

CLASSIFICATION:

UNCLASSIFIED

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 LIGHTWEIGHT TORPEDO DEVELOPMENT / 0604610N				
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Total PE Cost	9.041	10.219	7.769	3.630	1.566	1.561	1.602	CONT.	CONT.
Lightweight Hybrid Torpedo / V2234 / F2234 ¹	9.041	10.219	7.769	3.630	1.566	1.561	1.602	CONT.	CONT.
Quantity of RDT&E Articles									
<p>A. (U) Mission Description and Budget Item Justification: The funding is to design, integrate and test the Lightweight Hybrid Torpedo (MK54 MOD 0). The torpedo will be comprised of hardware and software from the MK 46 Torpedo, MK50 Torpedo, and MK 48 ADCAP Torpedo. The Lightweight Hybrid Torpedo will provide performance improvements in shallow water, littoral, counter-measure filled environments. The Engineering Development Model (EDM) contract was awarded to Raytheon Systems Company (formerly Hughes Aircraft Company) in June 1996. Current contract has delivered twenty-one EDM units to support the in-water test program.</p> <p>FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - (U) (\$0.603) Continued development and production of Ancillary Hardware, including Fleet Exercise Section (FES) and Automatic Test Equipment (ATE) to support LHT. - (U) (\$1.596) Continued development of tactical and signal processing software. - (U) (\$4.229) Continued simulation and in-water developmental test program. - (U) (\$2.238) Continued Lightweight torpedo system engineering efforts. - (U) (\$0.375) Supported the LHT Command and Decision system software integration into DDG-51 class surface combatants. 									

R-1 SHOPPING LIST - Item No. 129

Exhibit R-2, RDT&E Budget Item Justification

(Exhibit R-2, page 1 of 6)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

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

LIGHTWEIGHT TORPEDO DEVELOPMENT / 0604610N

FY 2002 PLAN:

- (U) (\$0.827) Continue development and production of Ancillary Hardware, including Fleet Exercise Section (FES) and Automatic Test Equipment (ATE) to support LHT.
- (U) (\$1.541) Continue development of tactical and signal processing software.
- (U) (\$4.834) Continue simulation and conduct in-water developmental technical evaluation test program.
- (U) (\$2.297) Continue Lightweight torpedo system engineering efforts.
- (U) (\$0.720) Support the LHT Command and Decision system software integration into DDG-51 class surface combatants.

FY 2003 PLAN:

- (U) (\$0.505) Continue development and production of Ancillary Hardware, including Fleet Exercise Section (FES) and Automatic Test Equipment (ATE) to support LHT.
- (U) (\$1.039) Continue development of tactical and signal processing software.
- (U) (\$3.920) Continue simulation and conduct operational in-water test program.
- (U) (\$1.447) Continue Lightweight torpedo system engineering efforts.
- (U) (\$0.858) Support the LHT Command and Decision system software integration into DDG-51 class surface combatants.

R-1 SHOPPING LIST - ITEM No. 129

Exhibit R-2, RDT&E Budget Item Justification

(Exhibit R-2, page 2 of 6)

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE		
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5						LIGHTWEIGHT TORPEDO DEVELOPMENT / 0604610N		
B. (U) Program Change Summary				FY 2001	FY 2002		FY 2003	
(U) FY 2002 President's Budget:				9.262	10.310			
(U) Appropriated Value:				9.347	10.310			
(U) Adjustments to FY 2001/2002								
Appropriated Value/FY 2002								
President's Budget:				-0.306	-0.091			
(U) FY 2003 President's Budget Submit:				9.041	10.219		7.769	
Funding:								
FY01: Net reduction of (-0.221M) is due to a (-0.013M) SBIR reduction and (-0.208M) for minor adjustments.								
FY02: Net reduction of (-0.091M) for minor adjustments.								
Schedule: In-water engineering testing scheduled for fourth quarter FY01 was extended three months to second quarter FY02 due to problems in scheduling Fleet services. TECHEVAL will commence second quarter FY02 following completion of engineering testing.								
Technical: Not Applicable.								
C. Other Program Funding Summary (\$ in millions)								
								To
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Complete
Torpedo MK 46 MODS (WPN / PE 0204228N / BA3 / BLI 321500)	7.041	9.861	38.783	35.534	55.778	113.775	117.797	CONT.
AN/SQQ-89(V) Surface ASW Combat Systems (OPN / PE 0204228N / BA2 / BLI 213600)								
Fire Control System Mods for MK54	10.449	14.204	22.140	28.801	18.089	9.632	11.803	CONT.
AN/SQQ-89(V) Surface ASW Combat Systems (OPN / PE 0204228N / BA2 / BLI 213605)								
Fire Control System Mods for MK54	3.640	2.210	2.107	2.429	3.162	11.679	12.143	CONT.
D. (U) Acquisition Strategy: The EDM contract is currently held by Raytheon Systems Company (formerly Hughes Aircraft Company). The contract was awarded as a Cost-Plus-Award Fee in June 1996 and was converted to Cost-Plus-Incentive Fee in December 1998.								

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification

DATE:

February 2002

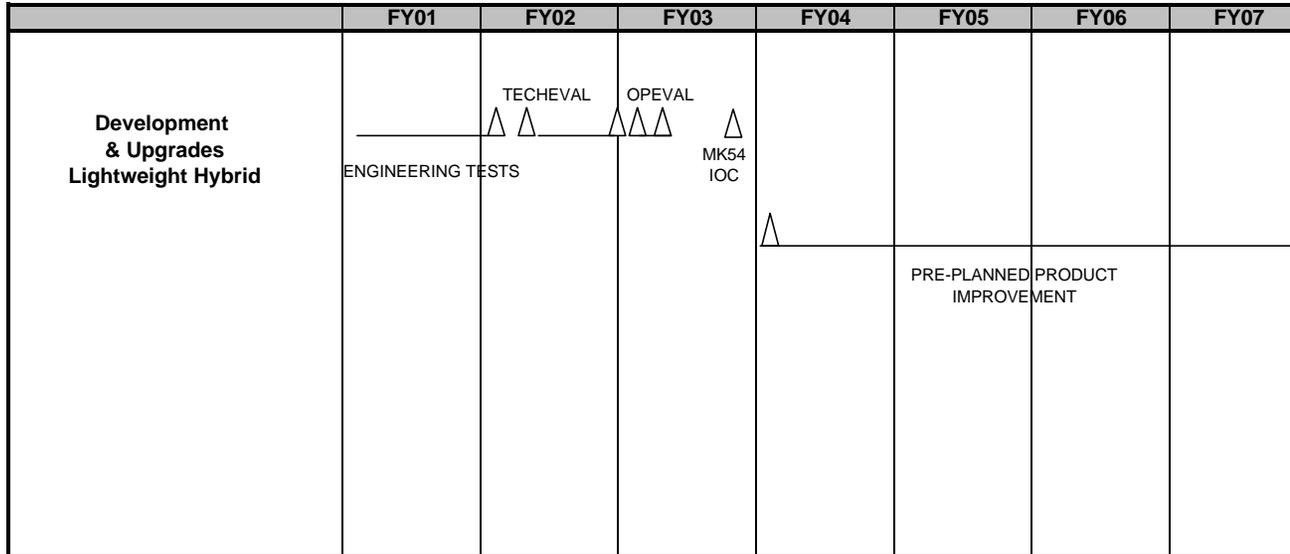
APPROPRIATION/BUDGET ACTIVITY

RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-5

R-1 ITEM NOMENCLATURE

LIGHTWEIGHT TORPEDO DEVELOPMENT / 0604610N

E. Schedule Profile:



R-1 SHOPPING LIST - Item No. 129

Exhibit R-2, RDT&E Budget Item Justification

(Exhibit R-2, page 4 of 6)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-5			0604610N			Lightweight Hybrid Torpedo / V2234/F2234						
Cost Categories (Tailor to WBS, or System/Item Requirements)	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
Ancillary Hardware Development	WR	NUWC Newport/Keyport	CONT.	0.574	10/00	0.827	10/01	0.505	10/02	CONT.	CONT.	N/A
Ancillary Hardware Development	WR	NAWC Patuxent River	CONT.	0.029	03/01					CONT.	CONT.	N/A
Systems Engineering	WR	NUWC Newport/Keyport	CONT.	1.517	10/00	1.701	10/01	1.194	10/02	CONT.	CONT.	N/A
Systems Engineering	WR	NSWC Indian Head	CONT.	0.080	01/01	0.000		0.000		CONT.	CONT.	N/A
Systems Engineering	Various	Various	CONT.	0.375	10/00	0.720	10/01	0.858	10/02	CONT.	CONT.	N/A
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			CONT.	2.575		3.248		2.557		0.000	8.380	N/A
Development Support Equipment											0.000	
Software Development	WR	NUWC Newport	CONT.	1.596	10/00	1.541	10/01	1.039	10/02	CONT.	CONT.	N/A
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Subtotal Support			CONT.	1.596		1.541		1.039		0.000	4.176	
Remarks:												

R-1 SHOPPING LIST - Item No. 129

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 5 of 6)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-5			0604610N			Lightweight Hybrid Torpedo / V2234/F2234						
Cost Categories (Tailor to WBS, or System/Item Requirements)	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
System Test & Evaluation	WR	COMOPTEVFOR	CONT.	0.068	10/00	0.100	10/01	0.319	10/02	CONT.	CONT.	N/A
	WR	NUWC Newport/Keyport	CONT.	3.854	10/00	4.734	10/01	3.601	10/02	CONT.	CONT.	N/A
	WR	NAWC Patuxent River	CONT.	0.000		0.000		0.000		CONT.	CONT.	N/A
	C.CPFF	ARL/PSU State College, PA	CONT.	0.428	01/01	0.000		0.000		0.000	CONT.	N/A
Subtotal T&E			CONT.	4.350		4.834		3.920		CONT.	CONT.	
Remarks: None.												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	Various	Various	CONT.	0.500	MISC.	0.515	MISC.	0.183	MISC.	CONT.	CONT.	
Travel			CONT.	0.020	MISC.	0.030	MISC.	0.030	MISC.	CONT.	CONT.	
Labor (Research Personnel)											0.000	
Overhead			CONT.	0.000	MISC.	0.051	MISC.	0.040	MISC.	CONT.	CONT.	
Subtotal Management			CONT.	0.520		0.596		0.253		CONT.	CONT.	
Remarks: None.												
Total Cost			CONT.	9.041		10.219		7.769		CONT.	CONT.	
Remarks:												

R-1 SHOPPING LIST - Item No. 129

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 6)

UNCLASSIFIED