

Exhibit R-2, RDT&E Budget Item Justification								Date: February 1999		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N /B.A.-5					R-1 ITEM NOMENCLATURE Program Element (PE) Name and No. VERTICAL LAUNCH ASROC/0604355N					
COST (\$ in Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total P.E. Cost	8.488	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.488
Vertical Launch ASROC /V1504	8.488	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.488
Quantity of RDT&E Articles & cost										
<p>A. (U) Mission Description and Budget Item Justification:</p> <p>The funding is to complete engineering design changes to the Vertical Launch Anti-Submarine Rocket (VLA) missile and existing fire control and vertical launching systems on the design platforms to accommodate the Lightweight Hybrid Torpedo as a VLA payload variant. Integration of the VLA and Lightweight Hybrid Torpedo will provide additional stand-off capability in littoral, shallow-water, countermeasure filled environments. The engineering design technical initiative was awarded to Lockheed Martin Tactical Defense Systems in July 1998.</p> <p>1. (U) FY 1998 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> • (U) (\$3.910) Completed the engineering change design development and component confidence and qualification testing to verify design changes. Completed Preliminary Drawing Review (PDR), Comprehensive Design Review (CDR) and Final Design Review. • (U) (\$0.631) Completed the software development efforts for existing fire control systems that will provide interface capability with the VLA Lightweight Hybrid Torpedo payload variant. • (U) (\$2.297) Completed the engineering change designs to existing Vertical Launching Systems canisters and test sets to accommodate the VLA Lightweight Hybrid Torpedo payload variant. • (U) (\$1.650) Completed test and analysis of VLA engineering design and component performance data in support of program requirements. <p>2. (U) FY 1999 PLAN: Not Applicable.</p> <p>3. (U) FY 2000 PLAN: Not Applicable</p>										

APPROPRIATION/BUDGET ACTIVITY RDT&E,N /B.A.-5

R-1 ITEM NOMENCLATURE

Program Element (PE) Name and No. VERTICAL LAUNCH ASROC/0604355N

B. (U) Program Change Summary: (\$ in millions)

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	8.733		
(U) Appropriated Value:	9.000		
Adjustments to FY 1998 Appropriated Value/FY 1999			
President's Budget:	-0.512		
(U) FY 2000 PRES Budget Submit:	8.488		
(U) Funding:	FY98: \$0.512M reduction due to \$0.267 in general R&D and economic assumptions reductions and \$0.245M Small Business Innovation Research (SBIR) reduction.		
	FY99: Not Applicable		
	FY00: Not Applicable.		
(U) Schedule:	Not applicable.		
(U) Technical:	Not applicable.		

C. (U) Other Program Funding Summary (\$ in millions)

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total Cost</u>
Vertical Launch ASROC (WPN / PE 0204228N/ BA3 / BL Item 314500)	0.000	0.000	0.000	0.000	0.000	1.764	1.498	1.526	0.000	4.788
Torpedo MK46 MODS (WPN / PE 0204228N/ BA3 / BL Item 321500)	0.000	0.000	28.699	25.204	29.610	35.534	37.833	38.809	296.192	491.881

Note: FY 2000 includes \$3.000M for VLA Lightweight Hybrid Torpedo flight integration test efforts.

(U) RELATED RDT&E:

APPROPRIATION/BUDGET ACTIVITY RDT&E,N /B.A.-5

R-1 ITEM NOMENCLATURE

Program Element (PE) Name and No. VERTICAL LAUNCH ASROC/0604355N

Lightweight Torpedo Development (RDT&E,N / PE 0604610N / BA5)

15.773 7.929 9.297 8.684 7.966 2.895 2.996 1.747 CONT. CONT.

D. (U) Acquisition Strategy: The engineering design contract is currently held by Lockheed Martin Tactical Defense Systems. In July 1998 the design effort was funded utilizing an engineering services and VLA Lightweight Hybrid Torpedo integration technical instruction.

E. Schedule Profile:

Vertical ASROC Planning Schedule

