

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy Date: March 2019

Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 3: Advanced Technology Development (ATD)					R-1 Program Element (Number/Name) PE 0603747N / Undersea Warfare Advanced Tech							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	0.000	9.657	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.657
9999: Congressional Adds	0.000	9.657	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.657

## A. Mission Description and Budget Item Justification

All Navy advanced technology development in undersea target detection, classification, localization, tracking and neutralization is funded through this Program Element (PE). The related technologies being developed are aimed at enabling Sea Shield, one of the three core operational concepts detailed in the Naval Transformational Roadmap. Associated efforts focus on new Anti-Submarine Warfare (ASW) operational concepts that promise to improve wide-area surveillance, detection, localization, tracking and attack capabilities against quiet adversary submarines operating in noisy and cluttered shallow water environments. The focus is on leveraging technologies that will protect the country's current capital investment in surveillance, submarine, surface ship and air ASW assets.

The efforts described in this Program Element PE are based on investment directions as defined in the Naval S&T Strategic Plan approved by the S&T Corporate Board (20 Jan 2015). This strategy is based on needs and capabilities from Navy and Marine Corps guidance and input from the Naval Research Enterprise (NRE) stakeholders (including the Naval enterprises, the combatant commands, the Chief of Naval Operations (CNO), and Headquarters Marine Corps). It provides the vision and key objectives for the essential science and technology efforts that will enable the continued supremacy of U.S. Naval forces in the 21st century. The Strategy focuses and aligns Naval S&T with Naval missions and future capability needs that address the complex challenges presented by both rising peer competitors and irregular/asymmetric warfare.

Due to the number of efforts in this PE, the programs described herein are representative of the work included in this PE.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	9.657	0.000	0.000	-	0.000
Total Adjustments	9.657	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.343	0.000			
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000
• Congressional Add Adjustments	10.000	-	-	-	-

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<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy I BA 3: Advanced Technology Development (ATD)</i>		<b>R-1 Program Element (Number/Name)</b> PE 0603747N I <i>Undersea Warfare Advanced Tech</i>	
<b><u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u></b> <b>Project:</b> 9999: <i>Congressional Adds</i> Congressional Add: <i>Unmanned Underwater Vehicle Research</i>		<b>FY 2018</b>	<b>FY 2019</b>
Congressional Add Subtotals for Project: 9999		9.657	0.000
Congressional Add Totals for all Projects		9.657	0.000
<b><u>Change Summary Explanation</u></b> Technical: Not applicable.  Schedule: Not applicable.			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2020 Navy										<b>Date:</b> March 2019		
<b>Appropriation/Budget Activity</b> 1319 / 3					<b>R-1 Program Element (Number/Name)</b> PE 0603747N / <i>Undersea Warfare Advanced Tech</i>				<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
9999: <i>Congressional Adds</i>	0.000	9.657	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	9.657

**A. Mission Description and Budget Item Justification**  
Congressional Interest Items not included in other Projects.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2018</b>	<b>FY 2019</b>
<b><i>Congressional Add:</i></b> Unmanned Underwater Vehicle Research	9.657	0.000
<b><i>FY 2018 Accomplishments:</i></b> Funds used to develop and demonstrate cross-domain autonomous vehicle communications and autonomous behaviors for missions with undersea platforms.		
<b><i>FY 2019 Plans:</i></b> N/A		
<b>Congressional Adds Subtotals</b>	9.657	0.000

**C. Other Program Funding Summary (\$ in Millions)**  
N/A

**Remarks**

**D. Acquisition Strategy**  
N/A

**E. Performance Metrics**  
Congressional Interest Items not included in other Projects.