

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	187.352	36.761	33.181	2.120	-	2.120	5.152	4.469	7.776	7.929	Continuing	Continuing
0933: <i>Medical/Dental Equipment Dev</i>	28.012	7.800	8.181	2.120	-	2.120	5.152	4.469	7.776	7.929	Continuing	Continuing
9999: <i>Congressional Adds</i>	159.340	28.961	25.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	213.301

**A. Mission Description and Budget Item Justification**

The purpose of this program is to develop biomedical equipment and related techniques to reduce morbidity; to enhance the logistic feasibility of modern medical care for combat casualties; to sustain casualties for evacuation to fixed medical facilities for definitive care; and to ensure that personnel are medically qualified for military duty. Each work unit undertaken in this project has a military requirement. Efforts are justified based upon military payoff and cost benefit. There is a strong potential for dual use, technology transfer, and biotechnology firm/industry participation in the projects.

**B. Program Change Summary (\$ in Millions)**

	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021 Base</u>	<u>FY 2021 OCO</u>	<u>FY 2021 Total</u>
Previous President's Budget	38.095	8.181	9.020	-	9.020
Current President's Budget	36.761	33.181	2.120	-	2.120
Total Adjustments	-1.334	25.000	-6.900	-	-6.900
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	25.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.334	0.000			
• Program Adjustments	0.000	0.000	-6.895	-	-6.895
• Rate/Misc Adjustments	0.000	0.000	-0.005	-	-0.005

**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** 9999: *Congressional Adds*

- Congressional Add: *Military Dental Research*
- Congressional Add: *Wound Care Research*
- Congressional Add: *Hypoxia Research (MD)*
- Congressional Add: *Physiological episodes research*

	FY 2019	FY 2020
	9.654	10.000
	14.480	10.000
	4.827	0.000
	0.000	5.000

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2021 Navy	<b>Date:</b> February 2020
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<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>
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**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

	FY 2019	FY 2020
Congressional Add Subtotals for Project: 9999	28.961	25.000
Congressional Add Totals for all Projects	28.961	25.000

**Change Summary Explanation**

The FY 2021 funding request was reduced by \$5.919 million for higher Navy Priority.  
 The FY 2021 funding request was reduced by \$0.976 million to account for the availability of prior year execution balances.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Navy										<b>Date:</b> February 2020		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>				<b>Project (Number/Name)</b> 0933 / <i>Medical/Dental Equipment Dev</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
0933: <i>Medical/Dental Equipment Dev</i>	28.012	7.800	8.181	2.120	-	2.120	5.152	4.469	7.776	7.929	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The purpose of this program is to develop biomedical equipment and related techniques to reduce morbidity; to enhance the logistic feasibility of modern medical care for combat casualties; to sustain casualties for evacuation to fixed medical facilities for definitive care; and to ensure that personnel are medically qualified for military duty. Each work unit undertaken in this project has a military requirement. Efforts are justified based upon military payoff and cost benefit. There is a strong potential for dual use, technology transfer, and biotechnology firms/industry participation in the projects.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>
<b>Title:</b> Medical/Dental Equipment Development	7.800	8.181	2.120	0.000	2.120
<b>Articles:</b>	-	-	-	-	-
<b>FY 2020 Plans:</b>					
-Complete Individual Fatigue-Based Scheduling and Countermeasure System that predicts, prevents, detects, and mitigates periods of high risk associated with fatigue.					
-Continue fatigue mitigation and validation of scheduling tools to include validation of an alternative watchstanding schedule on Naval Surface Combatants.					
-Complete development of future capability products and technologies for management of moderate to severe hemorrhage.					
-Complete support for phage therapy to combat antibiotic resistant bacterial infections.					
-Complete support for mitigating adverse physiological episodes to enhance safety and warfighter readiness in tactical aircraft.					
-Continue Human Performance/Crew Endurance effort: Controlled Light Exposure and Fatigue Mitigation.					
-Continue innovative medical technologies and enhanced medical logistics: Autonomous system for field delivery of critical medical supplies.					
-Continue cabin-pressure/decompression sickness (DCS) test and evaluation capability.					
-Complete clinical trial evaluation of rapid pharmaceutical intervention for the prevention of motion sickness in dynamic military environments.					
-Initiated evaluation of physiological monitoring sensor system in relevant military environments.					
-Continue Human Performance/Crew Endurance effort: Navy specific Stress Inoculation Study.					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Navy	<b>Date:</b> February 2020
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<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 0933 / <i>Medical/Dental Equipment Dev</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
<p>-Ended medical wargaming to evaluate support of Future Fleet Architecture.</p> <p><b><i>FY 2021 Base Plans:</i></b></p> <ul style="list-style-type: none"> <li>-Continue fatigue mitigation and validation of scheduling tools to include validation of an alternative watchstanding schedule on Naval Surface Combatants.</li> <li>-Continue Human Performance/Crew Endurance effort: Controlled Light Exposure and Fatigue Mitigation.</li> <li>-Continue innovative medical technologies and enhanced medical logistics: Autonomous system for field delivery of critical medical supplies.</li> <li>-Continue cabin-pressure/decompression sickness (DCS) test and evaluation capability.</li> <li>-Continue evaluation of physiological monitoring sensor system in relevant military environments.</li> <li>-Continue Human Performance/Crew Endurance effort: Navy specific Stress Inoculation Study.</li> </ul> <p><b><i>FY 2021 OCO Plans:</i></b> N/A</p> <p><b><i>FY 2020 to FY 2021 Increase/Decrease Statement:</i></b> FY 2020 to FY2021 decrease due to reduction in efforts associated with en route and extended care, casualty care ashore and afloat, medical logistics enhancements, and preventive medicine.</p>					
<b>Accomplishments/Planned Programs Subtotals</b>	7.800	8.181	2.120	0.000	2.120

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

N/A

**Remarks**

**D. Acquisition Strategy**

The acquisition strategy for product lines and products in the Medical Development Program is designed and implemented consistent with the purpose of the particular product and with the nature and size of the investment. The Medical Development Program has a Memorandum of Agreement with the Marine Corps Systems Command (Family of Field Medical Equipment) for co-development of products for procurement by the USMC. The acquisition strategy for products involves direct partnership with the acquisition and procurement professionals at Marine Corps Systems Command.

The major Product Areas in the Medical Development Program are: 1) Equipment, 2) Pharmaceuticals/Biologics, and 3) Operational Knowledge/Concepts. The primary Program Areas of Interest are: 1) Optimize health, performance, and resilience of the ready and forward operating forces; 2) Enhance medical logistics; 3) Reduce mortality and morbidity from battlefield and mission-related injuries in support of Navy Health Services Support in Terrestrial, Maritime Surface, Submarine, and Aviation Operations and USMC in Expeditionary Operations.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Navy		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 0933 / <i>Medical/Dental Equipment Dev</i>
<p>For Product Areas 1 and 2, there are two primary acquisition strategies. The first is to test and evaluate for Naval application commercially-developed medical product or candidates in managed trials with the ultimate goal of Food and Drug Administration (FDA) approval, where appropriate. Partnerships with commercial developers promotes developing products of military interest for procurement by the Operating Forces. A second benefit of this strategy is that products are made available across the DoD, Federal Government, and commercial market, thus reducing overall procurement costs. During development, DoD end users are included in the process to the extent possible. The second strategy is to drive a collaborative development process with larger DoD program investments. Navy and Marine Corps needs can be met at lower service cost. This process involves developing in-house or industrial prototypes in government-managed programs to meet Naval needs while meeting regulatory requirements for production and fielding. Both tactics promote development of procurement plans that align product availability with Service integration strategies.</p> <p>The Third Product Area (Knowledge/Concepts) is focused on the introduction of technologies, techniques, and procedures that enhance medical practice and standards of care for effective delivery of health care and casualty care in the Naval operating environment. These primarily require early involvement of the senior leadership of military medicine, in that the end product of the program is modification of concepts of operations, policy, and/or doctrine. These acquisitions can impact the care and performance of Sailors and Marines. Medical Development Program examples include Navy Crew Endurance Handbook and associated implementation tools.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy												Date: February 2020			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604771N / Medical Development				Project (Number/Name) 0933 / Medical/Dental Equipment Dev					
Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Malaria Vaccine	SS/CR	Sanaria, Inc. : Rockville, MD	7.084	0.000		0.000		0.000		-		0.000	0.000	7.084	-
Malaria Vaccine	C/FFP	Various : Not Specified	0.133	0.000		0.000		0.000		-		0.000	0.000	0.133	-
Human Factors Individualized Fatigue Based Scheduling	Allot	Naval Submarine Medical Research Laboratory : Groton, CT	2.066	0.429	Dec 2018	0.000		0.000		-		0.000	0.000	2.495	-
Fatigue Based Scheduling	WR	Naval Post Graduate School : Monterey, CA	1.714	0.303	Mar 2019	0.301	Dec 2019	0.301	Dec 2020	-		0.301	Continuing	Continuing	Continuing
Future capabilities products & technologies: Management of Moderate to Severe Hemorrhage	Allot	Naval Med Rsrch. Cntr./Walter Reed Inst. of Rsrch. : Silver Spring, MD	0.894	0.000		0.000		0.000		-		0.000	0.000	0.894	-
Marine Corps Systems Command Medical Products and Equipment	Various	Various : Not Specified	0.374	0.000		0.000		0.000		-		0.000	0.000	0.374	-
Phage Therapy	Allot	Naval Med Rsrch. Cntr./Walter Reed Inst. of Rsrch. : Silver Spring, MD	0.878	0.000		0.000		0.000		-		0.000	0.000	0.878	-
Mitigation of Adverse Physiological Episodes in Tactical Aircraft	Allot	Various : Not Specified	1.267	0.000		0.000		0.000		-		0.000	0.000	1.267	-
Enhanced Decision Making Under Stress	Allot	Naval Health Research Center : San Diego, CA	0.397	0.000		0.000		0.000		-		0.000	0.000	0.397	-
Crew Endurance and Fatigue Mitigation	WR	Naval Post Graduate School : Monterey, CA	1.515	1.550	Dec 2018	1.850	Dec 2019	0.400	Dec 2020	-		0.400	Continuing	Continuing	Continuing
Innovative Medical Technologies and Logistics	Various	Various : Not Specified	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 0933 / <i>Medical/Dental Equipment Dev</i>
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<b>Product Development (\$ in Millions)</b>				<b>FY 2019</b>		<b>FY 2020</b>		<b>FY 2021 Base</b>		<b>FY 2021 OCO</b>		<b>FY 2021 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Autonomous System for Field Delivery of Critical Medical Supplies	Various	Various : Not Specified	4.193	2.430	Jun 2019	0.000		0.000		-		0.000	0.000	6.623	-
Cabin-pressure/ Decompression Sickness Test and Evaluation Capability	Allot	NAVFAC EXWC : Port Hueneme, CA	0.088	2.590	Sep 2019	0.300	Jun 2020	0.000		-		0.000	0.000	2.978	-
Rapid Pharmaceutical Intervention for the Prevention of Motion Sickness	Allot	Naval Medical Research Unit - Dayton : Dayton, OH	0.328	0.000		0.000		0.000		-		0.000	0.000	0.328	-
Physiological Monitoring Sensor Systems	Various	Various : Not Specified	0.000	0.000		4.640	Jun 2020	0.600	May 2021	-		0.600	Continuing	Continuing	Continuing
Medical wargaming to evaluate Distributed Maritime Operations (DMO)	C/CPFF	Center for Naval Analysis : Arlington, VA	0.250	0.000		0.000		0.000		-		0.000	0.000	0.250	-
Medical wargaming to evaluate and support Future Fleet Architecture	Various	Various : Not Specified	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Navy specific Stress Inoculation Study	WR	Naval Post Graduate School : Monterey, CA	0.000	0.300	Mar 2019	0.299	Dec 2019	0.306	Dec 2020	-		0.306	Continuing	Continuing	Continuing
Medical Product Development	Various	Various : Not Specified	5.586	0.000		0.253	Aug 2020	0.223	Aug 2021	-		0.223	Continuing	Continuing	Continuing
<b>Subtotal</b>			26.767	7.602		7.643		1.830		-		1.830	Continuing	Continuing	N/A

<b>Management Services (\$ in Millions)</b>				<b>FY 2019</b>		<b>FY 2020</b>		<b>FY 2021 Base</b>		<b>FY 2021 OCO</b>		<b>FY 2021 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program Support	Various	Various : Not Specified	1.245	0.198	Aug 2019	0.538	Aug 2020	0.290	Aug 2021	-		0.290	Continuing	Continuing	Continuing
<b>Subtotal</b>			1.245	0.198		0.538		0.290		-		0.290	Continuing	Continuing	N/A



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**Exhibit R-4, RDT&E Schedule Profile: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 0933 / <i>Medical/Dental Equipment Dev</i>
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Proj 0933	FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
<b>Innovative Medical Technologies/Enhanced Medical Logistics: Autonomous System for Field Delivery of Critical Medical Supplies</b>																																
	Evaluate System				Technology Development and Testing																											
<b>Optimized Health, Performance, and Resilience: Human Performance/Crew Endurance and Fatigue Mitigation</b>																																
	Evaluate System and Design Integration Methods																															
<b>Optimized Health, Performance, and Resilience: Cabin-pressure / Decompression Sickness (DCS) Test and Evaluation Capability</b>																																
					Technology Development and Testing																											
<b>Reduced Morbidity and Mortality: Physiological Monitoring Sensor Systems</b>																																
									Technology Development and Testing																							

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2021 Navy **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 0933 / <i>Medical/Dental Equipment Dev</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Proj 0933</i></b>				
Innovative Medical Technologies/Enhanced Medical Logistics: Autonomous System for Field Delivery of Critical Medical Supplies: Evaluate System	1	2019	4	2019
Innovative Medical Technologies/Enhanced Medical Logistics: Autonomous System for Field Delivery of Critical Medical Supplies: Technology Development and Testing	1	2020	1	2021
Optimized Health, Performance, and Resilience: Human Performance/Crew Endurance and Fatigue Mitigation: Evaluate System and Design Integration Methods	1	2019	4	2024
Optimized Health, Performance, and Resilience: Cabin-pressure / Decompression Sickness (DCS) Test and Evaluation Capability: Technology Development and Testing	4	2019	4	2022
Reduced Morbidity and Mortality: Physiological Monitoring Sensor Systems: Technology Development and Testing	3	2020	3	2022

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**Exhibit R-2A, RDT&E Project Justification:** PB 2021 Navy **Date:** February 2020

Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604771N / Medical Development				Project (Number/Name) 9999 / Congressional Adds			
COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
9999: Congressional Adds	159.340	28.961	25.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	213.301
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**Note**

None

**A. Mission Description and Budget Item Justification**

Congressional Adds

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

	FY 2019	FY 2020
<b>Congressional Add:</b> Military Dental Research <b>FY 2019 Accomplishments:</b> Continued efforts in craniofacial injury surveillance; combat dentistry; treatment of maxillofacial injury; dental disease non-battle injuries; and oral/facial disease and infection in military personnel. <b>FY 2020 Plans:</b> Continue efforts in craniofacial injury surveillance; combat dentistry; treatment of maxillofacial injury; dental disease non-battle injuries; and oral/facial disease and infection in military personnel.	9.654	10.000
<b>Congressional Add:</b> Wound Care Research <b>FY 2019 Accomplishments:</b> Continued to develop novel diagnostics and treatments to enhance the care of the wounded warfighter. <b>FY 2020 Plans:</b> Continue to develop novel diagnostics and treatments to enhance the care of the wounded warfighter.	14.480	10.000
<b>Congressional Add:</b> Hypoxia Research (MD) <b>FY 2019 Accomplishments:</b> Initiated research to help inform Doctrine Organization Training Material Leadership Personnel Facilities (DOTMLPF) updates to meet pilot mission needs and to ensure the safety of service members. Focus areas to include: Cabin pressure related events/decompression sickness (DCS); Toxicology of chemical exposure; and Physiological monitoring. <b>FY 2020 Plans:</b> N/A	4.827	0.000
<b>Congressional Add:</b> Physiological episodes research	0.000	5.000

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Navy	<b>Date:</b> February 2020
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<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2019</b>	<b>FY 2020</b>
<b><i>FY 2019 Accomplishments:</i></b> N/A		
<b><i>FY 2020 Plans:</i></b> Initiate Research, Development, Test and Evaluation (RDT&E) on technologies that facilitate the collection and monitoring of operationally relevant data for the detection of physiological events.		
<b>Congressional Adds Subtotals</b>	28.961	25.000

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

N/A

**Remarks**

**D. Acquisition Strategy**

None

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Navy** **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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<b>Product Development (\$ in Millions)</b>				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Congressional Add - Wound Care Research	TBD	TBD : Not Specified	41.589	14.480	Jun 2020	10.000	Jun 2020	0.000		-		0.000	0.000	66.069	-
Congressional Add - Military Dental Research	Allot	Naval Medical Research Unit - San Antonio : San Antonio, TX	13.784	4.827	Mar 2019	5.000	Apr 2020	0.000		-		0.000	0.000	23.611	-
Congressional Add - Military Dental Research	MIPR	USAISR Dental & Craniofacial Trauma Research Dir. : San Antonio, TX	13.466	4.827	Apr 2019	5.000	Apr 2020	0.000		-		0.000	0.000	23.293	-
Congressional Add - Hypoxia Research (C0232)	Various	Various : Not Specified	4.828	0.000		0.000		0.000		-		0.000	0.000	4.828	-
Congressional Add - Aircrew Mounted Physiological Sensors (C0233)	Various	Various : Not Specified	2.897	0.000		0.000		0.000		-		0.000	0.000	2.897	-
Congressional Add - Hypoxia Research (C471)	Various	Various : Not Specified	0.000	4.827	Jan 2019	0.000		0.000		-		0.000	0.000	4.827	-
Congressional Add - Physiological Episodes Research (C562)	Various	Various : Not Specified	0.000	0.000		5.000	Jun 2020	0.000		-		0.000	0.000	5.000	-
Congressional Adds	Various	Various : Not Specified	82.776	0.000		0.000		0.000		-		0.000	0.000	82.776	-
<b>Subtotal</b>			159.340	28.961		25.000		0.000		-		0.000	0.000	213.301	N/A

	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>		159.340	28.961	25.000	0.000	-	0.000	213.301	N/A

**Remarks**



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**Exhibit R-4A, RDT&E Schedule Details:** PB 2021 Navy **Date:** February 2020

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604771N / <i>Medical Development</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 9999</b>				
Military Dental Research (2896): Schedule Detail	2	2019	4	2021
Wound Care Research (C210): Schedule Detail	3	2020	4	2021
Hypoxia Research (C471): Schedule Detail	2	2019	4	2020
Physiological Episodes Research (C562): Schedule Detail	3	2020	4	2021