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

Date: March 2019

**Appropriation/Budget Activity** 

1319: Research, Development, Test & Evaluation, Navy I BA 6: RDT&E

R-1 Program Element (Number/Name)

Management Support

PE 0605898N I (U)MANAGEMENT HQ - R&D

management cappen												
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	43.266	41.765	39.673	-	39.673	41.064	42.081	42.607	43.549	Continuing	Continuing
0223: Sub Combat System Improvement (ADV)	0.000	0.141	0.149	0.141	-	0.141	0.129	0.134	0.137	0.140	Continuing	Continuing
1447: Surf Combatant Combat System Imp	0.000	0.165	0.174	0.178	-	0.178	0.180	0.184	0.188	0.192	Continuing	Continuing
3159: Naval Integrated Fire Control-Counter Air SE&I	0.000	0.165	0.173	0.177	-	0.177	0.179	0.183	0.187	0.191	Continuing	Continuing
3186: Air and Missile Defense Radar	0.000	0.493	0.514	0.524	-	0.524	0.534	0.546	0.557	0.568	Continuing	Continuing
3216: Tactical Support Center- Integration	0.000	0.025	0.027	0.025	-	0.025	0.026	0.027	0.028	0.029	Continuing	Continuing
3345: ONR Management Headquarters	0.000	42.277	40.728	38.628	-	38.628	40.016	41.007	41.510	42.429	Continuing	Continuing

**Program MDAP/MAIS Code:** 

Project MDAP/MAIS Code(s): P384

## A. Mission Description and Budget Item Justification

The Management HQ - R&D program funds management headquarter civilian personnel salaries at the Office of Naval Research (ONR). These personnel support the management of the Naval Science and Technology (S&T) programs. This program also funds management headquarter contractor support for the Integrated Warfare Systems (IWS) Program Executive Office.

PE 0605898N: (U)MANAGEMENT HQ - R&D

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

Appropriation/Budget Activity

R-1 Program Element (Number/Name) 1319: Research, Development, Test & Evaluation, Navy I BA 6: RDT&E PE 0605898N I (U)MANAGEMENT HQ - R&D

Management Support

3. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	44.279	43.262	42.134	-	42.134
Current President's Budget	43.266	41.765	39.673	-	39.673
Total Adjustments	-1.013	-1.497	-2.461	-	-2.461
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-1.497			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-1.012	0.000			
<ul> <li>Program Adjustments</li> </ul>	0.000	0.000	-0.782	-	-0.782
<ul> <li>Rate/Misc Adjustments</li> </ul>	-0.001	0.000	-1.679	-	-1.679

### **Change Summary Explanation**

The FY 2020 funding request was reduced by \$.782 million to account for the availability of prior year execution balances. The funding change from FY 2019 to FY 2020 reflects planned reductions in Management Headquarter activity contracted work hours.

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Exhibit R-2A, RDT&E Project J	ustification:	PB 2020 N	lavy		Date: March 201						ch 2019	
Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605898N I (U)MANAGEMENT HQ - R&D  Project (Number/Name) 0223 I Sub Combat System Improve (ADV)						vement	
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
0223: Sub Combat System Improvement (ADV)	0.000	0.141	0.149	0.141	-	0.141	0.129	0.134	0.137	0.140	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

### A. Mission Description and Budget Item Justification

This project provides management headquarters contractor support to the Integrated Warfare Systems (IWS) Program Executive Office (PEO). This work supports Navy Acoustic Superiority and Technology Insertion Initiatives through the application of advanced development and testing of sensors and sensor processing systems supporting tactical control systems improvements. This addresses technology challenges to improve tactical control in littoral and open ocean environments for a variety of operational missions.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2020	FY 2020	FY 2020
	FY 2018	FY 2019	Base	oco	Total
Title: Management Headquarters Personnel	0.141	0.149	0.141	0.000	0.141
Articles:	-	-	_	-	-
FY 2019 Plans: - Continue Advanced Processing Build (APB) development, integration, land-based testing, at-sea testing, and establishment of tactical scenarios.					
FY 2020 Base Plans: - Continue Advanced Processing Build (APB) development, integration, land-based testing, at-sea testing, and establishment of tactical scenarios.					
FY 2020 OCO Plans: N/A					
FY 2019 to FY 2020 Increase/Decrease Statement: There is no significant change from FY 2019 to FY 2020.					
Accomplishments/Planned Programs Subtotals	0.141	0.149	0.141	0.000	0.141

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

N/A

Navy

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605898N I (U)MANAGEMENT HQ - R&D	Project (Number/Name) 0223 I Sub Combat System Improvemen (ADV)
D. Acquisition Strategy N/A		
E. Performance Metrics		
This program funds management headquarter contractor suppo program office management.	ort. Performance is measured by attaining the administrative	e and financial tasks necessary to support

PE 0605898N: (U)MANAGEMENT HQ - R&D

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2020 N	lavy							Date: March 2019		
Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605898N / (U)MANAGEMENT HQ - R&D  Project (Number/Name) 1447 / Surf Combatant Combat Systems						ystem Imp	
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
1447: Surf Combatant Combat System Imp	0.000	0.165	0.174	0.178	-	0.178	0.180	0.184	0.188	0.192	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

### A. Mission Description and Budget Item Justification

This project provides management headquarters contractor support to the Integrated Warfare System (IWS) Program Executive Office (PEO). This work supports Cruiser and Destroyer AEGIS Combat System (ACS) upgrades and integrates new equipment and systems to pace the threat and capture advances in technology.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Management Headquarter Personnel	0.165	0.174	0.178	0.000	0.178
Articles:	-	-	-	-	-
FY 2019 Plans: -Support Cruiser and Destroyer AEGIS Combat System (ACS) upgrades and integrate new equipment and systems to pace the threat and capture advances in technology.					
FY 2020 Base Plans: -Support Cruiser and Destroyer AEGIS Combat System (ACS) upgrades and integrate new equipment and systems to pace the threat and capture advances in technology.					
FY 2020 OCO Plans: N/A					
FY 2019 to FY 2020 Increase/Decrease Statement: There is no significant change from FY 2019 to FY 2020.					
Accomplishments/Planned Programs Subtotals	0.165	0.174	0.178	0.000	0.178

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

N/A

Remarks

### D. Acquisition Strategy

N/A

Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605898N / (U)MANAGEMENT HQ - R&D	Project (Number/Name) 1447 I Surf Combatant Combat System Imp
E. Performance Metrics		
This PE funds contractor support for management headquarter contractors. Full support program office management.	Performance is measured by attaining the adr	ministrative and financial tasks necessary to

PE 0605898N: (U)MANAGEMENT HQ - R&D

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Exhibit R-2A, RDT&E Project Ju	ıstification:	: PB 2020 N	lavy							Date: March 2019			
Appropriation/Budget Activity 1319 / 6	•					, , , ,					Number/Name) aval Integrated Fire Control- Air SE&I		
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	
3159: Naval Integrated Fire Control-Counter Air SE&I	0.000	0.165	0.173	0.177	-	0.177	0.179	0.183	0.187	0.191	Continuing	Continuing	
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-			

### A. Mission Description and Budget Item Justification

This project provides management headquarters contractor support to the Integrated Warfare System (IWS) Program Executive Office (PEO). This work supports Naval Integrated Fire Control - Counter Air (NIFC-CA) project. Through this support technological advances are being developed enabling PEO IWS to extend the Naval Theater Air and Missile Defense battlespace out to the maximum kinematic range of our weapons.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	<b>5</b> 1/ 0040	<b>5</b> )/ 0040	FY 2020	FY 2020	FY 2020
	FY 2018	FY 2019	Base	oco	Total
Title: Management Headquarter Personnel	0.165	0.173	0.177	0.000	0.177
Articles:	-	-	-	-	-
FY 2019 Plans:					
Support the Navy's research and development efforts for NIFC-CA's System Engineering, Integration and Test (SEI&T) project.					
-Provide system engineering to upgrade the White Sands Missile Range (WSMR) Desert Ship complex to an AEGIS Advanced Capability Build (ACB).					
FY 2020 Base Plans:					
Support the Navy's research and development efforts for NIFC-CA's System Engineering, Integration and Test (SEI&T) project.					
-Provide system engineering to upgrade the White Sands Missile Range (WSMR) Desert Ship complex to an AEGIS Advanced Capability Build (ACB).					
FY 2020 OCO Plans:					
N/A					
FY 2019 to FY 2020 Increase/Decrease Statement:					
There is no significant change from FY 2019 to FY 2020.					
Accomplishments/Planned Programs Subtotals	0.165	0.173	0.177	0.000	0.177

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

N/A

Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity   319 / 6	R-1 Program Element (Number/Name) PE 0605898N / (U)MANAGEMENT HQ - R&D	Project (Number/Name) 3159 I Naval Integrated Fire Control- Counter Air SE&I
C. Other Program Funding Summary (\$ in Millions)	,	
<u>Remarks</u>		
D. Acquisition Strategy N/A		
E. Performance Metrics		
This PE funds contractor support for management headquarter support program office management.	contractors. Performance is measured by attaining the adr	ninistrative and financial tasks necessary t

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy												Date: March 2019		
Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605898N / (U)MANAGEMENT HQ - R&D  Project (Number/Name) 3186 / Air and Missile Defense Rad						ndar			
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		
3186: Air and Missile Defense Radar	0.000	0.493	0.514	0.524	-	0.524	0.534	0.546	0.557	0.568	Continuing	Continuing		
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-				

Project MDAP/MAIS Code: P384

### A. Mission Description and Budget Item Justification

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

This project provides management headquarters contractor support to the Integrated Warfare System (IWS) Program Executive Office (PEO). Through this support, technological advances are being developed, enabling PEO IWS to deliver "Enterprise" solutions for Naval Warfare Systems that operate seamlessly and effectively within the Fleet and Joint Forces.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2020	FY 2020	FY 2020
	FY 2018	FY 2019	Base	oco	Total
Title: Management Headquarter Personnel	0.493	0.514	0.524	0.000	0.524
Articles:	-	-	-	-	-
FY 2019 Plans:					
- Continue support for combat system integration and DDG 51 FLT III integration, including preparing for ACB20 CDR					
<ul> <li>Provide system engineering and software support for combat system integration efforts</li> <li>Initiate risk reduction testing at Advanced Radar Development Evaluation Laboratory (ARDEL), including</li> </ul>					
refinement of radar operation functions (calibration, fault detection/fault isolation, environmental adaptation),					
improving electronic protection capabilities, and continue data collection on ballistic missile defense targets of opportunity.					
FY 2020 Base Plans:					
- Continue risk reduction testing at ARDEL, including refinement of radar operation functions (calibration, fault detection/fault isolation, environmental adaptation), improving electronic protection capabilities, and continue data collection on ballistic missile defense targets of opportunity.					
FY 2020 OCO Plans:					
N/A					
FY 2019 to FY 2020 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019	
Appropriation/Budget Activity 1319 / 6	,	- 3 (	umber/Name) and Missile Defense Radar

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
There is no significant change from FY 2019 to FY 2020.					
Accomplishments/Planned Programs Subtotals	0.493	0.514	0.524	0.000	0.524

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

			FY 2020	FY 2020	FY 2020					Cost To	
<u>Line Item</u>	FY 2018	FY 2019	<b>Base</b>	OCO	<u>Total</u>	FY 2021	FY 2022	FY 2023	FY 2024	<b>Complete</b>	<b>Total Cost</b>
RDT&E/0604522N: Air and Missile	31.119	27.059	55.535	-	55.535	78.440	88.190	80.715	80.156	Continuing	Continuing
Defense Radar (AMDR) System											

### Remarks

# D. Acquisition Strategy

N/A

### E. Performance Metrics

This PE funds contractor support for management headquarter contractors. Performance is measured by attaining the administrative and financial tasks necessary to support program office management.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019				
Appropriation/Budget Activity 1319 / 6						t (Number/ NAGEMEN	,	• •	umber/Nan tical Suppor	Center-Integration				
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		
3216: Tactical Support Center- Integration	0.000	0.025	0.027	0.025	-	0.025	0.026	0.027	0.028	0.029	Continuing	Continuing		
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-				

### A. Mission Description and Budget Item Justification

This project provides management headquarters contractor support to the Integrated Warfare System (IWS) Program Executive Office (PEO). This supports AN/ SQQ-34 Aircraft Carrier Tactical Support Center (CV-TSC) fulfillment of Anti-Submarine Warfare (ASW) and Surface Warfare (SUW) coordination functions utilizing data received from multiple sources to assess the threat and assist the Tactical Action Officer (TAO) and Composite Warfare Commander (CWC) in effectively applying available resources to support CVN self-defense. This supports CV-TSC functionality updates being implemented through an evolutionary acquisition approach, providing phased incremental builds that are developed, tested, certified and fielded.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2020	FY 2020	FY 2020
	FY 2018	FY 2019	Base	oco	Total
Title: Management Headquarter Personnel	0.025	0.027	0.025	0.000	0.025
Articles:	_	-	-	_	-
FY 2019 Plans:					
- Continue CV-TSC Development/Integration including development of software builds and systems engineering efforts, conduct of incremental requirements, design, and test reviews.					
FY 2020 Base Plans: - Continue CV-TSC Development/Integration including development of software builds and systems engineering efforts, conduct of incremental requirements, design, and test reviews.					
FY 2020 OCO Plans: N/A					
FY 2019 to FY 2020 Increase/Decrease Statement: There is no significant change from FY 2019 to FY 2020.					
Accomplishments/Planned Programs Subtotals	0.025	0.027	0.025	0.000	0.025

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

N/A

Navy

Remarks

PE 0605898N: (U)MANAGEMENT HQ - R&D

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy	Date: March 2019	
Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605898N I (U)MANAGEMENT HQ - R&D	Project (Number/Name) 3216 I Tactical Support Center-Integration
D. Acquisition Strategy N/A		
E. Performance Metrics		
This PE funds contractor support for management headquarter contractor support program office management.	ractors. Performance is measured by attaining the adr	ministrative and financial tasks necessary to

PE 0605898N: (U)MANAGEMENT HQ - R&D Navy

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019				
Appropriation/Budget Activity 1319 / 6				_	am Elemen 98N / (U)MA	•	•	Project (N 3345 / ON/		,	nt Headquarters			
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		
3345: ONR Management Headquarters	0.000	42.277	40.728	38.628	-	38.628	40.016	41.007	41.510	42.429	Continuing	Continuing		
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-				

### A. Mission Description and Budget Item Justification

This project funds all basic costs of Office of Naval Research Management Headquarters Activity (MHA) salaries and non-labor in support of the entire Navy Science & Technology (S&T) program. Through this support, the S&T enterprise pursues the technological advances that enable the Fleet's ability to operate from a position of technological superiority.

Specifically, funding facilitates the execution of the Navy's basic research, applied research, and advanced technology development programs at the nation's universities/colleges, Navy laboratories, Warfare Centers, and private industry.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Management Headquarters Personnel	42.277	40.728	38.628	0.000	38.628
Articles	-	40	39	-	39
Description: N/A					
FY 2019 Plans:					
Provides corporate MHA personnel salaries and Non-Labor support in facilitating the purchase of the					
S&T programs for the Navy to ensure consistent external reporting. All Non-Operational HQ is now Major					
Headquarters Activity (MHA).					
Continue to reduce auditability challenges to meet the mandate.					
FY 2020 Base Plans:					
Provides corporate MHA personnel salaries and Non-Labor support in facilitating the purchase of the					
S&T programs for the Navy to ensure consistent external reporting. All Non-Operational HQ is now Major					
Headquarters Activity (MHA).					
Continue to reduce auditability challenges to meet the mandate.					
FY 2020 OCO Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019	
	, , , , , , , , , , , , , , , , , , , ,	- 3 (	umber/Name) R Management Headquarters

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
N/A <b>FY 2019 to FY 2020 Increase/Decrease Statement:</b> The funding decrease from FY 2019 to FY 2020 reflects planned reductions in Management Headquarter activity					
contracted work hours.  Accomplishments/Planned Programs Subtotals	42.277	40.728	38.628	0.000	38.628

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

N/A

Remarks

# D. Acquisition Strategy

N/A

## E. Performance Metrics

Program performance is measured by attaining financial benchmarks for planned obligations vs. actual obligations and planned expenditures vs. actual expenditures.

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