Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy												Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0604786N *I (U)Offensive Anti-Surface Warfare Weapon Dev*							
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	346.011	348.708	313.109	160.694	-	160.694	64.725	0.000	0.000	0.000	0.000	1,233.247
3337: *Offensive Anti-Surface Warfare (OASuW) Weapon*	346.011	348.708	311.071	160.694	-	160.694	64.725	0.000	0.000	0.000	0.000	1,231.209
3343: *Offensive Anti-Surface Warfare (OASuW) Weapon Increment II*	0.000	0.000	2.038	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.038
Program MDAP/MAIS Code: **Project MDAP/MAIS Code(s):** P449												

A. Mission Description and Budget Item Justification

Offensive Anti-Surface Warfare (OASuW) will be an offensive weapon system that can be air, surface, and subsurface launched in the maritime battle space environment. OASuW will be a vital component of the Joint Force Anti-Surface Warfare capability and incorporate new and emergent technologies to support an increased offensive strike capability. Due to emerging threats, the fleet issued an Urgent Operational Needs Statement (UONS) that identified a capability gap for a long-range anti-ship missile to be filled by 2018. Directly supporting this UONS and significantly reducing Joint Force warfighting risks, the U.S. Navy initiated OASuW Increment 1 (OASuW-1), which leverages the Defense Advanced Research Projects Agency(DARPA)/Office of Naval Research Long Range Anti-Ship Missile (LRASM) demonstration program to deliver an Early Operational Capability (EOC) in the required timeframe. LRASM fills the most urgent air-launched capability gap to compliment, existing ASuW weapon systems and positions the Department of Defense to address evolving surface warfare threats.

The OASuW program is part of the Navy's Integrated Fire Control (IFC) approach to address advanced threat capabilities in the Anti-Access/Area-Denial (A2AD) environment. IFC solutions enable individual system capabilities to be leveraged across an effects chain, placing the full spectrum of tactical capability in the hands of the warfighter. IFC solutions that push engagement distances beyond the launch platform's radar horizon and allows the U.S. Navy to operate in, and control, contested battle space in littoral waters and A2/AD environments are increasingly critical as more and more scenarios require compressed and coordinated fire control timelines.

Budget Item Justification: OASuW-1

Funding supports the delivery of an EOC of OASuW-1 LRASM weapon system, including the transition of the LRASM demonstration design into a fielded air-launched weapon system, using an accelerated acquisition approach, with streamlined governance. The program is leveraging DoDI 5000.02i Model 4 to structure the acquisition strategy, which includes a highly integrated and concurrent transition design, integration, and developmental / operational test program to meet the EOC schedule required by the UONS. To manage the accelerated timeline and resulting concurrency, the program uses a structured Knowledge Point review process that support decisions regarding significant program events such as transition from design to integration phase and contract awards. These reviews also provide senior DoD leadership the opportunity to provide focused support and active management of technical and acquisition risk and are chaired by the Service Acquisition Executive, ASN(RDA). The knowledge points are similar to acquisition milestone reviews, but occur more frequently and are tailored to program-specific milestone events. Of note, the OASuW Increment I knowledge points are defined differently than GAO defines the same term and are tailored to program-specific milestone events. The program

met statutory requirements associated with Milestone B at Knowledge Point 3. In addition to the Knowledge Point reviews, Executive Steering Board reviews, chaired by the MDA, are held at least monthly. Supporting these reviews, the associated engineering approach is designed to mitigate resulting risk by implementing a rolling-wave engineering progression based on the NAVAIR Systems Engineering Technical Review (SETR) process to enable detailed planning and decisions as the system matures. This process includes capstone SETR events that are tailored reviews using standard design review criteria. The Technology Maturation efforts in FY 2015 through FY 2017 culminated in a system level Critical Design Review (CDR) level review at SETR 4.0. SETR 3.0 in 4QFY 2015 provided a CDR-level review to support the Knowledge Point 3 decision to initiate the Integration and Test phase for the all-up-round components. SETR 5.0 held in 1QFY 2017 to support Knowledge Point 4 obtained MDA to enter into production.

This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	285.849	252.409	146.044	-	146.044
Current President's Budget	348.708	313.109	160.694	-	160.694
Total Adjustments	62.859	60.700	14.650	-	14.650
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	71.396	0.000			
• SBIR/STTR Transfer	-8.537	0.000			
• Program Adjustments	0.000	60.700	14.404	-	14.404
• Rate/Misc Adjustments	0.000	0.000	0.246	-	0.246

Change Summary Explanation

Program:
LRASM FY 2017 funding increase of $60.7M and FY 2018 increase of $25.9M to enable the program to maintain EOC schedule and fully funds the program to Milestone B certified levels.

OASuW INC 2 funding reduction of $11.5M reflects program deferment.

Schedule:
Production - LRASM FY 2017 Production Buy moved from 2QFY 2017 to 3QFY 2017.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	Project (Number/Name) 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3337: *Offensive Anti-Surface Warfare (OASuW) Weapon*	346.011	348.708	311.071	160.694	-	160.694	64.725	0.000	0.000	0.000	0.000	1,231.209
Quantity of RDT&E Articles		12	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: P449

A. Mission Description and Budget Item Justification

Offensive Anti-Surface Warfare (OASuW) will be an offensive weapon system that can be air, surface, and subsurface launched in the maritime battle space environment. OASuW will be a vital component of the Joint Force Anti-Surface Warfare capability and incorporate new and emergent technologies to support an increased offensive strike capability. Due to emerging threats, the fleet issued an Urgent Operational Needs Statement (UONS) that identified a capability gap for a long-range anti-ship missile to be filled by 2018. Directly supporting this UONS and significantly reducing Joint Force warfighting risks, the U.S. Navy initiated OASuW Increment 1, which leverages the Defense Advanced Research Projects Agency(DARPA)/Office of Naval Research Long Range Anti-Ship Missile (LRASM) demonstration program to deliver an Early Operational Capability (EOC) in the required timeframe. LRASM fills the most urgent air-launched capability gap to compliment, existing ASuW weapon systems and positions the Department of Defense to address evolving surface warfare threats.

Decrease in FY 2016 quantities from 24 test articles to 12 production representative units for free flight test events which will be consumed during maritime environmental testing. The remaining 12 are not considered fully configured end items for the purpose of PAUC calculation.

In FY 2017, system qualification testing will complete, environmental and ship suitability testing will be conducted, flight test articles will deliver, and flight testing will commence, including the first free-flight weapon firing. Platform integration work continues.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: OASuW Development Program	348.708	311.071	160.694	0.000	160.694
Articles:	12	-	-	-	-
FY 2016 Accomplishments: The Integration and Test phase of the program was initiated in FY 2016, concurrently with the wrap-up of the Technology Maturation phase. The planned concurrency of these phases is required in order to meet the Early Operational Capability (EOC) fielding specified by the program requirements. Primary efforts in FY 2016 included weapon system design maturation to support completion of full system critical design review and system qualification in preparation for a Production Readiness Review in FY 2017. These efforts were supported by subsystem testing utilizing flying test beds, laboratory assets and associated software models. Additional activities included integration design/development for the launch platforms as well as procurement of test articles					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
for environmental and ship suitability qualification and subsystems for the production representative free flight weapon firings beginning in FY 2017. The program completed SETR 4.0 system design review as well as Knowledge Point 3 (tailored Milestone B). ***FY 2017 Plans:*** The Integration and Test phase of the program will continue in FY 2017. Full system qualification, environmental and initial system performance testing will complete utilizing laboratory, flying test bed, and free flight test articles. The program will complete operational flight software for B-1 integration and continue updates to F/A-18 operational flight programming. Mission planning software development for both platforms will continue. F/A-18 airworthiness testing to assess flying qualities, noise and vibration, jettison, and safe separation will also be performed in FY 2017. Performance testing will commence utilizing a flying test bed, initial free-flight weapon firing, and modeling and simulation capabilities. The program will complete a production design review (SETR 5.0) and Knowledge Point 4 in support of the procurement decision for the initial lot of EOC weapons. ***FY 2018 Base Plans:*** The Integration and Test phase of the program will continue in FY 2018 focusing on B-1 fielding and completion of F/A-18 integration including carrier suitability testing. The final test assets will be delivered in FY 2018. The missile firings and associated modeling and simulation effort will continue the system performance test program. EOC will be achieved on the B-1. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	348.708	311.071	160.694	0.000	160.694

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• WPN/2291: *LRASM*	0.000	29.643	74.733	-	74.733	74.784	75.000	0.000	0.000	0.000	254.160
• MPAF/8010: *LRASM*	0.000	60.000	45.000	-	45.000	45.000	0.000	0.000	0.000	0.000	150.000

Remarks

U.S. Navy WPN funding supports the following quantities:

FY17 - 10
FY18 - 25

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
FY19 - 25											
FY20 - 25											

U.S. Air Force MPAF funding supports the following quantities:

FY17 - 20
FY18 - 15
FY19 - 15

D. Acquisition Strategy

OASuW-1 is using an accelerated acquisition approach, with streamlined governance to transition the DARPA/ONR-demonstrated Long Range Anti-Ship Missile (LRASM) for use as an air-launched weapon from USAF and USN platforms. The program is leveraging DoDI 5000.02i Model 4 to structure the acquisition strategy, which includes a highly integrated and concurrent transition design, integration, and developmental / operational test program to meet the 2018 Early Operation Capability (EOC) fielding schedule required by an Urgent Operational Need Statement (UONS) issued by the fleet. The program is structured in three phases: Technology Maturation, Integration and Test, and Procurement. To manage the accelerated timeline and resulting concurrency, the program uses a structured Knowledge Point review process that support decisions regarding significant program events such as transition from design to integration phase and contract awards. These reviews also provide senior DoD leadership the opportunity to provide focused support and active management of technical and acquisition risk and are chaired by the Service Acquisition Executive, ASN(RDA) (delegated MDA), and the Deputy Director of DARPA. The knowledge points are similar to acquisition milestone reviews, but occur more frequently. Of note, the OASuW-1 knowledge points are defined differently than GAO defines the same term. Knowledge Point 1 supported program initiation and approval of the acquisition strategy ; Knowledge Point 2 supported evaluation of the preliminary design of the weapon system as well as release of the Request for Proposal for the Integration and Test phase; Knowledge Point 3 supported evaluation of the final (critical design review level) weapon system design and initiation of/contract award for the Integration and Test phase; Knowledge Point 4 supports the procurement decision for Lot 1 EOC units; and Knowledge Point 5 supports Lot 2 procurement, Knowledge Point 6 supports USAF EOC decision, Knowledge Point 7 supports Lot 3 procurement and Knowledge Point 8 supports USN EOC decision. The program intends to meet the statutory requirements associated with Milestone B at Knowledge Point 3. In addition to the Knowledge Point reviews, Executive Steering Board reviews (also chaired by the MDA) are held at least monthly. Supporting these reviews, the associated engineering approach is designed to mitigate resulting risk by implementing a rolling-wave engineering progression based on the NAVAIR Systems Engineering Technical Review (SETR) process to enable detailed planning and decisions as the system matures. This process includes capstone SETR events that are tailored reviews using standard design review criteria. SETR 1.0 in FY 2014 provided a Systems Requirements Review. SETR 2.0 in FY 2015 provided a Preliminary Design Review level review of the system and supported Knowledge Point 2. SETR 3.0 in late 2015 provided a Critical Design Review (CDR) level review of the All-up Round in support of Knowledge Point 3, while SETR 4.0 in FY 2016 provided a CDR level review of the entire weapon system in support of Knowledge Point 4 in early FY 2017, along with flight test information.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

E. Performance Metrics

The Knowledge Points are defined reviews with the Executive Steering Board comprised of Service Acquisition Executive, ASN(RDA) (delegated MDA) and the Deputy Director of DARPA to make program decisions at key points in the program life cycle in place of milestone reviews, but tailored to support the accelerated process. The acquisition program baseline was established at Knowledge Point 3.

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development	C/CPIF	Lockheed Martin Missile and Fire Control : Orlando, FL	238.638	278.717	Oct 2015	223.380	Oct 2016	112.792	Oct 2017	-		112.792	25.512	879.039	879.039
Product Development	C/CPFF	Boeing : St. Louis, MO	18.472	21.068	Oct 2015	22.494	Oct 2016	3.254	Oct 2017	-		3.254	2.481	67.769	67.769
		Subtotal	257.110	299.785		245.874		116.046		-		116.046	27.993	946.808	946.808

Remarks

FY 2018 LMCO costs includes all integration and test efforts by LMCO and associated sub-contractors to complete Knowledge Points 5, 6 and 7 and the tailored qualification/ flight test program.

FY 2018 Boeing costs includes software integration onto the B-1 and the F/A-18 E/F to maintain synchronization with system and hardware development. Software development tests on B-1 and Systems Engineering Technical Review (SETR) 7.0 (USAF EOC Readiness Review).

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Support	WR	NAWC AD : Patuxent River,MD	3.396	1.050	Oct 2015	2.324	Oct 2016	2.303	Oct 2017	-		2.303	1.827	10.900	-
Government Support	WR	NAWC WD : China Lake, CA	19.663	8.578	Oct 2015	11.306	Oct 2016	10.442	Oct 2017	-		10.442	8.520	58.509	-
Government Support	WR	NSWC : Various	2.922	0.185	Nov 2015	0.291	Nov 2016	0.092	Nov 2017	-		0.092	0.063	3.553	-
Development Support	C/FFP	NSMA : Washington, DC	8.293	3.689	Dec 2015	5.570	Dec 2016	5.580	Dec 2017	-		5.580	5.662	28.794	28.794
Development Support	MIPR	USAF : Various	0.385	0.161	Oct 2015	0.425	Oct 2016	0.190	Oct 2017	-		0.190	0.000	1.161	-
Integrated Logistics Support	WR	NAWC AD : Patuxent River, MD	0.284	0.050	Oct 2015	0.171	Oct 2016	0.176	Oct 2017	-		0.176	0.182	0.863	-
Contractor Support	C/CPFF	JHU/APL : Laurel, MD	10.840	0.991	Oct 2015	0.000		0.000		-		0.000	0.000	11.831	11.831
Contractor Support	C/FFP	Schafer Corporation : Arlington, VA	8.516	5.647	Oct 2015	4.208	Oct 2016	3.719	Oct 2017	-		3.719	3.001	25.091	25.091

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Mission Planning Support	C/CPFF	Northrup Grumman : Bethpage, NY	1.932	3.859	Oct 2015	3.797	Oct 2016	0.400	Oct 2017	-		0.400	0.200	10.188	10.188
Contractor Support	Various	Various : Various	5.924	1.555	Oct 2015	0.639	Oct 2016	0.717	Oct 2017	-		0.717	1.431	10.266	10.266
Development Support	Various	NRL : Various	0.000	0.691	Nov 2015	0.885	Nov 2016	0.575	Nov 2017	-		0.575	0.143	2.294	2.294
Prior Yr Supp no longer funded in the FYDP	Various	Various : Various	2.800	0.000		0.000		0.000		-		0.000	0.000	2.800	2.800
		Subtotal	64.955	26.456		29.616		24.194		-		24.194	21.029	166.250	-

Remarks

FY 2018 Support costs consist of support from Government offices and Contractor Support experts associated with threat analysis, CONOPs, and Training and Tactical assessments in support of Program Readiness Review (PRR), Knowledge Points 5 and 6 the developmental test program, the Quick Reaction Assessment (QRA), and tactics development supporting EOC.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	WR	NAWC WD : China Lake, CA	8.017	10.909	Oct 2015	15.224	Oct 2016	13.180	Oct 2017	-		13.180	2.653	49.983	-
Development Support	WR	NAWC AD : Patuxent River, MD	3.083	8.038	Oct 2015	13.082	Oct 2016	3.071	Oct 2017	-		3.071	0.110	27.384	-
Development Support	WR	NSWC : Various	0.064	0.067	Nov 2015	0.210	Nov 2016	0.079	Nov 2017	-		0.079	0.081	0.501	-
Development Support	WR	COTF : Norfolk, VA	0.105	0.002	Oct 2015	0.100	Oct 2016	0.000		-		0.000	0.000	0.207	-
Development Support	MIPR	USAF : Various	0.290	1.082	Oct 2015	3.930	Oct 2016	1.106	Oct 2017	-		1.106	0.072	6.480	-
Wind Tunnel Testing	MIPR	AEDC : Arnolds AFB, TN	4.153	0.000		0.000		0.000		-		0.000	0.000	4.153	-
		Subtotal	15.712	20.098		32.546		17.436		-		17.436	2.916	88.708	-

Remarks

FY 2018 Test and Evaluation costs support flight testing, system qualifications, range time, and target costs needed for the B-1 and F/A-18 E/F to support PRR, Knowledge Points 5 and 6, the developmental test program, and the Quick Reaction Assessment (QRA).

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Support	WR	NAWC AD : Patuxent River, MD	4.376	1.283	Oct 2015	1.275	Oct 2016	1.311	Oct 2017	-		1.311	1.005	9.250	-
Government Support	WR	NAWC WD : China Lake, CA	1.768	0.851	Oct 2015	1.260	Oct 2016	1.207	Oct 2017	-		1.207	0.990	6.076	-
Project Management Support	C/CPFF	NAWC AD : Patuxent River, MD	1.600	0.000		0.000		0.000		-		0.000	0.000	1.600	1.600
Travel	Various	NAWC AD : Patuxent River, MD	0.490	0.235	Oct 2015	0.500	Oct 2016	0.500	Oct 2017	-		0.500	0.300	2.025	-
		Subtotal	8.234	2.369		3.035		3.018		-		3.018	2.295	18.951	-

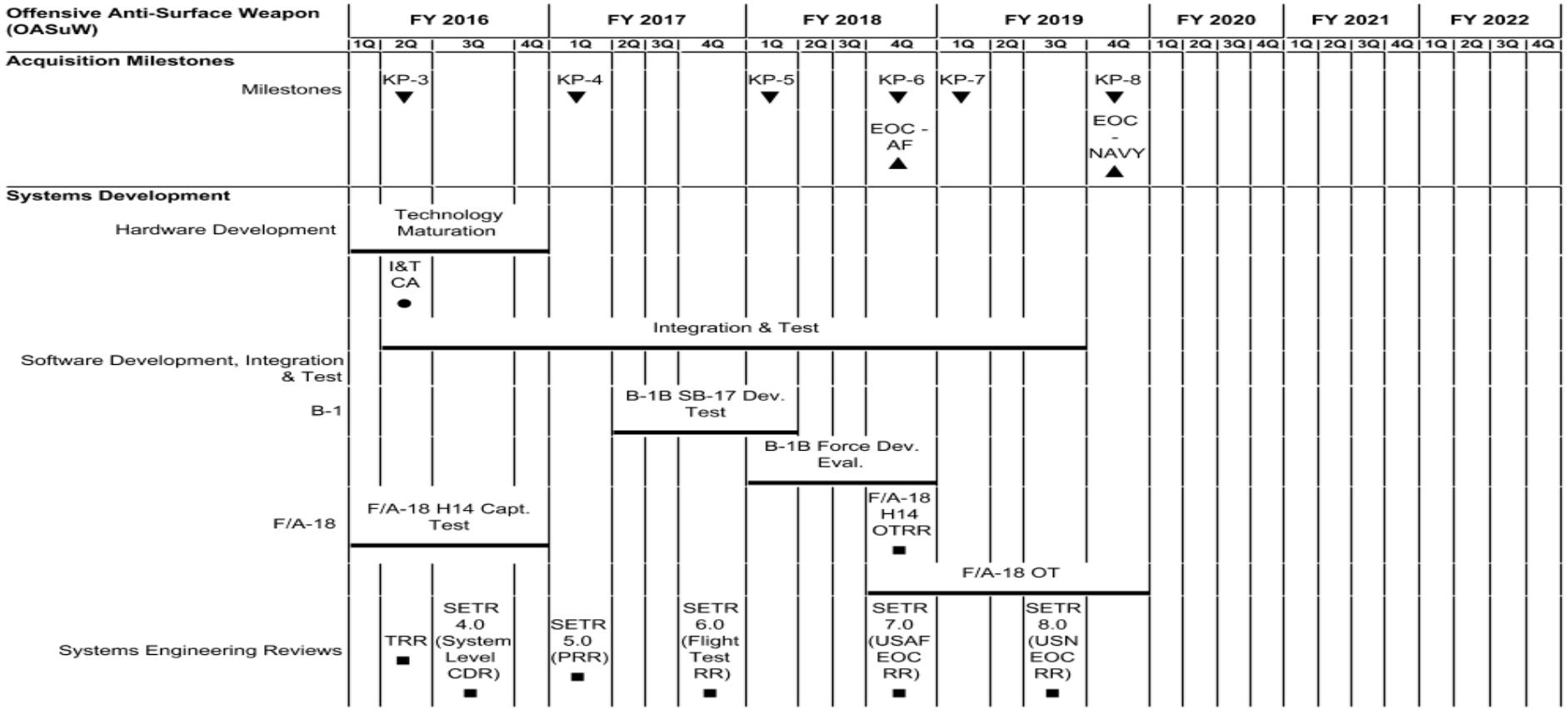
Remarks

FY 2018 Management Services costs consist of Non-Headquarters Program Office Management team (Government labor and Contractor support services) required for the management of the program.

	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	346.011	348.708		311.071		160.694		-		160.694	54.233	1,220.717	-

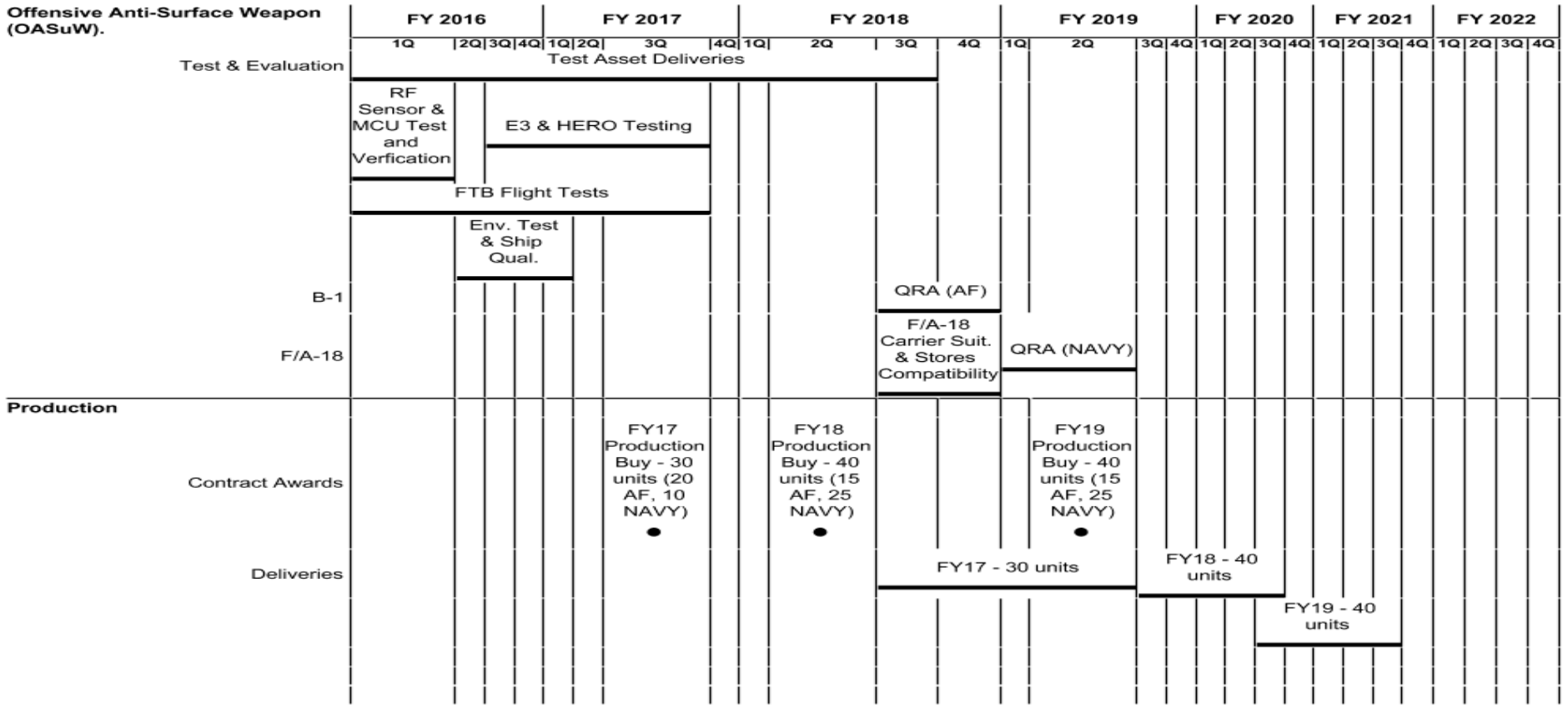
Remarks

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*



2018PB - 0604786N - 3337

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*



2018PB - 0604786N - 3337

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Offensive Anti-Surface Weapon (OASuW)				
Acquisition Milestones: Milestones: Knowledge Point 3	2	2016	2	2016
Acquisition Milestones: Milestones: Knowledge Point 4	1	2017	1	2017
Acquisition Milestones: Milestones: Knowledge Point 5	1	2018	1	2018
Acquisition Milestones: Milestones: Knowledge Point 6	4	2018	4	2018
Acquisition Milestones: Milestones: Knowledge Point 7	1	2019	1	2019
Acquisition Milestones: Milestones: Knowledge Point 8	4	2019	4	2019
Acquisition Milestones: Milestones: Early Operational Capability (EOC) Air Force	4	2018	4	2018
Acquisition Milestones: Milestones: Early Operational Capability (EOC) Navy	4	2019	4	2019
Systems Development: Hardware Development: Technology Maturation	1	2016	4	2016
Systems Development: Hardware Development: Integration & Test Contract Award	2	2016	2	2016
Systems Development: Hardware Development: Integration & Test	2	2016	3	2019
Systems Development: B-1: B-1 SB-17 Software Development Test	2	2017	1	2018
Systems Development: B-1: B-1 Force Development Evaluation	1	2018	4	2018
Systems Development: F/A-18: F/A-18 H14 Captive Carriage Test	1	2016	4	2016
Systems Development: F/A-18: F/A-18 H14 Operational Test Readiness Review	4	2018	4	2018
Systems Development: F/A-18: F/A-18 H14 Operational Test	4	2018	4	2019
Systems Development: Systems Engineering Reviews: System Engineering Technical Review 4.0 (System Level Critical Design Review)	3	2016	3	2016
Systems Development: Systems Engineering Reviews: System Engineering Technical Review 5.0 (Production Readiness Review)	1	2017	1	2017
Systems Development: Systems Engineering Reviews: System Engineering Technical Review 6.0 (Flight Test Readiness Review)	4	2017	4	2017

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3337 / *Offensive Anti-Surface Warfare (OASuW) Weapon*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Systems Development: Systems Engineering Reviews: System Engineering Technical Review 7.0 (USAF EOC Readiness Review)	4	2018	4	2018
Systems Development: Systems Engineering Reviews: System Engineering Technical Review 8.0 (USN EOC Readiness Review)	3	2019	3	2019
Systems Development: Systems Engineering Reviews: Technical Readiness Review	2	2016	2	2016
Offensive Anti-Surface Weapon (OASuW).				
Test & Evaluation: Test Asset Deliveries	1	2016	3	2018
Test & Evaluation: E3 & HERO Testing	3	2016	3	2017
Test & Evaluation: RF Sensor and MCU Testing and Verification	1	2016	1	2016
Test & Evaluation: Flying Test Bed Flight Tests	1	2016	3	2017
Test & Evaluation: Environmental Test & Ship Qualification	2	2016	1	2017
B-1: Quick Reaction Assessment Testing (AF)	3	2018	4	2018
F/A-18: Quick Reaction Assessment Testing (Navy)	1	2019	2	2019
F/A-18: F/A-18 Carrier Suitability & Stores Compatibility	3	2018	4	2018
Production: Contract Awards: FY17 Production Buy - 30 units (20 AF, 10 NAVY)	3	2017	3	2017
Production: Contract Awards: FY18 Production Buy - 40 units (15 AF, 25 NAVY)	2	2018	2	2018
Production: Contract Awards: FY19 Production Buy - 40 units (15 AF, 25 NAVY)	2	2019	2	2019
Production: Deliveries: FY17 Deliveries - 30 units	3	2018	2	2019
Production: Deliveries: FY18 Deliveries - 40 units	3	2019	3	2020
Production: Deliveries: FY19 Deliveries - 40 units	3	2020	3	2021

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	Project (Number/Name) 3343 / *Offensive Anti-Surface Warfare (OASuW) Weapon Increment II*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3343: *Offensive Anti-Surface Warfare (OASuW) Weapon Increment II*	0.000	0.000	2.038	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.038
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Update of Analysis of Alternatives (AoA) for OASuW Increment 2 (OASuW-2) capabilities.

The OASuW-2 will address future threats by 2024 to replace or update legacy weapons while in support of the Department of the Navy (DoN) Next Generation Strike Capability (NGSC). Within NGSC, OASuW-2 will be an air launched offensive weapon system to address capability needs beginning in 2024. The program is part of the Navy's Integrated Fire Control (IFC) approach to address advanced threat capabilities in the Anti-Access/Area-Denial (A2AD) environment. IFC solutions enable individual system capabilities to be leveraged across an effects chain, placing the full spectrum of tactical capability in the hands of the warfighter. IFC solutions that push engagement distances beyond the launch platform's radar horizon and allows the U.S. Navy to operate in, and control, contested battle space in littoral waters and A2/AD environments are increasingly critical as more and more scenarios require compressed and coordinated fire control timelines.

The OAWSuW-2 program was deferred in FY 2018.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Analysis of Alternatives	0.000	2.038	0.000	0.000	0.000
Articles:	-	-	-	-	-
FY 2016 Accomplishments: N/A					
FY 2017 Plans: Funding supports analysis required for system specification development and Acquisition Strategy development.					
FY 2018 Base Plans: N/A					
FY 2018 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	0.000	2.038	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604786N / *(U)Offensive Anti-Surface Warfare Weapon Dev*	**Project (Number/Name)** 3343 / *Offensive Anti-Surface Warfare (OASuW) Weapon Increment II*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

System specification development