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 0604659N *I (U)Precision Strike Weapons Development Program*							
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	0.000	7.621	9.910	31.315	-	31.315	118.830	107.212	108.545	119.712	Continuing	Continuing
3378: *Next Generation Land Attack Weapon (NGLAW)*	0.000	7.621	9.910	9.994	-	9.994	16.866	49.286	91.658	109.844	Continuing	Continuing
3407: *Air Launched Decoy Development*	0.000	0.000	0.000	21.321	-	21.321	101.964	57.926	16.887	9.868	Continuing	Continuing

A. Mission Description and Budget Item Justification

Initial and continuing development of strike weapons consisting of armament, munitions, and weapon subsystems to allow for the horizontal integration among current and future weapon system capabilities to provide enhanced anti-surface and land strike capabilities in a demanding Anti-Access Area-Denial environment. This program provides for the development of weapon and weapon system technologies to address future requirements for enhanced and alternative weapon system capability requirements that include selectable output weapons, low collateral damage weapons, precision lethality weapons, area weapons, alternative warhead technology, Insenstive Munitions (IM), scaled munitions, Department of Defense (DoD) fuzing systems, sensors, extended range weapons and precision guided training round technology.

The Precision Strike Weapons Development Program Element (PE) supports the Next Generation Strike Capability (NGSC) by funding Next Generation Land Attack Weapon (NGLAW); a surface/submarine fired survivable, long range, multi-mission, multi-platform conventional strike capability fielding in the FY 2028 - FY 2030 timeframe. The Next Generation Strike Capability (NGSC) strategy will address future threats in time to replace or update legacy weapons while bringing next generation technology to Department of the Navy (DON) standoff conventional strike (Land Attack & ASuW). Within NGSC, NGLAW will be capable of attacking land and maritime, stationary and mobile targets while supporting two of the Navy's primary mission areas: 'Power Projection' (land attack from the sea/undersea) and 'Sea Control' against enemy surface action groups/combatants. To the maximum extent possible, NGSC will utilize common components and component technologies (e.g. navigation; communications; seeker; guidance and control) across the air-launched and sea-launched missile variants to reduce cost, shorten development timelines, and promote interoperability.

The Precision Strike Weapons Development Program Element (PE) supports the air-launched electronic warfare (EW) systems capability; through the integration of a Navy variant of the Miniature Air Launched Decoy (MALD). EW is an integral war-fighting effect supporting combatant commander integrated priorities, as well as Joint or Coalition operations. EW systems influence, deceive, disrupt, degrade, deny and destroy threats throughout the electromagnetic spectrum to airborne and air-launched systems and their operations. EW includes air-launched electronic attack (EA) as well as elements of electronic support (ES) and electronic protection (EP). EA provides self-protection capabilities to other weapon systems through active and passive measures that deceive threats to airborne and air-launched systems and their operations by using kinetic and non-kinetic means to defeat threats that rely on the electromagnetic spectrum (Radio Frequency (RF), Electro-Optical (EO), Infrared (IR). The ES capabilities support the collection, analysis, and dissemination of information related to the detection, geo-location, characterization, and identification of threats to airborne and air-launched systems and their operations. An air-launched EW system with stand-in capability increases the range and duration of EW systems while providing flexibility to commanders for employment.

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 0604659N *I (U)Precision Strike Weapons Development Program*

JUSTIFICATION FOR BUDGET ACTIVITY: 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	9.595	9.910	45.088	-	45.088
Current President's Budget	7.621	9.910	31.315	-	31.315
Total Adjustments	-1.974	0.000	-13.773	-	-13.773
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.905	0.000			
• SBIR/STTR Transfer	-0.069	0.000			
• Program Adjustments	0.000	0.000	-13.471	-	-13.471
• Rate/Misc Adjustments	0.000	0.000	-0.302	-	-0.302

Change Summary Explanation

The FY 2018 funding request was reduced by $2.871 million to account for the availability of prior year execution balances.

NGLAW funding was realigned to support the updated AoA timeline.

Schedule: PU 3378

The NGLAW Initial Capabilities Document (ICD) was approved in 4QFY2016.

Analysis of Alternatives (AoA) changed from 2Q FY 2016 - 2Q FY 2018 to 1Q FY 2017 - 2Q FY 2018 as a result of ICD approval moved to 4Q FY2016.

Schedule: PU 3407
FY 2018 will transition MALD from a Strategic Capabilities Office (SCO) Demonstration to a Navy program of record. This is not a new start.

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 0604659N / *(U)Precision Strike Weapons Development Program*	Project (Number/Name) 3378 / *Next Generation Land Attack Weapon (NGLAW)*	

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
3378: *Next Generation Land Attack Weapon (NGLAW)*	0.000	7.621	9.910	9.994	-	9.994	16.866	49.286	91.658	109.844	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding is provided for the Next Generation Land Attack Weapon (NGLAW) that includes a survivable, long range, multi-mission, multi-platform (surface and subsurface) conventional strike capability in the FY 2028 - FY 2030 timeframe. NGLAW will address future threats while bringing ship/submarine Next Generation Strike Capability (NGSC) to Department of the Navy (DON) standoff conventional strike (land and maritime attack). NGLAW will be capable of attacking land and maritime, stationary and mobile targets while supporting two of the Navy's primary mission areas: 'Power Projection' (land attack from the sea/undersea) and 'Sea Control' against enemy surface action groups/combatants. To the maximum extent possible, the Navy will utilize common components and component technologies (e.g. navigation; communications; seeker; guidance and control) to reduce cost, shorten development timelines, and promote interoperability.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Next Generation Land Attack Weapon (NGLAW)	7.621	9.910	9.994	0.000	9.994
Articles:	-	-	-	-	-
FY 2016 Accomplishments: Completion of the Capabilities Based Assessment (CBA) and Initial Capabilities Document (ICD). Establishment of the security environment for conduct of the AoA.					
FY 2017 Plans: Conduct NGLAW AoA assessing weapons systems, emergent technologies, and industry Internal Research and Development (IRAD) activities/proposals that can be used across multiple mission areas to reduce risk, development time and cost. Conduct threat assessments based on current and future scenarios and environments to inform performance requirements and relevant technology. Additionally, these technologies will be assessed for their maturity and applicability to fielded and future weapons to address expanded target sets to include mobile and moving land/maritime targets. Results of the analysis will inform the requirement and acquisition approach to deliver an affordable, long term Strike Weapon.					
FY 2018 Base Plans: Continue NGLAW AoA assessing weapons systems, emergent technologies, and industry Internal Research and Development (IRAD) activities/proposals that can be used across multiple mission areas to reduce risk, development time,					

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 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3378 / *Next Generation Land Attack Weapon (NGLAW)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
and cost. Complete threat assessments based on current and future scenarios and environments to inform performance requirements and relevant technology. Conduct sufficiency review and conduct Gate Reviews. Complete limited Technology Maturation Risk Reduction (TMRR) baseline assesment of the critical technologies identified by the AoA that require future investment to mature to a Technology Readiness Level (TRL) 6. Utilize both Government Field Activities and Industry partners to conduct TMRR. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	7.621	9.910	9.994	0.000	9.994

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Acquisition strategy will be influenced by the output of the AoA and the Material Development Decision (MDD).

E. Performance Metrics

Conduct NGLAW AoA.

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 0604659N / *(U)Precision Strike Weapons Development Program*	Project (Number/Name) 3407 / *Air Launched Decoy Development*	

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
3407: *Air Launched Decoy Development*	0.000	0.000	0.000	21.321	-	21.321	101.964	57.926	16.887	9.868	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project develops a Navy variant of the Miniature Air Launched Decoy (MALD). The variant will address current and future advanced Integrated Air Defense System (IADS) threats by bringing an air-launched, stand-in EW capability to Department of the Navy (DON) suppression of enemy air defenses/destruction of enemy air defenses (SEAD/DEAD) and standoff conventional land strike. A Navy variant of MALD with stand-in capability increases the range and duration of EW systems while providing flexibility to commanders for employment. To the maximum extent possible, the Navy will utilize existing technology from the current MALD-J production line and other common components (e.g. navigation, communication, guidance and control, payload) to reduce cost, shorten development timelines and promote interoperability. OPNAV has written a draft CDD in preparation for entry into formal staffing in 4Q17.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Miniature Air Launched Decoy (MALD)	0.000	0.000	21.321	0.000	21.321
Articles:	-	-	-	-	-
FY 2016 Accomplishments: N/A					
FY 2017 Plans: N/A					
FY 2018 Base Plans: Begin Engineering, Manufacturing, and Development phase activities. FY 2018 will transition MALD from a Strategic Capabilities Office (SCO) Demonstration to a Navy program of record. The Navy program builds upon the SCO demonstration, which allows the Navy to begin integration, development and mission planning activities in FY 2018. Tasks scheduled to begin in FY 2018 include but are not limited to: Aircraft Integration/ Air Worthiness to include wind tunnel testing and fit checks specific to F/A-18 E/F; software development of a MALD mission planning module hosted into Joint Mission Planning System (JMPS) and a Navy MALD unique "Airborne Electronic Attack" planning module and material purchases to support developmental activities. Material purchases in FY 2018 support base plan activities. Long lead material procurements in FY 2018 support continued development and aircraft integration work and have an 18 month lead time for some AUR components					

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 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3407 / *Air Launched Decoy Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
and up to a 24 month lead time for Range Safety/Flight Termination Systems. Funding also provides for Engineering, Logistics and Program Management support. This is not a new start. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	0.000	0.000	21.321	0.000	21.321

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
• 0204162N/2285: *Drones and Decoys*	0.000	0.000	0.000	-	0.000	5.800	26.399	32.799	47.099	Continuing	Continuing

Remarks

D. Acquisition Strategy

Research and development performed by contractor and government staff.

E. Performance Metrics

Complete staffing of CDD.

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 0604659N / *(U)Precision Strike Weapons Development Program*	Project (Number/Name) 3407 / *Air Launched Decoy Development*	

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	SS/CPFF	Raytheon : Tucson, AZ	0.000	0.000		0.000		14.315	Mar 2018	-		14.315	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		14.315		-		14.315	-	-	-

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	0.000	0.000		0.000		2.000	Oct 2017	-		2.000	Continuing	Continuing	Continuing
Government Support	WR	NAWC WD : China Lake, CA	0.000	0.000		0.000		4.000	Oct 2017	-		4.000	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		6.000		-		6.000	-	-	-

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	0.000	0.000		0.000		0.500	Oct 2017	-		0.500	Continuing	Continuing	Continuing
Government Support	WR	NAWC WD : China Lake, CA	0.000	0.000		0.000		0.256	Oct 2017	-		0.256	Continuing	Continuing	Continuing
Project Management Support	C/CPFF	NAWC AD : Patuxent River, MD	0.000	0.000		0.000		0.200	Mar 2018	-		0.200	Continuing	Continuing	Continuing
Travel	Various	NAVAIR : Patuxent River, MD	0.000	0.000		0.000		0.050	Oct 2017	-		0.050	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		1.006		-		1.006	-	-	-

	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	0.000	0.000		0.000		21.321		-		21.321	-	-	-

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 0604659N / *(U)Precision Strike Weapons Development Program*	Project (Number/Name) 3407 / *Air Launched Decoy Development*	

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract

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 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3407 / *Air Launched Decoy Development*

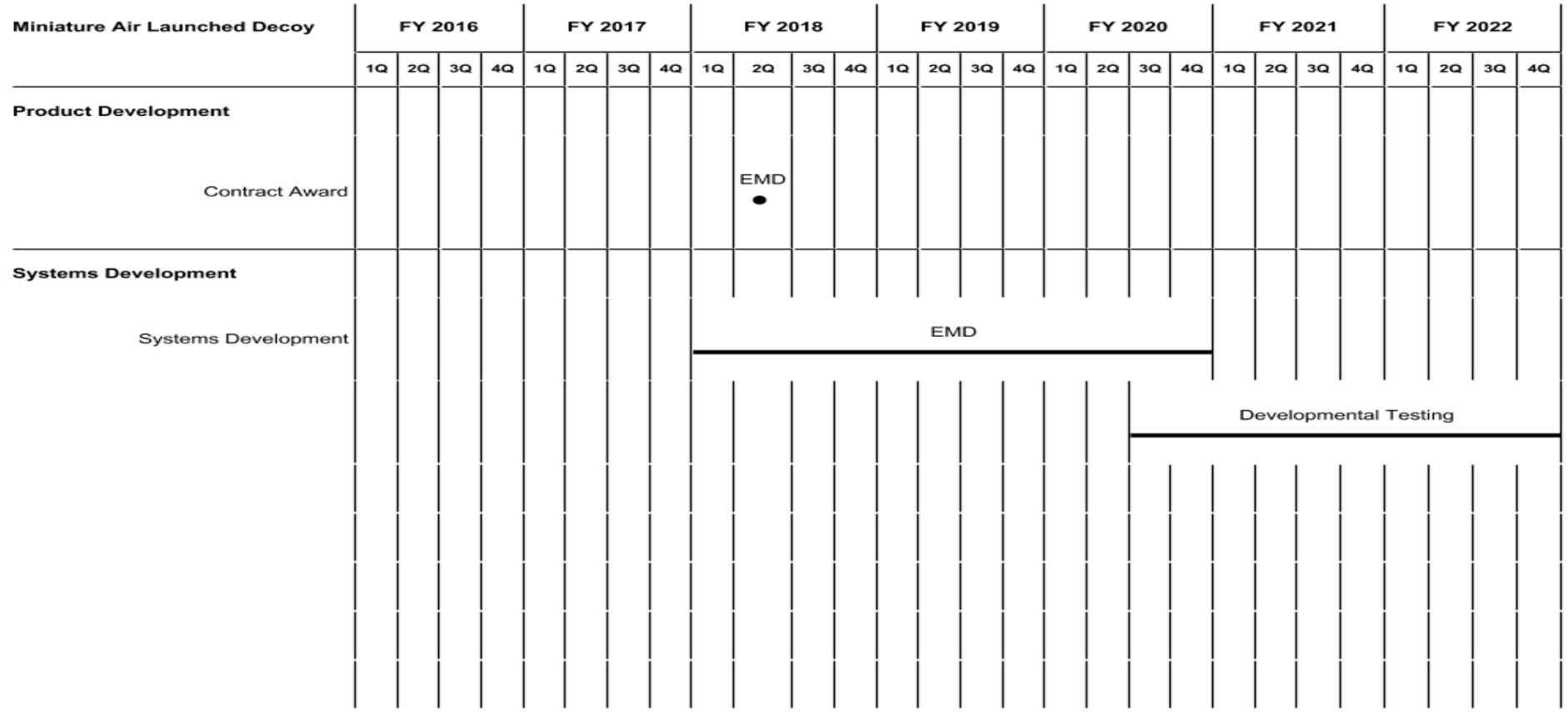

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3407 / *Air Launched Decoy Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Miniature Air Launched Decoy				
Product Development: Contract Award: EMD Contract Award	2	2018	2	2018
Systems Development: Systems Development: Engineering and Manufacturing Development	1	2018	4	2020
Systems Development: Systems Development: Developmental Testing	3	2020	4	2022