Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy	Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	7.621	4.874	31.315	132.818	-	132.818	455.970	566.707	627.791	601.489	Continuing	Continuing
3334: *Conventional Prompt Strike (CPS)*	0.000	0.000	0.000	15.000	-	15.000	290.373	374.579	478.377	482.745	Continuing	Continuing
3378: *Next Generation Land Attack Weapon (NGLAW)*	7.621	4.874	9.994	16.866	-	16.866	49.288	91.658	109.844	112.035	Continuing	Continuing
3407: *Air Launched Decoy Development*	0.000	0.000	21.321	100.952	-	100.952	116.309	100.470	39.570	6.709	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 supports the enhancement of Conventional Prompt Strike (CPS) war fighting capabilities. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives highlighted by flight tests. The program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, thermal protection systems, guidance systems, test range modernization, and mission planning and enabling capabilities. The development efforts could lead to a flight system that is non-ballistic over the majority of the flight path, controlled stage drop over Broad Ocean Area, positive control from launch to impact, adequate cross-range/maneuverability to avoid over flight issues, and effects on targets in a very short-period of time from execution order. To support these development activities, the program procures modeling and simulation capabilities, ground testing, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program timing will be driven by the outcome of flight and ground test events. Prior to FY 2019, Conventional Prompt Strike efforts were solely funded through Defense Wide Research and Development funding. In FY 2019, CPS efforts in this project are to support Navy integration efforts, conduct trade studies of system alternatives and risk reduction technology maturation efforts as the CPS program begins to transition to Navy in FY 2020.

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.

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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	9.910	31.315	118.830	-	118.830
Current President's Budget	4.874	31.315	132.818	-	132.818
Total Adjustments	-5.036	0.000	13.988	-	13.988
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.036	0.000			
• Rate/Misc Adjustments	0.000	0.000	13.988	-	13.988
• Congressional Directed Reductions Adjustments	-5.000	-	-	-	-

Change Summary Explanation

Schedule: PU 3407

FY 2019 will continue the MALD technical maturation effort and begin the EMD effort.

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy	Date: February 2018
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*

Schedule: PU 3378

Analysis of alternatives (AoA) and Material Solution Analysis has been extended from 1Q FY 2017-2Q FY 2018 to 1Q FY 2017-4Q FY 2018 due to the physical and informational technology security processes needed to be executed for a study of this scope.

The Technology Maturation and Risk Reduction (TMRR) phase moved from 2Q FY 2018 to 1Q FY 2019 due to extended AoA completion.

Schedule: PU 3334

The Convention Prompt Strike schedule has been added reflecting TMRR and Engineering Manufacturing and Development (EMD) associated with the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, thermal protection systems, guidance systems, test range modernization, and mission planning and enabling capabilities.

FY 2019 program increase of $15.0M supports the Convention Prompt Strike program integration efforts.

FY 2019 program decrease of $1.0M due to inflation rate changes.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604659N / *(U)Precision Strike Weapons Development Program*	Project (Number/Name) 3334 / *Conventional Prompt Strike (CPS)*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3334: *Conventional Prompt Strike (CPS)*	0.000	0.000	0.000	15.000	-	15.000	290.373	374.579	478.377	482.745	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Precision Strike Weapons Development Program Element supports the enhancement of Conventional Prompt Strike (CPS) warfighting capabilities. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives highlighted by flight tests. The program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, thermal protection systems, guidance systems, test range modernization, and mission planning and enabling capabilities. The development efforts could lead to a flight system that is non-ballistic over the majority of the flight path, controlled stage drop over Broad Ocean Area, positive control from launch to impact, adequate cross-range/maneuverability to avoid overflight issues, and effects on targets in a very short-period of time from execution order. To support these development activities, the program procures modeling and simulation capabilities, ground testing, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program timing will be driven by the outcome of flight and ground test events. Prior to FY 2019, Conventional Prompt Strike efforts were solely funded through Defense Wide Research and Development funding. In FY 2019, CPS efforts in this project are to support Navy integration efforts, conduct trade studies of system alternatives and risk reduction technology maturation efforts as the CPS program begins to transition to Navy in FY 2020.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Conventional Prompt Strike (CPS)	0.000	0.000	15.000	0.000	15.000
Articles:	-	-	-	-	-
Description: The Precision Strike Weapons Development Program Element supports the enhancement of Conventional Prompt Strike (CPS) warfighting capabilities. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives highlighted by flight tests. The program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, thermal protection systems, guidance systems, test range modernization, and mission planning and enabling capabilities. The development efforts could lead to a flight system that is non-ballistic over the majority of the flight path, controlled stage drop over Broad Ocean Area, positive control from launch to impact, adequate cross-range/maneuverability to avoid overflight issues, and effects on targets in a very short-period of time from execution order. To support these development activities, the program procures modeling and simulation capabilities, ground testing, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program timing will be driven by the outcome of flight and ground test events. Prior to FY 2019, Conventional Prompt Strike efforts					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3334 / *Conventional Prompt Strike (CPS)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
were solely funded through Defense Wide Research and Development funding. In FY 2019, CPS efforts in this project are to support Navy integration efforts, conduct trade studies of system alternatives and risk reduction technology maturation efforts as the CPS program begins to transition to Navy in FY 2020. ***FY 2018 Plans:*** N/A ***FY 2019 Base Plans:*** (U) FY 2019 PLAN (U) ($15.000M) FY 2019 efforts include: (U) Conduct trade studies of system alternatives. Evaluations to include: Architecture, Lethality, Survivability, Affordability, Maintainability, Facilitation needs, and others (U) Conduct risk reduction technology maturation efforts including: Common weapons launcher integration activity, shipboard/flight systems trade space evaluation and sensitivity analyses, communications analysis, CONOPs evaluations & recommendations, warhead advancements and dual/use capability, and a range of survivability technology advancements. (U) Support other integration activities as needed potentially for subsurface and/or surface ships (SSN, Virginia Payload Module, DDG) and other leading architectures ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Funding increased in FY 2019 for Conventional Prompt Strike program integration efforts ($15M).					
Accomplishments/Planned Programs Subtotals	0.000	0.000	15.000	0.000	15.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3334 / *Conventional Prompt Strike (CPS)*

D. Acquisition Strategy

The acquisition strategy will be influenced through the completion of trade studies of system alternatives and risk reduction technology maturation efforts through various contracts and warfare centers.

E. Performance Metrics

Program reviews and assessments of R&D testing results.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604659N / *(U)Precision Strike Weapons Development Program*	Project (Number/Name) 3334 / *Conventional Prompt Strike (CPS)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Conventional Prompt Strike	C/BA	Not Specified : Not Specified	0.000	0.000		0.000		14.500	Nov 2018	-		14.500	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		14.500		-		14.500	Continuing	Continuing	N/A

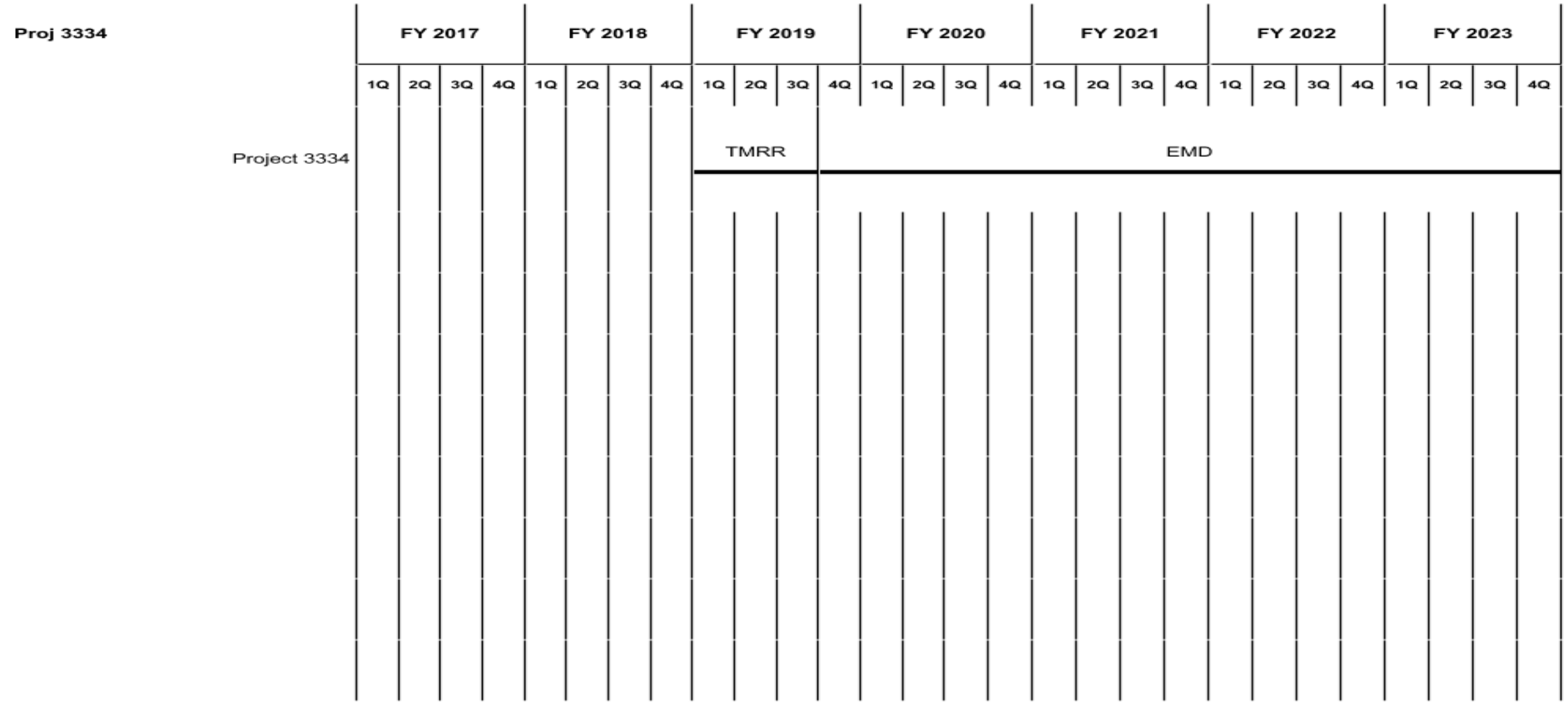
Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Conventional Prompt Strike	TBD	TBD : TBD	0.000	0.000		0.000		0.500	Oct 2018	-		0.500	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		0.000		0.500		-		0.500	Continuing	Continuing	N/A

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		0.000		15.000		-		15.000	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3334 / *Conventional Prompt Strike (CPS)*



2019PB - 0604659N - 3334

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0604659N / *(U)Precision Strike Weapons Development Program*	**Project (Number/Name)** 3334 / *Conventional Prompt Strike (CPS)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3334				
Project 3334: Technology Maturation and Risk Reduction	1	2019	3	2019
Project 3334: Engineering and Manufacturing Development	4	2019	4	2023

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3378: *Next Generation Land Attack Weapon (NGLAW)*	7.621	4.874	9.994	16.866	-	16.866	49.288	91.658	109.844	112.035	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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Next Generation Land Attack Weapon (NGLAW)	4.874	9.994	16.866	0.000	16.866
Articles:	-	-	-	-	-
FY 2018 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, and cost. Complete threat assessments based on current and future scenarios and environments to inform performance requirements and relevant technology.					
FY 2019 Base Plans: Commence the Technology Maturation and Risk Reduction (TMRR) Phase of the NGLAW program. Efforts include competitive prototyping of system elements, the refinement of requirements, and the development of functional and allocated baselines of the end-item system configuration for the follow-on long range cruise missile strike mission. FY 2019 efforts specifically include multiple contract awards associated with the prototyping of critical technologies identified during the Analysis of Alternatives to include engines, warhead, electronic warfare,					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
seekers/sensors, and airframe prototype designs to reduce technical risk, validate designs, validate cost estimates, evaluate manufacturing processes, and refine requirements. ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** The increase in FY 2019 required to transition the NGLAW program from the Analysis of Alternatives (AoA) to the Technology Maturation and Risk Reduction (TMRR) phase.					
Accomplishments/Planned Programs Subtotals	4.874	9.994	16.866	0.000	16.866

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Acquisition strategy will be influenced by the output of the Analysis of Alternatives (AoA) and the Material Development Decision (MDD). Commencing in FY 2019, the NGLAW program will enter the Technology Maturation and Risk Reduction (TMRR) phase which will conduct competitive prototyping of system elements and refine requirements of the future long range cruise missile. The TMRR phase will decrease technical risk and develop a sufficient understanding of a solution in order to make sound business decisions on initiating a formal acquisition program in the Engineering, Manufacturing and Development (EMD) Phase.

E. Performance Metrics

Performance Metrics will be influenced by the output of the AoA.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy		Date: February 2018
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)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
TMRR - Airframe	C/CPFF	TBD : TBD	0.000	0.000		0.000		2.573	Nov 2018	-		2.573	0.000	2.573	-
TMRR - Engines	C/CPFF	TBD : TBD	0.000	0.000		0.000		4.289	Nov 2018	-		4.289	0.000	4.289	-
TMRR - Seeker/Sensor	C/CPFF	TBD : TBD	0.000	0.000		0.000		3.431	Dec 2018	-		3.431	0.000	3.431	-
TMRR - Electronic Warfare	C/CPFF	TBD : TBD	0.000	0.000		0.000		1.715	Jan 2019	-		1.715	0.000	1.715	-
TMRR- Warhead	C/CPFF	TBD : TBD	0.000	0.000		0.000		0.860	Nov 2018	-		0.860	0.000	0.860	-
		Subtotal	0.000	0.000		0.000		12.868		-		12.868	0.000	12.868	N/A

Remarks

The FY 2019 airframe, engines seeker/sensor and electronic warfare contracts will be multiple competitive awards.
FY 2019 funding increases due to program transition from AoA phase to Technical Maturation Risk Reduction (TMRR) baseline assesment phase. TMRR will involve multiple contracts for subcomponent prototyping by industry vendors and multiple Statement's of Work (SOWs) for subcomponent prototyping by Government Field Activities, as determined by the AoA requirements.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	WR	NAWC-WD : China Lake, CA	0.150	2.300	Dec 2016	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Development Support- AIR 4.0M	WR	NAWC-AD : Patuxent River, MD	1.314	1.800	Dec 2016	2.470	Nov 2017	0.988	Oct 2018	-		0.988	Continuing	Continuing	Continuing
Development Support	SS/CPFF	JHU/APL : Patuxent River, MD	2.050	0.774	Dec 2016	1.114	Nov 2017	0.445	Dec 2018	-		0.445	Continuing	Continuing	Continuing
Weapons Control System	WR	NSWC-DD : Dahlgren, VA	0.025	0.000		3.360	Nov 2017	1.344	Nov 2018	-		1.344	0.000	4.729	Continuing
Mission Planning System	WR	NAVAIR : Patuxent River, MD	0.000	0.000		3.050	Nov 2017	1.221	Nov 2018	-		1.221	0.000	4.271	Continuing
Development Support	WR	NSMA : JBAB, DC	3.488	0.000		0.000		0.000		-		0.000	0.000	3.488	Continuing
Development Support	MIPR	NRO : Chantilly, VA	0.569	0.000		0.000		0.000		-		0.000	0.000	0.569	Continuing
Development Support	WR	NSWC-NPT : Newport, RI	0.025	0.000		0.000		0.000		-		0.000	0.000	0.025	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy		Date: February 2018
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)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	7.621	4.874		9.994		3.998		-		3.998	Continuing	Continuing	N/A

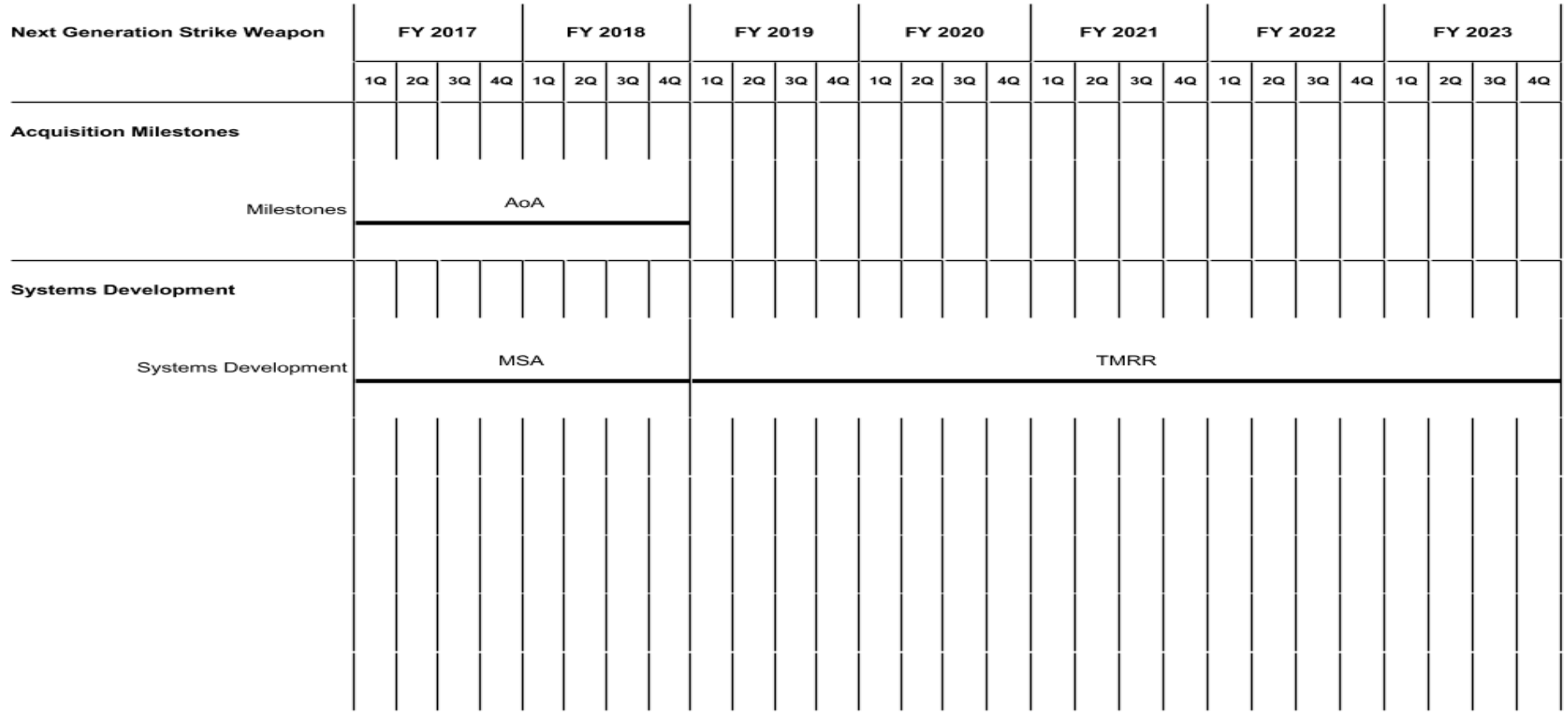
Remarks

Development Support - funding in FY 2019 required to support the commencement of the Technology Maturation and Risk Reduction Phase of the NGLAW program.

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	7.621	4.874		9.994		16.866		-		16.866	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy		Date: February 2018
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)*



2019PB - 0604659N - 3378

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
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)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Next Generation Strike Weapon				
Acquisition Milestones: Milestones: Analysis of Alternatives	1	2017	4	2018
Systems Development: Systems Development: Technology Maturation and Risk Reduction	1	2019	4	2023
Systems Development: Systems Development: Material Solution Analysis	1	2017	4	2018

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3407: *Air Launched Decoy Development*	0.000	0.000	21.321	100.952	-	100.952	116.309	100.470	39.570	6.709	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 4Q2017.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Miniature Air Launched Decoy (MALD)	0.000	21.321	100.952	0.000	100.952
Articles:	-	-	-	-	-
FY 2018 Plans: Begin technical maturation efforts. 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 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 2019 Base Plans: Continue and complete technical maturation efforts. Begin Engineering, Manufacturing, and Development phase activities. FY 2019 builds upon the FY18 technical maturation effort, to take the program through SETR 2.0 and SETR 3.0, and begin planning for SETR 4.0. Component level development will continue into FY 2019, with					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
power and distribution, airframe and container completing by the end of the FY. Tasks scheduled to continue in FY 2019 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 development activities. Material purchases in FY 2019 support development of test assets. Long Lead material procurements in FY 2019 support continued development and aircraft integration work and have an 18 month lead time for some AUR components and up to a 24 month lead time for Range Safety/Flight Termination Systems. Funding also provides for Engineering, Logistics and Program Management support. ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** FY 2018 provided funding to begin tasks related to aircraft integration and air worthiness that includes wind tunnel testing specific to F/A-18 E/F. FY 2019 provides funding to begin design and development of the MALD-N, container re-design and procure long lead items required to build test assets. FY 2019 increase supports the commencement of engineering, manufacturing and development phase and award.					
Accomplishments/Planned Programs Subtotals	0.000	21.321	100.952	0.000	100.952

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• 0204162N/2285: *Drones and Decoys*	0.000	0.000	0.000	-	0.000	0.000	61.291	84.166	133.728	0.000	279.185

Remarks

D. Acquisition Strategy

Research and development performed by contractor and government staff.

E. Performance Metrics

Acquisition Strategy, Class Justification and Approval, Acquisition Plan.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
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 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development	C/CPFF	TBD : TBD	0.000	0.000		14.315	Mar 2018	73.005	Jan 2019	-		73.005	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		14.315		73.005		-		73.005	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Support	WR	NAWC AD : Patuxent River, MD	0.000	0.000		2.000	Oct 2017	10.204	Nov 2018	-		10.204	Continuing	Continuing	Continuing
Government Support	WR	NAWC WD : China Lake, CA	0.000	0.000		4.000	Oct 2017	16.947	Nov 2018	-		16.947	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		6.000		27.151		-		27.151	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Support	WR	NAWC AD : Patuxent River, MD	0.000	0.000		0.500	Oct 2017	0.333	Nov 2018	-		0.333	Continuing	Continuing	Continuing
Government Support	WR	NAWC WD : China Lake, CA	0.000	0.000		0.256	Oct 2017	0.171	Nov 2018	-		0.171	Continuing	Continuing	Continuing
Project Management Support	C/CPFF	NAWC AD : Patuxent River, MD	0.000	0.000		0.200	Mar 2018	0.212	Nov 2018	-		0.212	Continuing	Continuing	Continuing
Travel	Various	NAVAIR : Patuxent River, MD	0.000	0.000		0.050	Oct 2017	0.080	Nov 2018	-		0.080	Continuing	Continuing	Continuing
		Subtotal	0.000	0.000		1.006		0.796		-		0.796	Continuing	Continuing	N/A

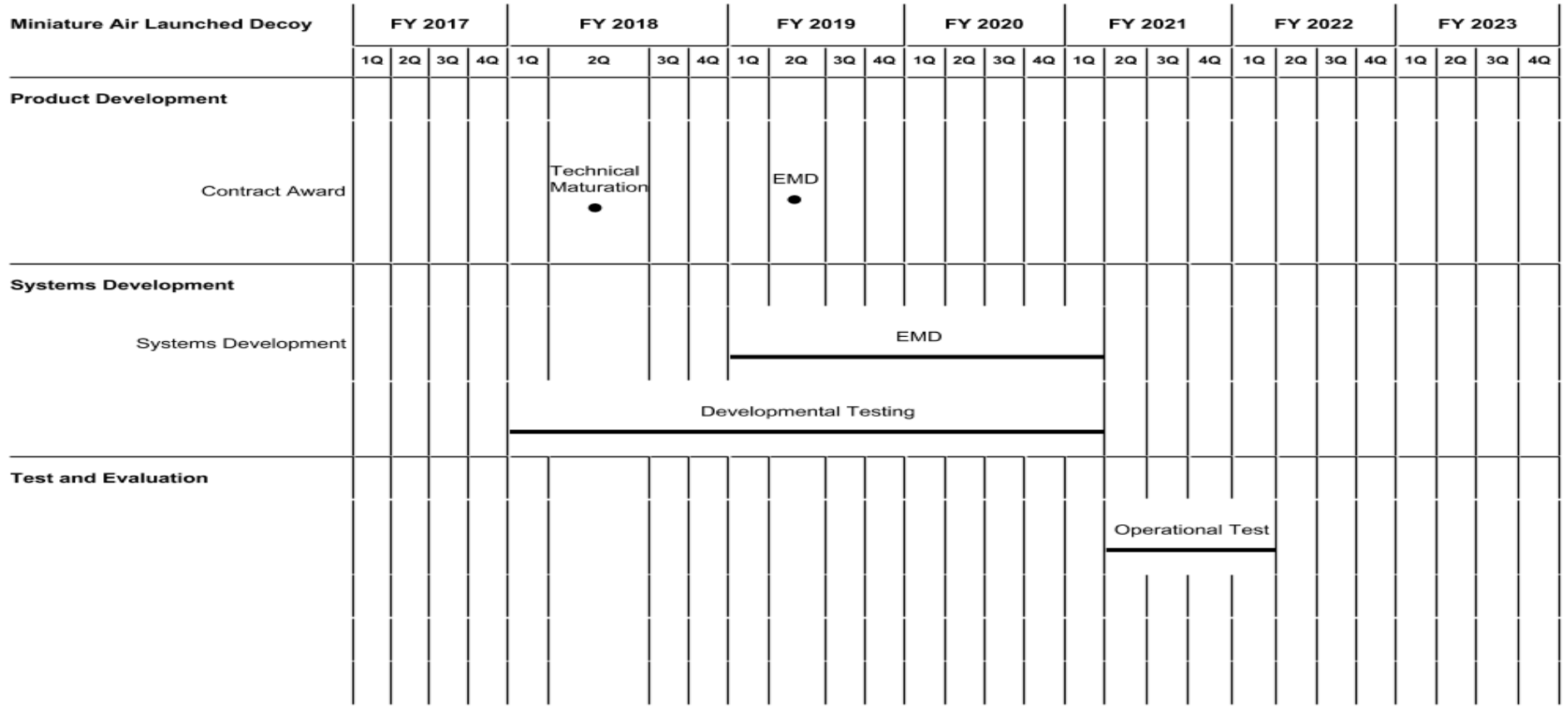
	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000		21.321		100.952		-		100.952	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy		Date: February 2018
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*



2019PB - 0604659N - 3407

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
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: Technical Maturation Contract Award	2	2018	2	2018
Product Development: Contract Award: EMD Contract Award	2	2019	2	2019
Systems Development: Systems Development: Engineering and Manufacturing Development	1	2019	1	2021
Systems Development: Systems Development: Developmental Testing	1	2018	1	2021
Test and Evaluation: Operational Test	2	2021	1	2022