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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0604659N I (U) Precision Strike Weapons Development Program							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	37.934	2.191	-	9.595	-	9.595	65.243	132.162	150.000	152.899	Continuing	Continuing
3214: Fuze Development Program	37.934	2.191	-	-	-	-	-	-	-	-	-	40.125
3378: Next Generation Land Attack Weapon (NGLAW)	0.000	-	-	9.595	-	9.595	65.243	132.162	150.000	152.899	Continuing	Continuing

Note

FY16 and later funding for the Next Generation Land Attack Weapon has moved from Program Element 0204229N (Tomahawk Mission Planning Center) to 0604659N (Precision Strike Weapons Development Program) under the same Project Unit of 3378.

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, Insensitive Munitions (IM), scaled munitions, DoD fuzing systems, sensors, extended range weapons and precision guided training round technology.

The Precision Strike Weapons Development Program Element (PE) provides funding for the Next Generation Strike Capability (NGSC) that includes a survivable, long range, multi-mission, multi-platform conventional strike capability by 2024. NGSC will combine the current maritime (OASuW Increment II under PE 0604786N and Project 3343) and Land Attack (NGLAW under PE 0204229N and Project 3378) projects into a single, Multi-Mission development effort as the acquisition follow-on program to the current maritime (OASuW Increment I/LRASM) and Land Strike (Tomahawk Modernization) investments. NGSC will focus on assessing, maturing and incorporating emergent technologies to determine the best path for the follow-on improved land/maritime strike capability effort.

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.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy				Date: February 2015	
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			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	2.257	-	-	-	-
Current President's Budget	2.191	-	9.595	-	9.595
Total Adjustments	-0.066	-	9.595	-	9.595
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.066	-			
• Program Adjustments	-	-	10.000	-	10.000
• Rate/Misc Adjustments	-	-	-0.405	-	-0.405
Change Summary Explanation					
Schedule: PU 3378					
System Readiness Review acquisition milestone added 3Q 2017					
Material Solution Analysis added 1Q 2016-4Q 2018					
Milestone B moved to 4th Qtr FY18					
Preliminary Design Review moved to 2nd Qtr FY19					
Critical Design Review acquisition milestone added 2Q 2018					
Engineering, Manufacturing, and Development Phase acquisition milestone added 1Q FY19 to 4Q FY20					
Schedule: PU 3214 MS C is now planned for 2nd QTR FY15 due to delays in the Air Force testing.					
Technical: Not applicable					
The FY 2016 funding request was reduced by \$405 thousand to account for the availability of prior year execution balances.					

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0604659N / (U)Precision Strike Weapons Development Program				Project (Number/Name) 3214 / Fuze Development Program			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
3214: Fuze Development Program	37.934	2.191	-	-	-	-	-	-	-	-	-	40.125
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Fuze Development Program provides for the development of alternative and innovative fuze system and fuze sensor technologies to improve the reliability, capability and production characteristics of fuze products. This program also provides for emerging technology insertion to improve the performance and maintainability characteristics of current and future fuze and fuze sensor technologies.

The Hard Target Void Sensing Fuze (HTVSF) is an FY08 Joint Capability Technology Demonstration (JCTD) sponsored by United States Strategic Command in coordination with the United States Air Force and United States Navy. The JCTD was a 27 month risk reduction program that was awarded to two Contractors in 3rd QTR FY08 to perform design, test, and manufacturing activities leading to a down-select to a single Contractor for Engineering Manufacturing Development (EMD) and production. The JCTD was completed in 3rd QTR FY10 and the EMD contract was awarded to a single Contractor in 2nd QTR FY11. HTVSF is designed to prosecute harder, deeper, and more complex targets that exceeded design parameters of existing conventional kinetic strike capabilities. HTVSF will be used only with BLU-109 Joint Direct Attack Munitions.

Note: First test article quantity for HTVSF includes FY 12-Quantity 26 , FY13-Quantity 3, FY14-Quantity 3

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

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Hard Target Void Sensing Fuze (HTVSF) Hardware Development	2.191	-	-	-	-
Articles:	3	-	-	-	-
Description: HTVSF hardware development funding will be used to qualify the fuze booster as part of the BLU-109 explosive train and begin F/A-18E/F software OFP development.					
FY 2014 Accomplishments: Completed F/A-18 E/F integration and mission planning software efforts.					
FY 2015 Plans: N/A					
FY 2016 Base Plans:					

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Appropriation/Budget Activity 1319 / 4			R-1 Program Element (Number/Name) PE 0604659N / (U)Precision Strike Weapons Development Program		Project (Number/Name) 3214 / Fuze Development Program	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A					
FY 2016 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	2.191	-	-	-	-

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• PANMC/01450: <i>General Purpose Bombs</i>	-	1.044	8.772	-	8.772	-	-	-	-	-	9.816
• RDTE/ PE 064635F: <i>Air Force (SDD)</i>	21.175	7.808	2.218	-	2.218	-	-	-	-	-	97.591
• Proc/PE 020803: <i>Air Force</i>	19.280	38.500	39.510	-	39.510	41.700	-	-	-	-	139.120

Remarks
Due to MS C slipped the contract award slipped from FY14 to FY15 and will increase the FY16 procurement.

D. Acquisition Strategy
The Hard Target Void Sensing Fuze (HTVSF) Joint Capability Technology Demonstration (JCTD) is a risk reduction effort. The JCTD supported two competitively selected sources for development and testing of initial prototyping. Following the JCTD, a down select to a single source occurred, awarding a contract to ATK in FY11. Engineering Manufacturing Development phase is complete with production contract awards planned for FY15.

E. Performance Metrics
MS C is now planned for 2nd QTR FY15.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604659N / (U)Precision Strike Weapons Development Program						Project (Number/Name) 3214 / Fuze Development Program			
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/FPIF	ATK : Keyser, WV	2.567	0.053	Feb 2014	-		-		-		-	-	2.620	2.620
Subtotal			2.567	0.053		-		-		-		-	-	2.620	2.620
Remarks Primary Hardware (H/W) development testing requirements on the HTVSF were decreased in FY14 at the contractor facility due to change in 40ft drop test requirements.															
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development HTVSF	WR	NAWC WD : China Lake, CA	4.177	0.313	Dec 2013	-		-		-		-	-	4.490	-
Software Development HTVSF	C/CPIF	Boeing : St. Louis, MO	2.455	0.005	Dec 2013	-		-		-		-	-	2.460	2.460
Prior years support no longer funded in the FYDP	Various	Various : Various	3.984	-		-		-		-		-	-	3.984	-
Subtotal			10.616	0.318		-		-		-		-	-	10.934	-
Remarks FY14 software requirements at NAWC WD were updated for actuals.															
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test & Evaluation HTVSF	WR	OPTVFOR : Norfolk, VA	0.080	0.268	Nov 2013	-		-		-		-	-	0.348	-
Development Test & Evaluation HTVSF	MIPR	Air Force : Eglin AFB, FL	0.000	0.256	Nov 2013	-		-		-		-	-	0.256	-
Development Test & Evaluation HTVSF	WR	NAWC WD : China Lake, CA	1.400	0.300	Nov 2013	-		-		-		-	-	1.700	-

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Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604659N / (U)Precision Strike Weapons Development Program						Project (Number/Name) 3214 / Fuze Development Program			

Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Operational Test & Evaluation HTVSF	WR	Various : Various	0.100	0.111	Nov 2013	-		-		-		-	-	0.211	-
Prior years T&E no longer funded in the FYDP	Various	Various : Various	10.898	-		-		-		-		-	-	10.898	-
Subtotal			12.478	0.935		-		-		-		-	-	13.413	-

Remarks
FY14 Development Test & Evaluation for HTVSF was added at Eglin AFB, FL due to a change in testing location.

Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Support HTVSF	WR	NAWC WD : China Lake, CA	3.199	0.636	Nov 2013	-		-		-		-	-	3.835	-
Government Support HTVSF	WR	NAWC AD : Patuxent River, MD	1.298	0.249	Nov 2013	-		-		-		-	-	1.547	-
Prior years Mgmt Svcs no longer funded in the FYDP	WR	NAWC WD : China Lake, CA	7.776	-		-		-		-		-	-	7.776	-
Subtotal			12.273	0.885		-		-		-		-	-	13.158	-

Remarks
The development and transitioning of the Safe Separation/Integration Flight Testing at NAWCAD was updated to reflect actuals in FY14.

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	37.934	2.191	-	-	-	-	-	40.125	-

Remarks

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PE 0604659N: (U)Precision Strike Weapons Development ...
Navy

R-1 Line #81

R-1 Program Element (Number/Name)	Program Element Description	Program Element Type	Program Element Status	Program Element Location	Program Element Contact	Program Element Date	Program Element Comments

PE 0604659N / (U) Precision Strike
Weapons Development Program

3214 / Fuze Development Program

Hard Target Void Sensing Fuze (HTVSF)					FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				
					1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Acquisition Milestones																																	
Milestones										MS C ▲																							
Systems Development																																	
Hardware Development					EMD																												
Test Unit Deliveries					62 Test Deliveries																												
Test & Evaluation																																	
Technical Evaluation					DT&E																												
Operational Evaluation																																	
Production Milestones																																	
Contract Awards											LRIP ◆																						
Deliveries																																	

2016PB - 0604659N - 3214

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604659N / (U) <i>Precision Strike Weapons Development Program</i>	Project (Number/Name) 3214 / <i>Fuze Development Program</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Hard Target Void Sensing Fuze (HTVSF)</i>				
Acquisition Milestones: Milestones: Full Rate Production Decision	4	2015	4	2015
Acquisition Milestones: Milestones: Milestone C	2	2015	2	2015
Acquisition Milestones: Milestones: IOC	4	2015	4	2015
Systems Development: Hardware Development: Engineering, Manufacturing, and Development Phase	1	2014	4	2014
Systems Development: Test Unit Deliveries: 62 Test Deliveries	1	2014	2	2014
Test & Evaluation: Technical Evaluation: Developmental Test and Evaluation	1	2014	2	2014
Test & Evaluation: Operational Evaluation: Intergrational Operational Test and Evaluation	3	2015	4	2015
Production Milestones: Contract Awards: Full Rate Production-1 Award (PANMC)	3	2016	3	2016
Production Milestones: Contract Awards: Low-Rate Initial Production Award (PANMC)	3	2015	3	2015
Deliveries: LRIP Deliveries 50 (PANMC)	3	2016	2	2017
Deliveries: FRP 1 Deliveries 450 (PANMC)	3	2017	2	2018

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
3378: Next Generation Land Attack Weapon (NGLAW)	-	-	-	9.595	-	9.595	65.243	132.162	150.000	152.899	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Funding is provided for the Next Generation Strike Capability (NGSC) that includes a survivable, long range, multi-mission, multi-platform conventional strike capability by 2024. NGSC will combine the current maritime (OASuW Increment II under PE 0604786N and Project 3343) and Land Attack (NGLAW under PE 0204229N and Project 3378) projects into a single, Multi-Mission development effort as the acquisition follow-on program to the current maritime (OASuW Increment I/LRASM) and Land Strike (Tomahawk Modernization) investments. NGSC will focus on assessing, maturing and incorporating emergent technologies to determine the best path for the follow-on improved land/maritime strike capability effort.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Next Generation Strike Capability Articles: FY 2014 Accomplishments: N/A FY 2015 Plans: N/A FY 2016 Base Plans: Conduct NGSC 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 2016 OCO Plans: N/A								-	-	9.595	-	9.595
								-	-	-	-	-
Accomplishments/Planned Programs Subtotals								-	-	9.595	-	9.595

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
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)
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 NGSC AoA.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604659N / (U) <i>Precision Strike Weapons Development Program</i>				Project (Number/Name) 3378 / <i>Next Generation Land Attack Weapon (NGLAW)</i>					
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	WR	NAWC-WD : China Lake, CA	0.000	-		-		3.838	Nov 2015	-		3.838	Continuing	Continuing	Continuing
Development Support- AIR 4.10	WR	NAWC-AD : Patuxent River, MD	0.000	-		-		3.838	Nov 2015	-		3.838	-	3.838	-
Development Support	WR	JHU/APL : Patuxent River, MD	0.000	-		-		1.919	Nov 2015	-		1.919	-	1.919	-
Subtotal			0.000	-		-		9.595		-		9.595	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		-		9.595		-		9.595	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy																Date: February 2015																					
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)																			
Next Generation Strike Weapon										FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
										1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestones																																					
Milestones														AoA																							
Reviews																																					
Systems Development																																					
Systems Development														MSA								EMD Phase															
														</																							

2016PB - 0604659N - 3378

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604659N / (U) <i>Precision Strike Weapons Development Program</i>	Project (Number/Name) 3378 / <i>Next Generation Land Attack Weapon (NGLAW)</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Next Generation Strike Weapon</i>				
Acquisition Milestones: Milestones: Analysis of Alternatives	1	2016	4	2016
Acquisition Milestones: Milestones: Milestone B	4	2018	4	2018
Acquisition Milestones: Reviews: System Readiness Review	3	2017	3	2017
Acquisition Milestones: Reviews: Preliminary Design Review	2	2019	2	2019
Acquisition Milestones: Reviews: Critical Design Review	2	2020	2	2020
Systems Development: Systems Development: Material Solution Analysis	1	2016	4	2018
Systems Development: Systems Development: Engineering, Manufacturing and Development Phase	1	2019	4	2020