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 0604279N I (U)ASE Self Protection Optimization

	-71 (	/										
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	12.621	0.169	3.921	7.874	-	7.874	6.157	3.554	7.901	8.044	Continuing	Continuing
3308: Technology Development	1.324	0.080	1.498	2.438	-	2.438	2.571	2.665	7.024	7.164	Continuing	Continuing
3309: Assault Survivability Optimization	11.297	0.089	2.423	5.436	-	5.436	3.586	0.889	0.877	0.880	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This element includes development of Aircraft Survivability Equipment (ASE) and Electronic Warfare (EW)/countermeasures solutions for the United States Navy, United States Marine Corps and Coalition Aircraft to include studies and evaluations of current and future aircraft threats, modeling and simulation for improved countermeasure capabilities, and development and testing to address new and emerging threats.

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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	0.169	8.033	7.951	-	7.951
Current President's Budget	0.169	3.921	7.874	-	7.874
Total Adjustments	-	-4.112	-0.077	-	-0.077
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.002			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-4.110			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	_	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	_	-			
Reprogrammings	_	-			
SBIR/STTR Transfer	_	-			
Rate/Misc Adjustments	-	-	-0.077	-	-0.077

### **Change Summary Explanation**

Technical:

PU 3309 Assault Survivability Optimization: Advanced threat system capability for seeker vans delayed until FY16. Application of advanced countermeasures for increased aircraft survivability delayed until FY17 for four DoN aircraft, UH-1Z, CH-53K and KC-130J.

Cost:

Navy

PE 0604279N: (U)ASE Self Protection Optimization

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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	PE 0604279N I (U)ASE Self Protection Optimization	
Component Development & Prototypes (ACD&P)		

Project Unit (PU) 3309 Assault Survivability Optimization: FY2015 \$2.110M Senate Appropriations Committee mark for unjustified request for test assets and \$1.106M House Appropriations Committee mark for program growth. Congressional marks delay procurement of advanced countermeasures for flight effectiveness testing and capability upgrades to seeker vans and delays fielding of survivability improvements to DoN aircraft.

#### Schedule:

PU 3309 Assault Survivability Optimization: Program was established by OPNAV N98 to fill USN and USMC aircraft survivability gaps against current and future threat systems using current and advanced technology expendable countermeasures as well as improvements in Aircraft Survivability Equipment (ASE) systems. Changes to R-3, R-4, and R-4A from previous budget submission are in response to proliferation changes of threat systems and fielding of additional ASE capability. The current schedule is developed to meet these emerging threat changes by optimizing countermeasure techniques using this additional ASE capability in accordance with Air Expendable Countermeasures (AECM) ORD: #512-88-89 dated 28 May 99 to provide operationally effective countermeasures and countermeasures techniques. It is anticipated that PU 3309 will continue to change in response to this requirement when similar threat proliferation, advances in countermeasures technology and ASE capability advancements are accomplished. Procurement of advanced countermeasures delayed until 2nd quarter FY16 thereby delaying flight effectiveness test until FY17 and seeker test van capability upgrades delayed until FY16 due to PB-15 Congressional marks.

PE 0604279N: (U)ASE Self Protection Optimization

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Exhibit R-2A, RDT&E Project Ju	stification:	PB 2016 N	lavy							Date: Febr	ruary 2015	
Appropriation/Budget Activity 1319 / 4					_	am Elemen 79N / (U)AS on	•	•	Project (N 3308 / Tec	umber/Nar hnology De	,	
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
3308: Technology Development	1.324	0.080	1.498	2.438	-	2.438	2.571	2.665	7.024	7.164	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

Project Unit (PU) 3308 Technology Development: Funds efforts that focus on the quick reaction prototyping of tactical Electronic Warfare (EW)/countermeasures solutions for increased survivability providing friendly forces the self protection necessary for successful mission accomplishment. This program directly addresses the operational requirement of strike platforms for optimization of EW/countermeasure solutions across the Department of the Navy. Improved countermeasure capabilities and techniques through modeling and simulation, validated in subsequent field testing to address new and emerging threats, capitalize upon upgrades to Aircraft Survivability Equipment systems capabilities for strike platforms and evaluate new radio frequency countermeasure and infra red countermeasure technologies.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2016	FY 2016
	FY 2014	FY 2015	Base	OCO	Total
Title: Technology Development	0.080	1.498	2.438	-	2.438
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Continued EW vulnerability studies/analysis, product development and test conducted for strike aircraft across the FYDP.					
FY 2015 Plans: Continue EW vulnerability studies/analysis, product development and test conducted for strike aircraft across the FYDP.					
FY 2016 Base Plans: Continue EW vulnerability studies/analysis, product development and test conducted for strike aircraft across the FYDP.					
FY 2016 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	0.080	1.498	2.438	-	2.438

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

N/A

Navy

Remarks

PE 0604279N: (U)ASE Self Protection Optimization

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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 0604279N I (U)ASE Self Protection Optimization	Project (Number/Name) 3308 / Technology Development
D. Acquisition Strategy		
EW vulnerability studies/analysis, product development and test con-	ducted for strike aircraft across the FYDP.	
E. Performance Metrics		
Electronic Warfare (EW) vulnerability studies/analysis, product devel	opment and test conducted for strike aircraft across th	e FYDP.
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PE 0604279N: *(U)ASE Self Protection Optimization* Navy

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Exhibit R-3, RDT&E I	Project C	ost Analysis: PB 2	2016 Navy	,								Date:	February	2015	
Appropriation/Budge 1319 / 4	et Activity	1	•				ogram Ele 4279N / ( zation					(Numbei Technolog		oment	
Product Developmen	nt (\$ in M	illions)		FY:	2014	FY:	2015		2016 ise	FY 2		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	Total Cost	Target Value of Contrac
Product Analysis	C/CPFF	GTRI : Atlanta, GA	0.404	-		-		-		-		-	-	0.404	0.40
		Subtotal	0.404	-		-		-		-		-	-	0.404	0.40
Support (\$ in Million	s)			FY	2014	FY:	2015		2016 ise	FY 2		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	Total Cost	Target Value of Contract
Software Dev-ALQ-214 SW Dev	WR	NAWCWD : Point Mugu, CA	0.387	0.080	Nov 2013	0.964	Nov 2014	1.174	Nov 2015	-		1.174	Continuing	Continuing	Continuin
Software Dev-ALQ-214 SW Dev	WR	Various : Various	0.000	-		0.234	Oct 2014	0.644	Nov 2015	-		0.644	Continuing	Continuing	Continuin
Prior costs no longer in FYDP	Various	Various : Various	0.072	-		-		-		-		-	-	0.072	0.07
		Subtotal	0.459	0.080		1.198		1.818		-		1.818	-	-	-
Test and Evaluation	(\$ in Milli	ions)		FY :	2014	FY:	2015		2016 ise	FY 2		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	Total Cost	Target Value of Contract
Engineering & Evaluation	WR	NAWCWD : Point Mugu, CA	0.000	-		0.250	Oct 2014	0.260	Nov 2015	-		0.260	Continuing	Continuing	Continuir
Engineering & Evaluation	WR	NAWCWD : China Lake, CA	0.000	-		-		0.310	Nov 2015	-		0.310	Continuing	Continuing	Continuir
Prior years T&E no longer funded in the FYDP	Various	Various : Various	0.461	-		-				-		-	-	0.461	-
		Subtotal	0.461	-		0.250		0.570		_		0.570	-	_	-

PE 0604279N: *(U)ASE Self Protection Optimization* Navy

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy			Date: February 2015
, ·· ·	,	,	umber/Name) hnology Development

FY 2015

FY 2014

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
Travel	Allot	NAWCAD : Pax River, MD	0.000	-		0.050	Oct 2014	0.050	Oct 2015	-		0.050	Continuing	Continuing	Continuing
	_	Subtotal	0.000	-		0.050		0.050		-		0.050	-	-	-
			Prior Years	FY 2	2014	FY 2	2015	FY 2 Ba		FY 2	2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	1.324	0.080		1.498		2.438		-		2.438	-	-	-

Remarks

**Management Services (\$ in Millions)** 

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy  Appropriation/Budget Activity  1319 / 4																			Pate: February 2015 Project (Number/Name) 308 / Technology Development					
ASPO		FY 20	14		FY 20	15		FY 201			FY 2017			FY 2018				FY 2	019			FY	2020	
	10	2Q	3Q 4	Q 1Q	2Q	30	6Q 10	2 2Q	3Q	40 10	2Q	30	1Q 1C	2Q	3Q	40	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Milestones							ļ																	
Fleet Release	,								FR-1€ ▼	5					FR-1: ▼	8								
Systems Development	T		Ħ	Ť		Ħ	Ť			Ħ	İ	Ħ		İ		İ	Ť		İ		П			
Systems Development Reviews		FY-14 Reviev ▼			FY-15 Reviev ▼			FY-16 Review ▼			FY-17 Revie			FY-18 Reviev ▼				FY-19 Review ▼				FY-20 Reviev ▼	v	
System Development Analysis		FY-14 FY-15 FY-16 FY-17 FY-18 FY-19 FY-Analysis Analysis Analysis Analysis Analysis Analysis Analysis										-20 Ilysis												
System Development											So	ftware	Dev	velopme	nt									
Test and Evaluation	╁		$\vdash$	7			$\neg$				1		$\neg$		1		$\neg$				П		1	П
Integrated Evaluation					FY- Int-E			FY-16	Int-Ex	/al		/-17 Eval		FY-10	3 Int-E	val	-	FY-19	Int-E	Eval		Inte	Y-20 grate luatio	d
2016PB - 0604279N - 3308																								

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
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# Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
4SPO				
Milestones: Fleet Release - 16	3	2016	3	2016
Milestones: Fleet Release - 18	3	2018	3	2018
Systems Development: Systems Development Reviews: FY-14 Review	2	2014	2	2014
Systems Development: Systems Development Reviews: FY-15 Review	2	2015	2	2015
Systems Development: Systems Development Reviews: FY-16 Review	2	2016	2	2016
Systems Development: Systems Development Reviews: FY-17 Review	2	2017	2	2017
Systems Development: Systems Development Reviews: FY-18 Review	2	2018	2	2018
Systems Development: Systems Development Reviews: FY-19 Review	2	2019	2	2019
Systems Development: Systems Development Reviews: FY-20 Review	2	2020	2	2020
Systems Development: System Development Analysis: FY-14 Analysis	3	2014	1	2015
Systems Development: System Development Analysis: FY-15 Analysis	3	2015	1	2016
Systems Development: System Development Analysis: FY-16 Analysis	3	2016	1	2017
Systems Development: System Development Analysis: FY-17 Analysis	3	2017	1	2018
Systems Development: System Development Analysis: FY-18 Analysis	3	2018	1	2019
Systems Development: System Development Analysis: FY-19 Analysis	3	2019	4	2019
Systems Development: System Development Analysis: FY-20 Analysis	3	2020	4	2020
Systems Development: System Development: Software Development	3	2014	4	2020
Test and Evaluation: Integrated Evaluation: FY-15 Integrated Evaluation	2	2015	4	2015
Test and Evaluation: Integrated Evaluation: FY-16 Integrated Evaluation	2	2016	4	2016
Test and Evaluation: Integrated Evaluation: FY-17 Integrated Evaluation	2	2017	4	2017
Test and Evaluation: Integrated Evaluation: FY-18 Integrated Evaluation	2	2018	4	2018

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
1	,	- 3 (	umber/Name) hnology Development

	St	art	En	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Test and Evaluation: Integrated Evaluation: FY-19 Integrated Evaluation	2	2019	4	2019
Test and Evaluation: Integrated Evaluation: FY-20 Integrated Evaluation	2	2020	4	2020

Exhibit R-2A, RDT&E Project Ju	ustification:	PB 2016 N	lavy							Date: Febr	uary 2015	
Appropriation/Budget Activity 1319 / 4		_	<b>am Elemen</b> 79N <i>I (U)AS</i> on	•	umber/Name) ault Survivability Optimization							
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
3309: Assault Survivability Optimization	11.297	0.089	2.423	5.436	-	5.436	3.586	0.889	0.877	0.880	Continuing	Continuing
Quantity of RDT&E Articles		-	-	1,500	-	1,500	-	-	-	-		

### A. Mission Description and Budget Item Justification

This project funds the development, testing, and rapid fielding of advanced countermeasures and enhanced employment techniques needed to support current and future operations for USN and USMC aircraft. Incorporates capability advancements in Aircraft Survivability Equipment (ASE) and expendable countermeasures to develop and deploy countermeasure responses resulting in increased platform survivability. Resources will be applied to the following areas: 1) studies and evaluations to optimize current countermeasures and ASE capabilities, 2) development and demonstration of advanced expendable countermeasures and countermeasure techniques, 3) testing and evaluation of advanced countermeasures, 4) development of system software for the testing and deployment of advanced countermeasure techniques, and 5) development of and upgrades to modeling tools and specialized equipment required to conduct evaluation of advanced countermeasures.

FY16 flight test effectiveness testing to be conducted using Non-Combat Expenditure Allowance (NCEA) of current countermeasures. Advanced countermeasures procured in FY16 will support flight test for optimized/advanced countermeasures techniques in FY17. The quantity is required by Air Expendable Countermeasures Test and Evaluation Master Plan #1480 to complete the flight testing for test Mission Data Files (MDF) and optimized/advanced countermeasures techniques.

(RDT&E Articles are advanced air expendable countermeasures.)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2016	FY 2016
	FY 2014	FY 2015	Base	oco	Total
Title: Analysis and Development of Advanced Countermeasures and Countermeasure Techniques	0.089	2.423	5.436	-	5.436
Articles:	-	-	1,500	-	1,500
FY 2014 Accomplishments: Performed modeling, simulation and integration for advanced countermeasure measurement equipment.					
FY 2015 Plans: Conduct modeling and simulation, develop countermeasure techniques and perform flight effectiveness for evaluation of advanced countermeasures.					
FY 2016 Base Plans:					

PE 0604279N: (U)ASE Self Protection Optimization

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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 0604279N I (U)ASE Self Protection Optimization	Project (Number/Name) 3309 I Assault Survivability Optimization
B Accomplishments/Planned Programs (\$ in Millions Article Quan	ntities in Each)	FV 2016 FV 2016 FV 2016

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue development and testing of advanced countermeasure techniques and upgrade specialized evaluation equipment for advancing threat systems. 1,500 test articles procured in FY16 are advanced expendable countermeasures for flight effectives testing /optimization flight tests in FY17.					
FY 2016 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	0.089	2.423	5.436	-	5.436

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

N/A

Navy

#### Remarks

#### D. Acquisition Strategy

During the FY15 budget cycle OPNAV N98 performed zero sum realignment from PANMC PE 0204162N BLI 0182 to Assault Survivability Optimization PE 0604279N PU 3309: FY15 \$5.4M, FY16 \$5.3M, FY17 \$3.4M, FY18 \$0.7M, FY19 \$0.7M and FY20 \$0.7M. The reason for this realignment was demonstrated return on investment during Helo Survivability Task Force funded efforts during FY11 and FY12. Strategy will continue to: leverage improvements in air expendable countermeasures technology and in Aircraft Survivability Equipment (ASE) integration to enhance platform survivability on USN and USMC platforms through more effective dispense techniques, invest in enhancements to modeling and simulation tools to better evaluate countermeasure effectiveness, upgrade test and evaluation equipment to incorporate current and future threats for effectiveness tests and develop and demonstrate advanced concept countermeasures for future threats. Advanced countermeasures procured in FY16 will support flight test for optimized/advanced countermeasure techniques in FY17. R-3 cost analysis and R-4 schedule updated from PB15 budget submission to leverage modeling and simulation and enhanced test capability in order to counter new and emerging threats. New advanced countermeasures are transitioned to PANMC PE 0204162N for procurement and fielding. New optimized and advanced countermeasure techniques are delivered to government software support activities for fleet release to increase aircraft/aircrew survivability.

#### **E. Performance Metrics**

Maintain Air Expendable Countermeasures (AECM) ORD: #512-88-89 dated 28 May 99 requirement to provide operationally effective mixture of countermeasures that can be employed to degrade and/or neutralize the effectiveness of current and projected threats at or above aircraft key performance parameters for survivability. Continued development of optimized/advanced countermeasure techniques and advance countermeasures by ongoing analysis and test flight efforts related to aircraft platform survivability based on threat development and proliferation.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

R-1 Program Element (Number/Name)

Project (Number/Name)

1319 / 4

Appropriation/Budget Activity

PE 0604279N I (U)ASE Self Protection
Optimization

3309 I Assault Survivability Optimization

Date: February 2015

Product Developmen	nt (\$ in Mi	illions)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 ise	FY 2	2016 CO	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	Total Cost	Target Value of Contract
Expendable Countermeasure Technique Modeling and Simulation	WR	NSWC CRANE : Crane, IN	5.819	0.089	Oct 2013	1.475	Nov 2014	1.746	Nov 2015	-		1.746	Continuing	Continuing	Continuing
Expendable Countermeasure Technique Modeling and Simulation	SS/CPFF	Georgia Tech Research Institute : Atlanta, GA	0.000	-		-		0.100	Dec 2015	-		0.100	Continuing	Continuing	Continuing
	•	Subtotal	5.819	0.089		1.475		1.846		-		1.846	-	-	-

#### Remarks

Modeling and simulation to develop advanced countermeasure techniques prior to flight test.

Support (\$ in Million	ıs)			FY 2	2014	FY 2	2015		2016 ise	FY 2	2016 CO	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	Total Cost	Target Value of Contract
Test Mission Data File Software Development	WR	FRCSE : Jacksonville, FL	0.585	-		0.200	Jan 2015	0.360	Nov 2015	-		0.360	Continuing	Continuing	Continuing
Prior year Support costs no longer funded in the FYDP	Various	Various : Various	2.610	-		-		-		-		-	-	2.610	-
	•	Subtotal	3.195	-		0.200		0.360		-		0.360	-	-	-

#### Remarks

Software development to create Mission Data Files (MDF) and enhanced operational flight program algorithms for flight effectiveness testing.

Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	2015		2016 ise	FY 2		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	Total Cost	Target Value of Contract
Developmental T&E Flight Tests	WR	Various : Various	0.000	-		0.748	Apr 2015	0.800	Nov 2015	-		0.800	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

1319 / 4 PE 0604279N / (U)ASE Self Protection 3309 / Assault Survivability Optimization Optimization

Test and Evaluation	(\$ in Milli	ons)		FY 2014		FY 2015			2016 ise	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	Total Cost	Target Value of Contract
Advanced Countermeasures for Flight Tests	SS/FP	Esterline Inc. : Camden AR	0.000	-		-		0.419	Mar 2016	-		0.419	Continuing	Continuing	Continuing
Engineering and Evaluation for Technology Insertion	WR	NAWCWD : China Lake, CA	0.000	-		-		0.231	Oct 2015	-		0.231	Continuing	Continuing	Continuing
Prior year T&E no longer funded in the FYDP	Various	Various : Various	2.283	-		-		-		-		-	-	2.283	-
Seeker Test Van Advanced Threat Capability	TBD	TBD : TBD	0.000	-		-		1.680	Jan 2016	-		1.680	Continuing	Continuing	Continuing
		Subtotal	2.283	-		0.748		3.130		-		3.130	-	-	-

#### Remarks

Developmental T&E flight test following modeling and simulation evaluation in FY15 are at Eglin AFB (May/September 2015 for UH-1Y, MH-60R and CH-53E) and Edwards AFB (July 2015 for F/A-18E/F). FY15 Congressional mark delays advanced countermeasure procurement until FY16 and flight effectiveness testing/optimization of advanced countermeasures until FY17. FY15 flight effectiveness testing to be performed utilizing Non-Combat Expenditure Allowance (NCEA) of current countermeasures. Advanced expendable countermeasures procured in FY16 will support flight effectives testing /optimization flight tests in FY17. FY15 Seeker Test Van (STV) advanced threat capability item was eliminated due to congressional marks thereby delaying critical threat capability upgrades to Smart Dispense Van (SDV), STV, and Expeditionary Smart Dispense Van (ESDV). Equipment procurement required to evaluate advanced countermeasure techniques and integrate new threat systems into SDV, STV, and ESDV for evaluation capability will commence in FY16.

Management Servic	es (\$ in M	illions)		FY 2	2014	FY 2	2015	1	2016 ase	FY 2	2016 CO	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	Total Cost	Target Value of Contract
Travel	WR	FRCSE : Jacksonville, FL	0.000	-		-		0.010	Oct 2015	-		0.010	Continuing	Continuing	Continuing
Project Management	WR	FRCSE : Jacksonville, FL	0.000	-		-		0.090	Nov 2015	-		0.090	Continuing	Continuing	Continuing
		Subtotal	0.000	-		-		0.100		-		0.100	-	-	-

#### Remarks

Travel reduced. Project management line added from previous budget submission to coordinate increased development activities.

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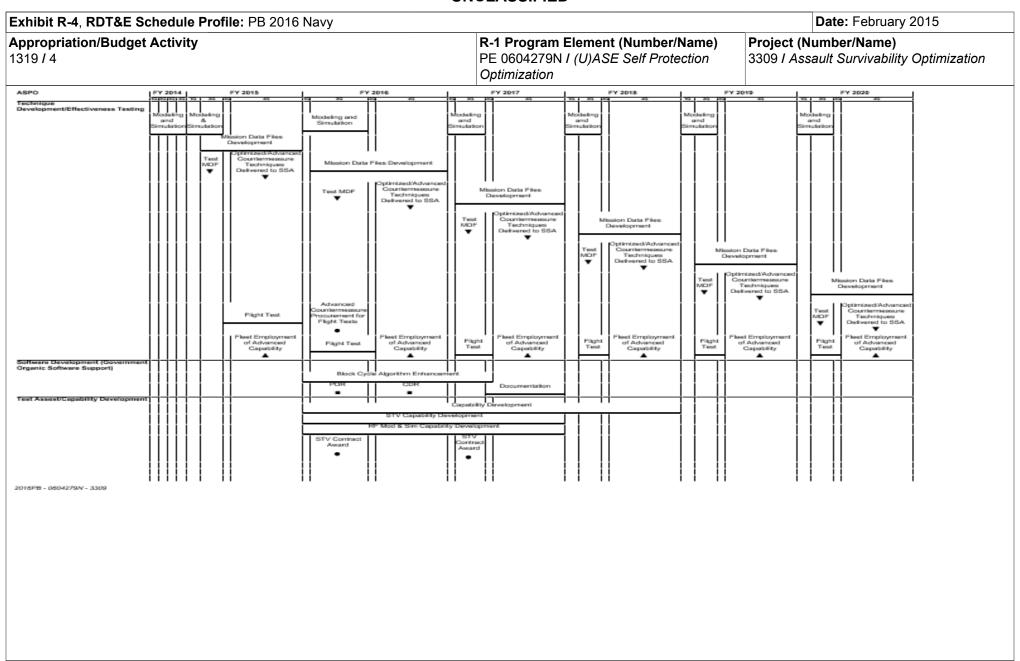


Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
1	,	,	umber/Name) ault Survivability Optimization

# Schedule Details

	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
ASPO				
Technique Development/Effectiveness Testing: FY14 Modeling and Simulation	1	2014	4	2014
Technique Development/Effectiveness Testing: FY15 Modeling and Simulation	1	2015	2	2015
Technique Development/Effectiveness Testing: FY16 Modeling and Simulation	1	2016	2	2016
Technique Development/Effectiveness Testing: FY17 Modeling and Simulation	1	2017	2	2017
Technique Development/Effectiveness Testing: FY18 Modeling and Simulation	1	2018	2	2018
Technique Development/Effectiveness Testing: FY19 Modeling and Simulation	1	2019	2	2019
Technique Development/Effectiveness Testing: FY20 Modeling and Simulation	1	2020	2	2020
Technique Development/Effectiveness Testing: FY15 Mission Data Files (MDF) Development	2	2015	4	2015
Technique Development/Effectiveness Testing: FY15 Test MDF	2	2015	2	2015
Technique Development/Effectiveness Testing: FY15 Optimized/Advanced Countermeasure Techniques Delivered to Software Support Activity (SSA) for fleet release	4	2015	4	2015
Technique Development/Effectiveness Testing: FY16 Mission Data Files Development	2	2016	4	2016
Technique Development/Effectiveness Testing: FY16 Test MDF	2	2016	2	2016
Technique Development/Effectiveness Testing: FY16 Optimized/Advanced Countermeasure Techniques Delivered to Software Support Activity (SSA) for fleet release	4	2016	4	2016
Technique Development/Effectiveness Testing: FY17 Mission Data Files Development	2	2017	4	2017
Technique Development/Effectiveness Testing: FY17 Test MDF	2	2017	2	2017
Technique Development/Effectiveness Testing: FY17 Optimized/Advanced Countermeasure Techniques Delivered to Software Support Activity (SSA) for fleet release	4	2017	4	2017

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy

Appropriation/Budget Activity

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R-1 Program Element (Number/Name)
PE 0604279N / (U)ASE Self Protection
Optimization

Project (Number/Name)
3309 / Assault Survivability Optimization

		Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year	
Technique Development/Effectiveness Testing: FY18 Mission Data Files Development	2	2018	4	2018	
Technique Development/Effectiveness Testing: FY18 Test MDF	2	2018	2	2018	
Technique Development/Effectiveness Testing: FY18 Optimized/Advanced Countermeasure Techniques Delivered to Software Support Activity (SSA) for fleet release	4	2018	4	2018	
Technique Development/Effectiveness Testing: FY19 Mission Data Files Development	2	2019	4	2019	
Technique Development/Effectiveness Testing: FY19 Test MDF	2	2019	2	2019	
Technique Development/Effectiveness Testing: FY19 Optimized/Advanced Countermeasure Techniques Delivered to Software Support Activity (SSA) for fleet release	4	2019	4	2019	
Technique Development/Effectiveness Testing: FY20 Mission Data Files Development	2	2020	4	2020	
Technique Development/Effectiveness Testing: FY20 Test MDF	2	2020	2	2020	
Technique Development/Effectiveness Testing: FY20 Optimized/Advanced Countermeasure Techniques Delivered to Software Support Activity (SSA) for fleet release	4	2020	4	2020	
Technique Development/Effectiveness Testing: Advanced Countermeasure Procurement for Flight Tests	2	2016	2	2016	
Technique Development/Effectiveness Testing: FY15 Flight Test	3	2015	4	2015	
Technique Development/Effectiveness Testing: FY16 Flight Test	2	2016	3	2016	
Technique Development/Effectiveness Testing: FY17 Flight Test	2	2017	3	2017	
Technique Development/Effectiveness Testing: FY18 Flight Test	2	2018	3	2018	
Technique Development/Effectiveness Testing: FY19 Flight Test	2	2019	3	2019	
Technique Development/Effectiveness Testing: FY20 Flight Test	2	2020	3	2020	
Technique Development/Effectiveness Testing: FY15 Fleet Employment of Advanced Capability	4	2015	4	2015	
Technique Development/Effectiveness Testing: FY16 Fleet Employment of Advanced Capability	4	2016	4	2016	

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
,	,	,	umber/Name) ault Survivability Optimization

	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Technique Development/Effectiveness Testing: FY17 Fleet Employment of Advanced Capability	4	2017	4	2017
Technique Development/Effectiveness Testing: FY18 Fleet Employment of Advanced Capability	4	2018	4	2018
Technique Development/Effectiveness Testing: FY19 Fleet Employment of Advanced Capability	4	2019	4	2019
Technique Development/Effectiveness Testing: FY20 Fleet Employment of Advanced Capability	4	2020	4	2020
Software Development (Government Organic Software Support): Block Cycle 10 Algorithm Enhancement	1	2016	3	2017
Software Development (Government Organic Software Support): PDR	2	2016	2	2016
Software Development (Government Organic Software Support): CDR	4	2016	4	2016
Software Development (Government Organic Software Support): Documentation	3	2017	4	2017
Test Assest/Capability Development: SDV/ESDV Capability Development	1	2016	4	2018
Test Assest/Capability Development: STV Capability Development	1	2016	4	2017
Test Assest/Capability Development: RF Mod & Sim Capability Development	1	2016	4	2017
Test Assest/Capability Development: FY16 STV Contract Award	2	2016	2	2016
Test Assest/Capability Development: FY17 STV Contract Award	2	2017	2	2017