Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604562N: Submarine Tactical Warfare System

		(- /										
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	524.977	47.318	49.141	49.143	-	49.143	48.263	46.419	46.220	46.998	Continuing (Continuing
0236: SSN Comb Cont Sys Imprvmnt (ENG)	524.977	47.318	49.141	49.143	-	49.143	48.263	46.419	46.220	46.998	Continuing (Continuing

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

Project Unit 0236: This program develops Commercial-Off-The-Shelf (COTS) based software and hardware upgrades to integrate improved tactical and weapons control capabilities for multiple submarine Classes (SSN-688, SSGN, SEAWOLF, and VIRGINIA (Post Shakedown Availability)). The AN/BYG-1 is the combat control system common across submarine platforms which incorporates tactical control, weapon control, and tactical Local Area Network (LAN) functions into a single development program. The hardware upgrades, Technology Insertions (TI) are developed on a biennial basis to provide improved capability and address COTS obsolescence. Funding also accommodates the biennial integration of software Advanced Processing Builds (APB) for both tactical control (APB(T)) and weapon control (APB(W)) subsystems. The tactical control integration effort incorporates the integration of other sensor (ESM, sonar, radar, etc.) inputs to provide a common operational picture and improved situational awareness in an information assurance (IA) compliant environment. The weapon control development effort provides improvements to the weapons control subsystem based on improvements to missiles and torpedoes. Provides funding for the development of Weapons Launch System, Multi-tube Weapons System (MTWS), Information Assurance (IA) system, Onboard Team Trainer (OBTT), and Command, Control, Computer and Intelligence Maintenance Tool (C3IMT). AN/BYG-1 allows the submarine Navy to rapidly update the ship safety tactical picture, integrate the common tactical picture into the battlegroup, improve torpedo interfaces, and provide Tactical TOMAHAWK (TOMAHAWK Block IV) capability.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	48.466	49.141	49.371	-	49.371
Current President's Budget	47.318	49.141	49.143	-	49.143
Total Adjustments	-1.148	0.000	-0.228	=	-0.228
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-1.148	0.000			
 Program Adjustments 	0.000	0.000	-0.071	-	-0.071
Rate/Misc Adjustments	0.000	0.000	-0.157	-	-0.157

PE 0604562N: Submarine Tactical Warfare System Navy

UNCLASSIFIED

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604562N: Submarine Tactical Warfare System	,
Change Summary Explanation Technical: Not applicable.		
Schedule: Not applicable.		

PE 0604562N: Submarine Tactical Warfare System Navy

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

All Prior

All Prior

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0604562N: Submarine Tactical Warfare
System

Cost To Total

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
0236: SSN Comb Cont Sys Imprvmnt (ENG)	524.977	47.318	49.141	49.143	-	49.143	48.263	46.419	46.220	46.998	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0			

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

Project Unit 0236: This program develops Commercial-Off-The-Shelf (COTS) based software and hardware upgrades to integrate improved tactical and weapons control capabilities for multiple submarine Classes (SSN 688, SSGN, SEAWOLF, and VIRGINIA (Post Shakedown Availability)). The AN/BYG-1 is the combat control system common across submarine platforms which incorporates tactical control, weapon control, and tactical Local Area Network (LAN) functions into a single development program. The hardware upgrades Technology Insertions (TI) are developed on a biennial basis to provide improved capability and address COTS obsolescence. Funding also accommodates the biennial integration of software Advanced Processing Builds (APBs) for both tactical control (APB(T)) and weapon control (APB(W)) subsystems. The tactical control integration effort incorporates the integration of other sensor (ESM, sonar, radar, etc.) inputs to provide a common operational picture and improved situational awareness in an information assurance (IA) compliant environment. The weapon control development effort provides improvements to the weapons control subsystem based on improvements to missiles and torpedoes. AN/BYG-1 allows the submarine Navy to rapidly update the ship safety tactical picture, integrates the common tactical picture into the battlegroup, improves torpedo interfaces and provides Tactical TOMAHAWK (TOMAHAWK Block IV) capability.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Advanced Processor Builds	19.931	22.663	22.237
Article	0	0	0
FY 2012 Accomplishments: Completed APB-11 integration into AN/BYG-1 (TI-12) baseline. Support development of APB-13 into AN/BYG-1 baseline.			
FY 2013 Plans: Continue development of APB-13 into AN/BYG-1 baseline.			
FY 2014 Plans: Complete APB-13 integration into AN/BYG-1 (TI-14) baseline.			
Title: AN/BYG-1 TI-10 Article	3.320	0.000	0.000

PE 0604562N: Submarine Tactical Warfare System

Navy

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^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604562N: Submarine Tactical Warfare System	PROJEC 0236: SS		Cont Sys Impr	vmnt (ENG)
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	uantities in Each)	F'	Y 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Completed development, integration, and test of the next generation	n AN/BYG-1 (TI-10) for SSN 688/SSGN/VA Class subma	rines.			
Title: AN/BYG-1 TI-12	Ar	ticles:	10.533 0	4.426 0	1.500 0
FY 2012 Accomplishments: Continue development, integration, and test of the next generation A	AN/BYG-1 (TI-12) for SSN 688/SSGN/VA Class submarir	nes.			
FY 2013 Plans: Continue development, integration, and test of the next generation A	AN/BYG-1 (TI-12) for SSN 688/SSGN/VA Class submarin	nes.			
FY 2014 Plans: Complete development, integration and test of the next generation A	AN/BYG-1 (TI-12) for SSN 688/SSGN/VA Class submarir	nes.			
Title: AN/BYG-1 TI-14	Ar	ticles:	3.178 0	7.118 0	7.945 0
FY 2012 Accomplishments: Begin engineering development process for selection and prototypin	ng of new technologies.				
FY 2013 Plans: Continue development, integration and test of the next generation A	N/BYG-1 (TI-14) for SSN 688/SSGN/VA Class submarin	es.			
FY 2014 Plans: Continue development, integration and test of the next generation A	N/BYG-1 (TI-14) for SSN 688/SSGN/VA Class submarin	es.			
Title: AN/BYG-1 TI-16	Ar	ticles:	0.000	3.030 0	7.239 0
FY 2013 Plans: Begin engineering development process for selection and prototypin	ng of new technologies.				
FY 2014 Plans: Continue development, integration and test of the next generation A	N/BYG-1 (TI-16) for SSN 688/SSGN/VA Class submarin	es.			
Title: Testing	Ar	ticles:	4.000 0	5.340 0	3.591 0
FY 2012 Accomplishments:					

PE 0604562N: Submarine Tactical Warfare System Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604562N: Submarine Tactical Warfare System	PROJEC 0236: S		Cont Sys Imp	rvmnt (ENG)
B. Accomplishments/Planned Programs (\$ in Millions, Article Queen Completed DT/OT for AN/BYG-1 TI-10 on SSN 688/SSGN/Seawolf/Von SSN 688/SSGN/Seawolf/VA Class submarines.	•		FY 2012	FY 2013	FY 2014
FY 2013 Plans: Complete DT/OT for AN/BYG-1 APB-11 on SSN 688/SSGN/Seawolf/SSN 688/SSGN/Seawolf/VA Class submarines.	/VA Class submarines. Begin DT/OT for AN/BYG-1 TI-1:	2 on			
FY 2014 Plans: Complete DT/OT for AN/BYG-1 TI-12 on SSN 688/SSGN/Seawolf/V/SSN 688/SSGN/Seawolf/VA Class submarines.	A Class submarines. Begin DT/OT for AN/BYG-1 APB-1	3 on			
Title: Information Assurance (IA)	Art	icles:	6.356 0	6.564 0	6.631 0
FY 2012 Accomplishments: Developed and integrated IA Toolkit and conduct IA Certification Tes	sting on BYG-1 TI-12.				
FY 2013 Plans: Complete integration of IA Toolkit and continue IA Certification Testir	ng on BYG-1 TI-12				
FY 2014 Plans: Develop and integrate IA Toolkit and conduct IA Certification Testing	on BYG-1 TI-14				

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

N/A

Navy

Remarks

D. Acquisition Strategy

This budget integrates APBs developed by the advanced development community.

This program has been tailored in accordance with the new DoD5000 directive to incorporate annual MDA production reviews.

Advanced Processing Builds (APB) products associated with AN/BYG-1 Release-To- Fleet 3Q 2011, 3Q 2013, 3Q 2015 and 3Q 2017.

E. Performance Metrics

AN/BYG-1 Submarine Combat and Weapon Control System performance metrics for each Advanced Processor Build (APB) and Technology Insertion (TI) cycle are contained in the classified Capability Production Document (CPD) annex to the overarching system requirements as laid out in the Capabilities Development Document (CDD). Each APB cycle receives an updated CPD based on fleet required capabilities.

PE 0604562N: Submarine Tactical Warfare System

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47.318

49.141

49.143

Accomplishments/Planned Programs Subtotals

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604562N: Submarine Tactical Warfare

0236: SSN Comb Cont Sys Imprvmnt (ENG)

DATE: April 2013

BA 5: System Development & Demonstration (SDD)

APPROPRIATION/BUDGET ACTIVITY

System

Product Developme	nt (\$ in M	illions)		FY 2	2012	FY:	2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
AN/BYG-1 TECH INSERTION	C/CPIF	GENERAL DYNAMICS (GDAIS):FAIR LAKES, VA	66.532	6.486	Oct 2011	6.446	Oct 2012	6.768	Oct 2013	-		6.768	Continuing	Continuing	Continuing
AN/BYG-1 TECH INSERTION	C/CPIF	GENERAL DYNAMICS (GDAIS):PITTSFIELD MA	17.629	8.995	Oct 2011	8.997	Oct 2012	9.267	Oct 2013	-		9.267	Continuing	Continuing	Continuing
GOVERNMENT ENGINEERING	WR	NUWC:NEWPORT, RI	73.994	2.653	Oct 2011	2.698	Oct 2012	2.749	Oct 2013	-		2.749	Continuing	Continuing	Continuing
INFORMATION ASSURANCE	C/CPAF	PROGENY:MANASSA VA	12.642		Oct 2011	6.564	Oct 2012	6.631	Oct 2013	-		6.631	Continuing	Continuing	Continuing
AN/BYG-1 TECH INSERTION	C/CPAF	RAYTHEON:PORTSN RI	10UTH 53.350	0.000		0.000		0.000		-		0.000	0.000	53.350	53.350
MULTI TUBE WEAPON SIMULATOR	Various	PROGENY:Not Specified	2.635	0.000		0.000		0.000		-		0.000	0.000	2.635	2.635
AN/BYG-1 TECH INSERTION	Various	MITRE:Not Specified	2.429	0.000		0.000		0.000		-		0.000	0.000	2.429	2.429
AN/BYG-1 TECH INSERTION	C/CPIF	ANTEON:Not Specified	6.000	0.000		0.000		0.000		-		0.000	0.000	6.000	6.000
COTS HARDWARE & SOFTWARE	C/CPAF	DDL OMNI:Not Specified	8.500	0.000		0.000		0.000		-		0.000	0.000	8.500	8.500
COMMON WEAPON LAUNCHER	C/CPAF	PROGENY:Not Specified	38.329	0.000		0.000		0.000		-		0.000	0.000	38.329	38.329
		Subtotal	282.040	24.490		24.705		25.415		0.000		25.415			
Support (\$ in Millior	ıs)			FY 2	2012	FY:	2013		2014 ise	FY 2	2014 CO	FY 2014 Total			
	Contract Method	Performing	All Prior	_	Award		Award	_	Award	_	Award		Cost To	Total	Target Value of

PE 0604562N: Submarine Tactical Warfare System Navy

& Type

C/CPIF

Activity & Location

GENERAL

DYNAMICS

Years

50.890

Cost

3.570

Date

Oct 2011

Cost Category Item

APB SOFTWARE

INTEGRATION

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Cost

Date

Cost

Complete

Cost

3.683 Continuing Continuing Continuing

Contract

3.576

Cost

Date

Oct 2012

Cost

3.683

Date

Oct 2013

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604562N: Submarine Tactical Warfare

System

PROJECT

0236: SSN Comb Cont Sys Imprvmnt (ENG)

Support (\$ in Millior				FY 2012		12 FY 20		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location (GDAIS):FAIRLAKES, VA	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
APB SOFTWARE INTEGRATION	C/CPIF	GENERAL DYNAMICS:PITTSFIE MA	LD, 9.135	4.590	Oct 2011	4.613	Oct 2012	4.751	Oct 2013	-		4.751	Continuing	Continuing	Continuing
APF SOFTWARE INTEGRATION	WR	NUWC:NEWPORT, RI	35.198	5.382	Oct 2011	5.103	Oct 2012	5.231	Oct 2013	-		5.231	Continuing	Continuing	Continuing
SOFTWARE DEVELOPMENT	Various	VARIOUS:VARIOUS:I Specified	40.315		Oct 2011	3.794	Oct 2012	5.070	Oct 2013	-		5.070	Continuing	Continuing	Continuing
APB SOFTWARE INTEGRATION	C/CPAF	RAYTHEON:PORTSN RI	10UTH 44.466	0.000		0.000		0.000		-		0.000	0.000	44.466	44.466
		Subtotal	180.004	17.828		17.086		18.735		0.000		18.735			

Test and Evaluation	est and Evaluation (\$ in Millions)			FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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	WR	NUWC:NEWPORT, RI	27.614	2.599	Oct 2011	3.116	Oct 2012	2.269	Oct 2013	-		2.269	Continuing	Continuing	Continuing
TEST & EVALUATION	Various	VARIOUS:VARIOUS:I Specified	Not 4.495	1.401	Oct 2011	2.224	Oct 2012	1.322	Oct 2013	-		1.322	Continuing	Continuing	Continuing
OPERATIONAL TEST & EVALUATION	WR	COMOPTEVFOR:Not Specified	16.169	0.000		0.000		0.000		-		0.000	0.000	16.169	16.169
		Subtotal	48.278	4.000		5.340		3.591		0.000		3.591			

Management Service	s (\$ in M	illions)		FY 2	2012	FY 2	2013	FY 2 Ba	-	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
PROGRAM MANAGEMENT SUPPORT	C/CPFF	URS:ARLINGTON, VA	14.035	1.000	Oct 2011	2.010	Oct 2012	1.402	Oct 2013	-		1.402	Continuing	Continuing	Continuing

PE 0604562N: Submarine Tactical Warfare System Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)

PE 0604562N: Submarine Tactical Warfare

R-1 ITEM NOMENCLATURE

PROJECT

System

0236: SSN Comb Cont Sys Imprvmnt (ENG)

Management Service	Management Services (\$ in Millions)				FY 2012		FY 2013		2014 se	FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All 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	WR	NAVSEA:ARLINGTON VA	N, 0.620	0.000		0.000		0.000		-		0.000	0.000	0.620	0.880
ACQUISITION WORKFORCE	Various	Not Specified:Not Specified	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	0.282
		Subtotal	14.655	1.000		2.010		1.402		0.000		1.402			
															Target

													Target
	All Prior					FY 2	2014	FY 2	2014	FY 2014	Cost To	Total	Value of
	Years	FY 2	2012	FY 2	2013	Ва	se	00	co	Total	Complete	Cost	Contract
Project Cost Totals	524.977	47.318		49.141		49.143		0.000		49.143			

Remarks

PE 0604562N: Submarine Tactical Warfare System Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE PR

PE 0604562N: Submarine Tactical Warfare

System

PROJECT

0236: SSN Comb Cont Sys Imprvmnt (ENG)

Page 1		FY 2012			FY 2013			FY 2014			FY 2015		FY 2016		FY 2017			FY 2018			
	1Q	2Q3Q	4Q	10	2030	4Q	10	2Q3Q	4Q	102	aзa	4Q	102	2 32	4Q	10	203	40	102	Q3Q	4Q
Acq Milestones																					
			MDA			MDA			MDA			MDA			MDA	Ш		MDA	$ \ $		MDA
			Program Review			Program Review			Program Review			Program Review			Program Review	Ш		Program			Progra
			A			A			A			A			A	Ш		A	$ \ $		A
		<u> </u>		4	4		\square	_ _		_ _	╀		_ _	4_		Ш	4	ļ	$\bot \bot$	_	
APB I&T, Certification																		!		-	
APB-11												!					-	!		ļ	
APB-13																					
APB-15							$ \ $									Ш		1		-	
APB-17				İ	İ	İ	İİ	İ											<u> </u>		
Development, I&T Certification		İΪ		寸	一	İ	Ħ	Ti-		İΤ	┪	İ	H	┪		\Box	\neg]	\Box	$\neg \neg$	
TI-10		i i		İ	İ	İ	Ιİ	İ		İΪ	İ	İ	i i	İ	İ	İΪ	İ	İ	Ιİ	İ	İ
TI-12						j	ĺĺ	İ		İİ	ĺ	ĺ		İ	ĺ	İΙ	İ	İ		İ	
TI-14						'	<u>'</u>			· ·	<u>'</u>	j	İİ	İ	İ	İΙ	İ	i	Ιİ	İ	
TI-16		i i										'	<u>'</u>		'	' '		j	Ιİ	İ	
TI-18		i i		İ	İ	İ	i	İ										'	<u>' '</u>	<u>'</u>	'
Test & Evaluation Milestones		İΪ		寸	一	İ	Ħ	Ti-		İΤ	一	İ	H	┪		\Box	\neg]	\Box	$\neg \neg$	
DT/FOT&E				İ	İ	İ	ĺĺ	İ			İ	İ		İ	İ	Ιİ	İ	İ		İ	
AN/BYG-1	TI-10 (DT/OT)		APB-1 (DT/OT			TI-12 (DT/OT	,		APB-1: (DT/OT			TI-14 (DT/OT	,		APB-1 (DT/OT			TI-16 (DT./O			APB (DT/O1

2014DON - 0604562N - 0236

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: System Development & Demonstration (SDD)

PATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0604562N: Submarine Tactical Warfare
System

PROJECT
0236: SSN Comb Cont Sys Imprvmnt (ENG)

Schedule Details

	Sta	End			
Events by Sub Project	Quarter	Year	Quarter	Year	
Page 1					
Acq Milestones: Annual MDA Program Review - FY12	4	2012	4	2012	
Acq Milestones: Annual MDA Program Review - FY13	4	2013	4	2013	
Acq Milestones: Annual MDA Program Review - FY14	4	2014	4	2014	
Acq Milestones: Annual MDA Program Review - FY15	4	2015	4	2015	
Acq Milestones: Annual MDA Program Review - FY16	4	2016	4	2016	
Acq Milestones: Annual MDA Program Review - FY17	4	2017	4	2017	
Acq Milestones: Annual MDA Program Review - FY18	4	2018	4	2018	
APB I&T, Certification: APB-11: APB-11	1	2012	3	2012	
APB I&T, Certification: APB-13: APB-13	4	2012	3	2014	
APB I&T, Certification: APB-15: APB-15	4	2014	3	2016	
APB I&T, Certification: APB-17: APB-17	4	2016	3	2018	
Development, I&T Certification: TI-12: TI-12	1	2012	3	2013	
Development, I&T Certification: TI-14: TI-14	4	2012	3	2015	
Development, I&T Certification: TI-16: TI-16	4	2014	3	2017	
Development, I&T Certification: TI-18: TI-18	4	2016	4	2018	
Test & Evaluation Milestones: AN/BYG-1: TI-10 DT/OT	1	2012	1	2012	
Test & Evaluation Milestones: AN/BYG-1: APB-11 DT/OT	4	2012	1	2013	
Test & Evaluation Milestones: AN/BYG-1: TI-12 DT/OT	4	2013	1	2014	
Test & Evaluation Milestones: AN/BYG-1: APB-13 DT/OT	4	2014	1	2015	
Test & Evaluation Milestones: AN/BYG-1: TI-14 DT/OT	4	2015	1	2016	
Test & Evaluation Milestones: AN/BYG-1: APB-15 DT/OT	4	2016	1	2017	

PE 0604562N: Submarine Tactical Warfare System Navy

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DATE: April 2013 Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT**

1319: Research, Development, Test & Evaluation, Navy PE 0604562N: Submarine Tactical Warfare 0236: SSN Comb Cont Sys Imprvmnt (ENG)

BA 5: System Development & Demonstration (SDD) System

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Test & Evaluation Milestones: AN/BYG-1: TI-16 DT/OT	4	2017	1	2018
Test & Evaluation Milestones: AN/BYG-1: APB-17 DT/OT	4	2018	4	2018

PE 0604562N: Submarine Tactical Warfare System Navy