Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy											Date: March 2014	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0101221N *I Strategic Sub & Wpns Sys Supt*							
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	702.346	83.771	98.057	96.943	-	96.943	107.800	122.448	117.124	68.396	Continuing	Continuing
0951: *Joint Warhead Fuze Sustainment Program*	77.190	56.180	81.456	87.380	-	87.380	96.149	114.715	111.280	65.494	Continuing	Continuing
2228: *Technical Applications Programs*	610.540	23.232	-	-	-	-	9.000	5.000	3.024	0.024	Continuing	Continuing
3097: *W78/88-1 Life Extension Program*	0.000	-	14.000	7.000	-	7.000	-	-	-	-	-	21.000
3158: *Integrated Nuclear Weapons Security Sys Dev*	14.616	4.359	2.601	2.563	-	2.563	2.651	2.733	2.820	2.878	Continuing	Continuing
MDAP/MAIS Code: 178												

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Joint Warhead Fuze Sustainment Program (0951) is an effort to develop advanced components to improve the reliability, safety, and security of Arming, Fuzing and Firing (AF&F) systems for nuclear reentry systems. The current effort is focused on supporting the alteration of the AF&F system for the MK5/W88 system which will be five years beyond its design life at the scheduled deployment of the AF&F alteration. This effort also supports future utilization of the developed components by the US Air Force and United Kingdom.

The Technology Applications Program (2228) supports the TRIDENT II (D5) Submarine Launched Ballistic Missile (SLBM) that provides the U.S. a weapon system with greater accuracy and payload capability as compared to the TRIDENT I (C4) system. TRIDENT II enhances U.S. strategic deterrence providing a survivable, sea-based system capable of engaging the full spectrum of potential targets with fewer submarines. This Program Element supports investigations into new technologies which would help mitigate the program impact due to component obsolescence and a rapidly decreasing manufacturing support base. These efforts include Reentry System Applications and Guidance System Applications which will terminate in 2014. In FY16, Multi-Star Enhanced Prelaunch (MEP) will commence. This will demonstrate the ability to use two stellar sightings to formulate the in-flight correction (rather than one) which may in the future provide relief to the strict tolerance requirements of the strategic navigator on the current OHIO class submarines and the OHIO Class Replacement program.

The W78/88-1 Life Extension Program (3097) is an effort to conduct the Navy portion of a Department of Defense/Department of Energy (DOD/DOE) Nuclear Weapons Council initiated Phase 6.2/6.2A investigation of design options and associated feasibility and cost study for a life extension of the Air Force W78 Reentry Vehicle and Navy W88 Reentry Body. The study will evaluate options and select a preferred solution(s) for a common Nuclear Explosive Package (NEP), including improved safety capabilities, which could be integrated into both the W78 and W88 platforms. In addition, the study will conduct a cost study for a refurbishment life extension of the current W88 design.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy	Date: March 2014
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0101221N *I Strategic Sub & Wpns Sys Supt*

The Integrated Nuclear Weapons Security System (INWSS) (3158) efforts support the Nuclear Weapons Security program and SSBN Escort mission. The policies and requirements regarding the safeguard of nuclear weapons within the Department of Defense is established by DoD S5210.41M. Within the Department of the Navy, nuclear weapons are limited to TRIDENT Fleet Ballistic Missiles (FBM), either deployed aboard TRIDENT submarines or located landside at Naval Submarine Base, Kings Bay, or Naval Submarine Base, Bangor where missiles are first assembled as well as repaired. The Chief of Naval Operations (CNO) has assigned the Strategic Systems Programs (SSP), the FBM program manager, with mission responsibility for the safeguard of FBM nuclear technologies. This budget supports efforts directed at improving the current technological baseline through a series of studies. These efforts will improve countermeasure technologies to address detection, delay and denial.

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	105.892	98.057	109.021	-	109.021
Current President's Budget	83.771	98.057	96.943	-	96.943
Total Adjustments	-22.121	-	-12.078	-	-12.078
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-3.000	-			
• SBIR/STTR Transfer	-1.274	-			
• Program Adjustments	-	-	-9.020	-	-9.020
• Rate/Misc Adjustments	-	-	-3.058	-	-3.058
• Congressional Recision Adjustments	-11.000	-	-	-	-
• Congressional General Reductions Adjustments	-6.847	-	-	-	-

Change Summary Explanation

FY 2013 funding does not include $11M in the Technology Applications Program (2228) that was transferred into the project to cover FY13 rescission as directed in the FY 2014 Consolidated Appropriations Act.

Funding reduced in FY 2015 to align with revised Joint Warhead Fuze Sustainment Program (0951) schedule, and inflation and working capital adjustments.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy											Date: March 2014	
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0101221N / *Strategic Sub & Wpns Sys Supt*				Project (Number/Name) 0951 / *Joint Warhead Fuze Sustainment Program*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
0951: *Joint Warhead Fuze Sustainment Program*	77.190	56.180	81.456	87.380	-	87.380	96.149	114.715	111.280	65.494	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Joint Warhead Fuze Sustainment Program is an effort to develop advanced components to improve the reliability, safety, and security of AF&F systems for nuclear reentry systems. The current effort is focused on supporting the alteration of the AF&F system for the MK5/W88 system which will be five years beyond its design life at the scheduled deployment of the AF&F alteration. This effort also supports future utilization of the developed components by the US Air Force and United Kingdom.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: TRIDENT II	56.180	81.456	87.380
Articles:	-	-	-
Description: Identify, prioritize, develop, proof, and demonstrate advanced technologies that will be leveraged and incorporated into future AF&Fs.			
FY 2013 Accomplishments: Continued development, proofing, demonstration, and technology maturation of identified advanced technologies for future AF&Fs Supported engineer working groups. Continued AF&F sub-assembly design demonstrations Continued development of advanced safety and surety architecture solutions. Continued detailed design Conducted performance assessment of tested designs Conducted production engineering			
FY 2014 Plans: Continue development, proofing, demonstration, and technology maturation of identified advanced technologies for future AF&Fs Support engineer working groups. Continue AF&F sub-assembly design demonstrations Continue development of advanced safety and surety architecture solutions. Continue detailed design Conduct performance assessment of tested designs Conduct production engineering			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 0951 / *Joint Warhead Fuze Sustainment Program*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Support Critical Radar Arming and Firing Test (CRAFT) Develop and implement software changes due to AF&F ***FY 2015 Plans:*** Continue development, proofing, demonstration, and technology maturation of identified advanced technologies for future AF&Fs Support engineer working groups. Continue AF&F sub-assembly design demonstrations Continue development of advanced safety and surety architecture solutions. Continue detailed design Continue to develop and implement software changes due to AF&F Conduct performance assessment of tested designs Conduct production engineering Initial pre-production line development and initial builds Procure material for qualification testing; Commercial-Off-The-Shelf (COTS) qualification testing			
Accomplishments/Planned Programs Subtotals	56.180	81.456	87.380

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Contracts will continue to be awarded to those sources who were engaged in the Mk4LE Reentry Body development program and are currently engaged in the production and/or operational support of the deployed Mk4LE Reentry Body on the basis of Other Than Full and Open Competition pursuant to the authority of 10 U.S.C. 2304 (c) (1) and (3) implemented by FAR 6.302.-1, 3, 4

E. Performance Metrics

Not applicable

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 0951 / *Joint Warhead Fuze Sustainment Program*

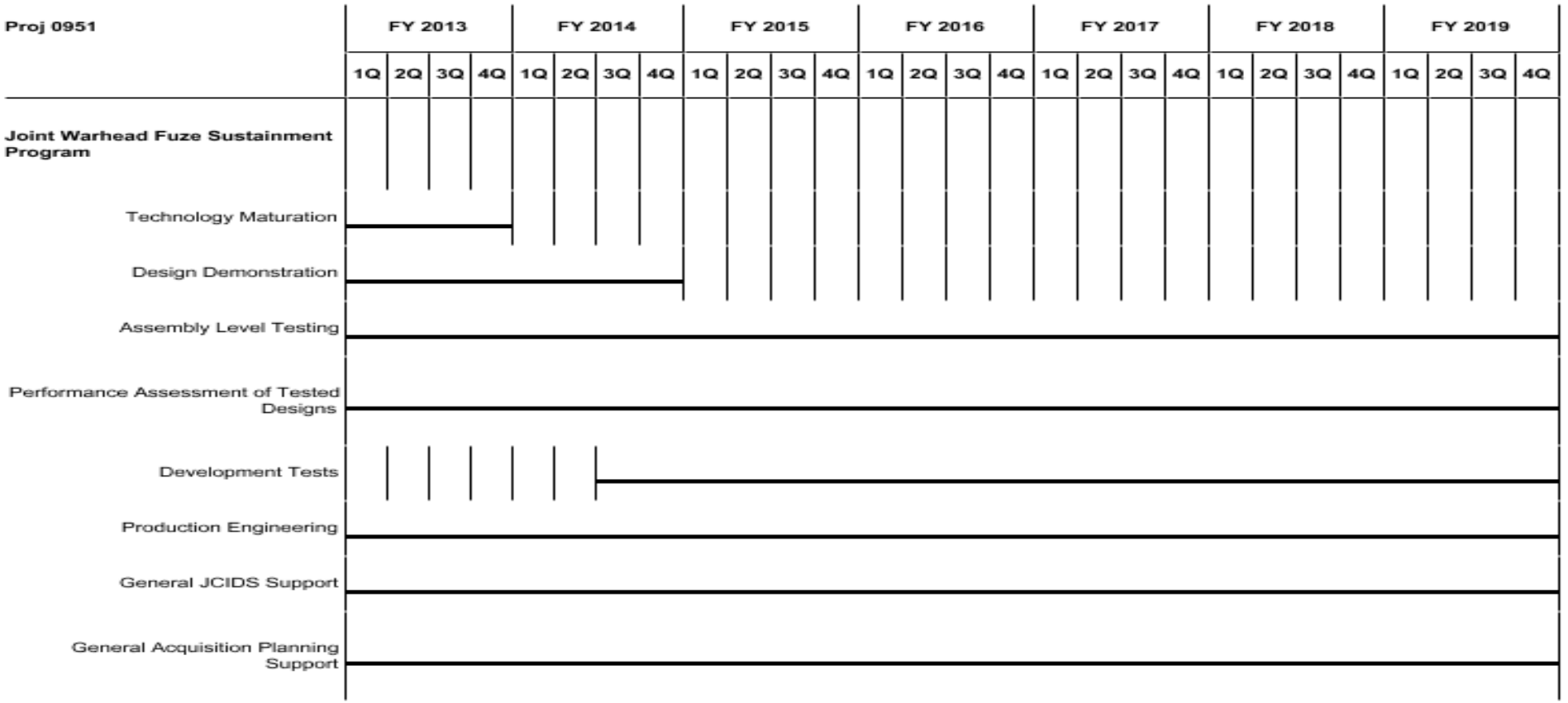
Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Warhead Fuze Sustainment DOE	MIPR	DOE : NM	71.003	49.547	Nov 2012	67.265	Nov 2013	72.829	Nov 2014	-		72.829	Continuing	Continuing	Continuing
Joint Warhead Fuze Sustainment ITT	SS/CPFF	ITT : VA	3.687	2.000	Dec 2012	2.000	Nov 2013	3.000	Nov 2014	-		3.000	Continuing	Continuing	Continuing
Joint Warhead Fuze Sustainment LMMS	SS/CPFF	LMMS : CA	2.500	4.000	Dec 2012	6.200	Nov 2013	6.600	Nov 2014	-		6.600	Continuing	Continuing	Continuing
Joint Warhead Fuze Sustainment	WR	NSWC Dahlgren : VA	0.000	0.633	Mar 2013	5.991	Oct 2013	4.951	Oct 2014	-		4.951	Continuing	Continuing	Continuing
		Subtotal	77.190	56.180		81.456		87.380		-		87.380	-	-	-

	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	77.190	56.180		81.456		87.380		-		87.380	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 0951 / *Joint Warhead Fuze Sustainment Program*



2015DON - 0101221N - 0951

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 0951 / *Joint Warhead Fuze Sustainment Program*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0951				
Joint Warhead Fuze Sustainment Program: Technology Maturation:	1	2013	4	2013
Joint Warhead Fuze Sustainment Program: Design Demonstration:	1	2013	4	2014
Joint Warhead Fuze Sustainment Program: Assembly Level Testing:	1	2013	4	2019
Joint Warhead Fuze Sustainment Program: Performance Assessment of Tested Designs:	1	2013	4	2019
Joint Warhead Fuze Sustainment Program: Development Tests:	3	2014	4	2019
Joint Warhead Fuze Sustainment Program: Production Engineering:	1	2013	4	2019
Joint Warhead Fuze Sustainment Program: General JCIDS Support:	1	2013	4	2019
Joint Warhead Fuze Sustainment Program: General Acquisition Planning Support:	1	2013	4	2019

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy												Date: March 2014
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0101221N / *Strategic Sub & Wpns Sys Supt*				Project (Number/Name) 2228 / *Technical Applications Programs*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
2228: *Technical Applications Programs*	610.540	23.232	-	-	-	-	9.000	5.000	3.024	0.024	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project supports implementation of a coordinated Navy/Air Force Reentry System Applications Program (RSAP), and a coordinated Navy/Air Force Strategic Guidance Applications Program (GAP). RSAP and GAP funding are critical to respond to future requirements. The December 2001 DOD Nuclear Posture Review determined that infrastructure is a critical part of the new triad and these efforts form part of the infrastructure that supports the nuclear force structure.

The RSAP program, through sustainment of the reentry vehicle technology base, will maintain confidence in the dependability and reliability of strategic SLBM and ICBM weapon systems over the long term when no new systems will be in development. Critical and unique attributes necessary for the design, development and in-service support of current and modernized SLBM reentry systems have been defined and will be maintained to ensure a functioning readiness application technical capability in reentry is preserved. Working closely with the Air Force, Navy and Air Force requirements have been integrated into a comprehensive program. The program maintains close coordination with the DOD Science and Technology (S&T) community in order to: leverage S&T programs, ensure system driven technology base requirements are considered in contract awards, eliminate duplication of effort and provide an opportunity to demonstrate appropriate emerging technologies through a reentry flight test evaluation process.

The GAP program provides a minimum strategic guidance core technology development capability consistent with the Strategic Advisory Group (SAG) recommendations to COMSTRATCOM. The SAG recommended that SSP establish a program which preserves this critical design and development core. It is a basic bridge program which develops critical guidance technology applicable to any of the existing Air Force/Navy strategic missiles. The objective is to transition from current capability to a long term readiness status required to support deployed systems. Efforts are focused on alternatives to technologies identified as system "weak links." Currently, system accuracy and functionality depends upon key technologies which provide radiation hardened velocity, attitude and stellar sensing capabilities. As the underlying technologies that currently provide these capabilities age and are no longer technically supportable, modern alternatives must be made available in order to allow for orderly replacement. There is no commercial market for these technologies and their viability depends on the strategic community.

Both RSAP and GAP programs end by FY14. In FY16, Multi-Star Enhanced Prelaunch (MEP) will commence. This will demonstrate the ability to use two stellar sightings to formulate the in-flight correction (rather than one) which may in the future provide relief to the strict tolerance requirements of the strategic navigator on the current OHIO class submarines and the OHIO Class Replacement program.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	**FY 2013**	**FY 2014**	**FY 2015**
Title: Technical Applications Program	23.232	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 2228 / *Technical Applications Programs*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Articles:	-	-	-
FY 2013 Accomplishments: Reentry System Applications Program (RSAP): Maintained the current capability and support the planned service life extension of Navy reentry systems. Continued development and ground testing of reentry vehicle candidate heat shield and nose tip materials including those available from S&T Continued testing of alternative low-cost heat shield and replacement nose tip material. Analyzed advanced aging material to determine its effectiveness. Continued testing of operationally aged heat shields to support aging trends and replacement materials assessments. Maintained RSAP technical program plan, conduct system assessments and continue vulnerability & hardening certification process development in absence of Nuclear Under Ground Testing (UGT) facilities. Continued reentry body material development and advanced flight test instrumentation activities. Ground test advanced reentry material systems and advanced instrumentation components. Continued design development evaluation of avionics batteries and avionics computers. Program ends in FY 2014. Strategic Guidance Applications Programs (GAP): Continued to evaluate emergent alternate sensor technologies, (accelerometer, gyro, and stellar) with an emphasis on providing existing performance in a significantly reduced form factor. Assessed feasibility of advanced stellar sensor technologies for use in strategic applications; specifically, active pixel and camera-on-a-chip architectures will be evaluated. Utilized the capabilities of the Virtual System Simulation (VSSim) to conduct system trade studies that support precision guidance application for boost phase and boost-thru-reentry scenarios. Investigated concepts for enhanced system test and analysis Completed to the maxium extent possible all GAP development effort. Commenced the orderly phase out and termination of the GAP program. Program ends in FY 2014.			
FY 2014 Plans: N/A			
FY 2015 Plans: N/A			
Accomplishments/Planned Programs Subtotals	23.232	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 2228 / *Technical Applications Programs*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Contracts will continue to be awarded to those sources who were engaged in program and are currently engaged in the production and/or operational support on the basis of Other Than Full and Open Competition pursuant to the authority of 10 U.S.C. 2304 (c) (1) and (3) implemented by FAR 6.302.-1, 3, 4

E. Performance Metrics

Not applicable

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 2228 / *Technical Applications Programs*

Product Development ($ in Millions)

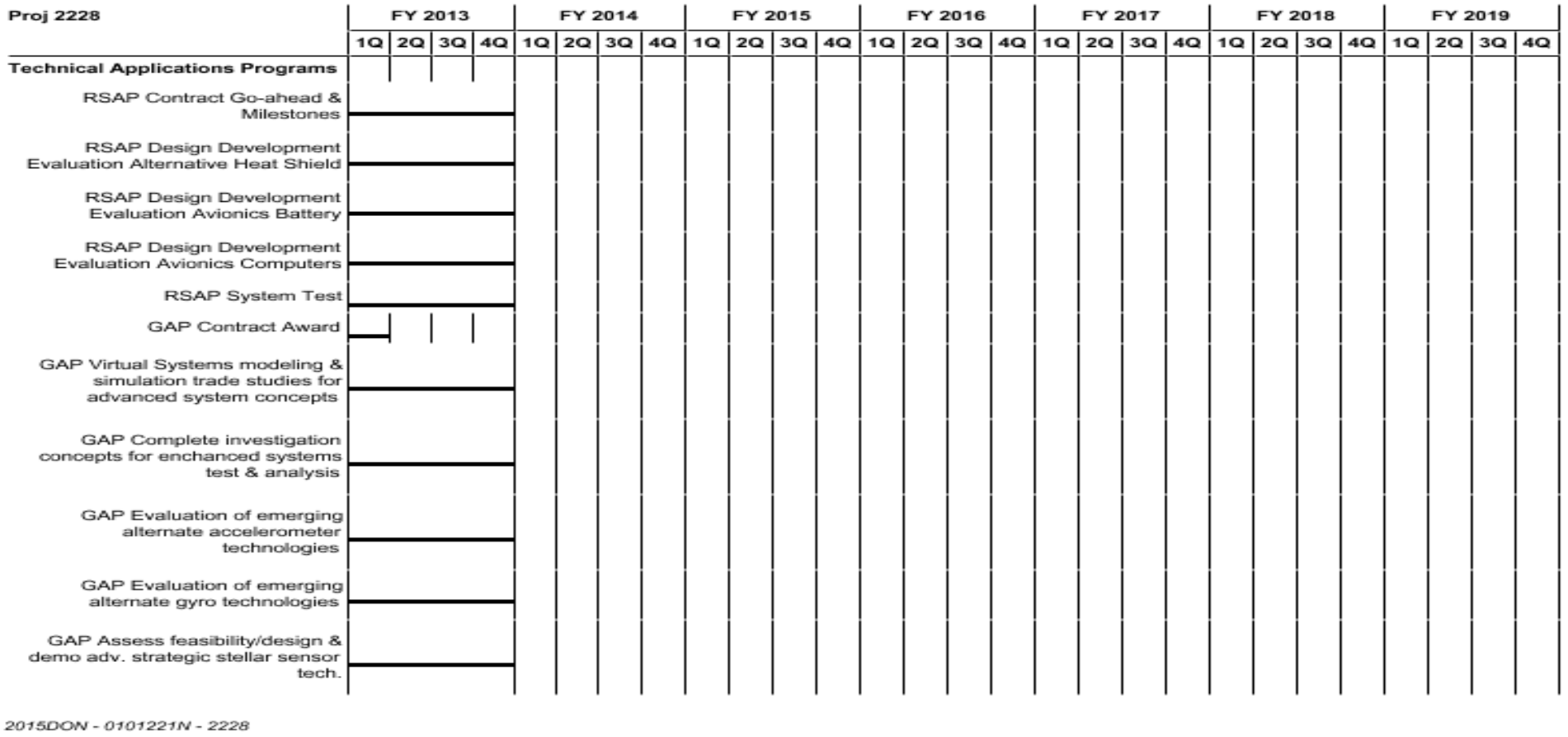
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Technology Applications LMSS	SS/CPFF	LMSS : CA	154.161	6.289	Dec 2012	-		-		-		-	Continuing	Continuing	Continuing
Technology Applications NSWC	WR	NSWC : VA	90.535	1.969	Jan 2013	-		-		-		-	-	92.504	-
Technology Applications DOE	MIPR	DOE : NM	31.964	1.753	Jan 2013	-		-		-		-	-	33.717	-
Technology Applications ITT	SS/CPFF	ITT : CO	10.799	1.395	Dec 2012	-		-		-		-	-	12.194	-
Technology Applications CSDL	SS/CPFF	CSDL : MA	302.493	11.029	Dec 2012	-		-		-		-	-	313.522	-
Technology Applications AERO	SS/CPFF	AERO : CA	2.271	0.797	Mar 2013	-		-		-		-	-	3.068	-
Technology Applications VAR	Various	Various : Various	18.317	-		-		-		-		-	-	18.317	-
		Subtotal	610.540	23.232		-		-		-		-	-	-	-

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	610.540	23.232		-		-		-		-	-	-	-

Remarks

FY 2013 funding does not include $11M in the Technology Applications Program (2228) that was transferred into the project to cover FY13 rescission as directed in the FY 2014 Consolidated Appropriations Act.

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 2228 / *Technical Applications Programs*



2015DON - 0101221N - 2228

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 2228 / *Technical Applications Programs*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2228				
Technical Applications Programs: RSAP Contract Go-ahead & Milestones:	1	2013	4	2013
Technical Applications Programs: RSAP Design Development Evaluation Alternative Heat Shield:	1	2013	4	2013
Technical Applications Programs: RSAP Design Development Evaluation Avionics Battery:	1	2013	4	2013
Technical Applications Programs: RSAP Design Development Evaluation Avionics Computers:	1	2013	4	2013
Technical Applications Programs: RSAP System Test:	1	2013	4	2013
Technical Applications Programs: GAP Contract Award:	1	2013	1	2013
Technical Applications Programs: GAP Virtual Systems modeling & simulation trade studies for advanced system concepts:	1	2013	4	2013
Technical Applications Programs: GAP Complete investigation concepts for enchanced systems test & analysis:	1	2013	4	2013
Technical Applications Programs: GAP Evaluation of emerging alternate accelerometer technologies:	1	2013	4	2013
Technical Applications Programs: GAP Evaluation of emerging alternate gyro technologies:	1	2013	4	2013
Technical Applications Programs: GAP Assess feasibility/design & demo adv. strategic stellar sensor tech.:	1	2013	4	2013

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0101221N / *Strategic Sub & Wpns Sys Supt*	Project (Number/Name) 3097 / *W78/88-1 Life Extension Program*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
3097: *W78/88-1 Life Extension Program*	-	-	14.000	7.000	-	7.000	-	-	-	-	-	21.000
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The W78/88-1 Life Extension Program (3097) is an effort to conduct the Navy portion of a DoD/DOE Nuclear Weapons Council initiated Phase 6.2/6.2A investigation of design options and associated feasibility and cost study for a life extension of the Air Force W78 Reentry Vehicle and Navy W88 Reentry Body. The study will evaluate options and select a preferred solution(s) for a common NEP, including improved safety capabilities, which could be integrated into both the W78 and W88 platforms. In addition the study will conduct a cost study for a refurbishment life extension of the current W88 design.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: W78/88-1 Life Extension Program	-	14.000	7.000
Articles:	-	-	-
FY 2013 Accomplishments: N/A			
FY 2014 Plans: Review and update the Military Characteristics (MCs), Stockpile to Target Sequence (STS) and Interface Control Documents (ICDs) including analysis of each of the NEP options operational impacts and benefits. Develop and approve system level design requirements. Develop new or modified environments. Conduct initial loads and dynamics assessments. Identify critical performance parameters. Continue development of advanced safety and surety architecture solutions. Conduct detailed analysis of each design option and integration impacts working towards selection of a single point design solution. Evaluate system performance impacts. Update structural designs and analytical models. Develop and document production strategy, procurement strategy, and handling and support equipment acquisition strategy.			
FY 2015 Plans: Continue study from FY14:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3097 / *W78/88-1 Life Extension Program*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Review and update the MCs, STS and ICDs including analysis of each of the NEP options operational impacts and benefits. Develop and approve system level design requirements. Develop new or modified environments. Conduct initial loads and dynamics assessments. Identify critical performance parameters. Continue development of advanced safety and surety architecture solutions. Conduct detailed analysis of each design option and integration impacts working towards selection of a single point design solution. Evaluate system performance impacts. Update structural designs and analytical models. Develop and document production strategy, procurement strategy, and handling and support equipment acquisition strategy.			
Accomplishments/Planned Programs Subtotals	-	14.000	7.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Contracts will be awarded to those sources who were engaged in the W78/88-1 Life Extension Program and are currently engaged in the production and/or operational support of the deployed W78/88-1 Systems on the basis of Other Than Full and Open Competition pursuant to the authority of 10 U.S.C. 2304 (c) (1) and (3) implemented by FAR 6.302.-1, 3, 4

E. Performance Metrics

Not applicable

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3097 / *W78/88-1 Life Extension Program*

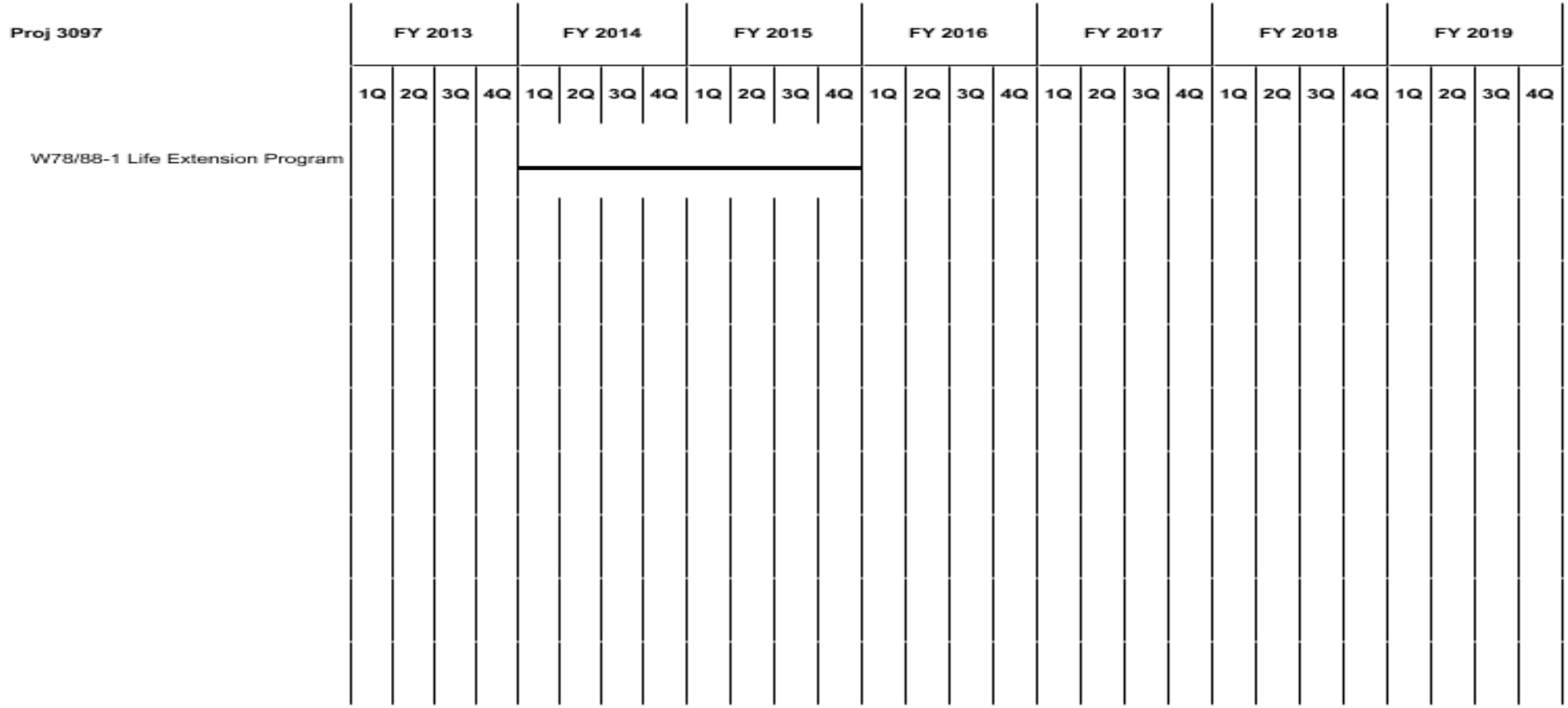
Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
W78/88-1 Life Extension Program	MIPR	DOE : NM	0.000	-		4.200	Nov 2013	0.700	Nov 2014	-		0.700	-	4.900	-
W78/88-1 Life Extension Program	C/CPFF	ITT : VA	0.000	-		1.500	Nov 2013	1.100	Oct 2014	-		1.100	-	2.600	-
W78/88-1 Life Extension Program	C/CPFF	LMMS : CA	0.000	-		7.500	Nov 2013	4.700	Oct 2014	-		4.700	-	12.200	-
W78/88-1 Life Extension Program	WR	NSWC Dahlgren : VA	0.000	-		0.800	Nov 2013	0.500	Nov 2014	-		0.500	-	1.300	-
		Subtotal	0.000	-		14.000		7.000		-		7.000	-	21.000	-

	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		14.000		7.000		-		7.000	-	21.000	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3097 / *W78/88-1 Life Extension Program*



2015DON - 0101221N - 3097

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3097 / *W78/88-1 Life Extension Program*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3097				
W78/88-1 Life Extension Program: W78/88-1 Study	1	2014	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0101221N / *Strategic Sub & Wpns Sys Supt*	Project (Number/Name) 3158 / *Integrated Nuclear Weapons Security Sys Dev*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
3158: *Integrated Nuclear Weapons Security Sys Dev*	14.616	4.359	2.601	2.563	-	2.563	2.651	2.733	2.820	2.878	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Enhanced Special Weapons effort supports the Nuclear Weapons Security program and SSBN Escort mission. The policies and requirements regarding the safeguard of nuclear weapons within the Department of Defense is established by DoD S5210.41M. Within the Department of the Navy, nuclear weapons are limited to TRIDENT Fleet Ballistic Missiles (FBM), either deployed aboard TRIDENT submarines or located landside at Naval Submarine Base, Kings Bay or Naval Submarine Base, Bangor where missiles are first assembled as well as repaired. The CNO has assigned SSP, the FBM program manager, with mission responsibility for the safeguard of FBM nuclear assets. More specifically, the mission includes landside and pier operations as well as transits to and from the dive point, each of which present challenges to personnel as well as existing technologies. This budget supports efforts directed at improving the current technological baseline through a series of studies focusing on land and in transit requirements. Collectively, these efforts will improve countermeasure technologies addressing detection, delay and denial.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Integrated Nuclear Weapons Security Sys Dev	4.359	2.601	2.563
Articles:	-	-	-

FY 2013 Accomplishments:

Continued efforts focused on developing an advanced underwater vehicle and diver detection and deterrence system, and enhanced underwater and surface barriers.

Continued development of advanced technologies for Site-Wide Nuclear Weapons Security Systems including a secure wireless command network and enhanced automated security systems.

Continued development of advanced technologies for Limited Area/Convoy Route Nuclear Weapons Security Systems including extended perimeter detection, vehicle barrier systems at entry control points, and enhanced tracking capabilities.

FY 2014 Plans:

Continue development of advanced technologies for Site-Wide Nuclear Weapons Security Systems including a secure wireless command network and enhanced automated security systems.

Continue development of advanced technologies for Limited Area/Convoy Route Nuclear Weapons Security Systems including extended perimeter detection, vehicle barrier systems at entry control points, and enhanced tracking capabilities.

FY 2015 Plans:

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3158 / *Integrated Nuclear Weapons Security Sys Dev*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Sensor development for: Land Water Interface project (LWI), underwater Sonar Track Association Research (STAR), Waterside Detection System (WDS) Development of technologies: for refresh of electronic systems in the Waterfront Restricted Area (WRA), increase detection and tracking capabilities, and to reduce manpower by automating processed and enhancing security technologies. Enhance the Marine Mammal System (MMS)			
Accomplishments/Planned Programs Subtotals	4.359	2.601	2.563

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• OPN/Various-2: *OPN (Nuclear Weapons Security)*	48.722	45.630	126.429	-	126.429	50.344	51.695	36.423	56.061	Continuing	Continuing
• OMN/11D2D-3: *Fleet Ballistic Missile (Nuclear Weapons Security)*	76.295	85.249	83.319	-	83.319	85.261	81.327	83.972	86.107	Continuing	Continuing
• OMN/11D2D-5: *Fleet Ballistic Missile (Transit/Escort)*	113.059	120.510	82.199	-	82.199	90.443	84.413	86.802	96.034	Continuing	Continuing
• MCN/Various-1: *MILCON (CNI) (Nuclear Weapons Security)*	-	-	20.638	-	20.638	28.921	-	-	-	-	93.401

Remarks

D. Acquisition Strategy

Procurements are being executed through a combination of private contractors (large and small business), government Centers of Excellence (COEs), other government agencies and the Naval Submarine Bases, Kitsap and Kings Bay. Contract awards are based upon "best value" determinations, and where practical will be performance based or include incentive provisions.

E. Performance Metrics

Not applicable

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0101221N / *Strategic Sub & Wpns Sys Supt*	Project (Number/Name) 3158 / *Integrated Nuclear Weapons Security Sys Dev*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Nuclear Weapons Security Sys Dev	WR	NFESC : CA	1.741	0.606	Mar 2013	0.300	Oct 2013	0.353	Nov 2014	-		0.353	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	WR	CNWS : CA	0.404	-		-		-		-		-	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	SS/CPFF	JHU APL : MD	2.862	0.300	Mar 2013	0.202	Oct 2013	0.183	Nov 2014	-		0.183	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	WR	SNWS : CA	3.652	0.600	Mar 2013	0.400	Oct 2013	0.306	Oct 2014	-		0.306	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	WR	NSWC : VA	2.517	0.360	Mar 2013	0.300	Oct 2013	0.191	Oct 2014	-		0.191	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	SS/CPFF	JRC : VA	0.751	0.861	Mar 2013	0.225	Oct 2013	0.502	Oct 2014	-		0.502	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	WR	NUWC : RI	0.795	0.075	Feb 2013	0.040	Oct 2013	0.049	Dec 2014	-		0.049	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	WR	NEDU : FL	0.383	-		-		-		-		-	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	SS/CPFF	LMSS : CA	0.706	0.295	Mar 2013	0.175	Oct 2013	0.180	Oct 2014	-		0.180	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	MIPR	DOEI : ID	0.180	-		-		-		-		-	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	MIPR	DOE : NM	0.425	-		-		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3158 / *Integrated Nuclear Weapons Security Sys Dev*

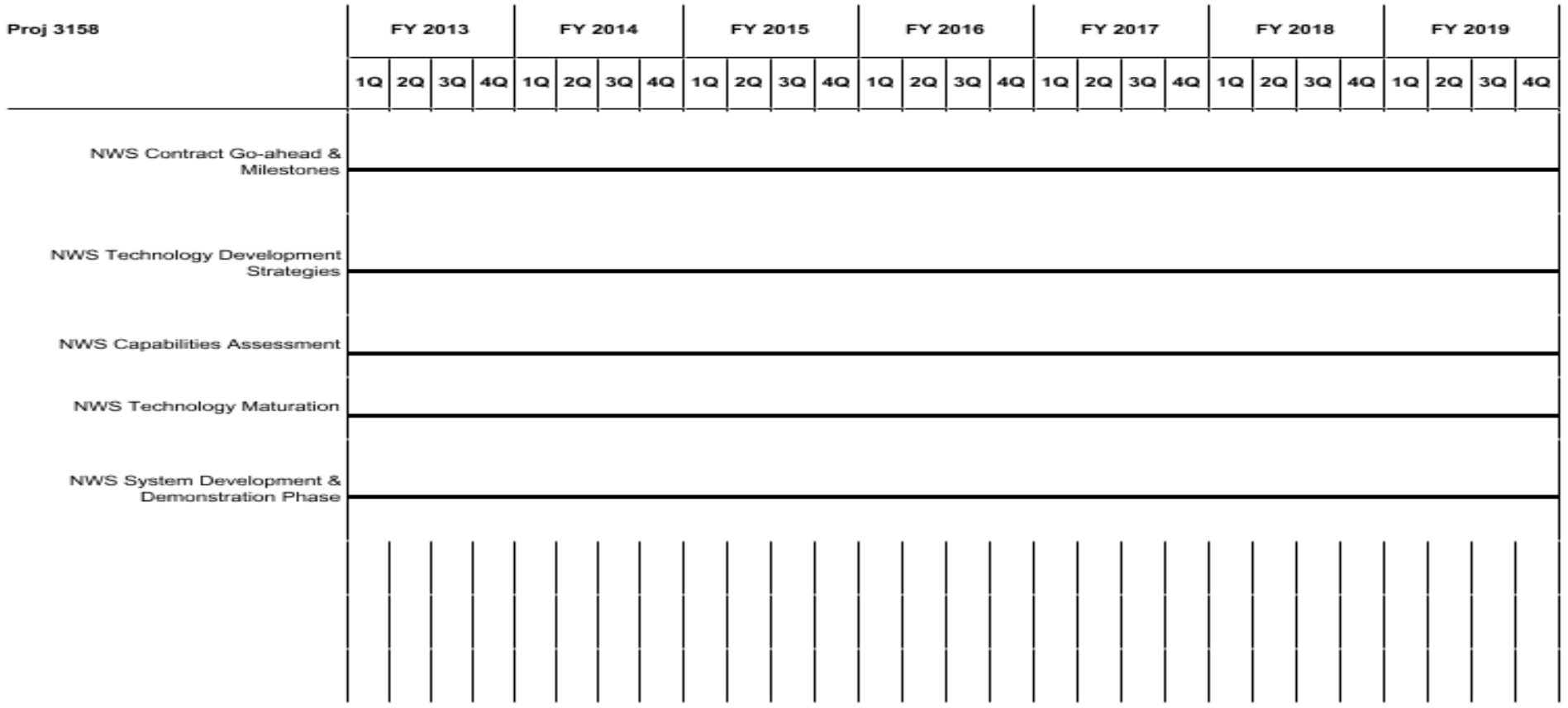
Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Nuclear Weapons Security Sys Dev	SS/CPFF	ARL : TX	0.200	0.732	Mar 2013	0.709	Oct 2013	0.448	Oct 2014	-		0.448	Continuing	Continuing	Continuing
Integrated Nuclear Weapons Security Sys Dev	WR	NUWD : WA	0.000	0.530	Feb 2013	0.250	Oct 2013	0.351	Dec 2014	-		0.351	Continuing	Continuing	Continuing
		Subtotal	14.616	4.359		2.601		2.563		-		2.563	-	-	-

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	14.616	4.359		2.601		2.563		-		2.563	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3158 / *Integrated Nuclear Weapons Security Sys Dev*



2015DON - 0101221N - 3158

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0101221N / *Strategic Sub & Wpns Sys Supt*	**Project (Number/Name)** 3158 / *Integrated Nuclear Weapons Security Sys Dev*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3158				
NWS Contract Go-ahead & Milestones:	1	2013	4	2019
NWS Technology Development Strategies:	1	2013	4	2019
NWS Capabilities Assessment:	1	2013	4	2019
NWS Technology Maturation:	1	2013	4	2019
NWS System Development & Demonstration Phase:	1	2013	4	2019