

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	17.556	17.077	10.587	0.000	10.587	9.333	9.050	9.186	9.370	Continuing	Continuing
0545: TOMAHAWK	13.567	13.174	10.587	0.000	10.587	9.333	9.050	9.186	9.370	Continuing	Continuing
9999: Congressional Adds	3.989	3.903	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.711
A. Mission Description and Budget Item Justification											
<p>The Tomahawk Weapons System (TWS) provides a Tomahawk cruise missile attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)). The TLAM can be fitted with either conventional unitary warhead (TLAM/C), nuclear warhead (TLAM/N) or submunition dispenser (TLAM/D). This program ensures that the TWS exploits state-of-the-art technology to preserve the efficiency of this proven weapon system, and includes all missile development, mission planning system development, and submarine and surface ship weapons control system development.</p>											
<p>The Tactical Tomahawk (TACTOM) All-Up-Round Block IV missile is a comprehensive spiral baseline upgrade to the TWS that provides the tactical commander a quick reaction response capability as well as improved flexibility, increased accuracy and higher lethality. A five-year multi-year (FY04-FY08) production contract was awarded in August 2004 for the production of up to 2200 Block IV Tomahawk missiles. The essential upgrades of the Block IV missile are: improved guidance, navigation, control and mission computer two-way satellite communications, and a lower production cost as compared to the Block III missile. Block IV provides a UHF SATCOM data link to enable the missile to receive in-flight mission modification messages, to transfer health and status messages and to broadcast Battle Damage Indication (BDI) messages. Block IV also includes a high anti-jam GPS receiver, navigation improvements and associated antenna systems. The Tomahawk Program (A0545) also includes development of Torpedo Tube Launch (TTL) capability for submarines and the continuing advances identified as spiral development under the Tomahawk Baseline IV Operational Requirements Document (ORD), to include development of the Joint Chiefs of Staff (JCS)-directed incorporation of Selective Availability Anti-Spoofing Module (SAASM) capability.</p>											
<p>Under the umbrella of the Tomahawk Command and Control System (TC2S), the Theater Mission Planning Center (TMPC) has evolved into scalable configurations deployed at the Cruise Missile Support Activities (CMSAs) (2), TSMPCs (Tomahawk Strike and Mission Planning Cells) (3), Carriers (CVNs) (11), Firing Units/DDGs/CGs (77), Command & Control (C2) Nodes (30), Training Sites (6), and Integration & Testing ((6) WPC & 5 other Labs), for a total of seven configurations at 135 sites. The Afloat Planning System (APS), a shipboard based version of TC2S, was migrated from CVNs to the TSMPCs in FY 2008. A smaller TC2S version is being fielded on CVNs to support deployed Strike Group Commanders. Systems fielded at the CMSAs and TSMPCs provide mission planning and employment support information for conventional TLAM, including the distribution of mission data and command information essential to TLAM employment via the Mission Distribution System (MDS) and associated communications infrastructure (CMSAs are the only organizations that can support TLAM-N). Development of Tactical Tomahawk capabilities in TMPC/APS/MDS includes software development, integration, test, and delivery, including support for TECHEVAL and OPEVAL, training development,</p>											

UNCLASSIFIED

R-1 Line Item #170

Page 1 of 23

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>
<p>installation planning, and simulation/model development required by COMOPTEVFOR to offset live missile flights in TECHEVAL and OPEVAL. This project also includes development related to national and tactical imagery architectures, as well as software development to decrease mission-planning time and increase the quality and accuracy of each mission for Block III and IV TLAM.</p> <p>The Tomahawk Weapons Control System provides launch capability for surface and submarine platforms. Development of the Tactical Tomahawk Weapons Control System (TTWCS) provides a common architecture to launch the Tactical Tomahawk Block IV and all variants in inventory. Development of upgrades to the Tactical Tomahawk Weapons Control System (TTWCS) is required to meet the DoD IT Standards Registry (DISR), to meet FORCEnet compliance and be Internet Protocol Version 6 (IPv6) ready in order to remain interoperable within the Joint Service Architecture and to retain weapons system viability and usability for our Sailors. These efforts provide battle-group tactical flexibility and responsiveness while maximizing TWS wartime capability.</p> <p>The Tactical Tomahawk FY 09 and FY10 Congressional funding supporting the Cost Reduction Initiative (CRI) provides for development and implementation of an affordability process to identify, investigate, plan and execute viable cost reduction initiatives (CRIs) for the Tomahawk F415 engine.</p> <p>FY 08 and FY 09 Congressional funding for the Precision Terrain-Aided Navigation (PTAN) provides for the development and design maturation of the PTAN subsystem and provides expertise in integrating the PTAN into the Tomahawk Block IV (AUR). The efforts support simulations, test missions development and integration of PTAN with the Tomahawk Block IV avionics.</p> <p>FY 09 Congressional funding for Image-Based Navigation provide analysis to assess reliability and performance of Image Navigation Reference Products in the TC2S. Additional funding received in FY10 will be added to the Phase 2.5 contract to support additional tasking in CONOPS development, hardware integration, and actual flight software development.</p>		

UNCLASSIFIED

R-1 Line Item #170

Page 2 of 23

UNCLASSIFIED

DATE: February 2010

R-1 ITEM NOMENCLATURE

PE 0204229N: *Tomahawk Mssn Planning Ctr*

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	18.132	13.238	0.000	0.000	0.000
Current President's Budget	17.556	17.077	10.587	0.000	10.587
Total Adjustments	-0.576	3.839	10.587	0.000	10.587
• Congressional General Reductions		-0.072			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	-0.009			
• Congressional Adds		3.920			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-0.150	0.000			
• SBIR/STTR Transfer	-0.426	0.000			
• Program Adjustments	0.000	0.000	10.587	0.000	10.587

FY 2009	FY 2010
1.595	0.000
1.596	3.266
0.798	0.637
3.989	3.903
3.989	3.903

Congressional Add: *PRECISION TERRAIN AIDED NAVIGATION (PTAN)*

Congressional Add: *Tomawk Cost Reduction Initiatives*

Congressional Add: *Low-Cost Image-Based Navigation and Precision Targeting*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

Technical: Not applicable.

Schedule:

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr	
<p>The schedule for the software implementation of the SAASM features was shifted to align with the Tactical Tomahawk Weapons Control System (TTWCS) software version v5.4.0 development schedule. The four quarter difference between v5.4 and SAASM's IOC is for platform integration testing of SAASM once v5.4 is installed on the platforms.</p> <p>SAASM capability will be demonstrated on an Operational Test Launch (OTL) Flight Test.</p> <p>Launch Platform Integration covers integration of the Tomahawk Weapons System onto DDG-1000, VIRGINA Class, and SSGN platforms.</p> <p>TTWCS v5.3.6 - maintenance build to fix DT/OT IIID issues.</p> <p>TTWCS v5.4.0 - software build for DDG 112 integration.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

UNCLASSIFIED

R-1 Line Item #170

Page 4 of 23

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>				PROJECT 0545: <i>TOMAHAWK</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0545: <i>TOMAHAWK</i>	13.567	13.174	10.587	0.000	10.587	9.333	9.050	9.186	9.370	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
<p>A. Mission Description and Budget Item Justification</p> <p>The Tomahawk Weapons System (TWS) provides a Tomahawk cruise missile attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)). The TLAM can be fitted with either conventional unitary warhead (TLAM/C), nuclear warhead (TLAM/N) or submunition dispenser (TLAM/D). This program ensures that the TWS exploits state-of-the-art technology to preserve the efficiency of this proven weapon system, and includes all missile development, mission planning system development, and submarine and surface ship weapons control system development.</p> <p>The Tactical Tomahawk (TACTOM) All-Up-Round Block IV missile is a comprehensive spiral baseline upgrade to the TWS that provides the tactical commander a quick reaction response capability as well as improved flexibility, increased accuracy and higher lethality. A five-year multi-year (FY04-FY08) production contract was awarded in August 2004 for the production of up to 2200 Block IV Tomahawk missiles. The essential upgrades of the Block IV missile are: improved guidance, navigation, control and mission computer two-way satellite communications, and a lower production cost as compared to the Block III missile. Block IV provides a UHF SATCOM data link to enable the missile to receive in-flight mission modification messages, to transfer health and status messages and to broadcast Battle Damage Indication (BDI) messages. Block IV also includes a high anti-jam GPS receiver, navigation improvements and associated antenna systems. The Tomahawk Program (A0545) also includes development of Torpedo Tube Launch (TTL) capability for submarines and the continuing advances identified as spiral development under the Tomahawk Baseline IV Operational Requirements Document (ORD), to include development of the Joint Chiefs of Staff (JCS)-directed incorporation of Selective Availability Anti-Spoofing Module (SAASM) capability.</p> <p>Under the umbrella of the Tomahawk Command and Control System (TC2S), the Theater Mission Planning Center (TMPC) has evolved into scalable configurations deployed at the Cruise Missile Support Activities (CMSAs) (2), TSMPCs (Tomahawk Strike and Mission Planning Cells) (3), Carriers (CVNs) (11), Firing Units/DDGs/CGs (77), Command & Control (C2) Nodes (30), Training Sites (6), and Integration & Testing ((6) WPC & 5 other Labs), for a total of seven configurations at 135 sites. The Afloat Planning System (APS), a shipboard based version of TC2S, was migrated from CVNs to the TSMPCs in FY 2008. A smaller TC2S version is being fielded on CVNs to support deployed Strike Group Commanders. Systems fielded at the CMSAs and TSMPCs provide mission planning and employment support information for conventional TLAM, including the distribution of mission data and command information essential to TLAM employment via the Mission Distribution System (MDS) and associated communications infrastructure (CMSAs are the only organizations that can support TLAM-N). Development of Tactical Tomahawk capabilities in TMPC/APS/MDS includes software development, integration, test, and delivery, including support for TECHEVAL and OPEVAL, training development, installation planning, and simulation/model development required by COMOPTEVFOR to offset live missile flights in TECHEVAL and OPEVAL. This project also</p>											

UNCLASSIFIED

R-1 Line Item #170

Page 5 of 23

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr		PROJECT 0545: TOMAHAWK		
includes development related to national and tactical imagery architectures, as well as software development to decrease mission-planning time and increase the quality and accuracy of each mission for Block III and IV TLAM.						
The Tomahawk Weapons Control System provides launch capability for surface and submarine platforms. Development of the Tactical Tomahawk Weapons Control System (TTWCS) provides a common architecture to launch the Tactical Tomahawk Block IV and all variants in inventory. Development of upgrades to the Tactical Tomahawk Weapons Control System (TTWCS) is required to meet the DoD IT Standards Registry (DISR), to meet FORCEnet compliance and be Internet Protocol Version 6 (IPv6) ready in order to remain interoperable within the Joint Service Architecture and to retain weapons system viability and usability for our Sailors. These efforts provide battle-group tactical flexibility and responsiveness while maximizing TWS wartime capability.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Tactical Tomahawk All-Up-Round (TACTOM AUR)		7.149	8.243	5.557	0.000	5.557
Continue Phase 2 ORD requirements, of which includes incorporating Selective Availability Anti-Spoofing Module (SAASM) capability into the GPS and continuing development and demonstration of a Precision Terrain Aided Navigation (PTAN) capability. Achieve SAASM IOC.						
FY 2009 Accomplishments: FY09: Continued Phase 2 ORD requirement hardware and software trade studies. Incorporating Selective Availability Anti-Spoofing Module (SAASM) capability into the GPS and continuing development of a Precision Terrain Aided Navigation (PTAN) capability. Completed a demonstration prototype of PTAN capability used in demonstrating real-time operation. Initiated PTAN advanced technology risk reduction efforts to develop next generation PTAN prototypes and to integrate PTAN capability into the missile simulation labs. Completed real-time processing capability for PTAN scenes. Continue integration and development of a precision Radar Altimeter.						
FY 2010 Plans: FY10: Continue launch platform SAASM integration. Continue ORDALT/TEMPALT efforts in support of the SEAWOLF program.						

UNCLASSIFIED

R-1 Line Item #170

Page 6 of 23

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr		PROJECT 0545: TOMAHAWK		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY11: Complete AUR platform integration of SAASM. Achieve SAASM program IOC.						
Tactical Tomahawk Weapons Control System (TTWCS) Initiate TTWCS Viability activities and complete SAASM integration of TTWCS V5.4.0 in order to enter TECHEVAL/OPEVAL for fleet release. FY 2009 Accomplishments: FY09: Initiated minimal TTWCS viability development activities to reduce risk in areas of overall TTWCS supportability, sustainability, HCI complexity, and interoperability with external interfaces. Began to address key DoD/DoN mandates, including Internet Protocol (IP)v6, FORCEnet, Open Architecture, and SAASM. FY 2010 Plans: FY10: Continue toward completion of SAASM integration of TTWCS v5.4.0. Complete DT/OT TRR for TTWCS v5.4.0. Complete v5.4.1 Increment 2 preliminary and detailed design review. Complete code porting of reuse code from UNIX to LINUX. Continue work to reduce HCI complexity. Perform development efforts in support of SSGN, DDG113, and DDG-1000. FY 2011 Base Plans: FY11: Complete development of TTWCS viability and enter TECHEVAL/OPEVAL. Prepare for Fleet Release of TTWCS v5.4.0. Continue development work on TTWCS v5.4.1 toward achievement of full TTWCS viability, and launch platform integration on platforms existing and in development.		3.790	2.323	2.245	0.000	2.245
Tactical Tomahawk Command and Control (TC2S) Development and incorporation of new capabilities in Tomahawk Command and Control systems (TC2S) necessary for the employment of Tactical Tomahawk. Imagery upgrades to Tomahawk		2.628	2.608	2.785	0.000	2.785

UNCLASSIFIED

R-1 Line Item #170

Page 7 of 23

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr		PROJECT 0545: TOMAHAWK	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Command and Control System. Continue Test & Evaluation support for Tomahawk Command and Control Systems. FY 2009 Accomplishments: FY09 - Completed verification of the Digital Scene Matching Area Correlator (DSMAC) planning and performance for Blocks III and IV missiles, ensuring it is responsive and consistently reliable regardless of mission planning environment. Evaluated the TC2S design process to ensure Tactical Tomahawk missile performance characteristics are adequately modeled in TC2S; e.g., aerodynamic models, GPS jamming models, threat models. Completed evaluation of imagery format changes, resulting from National Geospatial Agency (NGA) mandated updates and architectural changes to external interfaces. FY 2010 Plans: FY10- Continue TLAM navigation and accuracy and weapons delivery Circular Error Probable (CEP) studies and assessments necessary to ensure the TWS is properly employed; Continue evaluation of TC2S design process to ensure Tactical Tomahawk missile performance characteristics are adequately modeled in TC2S. Continue evaluation of all activities associated with TC2S's ability to effectively process evolving imagery formats resulting from NGA mandated architectural changes to external interfaces. FY 2011 Base Plans: FY11 - Continue TLAM navigation and accuracy and weapons delivery CEP studies and assessments necessary to ensure the TWS is properly employed; Continued evaluation of TC2S design process to ensure Tactical Tomahawk missile performance characteristics are adequately modeled in TC2S. Continue evaluation of imagery formats resulting from NGA mandated architectural changes.					
Accomplishments/Planned Programs Subtotals	13.567	13.174	10.587	0.000	10.587

UNCLASSIFIED

R-1 Line Item #170

Page 8 of 23

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>	PROJECT 0545: <i>TOMAHAWK</i>	

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

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• WPN/2101: <i>Tomahawk</i>	280.267	276.500	300.178	0.000	300.178	305.398	313.896	322.554	322.814	1,857.673	14,573.717
• OPN/5253: <i>Tomahawk Support Equip</i>	55.312	88.203	88.698	0.000	88.698	74.830	75.497	67.415	64.901	979.600	1,549.167
• OPN/9020: <i>Initial and Vendor Direct Spares</i>	0.206	1.123	0.853	0.000	0.853	0.544	0.409	0.446	0.418	0.000	7.799

D. Acquisition Strategy

In 1998, the Tomahawk Baseline Improvement Program (TBIP) transitioned to the Tactical Tomahawk (Block IV) Program. This program is outlined in the Class Justification and Approval (CJ&A No. AIR-22448) signed by the Under Secretary of the Navy on 29 May 1998. The acquisition strategy was to transition the TBIP to Tactical Tomahawk. The Tactical Tomahawk development program was a cost-sharing contract between the Government and the Contractor to add capability to the missile. A multi-year full-rate production contract was awarded in August 2004 for FY 2004-2008 production.

Torpedo Tube Launch missile procurement began in FY08 within the current missile production budget as required to meet Fleet load-out requirements. Other spiral development capabilities (PTAN, Multi-effects Warhead, Anti Surface Warfare (ASUW) will be introduced after successful qualification and testing. Continue SAASM integration efforts.

The FY 09 through FY 11 BLK IV Missile procurement strategy utilizes a FY 09 annualized Firm Fixed Price contract, along with two fixed price option years for FY 10 and FY 11.

E. Performance Metrics

The Navy seeks to improve the Tomahawk cruise missile attack capability against land targets through research and development done predominantly through defense contractors and government field activities.

Examples in the area of the all-up-round include development of candidate warheads that will enhance weapon ability to cover all assigned target types, provide a quick reaction response capability for the weapon system, and improved guidance, navigation, control, mission computer two-way satellite communications, and a high anti-jam GPS receiver all in line with state of the art technology.

UNCLASSIFIED

R-1 Line Item #170

Page 9 of 23

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>	PROJECT 0545: <i>TOMAHAWK</i>
<p>In the area of the Weapon Control System, research and development is performed to ensure viability and usability of the system into the future, providing necessary upgrades to meet the DoD IT standards registry to comply with FORCENET requirements and be Internet Protocol Version 6 (IPv6) ready to remain interoperable within Joint Service Architecture, in order to provide battle group tactical flexibility and responsiveness needed to enable full wartime capability.</p> <p>In the area of the Command and Control System, continue research and development in order to provide scalable configurations to deploy where and as needed to provide necessary command and control, development necessary to function with national and tactical imagery architectures, decrease mission planning time, and increase the quality and accuracy of each mission for the Tomahawk weapons System.</p> <p>All of these research and development efforts contribute to the Navy providing the very best weapon system to the war fighter to accomplish the combat mission.</p>		

UNCLASSIFIED

R-1 Line Item #170

Page 10 of 23

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr				PROJECT 0545: TOMAHAWK				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
PHD - Weapons Control System	C/CPAF	Lockheed Martin Valley Force, PA	91.964	0.000		0.000		0.000		0.000	0.000	91.964	91.964	
Award Fee	C/CPAF	Various Various	4.996	0.000		0.000		0.000		0.000	0.000	4.996	4.996	
PHD - Weapons Control System	Reqn	NAVSEA WNY, DC	0.875	0.000		0.000		0.000		0.000	0.000	0.875	0.875	
PHD - Mission Plan Systems TC2S	SS/CPFF	COMGLOBAL Sys, San Jose, CA	36.714	1.000	Dec 2009	0.000		0.000		0.000	3.100	40.814	40.814	
Various	Various/ Various	Various Various	7.674	0.000		0.000		0.000		0.000	0.000	7.674	Continuing	
Primary Hardware Dev - AUR	C/CPFF	Raytheon Co. Tucson, AZ	218.889	1.487	Mar 2010	1.063	Jun 2011	0.000		1.063	10.651	232.090	232.090	
Primary Hardware Dev - PTAN	C/CPFF	Raytheon Co. Tucson, AZ	2.644	0.000		0.000		0.000		0.000	0.000	2.644	2.644	
Primary Hardware De v - SAASM	C/CPFF	Raytheon Co. Tucson, AZ	6.725	0.000		0.000		0.000		0.000	0.000	6.725	6.725	
Primary Hardware Dev - TTL	C/CPAF	Raytheon Co. Tucson, AZ	11.886	0.000		0.000		0.000		0.000	0.000	11.886	11.886	
Primary Hardware Dev - TTL Award Fee	C/CPAF	Raytheon Co. Tucson, AZ	0.819	0.000		0.000		0.000		0.000	0.000	0.819	0.819	
Primary Hardware Dev - TTPC	C/CPFF	Raytheon Co. Tucson, AZ	3.189	0.000		0.000		0.000		0.000	0.000	3.189	3.189	
Primary Hardware Dev - ASUW	C/CPFF	Raytheon Co. Tucson, AZ	0.206	0.000		0.000		0.000		0.000	0.000	0.206	0.206	

UNCLASSIFIED

R-1 Line Item #170

Page 11 of 23

UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr				PROJECT 0545: TOMAHAWK				
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardwae Dev - WCS	C/CPFF	Raytheon Co. Tucson, AZ	0.828	0.000		0.000		0.000		0.000	0.000	0.828	0.828
Ship Integration - Launch1	Reqn	NAVSEA WNY, DC	31.768	0.000		0.000		0.000		0.000	0.000	31.768	31.768
Ship Integration - Launch2	C/CPFF	NAVSEA WNY, DC	0.752	0.000		0.000		0.000		0.000	0.000	0.752	0.752
Systems Engineering	Reqn	JHU/APL Columbia, MD	4.831	0.000		0.000		0.000		0.000	0.000	4.831	4.831
Systems Engineering - AUR	Reqn	JHU/APL Columbia, MD	27.932	1.687	Feb 2010	1.655	Mar 2011	0.000		1.655	5.781	37.055	37.055
Systems Engineering - AUR	C/FP	Boeing St. Louis, MO	3.000	0.000		0.000		0.000		0.000	0.000	3.000	3.000
Systems Engineering - PTAN	Reqn	JHU/APL Columbia, MD	2.691	0.000		0.000		0.000		0.000	0.000	2.691	2.691
Systems Engineering - SAASM	C/CPFF	Various Various	0.972	0.260	Jan 2010	0.000		0.000		0.000	0.250	1.482	1.482
Systems Engineering - AUR	C/FP	Raytheon Co. Tucson, AZ	14.263	0.000		0.000		0.000		0.000	0.000	14.263	14.263
Systems Engineering - TTL	C/FP	Raytheon Co Tucson, AZ	0.496	0.000		0.000		0.000		0.000	0.000	0.496	0.496
Systems Engineering - TTL	SS/CPFF	JHU/APL Columbia, MD	0.912	0.000		0.000		0.000		0.000	0.000	0.912	0.912
1974 THRU TBIP cost 1996	Various/ Various	Various Various	2,176.447	0.000		0.000		0.000		0.000	0.000	2,176.447	Continuing
Subtotal			2,651.473	4.434		2.718		0.000		2.718	19.782	2,678.407	494.286

UNCLASSIFIED

R-1 Line Item #170

Page 12 of 23

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development						R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr				PROJECT 0545: TOMAHAWK				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Remarks														
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Dev Support - Weapons Control Sys	WR	NUWC Newport, RI	20.966	0.000		0.000		0.000		0.000	0.000	20.966	Continuing	
Development Support	SS/CPFF	SAIC San Diego, CA	9.700	0.000		0.000		0.000		0.000	0.000	9.700	9.700	
Development Support	WR	NSWC Dahlgren, VA	1.287	0.553	Feb 2010	0.228	Feb 2011	0.000		0.228	0.000	2.068	Continuing	
Development Support - SAASM	C/CPFF	SAIC San Diego, CA	0.260	0.250	Nov 2009	0.000		0.000		0.000	0.000	0.510	0.510	
Development Support - AUR	SS/CPFF	SAIC San Diego, CA	2.244	1.388	Nov 2009	0.973	Feb 2011	0.000		0.973	1.440	6.045	6.045	
Development Support - AUR	WR	Various Various	0.813	0.703	Feb 2010	0.280	Feb 2011	0.000		0.280	13.140	14.936	Continuing	
Development Support - AUR	WR	NAWC China Lake, CA	65.274	1.641	Feb 2010	1.358	Feb 2011	0.000		1.358	0.000	68.273	Continuing	
Development Support - PTAN	Various/ Various	Various Various	0.020	0.000		0.000		0.000		0.000	0.000	0.020	Continuing	

UNCLASSIFIED

R-1 Line Item #170

Page 13 of 23

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr				PROJECT 0545: TOMAHAWK				
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support - PTAN	C/CPFF	Honeywell Minneapolis, MN	3.924	0.000		0.000		0.000		0.000	0.000	3.924	3.924
Development Support - PTAN	WR	NAWC China Lake, CA	0.606	0.000		0.000		0.000		0.000	0.000	0.606	Continuing
Development Support - SAASM	WR	Various Various	2.114	0.000		0.000		0.000		0.000	0.000	2.114	Continuing
Development Support - TTL	SS/CPFF	SAIC San Diego, CA	0.576	0.000		0.000		0.000		0.000	0.000	0.576	0.576
Development Support - TTL	WR	NUWC Newport, RI	10.521	0.000		0.000		0.000		0.000	0.000	10.521	Continuing
Development Support - TTL	WR	Various Various	5.503	0.000		0.000		0.000		0.000	0.000	5.503	Continuing
Government Eng Sup - SAASM	WR	Strategic Sys Pro Washington, DC	3.383	0.000		0.000		0.000		0.000	0.000	3.383	Continuing
Government Eng Sup - SAASM	WR	Various Various	0.061	0.000		0.000		0.000		0.000	0.000	0.061	Continuing
Soft Dev-Mission Plan Sys TC2S	Reqn	Raytheon Co Tucson, AZ	5.100	0.000		0.000		0.000		0.000	0.000	5.100	5.100
Soft Dev-Mission Plan Sys TC2s	MIPR	HQ SEC of AF-FMB Washington, DC	0.951	0.000		0.000		0.000		0.000	1.243	2.194	Continuing
Soft Dev-Mission Plan Sys TC2S	Reqn	JHU/APL Columbia, MD	20.035	0.150	Feb 2010	1.174	Feb 2011	0.000		1.174	0.672	22.031	22.031
Soft Dev-Mission Plan Sys TC2S	C/CPFF	Lockheed Martin Valley Forge, PA	8.364	1.027	Jan 2010	0.000		0.000		0.000	0.000	9.391	9.391

UNCLASSIFIED

R-1 Line Item #170

Page 14 of 23

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>					R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>					PROJECT 0545: <i>TOMAHAWK</i>				
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Soft Dev-Mission Plan Sys TC2S	Reqn	Navy Sys Mgt Act VA	10.276	0.455	Feb 2010	1.398	Feb 2011	0.000		1.398	6.223	18.352	14.026	
Soft Dev-Mission Plan Sys TC2S	Reqn	CNA Arlington, VA	0.200	0.000		0.213	Feb 2011	0.000		0.213	0.000	0.413	Continuing	
Soft Dev-Mission Plan Sys TC2S	Reqn	SAIC San Diego, CA	14.307	0.000		0.000		0.000		0.000	0.000	14.307	14.307	
Soft Dev-Mission Plan Sys TC2S	WR	NSWC Dahlgren, VA	31.325	0.000		0.000		0.000		0.000	0.000	31.325	Continuing	
Soft Dev-Dev Weapons Control Sys	C/CPFF	Lockheed Valley Forge, VA	103.525	2.323	Feb 2010	2.245	Feb 2011	0.000		2.245	0.000	108.093	108.093	
Soft Dev-Weapons Control Sys	Reqn	Various Various	1.438	0.000		0.000		0.000		0.000	0.000	1.438	1.438	
Soft Dev-PTAN	Reqn	JHU/APL Columbia, MD	1.702	0.000		0.000		0.000		0.000	0.000	1.702	Continuing	
Subtotal			324.475	8.490		7.869		0.000		7.869	22.718	363.552	195.141	
Remarks														

UNCLASSIFIED

R-1 Line Item #170

Page 15 of 23

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010																																																																																																											
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>				PROJECT 0545: <i>TOMAHAWK</i>																																																																																																														
<p>Test and Evaluation (\$ in Millions)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Cost Category Item</th> <th rowspan="2">Contract Method & Type</th> <th rowspan="2">Performing Activity & Location</th> <th rowspan="2">Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th rowspan="2">Cost To Complete</th> <th rowspan="2">Total Cost</th> <th rowspan="2">Target Value of Contract</th> </tr> <tr> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td>Development Test and Eval</td> <td>SS/CPFF</td> <td>Raytheon Co Tucson, AZ</td> <td align="right">42.883</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.800</td> <td align="right">43.683</td> <td align="right">43.683</td> </tr> <tr> <td>Operational Test and Eval</td> <td>Reqn</td> <td>JHU/APL Columbia, MD</td> <td align="right">1.730</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">1.730</td> <td align="center">Continuing</td> </tr> <tr> <td>Live Fire Test and Eval</td> <td>WR</td> <td>Various Various</td> <td align="right">37.593</td> <td align="right">0.250</td> <td align="center">Feb 2010</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">37.843</td> <td align="center">Continuing</td> </tr> <tr> <td>Test Assets</td> <td>WR</td> <td>Various Various</td> <td align="right">0.275</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">0.275</td> <td align="center">Continuing</td> </tr> <tr> <td>Tooling</td> <td>WR</td> <td>NUWC Newport, RI</td> <td align="right">0.681</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">0.681</td> <td align="center">Continuing</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td><td align="right">83.162</td><td align="right">0.250</td><td></td><td align="right">0.000</td><td></td><td align="right">0.000</td><td></td><td align="right">0.000</td><td align="right">0.800</td><td align="right">84.212</td><td align="right">43.683</td></tr> </tbody> </table> <p>Remarks</p>														Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Development Test and Eval	SS/CPFF	Raytheon Co Tucson, AZ	42.883	0.000		0.000		0.000		0.000	0.800	43.683	43.683	Operational Test and Eval	Reqn	JHU/APL Columbia, MD	1.730	0.000		0.000		0.000		0.000	0.000	1.730	Continuing	Live Fire Test and Eval	WR	Various Various	37.593	0.250	Feb 2010	0.000		0.000		0.000	0.000	37.843	Continuing	Test Assets	WR	Various Various	0.275	0.000		0.000		0.000		0.000	0.000	0.275	Continuing	Tooling	WR	NUWC Newport, RI	0.681	0.000		0.000		0.000		0.000	0.000	0.681	Continuing	Subtotal			83.162	0.250		0.000		0.000		0.000	0.800	84.212	43.683
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																																																																																									
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Operational Test and Eval	Reqn	JHU/APL Columbia, MD	1.730	0.000		0.000		0.000		0.000	0.000	1.730	Continuing																																																																																																									
Live Fire Test and Eval	WR	Various Various	37.593	0.250	Feb 2010	0.000		0.000		0.000	0.000	37.843	Continuing																																																																																																									
Test Assets	WR	Various Various	0.275	0.000		0.000		0.000		0.000	0.000	0.275	Continuing																																																																																																									
Tooling	WR	NUWC Newport, RI	0.681	0.000		0.000		0.000		0.000	0.000	0.681	Continuing																																																																																																									
Subtotal			83.162	0.250		0.000		0.000		0.000	0.800	84.212	43.683																																																																																																									
<p>Management Services (\$ in Millions)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Cost Category Item</th> <th rowspan="2">Contract Method & Type</th> <th rowspan="2">Performing Activity & Location</th> <th rowspan="2">Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th rowspan="2">Cost To Complete</th> <th rowspan="2">Total Cost</th> <th rowspan="2">Target Value of Contract</th> </tr> <tr> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td>Contractor Engineering Sup</td> <td>SS/CPFF</td> <td>SAIC San Diego, CA</td> <td align="right">0.401</td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">0.000</td> <td align="right">0.000</td> <td align="right">0.401</td> <td align="right">0.401</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td><td align="right">0.401</td><td align="right">0.000</td><td></td><td align="right">0.000</td><td></td><td align="right">0.000</td><td></td><td align="right">0.000</td><td align="right">0.000</td><td align="right">0.401</td><td align="right">0.401</td></tr> </tbody> </table> <p>Remarks</p>														Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Contractor Engineering Sup	SS/CPFF	SAIC San Diego, CA	0.401	0.000		0.000		0.000		0.000	0.000	0.401	0.401	Subtotal			0.401	0.000		0.000		0.000		0.000	0.000	0.401	0.401																																																								
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																																																																																									
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost																																																																																																												
Contractor Engineering Sup	SS/CPFF	SAIC San Diego, CA	0.401	0.000		0.000		0.000		0.000	0.000	0.401	0.401																																																																																																									
Subtotal			0.401	0.000		0.000		0.000		0.000	0.000	0.401	0.401																																																																																																									

UNCLASSIFIED

R-1 Line Item #170

Page 16 of 23

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy							DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>			PROJECT 0545: <i>TOMAHAWK</i>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 25%;"></div> <div style="width: 20%; text-align: center;"> Total Prior Years Cost </div> <div style="width: 10%; text-align: center;"> FY 2010 </div> <div style="width: 10%; text-align: center;"> FY 2011 Base </div> <div style="width: 10%; text-align: center;"> FY 2011 OCO </div> <div style="width: 10%; text-align: center;"> FY 2011 Total </div> <div style="width: 10%; text-align: center;"> Cost To Complete </div> <div style="width: 10%; text-align: center;"> Total Cost </div> <div style="width: 10%; text-align: center;"> Target Value of Contract </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 25%;">Project Cost Totals</div> <div style="width: 20%; text-align: center;">3,059.511</div> <div style="width: 10%; text-align: center;">13.174</div> <div style="width: 10%; text-align: center;">10.587</div> <div style="width: 10%; text-align: center;">0.000</div> <div style="width: 10%; text-align: center;">10.587</div> <div style="width: 10%; text-align: center;">43.300</div> <div style="width: 10%; text-align: center;">3,126.572</div> <div style="width: 10%; text-align: center;">733.511</div> </div>									
Remarks									

UNCLASSIFIED

R-1 Line Item #170

Page 17 of 23

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy																					DATE: February 2010							
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development										R-1 ITEM NOMENCLATURE PE 0204229N: Tomahawk Mssn Planning Ctr										PROJECT 0545: TOMAHAWK								
EXHIBIT R4, Schedule Profile																					DATE: February 2010							
APPROPRIATION/BUDGET ACTIVITY 1319 RDT&E, N / BA-7 Operational System Development										PROGRAM ELEMENT NUMBER 0204229N, TOMAHAWK & TMPC																		
Fiscal Year	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones																												
Missile Integration																												
Launcher Platform Integration																												
Full Rate Production																												
TTWCS V5.4.0																												
TTWCS V5.4.1																												
P3I																												
TTWCS V5.3.6																												
Test & Evaluation Milestones																												
TTWCS V5.3.6/TC2S 4.2																												
TC2S 4.2 DT/OT- III E																												
TC2S 4.2 IOC																												
TC2S 4.3																												
TTTWCs V5.4.1/TC2S 5.0																												

UNCLASSIFIED

R-1 Line Item #170

Page 18 of 23

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>	PROJECT 0545: <i>TOMAHAWK</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
TT SAASM Integrations	1	2009	2	2012
SAASM IOC	2	2012	2	2012
Launcher Platform Integration IOC	4	2011	4	2011
Full Rate Production	1	2009	4	2015
TTWCS V5.4.0 Sys TRR	3	2009	3	2009
TTWCS V5.4.0 DT/OT TRR	3	2011	3	2011
TTWCS V5.4.0 IOC	1	2012	1	2012
TTWCS V5.4.1 Sys TRR	1	2012	1	2012
TTWCS V5.4.1 DT/OT TRR	2	2014	2	2014
TTWCS V5.4.1 IOC	2	2015	2	2015
TT Preplanned Product Improvement (P3)	1	2009	4	2015
TTWCS V5.3.6 IOC	1	2009	1	2009
TTWCS V5.3.6/TC2S 4.2	1	2009	2	2009
TC2s 4.2 IOC	2	2009	2	2009
TC2S 4.2 DT/OT III E	1	2009	1	2009
TC2S 4.3 DT/OT - III F	1	2009	4	2011
TC2S 4.3 IOC	2	2012	2	2012
TC2S 5.0 DT/OT - III G	1	2010	1	2015

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: *Research, Development, Test & Evaluation, Navy*
BA 7: *Operational Systems Development*

R-1 ITEM NOMENCLATURE

PE 0204229N: Tomahawk Mssn Planning Ctr

PROJECT

0545: *TOMAHAWK*

	Start		End	
Event	Quarter	Year	Quarter	Year
TC2S 5.0 IOC	2	2015	2	2015

UNCLASSIFIED

R-1 Line Item #170

Page 20 of 23

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	3.989	3.903	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.711
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>The Tactical Tomahawk FY 09 and FY10 Congressional funding supporting the Cost Reduction Initiative (CRI) provides for development and implementation of an affordability process to identify, investigate, plan and execute viable cost reduction initiatives (CRIs) for the Tomahawk F415 engine.</p> <p>FY 09 Congressional funding for the Precision Terrain-Aided Navigation (PTAN) provides for the development and design maturation of the PTAN subsystem and provides expertise in integrating the PTAN into the Tomahawk Block IV (AUR). The efforts support simulations, test missions development and integration of PTAN with the Tomahawk Block IV avionics.</p> <p>FY 09 Congressional funding for Image-Based Navigation provide analysis to assess reliability and performance of Image Navigation Reference Products in the TC2S. Additional funding received in FY10 will be added to the Phase 2.5 contract to support additional tasking in CONOPS development, hardware integration, and actual flight software development.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009		FY 2010			
Congressional Add: PRECISION TERRAIN AIDED NAVIGATION (PTAN)						1.595		0.000			
<i>FY 2009 Accomplishments:</i> FY09 Accomplishments: <ul style="list-style-type: none"> - Developed navigation initialization method for the playback capability - Integrated updated correlation model into TAFS-MC - Initiated ICD updates to support flight test - Coordinated mission data requirements - Mission planning iterative tasking 											

UNCLASSIFIED

R-1 Line Item #170

Page 21 of 23

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>	PROJECT 9999: <i>Congressional Adds</i>
B. Accomplishments/Planned Program (\$ in Millions)		
	FY 2009	FY 2010
Congressional Add: Tomawlk Cost Reduction Initiatives <i>FY 2009 Accomplishments:</i> FY09 Accomplishments: - Completed 3 approved CRIs - Initiate remaining approved CRI initiatives <i>FY 2010 Plans:</i> Planned FY10 Activities: - Continue efforts to plan and execute the remaining approved CRI's - Continue Evaluation of new CRIs while capitalizing on Reuse, Refurbishment, and Service Life Extension opportunities	1.596	3.266
Congressional Add: Low-Cost Image-Based Navigation and Precision Targ <i>FY 2009 Accomplishments:</i> In FY09, Congressional Mark funding was used to initiate a study by APL on the government side, and to fund an SBIR contract with Scientific Systems Company, Inc (SSCI) to continue nescient development of the Image Navigation software module. SSCI was able to demonstrate in a lab simulation the efficacy of their software algorithm and to complete the analysis of data collected under the previous and continuing efforts. Specifically, a contract was awarded on 1 Dec 09 to begin phase 2.5 of the SBIR development program. This phase will support further simulation integration into the Raytheon TAFS-MC simulation program, a real time prototype operating on a missile representative hardware board, and further integration into mission data formats and requirements analysis. <i>FY 2010 Plans:</i> Additional funding received in FY10 will be added to the Phase 2.5 contract to support additional tasking in CONOPS development, hardware integration, and actual flight software development.	0.798	0.637

UNCLASSIFIED

R-1 Line Item #170

Page 22 of 23

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204229N: <i>Tomahawk Mssn Planning Ctr</i>	PROJECT 9999: <i>Congressional Adds</i>	
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>			
		FY 2009	FY 2010
Congressional Adds Subtotals		3.989	3.903
<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A			
<u>D. Acquisition Strategy</u> Not required for Congressional Adds.			
<u>E. Performance Metrics</u> Not required for Congressional Adds.			

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R-1 Line Item #170

Page 23 of 23