Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0204201N: *CG(X)*

BA 5: Development & Demonstration (SDD)

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	0.000	45.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	45.400
3106: Combat System Integration	0.000	10.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.680
3107: CG(X) Development	0.000	34.720	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	34.720

A. Mission Description and Budget Item Justification

This Program Element (PE) provides funds for development of CG(X), the next generation cruiser. CG(X) will focus on providing multi-mission capabilities. CG(X) is the follow-on to the CG-47 class as they reach the end of their service life. CG(X) development efforts will mature the ship design.

The CG(X) program is proposed for termination due to a projected high cost and risk in its technology and design. Instead of procuring CG(X), the Navy is considering other options including maturing the air and missile defense radar program and using technologies from other similar kinds of ships such as DDG-1000 and DDG-51 destroyers.

B. Program Change Summary (\$ in Millions)

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	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	150.022	0.000	0.000	0.000
Current President's Budget	0.000	45.400	0.000	0.000	0.000
Total Adjustments	0.000	-104.622	0.000	0.000	0.000
 Congressional General Reductions 		-0.622			
 Congressional Directed Reductions 		-104.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		0.000			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	0.000	0.000			
 SBIR/STTR Transfer 	0.000	0.000			
Program Adjustments	0.000	0.000	0.000	0.000	0.000

Change Summary Explanation

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

UNCLASSIFIED

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

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

FY 2011

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
3106: Combat System Integration	0.000	10.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.680
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

This project encompasses efforts for the integration of the CG(X) Combat System, C4I, Air, and Ship systems including materiel analysis, technology development, and integration of the Mission Systems into the CG(X) Mission System. Integration efforts will include communications, electronics, air, command and control, interface requirements, definition, system integration, and test and evaluation.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Acquisition and Requirements Documentation	0.000	6.000	0.000	0.000	0.000
FY 2010 Plans: Conduct feasibility analysis to evaluate capabilities and cost based on requirements allocation, and define and complete FY 2010 National Defense Authorization Act requirements for details on a technology roadmap and acquisition strategy for surface combatants.					
Technology Risk Reduction	0.000	3.000	0.000	0.000	0.000
FY 2010 Plans: Conduct risk reduction for technology elements in total ship system integration, including technology maturity and integration risks.					
Total Ship Systems Engineering	0.000	1.680	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE 1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PE 0204201N: CG(X)

PROJECT 3106: Combat System Integration

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Suppport of Total Ship Systems Engineering (TSSE) with maturation of mission system architecture functional allocation and integration requirements to support material solution analysis, including total ship system capabilities.					
Accomplishments/Planned Programs Subtotals	0.000	10.680	0.000	0.000	0.000

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>000</u>	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
RDTEN/0604501N: Advanced	92.998	189.078	228.436	0.000	228.436	123.053	132.390	141.771	141.608	Continuing	Continuing
Above Water Sensors/Air and											
Missile Defense Radar											
• RDTEN/0604300N: SC-21 Total	67.168	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	67.168
Ship System Engineering											

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0204201N: CG(X) 3107: CG(X) Development

BA 5: Development & Demonstration (SDD)

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
3107: CG(X) Development	0.000	34.720	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	34.720
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project encompasses efforts for total ship system development. These development efforts include materiel analysis, technology development, systems engineering, computer program development, interface design, technical documentation, and system testing to ensure a fully functional CG(X) system design. This project will mature the CG(X) design through several ship design cycles and baselines. Preparation and execution of a program level Preliminary Design Review (PDR) and Critical Design Review (CDR) will occur through these efforts.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Acquisition & Requirements Development	0.000	30.000	0.000	0.000	0.000
FY 2010 Plans: Development of requirements, capabilities, cost, and technical feasibility of the total ship system to develop a materiel solution. Refinement of program documentation to support CG(X) decision reviews (Gate and Milestone). Define and complete FY 2010 National Defense Authorization Act requirements for details on a technology roadmap and acquisition strategy for surface combatants.					
Technology Risk Reduction	0.000	4.720	0.000	0.000	0.000
FY 2010 Plans: Conduct risk reduction for Technology Elements including technology maturity and manufacturing feasibility in support of material solution analysis.					
Accomplishments/Planned Programs Subtotals	0.000	34.720	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0204201N: CG(X) 3107: CG(X) Development

BA 5: Development & Demonstration (SDD)

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

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			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	000	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
RDTEN/0604501N: Advanced	92.998	189.078	228.436	0.000	228.436	123.053	132.390	141.771	141.608	Continuing	Continuing
Above Water Sensors/Air and											
Missile Defense Radar											
• RDTEN/0604300N: SC-21 Total	67.168	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	67.168
Ship Systems Engineering											

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A