Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Office of Secretary Of Defense										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*							
COST ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
Total Program Element	232.454	174.830	110.383	-	110.383	138.701	254.740	276.007	335.296	Continuing	Continuing
P165: *Prompt Global Strike*	232.454	-	-	-	-	-	-	-	-	Continuing	Continuing
P164: *Hypersonic Glide Experiment and Concepts Demonstration Support*	-	61.830	49.526	-	49.526	28.282	123.740	150.081	150.081	Continuing	Continuing
P166: *Alternate Re-Entry System/ Warhead Engineering*	-	91.000	42.000	-	42.000	100.400	120.000	120.000	180.815	Continuing	Continuing
P167: *Test Range Development*	-	12.000	11.000	-	11.000	7.000	7.000	4.000	3.200	Continuing	Continuing
P168: *OSD CPCS Studies*	-	10.000	7.857	-	7.857	3.019	4.000	1.926	1.200	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element (PE) was established to develop and demonstrate technologies that advance conventional prompt global strike (CPGS) warfighting capabilities. The program uses a national team with coordination between the Services, Agencies and national research laboratories to pursue integrated portfolio objectives leading to the acquisition and operation of a CPGS system. This program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, guidance systems, and mission planning and enabling capabilities, with the goal of competitive acquisition beginning in FY 2013 or 2014. Timing will be driven by the outcome of flight events and DoD budgets. To support these development activities, the program procures modeling and simulation capabilities, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives. As a result of flight tests and supporting activities, there are several boost-glide concepts available in preparation for a competitive acquisition. In FY 2012, funding for the individual service initiatives will be contingent upon their abilities to execute and achieve satisfactory progress towards project goals as determined by the CPGS portfolio manager.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Office of Secretary Of Defense					DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*			R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*		
B. Program Change Summary ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**
Previous President's Budget	239.861	204.824	131.515	-	131.515
Current President's Budget	232.454	174.830	110.383	-	110.383
Total Adjustments	-7.407	-29.994	-21.132	-	-21.132
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.062	-			
• SBIR/STTR Transfer	-6.126	-			
• Defense Efficiency - Report, Studies, Boards, and Commissions	-24.051	-	-	-	-
• Defense Efficiency - Contractor Staff Support	-0.223	-	-	-	-
• Economic Assumptions	-1.219	-	-	-	-
• Other Adjustments	24.274	-29.994	-21.132	-	-21.132

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P165: *Prompt Global Strike*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P165: *Prompt Global Strike*	232.454	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Program Element (PE) was established to develop and demonstrate technologies that advance conventional prompt global strike (CPGS) warfighting capabilities. The program uses a national team with coordination between the Services, Agencies and national research laboratories to pursue integrated portfolio objectives leading to the acquisition and operation of a CPGS system. This program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, guidance systems, and mission planning and enabling capabilities, with the goal of competitive acquisition beginning in FY 2013 or 2014. Timing will be driven by the outcome of flight events and DoD budgets. To support these development activities, the program procures modeling and simulation capabilities, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives. As a result of flight tests and supporting activities, there are several boost-glide concepts available in preparation for a competitive acquisition. In FY 2012, funding for the individual service initiatives will be contingent upon their abilities to execute and achieve satisfactory progress towards project goals as determined by the CPGS portfolio manager.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: Hypersonic Glide Experiments and Concept Demonstration Development/Support	118.954	-	-
Description: This sub-project matures technologies that could lead to a system capable of global reach from Continental United States (CONUS) or forward bases with the following characteristics: effects on targets in a very short-period of time from execution order; non-ballistic flight over the majority of the flight path; positive control from launch to impact; adequate cross-range/ maneuverability to avoid overflight issues; controlled stage drop over Broad Ocean area(BOA), and provides for in-flight target updates. The technologies developed will have cross-service and cross-concept applicability and will be developed through close coordination among DoD components. This activity will support both ground and flight tests, and provide all national data to the competitive acquisition program. The objectives of this sub-project are to: - Assess boost-glide technologies in light of ground and flight test events and associated modeling and simulation Perform analysis of the military utility of vehicle performance with respect to thermal protection materials, aerodynamics and control surfaces, navigation, guidance, control, and weapons performance Assess the feasibility of producing an affordable solution to fill the CPGS capability gap. Continue systems engineering/development of weaponized payload delivery vehicles Continue flight test planning and support Continue KEP warhead and penetrator development for application to range of CPGS concepts			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P165: *Prompt Global Strike*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
FY 2011 Accomplishments: - Completed Engineering Review Board activities, analysis, and follow-on wind tunnel tests associated with the first HTV-2 flight experiment (conducted in FY 2010). - Conducted the second HTV-2 flight experiment and established an Engineering Review Board to investigate the flight anomaly. - Finalized the design concept for the CSM Payload Delivery Vehicle including thermal protection materials, guidance systems, mission planning, and command and control. Completed the Payload Delivery Vehicle Delta PDR. - Completed System Readiness Review for the launch vehicle. Qualified Minotaur launch vehicle for a CPGS mission analysis of launch system infrastructure requirements utilizing other ballistic missile propulsion programs, and matured/demonstrated technologies associated the high speed demonstration of conventional munitions. - Continued KEP development, testing, and modeling and simulation. Completed warhead initiation and structural tests. Completed system engineering reviews with Holloman AFB for KEP sled test and KEP Delta PDR. - Conducted system engineering for entire CPGS mission configuration, including mission performance assessment, mission assurance, risk management, integration, planning, analysis and cost estimates. - Completed end-to-end systems analysis of the CPGS development plan concept, roadmap, and Industry Request for Information.			
Title: Alternative Re-Entry System/Warhead Engineering and Delivery Vehicle Options/Development	75.000	-	-
Description: This sub-project will test and evaluate alternative booster and delivery vehicle options compatible with both intermediate and long range and will assess the feasibility of producing an affordable alternate solution to fill the CPGS capability gap. It will mature technologies that could lead to advanced systems with the following characteristics: effects on targets in a very short-period of time from execution order; non-ballistic flight over the majority of the flight path; positive control from launch to impact; adequate cross-range/maneuverability to avoid over flight issues; and controlled stage drop over BOA. The technologies developed will have cross-service and cross-concept applicability and will be developed through close coordination among DoD components. This activity will support both ground and flight tests, and provide all national data to the competitive acquisition program. ***FY 2011 Accomplishments:*** - Demonstrated modeling for flight test design to demonstrate maturity of technologies related to thermal management, precise navigation and control, and in-flight communications. - Applied test range capabilities for AHW flight test. - Completed booster design for unique depressed flight trajectory. - Executed the initial integration phase of the AHW including fabrication, assembly and integration of a single AHW flight vehicle in preparation for the flight test. - Documented the applicability of the proven AHW technologies to a family of CPGS concepts and implementations.			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P165: *Prompt Global Strike*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
- Documented the design of the AHW HGB to support future acquisition activities as required.			
Title: Test Range Development ***Description:*** This sub-project will complete design, assembly and delivery of power/telemetry subsystems; assemble and integrate components to check command/control and verify range safety functions. ***FY 2011 Accomplishments:*** - Performed range modifications in preparation for flight tests. - Upgrade of the TP01 launch pad (which has not been maintained). - Built sensors and targets to support flight tests. - Purchased range assets to support flight tests, including ships and aircraft to receive in-flight telemetry data transmitted by the PDV (store and burst mode).	25.500	-	-
Title: OSD CPGS Studies ***Description:*** This sub-project supports emergent CPGS study efforts. In addition, it also supports application of the Prompt Global Strike Analysis of Alternatives results, requirements development, CPGS basing alternatives, analysis and defining of mission enabling technologies, and measures to avoid conventional missile launch ambiguity. Finally, it supports administrative activities associated with the management and execution of this PE. ***FY 2011 Accomplishments:*** - Completed the study of strategic policy compliance to include CPGS basing alternatives and measures to avoid misinterpretation of intent; policy compliance, and operational requirements validation. - Conducted studies associated with mission planning systems and battle damage assessment. - Developed and implemented measures of system design performance to evaluate the performance of PDV and booster designs, and basing considerations. - Performed analysis of technology readiness of key aspects of the CPGS designs.	13.000	-	-
Accomplishments/Planned Programs Subtotals	232.454	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

This PE provides resources for technical studies, as well as design, development and test activities; project support; combatant requirements application; and systems design analyses necessary to establish and execute an integrated Conventional Prompt Global Strike program. These efforts will produce: a demonstration and

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P165: *Prompt Global Strike*

application of advanced technologies to support a combatant command materiel solution requirement; a DoD-wide coordinated assessment of kinetic non-nuclear system and operations concepts in a manner that supports planning, budgeting, and execution of further system concept development and procurement by the Services; resources for technical and operations projects and research, development and test and evaluation in such areas as PGS risk mitigation, strategic policy compliance, mission planning, reentry system thermal protection, advanced propulsion, advanced payload delivery and dispensing mechanisms, weapon system command and control, advanced non-nuclear warheads, modeling and simulation, launch system infrastructure, and other enabling capabilities that address emerging mission requirements.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P165: *Prompt Global Strike*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Hypersonic Glide Experiments and Concept Demonstration Development/Support	Allot	SPACE AND MISSILE CENTER:LOS ANGELES, CA	280.140	-		-		-		-	Continuing	Continuing	Continuing
Alternative Reentry System/ Warhead Engineering and Delivery Vehicle Options/ Development	Allot	SPACE AND MISSILE DEFENSE CENTER:HUNTSVILLE, AL	122.486	-		-		-		-	Continuing	Continuing	Continuing
Test Range Development	Allot	SPACE AND MISSILE CENTER:LOS ANGELES, CA	50.446	-		-		-		-	Continuing	Continuing	Continuing
OSD CPGS Studies	Allot	OFFICE OF THE SECRETARY OF DEFENSE:WASHINGTON, DC	21.988	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	475.060	-		-		-		-			

	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	475.060	-		-		-		-			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P165: *Prompt Global Strike*

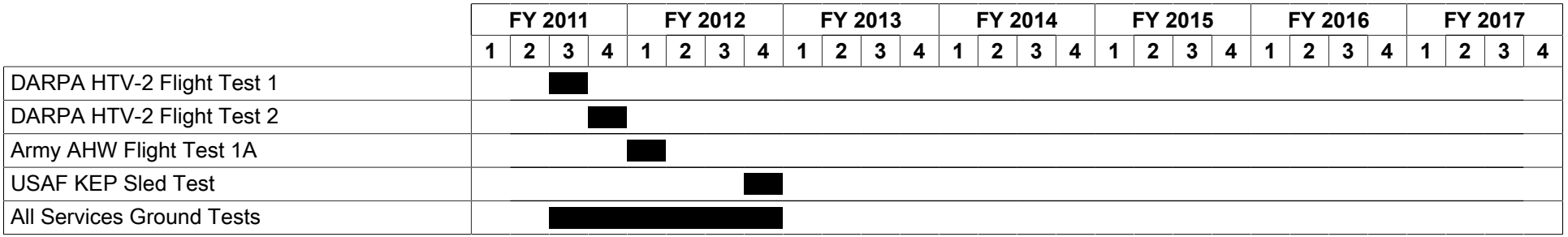

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604165D8Z: *Prompt Global Strike Capability Development*	**PROJECT** P165: *Prompt Global Strike*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
DARPA HTV-2 Flight Test 1	3	2011	3	2011
DARPA HTV-2 Flight Test 2	4	2011	4	2011
Army AHW Flight Test 1A	1	2012	1	2012
USAF KEP Sled Test	4	2012	4	2012
All Services Ground Tests	3	2011	4	2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P164: *Hypersonic Glide Experiment and Concepts Demonstration Support*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P164: *Hypersonic Glide Experiment and Concepts Demonstration Support*	-	61.830	49.526	-	49.526	28.282	123.740	150.081	150.081	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Program Element (PE) was established to develop and demonstrate technologies that advance conventional prompt global strike (CPGS) warfighting capabilities. The program uses a national team with coordination between the Services, Agencies and national research laboratories to pursue integrated portfolio objectives leading to the acquisition and operation of a CPGS system. This program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, guidance systems, and mission planning and enabling capabilities, with the goal of competitive acquisition beginning in FY 2013 or 2014. Timing will be driven by the outcome of flight events and DoD budgets. To support these development activities, the program procures modeling and simulation capabilities, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives. As a result of flight tests and supporting activities, there are several boost-glide concepts available in preparation for a competitive acquisition. In FY 2012, funding for the individual service initiatives will be contingent upon their abilities to execute and achieve satisfactory progress towards project goals as determined by the CPGS portfolio manager.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: Hypersonic Glide Experiments and Concept Demonstration Development/Support	-	61.830	49.526
Description: This sub-project matures technologies that could lead to a system capable of global reach from Continental United States (CONUS) or forward bases with the following characteristics: effects on targets in a very short-period of time from execution order; non-ballistic flight over the majority of the flight path; positive control from launch to impact; adequate cross-range/ maneuverability to avoid overflight issues; controlled stage drop over Broad Ocean area(BOA), and provides for in-flight target updates. The technologies developed will have cross-service and cross-concept applicability and will be developed through close coordination among DoD components. This activity will support both ground and flight tests, and provide all national data to the competitive acquisition program. The objectives of this sub-project are to: - Assess boost-glide technologies in light of ground and flight test events and associated modeling and simulation Perform analysis of the military utility of vehicle performance with respect to thermal protection materials, aerodynamics and control surfaces, navigation, guidance, control, and weapons performance Assess the feasibility of producing an affordable solution to fill the CPGS capability gap. Continue systems engineering/development of weaponized payload delivery vehicles			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P164: *Hypersonic Glide Experiment and Concepts Demonstration Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Continue flight test planning and support Continue KEP warhead and penetrator development for application to range of CPGS concepts ***FY 2011 Accomplishments:*** N/A ***FY 2012 Plans:*** - Complete the manufacture and accept delivery of aeroshells for KEP sled tests, complete build and conduct KEP sled tests - Participate in HTV-2 and AHW post-flight analyses - Support aero and thermal ground facility tests and future Flight Demo designs - Accept delivery of PDV trade study reports - Prepare and conduct the segment and System CDRs - Conduct post flight test reviews and data analysis, and validate that significant risk reduction was achieved utilizing updated aerodynamic, guidance, and control modeling. - Disseminate post flight data/analysis to CPGS national community, including the AF CSM program office, Army AHW program office, Navy SSP, and OSD/SW DWA Manager. ***FY 2013 Plans:*** - Initiate Program Office stand-up - Complete KEP sled test analysis and continue KEP warhead and penetrator development - Complete HTV-2 aero shell adaption for payload acceptance - Complete PDV alternate flap control system maturation and heat shield materials - Expand systems engineering parameters for performance and cost assessments for all concepts			
Accomplishments/Planned Programs Subtotals	-	61.830	49.526

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P164: *Hypersonic Glide Experiment and Concepts Demonstration Support*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Hypersonic Glide Experiments and Concept Demonstration Development/Support	Allot	SPACE AND MISSILE CENTER:LOS ANGELES, CA	-	61.830		49.526		-		49.526	Continuing	Continuing	
		Subtotal	-	61.830		49.526		-		49.526			

	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	61.830		49.526		-		49.526			

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P166: *Alternate Re-Entry System/Warhead Engineering*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P166: *Alternate Re-Entry System/ Warhead Engineering*	-	91.000	42.000	-	42.000	100.400	120.000	120.000	180.815	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Program Element (PE) was established to develop and demonstrate technologies that advance conventional prompt global strike (CPGS) warfighting capabilities. The program uses a national team with coordination between the Services, Agencies and national research laboratories to pursue integrated portfolio objectives leading to the acquisition and operation of a CPGS system. This program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, guidance systems, and mission planning and enabling capabilities, with the goal of competitive acquisition beginning in FY 2013 or FY 2014. Timing will be driven by the outcome of flight events and DoD budgets. To support these development activities, the program procures modeling and simulation capabilities, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives. As a result of flight tests and supporting activities, there are several boost-glide concepts available in preparation for a competitive acquisition. In FY 2012, funding for the individual service initiatives will be contingent upon their abilities to execute and achieve satisfactory progress towards project goals as determined by the CPGS portfolio manager.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: Alternative Re-Entry System/Warhead Engineering and Delivery Vehicle Options/Development	-	91.000	42.000

Description: This sub-project will test and evaluate alternative booster and delivery vehicle options compatible with both intermediate and long range and will assess the feasibility of producing an affordable alternate solution to fill the CPGS capability gap. It will mature technologies that could lead to advanced systems with the following characteristics: effects on targets in a very short-period of time from execution order; non-ballistic flight over the majority of the flight path; positive control from launch to impact; adequate cross-range/maneuverability to avoid over flight issues; and controlled stage drop over BOA. The technologies developed will have cross-service and cross-concept applicability and will be developed through close coordination among DoD components. This activity will support both ground and flight tests, and provide all national data to the competitive acquisition program.

FY 2011 Accomplishments:
N/A

FY 2012 Plans:
- Complete mission data reporting and analysis from AHW Flight 1; document predicted boost and glide performance, actual performance, range and collection activities, remaining uncertainties, and application of data to modeling for full range of design

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P166: *Alternate Re-Entry System/Warhead Engineering*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
capabilities/missions. Host a post-test Engineering workshop to brief and disseminate post FT-1 test data/analysis to CPGS national community and DWA Manager. - Perform ground testing of possible TPS materials and glide vehicle configurations. - Assess TPS materials; Material Manufacturing Demonstrations to support selected materials. - Initiate alternatives designs and flight procedures with promising TPS materials, NG&C concepts, and glide vehicle concepts. Conduct Integrated Baseline Review and Integrated Master Schedule development for follow-on tests. - Plan System Requirements Review (SRR) and Preliminary Design Review (PDR) as part of the future acquisition program. - Support initial range planning activities for Flight Termination System design and approval. - Conduct KEP warhead and penetrator payload integration trades and designs. ***FY 2013 Plans:*** - Participate in the analysis of FY 2012 ground tests and their application to CPGS modeling advancements. - Initiate work associated with PDV items at risk, in accordance with previous tests. - Mature Flight Control Systems and electronics to be made available to all acquisition program competitors. - Integrate all booster studies to support intermediate range applications. - Expand systems engineering parameters for performance and cost assessments for all concepts. - Mature payload integration studies and make available to all acquisition program competitors.			
Accomplishments/Planned Programs Subtotals	-	91.000	42.000

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P166: *Alternate Re-Entry System/Warhead Engineering*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Alternative Reentry System/ Warhead Engineering and Delivery Vehicle Options/ Development	Allot	SPACE AND MISSILE DEFENSE CENTER:HUNTSVILLE, AL	-	91.000		42.000		-		42.000	Continuing	Continuing	
		Subtotal	-	91.000		42.000		-		42.000			

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	91.000		42.000		-		42.000			

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P167: *Test Range Development*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P167: *Test Range Development*	-	12.000	11.000	-	11.000	7.000	7.000	4.000	3.200	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Program Element (PE) was established to develop and demonstrate technologies that advance conventional prompt global strike (CPGS) warfighting capabilities. The program uses a national team with coordination between the Services, Agencies and national research laboratories to pursue integrated portfolio objectives leading to the acquisition and operation of a CPGS system. This program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, guidance systems, and mission planning and enabling capabilities, with the goal of competitive acquisition beginning in FY 2013 or FY 2014. Timing will be driven by the outcome of flight events and DoD budgets. To support these development activities, the program procures modeling and simulation capabilities, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives. As a result of flight tests and supporting activities, there are several boost-glide concepts available in preparation for a competitive acquisition. In FY 2012, funding for the individual service initiatives will be contingent upon their abilities to execute and achieve satisfactory progress towards project goals as determined by the CPGS portfolio manager.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: Test Range Development	-	12.000	11.000
Description: This sub-project will complete design, assembly and delivery of power/telemetry subsystems; assemble and integrate components to check command/control and verify range safety functions. ***FY 2011 Accomplishments:*** N/A ***FY 2012 Plans:*** - Test-range development for all tests, including adaptation of Life Extension Test Bed (LETB) reentry bodies. - Complete design, assembly and delivery of selected sensors, power/telemetry subsystems; assemble and integrate components to check command/control and verify range safety functions. - Perform range assets to support technology demonstrations, including ships and aircraft to receive in-flight telemetry data transmitted by the PDV. ***FY 2013 Plans:*** - Improve telemetry collection and infrastructure in prep for DOTE/IOTE testing of contractor developed system concepts. - Assist test range infrastructure for long term use			
Accomplishments/Planned Programs Subtotals	-	12.000	11.000

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P167: *Test Range Development*

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P167: *Test Range Development*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Range Development	Allot	SPACE AND MISSILE CENTER:LOS ANGELES, CA	-	12.000		11.000		-		11.000	Continuing	Continuing	
		Subtotal	-	12.000		11.000		-		11.000			

	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	12.000		11.000		-		11.000			

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P168: *OSD CPCS Studies*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P168: *OSD CPCS Studies*	-	10.000	7.857	-	7.857	3.019	4.000	1.926	1.200	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This Program Element (PE) was established to develop and demonstrate technologies that advance conventional prompt global strike (CPGS) warfighting capabilities. The program uses a national team with coordination between the Services, Agencies and national research laboratories to pursue integrated portfolio objectives leading to the acquisition and operation of a CPGS system. This program funds the design, development, and experimentation of boosters, payload delivery vehicles (PDVs), non-nuclear warheads, guidance systems, and mission planning and enabling capabilities, with the goal of competitive acquisition beginning in FY 2013 or 2014. Timing will be driven by the outcome of flight events and DoD budgets. To support these development activities, the program procures modeling and simulation capabilities, command and control interfaces, test range support, and launch system infrastructure. Additionally, expert resources address strategic policy and treaty issues. Program emphasis is on demonstrating component and subsystem technology maturity with risk reduction initiatives. As a result of flight tests and supporting activities, there are several boost-glide concepts available in preparation for a competitive acquisition. In FY 2012, funding for the individual service initiatives will be contingent upon their abilities to execute and achieve satisfactory progress towards project goals as determined by the CPGS portfolio manager.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
Title: OSD CPGS Studies	-	10.000	7.857
Description: This sub-project supports emergent CPGS study efforts. In addition, it also supports application of the Prompt Global Strike Analysis of Alternatives results, requirements development, CPGS basing alternatives, analysis and defining of mission enabling technologies, and measures to avoid conventional missile launch ambiguity. Finally, it supports administrative activities associated with the management and execution of this PE.			
FY 2011 Accomplishments: N/A			
FY 2012 Plans: - Perform end-to-end modeling & simulation of CPGS concepts (including alternate CONUS and Sea-Based options) and design of acquisition program strategy (and post acquisition activities). - Complete the study of strategic policy compliance to include CPGS basing alternatives and measures to avoid misinterpretation of intent; policy compliance, and operational requirements validation.			
FY 2013 Plans: - Support Program Office(s) efforts toward CDD, requirement refinement for MS A entry, - Booster system integration studies - Warhead fusing studies			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P168: *OSD CPCS Studies*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2011	FY 2012	FY 2013
- Continue thermal modeling			
Accomplishments/Planned Programs Subtotals	-	10.000	7.857

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Office of Secretary Of Defense			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604165D8Z: *Prompt Global Strike Capability Development*	PROJECT P168: *OSD CPCS Studies*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2012 Cost	FY 2012 Award Date	FY 2013 Base Cost	FY 2013 Base Award Date	FY 2013 OCO Cost	FY 2013 OCO Award Date	FY 2013 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
OSD CPGS Studies	Allot	OFFICE OF THE SECRETARY OF DEFENSE:WASHINGTON, DC	-	10.000		7.857		-		7.857	Continuing	Continuing	
		Subtotal	-	10.000		7.857		-		7.857			

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	10.000		7.857		-		7.857			

Remarks