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PE NUMBER: 0604015F

PE TITLE: Next Generation Long Range Strike (NGLRS)

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2007

BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0604015F Next Generation Long Range Strike (NGLRS)

Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	24.108	25.491	0.000	0.000	0.000	81.092	101.113	151.441	Continuing	TBD
3308 Next Generation Bomber	24.108	25.491	0.000	0.000	0.000	81.092	101.113	151.441	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

This program develops and demonstrates a next generation Long Range Strike capability in support of Air Force Global Strike and Global Persistent Attack Concept of Operations. Program efforts support the Air Force three-phase long range strike strategy. This program will provide capability improvements in the areas of strike responsiveness, persistence, survivability, lethality, connectivity, and affordability. A wide variety of concept options are being considered for a Long Range Strike air platform. Funding supports Capability Needs Assessment, Analysis of Alternatives, operational and system architecture development, maturation and risk reduction of advanced Long Range Strike related technologies, and integrated system concept development and demonstration. Note: In FY 2005, Congress added \$30M for Bomber Development. This program is categorized as Budget Activity 4, Advanced Component Development and Prototypes, since advanced technologies will be explored and integrated for demonstration in a realistic operating environment applicable to Long Range Strike.

(U) B. Program Change Summary (\$ in Millions)

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	24.777	26.314	64.514	103.878
(U) Current PBR/President's Budget	24.108	25.491	0.000	0.000
(U) Total Adjustments	-0.669	-0.107		
(U) Congressional Program Reductions		-0.010		
Congressional Rescissions		-0.097		
Congressional Increases				
Reprogrammings				
SBIR/STTR Transfer	-0.668			

(U) Significant Program Changes:

FY08 and FY09 program reduced in this PE to fund technology maturation efforts.

Exhibit R-2a, RDT&E Project Justification

DATE
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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)				PE NUMBER AND TITLE 0604015F Next Generation Long Range Strike (NGLRS)				PROJECT NUMBER AND TITLE 3308 Next Generation Bomber		
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
3308 Next Generation Bomber	24.108	25.491	0.000	0.000	0.000	81.092	101.113	151.441	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

This program develops and demonstrates a next generation Long Range Strike capability in support of Air Force Global Strike and Global Persistent Attack Concept of Operations. Program efforts support the Air Force three-phase long range strike strategy. This program will provide capability improvements in the areas of strike responsiveness, persistence, survivability, lethality, connectivity, and affordability. A wide variety of concept options are being considered for a Long Range Strike air platform. Funding supports Capability Needs Assessment, Analysis of Alternatives, operational and system architecture development, maturation and risk reduction of advanced Long Range Strike related technologies, and integrated system concept development and demonstration. Note: In FY 2005, Congress added \$30M for Bomber Development. This program is categorized as Budget Activity 4, Advanced Component Development and Prototypes, since advanced technologies will be explored and integrated for demonstration in a realistic operating environment applicable to Long Range Strike.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) MAJOR THRUST: Develop and refine Long Range Strike requirements based on the Air Force Global Strike and Global Persistent Attack Concept of Operations.	24.108	25.491		
(U) In FY 2006: Refine system concepts and operational/system architectures, and prepare Technology Development Strategy. Conduct Analysis of Alternatives to identify preferred Long Range Strike option. Develop radio frequency/electro-optical/infrared sensor technology for rapid and accurate target detection and identification capability. Develop data fusion algorithms and crew interface techniques for multi-platform sensor cueing/management and net-centric operations. Develop blended wing aero-control and structural load databases to characterize aero-propulsive efficiency. Determine large-scale composite airframe manufacturing approaches. Demonstrate acoustic suppression and enhanced weapon separation technology. Develop lightweight thermal structures components for air platform concepts. Conduct small-scale wind tunnel experiments of tailless aero-configurations. Validate performance of engine inlet and nozzle flow path components for variable cycle propulsion. Demonstrate high temperature engine core components.				
(U) In FY 2007: Continue refinement of system concepts and designs and operational/system architectures. Continue Analysis of Alternative to identify preferred Long Range Strike option. Continue preparation of the Technology Development Strategy. Continue projects to mature key technologies including mitigating risk of key concept attributes of the possible options. Develop a Modeling and Simulation Support Plan to ensure robust analytic support across the concept life cycle. Continue development of radio frequency/electro-optical/infrared sensor technology for radio and accurate target detection and				

Exhibit R-2a, RDT&E Project Justification

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(U) **B. Accomplishments/Planned Program (\$ in Millions)** FY 2006 FY 2007 FY 2008 FY 2009
 identification capability. Continue development of high temperature and variable cycle engine core components, sensor/aperture integration technology, and advanced weapon integration technology.

(U) In FY 2008: N/A

(U) Total Cost 24.108 25.491 0.000 0.000

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							

(U) N/A

(U) **D. Acquisition Strategy**
 To be determined.

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Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE
04 Advanced Component Development and Prototypes (ACD&P)	0604015F Next Generation Long Range Strike (NGLRS)	3308 Next Generation Bomber

<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2006 Cost</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>(U) Long Range Strike</u>														
Concept Exploration and Refinement	TBD	TBD		24.108		25.491						Continuing	TBD	
Subtotal Long Range Strike			0.000	24.108		25.491		0.000		0.000		Continuing	TBD	0.000
Remarks:														
<u>(U) Total Cost</u>			0.000	24.108		25.491		0.000		0.000		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

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BUDGET ACTIVITY

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PE NUMBER AND TITLE

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PROJECT NUMBER AND TITLE

3308 Next Generation Bomber

NGLRS Phase II Schedule	FY05				FY06				FY07				FY08				FY09				FY10				FY11				FY12				FY13			
	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	1	2	3	4	1	2	3	4
Fiscal Year																																				
NGLRS Phase II Concept Decision -- AoA Kickoff				▲																																
NGLRS Phase II Concept Refinement																																				

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Exhibit R-4a, RDT&E Schedule Detail	DATE February 2007
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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <u>Schedule Profile</u>				
(U) Enter Concept Refinement Phase -- AoA Start	1Q			
(U) AoA Completion		2Q		