Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

Operational Systems Development

PE 0101127F *I B-2 SQUADRONS*

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	0.000	105.914	152.458	193.108	0.000	193.108	314.851	329.242	137.214	136.900	Continuing	Continuing
675345: B-2 Modernization	0.000	88.224	76.212	54.523	0.000	54.523	63.830	59.049	29.348	26.825	Continuing	Continuing
676021: BASELINE SUPPORT	0.000	17.690	13.660	13.967	0.000	13.967	14.195	14.459	14.709	15.011	Continuing	Continuing
676022: AEHF Strategic Comm	0.000	0.000	62.586	124.618	0.000	124.618	236.826	255.734	93.157	95.064	Continuing	Continuing

Note

This program, BA 07 PE 0101127F, project 675345, B-2 IFF Mode 5/S/ADS-B out, is a new start.

This program, BA 07 PE 0101127F, project 675345, B-2 Crash Survivable Memory Unit (CSMU), is a new start.

In FY 2017 and subsequent the B-2 AEHF strategic communications effort is documented in Project 676022 AEHF Strategic Comm; in FY 2016 \$10.926M for the effort is documented in Project 675345 B-2 Modernization.

A. Mission Description and Budget Item Justification

The B-2 Spirit is the world's most advanced long-range strike asset. The unique combination of range, precision, payload, and ability to penetrate and operate in anti-access/area denial environments allow the B-2 to identify, locate, target, and destroy the highest value enemy targets. The B-2 can, with necessary upgrades, accomplish its mission regardless of location, return to base safely, and permit freedom of movement for follow-on forces, including other long range strike platforms. An array of planned RDT&E projects are necessary to preserve a strategic advantage against 21st century threats as well as increase flexibility, lethality, and survivability of this national asset tasked across a broad spectrum of tactical and national strategic objectives. B-2 will achieve these objectives by adapting mature technologies/ systems in the fleet to rapidly deliver relevant combat capability, leveraging other Department of Defense investments and programs, utilizing innovative acquisition strategies.

The B-2 has a projected service life through 2058. To ensure the fleet can accomplish its nuclear and conventional mission in highly defended and anti-access environments, periodic modernization efforts must be undertaken to upgrade combat capability as well as improve the viability, supportability, and survivability of the weapon system.

Recent and ongoing investments in avionics, structures, communications, and weapons keep the B-2 viable in the immediate future. Current system upgrades include Low Observable Signature and Supportability Modifications, Defensive Management System Modernization, Flexible Strike Phase 1, alternative communication solutions such as Common Very Low Frequency Receiver and B-2 AEHF (Strategic Communications), Joint Air-to-Surface Standoff Missile Extended Range (JASSM-ER) weapon integration, Crash Survivable Memory Unit (CSMU) and Global Positioning System enhancements. The B-2 is also exploring opportunities for architecture updates to reduce future integration costs and improve program affordability. The Defensive Management System effort is documented in the exhibit for PE 0605931F.

PE 0101127F: *B-2 SQUADRONS*

Air Force

UNCLASSIFIED
Page 1 of 25

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0101127F *I B-2 SQUADRONS*

Operational Systems Development

In addition to the B-2 improvements described above, the Air Force has continuing efforts for Training Systems, Mission Planning System improvements, flight test aircraft upgrades and base of operations support, integration and testing of upgraded cryptographic components, as well as B-2 platform studies and acquisition planning.

Funds may be used to resolve emerging safety of flight and diminishing manufacturing sources issues, accommodate technology insertion and fulfill FAA or other mandates necessary to ensure continued aircrew safety and mission effectiveness.

This program is in Budget Activity 7, Operational System Development. This budget activity includes developmental efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	108.183	152.458	221.403	0.000	221.403
Current President's Budget	105.914	152.458	193.108	0.000	193.108
Total Adjustments	-2.269	0.000	-28.295	0.000	-28.295
 Congressional General Reductions 	0.000	0.000			
 Congressional Directed Reductions 	0.000	0.000			
 Congressional Rescissions 	0.000	0.000			
Congressional Adds	0.000	0.000			
 Congressional Directed Transfers 	0.000	0.000			
Reprogrammings	1.450	0.000			
SBIR/STTR Transfer	-3.719	0.000			
Other Adjustments	0.000	0.000	-28.295	0.000	-28.295

Change Summary Explanation

FY 2016: Reduced by \$3.719M for Small Business Innovation Research and increased by \$1.450M by way of a Below Threshold Reprogramming from B-2 DMS-M, PE 0605931F

FY 2018: +\$7.665M B-2 IFF Mode 5/S/ADS-B out, +\$2.365M B-2 Crash Survivable Memory Unit (CSMU), and +\$2.0M Flexible Strike, reduced AEHF Strategic Comm by -\$41.0M

PE 0101127F: *B-2 SQUADRONS*

Air Force

UNCLASSIFIED
Page 2 of 25

Exhibit R-2A, RDT&E Project J	ustification:	FY 2018 A	ir Force							Date: May	2017	
Appropriation/Budget Activity 3600 / 7 R-1 Program Element (Number/Name) PE 0101127F / B-2 SQUADRONS PE 0101127F / B-2 SQUADRONS Project (Number/Name) 675345 / B-2 Modernization												
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
675345: B-2 Modernization	0.000	88.224	76.212	54.523	0.000	54.523	63.830	59.049	29.348	26.825	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program, BA 07 PE 0101127F, project 675345, B-2 IFF Mode 5/S/ADS-B out, is a new start.

This program, BA 07 PE 0101127F, project 675345, B-2 Crash Survivable Memory Unit (CSMU), is a new start.

A. Mission Description and Budget Item Justification

The B-2 is currently undergoing modernization of avionics/communications systems, engines, armament systems, low observable components, core training system components, aircraft supportability improvements, and support equipment development.

The Air Force will also study multiple structural, avionics, and engine modifications that could improve the performance of the aircraft and engines and reduce maintenance man-hours and the logistics footprint of the fleet. Focus of the studies will be on non-mission capable (maintenance) drivers, safety issues, and obsolescence issues through modernization of key components in the airframe, avionics, and engines resulting in improved aircraft availability of a high demand/low density fleet.

Modern communications are key enablers for the B-2 in the anti-access/area denial battlespace, and directly enhance lethality and force multiplication. The Common Very Low Frequency (VLF) Receiver effort (CVR) develops and integrates a receive-only, low bandwidth receiver and antenna subsystem to provide a secure, survivable strategic nuclear communication capability for the B-2. The receiver will be adaptable for use by other Department of Defense platforms. B-2 cryptographic modernization updates cryptographic equipment for B-2 AIT/ARC-234, AN/ARC-211 and MIDS/LVT communication systems. The Adaptive Communication Suite (ACS) explores incremental improvements to the B-2 ACS UHF communication system. The B-2 Advanced Extremely High Frequency (AEHF) Satellite Communications (SATCOM) system provides secure, strategic, two-way, survivable Anti-Access/Area Denial communications capability for conventional and nuclear missions. The effort was established in Project 675345 B-2 Modernization; the B-2 AEHF effort continues in FY 2017 and subsequent years under Project 676022 AEHF Strategic Comm.

B-2 Armament upgrades integrate new and/or advanced weapons on the B-2 to attack a wider array of target sets, to include hardened, deeply buried targets, as well as destroy more targets per sortie. The Flexible Strike Phase 1 program will re-host the current B-2 stores management software onto a new integrated processor. B-2 will also integrate the Joint Air-to-Surface Standoff Missile Extended Range (JASSM-ER) weapon to further enhance the B-2's ability to attack and destroy high value target sets.

The Low Observable Signature and Supportability Modifications (LOSSM) program supports the B-2 ability to penetrate anti-access combat environments, performing missions directed by the National Command Authority while ensuring aircrew survivability. The LOSSM program reduces low observable (LO) maintenance, and stabilizes and improves the combat-ready LO signature for the B-2 fleet. This program encompasses multiple improvement projects including, but not limited to, improved LO materials (electrically conductive materials, adhesives, electrically resistive materials, radar absorbing material, fastener fills, coatings, welds, material removal tools, and improved processes), LO structures (radar radomes, antennas, hot trailing edges and tiles, intermediate section doors, tailpipes, windows, lib bay

PE 0101127F: *B-2 SQUADRONS*

Page 3 of 25 R-1 Line #169

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 <i>l</i> 7	PE 0101127F I B-2 SQUADRONS	675345 I B	-2 Modernization

panels, leading edge, permanent fasteners, exhaust pockets, gust load alleviation system, inlets, radar absorbing structures, overall signature stability, and Alternate High Frequency Material expansion), and radio frequency (RF) diagnostic tools, evaluation systems, and other tools (Tier One Material Inspection System, Signature Diagnostic System, next generation Tier II and Tier III systems, Test Article 0998 optimization, conductivity probes, tailpipe inspection tools, LO-related special test equipment, data archival, and communications tools).

The B-2 Crash Survivable Memory Unit (CSMU) provides a more capable recorder for flight data recovery following a mishap. The initiative includes replacement of the current CSMU and reprogramming firmware of the Flight Data Recorder Processor (FDRP) which provides data streams to the recorder. The current CSMU/FDRP does not meet the minimum requirements specified in the Aircraft Information Program (AIP) reference documents (AFI 63-133 and AFH 63-1402).

The B-2 Identification Friend or Foe (IFF) Mode 5/S modification provides improved combat identification security with better discrimination between closely spaced platforms, while reducing interference with civil air traffic control transponders enabling the B-2 fleet to accomplish its anti-access and global strike mission. Mode S provides improved accuracy, altitude resolution and reduced interference from closely spaced aircraft through interrogation of assigned transponder addresses.

The B-2 Training System upgrades include updates to training device hardware and components, simulation software, courseware and academic materials, instructional system design architectures, engineering drawings, and system documentation that is not driven by a funded aircraft modification. Upgrades may include Diminishing Manufacturing Sources efforts to include removal of end-of-life software/hardware within simulator systems and move to a modular, common open system architecture that is sustainable and cyber-resilient. Additional Training System Upgrades may also include efforts to implement requirements and standards defined under the Simulator Common Architecture Requirements and Standards (SCARS) initiative.

Funds may be used to resolve emerging safety of flight and diminishing manufacturing sources issues, accommodate technology insertion and fulfill FAA or other mandates necessary to ensure continued aircrew safety and mission effectiveness.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018	
Title: B-2 Common Very Low Frequency Receiver (CVR)	33.647	16.709	0.000	
Description: Provides secure, survivable, receive-only strategic nuclear communication for the B-2.				
FY 2016 Accomplishments: Continued Engineering and Manufacturing Development efforts, conducted Flight Test, and prepared for entry into Production. Procured four shipsets of developmental CVR hardware, of which one will be installed in the dedicated B-2 test aircraft, two will be installed in the Force Development Evaluation aircraft, and one will initially be a ready spare for testing and eventually installed in a fleet aircraft.				
FY 2017 Plans:				

PE 0101127F: *B-2 SQUADRONS*

Air Force

UNCLASSIFIED

Page 4 of 25 R-1 Line #169

	UNCLASSIFIED							
Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: M	lay 2017				
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101127F / B-2 SQUADRONS		roject (Number/Name) '5345 / B-2 Modernization					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018			
Complete Engineering and Manufacturing Development (EMD) efforts. hardware to support additional Emergency Action Message collection re Authority to Operate status, update technical orders, and design and interest of the control of	equired to upgrade B-2 from Interim Authority to Ope							
FY 2018 Plans: N/A								
Title: B-2 Flexible Strike Phase 1			35.384	44.832	2.006			
Description: Rehost the currently separate Stores Management Opera unit made available by the B-2 EHF Increment 1 program.	tional Flight Programs onto the new integrated proce	essor						
FY 2016 Accomplishments: Continued Engineering and Manufacturing Development efforts, conductions	cted Flight Test, and prepared for entry into Producti	on.						
FY 2017 Plans: Continue Engineering and Manufacturing Development efforts. Conduc Prepare for entry into Production.	t software/hardware integration testing and flight tes	t.						
FY 2018 Plans:								
Complete Engineering and Manufacturing Development efforts. Complete								
Title: Low Observable Signature and Supportability Mods and Trainers			9.394	1.954	24.84			
Description: B-2 Low Observable Signature and Supportability Modific efforts for Low Observable (LO) materials, diagnostics and procedures supportability, as well as other development or study efforts for training	to enhance LO signature and/or improve aircraft	nent						
FY 2016 Accomplishments: Continued development of on-going Low Observable Signature and Supprades.	pportability Modifications and Training System core							
FY 2017 Plans: Continue development of on-going Low Observable Signature and Supupgrades.	portability Modifications and Training System core							
FY 2018 Plans: Continue development of on-going Low Observable Signature and Supupgrades. Expand development efforts for advanced LO materials, structure.		ature						

PE 0101127F: *B-2 SQUADRONS* Air Force

UNCLASSIFIED Page 5 of 25

	UNCLASSIFIED							
Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date:	May 2017					
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101127F / B-2 SQUADRONS		Project (Number/Name) 75345 / B-2 Modernization					
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018				
Reduction efforts; increase efforts for enhanced diagnostics and measurer system as well as requirements analysis for Next Generation Tier III syste	•							
Title: B-2 AEHF (Strategic Communications)		9.799	0.000	0.000				
Description: B-2 AEHF (Strategic Communications) provides secure, stracommunications capability for conventional and nuclear missions.	ategic, two-way, survivable Anti-Access/Area Denial							
FY 2016 Accomplishments: Conducted acquisition planning, technology maturation, affordability assessatisfying B-2 communications requirements using extremely high frequent		ith						
FY 2017 Plans: Effort transferred to Project 676022 AEHF Strategic Comm								
FY 2018 Plans: N/A								
Title: B-2 Joint Air-to-Surface Standoff Missile - Extended Range (JASSM	-ER) Integration	0.000	8.558	15.431				
Description: Integrates the Joint Air to Surface Standoff Missile, Extended	d Range weapon (JASSM-ER) onto the B-2.							
FY 2016 Accomplishments: N/A								
FY 2017 Plans: Award Requirements Maturation (RM) effort, affordability assessments, ar	nd other pre-EMD activities. JASSM-ER was a new	start.						
FY 2018 Plans: Begin Engineering and Manufacturing Development efforts.								
Title: B-2 Cryptographic Modernization		0.000	3.961	1.987				
Description: Provides NSA-mandated cryptographic modifications to thre aircraft: Advanced Integrated Terminal (AIT) also known as AN/ARC-234 (Multifunction Information Distribution System (MIDS) Low Volume Terminal	(UHF/VHF Radio), AN/ARC-211 (HF Radio), and th	е						
FY 2016 Accomplishments: N/A								
FY 2017 Plans:								

PE 0101127F: *B-2 SQUADRONS* Air Force

UNCLASSIFIED Page 6 of 25

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: M	lay 2017				
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101127F / B-2 SQUADRONS		Project (Number/Name) 175345 / B-2 Modernization				
B. Accomplishments/Planned Programs (\$ in Millions) Conduct Multifunction Information Distribution System (MIDS) Low Vol Regression Testing. Cryptographic Modernization was a new start.	olume Terminal (LVT) Risk Reduction Terminal (RRT)	FY 2016	FY 2017	FY 2018			
FY 2018 Plans: Complete Multifunction Information Distribution System (MIDS) Low \ Regression Testing.	olume Terminal (LVT) Risk Reduction Terminal (RRT)						
Title: B-2 Adaptable Communications Suite (ACS)		0.000	0.198	0.19			
Description: The Adaptable Communications Suite provides a non-ir the B-2 fleet to receive complete integrated mission data, time sensiti command and control procedures.							
FY 2016 Accomplishments: N/A							
FY 2017 Plans: Conduct acquisition planning, affordability assessments, and requirer beyond line of sight integrated mission data, time sensitive targeting, capability. ACS was a new start development project in FY 2017.							
FY 2018 Plans: Continue acquisition planning, affordability assessments, and require Future ACS requirements include providing for a permanent BLOS consensitive targeting, intelligence updates, positive command and contraddress ACS obsolescence issues.	ommunications system for integrated mission data, time	•					
Title: B-2 IFF Mode 5/S/ADS-B out		0.000	0.000	7.68			
Description: B-2 IFF Mode 5/S/ADS-B Out provides improved combactosely spaced platforms, while reducing interference with civil air trafits anti-access and global strike mission, in compliance with the FAA resolution, and reduced interference from closely spaced aircraft thro	ffic control transponders enabling the B-2 fleet to accormandate. Mode S provides improved accuracy, altitud	nplish					
FY 2016 Accomplishments: N/A							
FY 2017 Plans:							

PE 0101127F: *B-2 SQUADRONS* Air Force

UNCLASSIFIED Page 7 of 25

Exhibit R-2A, RDT&E Project Just	tification: FY	2018 Air Foi	rce						Date: M	ay 2017				
Appropriation/Budget Activity 3600 / 7						nent (Numb 2 SQUADRC			roject (Number/Name) 75345 / B-2 Modernization					
B. Accomplishments/Planned Pro	ograms (\$ in N	Millions)							FY 2016	FY 2017	FY 2018			
N/A														
FY 2018 Plans: Conduct acquisition planning and of 2018 new start.	ther pre-EMD	activities in _l	preparation f	or contract a	ward. IFF M	ode 5/S/ADS	S-B Out is ar	n FY						
Title: B-2 Crash Survivable Memory	y Unit (CSMU)								0.000	0.000	2.37			
Description: The B-2 Crash Surviv a mishap. The initiative includes reprocessor (FDRP).														
FY 2016 Accomplishments: N/A														
FY 2017 Plans: N/A														
	ther pre-EMD	activities in լ	oreparation f	or 4Q FY18	EMD contra	ct award. CS	SMU is an F\	⁄ 2018						
N/A FY 2018 Plans: Conduct acquisition planning and of	ther pre-EMD	activities in _l	oreparation f			ct award. CS s/Planned P			88.224	76.212	54.523			
N/A FY 2018 Plans: Conduct acquisition planning and or new start.			preparation f						88.224	76.212	54.523			
N/A FY 2018 Plans: Conduct acquisition planning and of new start. C. Other Program Funding Summ	ary (\$ in Milli	ons)	FY 2018	Accom	nplishments	s/Planned P	rograms Su	btotals	ļ	Cost To	<u> </u>			
N/A FY 2018 Plans: Conduct acquisition planning and of new start. C. Other Program Funding Summ Line Item APAF: BA05: Line Item #B00200: B-2 CVR Inc 1				Accon	nplishments				1 FY 202	Cost To Complete	Total Cos			
N/A FY 2018 Plans: Conduct acquisition planning and of new start. C. Other Program Funding Summ Line Item • APAF: BA05: Line Item	ary (\$ in Milli FY 2016	ons) FY 2017	FY 2018 Base	Accom FY 2018 OCO	nplishments FY 2018 Total	s/Planned P	rograms Su FY 2020	btotals	1 FY 202 200 0.000	Cost To Complete	Total Cos 51.12			

PE 0101127F: *B-2 SQUADRONS* Air Force

UNCLASSIFIED Page 8 of 25

Exhibit R-2A, RDT&E Project Justi	fication: FY	2018 Air Fo	rce						Date: Ma	y 2017	
Appropriation/Budget Activity 3600 / 7					•	nent (Numb 2 SQUADRO	•	,	Number/Na B-2 Moderr	•	
C. Other Program Funding Summa	ry (\$ in Milli	ons)									
		-	FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
• APAF: BA07: Line Item #B00200:	0.000	0.010	0.131	0.000	0.131	0.254	0.114	0.000	0.000	0.00	0.395
B-2 Post Production Support, B-2A											
ICS for CVR Inc 1: PE 0101127F											
 APAF: BA06: Line Item 	0.000	2.036	2.578	0.000	2.578	0.000	0.000	0.000	0.000	0.00	4.610
#B00200: <i>B-2 Squadrons, A/</i>											
C Initial Spares for CVR Inc 1											
 APAF:BA07: Line Item 	2.196	0.761	2.025	0.000	2.025	0.000	0.000	0.000	0.000	0.00	3.465
#B00200: B-2 Depot Activation											
for CVR Inc 1, PE 0101127F											
 APAF:BA05:Line Item 	8.496	8.263	8.454	0.000	8.454	8.599	9.683	20.045	20.447	Continuing	Continuing
#B00200: <i>B-2 LOSSM Mod</i>											
Funding, PE 0101127F											
 APAF:BA05:Line 	0.000	0.000	0.000	0.000	0.000	2.500	0.000	0.800	1.615	0.00	4.915
Item#B00200: <i>B-2 CSMU</i>											
Mod Funding, PE 0101127F											
APAF: BA05:Line Item#B00200:	0.000	0.000	0.000	0.000	0.000	0.000	2.000	7.300	15.147	10.000	24.385
B-2 IFF Mode 5/S Mod											
Funding, PE 0101127F											
• APAF:BA05:LineItem #B00200:	0.000	0.000	27.514	0.000	27.514	0.000	0.000	0.000	0.000	0.00	27.470
B-2 B61-12 Integration Mod	0.000	4.000	40.70	0.000	40.764	0.500	0.000	0.000	0.000	0.00	40.004
• APAF:BA05:Line	0.000	4.066	10.704	0.000	10.704	0.583	0.998	0.000	0.000	0.00	16.334
Item#B00200: <i>B-2 MGUE Mod</i>											

Remarks

D. Acquisition Strategy

Key elements of the overall acquisition strategy include: use of sole source contract with a prime/integrating contractor (Northrop Grumman), employ the program office as the system integrator when practical, leverage mature technology and systems development investments by other Department of Defense organizations, encourage prime contractor competition of subsystems and key components to reduce risk and cost, use of cost plus incentive fee (CPIF) development contracts, and combine developmental upgrades with software sustainment blocks to minimize the number of software releases, aircraft downtime, and differences in fielded configurations.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

PE 0101127F: *B-2 SQUADRONS*

Air Force

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Air Force

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0101127F / B-2 SQUADRONS
PE 0101127F / B-2 SQUADRONS
Date: May 2017
Project (Number/Name)
675345 / B-2 Modernization

Product Developmen	nt (\$ in Mi	illions)		FY 2016		FY 2	2017	FY 2 Ba	2018 ise	FY 2		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
B-2 Flex Strike Phase 1	Various	Various : Various	0.000	27.434	Nov 2015	37.874	Oct 2016	1.899	Nov 2017	0.000		1.899	Continuing	Continuing	-
B-2 Common Very Low Frequency Receiver (CVR)	Various	Various : Various	0.000	29.375	Oct 2015	16.164	Oct 2016	0.000		0.000		0.000	Continuing	Continuing	-
Low Observable Signature and Supportability Mods	Various	Various : Various	0.000	8.177	Feb 2016	1.714	Feb 2017	23.222	Oct 2017	0.000		23.222	Continuing	Continuing	-
B-2 Advanced Extremely High Frequency Communications	Various	Various : Various	0.000	9.065	Mar 2016	0.000		0.000		0.000		0.000	Continuing	Continuing	-
B-2 Joint Air-to-Surface Standoff Missile - Extended Range (JASSM- ER) Integration	Various	Various : Various	0.000	0.000		8.284	Sep 2017	12.719	Dec 2017	0.000		12.719	0.000	21.003	-
B-2 Cryptographic Modernization	Various	Various : Various	0.000	0.000		3.079	Jul 2017	1.724	Dec 2017	0.000		1.724	0.000	4.803	-
B-2 Adaptable Communications Suite (ACS)	Various	Various : Various	0.000	0.000		0.198	Jul 2017	0.189	Nov 2017	0.000		0.189	0.000	0.387	-
B-2 IFF Mode 5/S/ADS-B Out	Various	Various : Various	0.000	0.000		0.000		7.270	Jan 2018	0.000		7.270	0.000	7.270	-
B-2 Crash Survivable Memory Unit (CSMU)	Various	Various : Various	0.000	0.000		0.000		2.225	Dec 2017	0.000		2.225	0.000	2.225	-
Aircrew Training	Various	Various : Various	0.000	4.291	Dec 2015	1.100	Dec 2016	0.086	Dec 2017	0.000		0.086	Continuing	Continuing	-
Mission Planning	Various	Various : Various	0.000	0.797	Jan 2016	0.014	Jan 2017	0.430	Jan 2018	0.000		0.430	Continuing	Continuing	-
		Subtotal	0.000	79.139		68.427		49.764		0.000		49.764	-	-	-

Remarks

Northrop-Grumman is the prime contractor and serves as integrator and hence main contractor for many (ie "Various"), but not all, B-2 modernization efforts.

B-2 AEHF (strategic communication) effort continues in FY 2017 and subsequent years under Project 676022 AEHF Strategic Comm.

PE 0101127F: *B-2 SQUADRONS*

Air Force Page 10 of 25

Exhibit R-3, RDT&E	Project C	ost Analysis: FY 2	018 Air F	orce							_	Date:	May 201	/		
Appropriation/Budg 3600 / 7	et Activity	/										Project (Number/Name) 675345 / B-2 Modernization				
Support (\$ in Million	าร)			FY 2016		FY 2017		FY 2018 Base		FY 2	2018 CO	FY 2018 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Award Cost Date		Cost	Award Date	Award Cost Date		Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
		Subtotal	-	-		-		-		-		-	-	-	-	
Test and Evaluation (\$ in Millions)				FY:	2016	FY 2	2017		2018 ise	FY 2	2018 CO	FY 2018 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
Government Test	MIPR	AFFTC : TBD	0.000	5.076	Nov 2015	5.150	Nov 2016	1.555	Nov 2017	0.000		1.555	Continuing	Continuing	-	
		Subtotal	0.000	5.076		5.150		1.555		0.000		1.555	-	-	-	
Management Service	es (\$ in M	lillions)		FY:	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2	2018 CO	FY 2018 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
PMA	Various	Various : TBD	0.000	4.009	Oct 2015	2.635	Oct 2016	3.204	Oct 2017	0.000		3.204	Continuing	Continuing	-	
		Subtotal	0.000	4.009		2.635		3.204		0.000		3.204	-	-	-	
			Prior Years	FY:	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2	2018 CO	FY 2018 Total	Cost To	Total Cost	Target Value of Contract	
		Project Cost Totals	0.000	88.224		76.212		54.523		0.000		54.523	_	_	_	

Remarks

Award dates listed are the first incremental funding opportunity associated with each cost category.

PE 0101127F: *B-2 SQUADRONS*

Air Force

UNCLASSIFIED
Page 11 of 25

xhibit R-4, RDT&E Schedule Profile: FY 2018 Ai	r Force								Date	: Ma	y 201	7	
ppropriation/Budget Activity 600 / 7				nt (Number/ SQUADRONS			Projec 67534					on	
	FY 2016 1 2 3 4	FY 201	 2018	FY 2019	4 1	FY 2	020	1	FY 2		4 1	FY 2	2022
Flexible Strike EMD													
Flexible Strike Ph 1 Milestone C													
Flexible Strike Ph 1 Production Contract Award													
Flexible Strike Production													
Flexible Strike Ph 1 Required Assets Available													
Common Very Low Frequency Receiver EMD													
Common Very Low Frequency Receiver Milestone C													
Common Very Low Frequency Receiver Production Contract Award													
Common Very Low Frequency Production													
Common Very Low Frequency Receiver Required Assets Available													
Low Observable Signature and Supportability Mods and Trainers													
AEHF Strategic Comm Acq Planning Contract Award													
JASSM-ER Acquisition Planning Contract Award													
JASSM-ER Milestone B													
Crypto Modification Integ and Regression Testing Contract Award													
Crypto Modification Integ and Regression Testing													
IFF Mode 5/S ADS-B Out Milestone B													
IFF Mode 5/S ADS-B Out EMD Contract Award													
Crash Survivable Memory Unit Milestone B													

PE 0101127F: *B-2 SQUADRONS* Air Force

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Air Force Appropriation/Budget Activity 3600 / 7 R-1 Program Element (Number/Name) PE 0101127F / B-2 SQUADRONS 675345 / B-2 Mod	: May 2017
	vr/Namo)
	-
FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 20	021 FY 2022
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	3 4 1 2 3
Crash Survivable Memory Unit EMD Contract	

PE 0101127F: *B-2 SQUADRONS* Air Force

Page 13 of 25

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 7	PE 0101127F <i>I B-2 SQUADRONS</i>	675345 <i>I B</i>	3-2 Modernization

Schedule Details

	Sta	art	En	d
Events	Quarter	Year	Quarter	Year
Flexible Strike EMD	1	2016	2	2019
Flexible Strike Ph 1 Milestone C	2	2018	2	2018
Flexible Strike Ph 1 Production Contract Award	2	2018	2	2018
Flexible Strike Production	2	2018	2	2022
Flexible Strike Ph 1 Required Assets Available	3	2020	3	2020
Common Very Low Frequency Receiver EMD	1	2016	2	2018
Common Very Low Frequency Receiver Milestone C	1	2017	1	2017
Common Very Low Frequency Receiver Production Contract Award	2	2017	2	2017
Common Very Low Frequency Production	2	2017	3	2019
Common Very Low Frequency Receiver Required Assets Available	1	2019	1	2019
Low Observable Signature and Supportability Mods and Trainers	1	2016	4	2022
AEHF Strategic Comm Acq Planning Contract Award	2	2016	2	2016
JASSM-ER Acquisition Planning Contract Award	4	2017	4	2017
JASSM-ER Milestone B	3	2018	3	2018
Crypto Modification Integ and Regression Testing Contract Award	4	2017	4	2017
Crypto Modification Integ and Regression Testing	4	2017	3	2019
IFF Mode 5/S ADS-B Out Milestone B	3	2018	3	2018
IFF Mode 5/S ADS-B Out EMD Contract Award	3	2018	3	2018
Crash Survivable Memory Unit Milestone B	1	2018	1	2018
Crash Survivable Memory Unit EMD Contract	2	2018	4	2019

PE 0101127F: *B-2 SQUADRONS*

Air Force

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 A	ir Force							Date: May	2017	
Appropriation/Budget Activity 3600 / 7					_	am Elemen 27F / B-2 SC	•	•	Project (N 676021 / B		,	
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
676021: BASELINE SUPPORT	0.000	17.690	13.660	13.967	0.000	13.967	14.195	14.459	14.709	15.011	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

Baseline Support maintains and upgrades the B-2 unique flight test aircraft as well as hardware/software and test equipment to support developmental systems integration, and flight test, reducing the need for additional operational aircraft and accelerating deployment of advanced operational capabilities to the warfighter. Baseline Support also ensures the Mission Planning System keeps pace with aircraft modifications and improves the mission planning core system. Baseline Support provides for other B-2 unique government costs and includes assorted studies of aircraft performance and cost trades as well as acquisition planning activities, up to and including proposal preparation, for future aircraft, engine, weapon, communication, navigation or other capabilities.

Funds may be used to resolve emerging safety of flight and diminishing manufacturing sources issues, accommodate technology insertion and fulfill FAA or other mandates necessary to ensure continued aircrew safety and mission effectiveness.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Baseline Support Acq Plan/Studies/Integr Tst Spt	0.395	0.297	0.297
Description: Baseline Support provides for other B-2 unique government costs, including acquisition planning activities for future capabilities, long range planning, studies, and program integration activities, as well as integration and test support of upgraded crypto components as needed.			
FY 2016 Accomplishments: Continued Baseline Support activities including acquisition planning for future capabilities, long range planning, studies, program integration activities, integration and test support of upgraded crypto components.			
FY 2017 Plans: Continue Baseline Support activities including acquisition planning for future capabilities, long range planning, studies, program integration activities, integration and test support of upgraded crypto components.			
FY 2018 Plans: Continue Baseline Support activities including acquisition planning for future capabilities, long range planning, studies, program integration activities, integration and test support of upgraded crypto components.			
Title: Baseline Support Flight Test	14.283	10.640	13.670
Description: Description: Baseline Support Flight Test maintains and upgrades the B-2 unique flight test aircraft as well as hardware/software and test equipment to support developmental systems integration and flight test, reducing the need for additional operational aircraft and accelerating deployment of advanced operational capabilities to the warfighter.			

PE 0101127F: *B-2 SQUADRONS* Air Force

UNCLASSIFIED

R-1 Line #169

EV 2046 EV 2047

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: N	lay 2017	
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101127F I B-2 SQUADRONS		t (Number/N 1 / BASELIN	Name) E SUPPORT	,
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
FY 2016 Accomplishments: Continued Baseline Support activities including acquisition planning integration activities, integration and test support of upgraded crypt		gram			
FY 2017 Plans: Continue B-2 Flight Test activities, maintaining and upgrading the I test equipment, to support developmental systems integration and	•	e and			
FY 2018 Plans: Continue B-2 Flight Test activities, maintaining and upgrading the I test equipment, to support developmental systems integration and	•	e and			
Title: Baseline Support Mission Planning			3.012	2.723	0.000
Description: Description: Baseline Support Mission Planning Syst pace with aircraft modifications and improves mission planning corrections.		eeps			
FY 2016 Accomplishments: Continued B-2 Mission Planning activities, keeping pace with aircrato include continuation of the transition from the current AFMSS mi					
FY 2017 Plans: Continue B-2 Mission Planning activities, keeping pace with aircraf Deliver mission planning release 4.4, i.e. Joint Mission Planning Sy		ems.			
FY 2018 Plans: N/A					

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

N/A

Remarks

Air Force

D. Acquisition Strategy

Key elements of the overall acquisition strategy include: use of a sole source contract with a prime/integrating contractor (Northrop Grumman) for most but not all B-2 programs; use of cost plus incentive fee (CPIF) development contracts; and the combination of developmental upgrades with software sustainment blocks to minimize the number of software releases, aircraft downtime, and differences in fielded configurations.

PE 0101127F: *B-2 SQUADRONS*

UNCLASSIFIED

Page 16 of 25

Accomplishments/Planned Programs Subtotals

R-1 Line #169

17.690

13.660

13.967

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0101127F I B-2 SQUADRONS	Project (Number/Name) 676021 / BASELINE SUPPORT
E. Performance Metrics		
Please refer to the Performance Base Budget Overview Book for Force performance goals and most importantly, how they contribute to the Performance Base Budget Overview Book for Force performance goals and most importantly, how they contribute to the Performance Base Budget Overview Book for Force performance goals and most importantly, how they contribute to the Performance Base Budget Overview Book for Force performance goals and most importantly, how they contribute to the Performance Base Budget Overview Book for Force performance goals and most importantly, how they contribute to the Performance Base Budget Overview Book for Force performance goals and most importantly, how they contribute to the Performance Base Budget Overview Book for Force performance goals and most importantly, how they contribute to the Performance Base Budget Overview Book for Base Budg		how those resources are contributing to Air

PE 0101127F: *B-2 SQUADRONS* Air Force

Exhibit R-3, RDT&E			.0107.111	0100							1		May 201	'	
Appropriation/Budge 3600 / 7	et Activity	/				1	ogram Ele 1127F <i>I B</i>	•		ame)		(Number	,	PORT	
Product Developme	nt (\$ in M	illions)		FY 2	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2	2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac
Mission Planning	Various	Various : Various	0.000	4.054	Oct 2015	2.248	Oct 2016	0.000		0.000		0.000	Continuing	Continuing	-
		Subtotal	0.000	4.054		2.248		0.000		0.000		0.000	-	-	-
Support (\$ in Million	ıs)			FY 2	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Other Government Costs	Various	Various : Various	0.000	9.305	Oct 2015	8.140	Oct 2016	9.965	Oct 2017	0.000		9.965	Continuing	Continuing	-
		Subtotal	0.000	9.305		8.140		9.965		0.000		9.965	-	-	-
Test and Evaluation	(\$ in Milli	ions)		FY 2	2016	FY 2	2017	FY 2 Ba	2018 ise	FY 2		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Government Test	MIPR	AFFTC : TBD	0.000	3.798	Oct 2015	2.841	Oct 2016	3.200	Oct 2017	0.000		3.200	Continuing	Continuing	-
		Subtotal	0.000	3.798		2.841		3.200		0.000		3.200	-	-	-
Management Service	es (\$ in M	lillions)		FY 2	2016	FY	2017	FY 2	2018 ise	FY 2		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac
PMA	Various	Various : TBD	0.000	0.533	Oct 2015	0.431	Oct 2016	0.802	Oct 2017	0.000		0.802	Continuing	Continuing	-
		Subtotal	0.000	0.533		0.431		0.802		0.000		0.802	-	-	-
			Prior Years	FY 2	2016	FY:	2017	FY 2 Ba	2018 Ise		2018 CO	FY 2018 Total	Cost To	Total Cost	Target Value of Contrac
		Project Cost Totals	0.000	17.690		13.660		13.967		0.000		13.967		_	

PE 0101127F: *B-2 SQUADRONS*

Air Force

Award dates listed are the first incremental funding opportunity associated with each cost category.

UNCLASSIFIED

Page 18 of 25

Exhibit R-4, RDT&E Schedule Profile: FY 2018 A	ir F	orc	е																			D	ate	: Ma	ay 2	:017	7		
Appropriation/Budget Activity 600 / 7										_				•	umbe DROI		ame)							ame		PORT	τ	
00077								FE	010	7112	7 - 7	D-Z	30	χUA	DKOI	VO			07	002	1 / /		<u> </u>	_IIVL		<i></i>	<u>OK</u>		—
		F	Y 201	6		F١	/ 201	7		FY	201	8		F	Y 201	9		FY	202	0		F	Y 2	021			FY	2022	2
	1	1	2 3	4	1	2	2 3	4	1	2	3	4		1	2 3	4	1	2	3	4	1	1	2	3	4	1	2	3	4
Mission Planning Release 4.4 (JMPS)																													
FY16 Flight Test Core Support Contract Award																													
FY17 Flight Test Core Support Contract Award																													
FY18 Flight Test Core Support Contract Award																													_
FY19 Flight Test Core Support Contract Award																													
FY20 Flight Test Core Support Contract Award																													
FY21 Flight Test Core Support Contract Award																													
FY22 Flight Test Core Support Contract Award																											Ā		

PE 0101127F: *B-2 SQUADRONS* Air Force

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity		,	umber/Name)
3600 / 7	PE 0101127F <i>I B-2</i> SQUADRONS	676021 <i>I B</i>	BASELINE SUPPORT

Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Mission Planning Release 4.4 (JMPS)	3	2017	3	2017
FY16 Flight Test Core Support Contract Award	1	2016	1	2016
FY17 Flight Test Core Support Contract Award	1	2017	1	2017
FY18 Flight Test Core Support Contract Award	1	2018	1	2018
FY19 Flight Test Core Support Contract Award	1	2019	1	2019
FY20 Flight Test Core Support Contract Award	1	2020	1	2020
FY21 Flight Test Core Support Contract Award	1	2021	1	2021
FY22 Flight Test Core Support Contract Award	1	2022	1	2022

PE 0101127F: *B-2 SQUADRONS* Air Force

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 A	ir Force							Date: May	2017	
Appropriation/Budget Activity 3600 / 7	umber/Name) EHF Strategic Comm											
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
676022: AEHF Strategic Comm	0.000	0.000	62.586	124.618	0.000	124.618	236.826	255.734	93.157	95.064	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

The initial FY-2016 efforts for B-2 AEHF (strategic communication) were documented in PE 0101127F BPAC 675345 B-2 Modernization.

A. Mission Description and Budget Item Justification

The Advanced Extremely High Frequency (AEHF) Satellite Communications (SATCOM) system provides the only survivable, low probability of intercept/detection, high bandwidth system that ensures secure intra/inter-flight and two-way command and control communications in the modern anti-access/aerial denial battlespace. This communications upgrade replaces the Milstar/Ultra High Frequency (UHF) SATCOM system (which is nearing system end of life) on the B-2.

The strategic communications effort will select, install, and integrate the radio, antenna and system components required to provide two-way EHF communication for the B-2.

Funds may be used to resolve emerging safety of flight and diminishing manufacturing sources issues, accommodate technology insertion and fulfill FAA or other mandates necessary to ensure continued aircrew safety and mission effectiveness.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: B-2 AEHF (Strategic Communication)	0.000	62.586	124.618
Description: B-2 AEHF (Strategic Communication) provides secure, strategic, two-way, survivable Anti-Access/Area Denial communications capability for conventional and nuclear missions.			
FY 2016 Accomplishments: FY16 efforts for B-2 AEHF are documented under Project 675345 B-2 Modernization.			
FY 2017 Plans: Continue acquisition planning, technology maturation, affordability assessments, and other pre-Technology Maturation and Risk Reduction (TMRR) efforts in preparation for a Milestone A decision and entry into TMRR phase. Upon successful Milestone A decision, begin TMRR activities.			
FY 2018 Plans: Continue TMRR efforts to include conducting a System Functional Review (SFR) and Preliminary Design Review (PDR). Develop pre-EMD RFP and accomplish activities to support a future Milestone B decision.			
Accomplishments/Planned Programs Subtotals	0.000	62.586	124.618

PE 0101127F: *B-2 SQUADRONS*

Air Force

UNCLASSIFIED

Page 21 of 25

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017	
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)	
3600 <i>l</i> 7	PE 0101127F <i>I B-2 SQUADRONS</i>	676022 <i>I A</i>	EHF Strategic Comm	
C. Other Program Funding Summary (\$ in Millions)				

			FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
APAF: BA05: Line Item	0.000	0.000	0.000	0.000	0.000	0.000	0.000	121.026	163.254	45.370	329.326

#B00200: *B-2 Squadrons* Remarks

D. Acquisition Strategy

Key elements of the overall acquisition strategy include: use of sole source contract with a prime/integrating contractor (Northrop Grumman), leverage mature technology and system development investments by other Department of Defense organizations, encourage prime contractor to conduct competitions at the subsystem/key component level to reduce risk and cost, use cost plus incentive fee (CPIF) development contracts, and combine developmental upgrades with software sustainment blocks to minimize the number of software releases, aircraft downtime, and differences in fielded configurations

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

PE 0101127F: *B-2 SQUADRONS*

Air Force Page 22 of 25

Exhibit R-3, RDT&E	Project C	ost Analysis: FY 2	2018 Air F	orce								Date:	May 201	7			
Appropriation/Budg 3600 / 7	et Activity	1					gram Ele 1127F <i>I B</i>		umber/Na DRONS	ame)	Project (Number/Name) 676022 / AEHF Strategic Comm						
Product Developme	ent (\$ in Mi	illions)		FY 2	FY 2016		2017		2018 ise	FY 2		FY 2018 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract		
AEHF Strategic Comm	SS/CPIF	Northrop Grumman : Palmdale, CA	0.000	0.000		60.589	Jul 2017	117.484	Oct 2017	0.000		117.484	Continuing	Continuing	-		
		Subtotal	0.000	0.000		60.589		117.484		0.000		117.484	-	-	-		
Northrop-Grumman is the Support (\$ in Million	<u>. </u>	ctor and lead integrator		FY 2	016	FY 2	2017		2018 ise	FY 2		FY 2018 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract		
		Subtotal	-	-		-		-		-		-	-	-	-		
Test and Evaluation	(\$ in Milli	ons)		FY 2	016	FY 2	2017		2018 ise	FY 2		FY 2018 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract		
		Subtotal	-	-		-		-		-		-	-	-	-		
Management Service	es (\$ in M	lillions)		FY 2	016	FY 2	2017		2018 ise	FY 2		FY 2018 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract		
PMA	Various	Various : TBD	0.000	0.000		1.997	Oct 2016	7.134	Nov 2017	0.000		7.134	Continuing	Continuing	0.000		
		Subtotal	0.000	0.000		1.997		7.134		0.000		7.134	-	-	0.000		
			Prior Years	FY 2	016	FY 2	2017		2018 ise	FY 2		FY 2018 Total	Cost To	Total Cost	Target Value of Contract		

PE 0101127F: *B-2 SQUADRONS* Air Force

Award dates listed are the first incremental funding opportunity associated with each cost category.

Page 23 of 25

Exhibit R-4, RDT&E Schedule Profile: FY 2018	Air F	orc	е																				Da	te: N	Лау	201	17		
Appropriation/Budget Activity 3600 / 7															Number/Name) AEHF Strategic Comm														
		F١	7 20	16			FY 2	2017	7		FY	201	8		FY	2019)		FY	2020)		FY	202	1		F	Y 20	22
	1	2	2 ;	3 4	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	, 1	1	2 :	3 4
B-2 AEHF Milestone A											'			,															
B-2 AEHF TMRR Contract Award																													
B-2 AEHF TMRR																													
B-2 AEHF Preliminary Design Review																													
B-2 AEHF Milestone B																													
B-2 AEHF EMD Contract Award																													
B-2 AEHF Engineering and Manufacturing Development																													

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 7	PE 0101127F <i>I B-2</i> SQUADRONS	676022 <i>I A</i>	NEHF Strategic Comm

Schedule Details

	St	End			
Events	Quarter	Year	Quarter	Year	
B-2 AEHF Milestone A	4	2017	4	2017	
B-2 AEHF TMRR Contract Award	4	2017	4	2017	
B-2 AEHF TMRR	4	2017	1	2019	
B-2 AEHF Preliminary Design Review	4	2018	4	2018	
B-2 AEHF Milestone B	1	2019	1	2019	
B-2 AEHF EMD Contract Award	1	2019	1	2019	
B-2 AEHF Engineering and Manufacturing Development	1	2019	1	2022	

PE 0101127F: *B-2 SQUADRONS* Air Force

Page 25 of 25