Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force											Date: May 2017	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*							
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	-	34.765	108.663	10.736	0.000	10.736	42.173	44.442	66.077	67.431	Continuing	Continuing
641020: *ICBM Guidance Applications*	-	8.524	25.226	0.502	0.000	0.502	7.717	10.261	12.984	13.250	Continuing	Continuing
641021: *ICBM Propulsion Applications*	-	10.057	15.437	1.007	0.000	1.007	9.775	6.901	7.020	7.163	Continuing	Continuing
641022: *ICBM Reentry Vehicle Applications*	-	13.457	36.840	7.085	0.000	7.085	18.055	19.585	19.925	20.333	Continuing	Continuing
641024: *ICBM Command & Control (C2) Applications*	-	0.971	26.362	1.004	0.000	1.004	3.693	3.741	22.126	22.580	Continuing	Continuing
644209: *Long Range Planning (LRP)*	-	1.756	4.798	1.138	0.000	1.138	2.933	3.954	4.022	4.105	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program ensures a responsive design and development engineering infrastructure to address emerging issues and technology insertion/technology application on legacy Intercontinental Ballistic Missile (ICBM), future strategic systems/capability beyond the Ground Based Strategic Deterrent (GBSD) baseline, and other common strategic deterrent mission areas to develop enhanced multi-use capabilities. The ICBM Dem/Val program will provide technology maturation and risk reduction activities to support Minuteman (MM) III sustainment, MM III to GBSD transition, and future ICBM systems (non-GBSD) development. Efforts will identify methods to improve system performance, mitigate evolving threats, reduce life cycle costs, improve nuclear safety and surety, and ensure both viability and endurability of strategic missile systems. This program also includes any needed nuclear surety and certification and system vulnerability assessments.

BA4 - This program is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P) because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force					Date: May 2017
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*			R-1 Program Element (Number/Name) PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*		
B. Program Change Summary ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
Previous President's Budget	39.765	108.663	72.604	0.000	72.604
Current President's Budget	34.765	108.663	10.736	0.000	10.736
Total Adjustments	-5.000	0.000	-61.868	0.000	-61.868
• 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	-5.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	-61.868	0.000	-61.868

Change Summary Explanation

FY 2016 funding reflects a decrease of $5.000M to other Air Force priorities.

FY 2018 funding reflects a realignment of $61.868M to higher Air Force priorities.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	Project (Number/Name) 641020 / *ICBM Guidance Applications*	

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
641020: *ICBM Guidance Applications*	-	8.524	25.226	0.502	0.000	0.502	7.717	10.261	12.984	13.250	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Guidance Applications Program (GAP) ensures the development of strategic capability in response to the Nuclear Posture Review, recommendations of the United States Strategic Command (USSTRATCOM) Strategic Advisory Group, USSTRATCOM Commander Guidance, and the Defense Science Board Task Force on Nuclear Deterrence. The program studies and assesses both legacy and future (non-GBSD baseline) ICBM Guidance System technology applications. Efforts are focused on current and future requirements and technologies, reduced life cycle costs, and increased nuclear surety and safety. Activities leverage the efforts of the Science and Technology community and are coordinated with the Navy strategic applications program to enhance synergy and avoid duplication. Key elements include developing responsive technologies with common applications for future strategic guidance capabilities. This program also includes any needed surety and certification and system vulnerability assessments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Guidance Applications Program	8.524	25.226	0.502	0.000	0.502
Description: Develop and mature, in coordination with the Navy, advanced technologies and concepts to support future requirements.					
FY 2016 Accomplishments: - Continued efforts to evaluate guidance technologies and assess technical/manufacturing capabilities for a future ICBM system -- This included progress testing for a non-destructive capability that augments flight test. - Continued to assess Strategic Resonating Beam Accelerometers (SRBAs) as a potential future ICBM system instrument. - Continued to assess various future ICBM System sensor candidates, such as, Hemispheric Resonating Gyroscopes, Strategic Fiber-Optic Gyroscopes, and Alternate-Pendulous Integrating Gyroscopic Accelerometer (Alt-PIGA).					
FY 2017 Plans: - Continue evaluation and testing of strategic guidance commodities for use in a future strategic guidance system, and leveraging from the Navy Trident Life Extension Program.					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	**Project (Number/Name)** 641020 / *ICBM Guidance Applications*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Develop risk reduction initiatives associated with micro-electronic/electronic component technologies and commodities for future ICBM applications and/or obsolescence occurrences. Further progress testing for a non-destructive capability that augments flight test. - Independently validate and verify military parts suppliers (especially those with a single supplier) for their adherence to strategic radiation and other missile environments that are historically challenging. - Assess market for alternate vendors and electronic wafer technologies for fabrication of radiation hardened integrated circuits. Effort will include the military supplier base for products such as Metal-Oxide-semiconductor Field-effect Transistor (MOSFETs), Application Specific Integrated Circuits (ASICs), and memory. - Test analysis effort designed to augment flight test programs for performance assessment and anomaly investigation by conducting non-destructive, operationally dynamic testing, including a full range of critical missile environments. Establish a Strategic Guidance Hardware capability ***FY 2018 Base Plans:*** - Continue risk reduction, evaluation and testing of strategic and space guidance-related commodities within the market for potential use in a future strategic guidance system, and continue to leverage from the Navy Trident Life Extension Program. - Continue risk reduction initiatives involving component technologies and obsolescence for legacy and/or future ICBM applications. - Establish a Strategic Guidance Hardware independent validation & verification capability, perform guidance analysis, and Guidance technology studies. ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	8.524	25.226	0.502	0.000	0.502

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• RDTE: BA04: PE 0605230F: *GBSD*	64.966	113.919	215.721	0.000	215.721	347.638	574.661	1,539.050	2,557.439	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	**Project (Number/Name)** 641020 / *ICBM Guidance Applications*

D. Acquisition Strategy

Accomplish studies, analyses, concept development and engineering; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive contracts and/or other obligating documentation considered most appropriate by obligating and performing agencies involved.

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.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	Project (Number/Name) 641021 / *ICBM Propulsion Applications*	

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
641021: *ICBM Propulsion Applications*	-	10.057	15.437	1.007	0.000	1.007	9.775	6.901	7.020	7.163	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Propulsion Applications Program (PAP) develops and assesses strategic propulsion system technology applications for both legacy and future (non-GBSD baseline) systems through projects exploring improvements and/or alternatives to current propulsion systems, conducting studies assessing application of new technologies to meet future common propulsion systems requirements, and assessing opportunities for applying common materials and technology between the ICBM, submarine-launched ballistic missile (SLBM) propulsion systems, and other rocket motor propulsion capabilities. Efforts are focused on current and future requirements and technologies, reduced life cycle costs, and increased nuclear surety, safety, certification and system vulnerability assessments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Propulsion Applications Program	10.057	15.437	1.007	-	1.007
Description: Assess, develop, evaluate, and demonstrate common solid and liquid propulsion technology and manufacturing leading up to a static fire and test of strategic propulsion systems; develop capability and explore improvements to current and future propulsion systems; and support the research and development industrial base and critical infrastructure.					
FY 2016 Accomplishments: - Continued assessment and demonstration of Post Boost, Thrust Vector Control and other advanced propulsion technologies. - Performed Medium Class Stage III Sea-level Static Fire Test to provide valid technological candidates for future Solid Rocket Motor (SRM) requirements.					
FY 2017 Plans: - Initiate trade studies and risk reduction of components and subsystem propulsion technologies for future ICBM program insertion. - Continue assessment and demonstration of existing Post Boost, Thrust Vector Control, and other advanced propulsion technology programs.					
FY 2018 Base Plans:					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	**Project (Number/Name)** 641021 / *ICBM Propulsion Applications*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Initiate Minuteman III mechanistic aging study, propulsion modeling & simulation development, and propulsion technology studies and analysis.					
Accomplishments/Planned Programs Subtotals	10.057	15.437	1.007	-	1.007

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• RDTE: BA04: PE 0605230F: *GBSD*	64.966	113.919	215.721	0.000	215.721	347.638	574.661	1,539.050	2,557.439	Continuing	Continuing

Remarks

D. Acquisition Strategy

Studies, analyses, limited engineering, hardware development and/or testing will be accomplished; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive contracts and/or other obligating documentation considered most appropriate by obligating and performing agencies involved.

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.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	Project (Number/Name) 641022 / *ICBM Reentry Vehicle Applications*	

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
641022: *ICBM Reentry Vehicle Applications*	-	13.457	36.840	7.085	0.000	7.085	18.055	19.585	19.925	20.333	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Reentry Vehicle Applications Program (RVAP) ensures the ICBM force is equipped with the safest, most reliable Reentry Systems, and explores options for common, multi-mission capabilities. The program enables a responsive engineering infrastructure to support Reentry Systems beyond their original design life by addressing system issues and ensuring the availability of long-lead components and materials while identifying life cycle cost reduction methods. In addition, the program develops and tests advanced Reentry System technologies to meet future requirements. This includes studying and assessing Mk12A, Mk21, Mk21A and future ICBM Reentry System technology applications. The program leverages investments by the Science & Technology community and Navy reentry systems applications program. Testing may occur on a space available basis on Air Force and Navy Force Development Evaluation (FDE) flights.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Reentry Vehicle Applications Program	13.457	36.840	7.085	-	7.085
Description: Mature, evaluate, and test reentry system materials and technologies for use in current and future strategic applications. ***FY 2016 Accomplishments:*** - Continued to mature and evaluate Countermeasure Studies, Multiple Independently Targetable Reentry Vehicle (MIRV)/Shroud and Thermal Protection System(TPS) Material Development. - Developed TPS material. - Initiated tradespace studies between all reentry system elements and their effects on a future integrated weapon system. ***FY 2017 Plans:*** - Complete Countermeasure Studies I & II, and MIRV/Shroud. - Initiate studies to mature and evaluate future countermeasures, heatshield development, carbon phenolic replacements, modeling and simulation programs, manufacturing capabilities, reentry system technologies, threat development analysis and countermeasure technology strategies, and inform future weapon development. - Conduct materials development, prototyping, and testing. - Continue to determine tradespace between all reentry system elements and their effects on the integrated weapon system.					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	**Project (Number/Name)** 641022 / *ICBM Reentry Vehicle Applications*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Continue TPS testing and studies. ***FY 2018 Base Plans:*** - Continue risk reduction studies to mature and evaluate future heatshield development, carbon phenolic replacements, modeling and simulation programs, manufacturing capabilities, reentry system technologies, threat development analysis and countermeasure technologies/strategies, and inform future RV capabilities. - Continue TPS testing and studies. - Conduct materials development, prototyping, and testing.					
Accomplishments/Planned Programs Subtotals	13.457	36.840	7.085	-	7.085

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• RDTE: BA04: PE 0605230F: *GBSD*	64.966	113.919	215.721	0.000	215.721	347.638	574.661	1,539.050	2,557.439	Continuing	Continuing

Remarks

D. Acquisition Strategy

Studies, analyses, limited engineering, and pre-prototype hardware development will be accomplished; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive contracts and/or other obligating documentation considered most appropriate by obligating and performing agencies involved.

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.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	Project (Number/Name) 641024 / *ICBM Command & Control (C2) Applications*	

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
641024: *ICBM Command & Control (C2) Applications*	-	0.971	26.362	1.004	0.000	1.004	3.693	3.741	22.126	22.580	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Command and Control Applications Program (C2AP) supports ICBM weapon system connectivity to the President and National Command Authorities. C2AP studies and assesses both legacy and future (non-GBSD baseline) C2 System technology applications. C2AP evaluates and develops assured, survivable, and secure communications and battlespace awareness between the missile Launch Control Centers (LCCs) and Launch Facilities (LFs) essential for mission execution. Efforts include identifying and developing current and future technologies, as well as concepts that exploit state-of-heart communications and information transfer techniques to both current and future ICBM systems. Products include studies, demonstrations and tests such as ICBM weapon system C2 (WSC2) architectures, networks, and systems to meet nuclear command and control requirements

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Command and Control Application Program	0.971	26.362	1.004	-	1.004
Description: Examine and develop concepts for transforming ICBM WSC2 to meet current and future requirements. ***FY 2016 Accomplishments:*** - Continued studies to identify, assess, and preserve unique strategic command and control skills and technologies to meet current and future system requirements. - Continued development of WSC2 laboratory to facilitate development and testing of future WSC2 architectures. ***FY 2017 Plans:*** - Support ongoing development efforts for the WSC2 laboratory to facilitate development and testing of potential future WSC2 architectures, to include software development, cyber security testing, and preparation for Nuclear Surety Certification activities. - Continue studies to identify, assess, and preserve unique strategic command and control skills and technologies to meet current and future system requirements. ***FY 2018 Base Plans:***					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	**Project (Number/Name)** 641024 / *ICBM Command & Control (C2) Applications*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
- Continue risk reduction studies to identify, assess, and preserve unique strategic command and control skills and technologies to meet current and future system requirements.					
Accomplishments/Planned Programs Subtotals	0.971	26.362	1.004	-	1.004

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• RDTE: BA04: PE 0605230F: *GBSD*	64.966	113.919	215.721	0.000	215.721	347.638	574.661	1,539.050	2,557.439	Continuing	Continuing

Remarks

D. Acquisition Strategy

Studies, analyses, limited engineering, will be accomplished; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive contracts and/or other obligating documentation considered most appropriate by obligating and performing agencies involved.

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.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	Project (Number/Name) 644209 / *Long Range Planning (LRP)*	

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
644209: *Long Range Planning (LRP)*	-	1.756	4.798	1.138	0.000	1.138	2.933	3.954	4.022	4.105	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Long Range Planning (LRP) effort identifies and analyzes potential modifications to current and future Intercontinental Ballistic Missile (ICBM) Weapon Systems required to meet objectives relative to long-term sustainment, technology insertion, battle space awareness, employment, force structure and future systems. The studies will focus on system supportability, operability, reliability, innovation and maintainability. Options/concepts generated by these studies are evaluated for feasibility, system impacts, and cost. The LRP also lays the groundwork for analysis supporting future weapon systems development and deployment. Pre-milestone activities may be conducted for current or future ICBM weapon systems to include entry criteria for milestone activities.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Long Range Planning	1.756	4.798	1.138	-	1.138
Description: Analyze, study and plan current and future ICBM activities to meet requirements for long-term sustainment, technology insertion, employment force structure and future systems. ***FY 2016 Accomplishments:*** - Completed Water Intrusion Study. - Initiated a LF deep dive analysis and assessment to inform future Launch Control Center (LCC) and Missile Alert Facility (MAF) requirements. - Initiated effort to examine and test potential Launch Systems (LS) security enhancements. ***FY 2017 Plans:*** - Continue LF deep dive analysis and assessment to inform future LCC and MAF requirements. Initiate analysis on LF/LC technical drawings and understand the MMIII and GBSD Technical Baseline. - Continue examining and testing potential for LS security. - Continue Long Range Planning studies to assess current and future ICBM support systems. ***FY 2018 Base Plans:*** - Continue analysis on LF/LC technical drawings and understand the MMIII and GBSD Technical Baseline. - Continue Long Range Planning studies to assess ongoing MMIII Sustainment and GBSD transition.					
Accomplishments/Planned Programs Subtotals	1.756	4.798	1.138	-	1.138

Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force		Date: May 2017
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0603851F / *Intercontinental Ballistic Missile - Dem/Val*	**Project (Number/Name)** 644209 / *Long Range Planning (LRP)*

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• RDTE: BA04: PE 0605230F: *GBSD*	64.966	113.919	215.721	0.000	215.721	347.638	574.661	1,539.050	2,557.439	Continuing	Continuing

Remarks

D. Acquisition Strategy

Analysis will be accomplished; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive contracts and/or other obligating documentation considered most appropriate by obligating and performing agencies involved.

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.