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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force **Date:** February 2019

Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0303131F I Minimum Essential Emergency Communications Network (MEECN)							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	34.466	64.543	13.543	0.000	13.543	91.814	58.666	14.443	7.024	Continuing	Continuing
672832: MEECN System Improvements	-	3.485	25.942	0.948	0.000	0.948	0.966	0.987	1.005	1.024	Continuing	Continuing
672835: Common VLF/LF Receiver Inc 2	-	12.916	9.559	12.478	0.000	12.478	82.499	57.663	13.428	6.000	Continuing	Continuing
676029: Global Aircrew Strategic Network Terminal	-	7.376	14.692	0.000	0.000	0.000	0.001	0.000	0.000	0.000	Continuing	Continuing
676030: Global ASNT Inc 2	-	10.689	14.350	0.117	0.000	0.117	8.348	0.016	0.010	0.000	Continuing	Continuing

Note

Nuclear Command, Control, and Communications (NC3) Dem/Val will continue to execute funds from the MEECN System Improvements (MSI) Program 0303131F, Project 672832.

A. Mission Description and Budget Item Justification

Nuclear Deterrence Operations (NDO) is an Air Force Core Function. Within this core function, Nuclear Command and Control (NC2) is the exercise of authority and direction by the President, as Commander in Chief, through established command lines, over nuclear weapon operations of military forces. The President's authority and direction are exercised through the Nuclear Command and Control System (NCCS). The NCCS is the designated combination of flexible and enduring elements including facilities, equipment, communications, procedures, personnel, and the structure in which these elements are integrated, all of which are essential for planning, directing, and controlling nuclear weapon operations.

The MEECN portfolio modernizes the systems necessary to effectively provide assured communications connectivity between the President and the strategic deterrence forces in stressed environments.

MSI is a long-range planning process with users (Air Force Global Strike Command (AFGSC), Air Combat Command (ACC), Air Force Space Command (AFSPC), Air Mobility Command (AMC), Air Force Special Operations Command (AFSOC), US Strategic Command (USSTRATCOM), and the Navy) to monitor and assess the performance of NC3 systems and develop recommendations for current and future strategic and tactical architectures, requirements, and issues based on available and emerging technologies. MSI is used to conduct technology testing; analyze technology strategies; conduct requirement trade space analysis, technology maturation and risk reduction efforts, and mission analysis; and build technology Roadmaps as proactive support to the NC3 community. MSI performs analysis, integration, and testing activities for the NC3 Weapon System.

NC3 Dem/Val is required for advanced concept development and prototyping of next generation NC3 systems. This program ensures a responsive design and development engineering infrastructure to address evolving Nuclear Deterrence Operations mission requirements, emerging issues and technology insertion/technology

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<p>application on the NC3 Weapon System, future strategic systems/capability, and other common strategic areas where appropriate, and develop enhanced multi-use capabilities. The NC3 Dem/Val Program will provide technology maturation and risk reduction activities to support the NC3 Weapon System (AN/USQ-225). Activity will reduce life cycle costs, inform technology maturation & risk reduction efforts, improve system performance, mitigate evolving threats, and ensure both viability and durability of the NC3 Weapon System.</p> <p>Common Very Low Frequency/Low Frequency (VLF/LF) Receiver (CVR) Increment 2 (CVR Inc. 2) will deliver a survivable, beyond-line-of-sight path for Emergency Action Message (EAM) reception. The intent of CVR Inc. 2 is to replace inadequate, unsustainable strategic communications equipment by developing and producing a common VLF/LF receiver, capable of implementing an interoperable waveform, to integrate into current and future airborne and ground based platforms, improve system performance, and reduce supportability costs through commonality. The program will also lead the development of the Uniform MEECN Mode (UMM) waveform expected to be used by the United States Air Force and Navy.</p> <p>Global Aircrew Strategic Network Terminal (Global ASNT) replaces inadequate, unsustainable strategic communications equipment at bomber, tanker and reconnaissance Wing Command Posts (WCPs), Nuclear Task Forces and Munitions Support Squadrons (MUNSS) and for Mobile Support Teams (MSTs). Global ASNT is a ground-based system that will provide survivable, secure communication paths to receive Emergency Action Messages (EAMs), Force Management messages, and Force Direction messages and disseminate them to bomber, tanker, and reconnaissance aircrews.</p> <p>Global ASNT is being fielded in separate capability increments. Global ASNT Increment 1 (Inc. 1) includes early system engineering support for the planning and development for the future Global ASNT Increments.</p> <p>Global ASNT Inc. 1 fields required Extremely High Frequency/Advanced Extremely High Frequency (EHF/AEHF) capabilities and replaces inadequate, unsustainable strategic mobile and fixed-site Single Channel Anti-jam Man-Portable (SCAMP) terminals and Secure, Mobile, Anti-Jam, Reliable, Tactical - Terminal (SMART-T) equipment.</p> <p>Global ASNT Increment 2 delivers a replacement Aircrew Alerting System (AAS) consisting of personal and general alerting equipment, and High Frequency (HF) and Ultra High Frequency (UHF) capabilities. Increment 2 replaces inadequate, unsustainable Electromagnetic Pulse Hardened Dispersal Communication (EHDC) systems and Aircrew Alerting Communications Electromagnetic Pulse (AACE) systems.</p> <p>This program element may include necessary civilian pay expenses required to manage, execute, and deliver nuclear weapon support capabilities. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F.</p> <p>As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.</p>		

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Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0303131F I Minimum Essential Emergency Communications Network (MEECN)				
This program is in Budget Activity 7, Operational System Development because this budget activity includes development 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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		48.841	99.088	65.839	0.000	65.839
Current President's Budget		34.466	64.543	13.543	0.000	13.543
Total Adjustments		-14.375	-34.545	-52.296	0.000	-52.296
• Congressional General Reductions		0.000	0.000			
• Congressional Directed Reductions		-12.200	-32.000			
• Congressional Rescissions		0.000	0.000			
• Congressional Adds		0.000	0.000			
• Congressional Directed Transfers		0.000	0.000			
• Reprogrammings		0.000	0.000			
• SBIR/STTR Transfer		-0.402	0.000			
• Other Adjustments		-1.773	-2.545	-52.296	0.000	-52.296
Change Summary Explanation						
FY 2018 PB CVRi2/ASNTi2 Congressional mark (-\$12.2M)						
FY 2018 PB CVRi2 decrease FFRDC reduction (-\$1.773M)						
FY 2018 PB SBIR reduction (-\$0.402)						
FY 2019 PB Congressional mark (-\$-32.0M)						
FY 2019 PB FFRDC reduction (-\$2.545M)						
FY 2020 PB CVRi2 re-phase to FY22/23(-\$12.0M)						
FY 2020 PB CVRi2 under-execution(-\$5.205M)						
FY 2020 PB Global ASNTi2 decrease (-\$35.091M)						

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0303131F / Minimum Essential Emergency Communications Network (MEECN)				Project (Number/Name) 672832 / MEECN System Improvements			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
672832: MEECN System Improvements	-	3.485	25.942	0.948	0.000	0.948	0.966	0.987	1.005	1.024	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Nuclear Command, Control, and Communications (NC3) Dem/Val, is an FY19 new start (\$25.012M), to be executed in the MEECN System Improvements (MSI) line Program 0303131F, Project 672832. NC3 Dem/Val efforts will be continued in the MSI line in FY20 and beyond.

A. Mission Description and Budget Item Justification

MEECN System Improvement (MSI) is a long-range planning process with users (Air Force Global Strike Command (AFGSC), Air Combat Command (ACC), Air Force Space Command (AFSPC), Air Mobility Command (AMC), Air Force Special Operations Command (AFSOC), US Strategic Command (USSTRATCOM), and the Navy) to monitor and assess the performance of NC3 systems and develop recommendations for current and future strategic and tactical architectures, requirements, and issues based on available and emerging technologies. MSI is used to conduct technology testing; analyze technology strategies; conduct requirement trade space analysis, technology maturation and risk reduction efforts, and mission analysis; and build technology roadmaps as proactive support to the NC3 enterprise. MSI performs analysis, integration, and testing activities for the NC3 Weapon System.

NC3 Dem/Val is required for advanced concept development and prototyping of next generation NC3 systems. This program ensures a responsive design and development engineering infrastructure to address evolving NDO mission requirements, emerging issues and technology insertion/technology application on the NC3 Weapon System, future strategic systems/capability, and other common strategic areas where appropriate, and develop enhanced multi-use capabilities. The NC3 Dem/Val Program will provide technology maturation and risk reduction activities to support the NC3 Weapon System (AN/USQ-225). Activity will reduce life cycle costs, inform technology maturation & risk reduction efforts, improve system performance, mitigate evolving threats, and ensure both viability and durability of the NC3 Weapon System.

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

	FY 2018	FY 2019	FY 2020
Title: MEECN System Improvements	3.485	25.942	0.948
Description: Conduct NC3 technology testing, NC3 Weapon System integration, build comprehensive technology strategies and roadmaps. Conduct VLF/LF tradeoff analysis. Deliver results of analytic tasks in an annual NC3 report.			
NC3 Dem/Val activities will include but not limited to; conducting studies, analysis, and software/hardware prototyping; test bed activities; exercise participation; developing modeling and simulation of identified NC3 WS architecture; integrated NC3 WS testing, validation, and certification; and direct mission support contracts in support of next generation NC3 systems and sub-			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019	
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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
<p>systems. NC3 Dem/Val ensures a responsive design and development engineering infrastructure to address evolving Nuclear Deterrence Operations.</p> <p>FY 2019 Plans: Continue to refresh NC3 Architecture Roadmap Complete NC3 Annual Report - FY19 Conduct design and development engineering Perform analysis of engineering issues and technology insertion Develop enhanced multiuse capabilities Conduct technology maturation and risk reduction activities Evaluate integrated technology, representative modes, and prototype systems Conduct technology testing; analyze technology strategies Build technology roadmaps as proactive support Perform analysis, integration, and testing activities Conduct NC3 Connectivity Performances updates Develop messaging, waveform, mode, and system standards Develop proof-of-concepts and prototypes for prediction-based system functionality, sensor systems, transmission modes and algorithms for traffic routing Develop weapon system validation test environment including but not limited to the purchase of vendor radios and terminals and test equipment Conduct studies, analysis, proof-of-concept, and prototyping for the assessment and modernization of the AF NC3 WS (AN/USQ-225)</p> <p>FY 2020 Plans: Continue to refresh NC3 Architecture Roadmap Continue planning and initiate integration, analysis, and testing activities for AF NC3 WS Complete NC3 Annual Report - FY20 Conduct design and development engineering Perform analysis of engineering issues and technology insertion Develop enhanced multiuse capabilities Conduct technology maturation and risk reduction activities Evaluate integrated technology, representative modes, and prototype systems Conduct technology testing; analyze technology strategies</p>			

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>	Project (Number/Name) 672832 / <i>MEECN System Improvements</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
Build technology roadmaps as proactive support Perform analysis, integration, and testing activities Conduct NC3 Connectivity Performances updates Develop messaging, waveform, mode, and system standards Develop proof-of-concepts and prototypes for prediction-based system functionality, sensor systems, transmission modes and algorithms for traffic routing Develop weapon system validation test environment including but not limited to the purchase of vendor radios and terminals and test equipment Conduct studies, analysis, proof-of-concept, and prototyping for the assessment and modernization of the AF NC3 WS (AN/USQ-225) FY 2019 to FY 2020 Increase/Decrease Statement: Funding decrease due to reduced NC3 DEM/VAL program in FY 2020.			
Accomplishments/Planned Programs Subtotals		3.485	25.942
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
MSI will continue to evaluate the performance of the NC3 Weapon System, by assessing performance and technology areas for improvement with the assistance of expert technical support from FFRDCs, UARCs, and may include competitively awarded technical support contracts with industry. Johns Hopkins University/Applied Physics Laboratory will support NC3 Weapon System Architecture Roadmap updates.			
To conduct NC3 Dem/Val essential activities a combination of competitively awarded contracts, as well as sole source contracts, may be used to augment AF organic capabilities with technical skill sets from FFRDCs, UARCs, and industry Advisory and Assistance Services (A&AS) providers.			
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.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>				Project (Number/Name) 672832 / <i>MEECN System Improvements</i>					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
MSI NC3 Roadmap / NC3 Connectivity Performances Update	MIPR	JHU APL : Laurel, MD	-	0.000		0.792	Mar 2019	0.800	Mar 2020	-		0.800	Continuing	Continuing	-
NC3 Integration DMS FFRDC/UARC/A&AS	Various	Various : Various	-	3.422	Sep 2018	-		-		-		-	Continuing	Continuing	-
NC3 Dem/Val	TBD	Various : Various	-	-		12.035	Feb 2019	-		-		-	Continuing	Continuing	-
NC3 Dem/Val DMS FFRDC/UARC/A&AS	TBD	Various : Various	-	-		8.317	Dec 2018	-		-		-	Continuing	Continuing	-
Global Assured Comm	MIPR	Various : Various	-	-		-		-		-		-	Continuing	Continuing	-
Subtotal			-	3.422		21.144		0.800		-		0.800	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
NC3 Dem/Val Test	Various	Various : Various	-	-		4.660	Feb 2019	-		-		-	Continuing	Continuing	-
Subtotal			-	-		4.660		-		-		-	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
MSI PSC (Eng/Acq Spt/ Travel/IMPAC)	Various	Various : Various	-	0.063	Mar 2018	0.138	Feb 2019	0.148	Nov 2019	-		0.148	Continuing	Continuing	-
Subtotal			-	0.063		0.138		0.148		-		0.148	Continuing	Continuing	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	3.485		25.942		0.948		-		0.948	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force							Date: February 2019			
Appropriation/Budget Activity 3600 / 7			R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>			Project (Number/Name) 672832 / <i>MEECN System Improvements</i>				
	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>			Project (Number/Name) 672832 / <i>MEECN System Improvements</i>

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
<i>MEECN System Improvement</i>																												
MEECN System Improvement																												
MEECN System TMRR																												
NC3 Annual Report - FY19																												
NC3 Annual Report - FY20																												
NC3 Annual Report - FY21																												
NC3 Annual Report - FY22																												
NC3 Annual Report - FY23																												
NC3 Annual Report - FY24																												
NC3 Dem/Val																												
<i>NC3 Integration</i>																												
DMS FFRDC/UARC/A&AS																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>	Project (Number/Name) 672832 / <i>MEECN System Improvements</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>MEECN System Improvement</i>				
MEECN System Improvement	1	2018	4	2024
MEECN System TMRR	3	2018	3	2018
NC3 Annual Report - FY19	4	2019	4	2019
NC3 Annual Report - FY20	4	2020	4	2020
NC3 Annual Report - FY21	4	2021	4	2021
NC3 Annual Report - FY22	4	2022	4	2022
NC3 Annual Report - FY23	4	2023	4	2023
NC3 Annual Report - FY24	4	2024	4	2024
NC3 Dem/Val	1	2019	4	2019
<i>NC3 Integration</i>				
DMS FFRDC/UARC/A&AS	4	2018	4	2018

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0303131F / Minimum Essential Emergency Communications Network (MEECN)				Project (Number/Name) 672835 / Common VLF/LF Receiver Inc 2			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
672835: Common VLF/LF Receiver Inc 2	-	12.916	9.559	12.478	0.000	12.478	82.499	57.663	13.428	6.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Common Very Low Frequency/Low Frequency (VLF/LF) Receiver (CVR) Increment 2 (CVR Inc. 2) will deliver a survivable, beyond-line-of-sight path for Emergency Action Message (EAM) reception. The intent of CVR Inc. 2 is to replace inadequate, unsustainable strategic communications equipment by developing and producing a common VLF/LF receiver, capable of implementing an interoperable waveform, to integrate into current and future airborne and ground based platforms, improve system performance, and reduce supportability costs through commonality. The program will also lead the development of the Uniform MEECN Mode (UMM) waveform expected to be used by the United States Air Force and Navy.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2018	FY 2019	FY 2020	
Title: CVR Inc 2									12.916	9.559	12.478	
Description: Pre-Milestone B Activities												
FY 2019 Plans:												
Continue pre-development and upfront system engineering activities												
Continue requirements and technology analysis and market research												
Approved for Direct Cite Authority hires												
Continue inspection/modification of Waveguide Integrated Series of Programs (WISP) model												
Continue VLF/LF antenna characterization performance assessment												
Continue Validated Online Lifecycle Threat (VOLT) Assessment												
Continue VLF/LF and UMM Working Groups												
Develop UMM Waveform Reference Architecture												
Continue work on UMM VLF/LF Waveform Standard												
Develop Modeling and Simulation on UMM VLF/LF Waveform Standard												
Complete Material Development Decision (MDD) and obtain Acquisition Decision Memorandum (ADM)												
Complete Broad Agency Announcement (BAA)												
Draft system requirements documentation and validate requirements												
Conduct Platform Interface Assessments												

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>	Project (Number/Name) 672835 / <i>Common VLF/LF Receiver Inc 2</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
Develop acquisition strategy, requirements trades, mission analysis, and Government reference architecture in preparation for Milestone B Continue to develop RFP and Milestone B documentation <i>FY 2020 Plans:</i> Continue VLF/LF antenna characterization performance assessment Continue VLF/LF and UMM Working Groups Continue work on UMM VLF/LF Waveform Standard Conduct Competitive Source Selection Approved for Direct Cite Authority hires TMRR Prototype RFP Release/Contract Award Continue to develop acquisition strategy, requirements trades, mission analysis, and Government reference architecture in preparation for Milestone B Continue to develop RFP and Milestone B documentation RFP Release <i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> Funding addresses increasing preparation activities for Milestone B and EMD contract award.			
Accomplishments/Planned Programs Subtotals		12.916	9.559
C. Other Program Funding Summary (\$ in Millions)			
Line Item	FY 2018	FY 2019	FY 2020
			Base
			OCO
			Total
			FY 2021
			FY 2022
			FY 2023
			FY 2024
			Cost To Complete
			Total Cost
• APAF 03 PE 0303131F: <i>CVR Inc 2</i>	-	-	-
			-
			-
			-
			-
			6.378
			49.202
			66.000
			Continuing
			Continuing
Remarks			
D. Acquisition Strategy			
CVR Inc 2 intends to use a full and open competitive source selection to award TMRR Prototype followed by EMD contract. Program may leverage the 2010 NDAA Section 804 authority to accelerate acquisition schedule and procurement activities.			
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.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>				Project (Number/Name) 672835 / <i>Common VLF/LF Receiver Inc 2</i>					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Early Development (TMRR prototype contract FY 2020)	Various	Various : TBD	-	3.151	May 2018	1.418	Mar 2019	3.770	Jan 2020	-		3.770	Continuing	Continuing	-
DMS (MITRE)	Various	Various : TBD	-	1.020	May 2018	1.195	Jan 2019	0.000		-		0.000	Continuing	Continuing	-
Broad Agency Announcement	Various	Various : TBD	-	5.363	May 2018	0.000		-		-		-	Continuing	Continuing	-
DMS (Lincoln Lab)	Various	Various : TBD	-	0.210	Jul 2018	1.279	Mar 2019	0.000		-		0.000	Continuing	Continuing	-
Test	Various	Various : TBD	-	-		-		-		-		-	Continuing	Continuing	-
NSA	MIPR	NSA : TBD	-	-		-		-		-		-	Continuing	Continuing	-
Subtotal			-	9.744		3.892		3.770		-		3.770	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
GFE	Various	Various : TBD	-	-		-		-		-		-	Continuing	Continuing	-
Subtotal			-	-		-		-		-		-	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
PSC (Eng/Acq Spt/Travel/ IMPAC)	Various	Various : TBD	-	1.905	Oct 2017	4.049	Nov 2018	5.162	Nov 2019	-		5.162	Continuing	Continuing	-
PSC - MITRE	Various	Various : TBD	-	1.267	Dec 2017	1.618	Feb 2019	3.546	Oct 2019	-		3.546	Continuing	Continuing	-
Subtotal			-	3.172		5.667		8.708		-		8.708	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force										Date: February 2019					
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0303131F / Minimum Essential Emergency Communications Network (MEECN)				Project (Number/Name) 672835 / Common VLF/LF Receiver Inc 2							
		Prior Years	FY 2018	FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			-	12.916		9.559		12.478		-		12.478	Continuing	Continuing	N/A
Remarks In FY19,CVR Inc 2 will expend \$0.809M on manpower positions hired under Direct Cite Authority. In FY20,CVR Inc 2 will expend \$2.200M on manpower positions hired under Direct Cite Authority.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>			Project (Number/Name) 672835 / <i>Common VLF/LF Receiver Inc 2</i>

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
<i>CVR Inc. 2</i>																												
Early Systems Engineering																												
Requirements Development																												
Materiel Development Decision (MDD)																												
Acquisition Strategy Panel																												
TMRR Prototype RFP Release and Contract Award																												
TMRR Prototype Development/Test																												
EMD RFP Release																												
Milestone B Decision & Contract Award																												
MS C																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0303131F / Minimum Essential Emergency Communications Network (MEECN)	Project (Number/Name) 672835 / Common VLF/LF Receiver Inc 2	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
CVR Inc. 2				
Early Systems Engineering	1	2018	4	2019
Requirements Development	1	2018	3	2019
Materiel Development Decision (MDD)	3	2019	3	2019
Acquisition Strategy Panel	4	2019	4	2019
TMRR Prototype RFP Release and Contract Award	2	2020	2	2020
TMRR Prototype Development/Test	1	2021	1	2021
EMD RFP Release	2	2021	2	2021
Milestone B Decision & Contract Award	4	2021	4	2021
MS C	1	2024	1	2024

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>				Project (Number/Name) 676029 / <i>Global Aircrew Strategic Network Terminal</i>			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
676029: <i>Global Aircrew Strategic Network Terminal</i>	-	7.376	14.692	0.000	0.000	0.000	0.001	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Global ASNT replaces inadequate, unsustainable strategic communications equipment at bomber, tanker and reconnaissance Wing Command Posts (WCPs), Nuclear Task Forces and Munitions Support Squadrons (MUNSS) and for Mobile Support Teams (MSTs). Global ASNT is a ground-based system that will provide survivable, secure communication paths to receive Emergency Action Messages (EAMs), Force Management messages, and Force Direction messages and disseminate them to bomber, tanker, and reconnaissance aircrews.

Global ASNT is being fielded in separate capability increments. Global ASNT Increment 1 (Inc 1) includes early system engineering support for the planning and development for the future Global ASNT Increments.

Global ASNT Inc 1 fields required Extremely High Frequency/Advanced Extremely High Frequency (EHF/AEHF) capabilities and replaces inadequate, unsustainable strategic mobile and fixed-site Single Channel Anti-jam Man-Portable (SCAMP) terminals and Secure, Mobile, Anti-Jam, Reliable, Tactical - Terminal (SMART-T) equipment.

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

	FY 2018	FY 2019	FY 2020
Title: Global ASNT Inc 1	7.376	14.692	0.000
Description: Engineering & Manufacturing Development (EMD)			
FY 2019 Plans: Complete Operational Testing (OT) in preparation for Milestone C. Resolve any Deficiency Reports (DRs) identified in DT/OT testing. Resolve any outstanding Deficiency Reports (DRs) identified in integration and test of system level hardware and software. Complete satellite network simulations and associate MITRE lab analytic activities through DMS/PSC. Complete Milestone C documentation and Engineering Change Orders (ECOs). Achieve Milestone C production decision.			
FY 2020 Plans: No Activity			
FY 2019 to FY 2020 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>				Project (Number/Name) 676029 / <i>Global Aircrew Strategic Network Terminal</i>				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2018	FY 2019	FY 2020
Transition to production phase of acquisition lifecycle using procurement funds.												
Accomplishments/Planned Programs Subtotals										7.376	14.692	0.000
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost	
• OPAF 03 PE 0303131F: <i>Global ASNT Inc. 1 (834210)</i>	0.292	140.875	132.648	-	132.648	41.412	51.913	40.691	47.619	Continuing	Continuing	
• OPAF 05 PE 0303131F: <i>Global ASNT Inc. 1 (861900)</i>	0.000	73.470	68.795	-	68.795	0.000	0.000	0.000	0.000	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
Global ASNT used a full and open competitive approach to award an EMD contract for Increment 1. Global ASNT will continue to use a competitive incremental approach to fulfill the overall requirements for Increments 2 and 3.												
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.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0303131F / Minimum Essential Emergency Communications Network (MEECN)				Project (Number/Name) 676029 / Global Aircrew Strategic Network Terminal					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Global ASNT Inc 1 - Engineering & Manufacturing Development	C/FPIF	Raytheon : Marlborough, MA	-	2.920	Feb 2018	10.955	Oct 2018	-		-		-	Continuing	Continuing	-
Global ASNT Inc 1 - Satellite Simulations	SS/FFP	MIT/Lincoln Laboratory : Lexington, MA	-	-		1.143	Mar 2019	-		-		-	Continuing	Continuing	-
Subtotal			-	2.920		12.098		-		-		-	Continuing	Continuing	N/A
Remarks - Raytheon Global ASNT Inc 1 EMD contract is an incrementally funded continuing effort on the existing contract.															
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Global ASNT Inc 1 - MITRE Lab	SS/CPFF	MITRE : Bedford, MA	-	0.380	Oct 2018	-		-		-		-	Continuing	Continuing	-
Global ASNT Inc 1 - Software Support	Various	Various : NV	-	-		0.371	Mar 2019	-		-		-	Continuing	Continuing	-
Global ASNT Inc 1 - GFE	Various	Various : NV	-	-		-		-		-		-	Continuing	Continuing	-
Subtotal			-	0.380		0.371		-		-		-	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Global ASNT Inc 1 - Government Test and Evaluation	Various	Various : NV	-	0.830	Apr 2018	0.540	Dec 2018	-		-		-	Continuing	Continuing	-
Global ASNT Inc 1 - NSA	MIPR	NSA, Maryland : NV	-	0.011	Feb 2018	0.007	Apr 2019	-		-		-	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019					
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0303131F / Minimum Essential Emergency Communications Network (MEECN)						Project (Number/Name) 676029 / Global Aircrew Strategic Network Terminal					
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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			-	0.841		0.547		-		-		-	Continuing	Continuing	N/A		
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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		
Global ASNT Inc 1 - PSC (Eng/Acq Support, Travel)	Various	Various : NV	-	1.163	Feb 2018	1.676	Oct 2018	-		-		-	Continuing	Continuing	-		
Global ASNT Inc 1 - PSC (MITRE)	SS/CPFF	MITRE : Bedford, MA	-	2.072	Oct 2018	-		-		-		-	Continuing	Continuing	-		
Subtotal			-	3.235		1.676		-		-		-	Continuing	Continuing	N/A		
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			-	7.376		14.692		-		-		-	Continuing	Continuing	N/A		
Remarks																	

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>			Project (Number/Name) 676029 / <i>Global Aircrew Strategic Network Terminal</i>

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Global ASNT Inc. 1																												
Global ASNT Inc 1 - Engineering and Manufacturing Development																												
Global ASNT Inc 1 - Test																												
Global ASNT Inc 1 - Milestone C Decision																												
Global ASNT Inc 1 - Production and Deployment																												
Global ASNT Inc 1 - IOC																												
Global ASNT Inc 1 - Interim Contractor Support																												
Global ASNT Inc 1 - FOC																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>	Project (Number/Name) 676029 / <i>Global Aircrew Strategic Network Terminal</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Global ASNT Inc. 1</i>				
Global ASNT Inc 1 - Engineering and Manufacturing Development	1	2018	2	2019
Global ASNT Inc 1 - Test	1	2018	2	2019
Global ASNT Inc 1 - Milestone C Decision	3	2019	3	2019
Global ASNT Inc 1 - Production and Deployment	3	2019	2	2024
Global ASNT Inc 1 - IOC	2	2021	2	2021
Global ASNT Inc 1 - Interim Contractor Support	3	2020	2	2024
Global ASNT Inc 1 - FOC	2	2024	2	2024

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0303131F / Minimum Essential Emergency Communications Network (MEECN)				Project (Number/Name) 676030 / Global ASNT Inc 2			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
676030: Global ASNT Inc 2	-	10.689	14.350	0.117	0.000	0.117	8.348	0.016	0.010	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Global ASNT replaces inadequate, unsustainable strategic communications equipment at bomber, tanker and reconnaissance Wing Command Posts (WCPs), Nuclear Task Forces, Munitions Support Squadrons (MUNSS), and for Mobile Support Teams (MSTs). Global ASNT is a ground-based system that will provide survivable, secure communication paths to receive Emergency Action Messages (EAMs), Force Management messages, and Force Direction messages and disseminate them to bomber, tanker, and reconnaissance aircrews.

Global ASNT is being fielded in separate capability increments.

Global ASNT Increment 2 delivers a replacement Aircrew Alerting System (AAS) consisting of personal and general alerting equipment, Ultra High Frequency (UHF) and High Frequency (HF) capabilities. Increment 2 replaces inadequate, unsustainable Electromagnetic Pulse Hardened Dispersal Communication (EHDC) systems and Aircrew Alerting Communications Electromagnetic Pulse (AACE) systems.

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

	FY 2018	FY 2019	FY 2020
Title: Global ASNT Inc 2	10.689	14.350	0.117
Description: Pre-Engineering and Manufacturing Development Activities			
FY 2019 Plans: Continue pre-development and upfront system engineering activities Continue requirements and technology analysis and market research Conduct Materiel Development Decision (MDD) Release Draft Request for Proposal (RFP) or Request for Proposal Review proposal submissions and engage in Source Selection/Technical Evaluation Activities			
FY 2020 Plans: Conduct Source Selection/Technical Evaluation Activities Award Engineering and Manufacturing Development (EMD) contract Initiate design and build of EMD assets Conduct EMD activities			
FY 2019 to FY 2020 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019	
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>	Project (Number/Name) 676030 / <i>Global ASNT Inc 2</i>	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
Decrease due to re-plan of the GASNT Inc 2 effort			
Accomplishments/Planned Programs Subtotals	10.689	14.350	0.117

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

Remarks

D. Acquisition Strategy
 Global ASNT used a full and open competitive approach to award an EMD contract for Increment 1. Global ASNT Inc. 2 will leverage Inc. 1 activities and will continue to use a competitive incremental approach to fulfill the overall requirements for Increments 2 and 3.

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.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>				Project (Number/Name) 676030 / <i>Global ASNT Inc 2</i>					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Global ASNT Inc 2 - Pre-EMD Activities	TBD	Not specified. : TBD	-	7.526	Mar 2018	4.192	Mar 2019	0.000		-		0.000	Continuing	Continuing	-
Risk Reduction	TBD	Not specified. : TBD	-	-		4.892	Mar 2019	0.000		-		0.000	Continuing	Continuing	-
Subtotal			-	7.526		9.084		0.000		-		0.000	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Global ASNT Inc 2 - MITRE Lab	Various	MITRE : Bedford, MA	-	-		-		-		-		-	Continuing	Continuing	-
Global ASNT Inc 2 - Information Assurance	Various	Booz Allen Hamilton : Bedford, MA	-	0.000		0.145	Mar 2019	0.000		-		0.000	Continuing	Continuing	-
Subtotal			-	0.000		0.145		0.000		-		0.000	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Global ASNT Inc 2 - Test Planning	Various	Various : NV	-	0.000		0.177	Feb 2019	0.000		-		0.000	Continuing	Continuing	-
Subtotal			-	0.000		0.177		0.000		-		0.000	Continuing	Continuing	N/A
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Global ASNT Inc 2 - PSC (Eng/Acq Support, Travel)	Various	Various : NV	-	3.163	Feb 2018	4.944	Oct 2018	0.117	Oct 2019	-		0.117	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019					
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>						Project (Number/Name) 676030 / <i>Global ASNT Inc 2</i>					
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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			-	3.163		4.944		0.117		-		0.117	Continuing	Continuing	N/A		
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			-	10.689		14.350		0.117		-		0.117	Continuing	Continuing	N/A		
Remarks																	
In FY19,Global ASNT Inc 2 will expend \$0.380M on manpower positions hired under Direct Cite Authority.																	
In FY20,Global ASNT Inc 2 will expend \$.117M on manpower positions hired under Direct Cite Authority.																	

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force			Date: February 2019		
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>			Project (Number/Name) 676030 / <i>Global ASNT Inc 2</i>

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Global ASNT Inc. 2																												
Global ASNT Inc 2 - Pre-Engineering and Manufacturing Development Activities																												
Global ASNT Inc 2 - Materiel Development Decision																												
Global ASNT Inc 2 - Release Request for Proposal																												
Global ASNT Inc 2 - Milestone B																												
Global ASNT Inc 2 - Contract Award																												
Global ASNT Inc 2 - Engineering and Manufacturing Development																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0303131F / <i>Minimum Essential Emergency Communications Network (MEECN)</i>	Project (Number/Name) 676030 / <i>Global ASNT Inc 2</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Global ASNT Inc. 2</i>				
Global ASNT Inc 2 - Pre-Engineering and Manufacturing Development Activities	1	2018	1	2020
Global ASNT Inc 2 - Materiel Development Decision	3	2019	3	2019
Global ASNT Inc 2 - Release Request for Proposal	4	2019	4	2019
Global ASNT Inc 2 - Milestone B	2	2020	2	2020
Global ASNT Inc 2 - Contract Award	2	2020	3	2020
Global ASNT Inc 2 - Engineering and Manufacturing Development	2	2020	4	2024