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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs</i>	R-1 Program Element (Number/Name) PE 0308605F / <i>Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	0.000	0.000	240.926	0.000	240.926	202.751	137.776	142.565	156.908	Continuing	Continuing
682001: <i>AFDCS Continuous Capability Delivery</i>	-	0.000	0.000	225.865	0.000	225.865	202.751	137.776	142.565	156.908	Continuing	Continuing
688EBC: <i>Enhanced Budget Control</i>	-	0.000	0.000	15.061	0.000	15.061	0.000	0.000	0.000	0.000	0.000	15.061

Note

In FY23, the DAF realigned \$240.9M from Program Element (PE) 0208088F AF Defensive Cyberspace Operations (AFDCO) to PE 0308605F AF Defensive Cyber Systems (AFDCS) in order to consolidate efforts under a single Budget Activity 8 (BA08) Software and Digital Technology Pilot Program. This consolidation helps accelerate integration and modernization required to address the evolving cyber threat. Prior to FY23, funding was contained in PE 0208088F Projects 677821; 677822; 677823; Operations & Maintenance (O&M) AG/SAGs 12D/11V, and Other Procurement Line Item 834320.

In FY23, \$15.061M was realigned to Budget Activity 08, PE 0308605F Project 682EBC to transparently define specific resources to be realigned in FY24 to USCYBERCOM for Enhanced Budget Control in accordance with FY21 NDAA, Section 1746.

A. Mission Description and Budget Item Justification

This effort is not a new start. The FY 2018 NDAA Sections 873/874 directed OSD to streamline software development. The Air Force Defensive Cyber Systems (AFDCS) effort is an OSD pilot initiative in which all lifecycle funding will be tracked under BA08, Software and Digital Technology Pilot Programs. Pilot programs will allow the DAF to execute modern software development practices encompassing development, procurement, modification and maintenance activities within a single appropriation.

Air Force Defensive Cyber Systems (AFDCS) sustains, enhances, and integrates three defensive cyber weapon systems: Cyberspace Vulnerability Assessment/Hunter (CVA/H); Cyber Defense Analysis (CDA); and AFCERT (ACD). AFDCS provides and equips USAF operational units, predominantly Cyber Protection Teams, Mission Defense Teams, and network defenders with the capabilities required to protect USAF networks and systems. End users comprise over 2,000 operators across the country from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command(AFRC). AFDCS coordinates and executes resources needed to assess, analyze, and respond to Air Force network security incidents, intrusive activity, malicious logic (i.e., viruses) and vulnerabilities. AFDCS provides continuous monitoring and defense of Cybersecurity Service Provider (CSSP) assigned to the Department of Defense (DoD), AF classified, and unclassified computer networks. AFDCS conducts defensive cyberspace operations by monitoring, collecting, analyzing, and reporting on sensitive information released from friendly unclassified systems, such as computer networks, telephones, email, and USAF websites. AFDCS conducts vulnerability assessments, network intrusion analysis, systems vulnerability analysis, and protects against the advanced persistent threat through fielded Hunter teams. Hunter teams provide worldwide defensive cyberspace operations on AF classified and unclassified networks.

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Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 8: Software and Digital Technology Pilot Programs</i>	R-1 Program Element (Number/Name) PE 0308605F / <i>Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program</i>
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The systems within AFDCS are managed through an Agile software development procurement and sustainment process that includes working from a prioritized backlog managed by the Program Management Office (PMO) according to priorities provided by MAJCOM and operational users. Priorities are updated at least every 3-months . Priorities can be adjusted, and usable capability produced after every iteration. This approach allows the program to focus on current operational priorities, achieve early return on investment of taxpayer dollars, mitigate risk, reduce waste, effectively respond to change, and continuously improve processes.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 0605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In PY \$0.103M was expended for civilian pay expenses in this program element, and in CY \$0.228M is forecasted for civilian pay expenses in this program element.

This program is in Budget Activity 8, Software and Digital Technology Pilot Program because this budget activity includes funding provided for expenses necessary for agile development, test and evaluation, procurement, production and modification, and the operation and maintenance of these programs.

B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	240.926	0.000	240.926
Total Adjustments	0.000	0.000	240.926	0.000	240.926
• 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	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	240.926	0.000	240.926

Change Summary Explanation

In FY23, the DAF realigned \$240.9M from Program Element (PE) 0208088F AF Defensive Cyberspace Operations (AFDCO) to PE 0308605F AF Defensive Cyber Systems (AFDCS) in order to consolidate efforts under a single Budget Activity 8 (BA08) Software and Digital Technology Pilot Program. Prior to FY23, funding was contained in PE 0208088F Projects 677821; 677822; 677823; Operations & Maintenance (O&M) AG/SAGs 12D/11V, and Other Procurement Line Item 834320. Respective FY22 funding totaled \$232.13M. FY23 increased to \$240.93M due to economic adjustments prior to realignment to Budget Activity 8, PE 0308605F for participation in the DoD's Software & Digital Technology Pilot Program.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force										Date: April 2022		
Appropriation/Budget Activity 3600 / 8					R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program				Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery			
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
682001: AFDCS Continuous Capability Delivery	-	0.000	0.000	225.865	0.000	225.865	202.751	137.776	142.565	156.908	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Air Force Defensive Cyber Systems (AFDCS) sustains, enhances, and integrates three defensive cyber weapon systems: Cyberspace Vulnerability Assessment/Hunter (CVA/H); Cyber Defense Analysis (CDA); and AFCERT (ACD). AFDCS provides and equips USAF operational units, predominantly Cyber Protection Teams, Mission Defense Teams, and network defenders with the capabilities required to protect USAF networks and systems. End users comprise over 2,000 operators across the country from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command(AFRC). AFDCS coordinates and executes resources needed to assess, analyze, and respond to Air Force network security incidents, intrusive activity, malicious logic (i.e., viruses) and vulnerabilities. AFDCS provides continuous monitoring and defense of Cybersecurity Service Provider (CSSP) assigned to the Department of Defense (DoD), AF classified, and unclassified computer networks. AFDCS conducts defensive cyberspace operations by monitoring, collecting, analyzing, and reporting on sensitive information released from friendly unclassified systems, such as computer networks, telephones, email, and USAF websites. AFDCS conducts vulnerability assessments, network intrusion analysis, systems vulnerability analysis, and protects against the advanced persistent threat through fielded Hunter teams. Hunter teams provide worldwide defensive cyberspace operations on AF classified and unclassified networks.

This effort funds the development, sustainment, maintenance, additional hardware and software as well as recapitalization for various systems in AFDCS to enhance defensive cyberspace capabilities, computer and network systems security, damage assessment and recovery, cyber threat recognition, attribution, and mitigation, and active response methodologies in response to evolving threats and changes to cyber environment. These areas of emphasis are realized through research and development, test and acquisition in the areas of proactive defense, defensive counter cyberspace, cyberspace intelligence, surveillance and reconnaissance, command and control situational awareness, persistent network operations, as well as decision support, recovery, and digital forensics. Investment into the current weapon systems are also intended to meet the scope and scale of USCYBERCOM directed Cyber Protection Teams and AF Mission Defense Teams.

Funding provides the AFDCS Operators with the development and sustainment of capabilities to identify compromised information from network intrusions and to determine potential impacts and necessary operational adjustments resulting from information disclosures.

Daily intrusions to the AF network are analyzed using complex Commercial off the Shelf (COTS) and Government off the Shelf (GOTS) forensic tools to identify a multitude of counter defensive and defensive tools and techniques that are required to strengthen AF cyber security. AFDCS will work with Air Force Research Laboratory (AFRL), Air Force CyberWorx, and other Federal Research and Development (R&D) entities in order to take cutting edge solutions to the technology readiness level (TRL) needed for rapid deployment of new capabilities to counter critical cyber weapon system vulnerabilities.

AFDCS funding also provides essential compute and store capacity and USAF unique application development for the ELICSAR big data platform, a capability federated with other Service efforts under the Unified Platform program.

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Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
<p>Title: AFDCS Continuous Capability Delivery (CCD) Development - RDT&E</p> <p>Description: AFDCS CCD system capabilities will be developed and enhanced through completion of iterative development cycles in accordance with an Agile software development strategy. Development activities include requirements analysis, design, build, test, data conversion, vulnerability, compliance, defense and non-technical assessments, best practice reviews, penetration testing, and the resolution of deficiency reports and defects. Development and integration of solutions supporting defensive cyber modernization and AF Cyber Needs Forms in the area of AFDCS capabilities and technologies to meet capability gaps required by Cyber Protection Teams and Mission Defense Teams. Test and Evaluation provides both developmental testing of new capabilities and the test environments for validating the capabilities. Engineering support to conduct AFDCS assessment of non-secure telecommunications during peace time and contingency operations. Additional developments include projects to prevent, detect, and respond to adversarial penetration in AF networks. Activities also include various Advisory and Assistance Services (A&AS) and Program Management Administration (PMA) activities to support the aforementioned development efforts.</p> <p>FY 2022 Plans: FY22 Plans consolidated from PE 0208088F, AF Defensive Cyberspace Operations, Projects 677821 Cyberspace Vulnerability Assessment, 677822 Cyberspace Defense Analysis, and 677823 AFCERT.</p> <ul style="list-style-type: none"> - Continue development and integration of technologies to conduct vulnerability assessments, network intrusion analysis and systems vulnerability analysis. - Continue development and integration to support modernization of DCO capabilities and technologies to support Cyber Protection Teams and Mission Defense Teams. - Continue support of development of data loss prevention technologies and support to insider threat detection capabilities. Support technology areas that prevent adversaries' attempts to get into our networks. - Continue to develop and test technologies to prevent, detect, and respond to adversarial penetration in AF networks. <p>FY 2023 Plans:</p> <ul style="list-style-type: none"> - Will continue incremental planning and support initiatives to organize Continuous Capability Development (CCD) backlog requirements into delivered capabilities. - Will continue development and integration of technologies to conduct vulnerability assessments, network intrusion analysis and systems vulnerability analysis 	-	0.000	9.508

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022	FY 2023
<ul style="list-style-type: none"> - Will continue development and integration to support modernization of AFDCS capabilities and technologies to support Cyber Protection Teams and Mission Defense Teams - Will continue support of development of data loss prevention technologies and support to insider threat detection capabilities. Support technology areas that prevent adversaries' attempts to get into our networks - Will continue to develop and test technologies for the AFDCS to prevent, detect, and respond to adversarial penetration in AF networks - Will continue development testing for AFDCS capability products and technologies prior to fielding - Will leverage Agile methods and cadence to resolve existing/new defects and add enhancements in the production environment - Will restructure the system architecture to improve performance - Will continue migration/development/transition activities to implement Cloud solution - Will refine near-term technical requirements/tools to ensure smooth operation of AFDCS and mature development capabilities - Will research, design, and build a secure and continuous process for development and delivery of capabilities (Dev/Sec/Ops) <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding for this effort is unchanged with respect to FY22 request in PE 0208088F, AF Defensive Cyberspace Operations, Projects 677821 Cyberspace Vulnerability Assessment, 677822 Cyberspace Defense Analysis, and 677823 AFCERT.</p>				
<p>Title: AFDCS Continuous Capability Development (CCD) Deployment - Procurement</p> <p>Description: AFDCS CCD provides defensive counter cyberspace capabilities that protect the AFNet and DoD network enclaves, to include their associated computer systems, software applications and sensitive operational information against unauthorized intrusion, corruption, and/or destruction. AFDCS additionally provide for 24/7/365 monitoring and defense of US Air Force and US Central Command, and Third Party SIPR/NIPR computer networks against hostile attacks as well as intrusion detection, network traffic analysis, network forensics analysis, countermeasure development and execution, and incident response. Provides indication and warning, correlation, logging, vulnerability remediation, assessment, process management, blocking, vulnerability identification, investigation, and containment. Provides CSSP (Cyber Security Service Provider) system upgrades to the AFNet and several third party entities including Joint Strike Fighter, USTRANSCOM, and others. In accordance with Section 1815 of the</p>		-	0.000	87.048

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
<p>FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.</p> <p>AFDCS provides hardware, software, technical documents, fielding support, and Capital Equipment Replacement (CER) (e.g., replacing end of life/end of support Direct Mission Support (DMS) and 3rd Party components). Also includes integration, test and fielding for cyber security improvements and existing 3rd Party modernized improvements/modifications.</p> <p>AFDCS provides defensive cyber capability and CVA/H equipment (e.g. Garrison Interceptor Platform (GIP), Deployable Interceptor Platform (DIP), and Mobile Interceptor Platform (MIP)) for Air Force Cyber Protection Teams (CPTs) and Mission Defense Teams (MDTs). Equipment also includes an enhanced DIP which is capable of 10GB throughput in a small form factor (less than 50lbs and TSA carry-on compliant).</p> <p>FY 2022 Plans: FY22 plans consolidated from FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures:</p> <ul style="list-style-type: none"> - Continue providing hardware refresh of the CVA/H subsystems and technical refresh of 15 existing MDTs and equip an additional 20 MDTs. - Continue procuring necessary hardware and software to combat the rapidly evolving cyber threats, as well as additional recapitalization projects to include Enterprise Voice Protection System (VPS)/Voice Over Internet Protocol (VoIP) Monitoring for 184+ AF Sites and regional management and collection servers at 3 Integrated Network Operations and Security Centers. - Continue supporting early system deployment of Enterprise-Data Loss Prevention (E-DLP) capability to overcome technological advances, and provide operators the ability to automatically detect, assess, and classify sensitive content using content-aware detection techniques - Continue acquiring and installing active defensive counter cyberspace operations and situational awareness capabilities in a Defensive Cyberspace Operations role to achieve cyberspace superiority for assigned missions. - Continue procure updates for Enterprise Logging, Data Wall, Data Analytics (via ELICSAR big data platform), and hardware/software upgrades needed to maximize operators' threat awareness. 			

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Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022	FY 2023
<p>- Continue acquiring commercial threat intelligence to speed decision-making against threats to the Air Force Network (AFNET).</p> <p>FY 2023 Plans:</p> <p>- Will continue to replace the subsystems fielded in FY20 for compliance with recent CVA/H hardware baseline standards for MDTs.</p> <p>- Will continue procuring necessary hardware and software to combat the rapidly evolving cyber threats, as well as additional recapitalization projects to include Endpoint Detection and Response (EDR) and to enable the ability to capture execution, local connections, system changes, memory activities, and other operations performed by endpoints; and Endpoint Packet Capture (PCAP) which provides indexing, searching, visualization, and extraction (ISVE) capability.</p> <p>- Will continue supporting early system deployment of Enterprise-Data Loss Prevention (E-DLP) capability to overcome technological advances, and provide operators the ability to automatically detect, assess, and classify sensitive content using content-aware detection techniques</p> <p>- Will continue acquiring and installing active defensive counter cyberspace operations and situational awareness capabilities in a Defensive Cyberspace Operations role to achieve cyberspace superiority for assigned missions.</p> <p>- Will continue procure updates for Enterprise Logging, Data Wall, Data Analytics (via ELICSAR big data platform), and hardware/software upgrades needed to maximize operators' threat awareness.</p> <p>- Will continue acquiring commercial threat intelligence to speed decision-making against threats to the Air Force Network (AFNET).</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: Funding for this effort is unchanged with respect to FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures.</p>				
<p>Title: AFDCS Continuous Capability Delivery (CCD) - Support and Sustainment</p> <p>Description: AFDCS capabilities will be sustained through activities designed to support continued operations of three weapon systems and integrated AFDCS capabilities activities include day-to-day operations and support, production environment management, system performance monitoring and tuning, technical debt reduction, refreshes/updates to databases, and information processing capabilities. Activities also include Advisory and assistance Services (A&AS) and Program Management Administration (PMA) activities to support the aforementioned sustainment operations as well as cloud compute and store costs.</p>		-	0.000	129.309

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Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / <i>Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program</i>	Project (Number/Name) 682001 / <i>AFDCS Continuous Capability Delivery</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
<p><i>FY 2022 Plans:</i> FY22 Plans consolidated from FY22 request OMAF Operating Forces, Activity Group, Combat Related Operations, Sub-Activity Group 12D, Cyberspace Activities and OMAF Operating Forces, Activity Group, Air Operations, Sub-Activity Group 11V, Cyber Sustainment</p> <ul style="list-style-type: none"> - Continue supporting secure, reliable conduct of cyber defense operations and related air, land, maritime, and space cyberspace forces without prohibitive interference by an adversary. - Continue to sustain the operational capability of the Cyberspace Vulnerability Assessment/Hunter mission to support Cyber Protection Teams. - Continue 24/7 support to operations for over 2,000 operators from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) and expanding global user community. - Continue Hardware Refresh, Software License Renewal, Cybersecurity support, Sustaining Engineering Support, training development and support. - Continue maintenance and updates for Technical Orders, including updating, verifying, indexing, configuration control, storing, archiving, distributing, superseding, rescinding, and reinstating. - Continued Contractor Logistics Support (CLS) for Cyber sustainment to include for a program, system, training system, equipment or item. CLS is used to provide all or part of the sustainment functions. - Continue sustaining cloud-hosted data and applications at Unclassified, Secret and Top Secret classifications. - Continue sustaining procured enhanced software capabilities, system integration support and improvements for the AFDCS subsystems ACD, CDA, and CVA/H. <p><i>FY 2023 Plans:</i></p> <ul style="list-style-type: none"> - Will continue supporting secure, reliable conduct of cyber defense operations and related air, land, maritime, and space cyberspace forces without prohibitive interference by an adversary. - Will continue to sustain the operational capability of the Cyberspace Vulnerability Assessment/Hunter mission to support Cyber Protection Teams. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force	Date: April 2022
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Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
<ul style="list-style-type: none"> - Will continue 24/7 support to operations for over 2,000 operators from across the Total Force - Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Command (AFRC) and expanding global user community. - Will continue Hardware Refresh, Software License Renewal, Cybersecurity support, Sustaining Engineering Support, training development and support. - Will continue maintenance and updates for Technical Orders, including updating, verifying, indexing, configuration control, storing, archiving, distributing, superseding, rescinding, and reinstating. - Will continue Contractor Logistics Support (CLS) for Cyber sustainment to include for a program, system, training system, equipment or item. CLS is used to provide all or part of the sustainment functions. - Will continue sustaining cloud-hosted data and applications at Unclassified, Secret and Top Secret classifications. - Will continue sustaining procured enhanced software capabilities, system integration support and improvements for the AFDCS. - Will continue to improve system efficiency by supporting continuous processes for secure development and delivery of capabilities (Dev/Sec/Ops) and posturing the production system architectures for integration. <p><i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> FY23 economic adjustments increased funding by \$8.8M with respect to FY22 request OMAF Operating Forces, Activity Group, Combat Related Operations, Sub-Activity Group 12D, Cyberspace Activities and OMAF Operating Forces, Activity Group, Air Operations, Sub-Activity Group 11V, Cyber Sustainment.</p>			
Accomplishments/Planned Programs Subtotals	-	0.000	225.865

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

Remarks

D. Acquisition Strategy
The AFDCS will use various existing and new contractual vehicles to procure commercial off the shelf cyber capabilities, leverag industry leading commercial capabilities, and professional services for integration and configuration support, new capability development and sustainment. Contract sources include Government-Wide Acquisition Contracts (GWACs) such as Alliant, Encore II, NASA Solutions for Enterprise-Wide Procurement IV (SEWP IV), and General Services Administration

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Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
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(GSA) Federal Supply Schedules. AFDCS will also leverage Small Business Innovative Research (SBIR) and Air Force Research Laboratory (AFRL) contracts, FFRDCs, Advisory and Assistance Services (A&AS) contracts, and support from Test and Evaluation Enterprises. Wherever possible AFDCS will leverage competitive contracts and task orders to ensure cost efficiency and industry engagement. The use of multiple-award contractual vehicles will provide a wide range of commercially-available products and services to meet AFDCS requirements.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery
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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFDCS: Enterprise Logging Ingest & Cyber Situational Awareness Refinery (ELICSAR)	C/FFP	CCSD : San Antonio, TX	-	-		-		26.297	Mar 2023	-		26.297	Continuing	Continuing	-
AFDCS: Enterprise Data Acquisition Transport & Analysis (ELX)	TBD	TBD : TBD, TX	-	-		-		30.700	Jul 2023	-		30.700	Continuing	Continuing	-
AFDCS: AFRL - CPAC B	C/FFP	CNF : San Antonio, TX	-	-		-		0.900	Feb 2023	-		0.900	Continuing	Continuing	-
AFDCS: AFRL - RAZOR	C/FFP	BAH : San Antonio, TX	-	-		-		2.900	Mar 2023	-		2.900	Continuing	Continuing	-
AFDCS: AFRL FIRESTARTER	C/FFP	AFRL : Rome, NY	-	-		-		1.700	Apr 2023	-		1.700	Continuing	Continuing	-
AFDCS: WEB VULNERABILITY SYSTEM	C/FFP	Thundercat : San Antonio, TX	-	-		-		0.500	Mar 2023	-		0.500	Continuing	Continuing	-
AFDCS: SERVICE NOW	C/FFP	Technica : San Antonio, TX	-	-		-		3.000	Feb 2023	-		3.000	Continuing	Continuing	-
AFDCS: MITRE	C/FFP	MITRE : San Antonio, TX	-	-		-		4.000	Jan 2023	-		4.000	Continuing	Continuing	-
AFDCS: Cyber Threat Mitigation - Threat Intelligence	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		0.300	Jan 2023	-		0.300	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Data & Analysis	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		2.900	Jan 2023	-		2.900	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Sensor Optimization	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		0.390	May 2023	-		0.390	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Data Collection and Correlation	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		0.309	Apr 2023	-		0.309	Continuing	Continuing	-
AFDCS: Defensive Next Gen - Intrusion Prevention Capabilities	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		0.300	Aug 2023	-		0.300	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery
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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			-	-		-		74.196		-		74.196	Continuing	Continuing	N/A

Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFDCS: Hardware and Architecture	C/FFP	Dell/Cisco/ VARIOUS : San Antonio, TX	-	-		-		6.000	May 2023	-		6.000	Continuing	Continuing	-
AFDCS: Production Licenses, renewals, and Maintenance	C/FFP	Fidelis/vmware/ VARIOUS : San Antonio, TX	-	-		-		8.000	May 2023	-		8.000	Continuing	Continuing	-
AFDCS: Sustainment (DBA Support, Architecture Services, SME Support, HW/SW)	C/FFP	BAH, Zivaro, Fidelis : San Antonio, TX	-	-		-		1.200	May 2023	-		1.200	Continuing	Continuing	-
AFDCS: Cloud Services	C/FFP	SAIC : Hanscom AFB, MA	-	-		-		1.700	May 2023	-		1.700	Continuing	Continuing	-
AFDCS: Contractor Logistics Support	C/FFP	Fidelis/vmware/ VARIOUS : San Antonio, TX	-	-		-		2.600	May 2023	-		2.600	Continuing	Continuing	-
AFDCS: Training and Technical Data	C/FFP	SMS : San Antonio, TX	-	-		-		0.400	May 2023	-		0.400	Continuing	Continuing	-
AFDCS: Compute and Store Cloud Services-ELICSAR-U	C/CPAF	Cloud One - HNI : Hanscom AFB, MA	-	-		-		27.554	Mar 2023	-		27.554	Continuing	Continuing	-
AFDCS: Compute and Store Cloud Services-ELICSAR-TS	C/CPAF	AMIC - DET : Lackland AFB, TX	-	-		-		4.047	Mar 2023	-		4.047	Continuing	Continuing	-
AFDCS: SEIM	C/FFP	Thundercat : San Antonio, TX	-	-		-		3.000	Jun 2023	-		3.000	Continuing	Continuing	-
AFDCS: SOAR	C/FFP	GovSmart : San Antonio, TX	-	-		-		0.900	Aug 2023	-		0.900	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery
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Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFDCS: IOP	C/FFP	BAH : San Antonio, TX	-	-		-		1.700	Jan 2023	-		1.700	Continuing	Continuing	-
AFDCS: RFMS	C/FFP	Telos : San Antonio, TX	-	-		-		1.300	Apr 2023	-		1.300	Continuing	Continuing	-
AFDCS: Direct Cite Authority Civilian Pay	TBD	VARIOUS : VARIOUS, TX	-	-		-		0.387	Oct 2022	-		0.387	Continuing	Continuing	-
AFDCS: Sustaining Engineering Software Licenses	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		21.742	Nov 2022	-		21.742	Continuing	Continuing	-
AFDCS: Contracted Logistics Support	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		8.155	Feb 2023	-		8.155	Continuing	Continuing	-
AFDCS: Tech Data Sustainment	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		0.278	Feb 2023	-		0.278	Continuing	Continuing	-
AFDCS: TRAINING	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		0.141	Feb 2023	-		0.141	Continuing	Continuing	-
AFDCS: Product Engineering Support	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		5.418	Feb 2023	-		5.418	Continuing	Continuing	-
AFDCS: Hardware Sustainment	Various	VARIOUS : VARIOUS, TX	-	-		-		3.865	May 2023	-		3.865	Continuing	Continuing	-
AFDCS: Cyber Security Support	C/CPFF	VARIOUS : VARIOUS, TX	-	-		-		0.525	Feb 2023	-		0.525	Continuing	Continuing	-
AFDCS: CVA/H Subsystems Upgrade	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		10.039	Mar 2023	-		10.039	Continuing	Continuing	-
AFDCS: Hardware Procurement MDT	C/FFP	VARIOUS : VARIOUS, TX	-	-		-		19.958	Mar 2023	-		19.958	Continuing	Continuing	-
Subtotal			-	-		-		128.909		-		128.909	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force **Date:** April 2022

Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 682001 / AFDCS Continuous Capability Delivery
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Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFDCS: 47 CYBER TEST SQUADRON	C/Various	47 TEST SQDN : Lackland AFB, TX	-	-		-		1.800	Mar 2023	-		1.800	Continuing	Continuing	-
AFDCS: 46TH TEST SUPPORT	MIPR	46 TEST SQDN : EGLIN AFB, FL	-	-		-		0.400	Oct 2022	-		0.400	Continuing	Continuing	-
Subtotal			-	-		-		2.200		-		2.200	Continuing	Continuing	N/A

Management Services (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
AFDCS: Program Support Costs (PSC)	C/CPIF	CCSD : Lackland AFB, TX	-	-		-		17.000	Apr 2023	-		17.000	Continuing	Continuing	-
AFDCS: GPC/SHIPPING/TRAVEL	C/Various	VARIOUS : VARIOUS	-	-		-		0.700	Dec 2022	-		0.700	Continuing	Continuing	-
AFDCS: Engineering & Technical Assistance Support Services	Various	VARIOUS : VARIOUS	-	-		-		2.860		-		2.860	Continuing	Continuing	-
Subtotal			-	-		-		20.560		-		20.560	Continuing	Continuing	N/A

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		-	-	-	225.865	225.865	Continuing	Continuing	N/A

Remarks

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / <i>Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program</i>	Project (Number/Name) 682001 / <i>AFDCS Continuous Capability Delivery</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AFDCS				
AFDCS Development	1	2023	4	2027
AFDCS Deployment	1	2023	4	2027
AFDCS Support/Sustainment	1	2023	4	2027
AFDCS Test and Evaluation	1	2023	4	2027

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force										Date: April 2022		
Appropriation/Budget Activity 3600 / 8					R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program					Project (Number/Name) 688EBC / Enhanced Budget Control		
COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
688EBC: <i>Enhanced Budget Control</i>	-	0.000	0.000	15.061	0.000	15.061	0.000	0.000	0.000	0.000	0.000	15.061
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

In FY23, \$15.061M was realigned to Budget Activity 08, PE 0308605F Project 682EBC to transparently define specific resources to be realigned in FY24 to USCYBERCOM for Enhanced Budget Control in accordance with FY21 NDAA, Section 1746.

This effort procures the Cyberspace Vulnerability Assessment/Hunter (CVA/H) kits for USCYBERCOM Cyber Protection Teams (CPTs). CVA/H kits are comprised of various commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) hardware and software required to perform the CVA/H missions in support of USCYBERCOM. The composition of procured items will vary from year-to-year and site-to-site based on operational requirements to achieve the weapon systems capabilities.

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

	FY 2021	FY 2022	FY 2023
Title: Enhanced Budget Controls	-	0.000	15.061
<p>Description: This effort procures the Cyberspace Vulnerability Assessment/Hunter (CVA/H) kits for USCYBERCOM Cyber Protection Teams (CPTs). CVA/H kits are comprised of various commercial-off-the-shelf (COTS) and government-off-the-shelf (GOTS) hardware and software required to perform the CVA/H missions in support of USCYBERCOM. The composition of procured items will vary from year-to-year and site-to-site to achieve the weapon systems capabilities.</p> <p>FY 2022 Plans: FY22 plans consolidated from FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures:</p> <ul style="list-style-type: none"> - Continue providing hardware refresh of the CVA/H subsystems and technical refresh of CPTs. <p>FY 2023 Plans: - Will continue to replace the subsystems fielded in FY20 for compliance with recent CVA/H hardware baseline standards for CPTs.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement:</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Air Force		Date: April 2022		
Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 688EBC / Enhanced Budget Control		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022	FY 2023
Funding decreased 1.559M with respect to FY22 request PE 0208088F, AF Defensive Cyberspace Operations, Line Item 834320, C3 Countermeasures to align with current operational requirements.				
Accomplishments/Planned Programs Subtotals		-	0.000	15.061
C. Other Program Funding Summary (\$ in Millions) N/A				
Remarks				
D. Acquisition Strategy Refer to Budget Activity 8, PE 0308605F, Project 682001, AFDCS Continuous Capability Delivery for description of acquisition strategy.				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force												Date: April 2022			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
3600 / 8				PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program				688EBC / Enhanced Budget Control							
Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
AFDCS: Hardware Procurement CPT	C/FFP	VARIOUS : VARIOUS	-	-		-		15.061	Mar 2023	-		15.061	Continuing	Continuing	-
Subtotal			-	-		-		15.061		-		15.061	Continuing	Continuing	N/A
			Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		-		15.061		-		15.061	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program	Project (Number/Name) 688EBC / Enhanced Budget Control

FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
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

AFDCS																												
Budget Control																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
Appropriation/Budget Activity 3600 / 8	R-1 Program Element (Number/Name) PE 0308605F / <i>Air Force Defensive Cyber Systems (AFDCS) - Software Pilot Program</i>	Project (Number/Name) 688EBC / <i>Enhanced Budget Control</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AFDCS				
Budget Control	1	2023	4	2023

Note

In FY23, Budget Activity 8, PE 0308605F, Project 682001, AFDCS Continuous Capability Delivery funds in the amount of \$15.061M were transferred to Budget Activity 8, PE 0308605F, Project 682EBC, in order to display budget controls which will be realigned in FY24 in accordance with the FY21 NDAA Section 1746.