Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force												Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0305236F / *Common Data Link Executive Agent (CDL EA)*							
COST ($ in Millions)	**Prior Years**	**FY 2022**	**FY 2023**	**FY 2024 Base**	**FY 2024 OCO**	**FY 2024 Total**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**Cost To Complete**	**Total Cost**
Total Program Element	-	43.881	37.460	25.157	0.000	25.157	33.291	34.119	34.820	36.080	Continuing	Continuing
641334: *Common Data Link (CDL)*	-	43.881	37.460	25.157	0.000	25.157	33.291	34.119	34.820	36.080	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Common Data Link Executive Agent (CDL EA) provides the DoD standard for interoperable, multi-service, multi-agency, Intelligence, Surveillance, and Reconnaissance (ISR) datalinks for 15,000 DoD manned/unmanned airborne and ground terminals. As the DoD CDL EA, the Air Force is responsible for cross-service application of CDL RDT&E Military Intelligence Program (MIP) funds facilitating compliance to DoD mandates. The CDL EA develops, modifies, distributes, and maintains specifications for the CDL waveform family; ensuring design configuration control, commonality, and interoperability among ISR platforms. Additionally, funds support managing resources allocated for development, maturation, and migration of CDL technologies.

CDL EA enables compliance with OSD mandates to effectively utilize spectrum, use approved cryptographic equipment, and provide direct support to current operations. CDL is a vital link in DoD's existing and emerging communication architectures, providing flexibility to accommodate Command and Control (C2) data and myriad types of Signals Intelligence (SIGINT), Geospatial Intelligence (GEOINT), and Full-Motion Video (FMV) data. The CDL specifications permit current and future ISR asset operations worldwide by providing sensor data directly via point-to-point and air-to-air or compatible satellite broadcast links to ground sites, airborne platforms, and dismounted users to support Joint All-Domain Command and Control (JADC2) warfare.

CDL EA's research and development activities support a broad array of tactical (including tactical data links (TDL) and high capacity backbone (HCB)), operational, and strategic ISR users. High priority investment activities support and include: achieving higher data rates, open architecture development, multi-access and multi-node network management, cryptographic modernization, advancements needed to operate in contested environments, terminal and antenna design enhancements, operations in other spectral bands for spectrum efficiency. Activities also include studies and analysis to support current and future requirements documentation, program planning and execution. CDL prototype terminal designs provide for future technology insertion and reduce non-recurring engineering and life-cycle costs to the user.

In addition, the Cryptographic Core Modernization (CCM) thrust enables CDL to develop a miniaturized gigabit rate cybersecurity devices capable of securing CDL data through improving Transportation Security (TRANSEC) capabilities. The miniaturized Cybersecurity device will allow faster throughput while reducing Size, Weight, and Power (SWaP) requirements.

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,

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
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0606398F. In FY22 $0.444M was expended for civilian pay expenses in this program element, and in FY23 $0.450M is forecasted for civilian pay expenses in this program element.

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

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	43.881	37.460	32.487	0.000	32.487
Current President's Budget	43.881	37.460	25.157	0.000	25.157
Total Adjustments	0.000	0.000	-7.330	0.000	-7.330
• 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	-7.330	0.000	-7.330

Change Summary Explanation

The FY 2024 funding request was reduced by [7.330] million to account for the availability of prior year execution balances.

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
Title: Common Data Link (CDL) Technology Advancement	19.100	14.062	11.757
Description: CDL evolutionary concept development, exploratory prototyping, advanced technology demonstrations, and studies of emerging technologies and capability gaps. ***FY 2023 Plans:*** - Continue to research and evaluate technology developments for enhancing the CDL enterprise networking architecture, to include network management devices, applications and advanced algorithms. - Continue to research, evaluate and develop more spectrally efficient waveforms to support Combatant Command demand for higher bandwidth transmission and improved jam resistant capabilities. - Continue to research, evaluate and develop improvements to CDL waveforms to lower probability of detection and interception to support Combatant Command demand for improved covertness of ground and airborne forces.			

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
- Continue development of enhanced, CDL-based Intelligence, Surveillance and Reconnaissance (ISR) communication capabilities across multiple platforms and echelons among U.S and allied partners. - Continue development of a collaborative CDL modeling and simulation environment using Navy Research Lab's Extendable Mobile Ad-Hoc Network Emulator (EMANE) framework for CDL performance analysis and waveform advancements. The CDL EMANE environment will be the baseline for joint Service and vendor collaboration as the community modernizes CDL for the future fight. - Continue waveform performance analysis of current CDL capabilities and future enhancements on their ability to achieve mission success in National Defense Strategy (NDS) derived scenarios to focus future CDL modernization efforts to update the CDL specifications. - Continue analysis and study of multi-beam antenna technology to further improve CDL networking and Low Probability of Interception / Low Probability of Detection / Anti-Jam (LPI/LPD/AJ) capabilities in future contested battlespace. - Continue antenna array modernization with the Extremely Wideband Operations (EWO) antenna array research and development. - Continue to research, evaluate and develop an Open Systems Architecture to improve CDL enterprise interoperability and terminal design flexibility. - Continue prototyping and advanced technology demonstrations in support of emerging communication backbone architecture, including high capacity backbone (HCB) development, across multi-domains. - Continue requirements and design improvements for more robust BE-CDL support to smaller Group 1 UAV. - Continue exploratory prototyping efforts and advanced technology demonstrations in support of emerging communication backbone architecture, including HCB development, across air, space and terrestrial layers, to include agile high capacity data transport, assured communications and multi-mode access network. - Continue research and evaluate developing Artificial Intelligence (AI) technologies to support faster correlation and fusion of ISR and CDL network management processes. - Continue to research and evaluate developing technologies to minimize the National Security Agency (NSA) required certification requirements for terminals while standardizing Communications Security (COMSEC) and Transmission Security (TRANSEC) implementation. ***FY 2024 Plans:*** - Will continue to research and evaluate technology developments for enhancing the CDL enterprise networking architecture, to include network management devices, applications and advanced algorithms. - Will continue to research, evaluate and develop more spectrally efficient waveforms to support Combatant Command demand for higher bandwidth transmission and improved jam resistant capabilities. - Will continue to research, evaluate and develop improvements to CDL waveforms to lower probability of detection and interception to support Combatant Command demand for improved covertness of ground and airborne forces.			

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
- Will continue development of enhanced, CDL-based Intelligence, Surveillance and Reconnaissance (ISR) communication capabilities across multiple platforms and echelons among U.S and allied partners. - Will continue development of a collaborative CDL modeling and simulation environment using Navy Research Lab's Extendable Mobile Ad-Hoc Network Emulator (EMANE) framework for CDL performance analysis and waveform advancements. The CDL EMANE environment will be the baseline for joint Service and vendor collaboration as the community modernizes CDL for the future fight. - Will continue waveform performance analysis of current CDL capabilities and future enhancements on their ability to achieve mission success in National Defense Strategy (NDS) derived scenarios to focus future CDL modernization efforts to update the CDL specifications. - Will continue analysis and study of multi-beam antenna technology to further improve CDL networking and Low Probability of Interception / Low Probability of Detection / Anti-Jam (LPI/LPD/AJ) capabilities in future contested battlespace. - Will continue antenna array modernization with the Extremely Wideband Operations (EWO) antenna array research and development. - Will continue to research, evaluate and develop an Open Systems Architecture to improve CDL enterprise interoperability and terminal design flexibility. - Will continue prototyping and advanced technology demonstrations in support of emerging communication backbone architecture, including high capacity backbone (HCB) development, across multi-domains. - Will continue requirements and design improvements for more robust BE-CDL support to smaller Group 1 UAV. - Will continue exploratory prototyping efforts and advanced technology demonstrations in support of emerging communication backbone architecture, including HCB development, across air, space and terrestrial layers, to include agile high capacity data transport, assured communications and multi-mode access network. - Will continue research and evaluate developing Artificial Intelligence (AI) technologies to support faster correlation and fusion of ISR and CDL network management processes. - Will continue to research and evaluate developing technologies to minimize the National Security Agency (NSA) required certification requirements for terminals while standardizing Communications Security (COMSEC) and Transmission Security (TRANSEC) implementation. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Decrease in technology advancement funding relates to transfer of funds from test and evaluation funding to prepare for next formal publication of updated CDL Specification advancements in late FY2025.			
Title: Common Data Link (CDL) Specification Development, Validation, Test and Maintenance	15.000	15.298	8.300

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
Description: Systems engineering lifecycle for CDL and NATO STANAG 7085 specification development: requirement decomposition, specification development (modeling, maturation, documentation), specification validation (and associated component prototyping), testing, configuration management, and process maintenance. ***FY 2023 Plans:*** - Continue development of vendor and government owner reference implementation of the new LPI/LPD/AJ waveform to perform future test and validation to ensure the CDL specification is accurate and can be built by multiple vendors in the future, therefore keeping the market space open. - Continue evaluation, analysis and study of network management devices, network and waveform configuration tool development; transition improved technologies into CDL Specification baseline that increases data sharing across Service-specific networks. - Continue development and advancement of dynamical control algorithms to enable terminals to more efficiently use CDL spectrum. This work is also to validate the CDL Common Control Interface. - Continue to work with CDL industry partners and DoD Services and Agencies to document, validate, and test common terminal control interfaces through use of commercially recognized standards. - Continue configuration control of the CDL architecture, standards, specifications and reference artifacts to support open interoperability and open competition. - Continue development of CDL test equipment capable of compliance testing to the latest, validated version of CDL specifications. ***FY 2024 Plans:*** - Will continue development of vendor and government owner reference implementation of the new LPI/LPD/AJ waveform to perform future test and validation to ensure the CDL specification is accurate and can be built by multiple vendors in the future, therefore keeping the market space open. - Will continue evaluation, analysis and study of network management devices, network and waveform configuration tool development; transition improved technologies into CDL Specification baseline that increases data sharing across Service-specific networks. - Will continue development and advancement of dynamical control algorithms to enable terminals to more efficiently use CDL spectrum. This work is also to validate the CDL Common Control Interface. - Will continue to work with CDL industry partners and DoD Services and Agencies to document, validate, and test common terminal control interfaces through use of commercially recognized standards. - Will continue configuration control of the CDL architecture, standards, specifications and reference artifacts to support open interoperability and open competition.			

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
- Will continue development of CDL test equipment capable of compliance testing to the latest, validated version of CDL specifications. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Decrease in technology advancement funding relates to, in part a relative allocation of funds from test evaluation funding to prepare for the next formal publication of updated CDL Specification advancements in late FY025.			
Title: Common Data Link (CDL) Cryptographic Modernization	9.781	8.100	5.100
Description: Phased development effort to modernize CDL Communications Security (COMSEC) and Transmission Security (TRANSEC) devices and standards to maximize performance and reduce Size Weight and Power (SWaP) requirements while supporting interoperability, commonality, modularity, portability, remote management, multi-level security and release to Allied and Coalition partners. ***FY 2023 Plans:*** - Continue to research and evaluate developing technologies to minimize the National Security Agency (NSA) required certification requirements for terminals while standardizing Communications Security (COMSEC) implementation. - Continue incorporating data Transmission Security (TRANSEC) support, data handling capabilities, and new cryptographic algorithms into all cryptographic core form factors (i.e., Nano, Mini and Mega). - Complete the upgrades for Nano and Mini crypto cores with customer requested Engineering Change Proposals (ECP) and complete Security Validation Testing (SVT) and subsequent National Security Agency (NSA) Cyber Security Certification. - Continue to ensure CDL family of waveforms meet developing Transmission Security (TRANSEC) requirements as outlined by the Office of Secretary of Defense Chief Information Officer (DoD CIO). - Continue development, prototyping, and First Implementer integration testing of multi-channel, gigabit data rate (Mega) cryptographic cores. - Continue to work with Army Reconfigurable Communications for Small Unmanned Systems (RCSUS) Acquisition program to develop a Type 1 cryptographic solution (Pico) for Group 1 Unmanned Aerial Vehicles (UAVs) that provides algorithmic interoperability, using CCM cryptography, for Full Motion Video (FMV) datalinks with existing manned and unmanned ISR platforms and ground stations. - Continue development and design of common End Cryptographic Units (ECUs) for use with medium- and large-sized ISR terminals. - Continue development of a reference ECU using the Mega CCM crypto core for hardware/software and interface documentation validation. - Continue the advancement of standardized CCM interface specifications for modularity to ease future systems upgrades, facilitate competitive terminal procurements, promote innovation, and maintain backward compatibility with existing Intelligence, Surveillance and Reconnaissance (ISR) systems.			

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
- Continue development, advancement and instantiation of CCM algorithms to support FIVE EYE (FVEY), North Atlantic Treaty Organization (NATO), and Coalition operations for secure encrypted and interoperable ISR data exchange among allied and partner nations. - Continue participating in FVEY, NATO and Coalition forums, testing venues and exercises (including live-fly) to ensure secure encrypted and interoperable ISR data exchange among allied and partner nations. ***FY 2024 Plans:*** - Will continue to research and evaluate developing technologies to minimize the National Security Agency (NSA) required certification requirements for terminals while standardizing Communications Security (COMSEC) implementation. - Will continue incorporating data Transmission Security (TRANSEC) support, data handling capabilities, and new cryptographic algorithms into all cryptographic core form factors (i.e., Nano, Mini and Mega). - Will continue to upgrade Nano and Mini crypto cores with customer requested Engineering Change Proposals (ECP) and complete Security Validation Testing (SVT) and subsequent National Security Agency (NSA) Cyber Security Certification. - Will continue to ensure CDL family of waveforms meet developing Transmission Security (TRANSEC) requirements as outlined by the Office of Secretary of Defense Chief Information Officer (DoD CIO). - Will complete development, prototyping, integration testing and Cyber Security Certification of multi-channel, gigabit data rate (Mega) cryptographic cores and move into full rate production and delivery to ISR platforms. - Will continue development, prototyping, and First Implementer integration and testing on a Type 1 cryptographic solution (Pico) for Group 1 Unmanned Aerial Vehicles (UAVs) that provides algorithmic interoperability, using CCM cryptography, for Full Motion Video (FMV) datalinks with existing manned and unmanned ISR platforms and ground stations. - Will continue development and design of common End Cryptographic Units (ECUs) for use with medium- and large-sized ISR terminals. - Will continue development of a reference ECU using the Mega CCM crypto core for hardware/software and interface documentation validation. - Will continue the advancement of standardized CCM interface specifications for modularity to ease future systems upgrades, facilitate competitive terminal procurements, promote innovation, and maintain backward compatibility with existing Intelligence, Surveillance and Reconnaissance (ISR) systems. - Will continue development, advancement and instantiation of CCM algorithms to support FIVE EYE (FVEY), North Atlantic Treaty Organization (NATO), and Coalition operations for secure encrypted and interoperable ISR data exchange among allied and partner nations.			

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Air Force	Date: March 2023
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2022	FY 2023	FY 2024
- Will continue participating in FVEY, NATO and Coalition forums, testing venues and exercises (including live-fly) to ensure secure encrypted and interoperable ISR data exchange among allied and partner nations. ***FY 2023 to FY 2024 Increase/Decrease Statement:*** Decrease in funding due to completion of Generation 2 development and production of Nano, Mini and Mega core processors. Future funding focused on advancing internal TRANSEC capabilities and reducing SWaP for support to Group 1 (less than 20 pounds dry weight) ISR assets.			
Accomplishments/Planned Programs Subtotals	43.881	37.460	25.157

D. Other Program Funding Summary ($ in Millions)

N/A

Remarks

E. Acquisition Strategy

The Air Force serves as the DoD Common Data Link Executive Agent, with support from each Service's designated CDL lead and AFLCMC/HNA (Airborne Network Division). The CDL EA develops interoperable ISR data links mandated for use by DoD CIO policy. Once CDL technology development matures and a specification is published, services are responsible for CDL compliant platform and terminal procurement; National Security Agency (NSA) and Joint Interoperability Test Command (JITC) ensure compliance certifications; integration; and installation. Acquisition strategy varies by contract. Whenever possible, contracts are awarded under full and open competition.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*	**Project (Number/Name)** 641334 / *Common Data Link (CDL)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Cryptographic Modernization	MIPR	NSA : Ft Meade, MD	-	8.100	Dec 2021	8.100	Nov 2022	5.173		-		5.173	Continuing	Continuing	-
Generic ECU	C/Various	MIT/LL : San Antonio, TX	-	-		-		-		-		-	Continuing	Continuing	-
CDL Network Modernization	MIPR	Air Force and Navy : Various	-	4.750	Apr 2022	4.216	Feb 2023	4.000		-		4.000	Continuing	Continuing	-
A2AD Waveform Advancement	C/CPAF	Army : Various	-	2.500	Apr 2022	2.500	Mar 2023	1.500		-		1.500	Continuing	Continuing	-
CDL Multi Beam Survey and Demonstration	C/Various	Navy : Various	-	-		-		-		-		-	Continuing	Continuing	-
CDL Cognitive Radio Networking Element (CRNE)	C/Various	Navy : Various	-	1.330	Feb 2022	0.500	Dec 2022	-		-		-	Continuing	Continuing	-
CDL Performance Analysis	SS/FP	JHU/APL : Various	-	-		-		-		-		-	Continuing	Continuing	-
CDL Resource Management and Bridging Network	C/CPAF	Navy : Various	-	-		-		-		-		-	Continuing	Continuing	-
CDL Life Cycle Cost Analysis	C/CPAF	Various : Various	-	-		-		-		-		-	Continuing	Continuing	-
Flexible Ku-Band Adaptive Coding and Group 1/2 UAV CDL and Cryptographic SWaP	C/CPAF	Marine Corps : Various	-	2.100	Jan 2022	1.100	Mar 2023	1.000		-		1.000	Continuing	Continuing	-
Pseudorandom Noise (PM) Code Generation	C/CPAF	Air Force : Various	-	0.700	Jan 2022	0.700	Nov 2022	0.300		-		0.300	Continuing	Continuing	-
CDL Network Control Application	C/CPAF	Air Force : TBD	-	1.950	Feb 2022	1.950	Aug 2023	0.400		-		0.400	Continuing	Continuing	-
Open Systems Architecture Framework	C/CPAF	Navy : Various	-	1.000	Jan 2022	0.500	Mar 2023	0.500		-		0.500	Continuing	Continuing	-
Antenna Array Modernization	C/CPAF	Various : Various	-	1.500	Oct 2021	1.500	Dec 2022	-		-		-	Continuing	Continuing	-
Over the Air Parameter Administration	C/CPAF	Various : Various	-	1.000	Jan 2022	0.250	Feb 2023	-		-		-	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force			Date: March 2023
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*	**Project (Number/Name)** 641334 / *Common Data Link (CDL)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	-	24.930		21.316		12.873		-		12.873	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Service Tech Support & Spec Development	MIPR	Various : Various	-	4.200	Dec 2021	3.000	Dec 2022	3.134		-		3.134	Continuing	Continuing	-
Joint Staff CDL Requirements Support	MIPR	Joint Staff - J6 : Arlington, VA	-	-		0.225	Feb 2023	-		-		-	Continuing	Continuing	-
NATO STANAG 7085 Support	MIPR	Air Force : Various	-	0.500	Feb 2022	0.500	Apr 2023	0.350		-		0.350	Continuing	Continuing	-
Fielded Terminals Database	C/CPFF	Booz Allen : McLean, VA	-	0.800	Jan 2022	0.500	Mar 2023	0.400		-		0.400	Continuing	Continuing	-
		Subtotal	-	5.500		4.225		3.884		-		3.884	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Interoperability Test Command Support	Various	Not specified. : TBD	-	0.800	Feb 2022	0.800	Jun 2023	0.400		-		0.400	Continuing	Continuing	-
CDL Exercise Support	MIPR	Various : Various	-	0.500	Apr 2022	0.500	Jan 2023	0.500		-		0.500	Continuing	Continuing	-
CDL Mode 303/304 Security Validation	C/CPAF	Various : Various	-	1.200	Feb 2022	1.200	Feb 2023	0.500		-		0.500	Continuing	Continuing	-
Compliance Test Tool	C/CPAF	Various : Various	-	1.500	Feb 2022	1.000	Dec 2022	-		-		-	Continuing	Continuing	-
Cyber Security Initiative	C/CPAF	Navy : San Diego, CA	-	0.650	Jan 2022	0.650	Dec 2022	-		-		-	Continuing	Continuing	-
		Subtotal	-	4.650		4.150		1.400		-		1.400	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Air Force			Date: March 2023
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0305236F / *Common Data Link Executive Agent (CDL EA)*	Project (Number/Name) 641334 / *Common Data Link (CDL)*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MITRE Engineering Direct Mission Support (FFRDC)	SS/CPFF	MITRE Corp. : Bedford, MA	-	5.800	Oct 2021	5.300	Oct 2022	5.000		-		5.000	Continuing	Continuing	-
PMO Support - AFLCMC (HNAG)	C/CPFF	Various : Various, MA	-	3.001	Feb 2022	2.469	Apr 2023	2.000		-		2.000	Continuing	Continuing	-
		Subtotal	-	8.801		7.769		7.000		-		7.000	Continuing	Continuing	N/A

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	43.881		37.460		25.157		-		25.157	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*	**Project (Number/Name)** 641334 / *Common Data Link (CDL)*

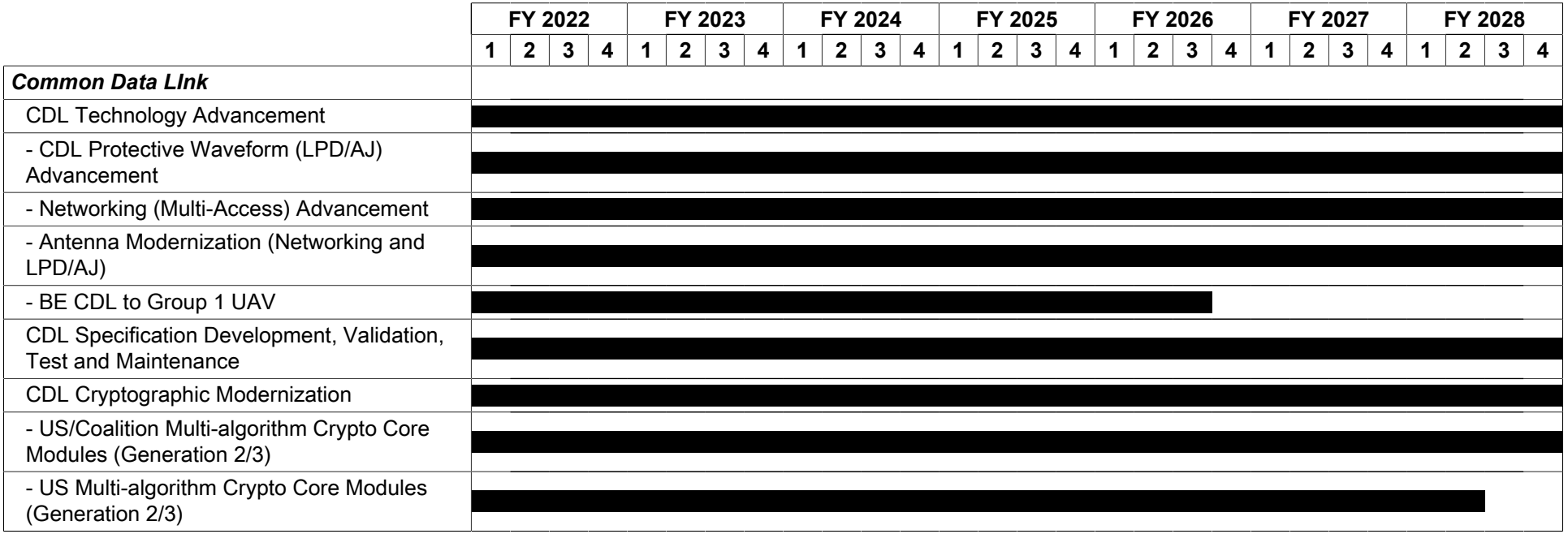

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Air Force		Date: March 2023
Appropriation/Budget Activity 3600 / 4	**R-1 Program Element (Number/Name)** PE 0305236F / *Common Data Link Executive Agent (CDL EA)*	**Project (Number/Name)** 641334 / *Common Data Link (CDL)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Common Data LInk				
CDL Technology Advancement	1	2022	4	2028
- CDL Protective Waveform (LPD/AJ) Advancement	1	2022	4	2028
- Networking (Multi-Access) Advancement	1	2022	4	2028
- Antenna Modernization (Networking and LPD/AJ)	1	2022	4	2028
- BE CDL to Group 1 UAV	1	2022	3	2026
CDL Specification Development, Validation, Test and Maintenance	1	2022	4	2028
CDL Cryptographic Modernization	1	2022	4	2028
- US/Coalition Multi-algorithm Crypto Core Modules (Generation 2/3)	1	2022	4	2028
- US Multi-algorithm Crypto Core Modules (Generation 2/3)	1	2022	2	2028