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

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0305205N / <i>UAS Integration & Interoperability</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	146.568	61.198	5.000	18.373	-	18.373	12.396	7.386	6.472	6.544	Continuing	Continuing
3379: <i>Common Control System</i>	146.568	61.198	5.000	18.373	-	18.373	12.396	7.386	6.472	6.544	Continuing	Continuing

A. Mission Description and Budget Item Justification

Project 3379: Common Control System (CCS) budget profile supports MQ-8 Fire Scout and follow-on Unmanned Systems (UxS) platforms.

The primary mission of CCS is to provide common control across the Navy's UxSs portfolio to add scalable and adaptable warfighting capability, implement robust cybersecurity attributes, leverage existing government owned products, eliminate redundant software development efforts, consolidate product support, encourage innovation thru competition, improve cost control and enable rapid integration of UxS capabilities across Aviation, Surface, Sub-Surface, and Ground domains.

CCS is a ship/shore/airborne/expeditionary based common control system that provides Vehicle Management (VM) and MM/MP capabilities for Naval Group 1 through 5 Unmanned Air Vehicles (UAVs) as well as other domain UxSs. VM is the software that allows the operator to control the UxS. MM/MP is the software that allows the operator to create mission plans and control the UxS's sensors and payloads. CCS software is based on the Society of Automotive Engineers (SAE) Unmanned Control Segment (UCS) architecture which is a service oriented open architecture that is modular and scalable to meet evolving Service requirements and is also supportive of safety/airworthiness certification and cybersecurity certification. CCS is integrated with legacy UxS Platforms' defined hardware, processors and networks.

The CCS requirements are documented in an approved and validated Information Systems Initial Capabilities Document (IS-ICD) and in approved Requirement Definition Packages (RDPs). CCS offers a low cost test and integration alternative for platform suitability determination across a broad spectrum of UxS capability. CCS is also developing affordable, scalable capabilities that are exportable to UxS platforms in the following areas: cyber security/ resiliency, interoperability solutions (across multiple architectures), multi-level security, executive control, autonomy and artificial intelligence/ machine learning.

This program defines, develops, and delivers CCS capability that enables the flexibility for Ground Control Systems (GCS) that could be ship, shore, airborne, or expeditionary based to operate multiple and dissimilar Naval UxSs. CCS includes a common framework, user interface, and common components that will also be integrated and tested with legacy platform components. CCS is being developed with an open and modular business model with robust cybersecurity implementation and will be provided as Government Furnished Equipment (GFE) to UxS contractors as required.

The CCS acquisition approach provides increasing capability through incremental development for UxS platforms as follows: CCS will deliver a UAS baseline of VM and MM software built to the full SAE UCS standard to support emerging requirements. Increment I development activities completed in FY 2019. Increment II builds upon CCS Increment I software delivery, adding discrete common MM/MP capabilities as well as maturing VM capabilities. These MM/MP capabilities include route planning, sensor and payload control, and data processing and dissemination. CCS Increment II software will be hosted on legacy platform hardware. Increment II adds robust cybersecurity controls, key systems safety attributes and core program infrastructure, to include a system integration lab and software support activity (SSA), which provides software maintenance and support such as monthly cybersecurity patches and Correction of Deficiencies. Additional efforts include developing and executing plans for integration of common CCS VM services already developed under this program into other UxS cross-domain platforms' control stations to reduce

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department-level Total Ownership Costs for unmanned Ground Control Systems. The CCS Acquisition Strategy will be revised going forward in FY21 to align with the UxS Campaign Plan to focus on executive control, automation, artificial intelligence, machine learning for UxS systems and continuing to reduce barriers to integration of Government owned software services.

Starting in FY23, increased focus on Autonomy development. Autonomy development includes: collaboration with Industry and other Government agencies regarding technology maturation and transition; Capability Test, Evaluation, Validation, and Verification (TEVV); and Capability Monitoring & Sustainment. As part of autonomy development, the program will begin transition activities for the autonomy elements of the AVATAR Manned-Unmanned Teaming (MUM-T) program, in coordination with other partner programs, with the ultimate goal of fielding an MUM-T capability.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	61.235	9.797	0.000	-	0.000
Current President's Budget	61.198	5.000	18.373	-	18.373
Total Adjustments	-0.037	-4.797	18.373	-	18.373
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-4.797			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.037	0.000			
• Program Adjustments	0.000	0.000	0.000	-	0.000
• Rate/Misc Adjustments	0.000	0.000	0.000	-	0.000
• Adjustments to Budget Year	-	-	18.373	-	18.373

Change Summary Explanation

FY 2023 funding increase reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Navy										Date: April 2022		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305205N / UAS Integration & Interoperability				Project (Number/Name) 3379 / Common Control System			
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
3379: Common Control System	146.568	61.198	5.000	18.373	-	18.373	12.396	7.386	6.472	6.544	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Common Control System (CCS) budget profile supports MQ-8 Fire Scout and follow on UxS platforms.

The primary mission of CCS is to provide common control across the Navy's UxSs portfolio to add scalable and adaptable warfighting capability, implement robust cybersecurity attributes, leverage existing government owned products, eliminate redundant software development efforts, consolidate product support, encourage innovation thru competition, improve cost control and enable rapid integration of UxS capabilities across Aviation, Surface, Sub-Surface, and Ground domains.

CCS is a ship/shore/airborne/expeditionary based common control system that provides Vehicle Management (VM) /MM/MP capabilities for Naval Group 1 through 5 Unmanned Air Vehicles (UAVs) as well as other domain UxSs. VM is the software that allows the operator to control the UxS. MM/MP is the software that allows the operator to create mission plans and control the UxS's sensors and payloads. CCS software is based on the Society of Automotive Engineers (SAE) Unmanned Control Segment (UCS) architecture which is a service oriented open architecture that is modular and scalable to meet evolving Service requirements and is also supportive of safety/airworthiness certification and cybersecurity certification.

The CCS requirements are documented in an approved and validated Information Systems Initial Capabilities Document (IS-ICD) and in approved Requirement Definition Packages (RDP). This program defines, develops, and delivers CCS capabilities that enables the flexibility for Ground Control Systems (GCS) that could be ship, shore, airborne, or expeditionary based to operate multiple and dissimilar Naval UxSs. CCS includes a common framework, user interface, and common components that will also be integrated and tested with legacy platform components. CCS is being developed with an open and modular business model with robust cybersecurity implementation and will be provided as Government Furnished Equipment (GFE) to UxS contractors as required. The CCS acquisition approach provides increasing capability through incremental development for UxS platforms as follows: Increment I delivered initial unmanned vehicle management (VM) functionality for MQ-25 Stingray in FY 2018 and MQ-8 Fire Scout in FY 2019. Increment I development activities completed in FY 2019. Increment II builds upon CCS Increment I software delivery, adding discrete common MM/MP capabilities as well as maturing VM capabilities.

These MM/MP capabilities include route planning, sensor and payload control, and data processing and dissemination. CCS Increment II software will be hosted on legacy platform hardware. Increment II adds robust cybersecurity controls, key systems safety attributes and core program infrastructure, to include a system integration lab and software support activity (SSA), which provides monthly cybersecurity patches and Correction of Deficiencies. Additional efforts include developing and executing plans for integration of common CCS VM services already developed under this program into other UxS cross-domain platforms' control stations to reduce department-level Total Ownership Costs for unmanned Ground Control Systems. The CCS Acquisition Strategy was revised in FY21 to align with the UxS Campaign Plan to focus on executive control, automation, artificial intelligence and machine learning for UxS systems.

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Title: Increment II</p> <p align="right">Articles:</p> <p>Description: CCS Increment II develops common MM/MP capabilities and updates and matures VM capabilities, integrating these capabilities into the core CCS software baseline delivered under Increment I in support of Naval UxSs. CCS Increment II is the future common control system software that provides maximum commonality for affordable transition to MQ-8 Fire Scout, and other UxS to reduce enterprise Total Ownership Cost for UxS Ground Control Systems. Increment II also incorporates cyber security measures, key systems safety attributes, and core program infrastructure to include system integration lab and software support activities (SSA).</p> <p>FY 2022 Plans: The SSA will continue to provide integrated software baselines to supported UxS platforms, correct identified deficiencies, ensure cyber security compliance, and support engineering/test/evaluation activities. Development efforts support the CNO's Unmanned Campaign Plan including key focus areas related to Model-Based Systems Engineering, interoperability throughout the Navy and DoD, autonomy, artificial intelligence /machine learning, manned-unmanned teaming, cyber defense and continuing to reduce barriers to integration of Government owned software services. This includes incremental deliveries of both the Integrated Cyber Model (ICM) to detect/address cyber attacks during mission execution and the CCS Common Presentation Layer, the prerequisite for control of multiple dissimilar UxS vehicles from a single control station. Integration and test support for other CCS platforms will continue.</p> <p>FY 2023 Base Plans: The SSA will continue to provide integrated software baselines to supported UxS platforms, correct identified deficiencies, ensure cyber security compliance, and support engineering/test/evaluation activities. Development efforts support the CNO's Unmanned Campaign Plan, including key focus areas related to Model-Based Systems Engineering, interoperability throughout the Navy and DoD, autonomy, artificial intelligence /machine learning, manned-unmanned teaming, cyber defense and continuing to reduce barriers to integration of Government owned software services. This includes incremental deliveries of both the Integrated Cyber Model (ICM) to detect/address cyber attacks during mission execution and the CCS Common Presentation Layer, the prerequisite for control of multiple dissimilar UxS vehicles from a single control station. Begin integration efforts with Unmanned Maritime Autonomy Architecture (UMAA) in FY23 while integration and test support for other CCS platforms continue. Starting in FY23, funding will support an increased focus on Autonomy development. Autonomy development includes: collaboration with Industry and other Government agencies</p>	13.198	5.000	18.373	0.000	18.373
	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>regarding technology maturation and transition; Capability Test, Evaluation, Validation, and Verification (TEVV); and Capability Monitoring & Sustainment. As part of autonomy development, the program will begin transition activities for the autonomy elements of the AVATAR MUM-T program, in coordination with other partner programs, with the ultimate goal of fielding an operational MUM-T capability.</p> <p>FY 2023 OCO Plans: N/A</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: FY 2023 funding increase due to a net-zero realignment from CCS OPN, the CCS pivot from software development to autonomy/AI/ML development, and programmatic changes by MQ-25, MQ-8, and MQ-4. FY23 increase also due to commencement of increased focus on Autonomy development.</p>					
<p>Title: MQ-25 FY21</p> <p align="right">Articles:</p> <p>Description: \$48M CCS FY21 funding realigned to PMA-268(MQ-25) during execution due to: 1) \$35.1M cost avoidance realized by fielding Minotaur with CCS and deferring the program's Inc. III study. 2) \$9.1M platform integration savings due to the Navy's decision to switch the MQ-25 Ground Control Station (GCS) from the MD-5 A/B to the MD-5 C/D/E GCS. 3) \$3.7M Systems Integration Support (Gov't/Contractor).</p> <p>FY 2022 Plans: N/A</p> <p>FY 2023 Base Plans: N/A</p> <p>FY 2023 OCO Plans: N/A</p>	48.000	0.000	0.000	0.000	0.000
	-	-	-	-	-
Accomplishments/Planned Programs Subtotals	61.198	5.000	18.373	0.000	18.373

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

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPN/4250: <i>Common Control System</i>	1.189	1.470	1.610	-	1.610	5.611	5.613	5.618	5.728	Continuing	Continuing

Remarks

D. Acquisition Strategy

Program Executive Office Unmanned Aviation and Weapon Systems (PEO(U&W)) issued an Acquisition Decision Memorandum (ADM) 5000 Ser PEO(U&W)/11-093 dated July 1, 2011 to establish the Common Control System (CCS) to achieve Unmanned Aircraft System (UAS) common control across PEO(U&W) UAS platforms to eliminate redundant efforts, encourage innovation and improve cost control of unmanned aviation.

As directed by the ADM the program will define, develop and deliver a common control system to be integrated into platform ground control systems that operate respective naval Unmanned Systems (UxS)s. This will include a common framework, a common user interface and common components that will be integrated and tested with unique components on emerging or legacy platforms. The CCS acquisition approach provides increasing UxS capability through incremental development for UxS platforms as follows: Increment I provided common Vehicle Management (VM) capability to MQ-25 Stingray and MQ-8 Fire Scout which can also support other UxSs.

Increment II develops common MM/MP capabilities and updates and matures VM capabilities, integrating these capabilities into the core CCS software baseline delivered under Increment I in support of Naval UxSs. CCS was provided to the MQ-25 Stingray air vehicle prime as Government-Furnished Equipment (GFE) in FY 2018 and was also provided for transition to MQ-8 Fire Scout starting in FY 2019.

CCS will be provided to additional follow-on UxS platforms to further reduce enterprise Total Ownership Cost for Ground Control Systems. CCS leverages existing government-owned products and will employ competitive procurement vehicles.

ASN (RDA) designated CCS Increment II as an ACAT II program on December 1, 2017. PEO(U&W) issued ADM 5000 Ser PEO(U&W)/18-119 dated September 11, 2018 approving the CCS Increment II Acquisition Strategy. PEO(U&W) issued ADM 5000 Ser PEO(U&W)/18-157 dated October 5, 2018 approving the CCS acquisition documentation tailoring and entry criteria for Increment II Milestone B. OPNAV N9 letter designating CCS as the Navy's Unmanned Systems' (UxS) Control Station software signed 31 JAN 19. CCS IS-ICD signed by OPNAV N9 on 01 MAR 19 and validated by JROC on 23 JUL 19. Requirements Definition Package (RDP) for CCS Unmanned Aircraft System (UAS) VM was signed by OPNAV N98 on 07 MAR 19. RDP for CCS UAS MM/MP signed by OPNAV N98 on 07 MAR 19. A Key Performance Parameter for all future Navy Unmanned Systems to use CCS was approved by OPNAV N9 08 JAN 2020. RDP for CCS interoperability signed by OPNAV N98 on 23 JUL 20. CCS was reaffirmed as the Navy's Modular Open Systems Architecture (MOSA) control software solution for all Navy Unmanned Systems (UxS), DEC 2020. OPNAV N9 further highlighted their commitment to CCS as defined in the UxS Campaign Plan on 17 MAR 21.

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

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305205N / UAS Integration & Interoperability	Project (Number/Name) 3379 / Common Control System
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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			
Primary Software Development (Increment I)	C/CPFF	Raytheon : Dulles, VA	44.177	0.000		0.000		0.000		-		0.000	0.000	44.177	44.228
Primary Software Development - Software Services (Increment II)	C/CPFF	TBD : TBD	0.000	0.000		0.000	Jul 2022	3.000	Jan 2023	-		3.000	Continuing	Continuing	Continuing
Primary Software Development - Software Services (Increment II)	C/CPFF	Northrop Grumman : Rancho Bernardo, CA	13.034	0.000	Mar 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Primary Software Development - Software Services (Increment II)	C/CPFF	Raytheon : Dulles, VA	2.364	0.000	Jan 2021	0.000		0.000		-		0.000	0.000	2.364	2.364
Advanced Development	WR	NAWC-WD : China Lake, CA	8.339	0.235	Nov 2021	0.240	Nov 2021	0.245	Nov 2022	-		0.245	0.000	9.059	8.339
Software Cyber Modeling	C/CPFF	JHU APL : Baltimore, MD	4.599	0.350	Jul 2021	0.000	Jul 2022	0.551	Jul 2023	-		0.551	Continuing	Continuing	Continuing
Architecture Development	C/CPFF	SEI : Hanscom, MA	1.355	0.000		0.000		0.000		-		0.000	0.000	1.355	1.355
Architecture Development	C/CPFF	NRL : Washington, DC	2.330	0.000		0.000		0.000		-		0.000	0.000	2.330	2.330
Architecture Development	Various	Various : Various	4.605	0.128	Mar 2021	0.100	Mar 2022	0.102	Mar 2023	-		0.102	0.000	4.935	3.605
SSA - Software Integration	C/CPFF	Raytheon : Dulles, VA	17.057	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
SSA - Software Integration	C/CPFF	NIWC : San Diego, CA	1.690	4.900	Nov 2020	0.835	Nov 2021	5.312	Nov 2022	-		5.312	Continuing	Continuing	Continuing
MQ-25 MIPR NSMA	TBD	NSMA : Washington, DC	0.000	48.000	May 2021	0.000		0.000		-		0.000	0.000	48.000	-
Autonomy Development	TBD	TBD : TBD	0.000	0.000		0.000		3.732	Nov 2022	-		3.732	0.000	3.732	-
Subtotal			99.550	53.613		1.175		12.942		-		12.942	Continuing	Continuing	N/A

Remarks
 The FY23 primary software development contracts support the CNO's UxS Campaign plan. The performing activity and location are currently TBD because of the competitive contracting strategy. Originally scheduled for an FY22 award, this effort is rescheduled due to program mark. Contract award will now be in FY23 Increase in FY23 Product Development line due to new cost element Autonomy development; SSA software integration and Software Cyber Modeling funding supports enterprise architecture restructuring required to align CCS with CNO's UxS Campaign Plan objectives and integration with Unmanned Maritime Autonomy Architecture (UMAA).

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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			
Systems Engineering	WR	NAWC-AD : Pax River, MD	18.381	3.650	Nov 2020	1.045	Nov 2021	1.516	Nov 2022	-		1.516	Continuing	Continuing	Continuing
Lead Systems Engineering and Integration	WR	NAWC-WD : Pt Mugu, CA	2.995	0.000		0.000		0.000		-		0.000	0.000	2.995	2.995
Systems Engineering	C/CPFF	Engility : Pax River, MD	0.756	0.000		0.000		0.000		-		0.000	0.000	0.756	0.756
Systems Engineering Integration Test	C/CPFF	Booz Allen : Pax River, MD	3.064	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Systems Engineering Study	C/CPFF	CNA : Alexandria, VA	0.800	0.000		0.000		0.000		-		0.000	0.000	0.800	0.800
Systems Engineering	Various	Various : Various	1.666	0.000		0.000		0.000		-		0.000	0.000	1.666	2.026
Systems Engineering Technical Agent	C/CPFF	DCS Corporation : Alexandria, VA	10.176	0.000		0.000		0.000		-		0.000	0.000	10.176	10.176
Systems Engineering Technical Agent Follow On	C/CPFF	DCS Corporation : Alexandria, VA	0.600	1.700	Nov 2020	1.734	Nov 2021	2.850	Nov 2022	-		2.850	Continuing	Continuing	Continuing
Systems Engineering	C/CPFF	PSE : San Diego, CA	0.650	1.100	Nov 2020	0.375	Nov 2021	0.382	Nov 2022	-		0.382	0.000	2.507	-
Subtotal			39.088	6.450		3.154		4.748		-		4.748	Continuing	Continuing	N/A

Remarks
 FY22 decrease in Systems Engineering - NAWC-AD and Systems Engineering - PSE due to congressional mark.
 FY23 activities continue the development of the CCS architecture and requirements in support of the CNO's UxS Campaign Plan.
 Increase in Systems Engineering Technical Agent, Systems Engineering funding supports enterprise architecture restructuring required to align CCS with CNO's UxS Campaign Plan objectives.

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			
DT&E/OT	WR	NAWC-AD : Pax River, MD	2.194	0.351	Nov 2020	0.190	Nov 2021	0.193	Nov 2022	-		0.193	Continuing	Continuing	Continuing
DT&E	WR	NAWC-WD : Pt Mugu, CA	0.730	0.000		0.000		0.000		-		0.000	0.000	0.730	0.730

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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			
DT&E/OT	C/CPFF	BAE : Rancho Bernardo, CA	2.549	0.000		0.000		0.000		-		0.000	0.000	2.549	2.549
Subtotal			5.473	0.351		0.190		0.193		-		0.193	Continuing	Continuing	N/A

Remarks
FY23 Test and Evaluation efforts support DT/OT events for the integration and test of CCS Increment II software services support, MQ-8 Fire Scout and additional UxS platforms.

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			
Program Management	WR	NAWC-AD : Pax River, MD	1.450	0.351	Nov 2020	0.250	Nov 2021	0.255	Nov 2022	-		0.255	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	Ausley Associates : Lexington Park, MD	1.007	0.433	May 2021	0.231	May 2022	0.235	May 2023	-		0.235	Continuing	Continuing	Continuing
Subtotal			2.457	0.784		0.481		0.490		-		0.490	Continuing	Continuing	N/A

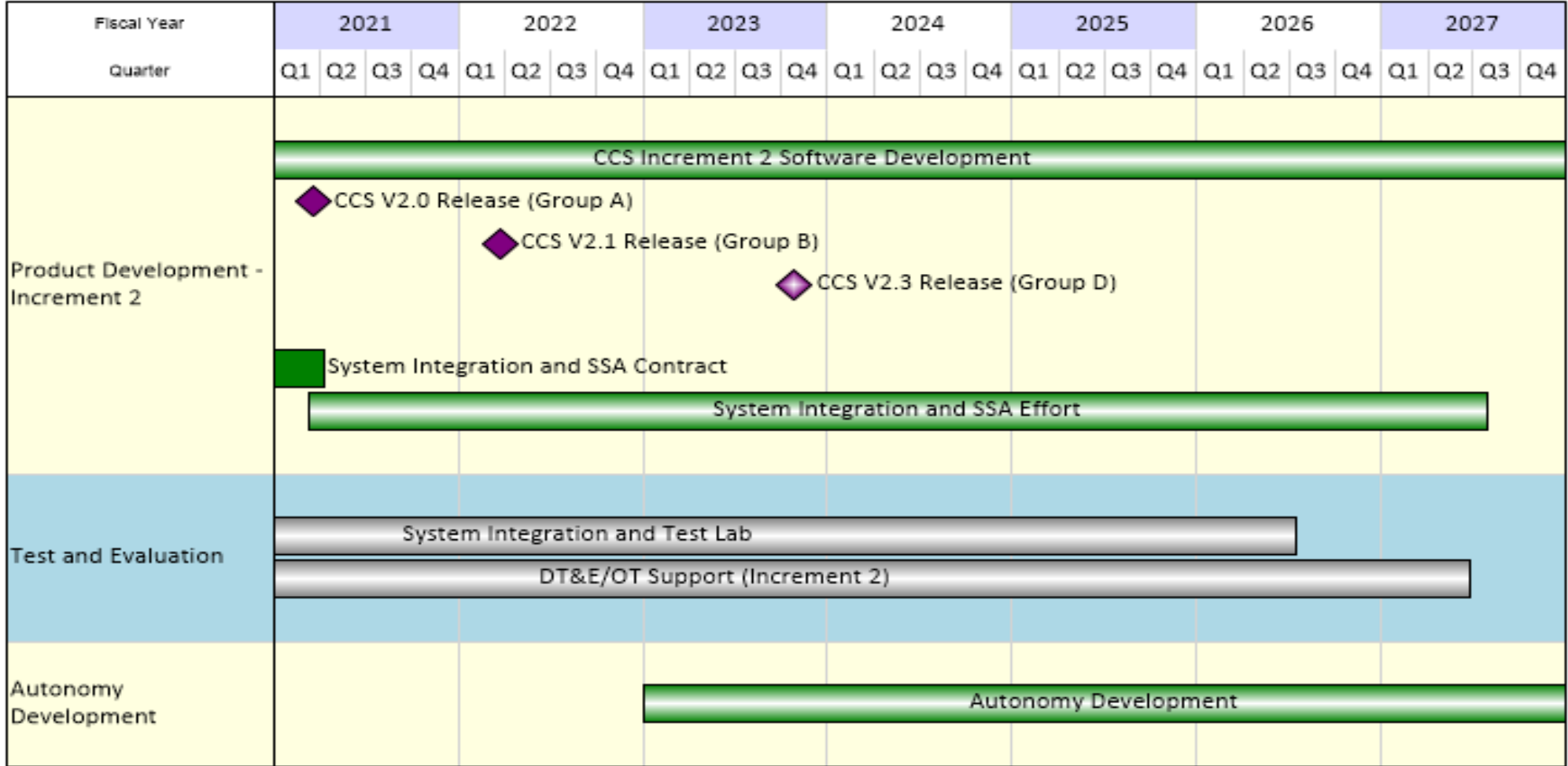
Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract			
Project Cost Totals			146.568	61.198	5.000	18.373	-	18.373	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Navy **Date:** April 2022

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Navy		Date: April 2022
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305205N / UAS Integration & Interoperability	Project (Number/Name) 3379 / Common Control System

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Common Control System				
Product Development: Increment II: CCS Program Software Integration/SSA Support	1	2021	2	2021
Product Development: Increment II: CCS Program Software Integration/SSA Follow-on Efforts	2	2021	3	2027
Product Development: Increment II: CCS Increment II Software Development	1	2021	4	2027
Product Development: Increment II: CCS V2.0 Release	2	2021	2	2021
Test and Evaluation: DT&E/OT Support (Increment II)	1	2021	2	2027
Test and Evaluation: System Integration and Test Laboratory	1	2021	3	2026
Autonomy Development: Autonomy Development	3	2023	4	2027