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**Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>
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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	228.674	86.255	76.107	86.448	-	86.448	104.991	90.371	84.150	49.267	Continuing	Continuing
2213: <i>Mission Planning</i>	185.776	75.371	58.873	74.401	-	74.401	92.837	78.018	71.631	36.403	Continuing	Continuing
2311: <i>Stores Planning and Weaponneering Module</i>	42.898	10.884	12.234	12.047	-	12.047	12.154	12.353	12.519	12.864	Continuing	Continuing
9999: <i>Congressional Adds</i>	0.000	0.000	5.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5.000

**A. Mission Description and Budget Item Justification**

The Mission Planning PE is used to develop automated mission planning systems to support Naval Aviation.

The Joint Mission Planning System (JMPS) (Proj 2213) is the designated automated mission planning system for Naval Aviation, supporting over 40 Type/Model/Series (T/M/S) of U.S. Navy and Marine Corps aircraft, expeditionary forces as well as Joint and Coalition forces. The Joint Mission Planning System - Maritime (JMPS-M) enables weapon system employment by providing the information, automated tools, and decision aids needed to rapidly plan aircraft, weapon, or sensor missions, load mission data into aircraft and weapons, conduct mission rehearsal, execute missions, and conduct post-mission analysis. The Joint Mission Planning System - Expeditionary (JMPS-E) is a scalable, tailorable, and collaborative web-based mission planning and execution monitoring tool for Amphibious Squadron staffs embarked with each Amphibious Ready Group and Expeditionary Strike Group. Electronic Kneeboard (EKB) is a mobile computing device configured with various software applications and features to support aircrew during pre-flight planning, in-flight re-planning and mission execution, and post-mission debriefing and analysis. Preflight mission planning, data loading, rehearsals, mission execution and post mission analyses are conducted at all appropriate security classification levels.

The Standardized Tester of Reprogrammable Munitions (STORM) system (Proj 2213) replaces the legacy Common Munitions Built-in-Test (BIT)/Reprogramming Equipment (CMBRE) and provides USN/USMC forces the critical capability to perform built-in test and programming/reprogramming of various advanced weapons. The STORM system supports advanced operational capabilities, addresses legacy CMBRE system obsolescence, enhances cybersecurity posture to improve readiness, and improves sortie generation rate.

The Next Generation Naval Mission Planning System (NGNMPS) will address critical capability gaps and deficiencies in the legacy JMPS that are required for modern 21st century integrated mission-centric and collaborative multi-domain mission planning, execution and analysis. The NGNMPS will replace Naval Aviation's legacy JMPS no later than FY 2027 while also affordably leveraging prior investments across the systems of systems to deliver integrated and collaborative capability. The NGNMPS will affordably address technological obsolescence while also delivering collaborative and automated capabilities in an integrated virtual collaborative data environment. The NGNMPS capability provides advanced multiple aircraft planning capabilities focused on emerging, high-threat mission areas. Current mission planning capabilities support individual aircraft and weapon initialization requirements. The emerging, near-peer threat environment demands a much more capable system that enables a team of aircraft to cooperate effectively across multiple mission areas, domains, and security levels. The NGNMPS will also leverage service-oriented architecture to provide revolutionary improvements in workflow, usability, cybersecurity. Additionally NGNMPS will provide information and decision aids needed to rapidly plan/employ/maximize effectiveness of aircraft/weapon/sensor/payload mission plans. This functionality includes advanced pre-mission rehearsal/

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analysis, loading mission data into aircraft and weapons, dynamic replanning/retargeting against evolving threats in contested environments, and advanced post-mission debrief/ analysis. The NGNMPS will incorporate cross-domain solution capabilities. These mission planning, mission execution, and mission analysis functions meet the National Defense Strategy and Interim National Security Strategic Guidance key objectives. The NGNMPS will conduct preflight mission planning, data loading, rehearsals, mission execution and post mission analyses at all appropriate security classification levels.

The Stores Planning and Weaponing Module, also referred to as Weaponing and Stores Planning (WASP) (Proj 2311), is an integrated software product that allows aircrew to determine the best combinations of weapons and delivery conditions to achieve the desired level of target damage. The WASP program performs detailed weapons employment planning for F/A-18 and E/A-18G aircraft. The WASP program provides inherent safety checks which eliminate weapon delivery solutions that violate aircraft T/M/S specific safety-of-flight envelopes. FY 2022 and out include funding for the research and development to integrate WASP with 3-D mission rehearsal, provide dynamic Safe Escape Automation Layer (SEAL) calculations on Electronic Kneeboard (EKB), develop WASP for other Navy and Marine Corps platforms, and support WASP development and integration with Next Generation Mission Planning Systems (NGNMPS).

The total cost of the STORM Middle Tier Acquisition effort is \$43.3 million, including RDT&E and procurement of prototype units. The STORM 804 program is fully funded through FY24.

The total cost of the NGNMPS Middle Tier Acquisition effort is \$195.37 million, including RDT&E and procurement of prototype units. The NGNMPS program is fully funded across the Future Years Defense Program. NGNMPS will transition from an MTA program being executed under 804 authority at the end of FY24.

**JUSTIFICATION FOR BUDGET ACTIVITY:** This program is funded under SYSTEM DEVELOPMENT & DEMONSTRATION (SDD) because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production decision.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
Previous President's Budget	88.128	71.107	43.155	-	43.155
Current President's Budget	86.255	76.107	86.448	-	86.448
Total Adjustments	-1.873	5.000	43.293	-	43.293
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	5.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.873	0.000			
• Program Adjustments	0.000	0.000	42.917	-	42.917
• Rate/Misc Adjustments	0.000	0.000	0.376	-	0.376

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**Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** 9999: *Congressional Adds*

Congressional Add: *Multi domain anti-submarine solutions*

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

	FY 2022	FY 2023
	0.000	5.000
	0.000	5.000
	0.000	5.000

**Change Summary Explanation**

**FUNDING:**

Funding increase in FY24 is due to transition of NGNMPS from prototyping activities to program of record and additional STORM MAP Software Development efforts.

**TECHNICAL:**

2213:

- Adjusted R2A & R3 to adequately show the splits between the NGNMPS, JMPS-M & STORM programs.

9999:

- Added R2A & R3 for Anti-Submarine Warfare efforts in FY23.

**SCHEDULE:**

2213:

- Broke out "STORM Advanced Capabilities" into "STORM MAP SW Development" and "STORM Program of Record".

- Renamed "NGNMPS Advanced Capabilities" to "NGNMPS Program of Record".

- Extended NGNMPS Integration & Test, NGNMPS Program of Record, and STORM Program of Record to 4Q FY28.

- Moved KP3 - Field STORM Prototype from 4Q FY23 to 3Q FY24.

- Extended STORM 804 Development from 4Q FY23 to 3Q FY24.

- Shifted STORM system testing from 3Q FY22-2Q FY23 to 2Q FY23-3Q FY24.

2311:

- Separated WASP NGNMPS efforts and WASP v5.2 efforts.

- Changed WASP System Dev: "WASP NGNMPS" to "WASP v5.2 System Dev".

- Changed WASP Test & Eval: "WASP NGNMPS" to "WASP v5.2 Test & Eval".

- Changed WASP Production - IOC: "WASP NGNMPS" to "WASP v5.2 IOC"

- Added "WASP NGNMPS System Dev." 4Q FY24 - 4Q FY28.

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<p>- Added "WASP NGNMPS Test &amp; Evaluation" 4Q FY24 - 4Q FY28. 9999: -Added "ASW Requirements Analysis" 2Q FY23 - 1Q FY24.</p>		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy										<b>Date:</b> March 2023		
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<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
2213: <i>Mission Planning</i>	185.776	75.371	58.873	74.401	-	74.401	92.837	78.018	71.631	36.403	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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The Next Generation Naval Mission Planning System (NGNMPS) will address critical capability gaps and deficiencies in the legacy JMPS that are required for modern 21st century integrated mission-centric and collaborative multi-domain mission planning, execution and analysis. The NGNMPS will replace Naval Aviation's legacy JMPS no later than FY 2027 while also affordably leveraging prior investments across the systems of systems to deliver integrated and collaborative capability. The NGNMPS will affordably address technological obsolescence while also delivering collaborative and automated capabilities in an integrated virtual collaborative data environment. The NGNMPS capability provides advanced multiple aircraft planning capabilities focused on emerging, high-threat mission areas. Current mission planning capabilities support individual aircraft and weapon initialization requirements. The emerging, near-peer threat environment demands a much more capable system that enables a team of aircraft to cooperate effectively across multiple mission areas, domains, and security levels. The NGNMPS will also leverage service-oriented architecture to provide revolutionary improvements in workflow, usability, cybersecurity. Additionally NGNMPS will provide information and decision aids needed to rapidly plan/employ/maximize effectiveness of aircraft/weapon/sensor/payload mission plans. This functionality includes advanced pre-mission rehearsal/analysis, loading mission data into aircraft and weapons, dynamic replanning/retargeting against evolving threats in contested environments, and advanced post-mission debrief/analysis. The NGNMPS will incorporate cross-domain solution capabilities. These mission planning, mission execution, and mission analysis functions meet the National Defense Strategy and Interim National Security Strategic Guidance key objectives. The NGNMPS will conduct preflight mission planning, data loading, rehearsals, mission execution and post mission analyses at all appropriate security classification levels.

The Standardized Tester of Reprogrammable Munitions (STORM) system (Proj 2213) replaces the legacy Common Munitions Built-in-Test (BIT)/Reprogramming Equipment (CMBRE) and provides USN/USMC forces the critical capability to perform built-in test and programming/reprogramming of various advanced weapons. The STORM system supports advanced operational capabilities, addresses legacy CMBRE system obsolescence, enhances cybersecurity posture to improve readiness, and improves sortie generation rate.

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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p><b>Title:</b> Mission Planning Program Mgmt, Integration, and Test</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Perform Mission Planning Program Management, and Integration and Test efforts supporting the Navy's system development, developmental testing/operational testing, integration, system-of-system testing, and managing Naval Mission Planning efforts. Life-cycle management efforts consist of development of program execution plans, development/integration of components provided by various developers into mission planning environments and testing of the integrated environment.</p> <p><b>FY 2023 Plans:</b> Continue mission planning integration and testing, project management and system engineering for over 40 T/M/S that are supported by legacy JMPS and by the Next Generation Naval Mission Planning System with a focus on transition to NGNMPS. Complete initial fleet requirement assessment in support of Next Generation Naval Mission Planning. Conduct studies, analyses, integration, and tests to move Naval Mission Planning Systems into a single ecosystem supporting fleet needs. Conduct additional studies, analyses, integrations, and tests to meet emergent fleet security and aircraft interface/data exchange requirements.</p> <p><b>FY 2024 Base Plans:</b> Continue mission planning integration and testing, project management and system engineering for over 40 T/M/S that are supported by legacy JMPS. Transition from the Next Generation Naval Mission Planning System Section 804 mid-tier acquisition / Rapid Prototype to an established program of record. Continue conducting studies, analyses, integration, and tests to move Naval Mission Planning Systems into a single ecosystem supporting fleet needs. Conduct additional studies, analyses, integrations, and tests to meet emergent fleet security and aircraft interface/ data exchange requirements.</p> <p><b>FY 2024 OCO Plans:</b> N/A</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Decrease from FY23 to FY24 due to scaling back of integration activities associated with the scheduled JMPS-M sundown in FY27.</p>	12.725	9.992	1.330	0.000	1.330
<p><b>Title:</b> Mission Planning Framework (FW) and Common Components (CC) Development</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> This task continues development and integration of modernized mission planning software frameworks and architecture which provide the required core mission planning capabilities supporting all naval</p>	8.829	6.988	0.000	0.000	0.000

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
<p>aircraft. Framework and architecture development tasks include: system engineering processes, management interface controls, software architectural analysis, requirements management and a centralized website for Mission Planning developers. Updating Common Component software into a modernized software environment and architecture will continue and also augment core mission planning capabilities supporting multiple T/M/S.</p> <p><b>FY 2023 Plans:</b> Continue development, integration and testing of modernized framework capabilities and architecture. Introduce capability involving new business services, utilities and data types. Continue development activities which include implementing a modular, scalable service-oriented architecture to reduce development and sustainment costs while also supporting cyber security hardening and resilience for compliance with cyber mandates. Continue development and integration of common components to meet platform(s) requirements for new and enhanced mission planning capability required in a modernized and service-oriented architecture environment. Integration activities will continue as platforms deliver modernized unique planning capabilities for integration, testing and fielding.</p> <p><b>FY 2024 Base Plans:</b> N/A</p> <p><b>FY 2024 OCO Plans:</b> N/A</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Decrease from FY23 to FY24 due to scaling back of development activities associated with the scheduled JMPS-M sundown in FY27.</p>					
<p><b>Title:</b> Next Generation Naval Mission Planning System (NGNMPS) Development</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> The Next Generation Naval Mission Planning System (NGNMPS) will address critical capability gaps and deficiencies in the legacy JMPS that are required for modern 21st century integrated mission-centric and collaborative multi-domain mission planning, execution and analysis. NGNMPS will replace Naval Aviation's legacy JMPS no later than FY 2027 while also affordably leveraging prior investments across the systems of systems to deliver integrated and collaborative capability. NGNMPS will affordably address technological obsolescence while also delivering collaborative and automated capabilities in an integrated virtual collaborative data environment. NGNMPS capability provides advanced multiple aircraft planning capabilities focused on emerging, high-threat mission areas. Current mission planning capabilities support individual aircraft and weapon initialization requirements. The emerging, near-peer threat environment demands a much more capable</p>	37.295	31.143	67.029	0.000	67.029
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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>system that enables a team of aircraft to cooperate effectively across multiple mission areas, domains, and security levels. NGNMPS will also leverage service-oriented architecture to provide revolutionary improvements in workflow, usability, cybersecurity, information and decision aids needed to rapidly plan/employ/maximize effectiveness of aircraft/weapon/sensor/payload mission plans; perform advanced pre-mission rehearsal/analysis; provide functionality to load mission data into aircraft and weapons; enable dynamic replanning/retargeting against evolving threats in contested environments; perform integrated and advanced post-mission debrief/analysis; support cross-domain capabilities; and support portability of mission planning, mission execution, and mission analysis functions to meet National Defense Strategy and Interim National Security Strategic Guidance key objectives. The NGNMPS will be integrating rapid prototyped capability developed under multiple S&amp;T efforts (e.g., Future Naval Capability, Rapid Innovation Fund, Small Business Innovative Research) as those projects mature sufficiently to meet critical advanced warfighting needs.</p> <p>NGNMPS will complete Middle Tier Acquisition approach, per Section 804 of the Fiscal Year (FY) 2016 National Defense Authorization Act (NDAA), as amended in FY 2017 NDAA (codified at 10 U.S.C. sub sec 2302 note) to prototype and deliver NGNMPS capabilities to Naval Aviation across multiple platforms. The NGNMPS program of record starts in FY 2024.</p> <p><b><i>FY 2023 Plans:</i></b> Continue development, integration and testing of the NGNMPS modernized framework capabilities and architecture. Continue development, integration, and test of mission planning capabilities enabling complex mission planning for the warfighter. Continue and expand a consolidated user interface for ease of use, reduced time to plan, as well as reduced training requirements. Continue to implement data automation to improve time to plan, reduce errors, and allow aircrew to focus on critical decision making in the mission planning process. Continue to implement a modular, scalable service-oriented architecture to reduce development and sustainment costs while supporting cyber security hardening and resilience for compliance with cyber mandates. Continue to develop and integrate micro-services to meet platform(s) requirements for new and enhanced mission planning capability required in a modernized and service-oriented architecture environment. Demonstrate developmental software in operationally representative environments to ensure shipboard interoperability and collect aircrew feedback. Continue implementation of DevSecOps software production pipeline and processes to achieve continuous integration &amp; continuous deployment. Prepare program documentation to transition NGNMPS into an established program of record. Selection of the most appropriate acquisition pathway and entry point will be documented in the NGNMPS program of record acquisition strategy.</p> <p><b><i>FY 2024 Base Plans:</i></b></p>					

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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
<p>In FY24, the NGNMPS will begin executing a Program of Record (PoR) which builds upon a completing 804 effort and is tightly aligned with joint mission planning investments and initiatives. The NGNMPS PoR anticipates using the Software Acquisition Pathway (governed by DoDI 5000.87) and plans to enter the execution phase in FY24. The FY24 budget and activities include advanced pre-mission rehearsal/analysis, loading mission data into aircraft and weapons, dynamic replanning/retargeting against evolving threats in contested environments, and advanced post-mission debrief/ analysis. Build upon and expand capabilities delivered under the Section 804 Mid-Tier Acquisition scheduled to complete concurrent with the beginning of this POR.</p> <p>Specific FY24 tasking includes:</p> <ul style="list-style-type: none"> <li>-Continue development, integration, test, and delivery of mission planning capabilities enabling complex mission planning for the warfighter. This continued development includes establishing the PoR systems engineering design, development of software incorporating additional mission areas such as Anti-Submarine Warfare or Amphibious Assault. Development activities would expand to include all appropriate security levels.</li> <li>-Continue development and expansion of a consolidated user interface and user experience for ease of use, reduced time to plan, as well as reduced training requirements.</li> <li>-Continue to implement data automation to improve time to plan, reduce errors, and allow aircrew to focus on critical decision making in the mission planning process.</li> <li>-Conduct non-recurring engineering design activities to implement NGNMPS functionality on mobile computing devices.</li> <li>-Continue to implement a modular, scalable service-oriented architecture to reduce development and sustainment costs while supporting cyber security hardening and resilience for compliance with cyber mandates.</li> <li>-Continue to develop and integrate micro-services to meet platform(s) requirements for new and enhanced mission planning capability required in a modernized and service-oriented architecture environment.</li> <li>-Develop and deliver software and hardware products supporting operations in both land-based and shipboard environments. This work includes the non-recurring engineering design required to support NGNMPS deployments aboard various classes of ships including CVN, LHA/LHD, and DDG class ships. Additionally the</li> </ul>					

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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>effort includes the engineering-design / network-design necessary for deployments in stand-alone, networked, and cloud-based environments.</p> <p>-Continue implementation of software DevSecOps and processes to achieve continuous integration &amp; continuous deployment. The effort includes on-boarding development teams from other platforms (e.g., F/A-18, EA-18, E-2, V-22).</p> <p>-Establish test and evaluation laboratories and facilities necessary for the end-to-end test of NGNMPS functionality.</p> <p>-Fund test personnel and test squadron project officers necessary for end-to-end testing.</p> <p><b>FY 2024 OCO Plans:</b> N/A</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Increase from FY23 to FY24 due to implementation of design, development, integration, test, and delivery of NGNMPS Program of Record. This funding integrates additional aircraft, mission areas, and weapons sets beyond the 804 rapid prototype.</p>					
<p><b>Title:</b> Standardized Tester of Reprogrammable Munitions (STORM) (previously titled: Next Generation Common Munitions BIT Reprogramming Equipment (CMBRE))</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> The technology inherent to the legacy CMBRE is obsolete and cannot be sustained beyond 2025. In addition to sustainability issues and cyber security concerns, the Fleet also requires a more transportable, lighter weight and rugged test set that has the ability to service existing and future weapons with increased data transfer capability in austere operating environments. Formerly named "CMBRE Next Generation" the Standardized Tester of Reprogrammable Munitions (STORM) efforts enhance mission readiness and security, and generate improved flexibility, depth, and capacity for existing and emerging aviation weapon capabilities during the conduct of ship, shore, and ship-to-shore operations in both conventional and Distributed Aviation Operations environments. STORM will satisfy current and future fleet weapon support requirements, CONOPS, and cyber security mandates while affordably addressing legacy CMBRE system obsolescence.</p>	16.522	10.750	6.042	0.000	6.042
	-	-	-	-	-

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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
STORM is being pursued through a Middle Tier Acquisition approach, per Section 804 of the Fiscal Year (FY) 2016 National Defense Authorization Act (NDAA), as amended in FY 2017 NDAA (codified at 10 U.S.C. sub sec 2302 note) to prototype and deliver STORM capability to USN/USMC forces.					
<b><i>FY 2023 Plans:</i></b> Continue development of STORM system. Complete prototype Munitions Application Program (MAP) software development. Complete assembly of STORM prototype hardware components. Conduct hardware/software system integration. Complete hardware/software system integration. Continue system-level test and evaluation. Prepare program documentation to transition STORM into an established program of record. Selection of the most appropriate acquisition pathway and entry point will be documented the STORM program of record acquisition strategy.					
<b><i>FY 2024 Base Plans:</i></b> Complete the Section 804 / Mid-Tier Acquisition and transition to program of record. Complete Munitions Application Program software development for weapons addressed under the Section 804 Mid-Tier Acquisition. Complete development, integration, and test of the STORM prototype. Initiate engineering activities to address discovery from the prototyping phase to support transition to program of record.					
<b><i>FY 2024 OCO Plans:</i></b> N/A					
<b><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i></b> Decrease from FY 2023 to FY 2024 is due to completion of STORM 804 activities.					
<b>Accomplishments/Planned Programs Subtotals</b>	75.371	58.873	74.401	0.000	74.401

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

Line Item	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
• OPN/2876: <i>Mission Planning</i>	16.777	25.092	39.180	-	39.180	45.241	55.139	48.182	51.165	Continuing	Continuing

**Remarks**

**D. Acquisition Strategy**

The initial Joint Mission Planning System (JMPS) development effort was a phased evolutionary approach. JMPS is a post Milestone III program and Initial Operational Capability (IOC) occurred in December 2005. Cost Plus Award Fee (CPAF) and Cost Plus Incentive Fee (CPIF) contracts were awarded during initial development. During the down-select process, one contractor was selected to develop the JMPS architecture framework and Version 1.0 basic flight planning components. Additional

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2213 / <i>Mission Planning</i>
<p>phases focused on strike planning requirements (i.e., support Precision Guided Missions and other tactical data intensive missions) in order to migrate platforms from legacy mission planning systems to JMPS. The USAF and USN continued the joint development of JMPS Frameworks via the USAF Mission Planning Enterprise Contract, which is used for JMPS Framework software development. The USN integration and fielding strategy supports a Mission Planning Environment (MPE) focus, where the JMPS Framework and other software components are integrated, tested, and fielded by T/M/S. Preflight mission planning, data loading, rehearsals, mission execution and post mission analyses are conducted at all appropriate security classification levels. As platforms plan their migration to newer versions of JMPS, the acquisition strategy, plan, and program baseline will be updated in order to divest legacy mission planning systems, meet the evolving requirements for integrated mission planning, and lower total life cycle cost. JMPS End of Life (EOL) is planned for 2027. This necessitates the development of a replacement system, Next Generation Naval Mission Planning System (NGNMPS).</p> <p>The NGNMPS will provide a modernized mission planning system, which supports multi-domain mission planning, execution, management, and mission analysis capabilities required by the 21st century warfighter. The NGNMPS will address critical capability gaps and deficiencies in the legacy JMPS that are required for modern 21st century integrated mission-centric and multi-domain collaborative mission planning, execution and analysis. The NGNMPS will replace Naval Aviation's legacy JMPS no later than 2027 while also affordably leveraging prior investments across the systems of systems to deliver integrated and collaborative capability. The NGNMPS will affordably address technological obsolescence while also delivering collaborative and automated capabilities in an integrated virtual collaborative data environment. The NGNMPS will also leverage service-oriented architecture to provide revolutionary improvements in workflow, usability, cybersecurity, information and decision aids needed to rapidly plan/employ/maximize effectiveness of aircraft/weapon/sensor/payload mission plans; perform advanced pre-mission rehearsal/analysis; provide functionality to load mission data into aircraft and weapons; enable dynamic replanning/retargeting against evolving threats in contested environments; perform integrated and advanced post-mission debrief/analysis; support cross-domain capabilities; and support portability of mission planning, mission execution, and mission analysis functions. Preflight mission planning, data loading, rehearsals, mission execution and post mission analyses are conducted at all appropriate security classification levels.</p> <p>The NGNMPS will address shortfalls in the family of legacy systems (including JMPS) by modernizing the foundational software to a services based architecture that will improve composability of software applications to support advanced mission planning, dynamic re-planning, mission execution, and post-mission analysis that is required to support the National Defense Strategy and Interim National Security Strategic Guidance. Adopting composable infrastructure that includes computing, storage and network elements treated as individual services allows greater speed and flexibility when performing tasks, allows software applications to operate independently of a single hardware platform, and supports affordable component re-use and supportability across the family of systems. The NGNMPS Program of Record plans to use the Software Acquisition Pathway for development, integration, test, and delivery of capabilities. The NGNMPS program anticipates entering the Software Acquisition Pathway Execution Phase by 2QFY24.</p> <p>The CMBRE program was designed to provide USN/USMC units with the critical capability to perform built-in-test and programming / reprogramming of various weapons. Because the legacy CMBRE is obsolete and cannot be sustained beyond 2025 a follow-on program, the Standardized Tester of Reprogrammable Munitions (STORM) will replace CMBRE and support current and future fleet weapon support requirements, CONOPS, and will comply with Cyber security mandates while affordably addressing legacy CMBRE system obsolescence. The STORM Program of Record plans to use DoDI 5000.82 major capability acquisition pathway. The STORM program anticipates entering the acquisition process by 1QFY24. CMBRE obsolescence issues are forecast to pose a significant obstacle to system sustainment beyond FY25. The follow-on Standardized Test of Reprogrammable Munitions (STORM) is intended to replace CMBRE and satisfy current and future fleet weapon support requirements and cybersecurity mandates while resolving CMBRE obsolescence. STORM transitions from prototyping to program of record in FY24.</p>		

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2213 / <i>Mission Planning</i>
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<b>Product Development (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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/JMPS Expeditionary	C/CPFF	Leidos : Reston, VA	1.598	0.000		0.000		0.000		-		0.000	0.000	1.598	1.618
Primary Software Development/JMPS Expeditionary	C/CPAF	BAE : San Diego, CA	2.164	0.000		0.000		0.000		-		0.000	0.000	2.164	2.238
JMPS-M Primary Software Development	C/CPFF	IDT : Arlington, VA	3.711	0.000	Feb 2022	0.000	Feb 2023	0.200	Feb 2024	-		0.200	Continuing	Continuing	Continuing
JMPS-M Primary Software Development	WR	NAWCWD : Point Mugu, CA	0.000	0.000		0.000		0.220	Nov 2023	-		0.220	0.000	0.220	-
JMPS-M Primary Software Development	WR	NAWCWD : China Lake, CA	0.483	0.166	Dec 2021	0.148	Dec 2022	0.075	Dec 2023	-		0.075	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	ATC : Eden Prairie, MN	0.260	0.000		0.000		0.000		-		0.000	0.000	0.260	0.260
NGNMPS Primary Software Development, FW	C/CPFF	Northrop Grumman : Long Beach, CA	4.970	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	DCS : Alexandria, VA	4.301	1.650	Jan 2022	1.412	Jan 2023	4.848	Jan 2024	-		4.848	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	AMEWAS : California, MD	1.775	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	MTI : Park City, UT	2.795	1.675	Feb 2022	1.465	Feb 2023	1.950	Feb 2024	-		1.950	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	John's Hopkins University : Laurel, MD	2.250	1.122	Jan 2022	0.892	Jan 2023	0.000		-		0.000	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	WR	NAWCWD : Point Mugu, CA	10.912	5.732	Nov 2021	5.350	Nov 2022	5.328	Nov 2023	-		5.328	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	VARIOUS : VARIOUS	0.000	6.590	Jan 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	Northrop Grumman : Linthicum Heights, MD	11.947	0.000		0.000		0.000		-		0.000	0.000	11.947	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy												Date: March 2023			
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605215N / Mission Planning					Project (Number/Name) 2213 / Mission Planning					
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
NGNMPS Primary Software Development	C/CPFF	Northrop Grumman : Mclean, VA	5.000	11.000	Dec 2021	12.553	Dec 2022	0.000		-		0.000	0.000	28.553	-
NGNMPS Primary Software Development	TBD	TBD : TBD	0.000	0.000		0.000		19.386	Dec 2023	-		19.386	0.000	19.386	-
NGNMPS Primary Software Development (SEIC)	C/CPFF	Leidos : Orlando, FL	16.032	3.724	Feb 2022	3.152	Feb 2023	3.285	Feb 2024	-		3.285	Continuing	Continuing	Continuing
NGNMPS Primary Software Development/ (Human Factors)	C/CPFF	Georgia Technical Research Institute (GTRI) : Atlanta, GA	3.297	0.775	Mar 2022	0.685	Mar 2023	1.025	Mar 2024	-		1.025	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	WR	NRL/Inc Lab : Washington DC	2.654	1.502	Nov 2021	1.385	Nov 2022	1.165	Nov 2023	-		1.165	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	Carnegie Mellon University : Pittsburgh, PA	0.998	0.520	Mar 2022	0.499	Mar 2023	0.750	Apr 2024	-		0.750	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	WR	NIWC PAC : San Diego, CA	3.080	1.780	Nov 2021	1.622	Nov 2022	1.150	Nov 2023	-		1.150	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	MIPR	Elmendorf AFB : Jber, AK	2.250	1.825	Jan 2022	1.625	Jan 2023	0.000		-		0.000	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	2-Circle : Arlington, VA	1.350	0.925	Mar 2022	0.850	Mar 2023	0.700	Apr 2024	-		0.700	Continuing	Continuing	Continuing
NGNMPS Primary Software Development	C/CPFF	Progeny Systems Corp : Manassas, VA	0.000	0.000		0.000		1.350	Feb 2024	-		1.350	0.000	1.350	-
NGNMPS Primary Software Development	C/CPFF	BAE Systems : San Diego, CA	0.000	0.000		0.000		1.250	Mar 2024	-		1.250	0.000	1.250	-
NGNMPS Primary Software Development	C/CPAF	CENTAURI LLC : Chantilly, VA	0.000	0.000		0.000		0.850	Jan 2024	-		0.850	0.000	0.850	-
STORM Development	MIPR	Dep Of Energy : Kansas City, MO	22.114	7.233	Nov 2021	6.253	Nov 2022	2.050	Nov 2023	-		2.050	Continuing	Continuing	Continuing
STORM MAP SW Development	C/CPFF	Raytheon : Tuscon, AZ	0.850	3.000	Jun 2022	1.250	Jan 2023	1.792	Jan 2024	-		1.792	Continuing	Continuing	Continuing
Multi Level Mission Planning	Various	NSMA : NSMA	0.000	0.000		0.000		6.353	Nov 2023	-		6.353	0.000	6.353	-
<b>Subtotal</b>			104.791	49.219		39.141		53.727		-		53.727	Continuing	Continuing	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2213 / <i>Mission Planning</i>
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<b>Product Development (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			

**Remarks**

FY 2024 NGNMPS prime development contract supports continued development of micro-services and continuous software integration for advanced mission planning, execution, dynamic re-planning, and analysis capabilities.

FY 2024 continues to support incremental funding for JMPS Primary Software Development efforts awarded via multiple contracts for service oriented architecture development.

FY 2024 supports incremental funding for the NGNMPS Primary Software Development efforts awarded via a competitive contract award. Funding in FY 2024 supports NGNMPS program phasing required to transition legacy JMPS-M platforms to NGNMPS before JMPS-M end of life while also developing advanced mission planning, execution, dynamic re-planning, and analysis capabilities required to support the National Defense Strategy and Interim National Security Strategic Guidance. The performing activities and locations are currently various to support a competitive contracting strategy. Once awarded, the performing activities and locations will be updated to reflect the selected contractors.

FY 2024 realigns Multi-Level Mission Planning from other budgets for increased transparency. This capability facilitates mission management spanning multiple classified domains; further details are classified.

<b>Support (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
JMPS-M Systems Engineering	WR	NAWCAD : Patuxent River, MD	6.785	1.475	Nov 2021	1.239	Nov 2022	0.310	Nov 2023	-		0.310	Continuing	Continuing	Continuing
JMPS-M Systems Eng & Integration	WR	NAWCWD : Point Mugu, CA	0.000	1.860	Nov 2021	1.562	Nov 2022	0.000		-		0.000	0.000	3.422	-
JMPS-M Systems Engineering	MIPR	Hill AFB : Ogden, UT	0.100	0.051	Nov 2021	0.045	Nov 2022	0.075	Nov 2023	-		0.075	Continuing	Continuing	Continuing
JMPS-M Integrated Logistics Support	WR	NAWCWD : Point Mugu, CA	1.070	0.214	Nov 2021	0.180	Nov 2022	0.075	Nov 2023	-		0.075	Continuing	Continuing	Continuing
NGNMPS Systems Eng & Integration	WR	NAWCWD : Point Mugu, CA	11.021	0.258	Nov 2021	0.220	Nov 2022	2.143	Nov 2023	-		2.143	Continuing	Continuing	Continuing
NGNMPS Systems Engineering	WR	NAWCAD : Patuxent River, MD	3.750	2.020	Nov 2021	1.625	Nov 2022	2.356	Nov 2023	-		2.356	Continuing	Continuing	Continuing
NGNMPS Integrated Logistics Support	WR	NAWCAD : Patuxent River, MD	0.505	0.258	Nov 2021	0.220	Nov 2022	0.283	Nov 2023	-		0.283	Continuing	Continuing	Continuing
NGNMPS Integrated Logistics Support	WR	NAWCWD : Point Mugu, CA	0.505	0.000		0.000		0.283	Nov 2023	-		0.283	Continuing	Continuing	Continuing
NGNMPS Systems Engineering	C/CPFF	Zenetex : Herndon, VA	2.522	1.365	Jan 2022	1.151	Jan 2023	0.000		-		0.000	Continuing	Continuing	Continuing

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2213 / <i>Mission Planning</i>
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<b>Support (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
NGNMPS Systems Engineering	TBD	TBD : TBD	0.000	0.000		0.000		1.014	Jan 2024	-		1.014	0.000	1.014	-
NGNMPS Systems Engineering	C/CPFF	MITRE : Lexington Park, MD	1.101	0.754	Jan 2022	0.650	Jan 2023	0.415	Jan 2024	-		0.415	Continuing	Continuing	Continuing
NGNMPS Systems Engineering	WR	NAWCWD : China Lake, CA	0.000	0.000		0.000		0.659	Nov 2023	-		0.659	0.000	0.659	-
Systems Engineering/ JMPS Expeditionary	WR	NAWCWD : Point Mugu, CA	0.740	0.000		0.000		0.000		-		0.000	0.000	0.740	-
STORM Systems Engineering Support	WR	NAWCWD : Point Mugu, CA	0.800	1.270	Nov 2021	0.825	Nov 2022	0.625	Nov 2023	-		0.625	Continuing	Continuing	Continuing
STORM Integrated Logistics Support	WR	NAWCAD : Patuxent River, MD	0.575	0.744	Nov 2021	0.480	Nov 2022	0.350	Nov 2023	-		0.350	Continuing	Continuing	Continuing
<b>Subtotal</b>			29.474	10.269		8.197		8.588		-		8.588	Continuing	Continuing	N/A

**Remarks**  
 FY 2024 supports NGNMPS systems engineering and design for ILS activities at multiple government and contractor sites. Funding in FY2024 support NGNMPS program phasing required to transition legacy JMPS-M platforms to NGNMPS before JMPS-M end of life while also developing advanced mission planning, execution, dynamic re-planning, and analysis capabilities required to support the National Defense Strategy and Interim National Security Strategic Guidance.

<b>Test and Evaluation (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Developmental Test & Evaluation (DT&E)	WR	NAWCWD : Point Mugu, CA	27.482	5.728	Nov 2021	4.695	Nov 2022	5.904	Nov 2023	-		5.904	Continuing	Continuing	Continuing
Operational Test & Evaluation (OT&E)	WR	COMOPTEVFOR : Norfolk, VA	4.754	0.538	Nov 2021	0.441	Nov 2022	0.560	Nov 2023	-		0.560	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	NAWCAD : Patuxent River, MD	3.009	1.796	Nov 2021	1.457	Nov 2022	1.796	Nov 2023	-		1.796	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	WR	Dep Of Energy : Kansas City, MO	0.000	4.000	Nov 2021	1.732	Nov 2022	1.011	Nov 2023	-		1.011	Continuing	Continuing	Continuing
<b>Subtotal</b>			35.245	12.062		8.325		9.271		-		9.271	Continuing	Continuing	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2213 / <i>Mission Planning</i>
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<b>Test and Evaluation (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			

**Remarks**  
 Test and Evaluation: Funding in FY 2024 supports the continuation of STORM system test activities as well as NGNMPS program phasing required to transition legacy JMPS-M platforms to NGNMPS before JMPS-M end of life while also developing advanced mission planning, execution, dynamic re-planning, and analysis capabilities required to support the National Defense Strategy and Interim National Security Strategic Guidance.

<b>Management Services (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
JMPS-M Program Management Support and Travel	WR	NAWCAD : Patuxent River, MD	12.088	0.000		0.000	Nov 2022	0.200	Nov 2023	-		0.200	Continuing	Continuing	Continuing
Program Management Support and Travel	WR	NAWCWD : China Lake, CA	0.982	0.501	Nov 2021	0.421	Nov 2022	0.175	Nov 2023	-		0.175	Continuing	Continuing	Continuing
NGNMPS Program Management Support and Travel	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		1.405	Nov 2023	-		1.405	0.000	1.405	-
NGNMPS Program Management Support	C/CPFF	Ausley Associates : Lexington Park, MD	3.196	0.840	May 2022	0.706	May 2023	0.000	May 2024	-		0.000	Continuing	Continuing	Continuing
NGNMPS Program Management Support	C/CPFF	Precise : Lexington Park, MD	0.000	0.000		0.000		1.035	May 2024	-		1.035	0.000	1.035	-
Program Management Support and Travel	WR	NAWCAD : Patuxent River, MD	0.000	2.480	Nov 2021	2.083	Nov 2022	0.000		-		0.000	0.000	4.563	-
<b>Subtotal</b>			16.266	3.821		3.210		2.815		-		2.815	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
<b>Project Cost Totals</b>	185.776	75.371	58.873	74.401	-	74.401	Continuing	Continuing	N/A

**Remarks**



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**Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2213 / <i>Mission Planning</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Joint Mission Planning Systems (JMPS)</i></b>				
JMPS Mission Planning Environment (MPE) Development: JMPS MPE Integration and Test: MPE Integration (V1.5.X)	1	2022	4	2025
Acquisition Milestones- Next Generation Naval Mission Planning System: KP3.5- Advanced Net Enabled Weapon mission planning capability	3	2022	3	2022
Acquisition Milestones- Next Generation Naval Mission Planning System: KP4- NGNMPS Prototype	2	2024	2	2024
NGNMPS Primary Software Development: NGNMPS Integration and Test	1	2022	4	2027
NGNMPS Primary Software Development: NGNMPS 804 Development	1	2022	2	2024
NGNMPS Primary Software Development: NGNMPS Program of Record	1	2024	4	2027
Acquisition Milestones- STORM: KP3- Field STORM Prototype	3	2024	3	2024
STORM Development: STORM 804 Development	1	2022	3	2024
STORM Development: STORM First Article Acceptance Testing	1	2022	2	2022
STORM Development: STORM System Testing	2	2023	3	2024
STORM Development: STORM MAP SW Development	1	2024	4	2027
STORM Development: STORM Program of Record	1	2024	4	2028

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy										<b>Date:</b> March 2023		
<b>Appropriation/Budget Activity</b> 1319 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>				<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponing Module</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
2311: <i>Stores Planning and Weaponing Module</i>	42.898	10.884	12.234	12.047	-	12.047	12.154	12.353	12.519	12.864	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The Weaponing and Stores Planning (WASP) components are integrated software products that allow aircrew to determine the best combinations of weapons and delivery conditions to achieve the desired level of target damage, eliminate weapon delivery solutions that violate aircraft Type/Model/Series (T/M/S) specific safety-of-flight envelopes, and perform detailed weapons employment planning. The WASP software is approved by NAVAIR Airworthiness and Cybersafe Office (formerly AIR 4.0P) as a flight clearance implementation system for the F/A-18 A, A+, A++, B, C, C+, D, D (RC), E, F, EA-18G. The WASP software includes potential support for other platforms to include F-35, P-8, AH-1, and other fixed wing and rotary wing platforms. The WASP software components will alert pilots if their planned weapon release conditions meet flight clearance limits, will result in bomb-to-bomb collisions, bomb-to-aircraft collisions, aircraft overstress, or excessive risk of aircraft loss/damage in the event of fuze early bursts. Weapon employment planning is fundamental to the Joint Capability Area of Force Application and joint mission areas of Strike and Amphibious Warfare. The WASP software provides the Navy and Marine Corps with weaponing capabilities that are critical requirements for Interdiction, Armed Reconnaissance and Close Air Support mission planning. Therefore, WASP product availability is critical to successful employment of the Joint Mission Planning System (JMPS) for the F/A-18 A-F and EA-18G. The WASP product encompasses a multitude of Government Furnished Information software components and tools including aircraft target maneuver simulations and weapon flyout models. The WASP software products will require updates as emergent requirements for new aircraft T/M/S, stores and weapons are approved, new flight clearances/restrictions are issued by Naval Air Systems Command and cyber security mandates are released. FY 2024 and out includes funding for the research and development in order to integrate WASP with 3-D mission rehearsal, provide dynamic Safe Escape Automation Layer (SEAL) calculations on Electronic Kneeboard (EKB), develop WASP for other Navy and Marine Corps platforms, and support WASP development and integration with the Next Generation Naval Mission Planning System (NGNMPS).

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
<b>Title:</b> Product Development	5.422	5.610	5.640	0.000	5.640
<b>Articles:</b>	-	-	-	-	-
<b>Description:</b> Includes associated system engineering design, development, installation, integration and software development for Weaponing and Stores Planning (WASP) components to support F/A-18 A-F and EA-18G. Provide domain engineering support for weapons separation, aircraft loads, flutter, fuzing and Safe Escape Automation Layer (SEAL)for application to WASP. Provide analysis of new requirements, allocation of requirements, design oversight, and life cycle management of the WASP program. Develop new aircraft configuration, aircraft loading, store release and delivery planning components for F/A-18 A-F and EA-18G, and implement new flight clearances and flight restrictions issued by NAVAIRSYSCOM. Provide					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponneering Module</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
<p>configuration management, system administration, quality assurance, documentation, metrics and software risk management for WASP. Acquire, integrate and modify numerous Government Furnished Information (GFI) software components and tools (aircraft target maneuver simulations, weapon flyout models, etc.) that are used for the WASP software development. Integrate WASP with weapons mission planning systems as required.</p> <p><b>FY 2023 Plans:</b> Continue development of WASP 5.1 for an FY 2023 release to the fleet with continuing database updates and defect correction. Fund requirements definition and initial system development of WASP NGNMPS for an incremental release to the Fleet starting in FY 2024.</p> <p><b>FY 2024 Base Plans:</b> Conduct requirements definition of WASP 5.2 for an FY 2025 release to the fleet with continuing database updates and defect corrections. Fund requirements definition and system development/migration of full WASP capabilities to the NGNMPS framework.</p> <p><b>FY 2024 OCO Plans:</b> N/A</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Slight increase in Product Development funding due to concurrent development of WASP 5.2, multiple database update versions and WASP NGNMPS initial system development.</p>					
<p><b>Title:</b> Test and Evaluation (T&amp;E)</p> <p align="right"><b>Articles:</b></p> <p><b>Description:</b> Provide test and evaluation for unit and system level testing; functional qualification testing; safety of flight certification testing; integration and standards compliance testing for WASP versions. Provide JMPS-M and Next Generation Naval Mission Planning System Integration test support. Provide testing and test support to ensure all components (to include internally developed software, externally developed GFI) comply with Department of Navy (DoN) and Department of Defense (DoD) software mandates and directives. These include Integrated Shipboard Network System IT-21, and Cyber Risk Management Framework (RMF).</p> <p><b>FY 2023 Plans:</b> Complete test and evaluations of multiple database updates to V5.0. Continue test and evaluation of WASP v5.1 to support</p>	2.359	2.888	2.907	0.000	2.907
	-	-	-	-	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponering Module</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
an FY23 release to the Fleet and automated test framework.  <b>FY 2024 Base Plans:</b> Complete test and evaluations of multiple database updates to V5.1. Continue to develop requirements of WASP V5.2 to support an FY25 release to Fleet and automated test framework.  <b>FY 2024 OCO Plans:</b> N/A  <b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Slight increase in test and evaluation due to multiple database updates to WASP V5.1, continuing test and evaluation of WASP V5.2 for FY25 fleet release, and initial investment into automated test framework.					
<b>Title:</b> Systems Engineering Support  <b>Description:</b> Provide systems engineering support, which includes requirements definition and analysis, compliance with Naval Air Systems Command systems engineering technical review processes, acquisition documentation development, cost, schedule and performance management, and compliance with external directives. Provide travel for government personnel.  <b>FY 2023 Plans:</b> Continue Systems Engineering support to the WASP for future software releases to the fleet and support legacy WASP. Develop integration plans with services architecture and NGNMPS. Provide continued support for multiple database releases.  <b>FY 2024 Base Plans:</b> Continue Systems Engineering support to the WASP for future software releases to the fleet and support legacy WASP. Develop integration plans with services architecture and NGNMPS. Provide continued support for multiple database releases.  <b>FY 2024 OCO Plans:</b> N/A  <b>FY 2023 to FY 2024 Increase/Decrease Statement:</b>	2.608	3.248	3.275	0.000	3.275
<b>Articles:</b>	-	-	-	-	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponing Module</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024 Base</b>	<b>FY 2024 OCO</b>	<b>FY 2024 Total</b>
Slight increase in Systems Engineering due to continued support and development of legacy WASP as well as the development of additional integration plans with services architecture and NGNMPS.					
<b>Title:</b> Program Management  <p align="right"><b>Articles:</b></p>	0.495	0.488	0.225	0.000	0.225
<b>Description:</b> Provide program management support, which includes requirements definition and analysis, compliance with Naval Air Systems Command systems engineering technical review processes, acquisition documentation development, cost, schedule and performance management, and compliance with external directives. Provide travel for government personnel.  <b>FY 2023 Plans:</b> Continue project management support to the WASP for future software releases to the fleet. Develop integration plans with services architecture and NGNMPS. Provide continued support for multiple database releases.  <b>FY 2024 Base Plans:</b> Continue project management support to the WASP for future software releases to the fleet. Develop integration plans with services architecture and NGNMPS. Provide continued support for multiple database releases.  <b>FY 2024 OCO Plans:</b> N/A  <b>FY 2023 to FY 2024 Increase/Decrease Statement:</b> Decrease due to reduced contractor support in out years.	-	-	-	-	-
<b>Accomplishments/Planned Programs Subtotals</b>	10.884	12.234	12.047	0.000	12.047

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

**Remarks**

**D. Acquisition Strategy**  
Weaponing and Stores Planning (WASP) products, delivered quarterly, are developed in-house by NAVAIR consisting of Naval Air Warfare Center Aircraft Division and Naval Air Warfare Center Weapons Division engineers and support contractors. The team has migrated to a smaller government team that provides functional expertise in aircraft safety-of-flight (air-vehicle stores compatibility, weapons separation, aircraft aerodynamic flutter, ground/flight loads, authorized fuze arm times,

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2024 Navy		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponing Module</i>

aircraft SEAL), and guided weapons employment, with the majority of the software development conducted by various contractors. The Government, engineering, test, and support teams (test facilities, functional qualification testing and certification/accreditation test) are supplemented with contractor labor.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2024 Navy</b>											<b>Date: March 2023</b>				
<b>Appropriation/Budget Activity</b> 1319 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>					<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponering Module</i>				

<b>Product Development (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Product Development	WR	Naval Air Warfare Center Aircraft Division NAWCAD : Patuxent River, MD	0.579	0.100	Nov 2021	0.114	Nov 2022	0.136	Nov 2023	-		0.136	Continuing	Continuing	Continuing
Product Development	MIPR	Air Force Seek Eagle : Hill Air Force Base, UT	0.278	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Primary Software Development	C/CPFF	DCS Corp : Alexandria, VA	2.367	0.000		0.000		0.000		-		0.000	0.000	2.367	2.367
Product Development (V4.X/V5.X)	C/CPFF	DCS Corp : Alexandria, VA	20.898	5.322	Mar 2022	5.523	Mar 2023	5.504	Mar 2024	-		5.504	Continuing	Continuing	Continuing
<b>Subtotal</b>			24.122	5.422		5.637		5.640		-		5.640	Continuing	Continuing	N/A

**Remarks**  
 The FY 2024 Product Development for WASP Major Version (V5.2) effort is associated with the development of WASP V5.2 and multiple minor builds to support fielded WASP systems.

<b>Support (\$ in Millions)</b>				<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
System Engineering and Program Support	WR	NAWCAD : Patuxent River, MD	5.989	1.308	Nov 2021	1.613	Nov 2022	1.635	Nov 2023	-		1.635	Continuing	Continuing	Continuing
Government Engineering Support: Guided Weapons	WR	Naval Air Warfare Center Weapons Division NAWCWD : China Lake, CA	0.266	0.025	Nov 2021	0.000		0.030	Nov 2023	-		0.030	Continuing	Continuing	Continuing
Systems Engineering Support	C/CPFF	KBRwyle : Houston, TX	0.000	1.220	Mar 2022	1.553	Mar 2023	1.555	Mar 2024	-		1.555	Continuing	Continuing	Continuing
Govt Engineering Support: Mission Planning Environment Integration	WR	NAWCWD : Point Mugu, CA	0.415	0.055	Nov 2021	0.055	Nov 2022	0.055	Nov 2023	-		0.055	Continuing	Continuing	Continuing
<b>Subtotal</b>			6.670	2.608		3.221		3.275		-		3.275	Continuing	Continuing	N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponering Module</i>
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<b>Support (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			

**Remarks**  
The Support costs in FY 2024 are associated with the development of WASP V5.2 and multiple minor builds to support fielded WASP systems.

<b>Test and Evaluation (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Developmental Test & Evaluation (DT&E)	WR	NAWCAD : Patuxent River, MD	5.158	0.822	Nov 2021	0.990	Nov 2022	0.997	Nov 2023	-		0.997	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	C/CPFF	DCS Corp : Alexandria, VA	4.435	0.725	Mar 2022	0.765	Mar 2023	0.775	Mar 2024	-		0.775	Continuing	Continuing	Continuing
Developmental Test & Evaluation (DT&E)	C/CPFF	KBRwyle : Houston, TX	0.000	0.812	Mar 2022	1.133	Mar 2023	1.135	Mar 2024	-		1.135	Continuing	Continuing	Continuing
<b>Subtotal</b>			9.593	2.359		2.888		2.907		-		2.907	Continuing	Continuing	N/A

**Remarks**  
The FY 2024 Test and Evaluation costs for WASP Major Version (V5.2) effort is associated with the development of WASP V5.2 and multiple minor builds to support fielded WASP systems.

<b>Management Services (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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 Support	C/CPFF	Precise : Lexington Park, MD	1.808	0.260	May 2022	0.253	May 2023	0.100	May 2024	-		0.100	Continuing	Continuing	Continuing
Program Management Support	WR	NAWCAD : Patuxent River, MD	0.615	0.210	Nov 2021	0.210	Nov 2022	0.100	Nov 2023	-		0.100	Continuing	Continuing	Continuing
Travel	Various	NAVAIR : Patuxent River, MD	0.090	0.025	Nov 2021	0.025	Nov 2022	0.025	Nov 2023	-		0.025	Continuing	Continuing	Continuing
<b>Subtotal</b>			2.513	0.495		0.488		0.225		-		0.225	Continuing	Continuing	N/A

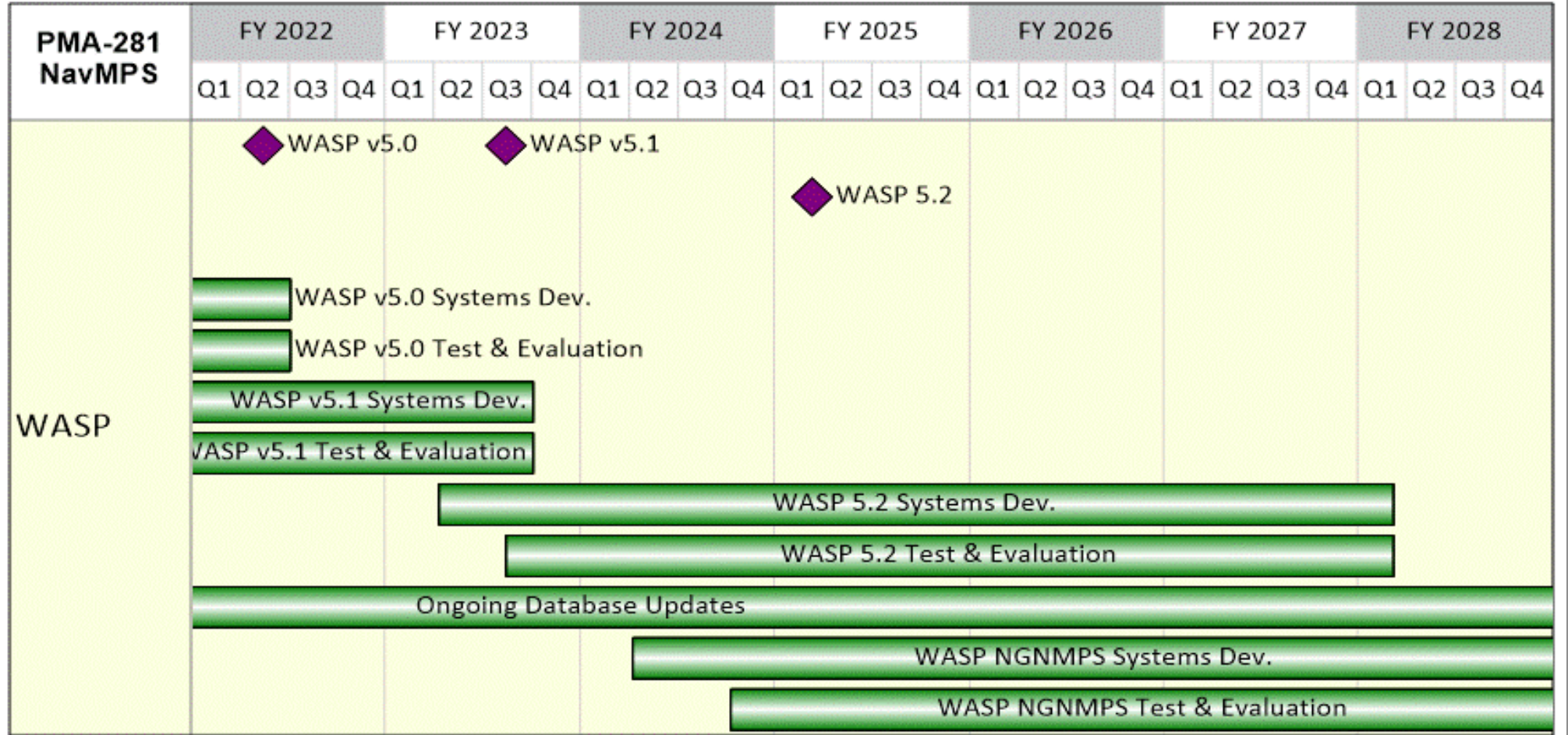
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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2024 Navy</b>								<b>Date: March 2023</b>					
<b>Appropriation/Budget Activity</b> 1319 / 5				<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>				<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponneering Module</i>					
	<b>Prior Years</b>	<b>FY 2022</b>		<b>FY 2023</b>		<b>FY 2024 Base</b>		<b>FY 2024 OCO</b>		<b>FY 2024 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	42.898	10.884		12.234		12.047		-		12.047	Continuing	Continuing	N/A

**Remarks**  
 Prior to FY17, PU 2311 was budgeted under PE 0604215N.

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2024 Navy</b>		<b>Date:</b> March 2023
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponering Module</i>



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<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2024 Navy</b>		<b>Date: March 2023</b>
<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 2311 / <i>Stores Planning and Weaponering Module</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Stores Planning and Weaponering Module</b>				
Systems Development: WASP v5.0 (F/A-18A/B/C/D/E/F, EA-18G):	1	2022	2	2022
Systems Development: WASP v5.1 (F/A-18A/B/C/D/E/F, EA-18G):	1	2022	3	2023
Systems Development: WASP v5.2 (F/A-18A/B/C/D/E/F, EA-18G):	4	2022	2	2024
Systems Development: WASP Ongoing Database Updates:	1	2022	4	2028
Systems Development: WASP NGNMPS System Development:	4	2024	4	2028
Test & Evaluation Milestones: WASP v5.0 (F/A-18A/B/C/D/E/F, EA-18G):	1	2022	2	2022
Test & Evaluation Milestones: WASP v5.1 (F/A-18A/B/C/D/E/F, EA-18G):	1	2022	3	2023
Test & Evaluation Milestones: WASP NGNMPS Test & Evaluation	4	2024	4	2028
Production Milestones: WASP v5.0 (F/A-18A/B/C/D/E/F, EA-18G) IOC::	2	2022	2	2022
Production Milestones: WASP v5.1 (F/A-18A/B/C/D/E/F, EA-18G) IOC::	3	2023	3	2023
Production Milestones: WASP v5.2 F/A-18A/B/C/D/E/F, EA-18G) IOC::	2	2024	2	2024

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**Exhibit R-2A, RDT&E Project Justification:** PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605215N / Mission Planning				Project (Number/Name) 9999 / Congressional Adds			
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
9999: Congressional Adds	0.000	0.000	5.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5.000
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The Next Generation Naval Mission Planning System (NGNMPS) will address critical capability gaps and deficiencies in the legacy JMPS that are required for modern 21st century integrated mission-centric and collaborative multi-domain mission planning, execution and analysis. The NGNMPS capability provides advanced multiple aircraft planning capabilities focused on emerging, high-threat mission areas. The emerging, near-peer threat environment demands a much more capable system that enables a team of aircraft to cooperate effectively across multiple mission area domains and security levels. One of these emerging high-threat mission areas demanding significantly improved mission planning capability is the area of Anti-Submarine Warfare (ASW). The increasing ASW threat requires additional mission planning / execution tools and techniques across airborne, shipboard, and undersurface platforms. Accomplishing and defeating the ASW threat will require significant improvements in workflow, usability, and cybersecurity, while also providing the decision aids needed to rapidly plan and effectively employ airborne, shipboard, and subsurface capabilities. These ASW mission planning, execution, and analysis functions comport with National Defense Strategy and Interim National Security Strategic Guidance key objectives. ASW mission planning, execution, and post-mission analysis will be conducted at all appropriate security classification levels.

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

	FY 2022	FY 2023
<b>Congressional Add:</b> Multi domain anti-submarine solutions	0.000	5.000
<b>FY 2022 Accomplishments:</b> N/A		
<b>FY 2023 Plans:</b> Initiate requirements analysis for multi-domain anti-submarine warfare (ASW). Identify necessary workflow, tools, and battle management aids. Identify integration points with the Next Generation Naval Mission Planning System as well as other PEO and Systems Command ASW planning and execution tools. Identify and allocate software, hardware, and interface requirements to airborne, surface, and subsurface ASW assets at all appropriate classification levels. Development of initial software capabilities inside the NGNMPS software factory. Support user evaluations. Prepare program documentation to transition ASW requirements into established programs of record. Establish design use cases for requirements definition. Allocate requirements to hardware and software. Establish design working groups, facilitate and conduct user assessments. Ensure delivered software meets NGNMPS business and technical rules.		
<b>Congressional Adds Subtotals</b>	0.000	5.000

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

N/A

**Remarks**

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**Exhibit R-2A, RDT&E Project Justification:** PB 2024 Navy **Date:** March 2023

<b>Appropriation/Budget Activity</b>	<b>R-1 Program Element (Number/Name)</b>	<b>Project (Number/Name)</b>
1319 / 5	PE 0605215N / <i>Mission Planning</i>	9999 / <i>Congressional Adds</i>

**D. Acquisition Strategy**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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<b>Product Development (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
ASW Requirements & SW Development	C/CPFF	Progeny Systems Corp : Manassas, VA	0.000	0.000		3.000	May 2023	0.000		-		0.000	0.000	3.000	-
<b>Subtotal</b>			0.000	0.000		3.000		0.000		-		0.000	0.000	3.000	N/A

**Remarks**  
Initiate requirements analysis for multi-domain anti-submarine warfare (ASW). Identify necessary workflow, tools, and battle management aids. Identify integration points with the Next Generation Naval Mission Planning System as well as other PEO and Systems Command ASW planning and execution tools. Identify and allocate software, hardware, and interface requirements to airborne, surface, and subsurface ASW assets at all appropriate classification levels. Development of initial software capabilities inside the NGNMPS software factory. Support user evaluations. Prepare program documentation to transition ASW requirements into established programs of record.

<b>Support (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
ASW Systems Engineering	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.750	Mar 2023	0.000		-		0.000	0.000	0.750	-
ASW Systems Engineering	WR	NAWCWD : Point Mugu, CA	0.000	0.000		1.000	Mar 2023	0.000		-		0.000	0.000	1.000	-
<b>Subtotal</b>			0.000	0.000		1.750		0.000		-		0.000	0.000	1.750	N/A

**Remarks**  
Establish design use cases for requirements definition. Allocate requirements to hardware and software. Establish design working groups, facilitate and conduct user assessments. Ensure delivered software meets NGNMPS business and technical rules.

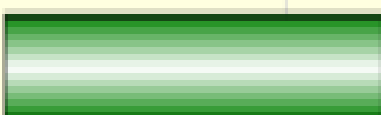
<b>Management Services (\$ in Millions)</b>				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
ASW Program Management Support	C/CPFF	Precise : Lexington Park, MD	0.000	0.000		0.250	May 2023	0.000		-		0.000	0.000	0.250	-
<b>Subtotal</b>			0.000	0.000		0.250		0.000		-		0.000	0.000	0.250	N/A



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**Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy** **Date:** March 2023

<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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<b>PMA-281</b> <b>NavMPS</b>	<b>FY 2023</b>				<b>FY 2024</b>				<b>FY 2025</b>				<b>FY 2026</b>			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Anti-Submarine Warfare (ASW)</b>	 <b>ASW Requirements &amp; SW Development</b>															

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2024 Navy	<b>Date:</b> March 2023
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<b>Appropriation/Budget Activity</b> 1319 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605215N / <i>Mission Planning</i>	<b>Project (Number/Name)</b> 9999 / <i>Congressional Adds</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 9999</b>				
Anti-Submarine Warfare (ASW): ASW Requirements Analysis	2	2023	1	2024