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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 0604657M / <i>MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST</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	46.334	40.885	45.025	62.329	-	62.329	47.085	41.100	37.439	41.916	Continuing	Continuing
7400: <i>Combat Capability Development Transition</i>	46.334	40.885	45.025	62.329	-	62.329	47.085	41.100	37.439	41.916	Continuing	Continuing

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

Organic Precision Fires (OPF) is a Service Force Design priority and will provide multiple echelons of the Fleet Marine Force with an organic, loitering, beyond-line-of-sight precision strike capability. OPF will be employed at the tactical level to allow Marines to rapidly engage the enemy beyond the range of direct fire weapons while minimizing collateral damage and exposure to enemy direct and indirect fires. OPF has demonstrated through extensive war-gaming and simulation, combined with experience gained in real world operations, that it will significantly improve the organic lethality of infantry and reconnaissance formations.

Multiple materiel solutions are required to provide the envisioned capabilities to the Fleet Marine Force. Three separate efforts will be used to deliver the initial increments of OPF capabilities, with additional future efforts planned.

Initiated in FY 2021, Organic Precision Fires-Mounted (OPF-M) is the initial OPF effort. It will develop and integrate a government Command and Control (C2) system with an existing anti-armor/anti-personnel loitering munition and develop a vehicle mounted, universal multi-canister launch platform to be integrated onto multiple vehicles, starting with the Light Armored Vehicle (LAV) and Joint Light Tactical Vehicle (JLTV). Primary target sets for this system will be armored targets, dismounted personnel, and fortified emplacements/structures, with a range of approximately 25 km. It is a battalion/company level asset.

Initiated in FY 2023, the OPF-Light (OPF-L) will procure an existing, light-weight loitering munition for use by dismounted elements. It provides a dismounted, lightweight, man-packable, loitering munition that extends the capability of the infantry squad/platoon to engage targets to the maximum range of organic Intelligence, Surveillance, and Reconnaissance (ISR) assets at that level. OPF-L will provide a counter-defilade, anti-personnel and anti-materiel capability. Primary target sets for this system will be enemy personnel, crew-served weapons, and Command and Control (C2) nodes. This will be principally a platoon/squad level asset.

Initiating in FY 2024, the OPF-Dismounted (OPF-D) will procure an existing anti-armor/anti-personnel, loitering munition system, to include the vendor command and control system, capable of being launched from the ground and transported by an Ultra-Light Tactical Vehicle (ULTV) or man-packed by dismounted Marines. Primary target sets for this system will be armored targets, dismounted personnel, and fortified emplacements/structures, with a range of approximately 25 km. This will be principally a company/platoon level asset.

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<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	42.144	45.025	66.275	-	66.275
Current President's Budget	40.885	45.025	62.329	-	62.329
Total Adjustments	-1.259	0.000	-3.946	-	-3.946
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.259	0.000			
• Program Adjustments	0.000	0.000	16.054	-	16.054
• Rate/Misc Adjustments	0.000	0.000	-20.000	-	-20.000

**Change Summary Explanation**

The increase of \$17.304M reflects the initial purchase OPF-L test assets, Limited User Evaluations for OPF-M, and program initiation of OPF-D.

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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 0604657M / MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST				<b>Project (Number/Name)</b> 7400 / Combat Capability Development Transition			
<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>
7400: <i>Combat Capability Development Transition</i>	46.334	40.885	45.025	62.329	-	62.329	47.085	41.100	37.439	41.916	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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

Organic Precision Fires (OPF) is a Marine Corps Force Design priority and will provide multiple echelons of the Fleet Marine Force with an organic, loitering, beyond-line-of-sight precision strike capability. OPF has demonstrated through extensive war-gaming and simulation, combined with experience gained in real world operations, that it will significantly improve the organic lethality of infantry and reconnaissance formations. Providing a Hunter (Group 2 UAS) - Killer (loitering munition) combination, OPF will deliver precision effects as well as surveillance before, during, and after striking targets, at ranges beyond 40 kilometers, while reducing the potential for collateral damage. As such, the OPF capability is a critical element of force modernization to close the gap between long range/precision fires and close-combat weapons.

In FY 2023, OPF-Mounted (OPF-M) conducted developmental and operational testing including System Integration Events (SIE) for launcher and C2 maturation, munition integration, and an Early Operational Assessment (EOA). Following the EOA, OPF-M will conduct system level and munitions qualification testing in FY 2024 to support transition into production.

In FY 2023, the program will release a RFP for OPF-Light (OPF-L). In FY 2024, the program will award two contracts for munitions and C2 systems supporting developmental testing.

In FY 2024, OPF-Dismounted (OPF-D) will conduct market analysis to refine requirements for product specifications and release a RFP for contract award in FY 2025.

**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> Organic Precision Fires (OPF)	40.885	45.025	62.329	0.000	62.329
<b>Articles:</b>	-	-	-	-	-
<b>FY 2023 Plans:</b>					
OPF-M					
- Continued C2 and software development and integration					
- Purchased munitions for testing					
- Conducted multiple System Integration Events (SIE) to further mature launcher and C2 software compatibility and munition integration					
- Began development of a universal launcher					

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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 0604657M / MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST	<b>Project (Number/Name)</b> 7400 / Combat Capability Development Transition

<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>
<ul style="list-style-type: none"> <li>- Conducted New Equipment Training (NET) in support of Early Operational Assessment (EOA)</li> <li>- Conducted EOA</li> <li>- Completed analysis and development of training systems requirements and improve training simulator</li> </ul> <p>OPF-L</p> <ul style="list-style-type: none"> <li>- Conducted market research and vendor manufacturing analysis</li> <li>- Completed product specification requirements for RFP and source selection evaluation criteria</li> </ul> <p><b>FY 2024 Base Plans:</b></p> <p>OPF-M</p> <ul style="list-style-type: none"> <li>- Continue C2 and software development and integration</li> <li>- Continue development of a universal launcher</li> <li>- Purchase OPF-M test assets to conduct post EOA system level testing and munitions qualification testing</li> <li>- Conduct Limited User Evaluations (LUE) to validate concept of employment and inform system improvements</li> </ul> <p>OPF-L</p> <ul style="list-style-type: none"> <li>- Award two contracts for test assets to include munitions and C2 systems</li> <li>- Complete test planning and conduct Test Readiness Review (TRR)</li> <li>- Initiate developmental testing</li> </ul> <p>OPF-D</p> <ul style="list-style-type: none"> <li>- Conduct market research and vendor manufacturing analysis</li> <li>- Initiate product specification requirements for RFP and source selection evaluation criteria</li> </ul> <p><b>FY 2024 OCO Plans:</b></p> <p>N/A</p> <p><b>FY 2023 to FY 2024 Increase/Decrease Statement:</b></p> <p>The increase reflects the initial purchase OPF-L test assets, Limited User Evaluations for OPF-M, and program initiation of OPF-D.</p>					
<b>Accomplishments/Planned Programs Subtotals</b>	40.885	45.025	62.329	0.000	62.329

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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 0604657M / MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST	<b>Project (Number/Name)</b> 7400 / Combat Capability Development Transition

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

Line Item	FY 2022	FY 2023	FY 2024	FY 2024	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Cost To	
			Base	OCO	Total					Complete	Total Cost
• PMC/4733: Organic Precision Fires (OPF)	0.000	0.000	0.000	-	0.000	126.864	219.344	107.158	204.781	Continuing	Continuing
• PMC/3088: Organic Precision Fires (OPF)	0.000	0.000	0.000	-	0.000	112.219	112.212	114.456	116.745	0.000	455.632

**Remarks**

**D. Acquisition Strategy**

The OPF-M was designated as a Mid-Tier Acquisition (MTA) program for Rapid Prototyping in order to reduce program risk by developing a system level prototype, maturing the technology and gaining user feedback to inform the Capabilities Development Document in support of a decision to transition to a Major Capability Acquisition pathway. The MTA will continue through FY 2024 and will be used to conduct system level testing and munitions qualification testing in support of transitioning into production. Based on successfully demonstrating the prototype and completing system level qualification testing, the program will transition to a Major Capability Acquisition pathway, entering at MS C in FY 2025. The program will seek to award a Federal Acquisition Regulations (FAR) based production contract to the current vendor based on the authorities of 10 USC 4022 and having successfully completed a rapid prototyping project that was previously competed.

The OPF-L program will be designated as an Abbreviated Acquisition Program in FY 2023. A Request For Proposal (RFP) will be released for non-developmental, loitering munition systems in FY 2023. In FY 2024, the program will award Indefinite Delivery/Indefinite Quantity contracts to two vendors for systems and munitions qualification testing, as well as follow-on systems and munitions procurements. Upon completion of testing, the program will issue additional delivery orders to the successful vendor(s).

The OPF-D effort will enter the Major Capability Acquisition (MCA) pathway at Milestone B in FY 2025. A RFP will be released in FY 2024 to award a FAR based contract for a loitering munition system, to include the vendor command and control system, capable of being launched from the ground and transported by a ULTV or man-packed by dismounted Marines.

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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 0604657M / MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST	<b>Project (Number/Name)</b> 7400 / Combat Capability Development Transition
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<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>			
Prior Years Cumulative Funding	Various	Various : Various	20.263	0.000		0.000		0.000		-		0.000	0.000	20.263	-
OPF-M Vendor Development	C/CPFF	Mistral : Bethesda, MD	9.407	5.407	Nov 2021	4.470	Nov 2022	3.398	Nov 2023	-		3.398	Continuing	Continuing	Continuing
OPF-M Government Development	Various	Various : Various	4.460	1.590	Nov 2021	3.738	Nov 2022	2.600	Nov 2023	-		2.600	Continuing	Continuing	Continuing
OPF-M Assembly and Installation	Various	Various : Various	0.000	4.022	Nov 2021	0.667	Nov 2022	0.000		-		0.000	Continuing	Continuing	Continuing
OPF-M Prototype - Universal Mount	C/BA	NSWC : Panama City, FL	0.510	0.170	Nov 2021	0.000		0.000		-		0.000	0.680	1.360	-
OPF-M Prototype - C2	MIPR	SMDC : Huntsville, AL	0.990	0.330	Nov 2021	0.000		0.000		-		0.000	1.320	2.640	-
OPF-M Prototype - Universal Launcher	C/FFP	Mistral : Bethesda, MD	0.750	0.250	Nov 2021	0.000		0.000		-		0.000	1.000	2.000	-
OPF-M Prototype - Stalker (Hunter)	MIPR	DLA : Norfolk, VA	0.000	3.000	Nov 2021	0.000		0.000		-		0.000	3.000	6.000	-
OPF-M Munition Test Assets	C/FFP	Mistral : Bethesda, MD	0.000	12.760	Nov 2021	15.250	Nov 2022	16.477	Nov 2023	-		16.477	0.000	44.487	-
OPF-L Munition Test Assets	C/BA	TBD : TBD	0.000	0.000		0.000		16.103	Feb 2024	-		16.103	0.000	16.103	-
<b>Subtotal</b>			36.380	27.529		24.125		38.578		-		38.578	Continuing	Continuing	N/A

**Remarks**  
The increase is due to the award of the OPF Light vendor contract.

<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>			
Prior Years Cumulative Funding	Various	Various : Various	3.298	0.000		0.000		0.000		-		0.000	0.000	3.298	-

PE 0604657M: MARINE CORPS GROUND COMBAT/SUPPORTING AR...  
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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 0604657M / MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST	<b>Project (Number/Name)</b> 7400 / Combat Capability Development Transition
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<b>Support (\$ in Millions)</b>				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
OPF-M Engineering Support	Various	Various : Various	0.879	1.914	Nov 2021	3.970	Nov 2022	3.918	Nov 2023	-		3.918	Continuing	Continuing	Continuing
OPF-L Engineering Support	C/BA	Various : Various	0.000	0.000		2.036	Nov 2022	2.047	Nov 2023	-		2.047	0.000	4.083	-
OPF-D Engineering Support	C/BA	Various : Various	0.000	0.000		0.000		2.062	Nov 2023	-		2.062	0.000	2.062	-
OPF-M Training System Development	MIPR	SMDC : Huntsville, AL	0.000	1.862	Apr 2022	0.945	Nov 2022	0.000	Nov 2023	-		0.000	Continuing	Continuing	Continuing
OPF-M JLTV Platform Support	Various	Various : Various	0.000	0.883	Apr 2022	0.404	Jan 2023	0.000	Jan 2024	-		0.000	Continuing	Continuing	Continuing
OPF-M LAV Platform Support	Various	Various : Various	0.537	1.445	Nov 2021	1.523	Nov 2022	1.599	Nov 2023	-		1.599	Continuing	Continuing	Continuing
<b>Subtotal</b>			4.714	6.104		8.878		9.626		-		9.626	Continuing	Continuing	N/A

**Remarks**  
The increase is due to the initiation of OPF-D.

<b>Test and Evaluation (\$ in Millions)</b>				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
Developmental Test & Evaluation (DT&E)	Various	Various : Various	2.960	5.324	Nov 2021	7.477	Nov 2022	9.804	Nov 2023	-		9.804	Continuing	Continuing	Continuing
Operational Test & Evaluation (OT&E)	Various	Various : Various	0.000	0.000	Nov 2021	1.230	Nov 2022	0.000	Jan 2024	-		0.000	Continuing	Continuing	Continuing
<b>Subtotal</b>			2.960	5.324		8.707		9.804		-		9.804	Continuing	Continuing	N/A

**Remarks**  
The increase is due to OPF-M conducting Limited User Evaluations and OPF-L conducting initial safety testing.

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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 0604657M / MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST	<b>Project (Number/Name)</b> 7400 / Combat Capability Development Transition
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<b>Management Services (\$ 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 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>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Travel	Various	Various : Various	0.150	0.182	Oct 2021	0.250	Oct 2022	0.250	Oct 2023	-		0.250	Continuing	Continuing	Continuing
Program/Cost Management	Various	Various : Various	2.130	1.746	Oct 2021	3.065	Oct 2022	4.071	Oct 2023	-		4.071	Continuing	Continuing	Continuing
<b>Subtotal</b>			2.280	1.928		3.315		4.321		-		4.321	Continuing	Continuing	N/A

**Remarks**  
The increase is due to increase in program support of OPF-D.

	<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>	46.334	40.885	45.025	62.329	-	62.329	Continuing	Continuing	N/A

**Remarks**  
Overall increase is due to procurement OPF-L test assets, Limited User Evaluations for OPF-M, and program initiation of OPF-D.

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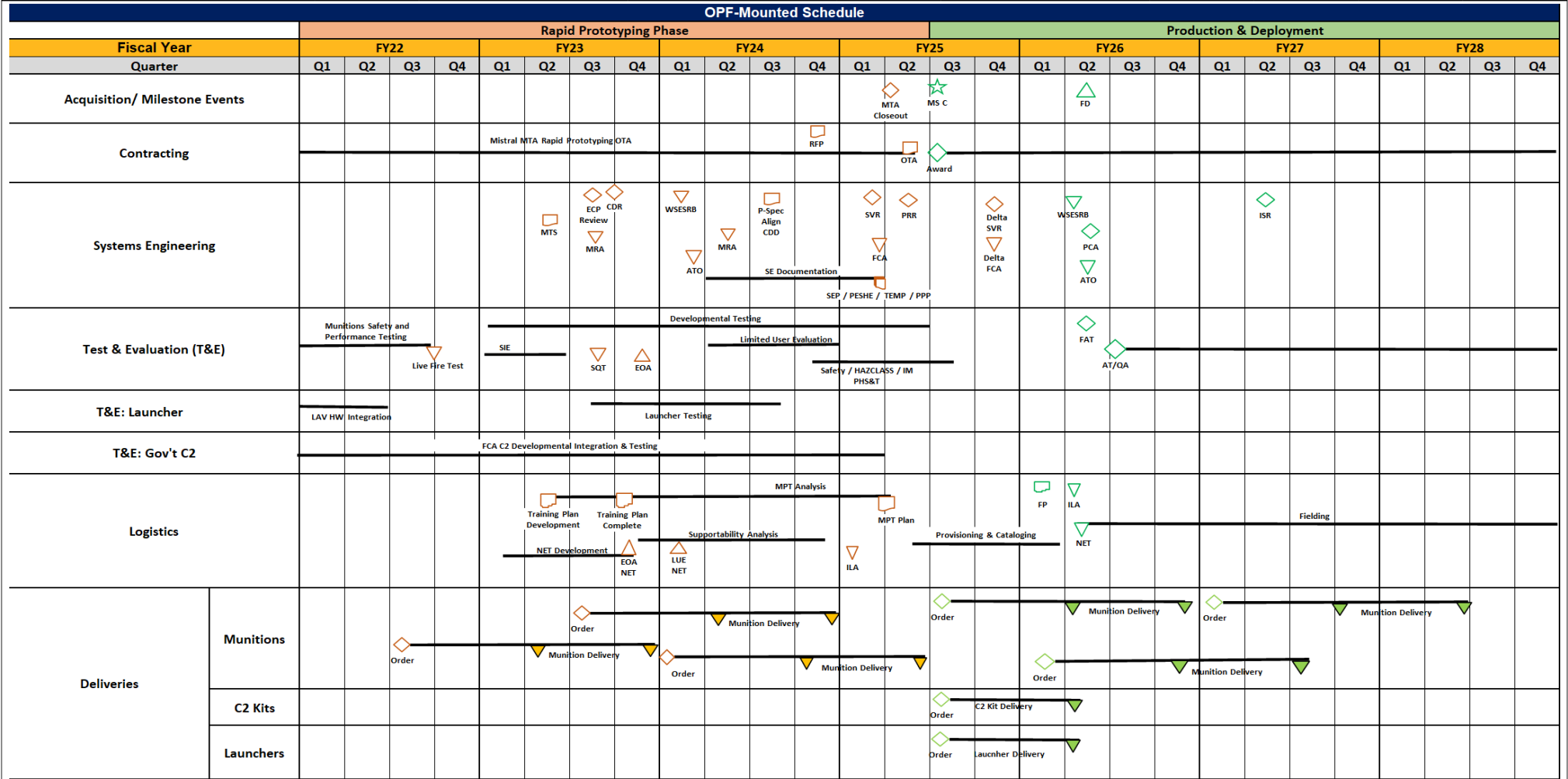
Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy

Date: March 2023

Appropriation/Budget Activity  
1319 / 5

R-1 Program Element (Number/Name)  
PE 0604657M / MARINE CORPS GROUND  
D COMBAT/SUPPORTING ARMS SYST

Project (Number/Name)  
7400 / Combat Capability Development  
Transition







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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</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 0604657M / MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYST	<b>Project (Number/Name)</b> 7400 / Combat Capability Development Transition

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 7400</b>				
OPF-M Live Fire Testing - Munitions	4	2022	4	2022
OPF-M Early Operational Testing	4	2023	4	2023
OPF-M Milestone C	3	2025	3	2025
OPF-L Munition Contract Award	2	2024	2	2024
OPF-D Munition Contract Award	1	2025	1	2025