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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2025 Army **Date:** March 2024

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603747A / <i>Soldier Support and Survivability</i>
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COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
Total Program Element	-	4.030	3.550	4.059	-	4.059	4.065	4.108	4.154	4.196	0.000	28.162
610: <i>Food Adv Development</i>	-	4.030	3.550	4.059	-	4.059	4.065	4.108	4.154	4.196	0.000	28.162

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

This Program Element (PE) supports component development and prototyping for organizational equipment, improved individual clothing and equipment that enhance Soldier battlefield effectiveness, survivability, and sustainment. This PE also supports the component development and prototyping of joint service food and combat feeding equipment designed to reduce logistics burden.

**B. Program Change Summary (\$ in Millions)**

	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025 Base</u>	<u>FY 2025 OCO</u>	<u>FY 2025 Total</u>
Previous President's Budget	4.060	3.550	4.154	-	4.154
Current President's Budget	4.030	3.550	4.059	-	4.059
Total Adjustments	-0.030	0.000	-0.095	-	-0.095
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.001	-			
• SBIR/STTR Transfer	-0.031	-			
• Adjustments to Budget Years	-	-	-0.095	-	-0.095

**Change Summary Explanation**

Slight reduction in cost resulting from planned lifecycle transition of efforts in Joint Service Combat Ration Advanced Development.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army										<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 4					<b>R-1 Program Element (Number/Name)</b> PE 0603747A / <i>Soldier Support and Survivability</i>				<b>Project (Number/Name)</b> 610 / <i>Food Adv Development</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
610: <i>Food Adv Development</i>	-	4.030	3.550	4.059	-	4.059	4.065	4.108	4.154	4.196	0.000	28.162
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

This Project provides for the advanced component development and prototyping of Joint Service combat ration components/platforms and field feeding equipment designed to improve warfighter performance and reduce the logistics burden of subsistence support. Efforts funded in this Project support all four Services, the Special Operations Command, and the Defense Logistics Agency. The Army serves as the Executive Agent for this Department of Defense (DoD) program, with oversight and coordination provided by the DoD Combat Feeding Research and Engineering Board as required by DoD Directive (DoDD) 3235.02E. Centralized execution of the DoD Combat Feeding Research and Engineering Program (CFREP) with Joint Service review and approval eliminates unnecessary duplication of efforts across the Services and maximizes use of common materiel solutions. Prototypes validated within this effort transition to Army Program Element 0604713A (Combat Feeding, Clothing and Equipment) / Project 548 (Mil Subsistence Sys) for System Development and Demonstration.

Work in this Project is performed by the United States Army Futures Command (AFC), U.S. Army Combat Capabilities Development Command (DEVCOM) Soldier Center (SC), Natick, MA.

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

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<b>Title:</b> Joint Service Combat Ration Advanced Development	2.176	2.661	2.098
<b>Description:</b> This effort matures and integrates combat ration technologies and prototypes that enable warfighter maneuver, readiness and effectiveness during highly mobile, dispersed operations. Technologies are transitioned from RDTE Budget Activity 3 projects to provide individual and group combat rations and components with improved capabilities including improved warfighter physical and cognitive performance through optimized nutrition and a reduced logistics burden through weight and cube reduction.			
<b>FY 2024 Plans:</b> Will perform advanced component development of calorically dense meal replacement bars, for insertion into the Meal Ready-to-Eat (MRE) and Close Combat Assault Ration (CCAR) platforms, in support of operations where resupply is limited; will perform small scale producibility studies and quality assurance testing of emerging manufacturing processes; Will perform evaluations of packaging configurations in support of reduced field feeding logistics, and supporting waste reduction efforts in operational settings; will maintain menu modernization enhancements across operational ration platform, to support the current demographic shifts, meeting emerging Warfighter preferences, improving Warfighter acceptance, and increasing nutritional intake.			
<b>FY 2025 Plans:</b>			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
<p>Will validate and integrate S&amp;T innovations and Commercial Off The Shelf Non-Developmental Item (COTS/NDI) candidate items into operational ration platforms; Will identify alternate products for discontinued commercial products in the Modular Operational Ration Enhancement (MORE) Performance Pack; will perform MORE component testing to support muscle recovery; will conduct accelerated storage to verify shelf life, and evaluate Warfighter acceptability; will perform Developmental Test and Evaluation (DT&amp;E) to establish baseline menus to meet religious menu requirements in arctic environments.</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Funding decrease due to planned lifecycle transition of efforts to Army Program Element 0604713A (Combat Feeding, Clothing and Equipment) / Project 548 (Mil Subsistence Sys) for Operational Test and Evaluation (OT&amp;E).</p>				
<p><b>Title:</b> Joint Service Field Feeding Equipment and Menu Development</p> <p><b>Description:</b> This effort matures and integrates field feeding equipment technologies and prototypes in support of the Navy, Air Force, and Marine Corps that reduce the logistics burden, improve efficiency, and decrease operation and support costs as directed by the DoD CFREB. This effort also conducts test and evaluation (T&amp;E) on Navy Standard Core Menu components and preparation techniques to enhance efficiency through standardization across the fleet and reduce labor requirements.</p> <p><b>FY 2024 Plans:</b> Will conduct developmental T&amp;E for insertion of refrigeration system prototypes in support of USAF Basic Expeditionary Airfield Resources (BEAR) energy conservation goals, will transition prototypes to Program Element 0604713A/Project 548 - Combat Feeding, Clothing and Equipment, for Operational Test &amp; Evaluation (OT&amp;E).; Will facilitate transition of Contingency Menus developed under the Navy Standard Core Menu (NSCM) to the Navy and support galley-based Limited User Evaluations.</p> <p><b>FY 2025 Plans:</b> Will conduct DT&amp;E to modernize fleet-wide foodservice operations aboard submarines, by optimizing refrigeration/storage, modernizing foodservice equipment assets, and reducing Sailor workload; Will initiate prototype fabrication of modular, scalable field feeding platforms in support of USMC Expeditionary Advance Base Operations (EABO), addressing the needs of platoon through battalion field feeding requirements; will deliver standardized Food Service Management (FSM) ready menu items in support of Navy Standard Core Menu (NSCM).</p> <p><b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Increase in funding to support efforts to modernize fleet-wide foodservice operations and initiation of prototypes for modular, scalable field feeding platforms.</p>		1.854	0.889	1.961
<b>Accomplishments/Planned Programs Subtotals</b>		4.030	3.550	4.059

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603747A / <i>Soldier Support and Survivability</i>	<b>Project (Number/Name)</b> 610 / <i>Food Adv Development</i>

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

<u>Line Item</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>Cost To</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>					<u>Complete</u>	
• 548: <i>Mil Subsistence Sys</i>	1.509	2.223	1.583	-	1.583	1.585	1.601	1.620	1.636	0.000	11.757

**Remarks**

**D. Acquisition Strategy**

Validated prototypes will transition to System Development and Demonstration for operational test and evaluation.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army												Date: March 2024				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)								
2040 / 4				PE 0603747A / Soldier Support and Survivability				610 / Food Adv Development								
<b>Management Services (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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	
Combat Feeding Program Management	Allot	DEVCOM Soldier Center, Natick, MA : Natick, MA	8.431	0.456	Oct 2022	0.495	Oct 2023	0.560	Oct 2024	-		0.560	Continuing	Continuing	Continuing	
<b>Subtotal</b>			8.431	0.456		0.495		0.560		-		0.560	Continuing	Continuing	N/A	
<b>Product Development (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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	
Joint Service Rations and Combat Feeding Equipment	Various	Various : Various	46.431	3.176	Oct 2022	2.442	Oct 2023	2.861	Oct 2024	-		2.861	Continuing	Continuing	Continuing	
<b>Subtotal</b>			46.431	3.176		2.442		2.861		-		2.861	Continuing	Continuing	N/A	
<b>Test and Evaluation (\$ in Millions)</b>				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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	
Joint Service Rations and Combat Feeding Equipment	Allot	DEVCOM Soldier Center, Natick, MA : Natick, MA	1.862	0.398	Oct 2022	0.613	Oct 2023	0.638	Oct 2024	-		0.638	Continuing	Continuing	Continuing	
<b>Subtotal</b>			1.862	0.398		0.613		0.638		-		0.638	Continuing	Continuing	N/A	
<b>Project Cost Totals</b>			56.724	4.030		3.550		4.059		-		4.059	Continuing	Continuing	N/A	
<b>Remarks</b>																

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<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2025 Army</b>			<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603747A / <i>Soldier Support and Survivability</i>	<b>Project (Number/Name)</b> 610 / <i>Food Adv Development</i>	

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Evaluate individual and group ration enhancements and tr...																												
Conduct in-house T&E of optimized CCAR and transition to...																												
Provide USN w/CPI, evaluations and menu development to s...																												
Conduct in-house T&E of energy conservation technologies...																												
Conduct in-house T&E of EFK upgrades for USMC																												
Conduct T&E of food service equipment systems for USAF JAC...																												
Conduct DT&E of field feeding equipment for Navy Bakery ...																												
Conduct in-house T&E of Modular Operational Ration Enhan...																												
Conduct developmental testing of field feeding equipment...																												
Conduct development of system prototypes for scalable fe...																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army		<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603747A / <i>Soldier Support and Survivability</i>	<b>Project (Number/Name)</b> 610 / <i>Food Adv Development</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Evaluate individual and group ration enhancements and transition to SDD for OT&E	1	2017	4	2029
Conduct in-house T&E of OPRATS with improved lipid quality & transition to TDPs	1	2022	4	2022
Conduct in-house T&E of EGR and transition to SDD for OT&E	1	2020	4	2022
Conduct I-H T&E of non-destructive sampling technologies for food contamination	1	2021	4	2022
Conduct in-house T&E of optimized CCAR and transition to SDD for OT&E	1	2024	4	2026
Provide USN w/CPI, evaluations and menu development to support NSCM upgrades	1	2017	4	2029
ID and evaluate advanced galley/scullery equipment for the USN	1	2017	4	2021
Conduct T&E of Galley/Scullery equipment and transition to SDD for OT&E	1	2017	4	2021
Conduct in-house T&E of JIMKE intuitive equipment and transition to SDD for OT&E	2	2019	4	2020
Conduct T&E on rapidly deployable refrigeration prototype	1	2020	4	2020
Conduct in-house T&E of mobile feeding galley and transition to SDD for OT&E	1	2019	1	2020
Award contract to fabricate IRefS prototype and conduct in-house T&E	1	2019	4	2020
Conduct in-house T&E of energy conservation technologies for BEAR Kitchens	1	2023	4	2024
Conduct in-house T&E of EFK upgrades for USMC	1	2022	4	2024
Conduct in-house T&E of expeditionary kitchen systems for shore-based Navy units	1	2020	4	2021
Conduct T&E of food service equipment systems for USAF JACKS	1	2023	4	2023
Conduct DT&E of field feeding equipment for Navy Bakery Upgrades, Transition for OT&E	1	2023	4	2023
Conduct in-house T&E of Modular Operational Ration Enhancement, Transition for OT&E	1	2025	4	2027
Conduct developmental testing of field feeding equipment for Submarine Based Upgrades, Transition for OT&E	1	2025	4	2025

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Events	Start		End	
	Quarter	Year	Quarter	Year
Conduct development of system prototypes for scalable feeding platforms, in support of USMC EABO;	1	2025	4	2026