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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Army **Date:** May 2021

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0605052A / Indirect Fire Protection Capability Inc 2 - Block 1
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	-	186.369	153.362	233.512	-	233.512	-	-	-	-	-	-
EY7: IFPC Increment 2 - Block 1	-	186.369	153.362	233.512	-	233.512	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The Indirect Fire Protection Capability Increment 2 (IFPC Inc 2) will provide a ground-based weapon system designed to acquire, track, engage, and defeat Cruise Missiles (CM), Unmanned Aircraft Systems (UAS), and Rocket, Artillery, and Mortar (RAM) threats. The IFPC Inc 2 system consists of a launcher and interceptor integrated with the Army Integrated Air and Missile Defense (AIAMD) open systems architecture, IAMD Battle Command System (IBCS), and the Sentinel sensor to support the Threshold CM and UAS defeat mission. The Objective counter-RAM mission employs both alternative kinetic and non-kinetic defeat solutions.

The Army is pursuing the IFPC Inc 2 capability consisting of a launcher and interceptor as the kinetic solution for the mission to defeat CM, UAS, and RAM threats. The Army plans to pursue the IFPC High Energy Laser (IFPC HEL) and IFPC High Powered Microwave (IFPC HPM) as non-kinetic complementary capabilities as part of the IFPC Objective counter-RAM mission.

Additionally, the Army was directed in section 112 of the Nation Defense Authorization Act for 2019 to deploy an Interim Cruise Missile Defense (CMD) capability. The Army contracted with the Israeli Missile Defense Organization (IMDO) for two Interim CMD (Iron Dome Defense System - Army (IDDS-A)) batteries and continues efforts to improve their interoperability with the Army's Integrated Air and Missile Defense networks.

FY 2022 Base dollars in the amount of \$233.512 million are designated for Interim CMD Interoperability testing and support and the development and integration of the IFPC Inc 2 system.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	194.366	235.770	341.077	-	341.077
Current President's Budget	186.369	153.362	233.512	-	233.512
Total Adjustments	-7.997	-82.408	-107.565	-	-107.565
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-73.802			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-7.997	-8.606			
• Adjustments to Budget Years	-	-	-107.565	-	-107.565

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<u>Change Summary Explanation</u> Fiscal year (FY) 2022 decrease of \$104.677 million aligned program requirements with the current acquisition strategy and \$2.888 million reduced for inflation rate adjustments.		

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Army **Date:** May 2021

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605052A / Indirect Fire Protection Capability Inc 2 - Block 1	Project (Number/Name) EY7 / IFPC Increment 2 - Block 1
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COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
EY7: IFPC Increment 2 - Block 1	-	186.369	153.362	233.512	-	233.512	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

The Indirect Fire Protection Capability Increment 2 (IFPC Inc 2) will provide a ground-based weapon system designed to acquire, track, engage, and defeat Cruise Missiles (CM), Unmanned Aircraft Systems (UAS), and Rocket, Artillery, and Mortar (RAM) threats. The IFPC Inc 2 system consists of a launcher and interceptor integrated with the Army Integrated Air and Missile Defense (AIAMD) open systems architecture, IAMD Battle Command System (IBCS), and the Sentinel sensor to support the Threshold CM and UAS defeat mission. The Objective counter-RAM mission employs both alternative kinetic and non-kinetic defeat solutions.

In Fiscal Year (FY) 2018, the Army evaluated alternative strategies to address an Army interim CM defense (CMD) capability at critical strategic fixed site locations while continuing the development of an IFPC capability. In FY 2019, the Army signed a contract with the Israeli Missile Defense Organization (IMDO) for two Interim CMD (Iron Dome Defense System - Army (IDDS-A)) batteries. The IFPC Inc 2 program is conducting an interoperability effort to establish communications between the Interim CMD (IDDS-A) batteries' Battle Management Center (BMC) and the US Army's Air and Missile Defense (AMD) Architecture that includes the Army's Integrated Air and Missile Defense (IAMD) Battle Command System (IBCS) and legacy Air Defense command and control (C2) networks.

Concurrently with the Interim CMD effort, the Army is pursuing an Enduring IFPC Inc 2 Middle Tier Acquisition (MTA) - Rapid Prototyping strategy. This competitive strategy invites Industry to participate in a "Shoot Off" demonstration in FY 2021 using Industries' proposed launcher and missile solutions integrated with the Army's IBCS and Sentinel radar. The Army will release a solicitation and will evaluate Industry proposals informed by models and simulations, hardware-in-the-loop, and live fire data to make a Best Value recommendation to proceed to a single vendor to deliver the Enduring IFPC Inc 2 prototype solution. The Army will use this MTA Rapid Prototyping approach to provide a prototype capability in FY 2023, before transitioning into Production and Deployment phase by FY 2025.

The Army plans to pursue the IFPC High Energy Laser (IFPC HEL) and IFPC High Powered Microwave (IFPC HPM) as part of the IFPC Objective counter-RAM mission. The IFPC HEL and IFPC HPM elements will be robust, cost effective, and sustainable complementary capabilities to the overall IFPC mission to protect key fixed and semi-fixed sites. The IFPC Product Office will conduct initial planning and coordination with the Army Rapid Capabilities and Critical Technologies Office (RCCTO) and the Army's Air and Missile Defense Cross-Functional Team (AMD CFT) in FY 2022 to enable an efficient transfer of the IFPC HEL and IFPC HPM efforts in FY 2024.

FY 2022 Base dollars in the amount of \$233.512 million are designated for Interim CMD Interoperability testing and support and the development and integration of the IFPC Inc 2 system.

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

	FY 2020	FY 2021	FY 2022
Title: Interim CMD (Iron Dome Defense System - Army) Integration and Testing	52.888	4.350	30.059

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605052A / <i>Indirect Fire Protection Capability Inc 2 - Block 1</i>	Project (Number/Name) EY7 / <i>IFPC Increment 2 - Block 1</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2020	FY 2021	FY 2022
<p>Description: Funding is provided to support the assessment of operational utility and safety of the Iron Dome Defense System-Army (IDDS-A) as an Interim IFPC Inc 2 capability</p> <p>FY 2021 Plans:</p> <ul style="list-style-type: none"> - Continue Performance Analysis of Interim CMD (IDDS-A) systems - Continue Logistics Assessments - Continue system engineering, integration, logistics engineering, system evaluation management, technical configuration control, and business management activities - Continue assessment of Interim CMD (IDDS-A) systems launcher and interceptor interoperability with US command and control system - Continue interoperability system engineering and software development efforts to enable Interim CMD (IDDS-A) system to interoperate with United States (US) systems utilizing a US external command and control system - Continue IAMD support of Interim CMD (IDDS-A) Interoperability <p>FY 2022 Plans:</p> <ul style="list-style-type: none"> - Residual testing of Interim CMD (IDDS-A) capability - Interim CMD (IDDS-A) Interoperability Operational Assessment - Conduct system engineering, logistics engineering, system evaluation management, and technical configuration control to enhance interoperability of Interim CMD (IDDS-A) capability with US missile defense architecture - Assess supportability requirements, sufficiency of training, maintenance and repair procedures, and capabilities of logistics support package during Operational Assessment - Continue IAMD effort to expand interoperability between Interim CMD (IDDS-A) and the Army Integrated Air and Missile Defense (AIAMD) through IBCS - IFPC's Interim CMD (IDDS-A) will develop nascent capability and support Army demonstration and test initiatives to increase interoperable offensive and defensive capability across warfighter functions and multiple domains <p>FY 2021 to FY 2022 Increase/Decrease Statement: Interim CMD (IDDS-A) capability increased requirements due to transition to operational assessment in FY 2022</p>				
<p>Title: IFPC Inc 2 Prototype Development, Integration, Manufacturing, and Testing</p> <p>Description: Funding is provided to support the development, integration, prototype manufacturing, and testing of the IFPC Inc 2 capability</p> <p>FY 2021 Plans:</p> <ul style="list-style-type: none"> - Hold "Shoot Off" demonstration for IFPC Inc 2 participating contractors 		59.195	149.012	203.453

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605052A / <i>Indirect Fire Protection Capability Inc 2 - Block 1</i>	Project (Number/Name) EY7 / <i>IFPC Increment 2 - Block 1</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
<ul style="list-style-type: none"> - Award contract for follow-on development and Rapid Prototyping effort to initiate manufacturing of incrementally funded IFPC Inc 2 prototype launchers (16) and interceptors (80) - Continue launcher, interceptor, and system hardware and software design - Continue launcher and interceptor development activities, to include Communications and Data Uplink with mission command and sensor, and launcher Weapons Interface Controller and Engagement Calculator software development - Continue engineering and technical support of the IFPC Inc 2 hardware, software, and interface development - Continue IFPC Inc 2 launcher and interceptor model accreditation - Continue IFPC Inc 2 interceptor integration with launcher - Continue IFPC Inc 2 launcher and interceptor Integration with mission command and sensor <p>FY 2022 Plans:</p> <ul style="list-style-type: none"> - Continue manufacturing of incrementally funded IFPC Inc 2 prototype launchers (16) and interceptors (80) - Continue launcher, interceptor, and system hardware and software design for producibility, affordability, and operational supportability to ensure materiel availability and reduce the logistics footprint - Continue IFPC Inc 2 interceptor integration with launcher - Continue IFPC Inc 2 launcher and interceptor development activities to integrate launcher and interceptor hardware and software, communications, and Data Uplink, and externally with IBCS EOC and Sentinel radar to ensure operational integrity and protection of critical program information - Continue IFPC Inc 2 launcher and interceptor model and simulation accreditation to provide alternate means to prove out system capabilities while reducing live fire test event requirements - Continue Interoperability End-to-End simulations and testing, to include updating the GSIL's Hardware-in-the-Loop elements with selected prototype hardware - Develop and integrate Operator and Maintainer Interfaces: Technical User and Maintenance Manuals, internal Maintenance Troubleshooting software, internal training software, RT3 software update for IFPC system, update to IBCS mission command SW tools (i.e., Integrated Defense Designer tool to inform for optimal coverage and protection) - Develop trainer hardware and software packages for institutional Operators and Maintainers training at ADA School and NG Training Sites - Initiate testing activities to demonstrate system integration, interoperability, supportability, safety, and utility - Initiate testing activities to demonstrate reliability, availability, maintainability, and sustainment features included in design of the system and ensure operational supportability while minimizing the logistical footprint - Conduct initial planning and coordination with RCCTO and AMD CFT on IFPC HEL and IFPC HPM <p>FY 2021 to FY 2022 Increase/Decrease Statement: The increase will fund the enduring IFPC Inc 2 ?Shoot-Off? demonstration that will take place in 3Q FY 2021, followed by an independent source selection based on proposals, informed by ?Shoot-Off? results and digital simulation data. In 4Q FY 2021,</p>			

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2020	FY 2021	FY 2022
the approved industry materiel solutions will begin prototyping activities, to include efforts to initiate manufacturing (i.e., long lead procurements, manufacturing setup) of 16 prototype launchers and 80 prototype interceptors.			
FY 2022 efforts will provide follow-on activities to continue prototyping manufacturing and design and initiate testing, modeling & simulation, interoperability modeling, maintainability and sustainability engineering, and User Interface efforts.			
Title: FY 2020 Congressional Rescission	74.286	-	-
Description: Funding transferred in accordance with Title 15 USC ?638			
Accomplishments/Planned Programs Subtotals	186.369	153.362	233.512

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
• C62002: <i>IFPC INC 2- I BLOCK 1 SYSTEM</i>	9.337	62.461	25.253	-	25.253	-	-	-	-	-	-
• E10: <i>Sentinel</i>	91.782	105.271	127.919	-	127.919	-	-	-	-	-	-
• WK5057: <i>Sentinel Mods</i>	133.910	92.380	47.642	-	47.642	-	-	-	-	-	-
• S40: <i>Army Integrated Air and Missile Defense</i>	211.634	206.850	157.873	-	157.873	-	-	-	-	-	-
• BZ5075: <i>IAMD Battle Command System</i>	29.629	198.587	301.872	-	301.872	-	-	-	-	-	-

Remarks
This program is an integral part of the Army Integrated Air and Missile Defense (AIAMD) architecture.

D. Acquisition Strategy
As reported in Oct 2018, the Army will rapidly field an Interim CMD capability with the Israeli Iron Dome system. Concurrently, the Army will integrate an Enduring IFPC capability of a launcher and interceptor leveraging the AIAMD open systems architecture and IBCS, as the Fire Control component, and the US Sentinel sensor.

The Army approved a Directed Requirement to initiate procurement of the Israeli Iron Dome missile system for the Interim CMD capability on 9 Feb 2019. Congress approved ATR actions to align IFPC FY 2018 and 2019 Procurement to fund the Interim CMD (Iron Dome Defense System-Army) purchase and to repurpose the FY 2019 RDTE funds in May 2019 for associated system evaluation.

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<p>To support the Interim CMD (IDDS-A) requirement, the Army has signed a contract for two Interim CMD (IDDS-A) batteries for technical evaluation, assessment of operational utility, and safety evaluation. Additionally, the IFPC program will perform logistics analysis and assessments to determine IDDS-A training requirements, fielding requirement, spares packages, maintenance policies, and required Operational and Maintenance documentation. IFPC is conducting interoperability efforts to assess the ability to improve IDDS-A interoperability with U.S. ADA system architecture, continuing its logistics assessments, Modeling and Simulation analysis, and integration activities, as well as, conducting Performance Analysis and Testing of the Interim CMD (IDDS-A) capability at White Sands Missile Range prior to their deployment for operational assessment.</p> <p>The Army will utilize a Middle Tier Acquisition (MTA) Rapid Prototyping approach to evaluate new capability and provide a prototype capability in FY 2023, before transitioning into Production and Deployment phase by FY 2025. In support of the IFPC Inc 2 solution, the Army will pursue a Competitive strategy with Industry participating in a "Shoot Off" demonstration using Industries' proposed launcher and missile solutions integrated with the Army's IBCS and Sentinel radar. On 2 July 2020, the Army Contracting Command - Redstone (ACC-RSA) signed bailment agreements with two vendors in support of the "Shoot Off" phase effort. The Army will evaluate Industry proposals informed by models and simulations, hardware-in-the-loop, and live fire data, to make a Best Value recommendation to proceed to a single vendor to deliver the enduring IFPC Inc 2 prototype solution.</p> <p>The Army plans to pursue the IFPC High Energy Laser (IFPC HEL) and IFPC High Powered Microwave (IFPC HPM) as part of the IFPC Objective counter-RAM mission. The IFPC HEL and IFPC HPM elements are currently managed by the Army Rapid Capabilities and Critical Technologies Office (RCCTO) and are planned for transfer of responsibility to the IFPC Product Office in FY 2024.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army												Date: May 2021			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0605052A / Indirect Fire Protection Capability Inc 2 - Block 1				EY7 / IFPC Increment 2 - Block 1							
Management Services (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
Travel	Various	Various : Various	0.674	0.474	May 2020	0.425	May 2021	0.500	May 2022	-		0.500	Continuing	Continuing	Continuing
FY 2020 Withhold Pending Congressional Rescission	TBD	Various : Various	-	74.286		-		-		-		-	0.000	74.286	-
Withhold Pending BTR to M-SHORAD	TBD	TBD : TBD	-	-		0.963	Apr 2021	-		-		-	0.000	0.963	-
Subtotal			0.674	74.760		1.388		0.500		-		0.500	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
Interim IFPC - System Dev & Interoperability External Spt	Various	Multiple Activities : Multiple Locations	-	-		4.350	May 2021	4.980	May 2022	-		4.980	0.000	9.330	-
Interim IFPC Ctr Eng, Product Dev, & Interoperability	Various	Multiple Activities : Multiple Locations	20.883	-		-		13.605	Jun 2022	-		13.605	0.000	34.488	-
IFPC Technical Support	MIPR	Multiple Activities : Multiple Locations	-	7.509	Jul 2020	-		-		-		-	0.000	7.509	-
IFPC - System Eng & Integration	Various	Multiple Activities : Multiple Locations	30.941	15.022	Aug 2020	17.137	Jul 2021	20.074	Jun 2022	-		20.074	Continuing	Continuing	Continuing
IFPC System Dev and Integration External Support	Various	Multiple Activities : Multiple Locations	-	45.010	Jul 2020	21.985	May 2021	33.426	Jul 2022	-		33.426	Continuing	Continuing	Continuing
IFPC Contractor Prototype Development / Integration	C/TBD	To Be Determined : To Be Determined	-	-		55.140	Aug 2021	59.852	Apr 2022	-		59.852	Continuing	Continuing	Continuing
IFPC Contractor Prototype Manufacturing	C/TBD	To Be Determined : To Be Determined	-	-		49.696	Aug 2021	37.509	Apr 2022	-		37.509	Continuing	Continuing	-
Subtotal			51.824	67.541		148.308		169.446		-		169.446	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army												Date: May 2021			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0605052A / Indirect Fire Protection Capability Inc 2 - Block 1				EY7 / IFPC Increment 2 - Block 1							
Support (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
Interim IFPC - Log Support	TBD	TBD : TBD	42.600	12.086	Apr 2020	-		-		-		-	0.000	54.686	-
IFPC Log Support	Various	Multiple Activities : Multiple Locations	4.023	0.919	Jul 2020	0.750	May 2021	2.786	Jul 2022	-		2.786	Continuing	Continuing	-
IFPC Contractor Log Support	C/TBD	To Be Determined : To Be Determined	-	-		-		5.305	Apr 2022	-		5.305	Continuing	Continuing	-
Subtotal			46.623	13.005		0.750		8.091		-		8.091	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 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
Interim IFPC Operational Testing	IA	Multiple Activities : Multiple Locations	19.888	30.663	Apr 2020	-		12.874	Apr 2022	-		12.874	0.000	63.425	-
IFPC PM Testing Support	IA	Multiple Activities : Multiple Locations	1.209	0.400	Jul 2020	2.200	Jun 2021	2.695	Jun 2022	-		2.695	Continuing	Continuing	Continuing
IFPC Developmental Testing	IA	Multiple Activities : Multiple Locations	-	-		0.716	Apr 2021	23.431	May 2022	-		23.431	Continuing	Continuing	-
IFPC Contractor Test Support	C/TBD	To Be Determined : To Be Determined	-	-		-		16.475	Apr 2022	-		16.475	Continuing	Continuing	-
Subtotal			21.097	31.063		2.916		55.475		-		55.475	Continuing	Continuing	N/A
Project Cost Totals			120.218	186.369		153.362		233.512		-		233.512	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2022 Army		Date: May 2021
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605052A / Indirect Fire Protection Cap ability Inc 2 - Block 1	Project (Number/Name) EY7 / IFPC Increment 2 - Block 1

Event Name	FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026			
	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
Interim CMD Capability Integration and Test Activities	[Redacted]				Interim CMD Integration and Test Activities																							
Interim CMD Interoperability and development effort					Interim CMD Interoperability																							
Interim CMD 1st Iron Dome Battery Delivery					1				Interim CMD 1st Iron Dome Battery Delivered																			
Interim CMD 2nd Iron Dome Battery Delivery					2				Interim CMD 2nd Iron Dome Battery Delivered																			
Interim CMD Live Fire Performance Testing									Interim CMD Live Fire Performance Testing																			
Interim CMD Safety Confirmation/Capabilities & Limitations Testing									Interim CMD Safety and Caps/Lims Testing																			
Interim CMD Urgent Materiel Release for Deployment of Batteries 1&2					4				Interim CMD UMR Btrys 1&2																			
Interim CMD Interoperability Operational Analysis									Interim CMD Interoperability Analysis																			
IFPC MDA Decision Point for Middle Tier Acquisition Strategy					3				IFPC MTA Strategy Decision Point																			
IFPC Industry Partners' preparation for "Shoot-Off" Demonstration	IFPC "Shoot-Off" Prep																											
IFPC "Shoot-Off" Demonstration					IFPC "Shoot-Off"																							
IFPC OTA (Single Vendor) for Prototype development completion and manufacturing									IFPC Prototype Dev & Mfg																			
IFPC System Testing (Component/System Qual & DT/Live Fire Testing)									IFPC System Qual / DT / Live Fire																			

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army		Date: May 2021
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
National Defense Authorization Act for FY2019 directed IFPC Report to Congress	1	2019	1	2019
Interim CMD Directed Requirement - Interim CMD System	2	2019	2	2019
Interim CMD Title 10, Para 2373 Contract Award for Interim Iron Dome Btrys 1&2	4	2019	4	2019
Interim CMD Capability Integration and Test Activities	1	2020	4	2020
Interim CMD Interoperability and development effort	4	2020	4	2023
Interim CMD 1st Iron Dome Battery Delivery	1	2021	1	2021
Interim CMD 2nd Iron Dome Battery Delivery	2	2021	2	2021
Interim CMD Live Fire Performance Testing	4	2021	4	2021
Interim CMD Safety Confirmation/Capabilities & Limitations Testing	4	2021	4	2021
Interim CMD Urgent Materiel Release for Deployment of Batteries 1&2	4	2021	4	2021
Interim CMD Interoperability Operational Analysis	3	2022	3	2022
IFPC MDA Decision Point for Middle Tier Acquisition Strategy	2	2021	2	2021
IFPC Industry Partners' preparation for "Shoot-Off" Demonstration	3	2020	3	2021
IFPC "Shoot-Off" Demonstration	3	2021	4	2021
IFPC OTA (Single Vendor) for Prototype development completion and manufacturing	4	2021	3	2023
IFPC System Testing (Component/System Qual & DT/Live Fire Testing)	2	2022	4	2023
IFPC Operational Demonstration	4	2023	1	2024
IFPC Early Operational Capability Units	4	2023	4	2023
IFPC MS C / Production Decision	2	2024	2	2024
IFPC Low Rate Initial Production (LRIP)	3	2024	1	2026
IFPC Initial Operational Test & Evaluation (IOT&E)	3	2025	1	2026
IFPC Full Rate Production (FRP)	1	2026	1	2031

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Exhibit R-4A, RDT&E Schedule Details: PB 2022 Army **Date:** May 2021

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Events	Start		End	
	Quarter	Year	Quarter	Year
IFPC First Unit Equipped (FUE)	3	2026	3	2026
IFPC Follow-On Test & Evaluation (FOT&E)	1	2028	4	2028

Note
 CMD: Cruise Missiles Defense
 FUE:
 FY: Fiscal Year
 IFPC: Indirect Fire Protection Capability