Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Office of the Secretary Of Defense	Date: February 2019
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*

COST ($ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	100.000	46.984	99.107	100.957	-	100.957	102.964	104.961	106.972	109.241	Continuing	Continuing
638: *Rapid Prototyping Program*	100.000	46.984	99.107	100.957	-	100.957	102.964	104.961	106.972	109.241	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Rapid Prototyping Program (RPP) accelerates innovation through prototyping efforts in partnership with the Services and Defense Agencies that reduce risk, establish affordable and realistic requirements, and support timely development of fieldable prototypes demonstrated in an operational environment. RPP addresses priorities identified by the National Defense Strategy, modernization focus areas of the Department of Defense (DoD), the Chairman's Capability Gap Assessment, and Service-identified capability gaps and needs. Overarching program goals include enhanced warfighter lethality, modernization of cross-cutting technology areas, and delivering capabilities more quickly than traditional acquisition.

RPP develops prototypes that deliver needed capabilities to address Service gaps, reduce technical and integration risk, and enable warfighter feedback to define and improve requirements for Service and Agency programs of record. RPP project selection is guided by the National Defense Strategy, USD(R&E) priorities, and key technology modernization areas including machine learning; directed energy, networked command, control, and communications, intelligence, surveillance, and reconnaissance (ISR), advanced autonomous systems, and, joint lethality. RPP is also guided by the Chairman's Capability Gap Assessment, and Service-identified gaps and needs. RPP rapidly develops and fields cross-cutting, multi-Service prototype capabilities that can be demonstrated in an operational environment to inform Department of Defense and Service leadership.

B. Program Change Summary ($ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	100.000	99.333	101.246	-	101.246
Current President's Budget	46.984	99.107	100.957	-	100.957
Total Adjustments	-53.016	-0.226	-0.289	-	-0.289
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-2.920	-			
• Congressional Reduction	-50.000	-	-	-	-
• FFRDC Reduction	-0.096	-0.226	-	-	-
• Other Program Adjustments	-	-	-0.289	-	-0.289

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Office of the Secretary Of Defense	Date: February 2019
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*

Change Summary Explanation

The Congressional reduction in FY 2018 recognizes that the Rapid Prototyping Program was a new initiative starting in late FY 2017.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense			Date: February 2019
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604331D8Z / *Rapid Prototyping Program*	Project (Number/Name) 638 / *Rapid Prototyping Program*	

COST ($ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
638: *Rapid Prototyping Program*	100.000	46.984	99.107	100.957	-	100.957	102.964	104.961	106.972	109.241	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Rapid Prototyping Program (RPP) develops prototypes to deliver capabilities, reduce risk, and inform requirements. RPP facilitates and accelerates joint, cross-cutting prototyping efforts for the Services and Defense Agencies. This program has the agility to select, fund, and implement projects in the year of execution as new opportunities or threats emerge. Planned funding supports the National Defense Strategy and focus areas that enable USD(R&E) to anticipate and respond to emergent Service and Agency needs and time-sensitive threats. RPP projects fund prototypes addressing specific Service gaps in technology areas including machine learning; advanced autonomous systems; directed energy; electronic warfare; command, control, communications, computers and intelligence, surveillance, and reconnaissance (C4ISR); and, joint lethality.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
Title: Multi-Domain Multi-Mission Sensors	12.700	-	-
Description: This project designed and developed prototype multi-mission intelligence, surveillance, reconnaissance, and tactical sensors through the Air Force multi-domain command and control system (MDC2). The prototype sensors support the DoD's modernization priority of counter-hypersonics. The developed sensors include a low-cost, distributed satellite system consisting of multiple small busses with multi-mode detection capabilities that operate in low Earth orbit. The prototype system leveraged other efforts to develop high speed sensor processing, clutter mitigation algorithms, and low latency sensor-to-shooter correlation processing. FY 2018 funds supported prototype development, testing, integration into MDC2, and operational demonstration. The capability transitioned to the Air Force and Missile Defense Agency.			
Title: Optical Augmentation	9.200	-	-
Description: This prototyping project rapidly developed a capability that automatically detects the day/night sights used by modern anti-tank guided missiles, enabling the warfighter to detect and engage adversaries from a standoff range with increased lethality. The prototype system consists of current vehicle sensors fused with optical augmentation in near-, short-, medium-, and long-wave infrared bands for increased target discrimination. The prototype detection capability was integrated via rapid technology insertion with the Army's Long Range Advance Scout Surveillance System (LRAS3). The project developed four prototype detection systems for test and validation. The prototypes leveraged partners from the Army Rapid Capabilities Office and the Army Product Manager Ground Soldier Systems. Using FY 2018 funding, the project initiated development, integration, and testing of the system hardware and software. Transition partner funding will support an initial assessment in FY 2020 and a final military utility assessment (MUA) in FY 2021. Following a successful MUA, the systems will be transitioned to the Army LRAS3 program of record, and will inform the Next Generation Combat Vehicle.			

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
Title: Seeker Technology for Hypervelocity Projectiles ***Description:*** This prototyping project developed innovative seeker technologies suitable for hypervelocity projectiles to enhance combat lethality in complex environments. The prototype is a gun-hardened, low-cost seeker technology that significantly improves accuracy and enables critical multi-mission capability. Multiple seeker technologies for small agile interceptors were integrated and tested using a government developed and built projectiles. The prototype built on work completed in the Office of Naval Research and the Strategic Capabilities Office. FY 2018 funds completed development and testing to support a final flight test with a subsequent transition to a new acquisition program in the Navy.	13.100	-	-
Title: The Perfect Storm ***Description:*** This prototyping project supports the command, control, computers, communications intelligence, surveillance, and reconnaissance (C4ISR) key capability area. The Perfect Storm developed an affordable, scalable, forward deployed electronic warfare asset to support missions not currently attainable by other means due to anti-access/area denial and size, weight, and power constraints. The prototype system consists of a multi-kernel, multi-channel application specific integrated circuit, radio frequency transceiver hardware, and software development kit. Prototypes were developed and tested using a small unmanned autonomous system platform. This effort leveraged partners from the U.S. Army Communications-Electronics Research Development and Engineering Center, Intelligence and Information Warfare Directorate. Capabilities transitioned to the U.S. Army and U.S. Navy. Additional details are classified.	10.484	-	-
Title: Mission Rehearsal Trainer (MRT) ***Description:*** The previously funded MRT prototyping project developed a distributed learning prototype that trains, prepares, and increases the performance of target intelligence officers thereby creating a more lethal, agile, and resilient force. MRT addressed a lack of on-site training through a scenario driven system that allows the instructor to increase the complexity of a training scenario to improve the intelligence officer's proficiency. MRT partnered with the U.S. Indo-Pacific Command (USINDOPACOM) Joint Intel Operations Center (JIOC) and Massachusetts Institute for Technology Lincoln Laboratory to improve an existing intelligence, surveillance, and reconnaissance training system. During FY 2018, the MRT system was assessed and demonstrated with intel operators and instructors using real world scenarios, while also validating training scenarios specifically desired by the USINDOPACOM JIOC. MRT transitioned to the Defense Intelligence Agency.	1.500	-	-
Title: Machine Learning Technologies Focus Area ***Description:*** This focus area leverages joint prototyping capabilities and key machine learning technologies to enable increased situational awareness with data analytics for faster reaction time. Prototype technologies will advance capabilities such as cognitive performance, object discrimination, and interactive task learning. Specific activities include algorithm development, machine learning transfer, and cognitive architecture and modeling. These prototype capabilities will reduce technical and	-	19.000	19.000

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
integration risk and provide joint, cross-cutting value to the warfighter. A cross functional team, led by the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)), will review and select prototyping proposals from across the Department of Defense in the year of execution. ***FY 2019 Plans:*** RPP anticipates supporting one to two machine learning projects in FY 2019. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. The FY 2019 RPP proposal submission cycle started in 1Q FY 2019, and funding awards are planned for 2Q FY 2019. ***FY 2020 Plans:*** RPP anticipates supporting one to two machine learning projects in FY 2020. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation.			
Title: Advanced Autonomous Systems Technologies Focus Area ***Description:*** This focus area explores advances in autonomy platforms to enable more effective human-machine teaming and collaboration, use of autonomous systems in complex urban environments, and low-cost, scalable autonomous assets to defeat threats. Prototype technologies will advance capabilities such as scalable autonomous behavior, collaborative actions between autonomous systems, human-above-the-loop control, and hardware for next-generation autonomous systems. Specific activities include autonomy algorithm development, modeling and design, and experimentation and evaluation of autonomy platforms. These prototype capabilities will reduce technical and integration risk and provide joint, cross-cutting value to the warfighter. A cross functional team, led by the OUSD(R&E), will review and select prototyping proposals from across the Department of Defense in the year of execution. ***FY 2019 Plans:*** RPP anticipates supporting one to two autonomy projects in FY 2019. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. The FY 2019 RPP proposal submission cycle started in 1Q FY 2019, and funding awards are planned for 2Q FY 2019. ***FY 2020 Plans:*** RPP anticipates supporting one to two autonomy projects in FY 2020. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** RPP plans to increase investment in advanced autonomous systems in FY 2020.	-	17.000	18.000
Title: Directed Energy (DE) Technologies Focus Area	-	18.000	18.000

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
Description: This focus area matures key technologies through rapid prototyping to develop DE capabilities while informing concept of operations (CONOPS). DE weapons provide the warfighter with scalable, targeted, and precision engagement while minimizing collateral damage. This focus area will prototype advanced technologies required to enable the broad employment of DE technologies across the joint force. Example technologies include compact, efficient energy generation, energy storage, and thermal management technologies, high efficiency laser diodes, advanced manufacturing and fabrication techniques, and, robust beam control technologies. Specific activities include effects testing to quantify target susceptibility to DE; development, testing, and optimization of DE subsystems; and, integration of weapon prototypes. These prototyping activities will enable faster transition of DE technologies to the warfighter by reducing technical risk, informing joint force CONOPS, and demonstrating new warfighter capabilities enabled by DE. A cross functional team, led by the OUSD(R&E), will review and select prototyping proposals from across the Department of Defense in the year of execution. ***FY 2019 Plans:*** RPP anticipates supporting one to two DE projects in FY 2019. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. The FY 2019 RPP proposal submission cycle started in 1Q FY 2019, and funding awards are planned for 2Q FY 2019. ***FY 2020 Plans:*** RPP anticipates supporting one to two DE projects in FY 2020. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation.			
Title: Electronic Warfare (EW) Technologies Focus Area	-	12.000	12.000
Description: This focus area develops new concepts and key technologies to improve the ability to detect, locate, and classify electronic threats; deter electronic attacks targeting military operations; defeat electronic attacks using kinetic and non-kinetic methods; and, create electromagnetic interference effects on enemy systems. Prototype technologies will advance capabilities like air and ground electronic support (ES) and electronic attack (EA), tactical EW systems, and EW mission command systems. Specific activities include development and testing of electronic protection systems, distributed and coordinated ES/EA systems, broadband radio frequency components and systems, and EW analysis support systems. These prototype capabilities will reduce technical and integration risk and provide joint, cross-cutting value to the warfighter. A cross functional team, led by the OUSD(R&E), will review and select prototyping proposals from across the Department of Defense in the year of execution. ***FY 2019 Plans:***			

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
RPP anticipates supporting one to two EW projects in FY 2019. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. The FY 2019 RPP proposal submission cycle started in 1Q FY 2019, and funding awards are planned for 2Q FY 2019. ***FY 2020 Plans:*** RPP anticipates supporting one to two EW projects in FY 2020. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation.			
Title: Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) ***Description:*** This focus area explores joint prototypes and concept-of-operations for C4ISR capabilities while deterring the adversary's capabilities. Developed prototypes will improve situational awareness; indications and warnings; threat detection; and, inform tactical and strategic decisions. Counter-C4ISR capabilities will prevent or disrupt the adversary's ability to detect, track, localize, and engage our forces. Specific activities include design and development of interoperable C4ISR system architectures; vulnerability analysis and exploitation; advanced sensors; anti-jam antenna systems; materials with novel electromagnetic properties; on-board processing; fusion of intelligence data; and, platform integration testing. These prototype capabilities will reduce technical and integration risk and provide joint, cross-cutting value to the warfighter. A cross functional team, led by the Office of the Under Secretary of Defense for Research and Engineering, will review and select prototyping proposals from across the Department of Defense in the year of execution. ***FY 2019 Plans:*** RPP anticipates supporting one to two C4ISR projects in FY 2019. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. The FY 2019 RPP proposal submission cycle started in 1Q FY 2019, and funding awards are planned for 2Q FY 2019. ***FY 2020 Plans:*** RPP anticipates supporting one to two C4ISR projects in FY 2020. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation.	-	18.000	18.000
Title: Joint Lethality Focus Area ***Description:*** This focus area matures joint prototypes to maintain U.S. dominance in the air, space, and ground domains; rapidly and precisely defeat foreign threats; and, maintain a decisive conventional force. Projects enable the warfighter to identify technical and operational deficiencies; characterize diverse threats in complex environments; explore emerging and novel attack capabilities inside adversaries' defense networks; and, improve warfighter readiness. Prototype technologies will advance and evaluate capabilities in long range weapons; kinetic and non-kinetic precision weapons; novel delivery systems and weapon effects; and, countermeasure mitigation. These prototype capabilities will reduce technical and integration risk; and, provide joint,	-	15.107	15.957

Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
cross-cutting value to the warfighter. A cross functional team, led by the OUDS(R&E), will review and select prototyping proposals from across the Department of Defense in the year of execution. ***FY 2019 Plans:*** RPP anticipates supporting one to two joint lethality projects in FY 2019. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. The FY 2019 RPP proposal submission cycle started in 1Q FY 2019, and funding awards are planned for 2Q FY 2019. ***FY 2020 Plans:*** RPP anticipates supporting one to two joint lethality projects in FY 2020. Deliverables will include developmental and fieldable prototypes demonstrated in an operational environment with warfighter participation. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** FY 2019 and FY 2020 are funded for a similar level of effort in this focus area. Minor changes are due to small internal baseline adjustments.			
Accomplishments/Planned Programs Subtotals	46.984	99.107	100.957

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

N/A

D. Acquisition Strategy

RPP leverages the Services' and Defense Agencies' most efficient and effective acquisition approach for rapid prototyping. This includes using Other Transaction Authorities and new or existing contract vehicles.

E. Performance Metrics

A new start program in FY 2017, RPP successfully completed its first two prototyping projects in FY 2018 and transitioned both with an overall transition rate of 100 percent. The FY 2018 remaining projects are on track toward completion and transition. All RPP projects are monitored for schedule deviation, transition outcome, and deliverables such as hardware, software, and other components.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Hypersonic Tracking with Multi-Mission Sensors	MIPR	Secretary of the Air Force Financial Management (SAF/FM) : Washington D.C.	-	12.700	Jul 2018	-		-		-		-	Continuing	Continuing	-
Optical Augmentation	MIPR	U.S. Army Night Vision and Electronic Sensors Directorate : Fort Belvoir, VA	-	2.608	Aug 2018	-		-		-		-	Continuing	Continuing	-
Optical Augmentation	MIPR	U.S. Army Night Vision and Electronic Sensors : Fort Belvoir, VA	-	6.592	Sep 2018	-		-		-		-	Continuing	Continuing	-
Seeker Technology for Hypervelocity Projectiles	MIPR	U.S. Army Armament Research, Development and Engineering Center : Picatinny Arsenal, NJ (5 MIPRs)	-	5.626	Jul 2018	-		-		-		-	Continuing	Continuing	-
Seeker Technology for Hypervelocity Projectiles	MIPR	U.S. Naval Sea Systems Command : Washington Navy Yard, D.C.	-	0.500	Sep 2018	-		-		-		-	Continuing	Continuing	-
Seeker Technology for Hypervelocity Projectiles	IA	U.S. Department of Energy National Nuclear Security Administration : Albuquerque, NM	-	0.817	Nov 2018	-		-		-		-	Continuing	Continuing	-
Seeker Technology for Hypervelocity Projectiles	MIPR	U.S. Naval Air Warfare Center Weapons Division : China Lake, CA	-	0.577	Aug 2018	-		-		-		-	Continuing	Continuing	-
Seeker Technology for Hypervelocity Projectiles	MIPR	MULTI : MULTI	-	5.580	Nov 2018	-		-		-		-	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
The Perfect Storm	MIPR	U.S. Army Communications-Electronics Command (6 MIPRs) : Aberdeen Proving Ground, MD	-	4.713	Nov 2018	-		-		-		-	Continuing	Continuing	-
The Perfect Storm	MIPR	U.S. Defense MicroElectronics Activity : McClellan, CA	-	1.252	Aug 2018	-		-		-		-	Continuing	Continuing	-
The Perfect Storm	MIPR	U.S. Army Armament Research, Development and Engineering Center : Picatinny Arsenal, NJ	-	1.248	Aug 2018	-		-		-		-	Continuing	Continuing	-
The Perfect Storm	MIPR	MULTI : MULTI	-	3.271	Dec 2018	-		-		-		-	Continuing	Continuing	-
Mission Rehearsal Training (MRT)	MIPR	U.S. Defense Intelligence Agency : Washington, D.C.	-	1.500	Sep 2018	-		-		-		-	Continuing	Continuing	-
VARIOUS	MIPR	MULTI : MULTI	100.000	-		99.107		100.957		-		100.957	Continuing	Continuing	-
		Subtotal	100.000	46.984		99.107		100.957		-		100.957	Continuing	Continuing	N/A

	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	100.000	46.984		99.107		100.957		-		100.957	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

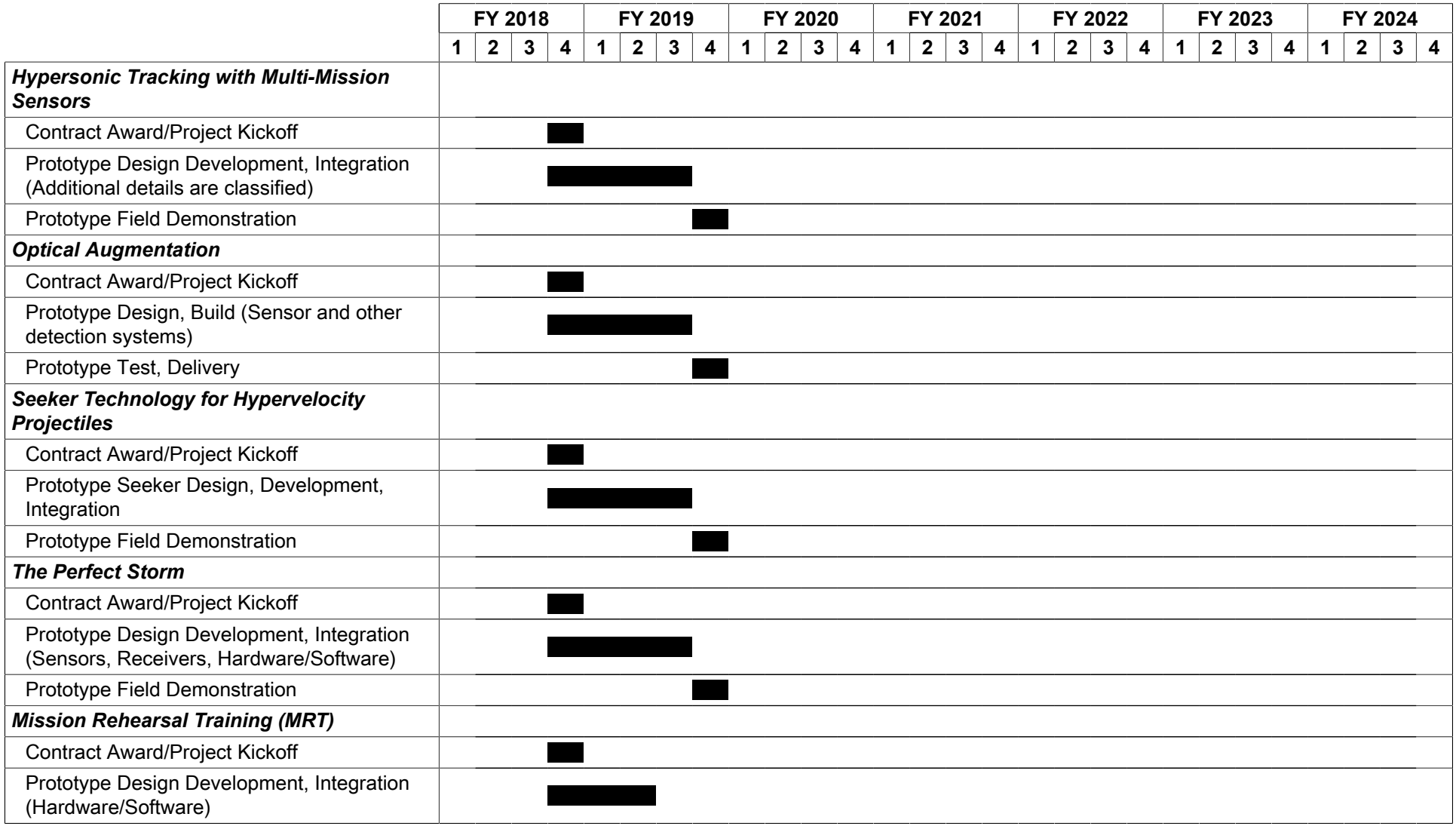

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

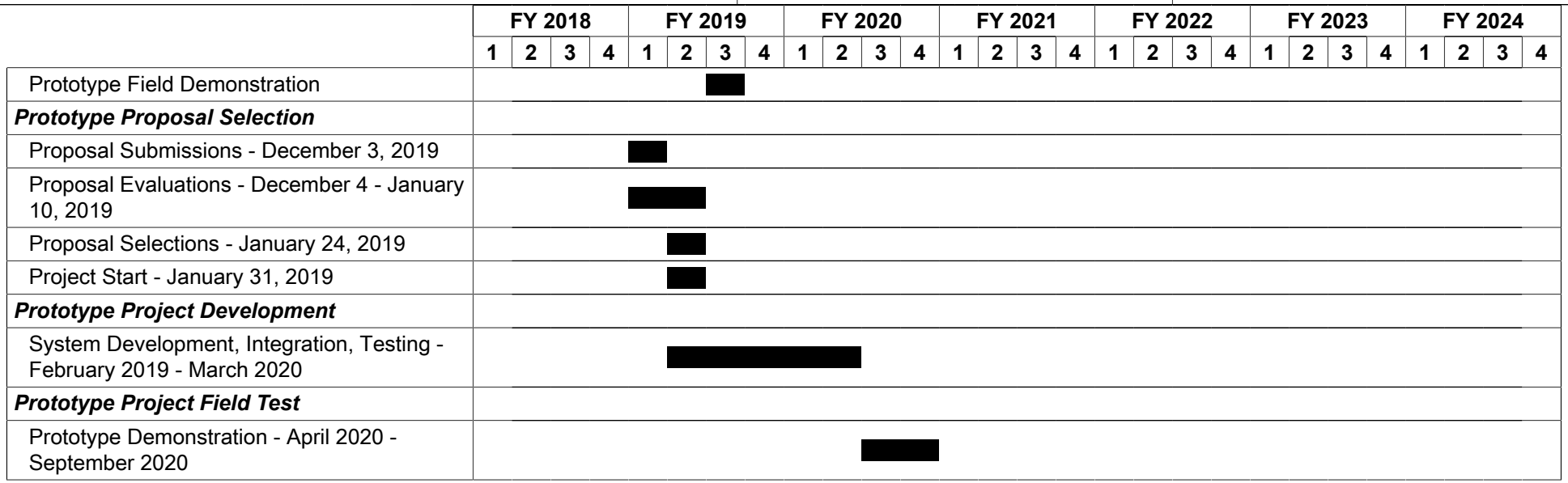

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Hypersonic Tracking with Multi-Mission Sensors				
Contract Award/Project Kickoff	4	2018	4	2018
Prototype Design Development, Integration (Additional details are classified)	4	2018	3	2019
Prototype Field Demonstration	4	2019	4	2019
Optical Augmentation				
Contract Award/Project Kickoff	4	2018	4	2018
Prototype Design, Build (Sensor and other detection systems)	4	2018	3	2019
Prototype Test, Delivery	4	2019	4	2019
Seeker Technology for Hypervelocity Projectiles				
Contract Award/Project Kickoff	4	2018	4	2018
Prototype Seeker Design, Development, Integration	4	2018	3	2019
Prototype Field Demonstration	4	2019	4	2019
The Perfect Storm				
Contract Award/Project Kickoff	4	2018	4	2018
Prototype Design Development, Integration (Sensors, Receivers, Hardware/Software)	4	2018	3	2019
Prototype Field Demonstration	4	2019	4	2019
Mission Rehearsal Training (MRT)				
Contract Award/Project Kickoff	4	2018	4	2018
Prototype Design Development, Integration (Hardware/Software)	4	2018	2	2019
Prototype Field Demonstration	3	2019	3	2019
Prototype Proposal Selection				
Proposal Submissions - December 3, 2019	1	2019	1	2019

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 4	**R-1 Program Element (Number/Name)** PE 0604331D8Z / *Rapid Prototyping Program*	**Project (Number/Name)** 638 / *Rapid Prototyping Program*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proposal Evaluations - December 4 - January 10, 2019	1	2019	2	2019
Proposal Selections - January 24, 2019	2	2019	2	2019
Project Start - January 31, 2019	2	2019	2	2019
Prototype Project Development				
System Development, Integration, Testing - February 2019 - March 2020	2	2019	2	2020
Prototype Project Field Test				
Prototype Demonstration - April 2020 - September 2020	3	2020	4	2020