

**UNCLASSIFIED**

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

<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 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>
---	--

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	-	41.690	4.813	39.376	-	39.376	-	-	-	-	-	-
FI4: <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	-	41.690	4.813	39.376	-	39.376	-	-	-	-	-	-

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

Maneuver-Short Range Air Defense (M-SHORAD) capabilities protect maneuvering forces by defeating, destroying, or neutralizing threat rotary-wing (RW), fixed-wing (FW), unmanned aircraft systems (UAS), rockets, artillery and mortar (RAM) capabilities. M-SHORAD is a Family of Systems (FoS) that perform operations to detect, track, and engage threat aerial objects without any external support. The M-SHORAD capability will be provided through a multi-phase approach including the rapidly fielded M-SHORAD Increment 1 (Inc. 1), formally known as Initial M-SHORAD system, and the follow-on M-SHORAD Increments 2 and 3 supported by a Joint Requirements Oversight Council approved Capability Development Document (CDD).

\* Inc. 1 system consists of existing capabilities integrated onto a Stryker A1 Double-V Hull (DVH) Infantry Carrier Vehicle (ICV) which includes the Reconfigurable Integrated-weapons Platform (RIWP) and Mission Equipment Package (MEP).

\* Inc. 2 is a 50 kilowatt(kW)-class laser integrated onto a Stryker combat Vehicle.

\* Inc. 3 will be the Next Generation interceptors to be compatible with Inc.1 platform.

**Budget Item Justification**

Key PB22 Activity:

M-SHORAD Inc. 1:

- First Fielding of 4 Systems (1 Platoon) April 2021
- Field 28 Systems (BN #1) 3Q-4QFY22
- Procure 37 Systems in FY22

M-SHORAD Inc. 2:

- Award OTA contract through RCCTO for prototyping
- Field prototype platoon

M-SHORAD Inc. 3:

- Pre-solicitation programmatic and technical activities

M-SHORAD programs will develop nascent capability and support Army demonstration and test initiatives to increase integrated offensive and defensive capability across warfighter functions and multiple domains.

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2022 Army	<b>Date:</b> May 2021
---	-----------------------

<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 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>
---	--

This program supports the Air and Missile Defense Cross Functional Team (CFT).

FY2021

The current funding shown is \$4.813M.

RDTE Funding increased by BTR of \$0.962M for a total funding value of \$5.8M in FY21.

The BTR amount of \$0.962M is currently not reflected in the cPROBE PB22 AF 3.3 database.

P&R Funding in FY21 will update when OSD receives an updated cPROBE data.

The PB22 APBB briefing slides includes the increased BTR funding for a total of \$5.8M in FY21.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>
Previous President's Budget	42.900	4.995	39.863	-	39.863
Current President's Budget	41.690	4.813	39.376	-	39.376
Total Adjustments	-1.210	-0.182	-0.487	-	-0.487
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.210	-0.182			
• Adjustments to Budget Years	-	-	-0.487	-	-0.487

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2022 Army										<b>Date:</b> May 2021		
<b>Appropriation/Budget Activity</b> 2040 / 4					<b>R-1 Program Element (Number/Name)</b> PE 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>				<b>Project (Number/Name)</b> F14 / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
F14: <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	-	41.690	4.813	39.376	-	39.376	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

FY2021  
 The current funding shown is \$4.813M.  
 RDTE Funding increased by BTR of \$0.962M for a total funding value of \$5.8M in FY21.  
 The BTR amount of \$0.962M is currently not reflected in the cPROBE PB22 AF 3.3 database.  
 P&R Funding in FY21 will update when OSD receives an updated cPROBE data.  
 The PB22 APBB briefing slides includes the increased BTR funding for a total of \$5.8M in FY21.

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

Maneuver-Short Range Air Defense (M-SHORAD) capabilities protect maneuvering forces by defeating, destroying, or neutralizing threat rotary-wing (RW), fixed-wing (FW), unmanned aircraft systems (UAS), rockets, artillery and mortar (RAM) capabilities. M-SHORAD is a Family of Systems (FoS) that perform operations to detect, track, and engage threat aerial objects without any external support. The M-SHORAD capability will be provided through a multi-phase approach including the rapidly fielded M-SHORAD Increment 1 (Inc. 1), formally known as Initial M-SHORAD system, and the follow-on M-SHORAD Increments 2 and 3 supported by a Joint Requirements Oversight Council approved Capability Development Document (CDD).

\* Inc.1 system consists of existing capabilities integrated onto a Stryker A1 Double-V Hull (DVH) Infantry Carrier Vehicle (ICV) which includes the Reconfigurable Integrated-weapons Platform (RIWP) and Mission Equipment Package (MEP).

\* Inc. 2 is a 50 kilowatt(kW)-class laser integrated onto a Stryker combat Vehicle.

\* Inc. 3 will be the Next Generation interceptors to be compatible with Inc.1 platform.

Budget Item Justification

Key PB22 Activity:

M-SHORAD Inc. 1:

- First Fielding of 4 Systems (1 Platoon) April 2021
- Field 28 Systems (BN #1) 3Q-4QFY22
- Procure 37 Systems in FY22

M-SHORAD Inc. 2:

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2022 Army		<b>Date:</b> May 2021		
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	<b>Project (Number/Name)</b> F14 / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>		
<p>- Award OTA contract through RCCTO for prototyping</p> <p>- Field prototype platoon</p> <p>M-SHORAD Inc. 3:</p> <p>- Pre-solicitation programmatic and technical activities</p> <p>M-SHORAD programs will develop nascent capability and support Army demonstration and test initiatives to increase integrated offensive and defensive capability across warfighter functions and multiple domains.</p> <p>This program supports the Air and Missile Defense Cross Functional Team (CFT).</p> <p>.</p>				
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
<p><b>Title:</b> Initial M-SHORAD Materiel Development/Integration</p> <p><b>Description:</b> Develop, test and integrate the M-SHORAD system.</p> <p><b>FY 2021 Plans:</b></p> <ul style="list-style-type: none"> <li>- Management Services (\$0.4M)</li> <li>- Product Development (\$3.0M)</li> <li>- Support (\$1.0M)</li> <li>- Test &amp; Evaluation Support (\$1.4M)</li> </ul> <p><b>FY 2022 Plans:</b></p> <p>Inc.1. (\$13.6M)</p> <p>Engineering &amp; Technical Support- This RDTE funding supports OTA contracts for engineering design, analysis integration, and systems modifications for obsolescence associated with internal radar and command and control systems. Additionally, other product improvements are required to advance the discharge of 30mm munitions and modernize GPS equipment for GPS- denied environments. (\$9.7M)</p> <p>Technical Support- This RDTE funding supports personnel assigned to government organizations to manage the various product improvements associated with OTA contracts. (\$3.9M)</p> <p>Inc.2. (\$24.6M)</p> <p>Program Management - Personnel in support of M-SHORAD Product Office (contractor support). FY22 PM costs support Inc.2 planning. Current funding for Inc. 2 supports personnel currently working in the Inc. 2 PO. The PO plans to transition the Inc. 2 team in FY24 to M-SHORAD PO. (\$2.3M).</p>		41.690	4.813	39.376

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2022 Army		<b>Date:</b> May 2021
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	<b>Project (Number/Name)</b> F14 / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
System Development, Prototypes and Integration - RDTE dollars placed through Rapid Capabilities and Critical Technologies Office (RCCTO) OTA contract for vendors that produce components and integrate M-SHORAD Inc. 2 System. (\$22.3M).  Inc.3. (\$1.2M) Prepare RFIs, conduct Industry Day, review white papers for Next Generation Interceptors. Industry Day will provide information for qualified contractors for a competitive shoot-off.  <b>FY 2021 to FY 2022 Increase/Decrease Statement:</b> Overall M-SHORAD Materiel Development/Integration funding increase supports Inc. 2 and future Increment development, integration, and planning for Inc. 3.			
<b>Accomplishments/Planned Programs Subtotals</b>	41.690	4.813	39.376

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022 Base</b>	<b>FY 2022 OCO</b>	<b>FY 2022 Total</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• C14301: <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	233.300	517.287	331.575	-	331.575	-	-	-	-	-	-

**Remarks**

**D. Acquisition Strategy**  
M-SHORAD Inc.1  
Increment 1 is a rapid acquisition program responding to a Directed Requirement signed by the Chief of Staff of the Army on 21 February 2018 to provide a short-term solution to address the lack of air defense capability in current maneuver formations. Prototyping activities were conducted with three vendors. M-SHORAD awarded a contract on September 30, 2020 for the production of enough systems to field four M-SHORAD Battalions by the end of FY23.

M-SHORAD Inc. 2  
Increment 2 will begin transition from the Rapid Capabilities and Critical Technologies Office (RCCTO) to the M-SHORAD Product Office in FY22. The M-SHORAD product office will award a contract to buy up to eight additional vehicle prototypes; buy long lead-time items for two prototypes and initiate acquisition and contract documents to support future production decision

M-SHORAD Inc. 3  
Increment 3 will be the Next Generation kinetic effector interceptors.

**UNCLASSIFIED**

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

<b>Appropriation/Budget Activity</b>	<b>R-1 Program Element (Number/Name)</b>	<b>Project (Number/Name)</b>
2040 / 4	PE 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	F14 / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>

M-SHORAD programs will develop nascent capability and support Army demonstration and test initiatives to increase integrated offensive and defensive capability across warfighter functions and multiple domains.

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army** **Date:** May 2021

<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604117A / Maneuver - Short Range Air Defense (M-SHORAD)	<b>Project (Number/Name)</b> F14 / Maneuver - Short Range Air Defense (M-SHORAD)
--	---	---

<b>Management Services (\$ in Millions)</b>				<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>			
Product Management Inc. 1	Various	Trident, Intuitive Research and others : Huntsville, Alabama	4.294	1.410	Oct 2019	0.376	Apr 2021	-		-		-	0.000	6.080	-
FY 2020 SBIR/STTR Transfer Inc. 1	TBD	Various : Various	-	1.210		-		-		-		-	0.000	1.210	-
Product Management Inc. 2	TBD	Trident, Intuitive Research and others : Huntsville, Alabama	-	-		-		2.300	Oct 2021	-		2.300	0.000	2.300	-
<b>Subtotal</b>			4.294	2.620		0.376		2.300		-		2.300	0.000	9.590	N/A

<b>Product Development (\$ in Millions)</b>				<b>FY 2020</b>		<b>FY 2021</b>		<b>FY 2022 Base</b>		<b>FY 2022 OCO</b>		<b>FY 2022 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>			
Engineering & Technical Support Inc. 1	MIPR	Combat Capabilites Development Command : Redstone Arsenal, AL	1.781	1.367	Oct 2019	-		-		-		-	0.000	3.148	-
System Development, Prototypes and Integration Inc. 1	C/CPIF	Defense Ordnance Technology Consortium (DOTC) : Various	121.552	13.835	Oct 2019	2.037	Mar 2021	-		-		-	0.000	137.424	-
Government Furnished Equipment (GFE) Inc. 1	MIPR	Program Executive Officer Missiles and Space : Various	6.896	1.183	Oct 2019	-		-		-		-	0.000	8.079	-
Technical Support - Inc. 1	MIPR	Redstone Test Center (RTC) and White Sands Missile Range (WSMR) : Huntsville, AL	-	-		-		3.890	Oct 2021	-		3.890	0.000	3.890	-

**UNCLASSIFIED**

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 / 4				PE 0604117A / Maneuver - Short Range Air Defense (M-SHORAD)				F14 / Maneuver - Short Range Air Defense (M-SHORAD)							
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
Next Gen M-SHORAD Interceptor Inc. 3	Various	Contractor : TBD	-	-		-		1.186	Oct 2021	-		1.186	0.000	1.186	-
Engineering Changes from M-SHORAD (Inc. 1) Fielding	Various	Contractor : TBD	-	-		-		9.700	Feb 2022	-		9.700	0.000	9.700	-
System Development, Prototypes and Integration Inc. 2	Various	Defense Ordnance Technology Consortium (DOTC) : Various	-	-		-		22.300	Jan 2022	-		22.300	0.000	22.300	-
<b>Subtotal</b>			130.229	16.385		2.037		37.076		-		37.076	0.000	185.727	N/A
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
Support Costs Inc. 1	MIPR	Aviation and Missiles Command (AMCOM) : Redstone Arsenal, AL	3.712	1.858	Oct 2019	1.000	May 2021	-		-		-	0.000	6.570	-
<b>Subtotal</b>			3.712	1.858		1.000		-		-		-	0.000	6.570	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
Developmental Testing Inc. 1	MIPR	Redstone Test Center (RTC) and White Sands Missile Range (WSMR) : Redstone, AL and WSMR, NM	2.448	10.125	Oct 2019	-		-		-		-	0.000	12.573	-

**UNCLASSIFIED**

**Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Army** **Date:** May 2021

<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	<b>Project (Number/Name)</b> F14 / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>
--	--	--

<b>Test and Evaluation (\$ in Millions)</b>				FY 2020		FY 2021		FY 2022 Base		FY 2022 OCO		FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Test Support Inc. 1	MIPR	RTC, WSMR, Target Management Office and others : Redstone, AL and WSMR, NM	4.229	10.702	Oct 2019	1.400	Mar 2021	-		-		-	0.000	16.331	-
<b>Subtotal</b>			6.677	20.827		1.400		-		-		-	0.000	28.904	N/A
<b>Project Cost Totals</b>			144.912	41.690		4.813		39.376		-		39.376	0.000	230.791	N/A

**Remarks**  
 FY2021  
 The current funding shown is \$4.813M.  
 RDTE Funding increased by BTR of \$0.962M for a total funding value of \$5.8M in FY21.  
 The BTR amount of \$0.962M is currently not reflected in the cPROBE PB22 AF 3.3 database.  
 P&R Funding in FY21 will update when OSD receives an updated cPROBE data.  
 The PB22 APBB briefing slides includes the increased BTR funding for a total of \$5.8M in FY21.

Contract Award Dates based on Obligation start dates in PB22 APBB briefing.  
 Engineering Change Orders and Technical Support for Inc.1 will be awarded based on individual task orders.

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2022 Army</b>		<b>Date: May 2021</b>
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604117A / Maneuver - Short Range Air Defense (M-SHORAD)	<b>Project (Number/Name)</b> F14 / Maneuver - Short Range Air Defense (M-SHORAD)

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
M-SHORAD (Incr. 1) Material Development/Integration	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
M-SHORAD (Incr. 1) Testing	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
M-SHORAD (Incr. 1) Contract Definitization	[Redacted]				[Redacted]				3 M-SHORAD (Incr. 1) Contract Definitization				[Redacted]				[Redacted]				[Redacted]							
M-SHORAD (Incr. 1) UMR	[Redacted]				1 M-SHORAD (Incr. 1) UMR				[Redacted]				[Redacted]				[Redacted]				[Redacted]							
M-SHORAD (Incr. 1) First Unit Equipped (FUE)	[Redacted]				2 M-SHORAD (Incr. 1) First Unit Equipped (FUE)				[Redacted]				[Redacted]				[Redacted]				[Redacted]							
M-SHORAD (Incr. 2) Other Transactional Authority (OTA) Award	[Redacted]				[Redacted]				4 M-SHORAD (Incr. 2) Separate Other Transaction Agreement (OTA) using RCCTO contr				[Redacted]				[Redacted]				[Redacted]							
M-SHORAD (Incr. 2) Prototyping	[Redacted]				[Redacted]				[Redacted]				5 M-SHORAD (Incr. 2) Prototyping				[Redacted]				[Redacted]							
M-SHORAD (Incr. 2) Prototype Platoon First Unit Issued	[Redacted]				[Redacted]				[Redacted]				7 M-SHORAD (Incr. 2) Prototype Platoon First Unit Issued				[Redacted]				[Redacted]							
M-SHORAD (Incr. 2) Production Decision	[Redacted]				[Redacted]				[Redacted]				7 M-SHORAD (Incr. 2) Production Decision				[Redacted]				[Redacted]							
M-SHORAD (Incr. 2) Production Contract Award	[Redacted]				[Redacted]				[Redacted]				[Redacted]				8 M-SHORAD (Incr. 2) Production Contract Award				[Redacted]							
M-SHORAD (Incr. 2) FUE	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				8 M-SHORAD (Incr. 2) M-SHORAD FU							
M-SHORAD (Incr. 3) Request for Information and Industry Day	[Redacted]				[Redacted]				[Redacted]				6 M-SHORAD (Incr. 3) Request for Information and Industry Day				[Redacted]				[Redacted]							
M-SHORAD (Incr. 3) Other Transactional Authority (OTA) Award	[Redacted]				[Redacted]				[Redacted]				6 M-SHORAD (Incr. 3) OTA Award				[Redacted]				[Redacted]							

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2022 Army</b>			<b>Date: May 2021</b>
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604117A / Maneuver - Short Range Air Defense (M-SHORAD)	<b>Project (Number/Name)</b> F14 / Maneuver - Short Range Air Defense (M-SHORAD)	

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
M-SHORAD (Incr. 3) Design, Development, Prototype Build & Performance Assessment																												

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details: PB 2022 Army</b>		<b>Date: May 2021</b>
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604117A / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>	<b>Project (Number/Name)</b> F14 / <i>Maneuver - Short Range Air Defense (M-SHORAD)</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Directed Requirement	2	2018	2	2018
M-SHORAD (Incr. 1) Material Development/Integration	4	2018	1	2020
M-SHORAD (Incr. 1) Testing	4	2019	1	2021
M-SHORAD (Incr. 1) Contract Definitization	4	2021	4	2021
M-SHORAD (Incr. 1) UMR	3	2021	3	2021
M-SHORAD (Incr. 1) First Unit Equipped (FUE)	3	2021	3	2021
M-SHORAD (Incr. 2) Other Transactional Authority (OTA) Award	2	2022	2	2022
M-SHORAD (Incr. 2) Prototyping	2	2022	4	2025
M-SHORAD (Incr. 2) Prototype Platoon First Unit Issued	4	2022	4	2022
M-SHORAD (Incr. 2) Production Decision	4	2023	4	2023
M-SHORAD (Incr. 2) Production Contract Award	1	2024	4	2031
M-SHORAD (Incr. 2) FUE	4	2025	4	2025
M-SHORAD (Incr. 3) Request for Information and Industry Day	2	2022	4	2022
M-SHORAD (Incr. 3) Other Transactional Authority (OTA) Award	2	2023	2	2023
M-SHORAD (Incr. 3) Design, Development, Prototype Build & Performance Assessment	2	2023	4	2028