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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2021 Army **Date:** February 2020

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	-	21.354	11.636	10.150	-	10.150	11.758	16.798	18.270	17.787	0.000	107.753
361: <i>Intelligence Simulation Systems</i>	-	4.936	3.026	2.024	-	2.024	0.000	0.000	0.000	0.000	0.000	9.986
362: <i>Jnt Land Component Constructive Trng</i>	-	16.418	8.610	8.126	-	8.126	11.758	16.798	18.270	17.787	0.000	97.767

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

This program element funds the development of constructive and wargame simulations used to realistically train commanders and their battle staffs on today's complex battlefield conditions.

Project 361 funds the development of the Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT). IEWTPT is a Non-System Training Device (NSTD) which supports home station training by simulating and stimulating Military Intelligence (MI) organic or surrogate equipment. It enables sustainment of critical individual and collective MI tasks/skills and is the core of the US Army Intelligence Center of Excellence (USAICoE) Military Intelligence (MI) holistic training strategy supporting mission command, targeting, and MI soldier readiness. IEWTPT provides a realistic simulation intelligence target environment for Multi-Intelligence disciplines such as All Source Analysis, Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), Human Intelligence (HUMINT), Geospatial Intelligence (GEOINT) and must stimulate and emulate multiple Intelligence, Surveillance, Reconnaissance (ISR) platform systems such as: Prophet, Distributed Common Ground Station-Army (DCGS-A); Tactical Ground Station (TGS); and Aerial Intelligence assets such as Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) and Guardrail Common Sensor (GRCS). IEWTPT provides training capabilities supporting detailed ISR individual, crew, and collective level mission rehearsals/exercises. IEWTPT can utilize a constructive simulation feed or operate in a stand-alone mode. IEWTPT provides the "Digital Range" for Warfighting Commanders at all echelons to train intelligence tasks based on accurately portraying the operational environment and simulating and stimulating MI equipment where system operators and analysts are able to synchronize their Intelligence, Surveillance, and Reconnaissance (ISR) assets to exploit exercise intelligence data and provide the commander with required, executable, intelligence information in support of decision making. IEWTPT provides training for analyst and system operators to exploit intelligence data during training, just as they would in "Real World" operations. The IEWTPT Technical Control Cell (TCC) is composed of two components: The Lower Enclave (LE) which supports exercise planning and development and drives the All Source and GEOINT training tasks and the Upper Enclave (UE) which supports all SIGINT related training and operates at the Top Secret / Sensitive Compartmented Information (TS/SCI) classification level.

FY 2021 funding in the amount of \$2.024 million supports MI soldier readiness and mission command by developing interface capabilities with Intelligence, Surveillance, Reconnaissance (ISR) platform programs/systems of record to train detailed military intelligence mission essential tasks in a simulation environment. The funds provide the development of web-enabled, cloud ready capabilities and emerging Electronic Warfare (EW) and intelligence support to Cyber operations for inclusion into the Technical Control Cell (TCC) software baseline. Additionally, funding will provide for transition to IEWTPT Increment 2 in FY 2022 by leveraging the existing mature program baseline. Increment 2 will be a software only environment and will provide training capabilities that are synchronized with emerging Intelligence Corps system modernization priorities supporting multi-domain operations.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2021 Army	<b>Date:</b> February 2020
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>
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Project 362, Joint Land Component Constructive Training Capability (JLCCTC) supports Army Title X training worldwide for Army Commanders and their staff at Mission Training Complexes (MTCs), Training and Doctrine Command (TRADOC) facilities, and other customer locations. JLCCTC trains Commanders and their staff in Decisive Actions to include offensive, defensive, stability, civil support operations, and is in the process to satisfy Multi-Domain Operations (MDO) requirements moving forward. JLCCTC is a software modeling and simulation capability that contributes to Army Training Mission Area by providing appropriate levels of model and simulation resolution and fidelity to support unit collective and combined arms training. The JLCCTC provides a composable federation configurable to any combination of models and simulations, as required by training exercise intent/design. The JLCCTC provides accurate representations of tactically and operationally relevant land warfare operations executed in a contemporary Joint operating environment/context in support of Army Training and Readiness.

FY 2021 base funding in the amount of \$8.134 million will complete Version 9.0 and will commence development, integration and test, and verification and validation activities for JLCCTC Version 10.0 to train Commanders and their Staff. JLCCTC will continue to support emerging Common Operating Environment / Computing Environment (COE/CE), Mission Command (MC), Cyber Security/Risk Management Framework (RMF), and Concurrency warfighter requirements. In addition, JLCCTC will continue to support the integration activities with Live, Virtual, Constructive-Integrated Architecture (LVC-IA), Combat Training Center Instrumentation System (CTC-IS), IEWTPT, and conduct Army ground model Analysis of Alternative (AoA) to interface with the Joint simulation capability.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>
Previous President's Budget	22.600	11.636	8.096	-	8.096
Current President's Budget	21.354	11.636	10.150	-	10.150
Total Adjustments	-1.246	0.000	2.054	-	2.054
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.246	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	2.054	-	2.054

**Change Summary Explanation**

Project 361 had no funding changes between Current President's Budget and Previous President's Budget.  
Project 362 has a funding decrease from FY 2020 to FY 2021 in support of the Army's modernization priorities.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Army										<b>Date:</b> February 2020		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>				<b>Project (Number/Name)</b> 361 / <i>Intelligence Simulation Systems</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
361: <i>Intelligence Simulation Systems</i>	-	4.936	3.026	2.024	-	2.024	0.000	0.000	0.000	0.000	0.000	9.986
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

This program element funds the Intelligence & Electronic Warfare Tactical Proficiency Trainer (IEWTPT) supporting home station training by simulating and stimulating Military Intelligence (MI) organic or surrogate equipment. It enables sustainment of critical individual and collective Military Intelligence (MI) tasks/skills and is the core of the US Army Intelligence Center of Excellence (USAICoE) Military Intelligence holistic training strategy supporting mission command, targeting, and MI soldier readiness. IEWTPT provides a realistic simulation intelligence target environment for Multi-Intelligence disciplines such as All Source Analysis, Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), Human Intelligence (HUMINT), Geospatial Intelligence (GEOINT) and must stimulate and emulate multiple Intelligence, Surveillance, Reconnaissance (ISR) platform systems such as: Prophet, Distributed Common Ground Station-Army (DCGS-A); Tactical Ground Station (TGS); and Aerial Intelligence assets such as Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) and Guardrail Common Sensor (GRCS). IEWTPT provides training capabilities supporting detailed ISR individual, crew, and collective level mission rehearsals/exercises. IEWTPT can utilize a constructive simulation feed or operate in a stand-alone mode. IEWTPT provides the "Digital Range" for Warfighting Commanders at all echelons to train intelligence tasks based on accurately portraying the operational environment and simulating and stimulating MI equipment where system operators and analysts are able to synchronize their Intelligence, Surveillance, and Reconnaissance (ISR) assets to exploit exercise intelligence data and provide the commander with required, executable, intelligence information in support of decision making. IEWTPT provides training for analyst and system operators to exploit intelligence data during training, just as they would in "Real World" operations. The IEWTPT Technical Control Cell (TCC) is composed of two components: The Lower Enclave (LE) which supports exercise planning and development and drives the All Source and GEOINT training tasks and the Upper Enclave (UE) which supports all SIGINT related training and operates at the Top Secret / Sensitive Compartmented Information (TS/SCI) classification level.

FY 2021 funding in the amount of \$2.024 million supports MI soldier readiness by developing interface capabilities with Intelligence, Surveillance, Reconnaissance (ISR) platform programs/systems of records to train detailed military intelligence mission essential tasks in a simulation environment in support of Mission Command and Targeting. The funds provide the development of web-enabled and cloud ready capabilities and emerging Electronic Warfare (EW) and intelligence support to Cyber operations for inclusion into the Technical Control Cell (TCC) software baseline. Additionally, funding will provide for transition to IEWTPT Increment 2 in FY 2022 by leveraging the existing mature program baseline. Increment 2 will be a software only environment and will provide training capabilities that are synchronized with emerging Intelligence Corps system modernization priorities supporting multi-domain operations.

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

	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<b>Title:</b> IEWTPT development, integration and support.	4.936	2.888	2.024
<b>Description:</b> Continue IEWTPT development, integration and support to the user community.			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Army		<b>Date:</b> February 2020		
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>	<b>Project (Number/Name)</b> 361 / <i>Intelligence Simulation Systems</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<p><b><i>FY 2020 Plans:</i></b> Will support V10.0 release and baseline improvements/concurrency in development of detailed simulation interface capabilities for Intelligence, Surveillance, Reconnaissance (ISR) platform systems in the PEO Intelligence Electronic Warfare &amp; Sensors (PEO IEW&amp;S) portfolio to support home-station intelligence training. Finalize a prototype cloud enabled training portal for the TCC and multi-intelligence training in a distributed/federated environment. Expand All Source, SIGINT baselines and begin task analysis of Electronic Warfare Open Source (OSINT) intelligence initial capabilities. Expand HUMINT, point of need, web-based, training capabilities, SIGINT scenario development tools, capabilities and evolve sensor emulation effects modeling as well as electronic intelligence replication for the simulation /user environment. Will execute technology development and integration supporting product deliverables needed to meet Ft. Huachuca and Army G2 training strategy requirements. Develop linkages to migrate to designated Core Data Center/Common Operating Environment/Computing and Synthetic Training Environments.</p> <p><b><i>FY 2021 Plans:</i></b> Supports V11.0 Security Accreditation, Version 11.01 release and incremental baseline improvements of detailed simulation interface capabilities for Intelligence, Surveillance, Reconnaissance (ISR) platform systems in the PEO Intelligence Electronic Warfare &amp; Sensors (PEO IEW&amp;S) portfolio to support home-station intelligence training. Develop prototype cloud ready baseline for the TCC transition to Increment 2, multi-intelligence training improvements that includes but not limited to: distributed/federated construct simulation environment, expand All Source, SIGINT baselines and begin detailed electronic warfare and cyber support task analysis in support of the Army's Multi Domain Operation strategy.</p> <p>Expand EW/SIGINT integration and cloud ready, point of need training capabilities. Expand SIGINT scenario development tools for cloud employment; sensor emulation effects modeling as well as theater and national level intelligence replication for the simulation /user environment. Will execute technology development and integration supporting product deliverables needed to meet Intelligence Center of Excellence (ICoE) and Army G2 training and modernization strategies. Develop and maintain appropriate linkages to ISR platform programs/systems to meet the Army's multi-domain intelligence training requirements.</p> <p><b><i>FY 2020 to FY 2021 Increase/Decrease Statement:</i></b> Decrease in FY 2020 to FY 2021 funding is in support of the Army's modernization priorities.</p>				
<p><b><i>Title:</i></b> FY 2020 SBIR/STTR Transfer</p> <p><b><i>Description:</i></b> Funding transferred in accordance with Title 15 USC ?638</p> <p><b><i>FY 2020 Plans:</i></b> Funding transferred in accordance with Title 15 USC ?638</p> <p><b><i>FY 2020 to FY 2021 Increase/Decrease Statement:</i></b></p>		-	0.138	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Army		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>	<b>Project (Number/Name)</b> 361 / <i>Intelligence Simulation Systems</i>

<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
Funding transferred in accordance with Title 15 USC ?638			
<b>Accomplishments/Planned Programs Subtotals</b>	4.936	3.026	2.024

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

<b>Line Item</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• NA0102: <i>NSTD INTELLIGENCE</i>	4.658	6.081	1.607	-	1.607	-	-	-	-	0.000	12.346

**Remarks**

NA0102= Other Procurement Army (OPA)

**D. Acquisition Strategy**

A full and open competitive five (5) year, cost plus fixed fee (CPFF) type contract, was awarded to General Dynamics Mission Systems, Orlando, FL on 16 February 2017. This IEWTPT Increment I/Block II contract has a two (2) year base with three (3) one (1) year options. The contract continues the incremental development, integration, test and evaluation, production and fielding and exercise/technical/training support for the US Army Military Intelligence Corps. The FY 2020 funds will provide continued version 10.0 development, testing, production, and integration of the IEWTPT system and software version releases and will set the conditions for Increment 2 in FY 2022 and intelligence modernization lines of effort. FY2021 funding will provide for continued Increment 2 transition planning and a full and open competitive re-procurement of the IEWTPT contract. An eight year IDIQ (Indefinite Delivery/Indefinite Quantity) contract is planned for IEWTPT Increment 2 beginning 4th QTR FY 2021. This competitive procurement will ensure future training capabilities are nested with the Intelligence Corps modernization priorities for multifunctional intelligence support to maneuver commanders.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Army												Date: February 2020			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604742A / Constructive Simulation Systems Development				361 / Intelligence Simulation Systems							
Management Services (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
Program Management	Various	PEO STRI : Orlando, FL	11.018	-		-		-		-		-	Continuing	Continuing	Continuing
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	-	-		0.138		-		-		-	0.000	0.138	-
<b>Subtotal</b>			11.018	-		0.138		-		-		-	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
TCC Technology	C/CPFF	General Dynamics C4 Systems : Orlando, Florida	7.900	-		-		-		-		-	Continuing	Continuing	Continuing
TCC Technology	C/CPFF	General Dynamics Mission Systems : Orlando, Florida	4.809	4.936	Feb 2019	1.928	Feb 2020	1.969	Nov 2020	-		1.969	Continuing	Continuing	Continuing
Eng & Manufacturing Dev. (Cloud Environment)	Option/CPFF	General Dynamics C4 Systems : Orlando, FL	63.825	-		0.960	Feb 2020	0.055	Jul 2021	-		0.055	Continuing	Continuing	Continuing
<b>Subtotal</b>			76.534	4.936		2.888		2.024		-		2.024	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
Engineering & Technical Support	Various	Various : Various	2.743	-		-		-		-		-	0.000	2.743	2.743
<b>Subtotal</b>			2.743	-		-		-		-		-	0.000	2.743	N/A





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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2021 Army		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>	<b>Project (Number/Name)</b> 361 / <i>Intelligence Simulation Systems</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
TCC Development/Integration/Test	4	2007	4	2021
Version 4.0 Security Accred.	3	2014	3	2014
Version 4.0 Release	4	2014	4	2014
Version 5.0 Security Accred.	3	2015	3	2015
Version 5.0 Release	4	2015	4	2015
Version 6.0 Security Accred.	3	2016	3	2016
Version 6.0 Release	4	2016	4	2016
Version 7.0 Security Accred.	2	2017	2	2017
Version 7.0 Release	3	2017	3	2017
Version 8.0 Security Accred.	3	2018	3	2018
Version 8.0 Release	4	2018	4	2018
Version 9.0 Security Accred.	3	2019	3	2019
Version 9.0 Release	4	2019	4	2019
Version 10.0 Security Accred.	3	2020	3	2020
Version 10.0 Release	4	2020	4	2020
Version 11.0 Security Accred.	3	2021	3	2021
Version 11.0 Release	4	2021	4	2021
FOC	4	2020	4	2020
TCC Development/Integration/Test (Increment 2 EMD)	4	2021	2	2028
Capability Drop 1	4	2022	4	2022
Capability Drop 2	4	2023	4	2023
Capability Drop 3	4	2024	4	2024

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2021 Army		<b>Date:</b> February 2020
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Events	Start		End	
	Quarter	Year	Quarter	Year
Capability Drop 4	4	2025	4	2025
Capability Drop 5	4	2026	4	2026
Capability Drop 6	4	2027	4	2027
Capability Drop 7	4	2028	4	2028

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Army										<b>Date:</b> February 2020		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>				<b>Project (Number/Name)</b> 362 / <i>Jnt Land Component Constructive Trng</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021 Base</b>	<b>FY 2021 OCO</b>	<b>FY 2021 Total</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
362: <i>Jnt Land Component Constructive Trng</i>	-	16.418	8.610	8.126	-	8.126	11.758	16.798	18.270	17.787	0.000	97.767
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

The Joint Land Component Constructive Training Capability (JLCCTC) supports Army Title X training worldwide for Army Commanders and their staff at Mission Training Complexes (MTCs), Training and Doctrine Command (TRADOC) facilities, and other customer locations. JLCCTC trains Commanders and their staff in Decisive Actions to include offensive, defensive, stability, and civil support operations. JLCCTC is a software modeling and simulation capability that contributes to Army Training Mission Area by providing appropriate levels of modeling and simulation resolution and fidelity to support unit collective and combined arms training. JLCCTC provides a composable federation configurable to any combination of models and simulations, as required by training exercise intent/design. JLCCTC provides accurate representations of tactically and operationally relevant land warfare operations executed in a contemporary Joint operating environment/context and in support of Army Training and Readiness.

FY 2021 base funding in the amount of \$8.126 million will complete Version 9.0 and will commence development, integration and test, and verification and validation activities for JLCCTC Version 10.0 to train Commanders and their Staff. JLCCTC will continue to support emerging Common Operating Environment / Computing Environment (COE/CE), Mission Command (MC), Cyber Security/Risk Management Framework (RMF), and Concurrency warfighter requirements. In addition, JLCCTC will continue to support the integration activities with Live, Virtual, Constructive-Integrated Architecture (LVC-IA), Combat Training Center Instrumentation System (CTC-IS), IEWTPT, and conduct Army ground model Analysis of Alternative (AoA) to interface with the Joint simulation capability.

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

	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<b>Title:</b> Improve JLCCTC software models to comply with emerging Common Operating Environment (COE)/Computing Environment (CE) requirements.	0.978	0.672	0.650
<b>Description:</b> Improve JLCCTC software models to comply with emerging COE/CE requirements.			
<b>FY 2020 Plans:</b> Will continue improvements of JLCCTC software models to include common overlay development/modifications in support of COE compliance/standards.			
<b>FY 2021 Plans:</b> Will continue improvements of JLCCTC software models to include common overlay development/modifications in support of COE compliance/standards.			
<b>FY 2020 to FY 2021 Increase/Decrease Statement:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Army		<b>Date:</b> February 2020		
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>	<b>Project (Number/Name)</b> 362 / <i>Jnt Land Component Constructive Trng</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
Funding decrease from FY 2020 to FY 2021 is in support of the Army's modernization priorities.				
<p><b>Title:</b> Improve JLCCTC software models to meet emerging Mission Command (MC) stimulation and Cyber Security requirements.</p> <p><b>Description:</b> Improve JLCCTC software models to meet emerging Mission Command (MC) stimulation and Cyber Security requirements.</p> <p><b>FY 2020 Plans:</b> Continue to evolve JLCCTC to support emerging Mission Command requirements and fully comply with the Cyber Security/Risk Management Framework (RMF) requirement.</p> <p><b>FY 2021 Plans:</b> Continue to evolve JLCCTC to support emerging Mission Command requirements and fully comply with the Cyber Security/Risk Management Framework (RMF) requirement.</p> <p><b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> Funding decrease from FY 2020 to FY 2021 is in support of the Army's modernization priorities.</p>		1.030	0.772	0.800
<p><b>Title:</b> Improve JLCCTC software models to meet emerging warfighter requirements for Concurrency of Commander and staff training (Battalion thru Theater Level).</p> <p><b>Description:</b> Improve JLCCTC software models to meet emerging warfighter requirements for Concurrency of Commander and staff training (Battalion thru Theater Level).</p> <p><b>FY 2020 Plans:</b> Continue to evolve JLCCTC software models to support additional emerging requirements in support of Commander and staff warfighter training exercises through Theater level.</p> <p><b>FY 2021 Plans:</b> Continue to evolve JLCCTC software models to support additional emerging requirements in support of Commander and staff warfighter training exercises through Theater level.</p> <p><b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> Funding decrease from FY 2020 to FY 2021 is in support of the Army's modernization priorities.</p>		1.064	4.531	2.933
<p><b>Title:</b> Engineering and Manufacturing Development (EMD) phase contract activity for Constructive Strategy Implementation.</p> <p><b>Description:</b> Constructive Strategy Implementation</p>		2.164	-	-

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<p><b>Title:</b> Government System Test and Evaluation for the Joint Land Component Constructive Training Capability (JLCCTC) Program.</p> <p><b>Description:</b> Government System Test and Evaluation for the Joint Land Component Constructive Training Capability (JLCCTC).</p> <p><b>FY 2020 Plans:</b> Continue conducting system test events (Integration and Testing) in support of the JLCCTC v9.0 validation event.</p> <p><b>FY 2021 Plans:</b> Conduct the v9.0 validation event (VE) and conduct system test events (Integration and Testing) in support of the JLCCTC v10.0 validation event (VE).</p> <p><b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> Funding decrease from FY 2020 to FY 2021 as efficiencies are gained with the JLCCTC Single Federation Solution.</p>		1.372	1.722	1.750
<p><b>Title:</b> Government Program Management for the Joint Land Component Constructive Training Capability (JLCCTC) Program.</p> <p><b>Description:</b> Supports Government program management, engineering, logistics, contracting support and continues operational evaluation support for JLCCTC.</p> <p><b>FY 2020 Plans:</b> Includes costs for program management, which includes technical engineering and logistics to continue operational evaluation for JLCCTC. No civilian labor is included.</p> <p><b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> Funding decrease due to Program Management expenses moving to OMA.</p>		1.570	0.522	-
<p><b>Title:</b> JLCCTC mission command training program simulation upgrades.</p> <p><b>Description:</b> JLCCTC mission command training program simulation upgrades.</p>		8.240	-	-
<p><b>Title:</b> Conduct Army Ground Model Analysis of Alternative</p> <p><b>FY 2021 Plans:</b> Start conducting Army ground model Analysis of Alternative (AoA) to interface with Joint simulation capability.</p> <p><b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> Increase in funding to support emerging requirement to conduct Army ground model Analysis of Alternative (AoA) so it can interface with Joint simulation capability.</p>		-	-	1.993
<b>Title:</b> FY 2020 SBIR/STTR Transfer		-	0.391	-

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2021 Army	<b>Date:</b> February 2020
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<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>	<b>Project (Number/Name)</b> 362 / <i>Jnt Land Component Constructive Trng</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	FY 2019	FY 2020	FY 2021
<b>Description:</b> Funding transferred in accordance with Title 15 USC ?638			
<b>FY 2020 Plans:</b> Funding transferred in accordance with Title 15 USC ?638			
<b>FY 2020 to FY 2021 Increase/Decrease Statement:</b> Funding transferred in accordance with Title 15 USC ?638			
<b>Accomplishments/Planned Programs Subtotals</b>	16.418	8.610	8.126

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u> <u>Base</u>	<u>FY 2021</u> <u>OCO</u>	<u>FY 2021</u> <u>Total</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• NAO103: <i>NSTD</i> <i>COMMAND &amp; CONTROL</i>	38.112	35.313	35.038	-	35.038	36.666	34.206	32.319	31.532	Continuing	Continuing

**Remarks**

**D. Acquisition Strategy**  
 JLCCTC Indefinite Delivery/Indefinite Quantity (ID/IQ) contract was awarded to Lockheed Martin on 27 March 2013. This contract was extended through 30 Sep 2018. The last Delivery Order, DO 0008 ended on 22 Mar 2019. A Bridge Contract was awarded to the current contractor (13 Dec 2018) in order to provide continuing support of the JLCCTC program until the new competitive JLCCTC contract award process is completed. The Bridge Contract consists of a Base contract for 12 months thru Dec 2019 with two options, six months each. Re-compete activities began during FY 2018 with a planned award of a new contract by 1st Quarter FY 2021. The Final RFP for the Re-compete was posted to Fed Biz Ops on 25 June 2019 with proposals due on 14 August 2019.

Activities under the current and follow-on contracts include System Engineering, Software Development, Integration & Test, support to validation events and PDSS/P3I support.

JLCCTC produces a major software release/version every 18 to 24 months, which is then distributed/fielded to over 40 MTCs worldwide in support of Army Command and Staff Training.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Army												Date: February 2020			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604742A / Constructive Simulation Systems Development				362 / Jnt Land Component Constructive Trng							
Management Services (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
Program Management	Various	Various : Various	66.762	1.570	Oct 2018	0.522	Oct 2019	-		-		-	Continuing	Continuing	Continuing
SBIR/STTR Transfer	TBD	PEO STRI : Orlando, FL	-	0.843	Oct 2018	-		-		-		-	0.000	0.843	-
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	-	-		0.391		-		-		-	0.000	0.391	-
<b>Subtotal</b>			66.762	2.413		0.913		-		-		-	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 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
Constructive Strategy Implementation	C/CPFF	Lockheed Martin : Orlando, FL	7.705	2.164	Jan 2019	-		-		-		-	Continuing	Continuing	Continuing
Improve JLCCTC to meet emerging warfighter requirements.	C/CPFF	Lockheed Martin : Orlando, FL	5.823	1.064	Jan 2019	4.531	Jan 2020	2.933	Dec 2020	-		2.933	Continuing	Continuing	Continuing
MC Systems Stimulation and Cyber Security	C/CPFF	Lockheed Martin : Orlando, FL	6.502	1.030	Jan 2019	0.772	Jan 2020	0.800	Dec 2020	-		0.800	Continuing	Continuing	Continuing
COE Compliance	C/CPFF	Lockheed Martin : Orlando, FL	4.090	0.978	Jan 2019	0.672	Jan 2020	0.650	Dec 2020	-		0.650	Continuing	Continuing	Continuing
JLCCTC mission command training program simulation upgrades	C/CPFF	Lockheed Martin : Orlando, FL	-	7.397	Jan 2019	-		-		-		-	Continuing	Continuing	Continuing
Conduct Army ground Model AoA	C/CPFF	TBD : Orlando, FL	-	-		-		1.993	Dec 2020	-		1.993	0.000	1.993	-
<b>Subtotal</b>			24.120	12.633		5.975		6.376		-		6.376	Continuing	Continuing	N/A





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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2021 Army		<b>Date:</b> February 2020
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604742A / <i>Constructive Simulation Systems Development</i>	<b>Project (Number/Name)</b> 362 / <i>Jnt Land Component Constructive Trng</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
JLCCTC Version 9.0 System Engr / Develop / I&T / Validation	1	2018	1	2021
JLCCTC Version 9.0 Release	1	2021	1	2021
JLCCTC Version 10.0 System Engr / Develop / I&T / Validation	1	2021	4	2022
JLCCTC Version 10.0 Release	1	2023	1	2023
JLCCTC Integration into LVC-IA / CTC-IS	1	2014	4	2024
JLCCTC Constructive Strategy Implementation (Single Federation)	2	2016	4	2019
JLCCTC Version 11.0 Sys Engr/ Develop/ I&T/ Validation	1	2023	4	2024
JLCCTC Version 11.0 Release	1	2025	1	2025