Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy

Date: March 2019

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 5: System

PE 0604274N / Next Generation Jammer (NGJ)

Development & Demonstration (SDD)

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	1,814.232	584.538	449.429	524.261	-	524.261	434.223	178.364	0.000	0.000	0.000	3,985.047
0557: Next Generation Jammer	1,814.232	584.538	449.429	524.261	-	524.261	434.223	178.364	0.000	0.000	0.000	3,985.047

Program MDAP/MAIS Code:

Project MDAP/MAIS Code(s): P445

A. Mission Description and Budget Item Justification

The Next Generation Jammer (NGJ) is the next step in the evolution of Airborne Electronic Attack (AEA) and is a critical capability necessary to address current, emerging, and evolving Electronic Warfare gaps, ensure kill chain wholeness against growing threat capabilities and capacity, keep pace with enemy threat weapon systems' advancements, and support the continuous expansion of the AEA mission areas that exceed the capability of currently fielded systems. NGJ will utilize enhanced techniques and tactics to deliver significantly improved radar and communications jamming effectiveness as well as other classified capabilities. Utilizing an Open Systems Architecture that supports software and hardware updates to rapidly counter emergent and evolving threats, NGJ is a key enabler and force multiplier for operations across the spectrum of missions defined in the Defense Strategic Guidance, including strike warfare, projecting power in highly contested environments, and counterinsurgency/irregular warfare. NGJ will also address the shortfalls in scalability, flexibility, supportability, interoperability, availability, and capability of the existing AN/ALQ-99 Tactical Jamming System.

This Program Element (PE 0604274N) supports the AN/ALQ-249 Next Generation Jammer - Mid Band (NGJ-MB) (formerly known as Next Generation Jammer Increment 1) program. NGJ-MB will address AEA capability and sufficiency gaps against enemy threats operating in the middle frequency bands of the electromagnetic spectrum. NGJ-MB will provide the ability to effectively engage enemy threats from increased stand-off distances, employ increased capacity (number of jamming assignments) against enemy targets, and support agile employment by operators. The NGJ-MB system will be integrated on the EA-18G tactical aircraft and will augment and then replace the legacy AN/ALQ-99 Tactical Jamming System.

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	632.936	459.529	568.662	-	568.662
Current President's Budget	584.538	449.429	524.261	-	524.261
Total Adjustments	-48.398	-10.100	-44.401	-	-44.401
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-10.100			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-10.000	0.000			
SBIR/STTR Transfer	-19.390	0.000			
Program Adjustments	0.000	0.000	-51.371	-	-51.371

PE 0604274N: Next Generation Jammer (NGJ)

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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 N	avy			Date: Mar	ch 2019
Appropriation/Budget Activity		R-1 Program Eleme	nt (Number/Name)	·	
1319: Research, Development, Test & Evaluation, Navy I BA	5: System	PE 0604274N / Next	Generation Jammer (NGJ)	
Development & Demonstration (SDD)					
Rate/Misc Adjustments	-0.008	0.000	6.970	-	6.970
 Congressional Directed Reductions 	-19.000	-	-	-	-
Adjustments					

Change Summary Explanation

The FY 2020 funding request was reduced by \$49.155 million to account for the availability of prior year execution balances.

Technical: Not applicable.

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Schedule: APN funding was re-phased due to required design modifications of the NGJ-MB structure. As a result, the total number of LRIP lots were reduced from 3 to 2 and production lead time was updated to 18 months for all LRIP and FRP lots. The scope, effort, and timing of IT-B2 has been redefined; as a result, the start of IT-B2 has moved from 3QFY2019 to 2QFY2020 with no impact to overall program schedule. MS FRR moved from 3QFY2019 to 2QFY2020 to align with the start of IT-B2.

PE 0604274N: Next Generation Jammer (NGJ) UNCLASSIFIED

FY 2020 | FY 2020 | FY 2020

Exhibit R-2A, RDT&E Project Ju	xhibit R-2A, RDT&E Project Justification: PB 2020 Navy Date: March 2019												
Appropriation/Budget Activity 1319 / 5					_		t (Number / Generation .	Project (No. 0557 / Nex					
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	
0557: Next Generation Jammer	1,814.232	584.538	449.429	524.261	-	524.261	434.223	178.364	0.000	0.000	0.000	3,985.047	
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-			

Project MDAP/MAIS Code: P445

A. Mission Description and Budget Item Justification

PE 0604274N: Next Generation Jammer (NGJ)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

This Program Element (PE 0604274N) supports the NGJ-MB program. NGJ-MB will address AEA capability and sufficiency gaps against enemy threats operating in the middle frequency bands of the electromagnetic spectrum. NGJ-MB will provide the ability to effective engage enemy threats from increased stand-off distances, employ increased capacity (number of jamming assignments) against enemy targets, and support agile employment by operators. The NGJ-MB system will be integrated on the EA-18G tactical aircraft and will augment and then replace the legacy AN/ALQ-99 Tactical Jamming System Mid-Band pods.

b. Accomplishments/riamied Frograms (\$ in Millions, Article Quantities in Lacin)	FY 2018	FY 2019	Base	OCO	Total
Title: Next Generation Jammer Mid-Band Primary Hardware Development	371.603	201.876	285.906	0.000	285.906
Articles:	-	-	7	-	7
FY 2019 Plans:					
Delivery of initial EDM pods to support ground chamber testing and mission systems developmental flight testing.					
FY 2020 Base Plans: Deliver aeromechanical test shapes (Pods) to support developmental flight test and envelope expansion on the EA-18G. Continue delivery EDM pods to support ground chamber testing, mission systems developmental flight testing and capabilities based test and evaluation to support Milestone C. Contract award for 7 System Demonstration Test Article Pod shipsets (2 pods per shipset) in 1st Qtr. FY 2020 which will be used for final developmental test efforts, tactics development, and operational test.					
FY 2020 OCO Plans: N/A					
FY 2019 to FY 2020 Increase/Decrease Statement: Increase of Next Generation Jammer Mid-Band Primary Hardware Development from FY 2019 to FY 2020 is due to the funding of the seven System Demonstration Test Article shipsets and associated support.					
Title: Next Generation Jammer Mid-Band Systems Engineering	59.471	61.604	58.541	0.000	58.541
Articles:	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy				Date: Marc	ch 2019		
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/I PE 0604274N / Next Generation J (NGJ)		Project (Number/Name) 0557 / Next Generation Jammer				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantit	ies in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	
FY 2019 Plans: Perform Systems Engineering efforts, which will support the Mission System FY 2019. Systems Engineering efforts will also be focused on the Producti 2020 and the System Verification Review in 4th Qtr. FY 2020. System eng Systems Integration Lab testing at government and contractor facilities and activities.	ion Readiness Review in 3rd Qtr. FY incering efforts will continue to support						
FY 2020 Base Plans: Perform Systems Engineering efforts, which will support the Aeromechanic Qtr. FY2020, the Production Readiness Review 3rd Qtr. FY 2020 and the Qtr. FY 2020. Perform Systems Engineering efforts to support the first Ae FY2020 and the first EDM Pod radiating flight in 3rd Qtr. FY2020. System to support Systems Integration Lab testing and platform software integratio facilities. Review system performance data and analysis from ground and Milestone C decision in 4th Qtr. FY 2020.	System Verification Review 4th romechanical Pod flight in 2nd Qtr. engineering efforts will continue on at government and contractor						
FY 2020 OCO Plans: N/A							
FY 2019 to FY 2020 Increase/Decrease Statement: Decrease of Next Generation Jammer Mid-Band Systems Engineering from funding required for Trainers and reimbursable efforts.	m FY 2019 to FY 2020 is due to less						
Title: Next Generation Jammer Mid-Band Aircraft Integration	Articles:	91.407 -	101.354 -	66.720 -	0.000	66.720	
FY 2019 Plans: Completion of SCS software H16 Build 2 integration activities, Build Readi 3 and subsequent integration, and follow on software support to meet Initia Continued SIL testing and NGJ-MB A-kit installs into the developmental tedelivery and installation of A-kits to Operational Test and Evaluation aircra	al Operational Capability (IOC). st and evaluation aircraft. Commence						
FY 2020 Base Plans: Completion of SCS software H16 Build 3 integration activities, initial H16 V and subsequent integration, and follow on software support to meet Initial Continued SIL testing and NGJ-MB A-kit installs into the developmental terms.	Operational Capability (IOC).						

PE 0604274N: Next Generation Jammer (NGJ) Navy UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy				Date: Marc	ch 2019		
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/ PE 0604274N / Next Generation (NGJ)			(Number/Name) ext Generation Jammer			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	
delivery and installation of A-kits to Operational Test and Evaluation aircraft. Interface (CVI) improvements for H18/H20 to include Design Advisory Group							
FY 2020 OCO Plans: N/A							
FY 2019 to FY 2020 Increase/Decrease Statement: Decrease of Next Generation Jammer Mid-Band Aircraft Integration from FY 2 funding required as Integration hardware and software completes the majority							
Title: Next Generation Jammer Mid-Band Test and Evaluation	Articles:	56.183 -	78.415 -	106.792 -	0.000	106.792 -	
FY 2019 Plans: Complete NGJ-MB Airworthiness and Mission Systems Test Planning. Perfor and instrument a F/A-18E/F to support store loads testing. Modify F/A-18E/F a Stability and Control, Performance, and Carrier Suitability flight testing. Instructuring and jettison/adjacent stores flight testing. Execute initial ground testing Environmental Effects, frequency and spatial coverage, beam stabilization and Environment Test and Evaluation (ACETEF) Facility. Execute initial ground testing to include Reliability Growth Testing in the Electronic Attack (EATES) Facility.	aircraft to support Flying Qualities, ment aircraft to support captive ng to include Electromagnetic d EIRP in the Air Combat esting to include Basic Jamming adiation (HEATR) Facility. Execute						
FY 2020 Base Plans: Begin NGJ-MB Airworthiness and Mission Systems Test Execution. Perform I Ground Vibration Test (GVT) and EA-18G Platform GVT. Finalize modification F and begin NGJ store loads testing. Finalize modification and instrumentation Flying Qualities, Stability and Control, and Performance flight testing. Finalize and begin captive carriage and jettison/adjacent stores flight testing. Finalize of EA-18G NGJ and H16 mission systems aircraft to support NGJ-MB test profinclude Electromagnetic Environmental Effects, frequency and spatial coverages well as initial EA-18G installed mission system testing in the Air Combat Ei (ACETEF) Facility. Execute ground testing to include Basic and Advanced Ja in the High-Power Electronic Attack Technique Radiation (HEATR) Facility. Execute ground testing to include Basic and Evaluation System Reliability Growth Testing in the Electronic Attack Test and Evaluation System	n and instrumentation of F/A-18E/ n of F/A-18E/F aircraft and begin instrumentation of F/A-18 aircraft modification and instrumentation ogram. Execute ground testing to ge, beam stabilization and EIRP, nvironment Test and Evaluation mming Technique characterization xecute ground testing to include						

PE 0604274N: Next Generation Jammer (NGJ) Navy UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Jus	stification: PB	2020 Navy							Date: Mar	ch 2019				
Appropriation/Budget Activity 1319 / 5						nent (Numbe ext Generation	mber/Name) Project (Number/Name) ation Jammer 0557 I Next Generation Jammer							
B. Accomplishments/Planned Pr	ograms (\$ in N	<u>lillions, Art</u>	icle Quantit	ties in Each))		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total			
testing to include Antenna Pattern Execute initial pre-MS-C Mission S Electronic Combat Range (ECR). A Decision.	Systems flight te	sting with V	X-23 at Atlaı	ntic Test Rar	nge (ATR) a	nd VX-31 at								
FY 2020 OCO Plans: N/A														
FY 2019 to FY 2020 Increase/Dec Increase of Next Generation Jamn funding of increased ground and fl	ner Mid-Band T	est and Eva		FY 2019 to I	FY 2020 is o	ue to the								
Title: Next Generation Jammer Mi	d-Band Suppor	t & Managei	ment Service	es		Articles	5.874 5: -	6.180	6.302	0.000	6.30			
FY 2019 Plans: Provide Support and Management	Services assoc	ciated with t	he NGJ-MB	Program.										
FY 2020 Base Plans: Provide Support and Management	: Services asso	ciated with t	he NGJ-MB	Program.										
FY 2020 OCO Plans: N/A														
FY 2019 to FY 2020 Increase/Dec Increase of Next Generation James			FY 2019 to	FY 2020 is d	ue to escala	ition of efforts								
			Accomplisi	hments/Plar	nned Progra	ams Subtotal	s 584.538	449.429	524.261	0.000	524.26			
C. Other Program Funding Sumi	mary (\$ in Milli	ons)												
Line Item • APN/0591: Next Generation Jammer Remarks	FY 2018 0.000	FY 2019 0.000	FY 2020 Base 6.223	FY 2020 OCO -	FY 2020 Total 6.223	FY 2021 144.670	FY 2022 300.114	FY 2023 468.829		Cost To Complete 3,376.955				
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PE 0604274N: Next Generation Jammer (NGJ) Navy UNCLASSIFIED
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Exhibit R-2A, RDT&E Project Justification: PB 2020 Na	Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy											
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604274N / Next Generation Jammer (NGJ)	Project (Number/Name) 0557 I Next Generation Jammer										
	ory 1C Major Defense Acquisition Program (MDAP), MDAP progrese completing the design of the pod and building fifteen (15) EDM											
E. Performance Metrics												
	e is scheduled for 2nd Qtr. FY 2020. First radiating flight of an ED	M Pod is scheduled for 3rd Qtr. FY 2020.										

PE 0604274N: Next Generation Jammer (NGJ) Navy

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy

Date: March 2019

Appropriation/Budget Activity R-1 Program Element (Number/Name)

PE 0604274N / Next Generation Jammer (NGJ)

Element (Number/Name)

I Next Generation Jammer

Project (Number/Name)

0557 I Next Generation Jammer

Product Development (\$ in Millions)			FY 2018		FY 2019			2020 ise	FY 2020 OCO						
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	Total Cost	Target Value of Contract
Primary Hardware Development - Engineering and Manufacturing Development	C/CPIF	Raytheon : El Segundo, CA	586.519	363.798	Oct 2017	188.256	Dec 2018	272.805	Oct 2019	-		272.805	311.800	1,723.178	1,723.178
Primary Hardware Development - AECR	C/CPIF	Raytheon : El Segundo, CA	0.000	0.000	Jun 2018	5.500	Dec 2018	5.500	Dec 2019	-		5.500	0.000	11.000	11.000
Primary Hardware Development - AECR	Various	Various : Various	0.000	2.805	Jun 2018	0.920	Dec 2018	2.000	Dec 2019	-		2.000	0.000	5.725	-
Primary Hardware Development - TRIMM	C/CPIF	Raytheon : El Segundo, CA	0.000	5.000	Jun 2018	7.200	Dec 2018	5.600	Dec 2019	-		5.600	2.200	20.000	20.000
Aircraft Integration - EMD	C/CPIF	Boeing : St. Louis, MO	26.993	10.000	Dec 2017	30.455	Dec 2018	34.419	Dec 2019	-		34.419	30.824	132.691	132.691
Software/Aircraft Integration	WR	NAWCWD : China Lake, CA	31.351	15.254	Nov 2017	19.811	Nov 2018	8.514	Nov 2019	-		8.514	15.542	90.472	-
Software Integration - SOR	C/CPIF	Boeing : St. Louis, MO	26.829	0.000	Oct 2017	1.516	Oct 2018	1.285	Oct 2019	-		1.285	0.187	29.817	29.817
Software Integration - Blk Update	WR	NAWCWD : Pt. Mugu, CA	43.763	20.436	Nov 2017	12.847	Nov 2018	10.759	Nov 2019	-		10.759	19.932	107.737	-
Software Integration H-16	C/CPIF	Boeing : St Louis, MO	31.024	33.614	Oct 2017	17.000	Oct 2018	3.800	Oct 2019	-		3.800	2.170	87.608	87.608
Software Integration H-16	SS/FFP	Northrup Grumman : Bethpage, NY	18.626	12.103	Dec 2017	15.724	Dec 2018	7.943	Dec 2019	-		7.943	8.380	62.776	62.776
Software Integration	WR	NAWCWD : China Lake	1.860	0.000	Nov 2017	4.000	Nov 2018	0.000		-		0.000	0.000	5.860	-
Systems Engineering - Trainer	Various	TBD : TBD	0.000	0.000	Nov 2017	3.194	Nov 2018	1.955	Nov 2019	-		1.955	1.329	6.478	6.478
Systems Engineering	WR	NAWCAD : Patuxent River, MD	120.294	22.261	Nov 2017	26.848	Nov 2018	24.755	Nov 2019	-		24.755	12.223	206.381	-
Systems Engineering	WR	NAWCWD : Pt. Mugu, CA	57.374	13.665	Nov 2017	9.121	Nov 2018	9.303	Nov 2019	-		9.303	11.811	101.274	-
Systems Engineering	WR	NSWC Crane : Crane, IN	36.395	7.680	Nov 2017	9.556	Nov 2018	8.462	Nov 2019	-		8.462	1.860	63.953	-

PE 0604274N: *Next Generation Jammer (NGJ)* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy

Appropriation/Budget Activity R-1 Program Element (Number/Name)

1319 / 5

PE 0604274N / Next Generation Jammer (NGJ)

(Number/Name) Project (Number/Name)
Seneration Jammer 0557 I Next Generation Jammer

Product Developme	nt (\$ in Mi	illions)		FY 2	2018	FY 2	FY 2019		2020 ise		2020 CO	FY 2020 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
Systems Engineering	WR	NSWC Dahlgren : Dahlgren, VA	4.253	0.145	Nov 2017	0.148	Nov 2018	0.150	Nov 2019	-		0.150	0.310	5.006	-
Systems Engineering	SS/CPFF	Johns Hopkins University Applied Physics Lab : Laurel, MD	43.900	9.460	Feb 2018	9.649	Feb 2019	9.842	Feb 2020	-		9.842	12.044	84.895	84.895
Systems Engineering	WR	Naval Research Laboratory : Washington, DC	5.268	0.420	Nov 2017	0.428	Nov 2018	0.437	Nov 2019	-		0.437	0.441	6.994	-
Systems Engineering	Various	Various : Various	10.369	1.273	Nov 2017	0.262	Nov 2018	0.267	Nov 2019	-		0.267	0.550	12.721	-
Systems Engineering	SS/FFP	NSMA : Arlington, VA	4.183	4.567	Feb 2018	2.400	Feb 2019	3.370	Feb 2020	-		3.370	4.370	18.890	18.890
Prior Year Prod Dev no longer funded in FYDP	Various	Various : Various	671.172	0.000		0.000		0.000		-		0.000	0.000	671.172	-
		Subtotal	1,720.173	522.481		364.835		411.166		-		411.166	435.973	3,454.628	N/A

Remarks

Funding increase from FY 2019 to FY 2020 is due to the funding of the seven System Demonstration Test Articles and associated support.

Support (\$ in Million	Support (\$ in Millions)			FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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	Total Cost	Target Value of Contract
Eng & Tech Srvc (Non FFRDC)	Various	Various : Various	31.149	5.684	Dec 2017	5.988	Dec 2018	6.108	Dec 2019	-		6.108	6.230	55.159	55.159
Prior Year Support no longer funded in FYDP	Various	Various : Various	5.382	0.000		0.000		0.000		-		0.000	0.000	5.382	-
	•	Subtotal	36.531	5.684		5.988		6.108		-		6.108	6.230	60.541	N/A

PE 0604274N: Next Generation Jammer (NGJ) Navy UNCLASSIFIED
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Project (Number/Name)

1319 / 5

PE 0604274N / Next Generation Jammer (NGJ)

0557 I Next Generation Jammer

Test and Evaluation	(\$ in Milli	ons)		FY 2	2018	FY 2	2019	FY 2 Ba	2020 ise	FY 2	2020 CO	FY 2020 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
Development T & E	WR	NAWCAD : Patuxent River, MD	36.798	44.220	Nov 2017	54.670	Nov 2018	74.862	Nov 2019	-		74.862	118.434	328.984	-
Development T & E	Various	Boeing : St Louis, MO	4.500	6.612	Oct 2017	15.657	Oct 2018	17.371	Oct 2019	-		17.371	20.115	64.255	64.255
Development T & E	Various	Boeing : St Louis MO	0.000	3.750	Dec 2017	4.875	Dec 2018	7.725	Dec 2019	-		7.725	12.304	28.654	28.654
Development T & E	Various	DynCorp : Not Specified	0.000	0.000		1.978	Jan 2019	3.492	Dec 2019	-		3.492	4.541	10.011	10.011
Test OT	Various	Various : Various	0.730	1.601	Mar 2018	1.234	Mar 2019	3.343	Mar 2020	-		3.343	14.597	21.505	-
Prior year T&E no longer funded in the FYDP	Various	Various : Various	14.525	0.000		0.000		0.000		-		0.000	0.000	14.525	-
		Subtotal	56.553	56.183		78.414		106.793		-		106.793	169.991	467.934	N/A

Remarks

Funding increases from FY 2019 to FY 2020 due to the funding of increased ground and flight test across multiple test phases.

Management Service	s (\$ in M	illions)		FY 2	2018	FY 2	2019		2020 ise	FY 2		FY 2020 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	WR	Various : Various	0.968	0.190	Oct 2017	0.192	Oct 2018	0.194	Oct 2019	-		0.194	0.393	1.937	-
Prior years Mgmt Svcs no longer funded in the FYDP	WR	Various : Various	0.007	0.000		0.000		0.000		-		0.000	0.000	0.007	-
		Subtotal	0.975	0.190		0.192		0.194		-		0.194	0.393	1.944	N/A

												Target
	Prior					FY 2020	FY 2	2020	FY 2020	Cost To	Total	Value of
	Years	FY 2	.018	FY 2	019	Base	00	CO	Total	Complete	Cost	Contract
Project Cost Totals	1,814.232	584.538		449.429		524.261	-		524.261	612.587	3,985.047	N/A

Remarks

PE 0604274N: Next Generation Jammer (NGJ) Navy

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FY 2018	19 <i>1</i> 5				20 Na							P						ımber/ ration .			Proj 0557						amm	er
Acquisition Milestones Engineering & Manufacturing Development Engineering & Manufacturing Development EDM Deliveries (Qty 15) H Build Integration Test & Evaluation IT-B1 IT-B2			FY	201	8		FY:	2019	,		FY	202	0		FY 2	2021		FY 2	2022			FY 20	023			FY 2	2024	
MS C A Boundary Companion Systems Development Hardware Development Engineering & Manufacturing Development EDM Deliveries (Qty 15) H Build Integration Test & Evaluation IT-B1 IT-B2		1Q	2Q	30	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q 4Q	10	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Systems Development Hardware Development Engineering & Manufacturing Development EDM Deliveries (Qty 15) H Build Integration Test & Evaluation IT-B1 IT-B2		>											C								FRP DR							
Hardware Development Engineering & Manufacturing Development		 	↓_	╀	_	<u> </u>	<u> </u>	<u> </u>	_		_	_	ļ <u> </u>		<u> </u>	_	<u> </u>	<u> </u>	_		_		Ш				_	
Software Development H Build Integration Test & Evaluation Technical Evaluation IT-B1 IT-B2			I	I	I	I	 	 vince			lon.	 foots	 urina [long	 t	I	I	I	 								
Software Development H Build Integration Test & Evaluation IT-B1 IT-B2	Hardware Developmen	t —					Eng	Jinee	ering	Ox IV	ianu	ласц	inng L	Jeve	юрп	ent												
Test & Evaluation Technical Evaluation IT-B1 IT-B2								EC	M E	Deliv	erie	s (Qt	y 15)															
Technical Evaluation IT-B1	Software Developmen	t	<u>'</u>	_	<u>'</u>			I НВ	uild	Integ	grati	ion		'	_	'	1											
IT-B2	est & Evaluation	1			7												1	<u> </u>	İ									
	Technical Evaluation	٠							IT	Г-В1							╛											
IT-C2												IT-E	32			IT-C1	ІТ-	C2										
Operational Evaluation OTRR	Operational Evaluation	ו																▼										
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PE 0604274N: Next Generation Jammer (NGJ) Navy UNCLASSIFIED
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xhibit R-4, RDT&E Schedule Pro	file	: P	В 2	202	1 0	lav	у																		Dat	te: N	March	201	9
ppropriation/Budget Activity 319 / 5												PE			am Ele 74N / <i>N</i>												Name ration		mer
Next Generation Jammer (Increment 1) (cont)		FY	20	18		F	Υ 2	2019			FY 20	20			FY 20	21			FY 2	2022	2		FY 20	023			FY 2	2024	
	10	2 20	2 3	Q 4	Q 1	Q 2	Q	3Q	4Q	1Q	2Q	3Q	4Q	10	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	30	4Q	1Q	2Q	3Q	4Q
Engineering Milestones Reviews								MS ΓRR			AERO FRR •																		
											MS FRR	PRR	svr •																
Production Milestones	İ	Ť	Ť	Ť	Ť	T	T		İTİ				İ	İ		П	T	T						İ	İ	П		П	
Contract Awards									ΙI	SDTA (7) RDTE					LRIP 1 (1) APN-5				LRIP 2 (6) APN-5 •				FRP 1 (12) APN-5				FRP 2 (14) APN-5		
Deliveries	╁	╁	╁	╁	╁	╁	╁		H					╁	 	H	一	\exists		H		i		╁	╁	П		iтi	
															SD RDTE	TA (ies			LRIP 1				_	LF	RIP 2	_	FRP 1

2020PB - 0604274N - 0557

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy			Date: March 2019
, , ,	,	, ,	umber/Name) tt Generation Jammer

Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Next Generation Jammer (Increment 1)				
Acquisition Milestones: Milestone C	4	2020	4	2020
Acquisition Milestones: Milestones: Initital Operational Capability	4	2022	4	2022
Acquisition Milestones: Milestones: Full Rate Production Decision Review	1	2023	1	2023
Systems Development: Hardware Development: Engineering & Manufacturing Development	1	2018	3	2022
Systems Development: Hardware Development: Engineering Development Model Deliveries	3	2019	4	2020
Systems Development: Software Development: H Build Integration	1	2018	4	2021
Test & Evaluation: Technical Evaluation: Aeromechanical Testing (IT-B1)	1	2018	4	2021
Test & Evaluation: Technical Evaluation: Mission Systems Testing (IT-B2)	2	2020	4	2020
Test & Evaluation: Technical Evaluation: Mission Systems Testing (IT-C1)	4	2020	2	2022
Test & Evaluation: Technical Evaluation: Aeromechanical Testing (IT-C2)	4	2021	2	2022
Test & Evaluation: Operational Evaluation: Operational Test Readiness Review	2	2022	2	2022
Test & Evaluation: Operational Evaluation: Initial Operational Test & Evaluation	2	2022	3	2022
Next Generation Jammer (Increment 1) (cont)				
Engineering Milestones: Reviews: MS Test Readiness Review	3	2019	3	2019
Engineering Milestones: Reviews: AERO Flight Readiness Review	2	2020	2	2020
Engineering Milestones: Reviews: MS Flight Readiness Review	2	2020	2	2020
Engineering Milestones: Reviews: Production Readiness Review	3	2020	3	2020
Engineering Milestones: Reviews: System Verification Review	4	2020	4	2020
Production Milestones: Contract Awards: System Demonstration Test Article RDTEN Contract Award	1	2020	1	2020

PE 0604274N: Next Generation Jammer (NGJ) Navy UNCLASSIFIED

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy

Appropriation/Budget Activity

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R-1 Program Element (Number/Name)
PE 0604274N / Next Generation Jammer
(NGJ)

PE 0604274N / Next Generation Jammer

	St	tart	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Production Milestones: Contract Awards: Low Rate Initial Production 1 APN-5 Contract Award	2	2021	2	2021
Production Milestones: Contract Awards: Low Rate Initial Production 2 APN-5 Contract Award	2	2022	2	2022
Production Milestones: Contract Awards: Full Rate Production 1 APN-5 Contract Award	2	2023	2	2023
Production Milestones: Contract Awards: Full Rate Production 2 APN-5 Contract Award	2	2024	2	2024
Deliveries: System Demonstration Test Article RDTEN Deliveries	2	2021	1	2022
Deliveries: LRIP 1 Deliveries	4	2022	4	2022
Deliveries: LRIP 2 Deliveries	4	2023	3	2024
Deliveries: FRP 1 Deliveries	4	2024	4	2024