Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy												Date: February 2018
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604274N *I Next Generation Jammer (NGJ)*							
COST ($ in Millions)	**Prior Years**	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**Cost To Complete**	**Total Cost**
Total Program Element	1,255.215	559.017	632.936	459.529	-	459.529	568.662	408.105	160.999	0.000	0.000	4,044.463
0557: *Next Generation Jammer*	1,255.215	559.017	632.936	459.529	-	459.529	568.662	408.105	160.999	0.000	0.000	4,044.463
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 despite anti-access/area denial challenges, 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 replace the aging AN/ALQ-99 Tactical Jamming System Mid-Band pods.

B. Program Change Summary ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	577.822	632.936	539.770	-	539.770
Current President's Budget	559.017	632.936	459.529	-	459.529
Total Adjustments	-18.805	0.000	-80.241	-	-80.241
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-18.805	0.000			
• Program Adjustments	0.000	0.000	-74.630	-	-74.630

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy				Date: February 2018
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	R-1 Program Element (Number/Name) PE 0604274N *I Next Generation Jammer (NGJ)*			

• Rate/Misc Adjustments	0.000	0.000	-5.611	-	-5.611

Change Summary Explanation

Technical: Not applicable.

Schedule: A system CDR was held 3rd Qtr. FY 2017, which revealed deficiencies in modeling, assumptions, and methodologies used in the design of the pod structure. These deficiencies are driving a redesign of the pod structure, but subsystem design, development, manufacturing, integration, and test are continuing independent of the pod structure redesign effort. The following changes have been made: Milestone C moved from 4th Qtr. FY 2019 to 4th Qtr. FY 2020. Initial Operational Capability moved from 4th Qtr. FY 2021 to 4th Qtr. FY 2022. Full Rate Production Decision Review moved from 1st Qtr. FY 2022 to 1st Qtr. FY 2023. Engineering & Manufacturing Development end moved from 3rd Qtr. FY 2021 to 3rd Qtr. FY 2022. Engineering Development Model Deliveries start moved from 1st Qtr. FY 2019 to 3rd Qtr. FY 2019. Integrated Testing broken out to Aeromechanical Testing (IT-B1), Mission Systems Testing (IT-B2), Mission Systems Testing (IT-C1) for clarity. Operational Test Readiness Review moved from 2nd Qtr. 2021 to 2nd Qtr. 2022. Initial Operational Test & Evaluation moved from 2nd through 3rd Qtrs. FY 2021 to 2nd through 3rd Qtrs. FY 2022. AERO Flight Readiness Review moved from 4th Qtr. FY 2018 to 1st Qtr. FY 2020. Production Readiness Review moved from 2nd Qtr. FY 2019 to 2nd Qtr. FY 2020. System Verification Review moved from 3rd Qtr. FY 2019 to 3rd Qtr. FY 2020. System Demonstration Test Article RDTEN Contract Award moved from 2nd Qtr. FY 2019 to 4th Qtr. FY 2019. Low Rate Initial Production 1 APN-5 Contract Award moved from 4th Qtr. FY 2019 to 4th Qtr. FY 2020. Low Rate Initial Production 2 APN-5 Contract Award moved from 2nd Qtr. FY 2020 to 2nd Qtr. FY 2021. Low Rate Initial Production 3 APN-5 Contract Award moved from 2nd Qtr. FY 2021 to 2nd Qtr. FY 2022. Full Rate Production 1 APN-5 Contract Award moved from 2nd Qtr. FY 2022 to 2nd Qtr. FY 2023. System Demonstration Test Article RDTEN Deliveries moved from 3rd Qtr. FY 2020 through 1st Qtr. FY 2021 to 2nd Qtr. FY 2021 through 2nd Qtr. FY 2022. Low Rate Initial Production 1 Deliveries moved from 2nd through 4th Qtrs. FY 2021 to 3rd Qtr. FY 2022 through 2nd Qtr. FY 2023. Low Rate Initial Production 2 Deliveries moved from 3rd Qtr. FY 2021 through 4th Qtr. FY 2022 to 3rd Qtr. FY 2023. Low Rate Initial Production 3 Deliveries start moved from 4th Qtr. FY 2022 to 4th Qtr. FY 2023.

The FY 2019 funding request was reduced by $1.330M to reflect the Department of Navy's effort to support the Office of Management and Budget directed reforms for Efficiency and Effectiveness that include a lean, accountable, more efficient government.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604274N / *Next Generation Jammer (NGJ)*	Project (Number/Name) 0557 / *Next Generation Jammer*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
0557: *Next Generation Jammer*	1,255.215	559.017	632.936	459.529	-	459.529	568.662	408.105	160.999	0.000	0.000	4,044.463
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: P445

A. Mission Description and Budget Item Justification

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 replace the aging AN/ALQ-99 Tactical Jamming System Mid-Band pods.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Next Generation Jammer Mid-Band Primary Hardware Development	408.094	360.287	228.453	0.000	228.453
Articles:	-	-	-	-	-
FY 2018 Plans: Ongoing assembly and integration of the initial EDM and Aeromechanical Pods to support ground and chamber testing. The April 2017 NGJ-MB Critical Design Review (CDR) revealed deficiencies in modeling, assumptions, and methodologies that are driving a redesign of the pod structure in FY 2018. All subsystem design, development, manufacturing, integration and tests are continuing independent of the structure redesign effort.					
FY 2019 Base Plans: Deliver aeromechanical test shapes (Pods) to support store safe separation (jettison) developmental testing. Delivery of initial EDM pods to support ground chamber testing and mission systems developmental flight testing. Contract award for 7 System Demonstration Test Article Pod shipsets in 4th Qtr. FY 2019 which will be used for final developmental test efforts and operational test.					
FY 2019 OCO Plans: N/A					
FY 2018 to FY 2019 Increase/Decrease Statement: Decrease of Next Generation Jammer Mid-Band Primary Hardware Development from FY 2018 to FY 2019 is due to the funding of the Ground Power and Cooling Modification and the Pod Power Generator Test in FY					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
2018. FY 2018 also includes funding required for the resolution of Next Generation Jammer Mid-Band pod structure challenges.					
Title: Next Generation Jammer Mid-Band Systems Engineering	39.757	52.796	56.164	0.000	56.164
Articles:	-	-	-	-	-
FY 2018 Plans: Perform Systems Engineering efforts to support the design review for the structural redesign and implementation. System engineering efforts will also support Systems Integration Lab testing at government and contractor facilities as well as establishing verification requirements for developmental flight test activities.					
FY 2019 Base Plans: Perform Systems Engineering efforts, which will support the Mission Systems TRR and FRR 2nd Qtr. FY 2019. Systems Engineering efforts will also be focused on the Production Readiness Review 2nd Qtr. FY 2020 and the System Verification Review 3rd Qtr. FY 2020. System engineering efforts will continue to support Systems Integration Lab testing at government and contractor facilities and developmental ground and flight test activities.					
FY 2019 OCO Plans: N/A					
FY 2018 to FY 2019 Increase/Decrease Statement: Increase of Next Generation Jammer Mid-Band Systems Engineering from FY 2018 to FY 2019 is due to the commencement of Systems Engineering - Trainer in FY 2019 and escalation of other Systems Engineering efforts.					
Title: Next Generation Jammer Mid-Band Aircraft Integration	77.997	148.841	103.087	0.000	103.087
Articles:	-	-	-	-	-
FY 2018 Plans: Continue working on three SCS software builds in various stages, finish the System Integration phase of Build #1, finish the Design phase and start the System Integration phase of Build #2, and conduct the Design phase and the System Integration phases of Build #3. Installation of the first modification kits into the initial aircraft to be used for testing MGJ-MB. Finalize and deliver wind tunnel reports for the performance aeromechanical high speed wind tunnel test, stores separation wind tunnel test, and the high lift, low speed wind tunnel test.					
FY 2019 Base Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Completion of SCS software H16 Build 2 integration activities, Build Readiness Review (BRR) for H16 Build 3 and subsequent integration, and follow on software support to meet Initial Operational Capability (IOC). Continued SIL testing and NGJ-MB A-kit installs into the developmental test and evaluation aircraft. Commence delivery and installation of A-kits to Operational Test and Evaluation aircraft. ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Decrease of Next Generation Jammer Mid-Band Aircraft Integration from FY 2018 to FY 2019 is due to completion of the System Integration phase of Build #1 and the completion of the design phase of Build #2.					
Title: Next Generation Jammer Mid-Band Test and Evaluation	30.128	67.359	68.102	0.000	68.102
Articles:	-	-	-	-	-
FY 2018 Plans: Complete High Speed Stability and Control, High and Low Speed Performance, and Loads/Stores wind tunnel test reports. Plan, conduct and report Ram Air Turbine Generator (RATG) performance testing and NGJ-MB pod static loads testing. Complete Regression Ground Vibration Testing (RGVT) analysis. Plan, conduct and report on Cantilever Ground Vibration Testing (GVT). Calibrate sensors for stores load testing. Instrument an F/A-18E/F to support store loads testing. Instrument an F/A-18E/F for flying qualities and stability and control testing. Plan captive carriage flight test for weapons separation testing. Modify and instrument EA-1 and EA-2 for NGJ to support regression flight testing. Plan and initiate AN/ALQ-99 and NGJ-MB regression flight testing. Instrument three EA-18G aircraft to support mission systems ground and flight test. Finalize NGJ-MB Mission Systems Test Planning for installed system performance characterization that includes System Performance Specification verification, EA-18G Airborne Electronic Attack systems integration, regression interoperability, software integration and functionality, Electromagnetic Environmental Effects, assignment control, frequency and spatial coverage, beam capacity, beam switching, beam stabilization, Effective Isotropic Radiated Power (EIRP), antenna patterns, receive functionality, technique generation and management, Crew Vehicle Interface, aircrew workload, safety, mission planning, cybersecurity, reliability, maintainability, ground support equipment, and environmental qualifications. ***FY 2019 Base Plans:*** Complete NGJ-MB Airworthiness and Mission Systems Test Planning. Perform loads pod calibration. Modify and instrument a F/A-18E/F to support store loads testing. Modify F/A-18E/F aircraft to support Flying Qualities, Stability and Control, Performance, and Carrier Suitability flight testing. Instrument aircraft to support captive					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
carriage and jettison/adjacent stores flight testing. Execute initial ground testing to include Electromagnetic Environmental Effects, frequency and spatial coverage, beam stabilization and EIRP in the Air Combat Environment Test and Evaluation (ACETEF) Facility. Execute initial ground testing to include Basic Jamming Technique characterization in the High-Power Electronic Attack Technique Radiation (HEATR) Facility. Execute initial ground testing to include Reliability Growth Testing in the Electronic Attack Test and Evaluation System (EATES) Facility. ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Increase of funding from FY 2018 to FY 2019 reflects increased activity required to prepare for test events scheduled for FY 2020.					
Title: Next Generation Jammer Mid-Band Support & Management Services ***Articles:*** ***FY 2018 Plans:*** Provide Support and Management Services associated with the NGJ-MB Program. ***FY 2019 Base Plans:*** Provide Support and Management Services associated with the NGJ-MB Program. ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Increase of Next Generation Jammer Mid-Band Support & Management Services from FY 2018 to FY 2019 is due to escalation of efforts.	3.041 -	3.653 -	3.723 -	0.000 -	3.723 -
Accomplishments/Planned Programs Subtotals	559.017	632.936	459.529	0.000	459.529

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• APN/0591: *Next Generation Jammer*	0.000	0.000	0.952	-	0.952	232.243	212.353	348.848	530.083	3,365.589	4,690.068

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

The NGJ-MB program is designated an Acquisition Category 1C Major Defense Acquisition Program (MDAP), MDAP program number 445. The activity will focus on Engineering and Manufacturing Development (EMD) phase completing the design of the pod and building fifteen (15) EDM pods for developmental test.

E. Performance Metrics

The EMD phase completes the pod design. A system CDR was held 3rd Qtr. FY 2017, which revealed deficiencies in modeling, assumptions, and methodologies used in the design of the pod structure. These deficiencies are driving a redesign of the pod structure, but subsystem design, development, manufacturing, integration, and test are continuing independent of the pod structure redesign effort. First flight of an aeromechanical developmental test shape is scheduled for 1st Qtr. FY 2020. First radiating flight of an EDM Pod is scheduled for 2nd Qtr. FY 2020.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604274N / *Next Generation Jammer (NGJ)*	Project (Number/Name) 0557 / *Next Generation Jammer*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development - Engineering and Manufacturing Development	C/CPIF	Raytheon : El Segundo, CA	178.425	408.094	Nov 2016	360.286	Oct 2017	228.452	Oct 2018	-		228.452	604.403	1,779.660	1,779.660
Aircraft Integration - EMD	C/CPIF	Boeing : St. Louis, MO	7.191	19.801	Dec 2016	45.757	Dec 2017	29.634	Dec 2018	-		29.634	44.824	147.207	147.207
Software/Aircraft Integration	WR	NAWCWD : China Lake, CA	21.639	9.712	Dec 2016	7.504	Nov 2017	8.071	Nov 2018	-		8.071	22.899	69.825	-
Software Integration-Systems Integration Lab	SS/FFP	Northrop Grumman : Bethpage. NY	15.353	0.000		1.955	Feb 2018	1.387	Feb 2019	-		1.387	1.604	20.299	20.299
Software Integration - SOR	C/CPIF	Boeing : St. Louis, MO	25.699	1.130	Dec 2016	3.897	Oct 2017	2.967	Oct 2018	-		2.967	1.472	35.165	35.165
Software Integration - Blk Update	WR	NAWCWD : Pt. Mugu, CA	30.409	13.354	Nov 2016	24.474	Nov 2017	19.188	Nov 2018	-		19.188	30.691	118.116	-
Software Integration H-16	C/CPIF	Boeing : St Louis, MO	10.524	20.500	Dec 2016	48.225	Oct 2017	10.351	Oct 2018	-		10.351	7.971	97.571	97.571
Software Integration H-16	SS/FFP	Northrup Grumman : Bethpage, NY	6.700	11.926	Dec 2016	16.059	Dec 2017	11.476	Dec 2018	-		11.476	16.701	62.862	62.862
Software Integration H-16	WR	NAWCWD : China Lake	0.286	1.574	Dec 2016	0.971	Nov 2017	20.014	Nov 2018	-		20.014	4.517	27.362	-
Systems Engineering - Trainer	Various	TBD : TBD	0.000	0.000		0.000	Nov 2017	3.194	Nov 2018	-		3.194	3.284	6.478	-
Systems Engineering	WR	NAWCAD : Patuxent River, MD	99.006	16.308	Nov 2016	21.662	Nov 2017	22.095	Nov 2018	-		22.095	34.032	193.103	-
Systems Engineering	WR	NAWCWD : Pt. Mugu, CA	47.003	10.371	Nov 2016	9.694	Nov 2017	9.887	Nov 2018	-		9.887	21.678	98.633	-
Systems Engineering	WR	NSWC Crane : Crane, IN	32.104	4.291	Oct 2016	4.377	Nov 2017	4.464	Nov 2018	-		4.464	6.414	51.650	-
Systems Engineering	WR	NSWC Dahlgren : Dahlgren, VA	4.151	0.102	Oct 2016	0.104	Nov 2017	0.106	Nov 2018	-		0.106	0.332	4.795	-
Systems Engineering	SS/CPFF	Johns Hopkins University Applied	39.067	4.833	Feb 2017	9.460	Feb 2018	9.649	Feb 2019	-		9.649	21.886	84.895	84.895

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604274N / *Next Generation Jammer (NGJ)*	Project (Number/Name) 0557 / *Next Generation Jammer*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Physics Lab : Laurel, MD													
Systems Engineering	WR	Naval Research Laboratory : Washington, DC	4.626	0.642	Nov 2016	0.655	Nov 2017	0.668	Nov 2018	-		0.668	1.440	8.031	-
Systems Engineering	Various	Various : Various	10.054	0.315	Nov 2016	0.218	Nov 2017	0.017	Nov 2018	-		0.017	0.052	10.656	-
Systems Engineering	SS/FFP	NSMA : Arlington, VA	1.288	2.896	Feb 2017	6.626	Feb 2018	6.082	Feb 2019	-		6.082	5.167	22.059	22.059
Prior Year Prod Dev no longer funded in FYDP	Various	Various : Various	655.820	0.000		0.000		0.000		-		0.000	0.000	655.820	-
		Subtotal	1,189.345	525.849		561.924		387.702		-		387.702	829.367	3,494.187	N/A

Remarks

Engineering Manufacturing Development (EMD) Aircraft Integration award and increase from FY 2017 to FY 2018 due to phasing of Aircraft Integration efforts.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Eng & Tech Srvc (Non FFRDC)	Various	Various : Various	28.343	2.801	Dec 2016	3.367	Dec 2017	3.434	Dec 2018	-		3.434	7.076	45.021	45.021
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	33.725	2.801		3.367		3.434		-		3.434	7.076	50.403	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development T & E	WR	NAWCAD : Patuxent River, MD	21.545	20.182	Nov 2016	49.706	Nov 2017	42.807	Nov 2018	-		42.807	219.382	353.622	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604274N / *Next Generation Jammer (NGJ)*	Project (Number/Name) 0557 / *Next Generation Jammer*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development T & E	Various	Boeing : St Louis, MO	1.000	3.500	Dec 2016	12.250	Oct 2017	16.448	Oct 2018	-		16.448	37.685	70.883	70.883
Development T & E	Various	Boeing : St Louis MO	0.000	0.000		3.750	Dec 2017	7.658	Dec 2018	-		7.658	25.414	36.822	36.822
Development T & E - Wind Tunnel	WR	Various : AEDC	1.500	2.511	Nov 2016	0.000		0.000		-		0.000	0.000	4.011	-
Development T & E - Wind Tunnel	WR	Various : NASA AMES	0.913	3.480	Apr 2017	0.000		0.000		-		0.000	0.000	4.393	-
Test OT	Various	Various : Various	0.275	0.454	Mar 2017	1.653	Mar 2018	1.189	Mar 2019	-		1.189	17.959	21.530	-
Prior year T&E no longer funded in the FYDP	Various	Various : Various	6.121	0.000		0.000		0.000		-		0.000	0.000	6.121	-
		Subtotal	31.354	30.127		67.359		68.102		-		68.102	300.440	497.382	N/A

Remarks

Increase of Test & Evaluation funding from FY 2017 to FY 2018 and FY 2018 to FY 2019 is due to phasing of Next Generation Jammer-Mid Band (NGJ-MB) test program.

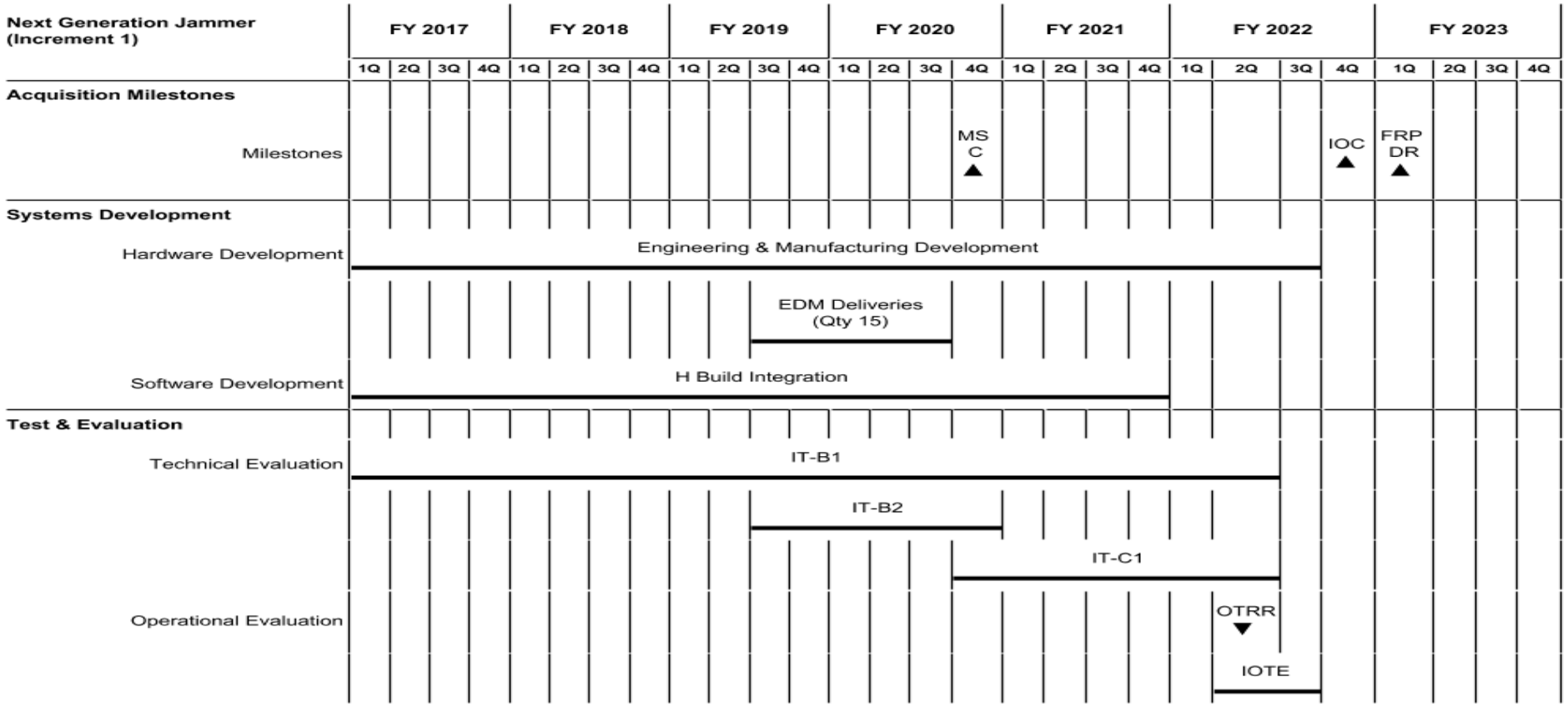
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	WR	Various : Various	0.784	0.240	Oct 2016	0.286	Oct 2017	0.291	Oct 2018	-		0.291	0.883	2.484	-
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	0.791	0.240		0.286		0.291		-		0.291	0.883	2.491	N/A

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1,255.215	559.017		632.936		459.529		-		459.529	1,137.766	4,044.463	N/A

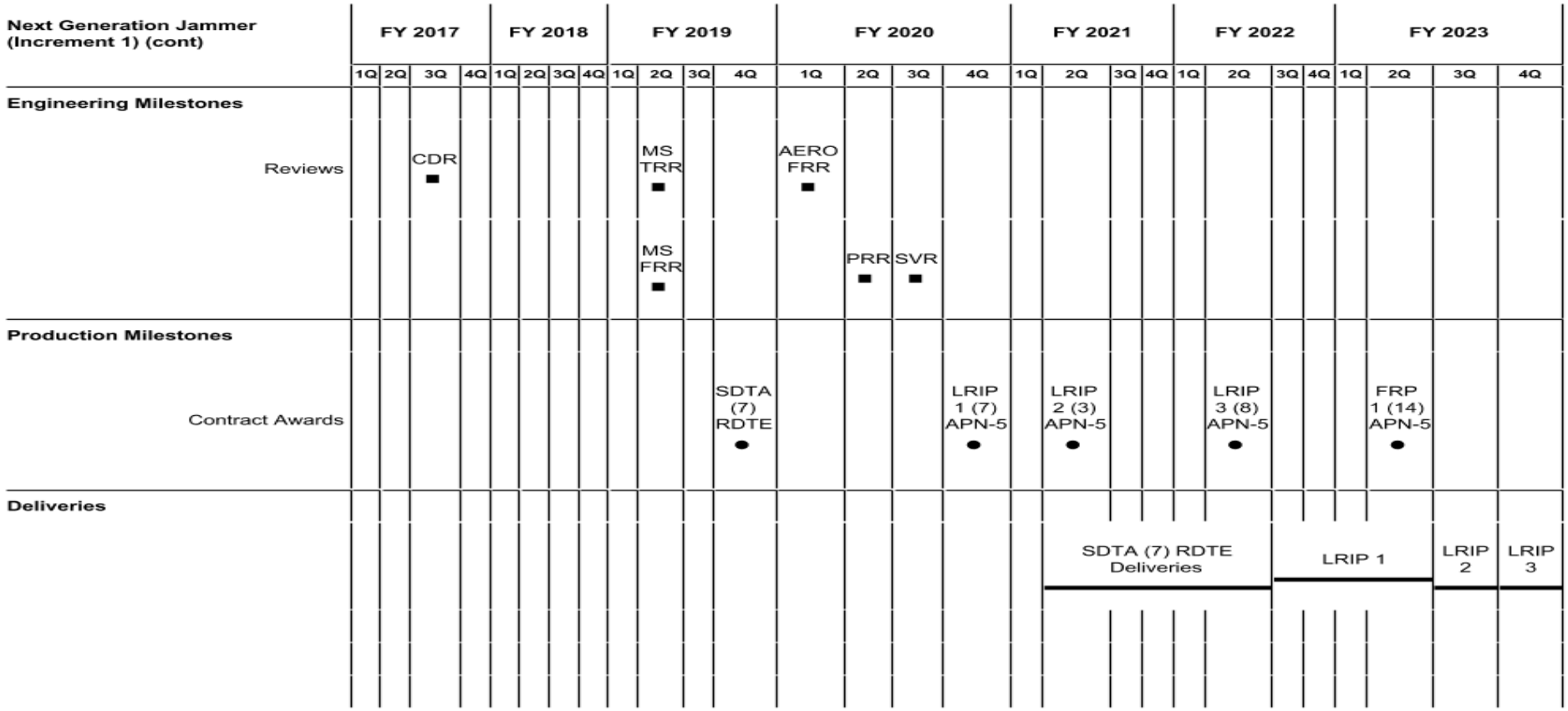
Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*



2019PB - 0604274N - 0557

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*



2019PB - 0604274N - 0557

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Next Generation Jammer (Increment 1)				
Acquisition Milestones: 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	2017	3	2022
Systems Development: Hardware Development: Engineering Development Model Deliveries	3	2019	3	2020
Systems Development: Software Development: H Build Integration	1	2017	4	2021
Test & Evaluation: Technical Evaluation: Aeromechanical Testing (IT-B1)	1	2017	2	2022
Test & Evaluation: Technical Evaluation: Mission Systems Testing (IT-B2)	3	2019	4	2020
Test & Evaluation: Technical Evaluation: Mission Systems Testing (IT-C1)	4	2020	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: Critical Design Review	3	2017	3	2017
Engineering Milestones: Reviews: AERO Flight Readiness Review	1	2020	1	2020
Engineering Milestones: Reviews: MS Test Readiness Review	2	2019	2	2019
Engineering Milestones: Reviews: MS Flight Readiness Review	2	2019	2	2019
Engineering Milestones: Reviews: Production Readiness Review	2	2020	2	2020
Engineering Milestones: Reviews: System Verification Review	3	2020	3	2020
Production Milestones: Contract Awards: System Demonstration Test Article RDTEN Contract Award	4	2019	4	2019

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604274N / *Next Generation Jammer (NGJ)*	**Project (Number/Name)** 0557 / *Next Generation Jammer*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Production Milestones: Contract Awards: Low Rate Initial Production 1 APN-5 Contract Award	4	2020	4	2020
Production Milestones: Contract Awards: Low Rate Initial Production 2 APN-5 Contract Award	2	2021	2	2021
Production Milestones: Contract Awards: Low Rate Initial Production 3 APN-5 Contract Award	2	2022	2	2022
Production Milestones: Contract Awards: Full Rate Production 1 APN-5 Contract Award	2	2023	2	2023
Deliveries: System Demonstration Test Article RDTEN Deliveries	2	2021	2	2022
Deliveries: LRIP 1 Deliveries	3	2022	2	2023
Deliveries: LRIP 2 Deliveries	3	2023	3	2023
Deliveries: LRIP 3 Deliveries	4	2023	4	2023