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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604282N I (U)Next Generation Jammer (NGJ) Increment II							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	0.000	12.306	52.065	66.686	-	66.686	116.550	171.087	209.686	240.022	1,021.921	1,890.323
3380: Next Generation Jammer Inc II	0.000	12.306	52.065	66.686	-	66.686	116.550	171.087	209.686	240.022	1,021.921	1,890.323
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): P520												
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 needed to meet current and emerging Electronic Warfare gaps, ensure kill chain wholeness against growing threat capabilities and capacity, and to keep pace with threat weapons systems advances and continuous expansion of the AEA mission area. NGJ is an evolutionary acquisition program providing capability in three increments: Increment 1 (Mid-Band) funded under Program Element 0604274N, Increment 2 (Low-Band) and Increment 3 (High-Band). The order of development - mid, low, and then high - was determined by the threat and available capability.												
NGJ Increment 2 (NGJ Inc 2) will address the mission need for a robust low band radar and communications jamming capability from an airborne platform that will require capabilities beyond the currently deployed system. Specifically, NGJ Inc 2 will address low-band AEA capability gaps, AEA sufficiency gaps, and address AN/ALQ-99 Tactical Jamming System shortfalls in scalability, flexibility, supportability, interoperability, availability, and capability.												
NGJ Inc 2 will deliver significantly improved radar and communications jamming capabilities with Open Systems Architecture that supports software and hardware updates to rapidly counter improving threats. Additionally, NGJ Inc 2 will contribute across the spectrum of missions defined in the Defense Strategic Guidance to include strike warfare, projecting power despite anti-access/area denial challenges, and counterinsurgency/irregular warfare.												
B. Program Change Summary (\$ in Millions)				FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total				
Previous President's Budget				13.000	52.065	76.424	-	76.424				
Current President's Budget				12.306	52.065	66.686	-	66.686				
Total Adjustments				-0.694	0.000	-9.738	-	-9.738				
• Congressional General Reductions				-	-							
• Congressional Directed Reductions				-	-							
• Congressional Rescissions				-	-							
• Congressional Adds				-	-							
• Congressional Directed Transfers				-	-							
• Reprogrammings				-0.547	0.000							
• SBIR/STTR Transfer				-0.147	0.000							
• Program Adjustments				0.000	0.000	-10.000	-	-10.000				

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• Rate/Misc Adjustments	0.000	0.000	0.262	-	0.262
Change Summary Explanation					
Technical: Not applicable.					
Schedule: Development Request for Proposal Release Decision Point (DRRDP) slid from 3QFY2017 to 2QFY2019. Milestone B (MS B) slid from 3QFY2018 to 1QFY2020. Engineering & Manufacturing Development (EMD) phase start shifted from 3QFY2018 to 2QFY2020. H Build Integration start shifted from 3QFY2018 to 2QFY2020. Next Generation Jammer Increment 2 Test & Evaluation Master Plan slid from 4QFY2017 to 4QFY2018. System Readiness Review-1 (SRR-1) was combined with a System Functional Review-1 (SFR-1) and slid from 4QFY2016 to 1QFY2019. System Readiness Review-2 (SRR-2) slid from 3QFY2018 to 3QFY2020. Integrated Baseline Review (IBR) slid from 4QFY2018 to 4QFY2020. Program Decision Review (PDR) was combined with a System Functional Review-2 (SFR-2) and slid from 1QFY2019 to 4QFY2021. Critical Design Review (CDR) slid from 4QFY2021 to FY2023. The following events were added to the schedule: Technology Demonstrators contract start 1QFY2018, Technology Demonstrators Test and Evaluation start 3QFY2019, and System Supportability Review (SSR) was added in 1QFY2021.					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604282N / (U)Next Generation Jammer (NGJ) Increment II				Project (Number/Name) 3380 / Next Generation Jammer Inc II			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3380: Next Generation Jammer Inc II	0.000	12.306	52.065	66.686	-	66.686	116.550	171.087	209.686	240.022	1,021.921	1,890.323
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: P520												
A. Mission Description and Budget Item Justification												
The Next Generation Jammer Increment 2 (NGJ Inc 2) will address the mission need for a robust low band radar and communications jamming capability from an airborne platform that will require capabilities beyond the currently deployed system. Specifically, NGJ Inc 2 will address low-band Airborne Electronic Attack (AEA) capability gaps, AEA sufficiency gaps, and address AN/ALQ-99 Tactical Jamming System shortfalls in scalability, flexibility, supportability, interoperability, availability, and capability.												
NGJ Inc 2 will deliver significantly improved radar and communications jamming capabilities with Open Systems Architecture that supports software and hardware updates to rapidly counter improving threats. Additionally, NGJ Inc 2 will contribute across the spectrum of missions defined in the Defense Strategic Guidance to include strike warfare, projecting power despite anti-access/area denial challenges, and counterinsurgency/irregular warfare.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)												
							FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
Title: Next Generation Jammer Increment 2 Primary Hardware Development							9.067	12.609	19.500	0.000	19.500	
Articles:							-	-	-	-	-	
FY 2016 Accomplishments:												
Performed trade studies in support of technology demonstration efforts, validation of technology readiness levels and development of technology roadmaps.												
FY 2017 Plans:												
Complete trade studies for Next Generation Jammer Increment 2 (NGJ Inc 2) subsystem concepts such as the transmitter group, power generation and cooling subsystems, and for the functional allocation and integration of these subsystems. These efforts will support the validation of technology readiness levels and development of technology roadmaps leading to the release of the Technology Demonstration Request for Proposal in 2QFY2017. It is anticipated that efforts commenced in FY2016 will ramp up in FY2017 as full staffing is realized, trade studies are completed, and source selection commences in 3QFY2017.												
FY 2018 Base Plans:												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Award and execution of the three Next Generation Jammer Increment 2 (NGJ Inc 2) technology demonstration contracts to include technology demonstration design reviews and hardware build approvals, leading up to NGJ Inc 2 Engineering & Manufacturing Development (EMD), Development Request for Proposal Decision Release Point (DRRDP) in FY2019. FY 2018 OCO Plans: N/A						
Title: Next Generation Jammer Increment 2 Systems Engineering Articles: FY 2016 Accomplishments: Performed System Engineering efforts in support of Next Generation Jammer Increment 2 (NGJ Inc 2) development to include initial drafts of a performance specification, a System Engineering Plan and a reliability analysis. FY 2017 Plans: Continue Systems Engineering efforts in support of NGJ Inc 2 development to include final performance specifications, a System Engineering Plan, an acquisition strategy approval, a development of the EMD Statement of Work, a continuous of the reliability analysis, and a source selection in preparation for Technology Demonstration contract award in FY 2018. FY 2018 Base Plans: Perform Systems Engineering efforts in support of NGJ Inc 2 development to include conducting the Integrated Logistics Assessment and finalizing the performance specification and Statement of Work in preparation for the DRRDP and release of the EMD Request for Proposal in FY 2019. FY 2018 OCO Plans: N/A		2.972 -	32.812 -	35.894 -	0.000 -	35.894 -
Title: Next Generation Jammer Increment 2 Support & Management Services Articles: FY 2016 Accomplishments: Provided Support and Management Services associated with the Next Generation Jammer Increment 2 (NGJ Inc 2) Program. FY 2017 Plans:		0.267 -	0.915 -	0.933 -	0.000 -	0.933 -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Provide Support and Management Services associated with the NGJ Inc 2 Program. FY 2018 Base Plans: Provide Support and Management Services associated with the NGJ Inc 2 Program. FY 2018 OCO Plans: N/A						
Title: Next Generation Jammer Increment 2 Test & Evaluation Articles:		0.000 -	5.729 -	7.274 -	0.000 -	7.274 -
FY 2016 Accomplishments: N/A FY 2017 Plans: Test & Evaluation activities include developing the initial Milestone-B (MS-B) Test and Evaluation Master Plan (TEMP) to include the Developmental Evaluation Framework, Integrated Evaluation Framework, and all associated planned resources and required infrastructure/improvements. FY 2018 Base Plans: Test & Evaluation activities include finalizing the MS-B Test and Evaluation Master Plan (TEMP). Additional efforts include activities to scope initial aeromechanical flight test program and scoping of the initial mission system and integration flight test program. FY 2018 OCO Plans: N/A						
Title: Next Generation Jammer Increment 2 Aircraft Integration Articles:		0.000 -	0.000 -	3.085 -	0.000 -	3.085 -
FY 2016 Accomplishments: N/A FY 2017 Plans: N/A FY 2018 Base Plans:						

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Utilize information gained from trade studies and technology demonstrations to begin development of the Statement of Requirements (SOR) for the aircraft System Configuration Set (SCS) software build required for integration of Next Generation Jammer Increment 2 physical and software interfaces into the EA-18G.					
FY 2018 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	12.306	52.065	66.686	0.000	66.686
C. Other Program Funding Summary (\$ in Millions) N/A					
Remarks					
D. Acquisition Strategy Next Generation Jammer Increment 2 is designated a pre-Major Defense Acquisition Program (pre MDAP), MDAP program number P520. The activity will focus on trade studies to inform the acquisition strategy, design engineering trades, and the identification of requirements and available technologies for program entry at Milestone B. Activity will also support execution of three technology demonstration contracts to validate existing technology maturity for low band applications on the EA-18G.					
E. Performance Metrics Utilize studies and technology demonstration efforts for favorable System Readiness Review (SRR) 1 and System Functional Review (SFR) in 1QFY2019 and preparation for the Development Request For Proposal Release Decision Point (DRRDP) 2QFY2019.					

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
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Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Primary H/W Dev - Trade Studies	SS/CPFF	JHU : Laurel, MD	0.000	5.215	Mar 2016	4.790	Dec 2016	0.000		-		0.000	0.000	10.005	10.005
Primary H/W Dev - Trade Studies	WR	NSWC Crane : Crane, IN	0.000	1.659	Feb 2016	3.183	Dec 2016	0.000		-		0.000	0.000	4.842	-
Primary H/W Dev - Trade Studies	WR	NAWCAD : Patuxent River, MD	0.000	1.921	Feb 2016	2.581	Dec 2016	0.000		-		0.000	0.000	4.502	-
Primary H/W Dev - Trade Studies	WR	NAWCWD : Point Mugu, CA	0.000	0.272	Jul 2016	2.055	Dec 2016	0.000		-		0.000	0.000	2.327	-
Primary H/W Dev - Technology Demonstrators 1	C/CPFF	TBD : TBD	0.000	0.000		0.000		6.500	Dec 2017	-		6.500	26.300	32.800	32.800
Primary H/W Dev - Technology Demonstrators 2	C/CPFF	TBD : TBD	0.000	0.000		0.000		6.500	Dec 2017	-		6.500	26.300	32.800	32.800
Primary H/W Dev - Technology Demonstrators 3	C/CPFF	TBD : TBD	0.000	0.000		0.000		6.500	Dec 2017	-		6.500	26.300	32.800	32.800
Primary H/W Dev - EMD	C/CPFF	TBD : TBD	0.000	0.000		0.000		0.000		-		0.000	719.520	719.520	719.520
Aircraft Integration	WR	NAWCWD : China Lake, CA	0.000	0.000		0.000		0.000		-		0.000	44.370	44.370	-
Aircraft Integration	Various	Various : Various	0.000	0.000		0.000		3.085	Dec 2017	-		3.085	7.423	10.508	-
Aircraft Integration - EMD	C/CPFF	Boeing : St. Louis, MO	0.000	0.000		0.000		0.000		-		0.000	46.257	46.257	46.257
Software Int - EMD A/C Integration	C/CPFF	Boeing : St. Louis, MO	0.000	0.000		0.000		0.000		-		0.000	140.443	140.443	140.443
Systems Engineering	WR	NAWCAD : Patuxent River, MD	0.000	1.405	Feb 2016	21.847	Dec 2016	24.710	Dec 2017	-		24.710	236.358	284.320	-
Systems Engineering	WR	NAWCWD : Point Mugu, CA	0.000	1.070	Feb 2016	4.838	Dec 2016	4.934	Dec 2017	-		4.934	52.398	63.240	-
Systems Engineering	WR	NSWC Crane : Crane, IN	0.000	0.498	Feb 2016	3.233	Dec 2016	3.298	Dec 2017	-		3.298	35.019	42.048	-
Systems Engineering	SS/CPFF	JHU : Laurel, MD	0.000	0.000		2.088	Dec 2016	2.130	Dec 2017	-		2.130	22.618	26.836	26.836

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Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	NRL : Washington, DC	0.000	0.000		0.000		0.000		-		0.000	5.240	5.240	-
Systems Engineering	Various	Various : Various	0.000	0.000		0.806	Dec 2016	0.822	Dec 2017	-		0.822	8.733	10.361	-
Subtotal			0.000	12.040		45.421		58.479		-		58.479	1,397.279	1,513.219	-
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Eng & Tech Srvc (Non FFRDC)	Various	Various : Various	0.000	0.265	Mar 2016	0.806	Dec 2016	0.822	Dec 2017	-		0.822	8.733	10.626	10.626
Subtotal			0.000	0.265		0.806		0.822		-		0.822	8.733	10.626	10.626
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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 - TEST DT	WR	NAWCAD : Patuxent River, MD	0.000	0.000		5.729	Dec 2016	7.274	Dec 2017	-		7.274	330.162	343.165	343.165
Development T&E - COTF	SS/FFP	FSC : San Diego, CA	0.000	0.000		0.000		0.000		-		0.000	2.111	2.111	2.111
Operational T&E - TEST OT	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	18.894	18.894	-
Subtotal			0.000	0.000		5.729		7.274		-		7.274	351.167	364.170	-
Management Services (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	Various	Various : Various	0.000	0.001	Feb 2016	0.109	Oct 2016	0.111	Oct 2017	-		0.111	2.087	2.308	-
Subtotal			0.000	0.001		0.109		0.111		-		0.111	2.087	2.308	-

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	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	0.000	12.306		52.065		66.686		-		66.686	1,759.266	1,890.323	-	
Remarks														

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604282N / (U)Next Generation Jammer
(NGJ) Increment II

Project (Number/Name)

3380 / Next Generation Jammer Inc II

Next Generation Jammer (Increment 2)	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestones														DRRDP ▲			MS B ▲											
Systems Development																												
Test & Evaluation																												
Engineering Milestones																												
Production Milestones																												
Contract Awards																												

2018OSD - 0604282N - 3380

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604282N / (U)Next Generation Jammer (NGJ) Increment II	Project (Number/Name) 3380 / Next Generation Jammer Inc II	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Next Generation Jammer (Increment 2)				
Acquistion Milestones: Development Request for Proposal Release Decision Point	2	2019	2	2019
Acquistion Milestones: Milestone B	1	2020	1	2020
Systems Development: Trade Studies	2	2016	4	2017
Systems Development: Technology Demonstrators	1	2018	1	2020
Systems Development: Engineering & Manufacturing Development	2	2020	4	2022
Systems Development: H Build Integration	2	2020	4	2022
Test & Evaluation: NGJ Increment 2 Test & Evaluation Master Plan	4	2018	4	2018
Test & Evaluation: Technology Demonstrations	3	2019	4	2019
Test & Evaluation: IT-B1	4	2022	4	2022
Engineering Milestones: System Readiness Review - 1 / System Functional Review - 1	1	2019	1	2019
Engineering Milestones: System Readiness Review - 2	3	2020	3	2020
Engineering Milestones: System Supportability Review	1	2021	1	2021
Engineering Milestones: Integrated Baseline Review	4	2020	4	2020
Engineering Milestones: Preliminary Design Review / System Functional Review - 2	4	2021	4	2021
Contract Awards: Engineering and Manufacturing Development Contract Award	2	2020	2	2020
Contract Awards: Technology Demonstrators Contract Award(s)	1	2018	1	2018