

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604282N / <i>Next Generation Jammer (NGJ) Increment II</i>
--	--

COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	13.000	52.065	-	52.065	76.424	156.730	230.696	194.291	886.204	1,609.410
3380: <i>Next Generation Jammer Inc II</i>	0.000	0.000	13.000	52.065	-	52.065	76.424	156.730	230.696	194.291	886.204	1,609.410

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), 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. Increment 1 is funded under Program Element 0604274N Project Unit 0557.

Next Generation Jammer (NGJ) Increment II capabilities will address low-band AEA capability gaps, AEA sufficiency gaps, and address ALQ-99 Tactical Jamming System shortfalls in scalability, flexibility, supportability, interoperability, availability, and capability.

Next Generation Jammer (NGJ) Increment II 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.

The Next Generation Jammer (NGJ) Increment II program was previously budgeted under PE 0604274N and was moved to PE 0604282N beginning in FY 2016.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy	Date: February 2016
---	----------------------------

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604282N / <i>Next Generation Jammer (NGJ) Increment II</i>
--	--

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	13.000	52.065	-	52.065
Total Adjustments	0.000	13.000	52.065	-	52.065
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	13.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Rate/Misc Adjustments	0.000	0.000	52.065	-	52.065

Change Summary Explanation

Technical: Not applicable.

Schedule: Schedule updated to reflect a 2Q FY2016 start due to FY2016 Continuing Resolution.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604282N / <i>Next Generation Jammer (NGJ) Increment II</i>				Project (Number/Name) 3380 / <i>Next Generation Jammer Inc II</i>			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
3380: <i>Next Generation Jammer Inc II</i>	0.000	0.000	13.000	52.065	-	52.065	76.424	156.730	230.696	194.291	886.204	1,609.410
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: P520

A. Mission Description and Budget Item Justification

The NGJ Increment 2 addresses 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. More specifically, the NGJ will provide Airborne Electronic Attack (AEA) capabilities against advanced radar and digital threats. The development of the NGJ is being conducted in three increments of capability with each increment addressing AEA capability needs within specific "bands" of frequency coverage. Increment 2 provides capability in "Low Band".

The current program plan as phased in FY2017 President's Budget requires FY2016 and FY2017 funding for initial government studies, technology maturity assessments, and program planning. Efforts are required before the FY2018 start of contracted engineering and manufacturing development efforts.

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: Next Generation Jammer Inc 2 Primary Hardware Development	0.000	5.831	28.714	0.000	28.714
Articles:	-	-	-	-	-
FY 2015 Accomplishments: N/A					
FY 2016 Plans: Perform technology feasibility studies and prototyping efforts in support of validating technology readiness levels and development of technology roadmaps.					
FY 2017 Base Plans: Complete technology feasibility studies and prototyping efforts for major Next Generation Jammer Increment 2 components such as the Amplifier, Antenna/Radome, Hardback, Ram Air Turbine (RAT), and the Digital Payload. These efforts will support the validation of technology readiness levels and development of technology roadmaps leading to the release of the E&MD Request for Proposal in 3Q FY2017 and the development of the Test and Evaluation Master Plan (TEMP). It is anticipated that efforts commenced in FY2016 will ramp up in FY2017 as full staffing is realized and the technology feasibility studies near completion in 3Q FY2017.					
FY 2017 OCO Plans:					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604282N / <i>Next Generation Jammer (NGJ) Increment II</i>	Project (Number/Name) 3380 / <i>Next Generation Jammer Inc II</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
N/A					
Title: Next Generation Jammer Inc 2 Systems Engineering Articles: FY 2015 Accomplishments: N/A FY 2016 Plans: Perform System Engineering efforts in support of Next Generation Jammer Increment 2 development to include Capability Development Document (CDD) updates, initial drafts of a performance specification and a System Engineering Plan and a reliability analysis. FY 2017 Base Plans: Continue Systems Engineering efforts in support of Next Generation Jammer Increment 2 development to include CDD updates and approvals, final performance specification, E&MD Statement of Work and a System Engineering Plan and a reliability analysis in preparation for Engineering and Manufacturing Development Contract Award in FY 2018. FY 2017 OCO Plans: N/A	0.000	6.635	20.352	0.000	20.352
	-	-	-	-	-
Title: Next Generation Jammer Inc 2 Support & Management Services Articles: FY 2015 Accomplishments: N/A FY 2016 Plans: Provide Support and Management Services associated with the Next Generation Jammer Inc 2 Program. FY 2017 Base Plans: Provide Support and Management Services associated with the Next Generation Jammer Inc 2 Program. FY 2017 OCO Plans: N/A	0.000	0.534	0.915	0.000	0.915
	-	-	-	-	-
Title: Next Generation Jammer Inc 2 Test & Evaluation Articles:	0.000	0.000	2.084	0.000	2.084
	-	-	-	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604282N / <i>Next Generation Jammer (NGJ) Increment II</i>	Project (Number/Name) 3380 / <i>Next Generation Jammer Inc II</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<i>FY 2015 Accomplishments:</i> N/A					
<i>FY 2016 Plans:</i> N/A					
<i>FY 2017 Base Plans:</i> Develop and complete Next Generation Jammer Increment 2 Test and Evaluation Master Plan.					
<i>FY 2017 OCO Plans:</i> N/A					
Accomplishments/Planned Programs Subtotals	0.000	13.000	52.065	0.000	52.065

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

N/A

Remarks

D. Acquisition Strategy

Next Generation Jammer Increment 2 is a prospective Major Defense Acquisition Program (MDAP) with activity focused on identification of requirements and available technologies needed to counter threats in the "Low Band" frequency range.

E. Performance Metrics

Utilize studies and prototyping efforts to obtain sufficient information to develop system requirements and validate technology readiness levels prior to Milestone B and initiation of the Engineering and Manufacturing Development phase.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy												Date: February 2016			
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604282N / Next Generation Jammer (NGJ) Increment II				Project (Number/Name) 3380 / Next Generation Jammer Inc II							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 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 - AMP TM Study	Various	Various : Various	0.000	0.000		0.255	Feb 2016	2.070	Dec 2016	-		2.070	0.000	2.325	-
Primary H/W Dev - AMP TM Study	Various	JHU : Laurel, MD	0.000	0.000		0.254	Jul 2016	2.070	Dec 2016	-		2.070	0.000	2.324	2.324
Primary H/W Dev - ANT/RAD TM Study	Various	Various : Various	0.000	0.000		0.139	Feb 2016	0.786	Dec 2016	-		0.786	0.000	0.925	-
Primary H/W Dev - ANT/RAD TM Study	Various	JHU : Laurel, MD	0.000	0.000		0.138	Jul 2016	0.786	Dec 2016	-		0.786	0.000	0.924	0.924
Primary H/W Dev - Hardback TM Study	Various	Various : Various	0.000	0.000		0.138	Feb 2016	0.786	Dec 2016	-		0.786	0.000	0.924	-
Primary H/W Dev - Hardback TM Study	Various	JHU : Laurel, MD	0.000	0.000		0.139	Jul 2016	0.786	Dec 2016	-		0.786	0.000	0.925	0.925
Primary H/W Dev - RAT TM Study	Various	Various : Various	0.000	0.000		0.599	Feb 2016	4.326	Dec 2016	-		4.326	0.000	4.925	-
Primary H/W Dev - RAT TM Study	Various	JHU : Laurel, MD	0.000	0.000		0.599	Jul 2016	4.326	Dec 2016	-		4.326	0.000	4.925	4.925
Primary H/W Dev - Digital Payload	Various	Various : Various	0.000	0.000		0.577	Feb 2016	3.926	Dec 2016	-		3.926	0.000	4.503	-
Primary H/W Dev - Digital Payload	Various	JHU : Laurel, MD	0.000	0.000		0.578	Jul 2016	3.926	Dec 2016	-		3.926	0.000	4.504	4.504
Primary H/W Dev - RAT EMD	C/CPFF	Honeywell : TBD	0.000	0.000		0.000		0.000		-		0.000	22.571	22.571	22.571
Primary H/W Dev - Antenna/Radome Amplfier EMD	C/CPFF	TBD : TBD	0.000	0.000		0.000		0.000		-		0.000	350.968	350.968	350.968
Primary H/W Dev - Exciter EMD	C/CPFF	TBD : TBD	0.000	0.000		0.000		0.000		-		0.000	124.876	124.876	124.876
Primary H/W Dev - Hardback EMD	WR	NSWC Crane : Crane, IN	0.000	0.000		0.000		0.000		-		0.000	25.346	25.346	-
Primary H/W Dev - PSI	WR	TBD : TBD	0.000	0.000		2.414	Feb 2016	4.926	Dec 2016	-		4.926	144.776	152.116	-
Aircraft Int - EMD A/C Integration	C/CPFF	Boeing : St. Louis, MO	0.000	0.000		0.000		0.000		-		0.000	35.659	35.659	35.659

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604282N / Next Generation Jammer (NGJ) Increment II	Project (Number/Name) 3380 / Next Generation Jammer Inc II
--	--	--

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Aircraft Int - EMD A/C Integration	WR	NAWCWD : China Lake, CA	0.000	0.000		0.000		0.000		-		0.000	47.642	47.642	-
Software Int - EMD A/C Integration	Various	Boeing : St. Louis, MO	0.000	0.000		0.000		0.000		-		0.000	148.030	148.030	148.030
Aircraft Int - Loads Aircraft	Various	Boeing : St. Louis, MO	0.000	0.000		0.000		0.000		-		0.000	49.737	49.737	49.737
Systems Engineering	WR	NAWCAD : Patuxent River, MD	0.000	0.000		1.889	Feb 2016	9.159	Dec 2016	-		9.159	100.518	111.566	-
Systems Engineering	WR	NAWCWD : Point Mugu, CA	0.000	0.000		1.033	Feb 2016	4.782	Dec 2016	-		4.782	52.395	58.210	-
Systems Engineering	WR	NSWC Crane : Crane, IN	0.000	0.000		1.641	Feb 2016	3.133	Dec 2016	-		3.133	35.018	39.792	-
Systems Engineering	SS/CPFF	JHU : Laurel, MD	0.000	0.000		2.073	Jul 2016	1.988	Dec 2016	-		1.988	22.617	26.678	26.678
Systems Engineering	WR	NRL : Washington, DC	0.000	0.000		0.000		0.484	Dec 2016	-		0.484	5.240	5.724	-
Systems Engineering	Various	Various : Various	0.000	0.000		0.000		0.806	Dec 2016	-		0.806	8.733	9.539	-
Subtotal			0.000	0.000		12.466		49.066		-		49.066	1,174.126	1,235.658	-

Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Eng & Tech Svc (Non FFRDC)	Various	Various : Various	0.000	0.000		0.480	Mar 2016	0.806	Dec 2016	-		0.806	8.733	10.019	10.019
Subtotal			0.000	0.000		0.480		0.806		-		0.806	8.733	10.019	10.019

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy **Date:** February 2016

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604282N / Next Generation Jammer (NGJ) Increment II	Project (Number/Name) 3380 / Next Generation Jammer Inc II
--	--	--

Next Generation Jammer (Increment 2)	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021					
	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																														
	Trade Studies								Engineering & Manufacturing Development								H Build Integration													
Test & Evaluation											TEMP ▼																			
Engineering Milestones							SRR-1 ■								SRR-2 ■	IBR ■	SFR ■			PDR ■									CDR ■	
Production Milestones																														
Contract Awards															E&MD Award ●															

2017PB - 0604282N - 3380

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604282N / <i>Next Generation Jammer (NGJ) Increment II</i>	Project (Number/Name) 3380 / <i>Next Generation Jammer Inc II</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Next Generation Jammer (Increment 2)</i>				
Acquisition Milestones: Development RFP Release Decision Point	3	2017	3	2017
Acquisition Milestones: Milestone B	3	2018	3	2018
Systems Development: Trade Studies	2	2016	3	2018
Systems Development: Engineering & Manufacturing Development	3	2018	4	2021
Systems Development: H Build Integration	3	2018	4	2021
Test & Evaluation: NGJ Increment 2 Test & Evaluation Master Plan	4	2017	4	2017
Engineering Milestones: System Readiness Review - 1	4	2016	4	2016
Engineering Milestones: System Readiness Review - 2	3	2018	3	2018
Engineering Milestones: System Functional Review	1	2019	1	2019
Engineering Milestones: Integrated Baseline Review	4	2018	4	2018
Engineering Milestones: Preliminary Design Review	4	2019	4	2019
Engineering Milestones: Critical Design Review	4	2021	4	2021
Contract Awards: Engineering and Manufacturing Development Contract Award	3	2018	3	2018