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

Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0204460M I (U)Ground/Air Task Oriented Radar (G/ATOR)
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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	144.649	90.577	65.598	83.538	-	83.538	50.274	10.072	12.510	6.348	Continuing	Continuing
9C89: Marine Ground-Air Radar	144.649	90.577	65.598	83.538	-	83.538	50.274	10.072	12.510	6.348	Continuing	Continuing

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 386

A. Mission Description and Budget Item Justification

The Ground/Air Task Oriented Radar (G/ATOR) is a multi-role, ground-based, expeditionary radar that replaces five legacy radar systems for the Marine Air Ground Task Force. It satisfies the Marine Air Command and Control System (G/ATOR Block 1) and the Ground Counter Fire/Counter Battery (G/ATOR Block 2) capabilities. The G/ATOR replaces the AN/TPS-63 and complements the AN/TPS-59 long range radar and will provide mobile, multi-functional, three-dimensional surveillance of air breathing targets, detection of cruise missiles and UAS, and the cueing of air defense weapons. The G/ATOR contributes to the extension of Sea Shield/Sea Strike by surveillance and detection of enemy air threats not seen by Navy sensors in the littorals by participating in a cooperative engagement network of sensors and shooters. G/ATOR enables Integrated Fire Control (IFC) and provides engage/fire on remote capability. G/ATOR surveillance coverage with IFC will provide unprecedented reach, volume, and precision in the execution of Operational Maneuver From The Sea, allowing Naval forces to project and sustain power deep inland.

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	99.082	80.129	84.424	-	84.424
Current President's Budget	90.577	65.598	83.538	-	83.538
Total Adjustments	-8.505	-14.531	-0.886	-	-0.886
• Congressional General Reductions	-	-0.031			
• Congressional Directed Reductions	-	-14.500			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-5.551	0.000			
• SBIR/STTR Transfer	-2.954	0.000			
• Program Adjustments	0.000	0.000	0.000	-	0.000
• Rate/Misc Adjustments	0.000	0.000	-0.886	-	-0.886

Change Summary Explanation

RDT&E funding increases (\$17.940M) from FY16 to FY17 to perform DT1C/DT1D test events and complete development and begin implementation of Program Protection for incorporation into the system.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy										Date: February 2016		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)				Project (Number/Name) 9C89 / Marine Ground-Air Radar			
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
9C89: Marine Ground-Air Radar	144.649	90.577	65.598	83.538	-	83.538	50.274	10.072	12.510	6.348	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 386												

A. Mission Description and Budget Item Justification

The Ground/Air Task Oriented Radar (G/ATOR) is a multi-role, ground-based, expeditionary radar that replaces five legacy radar systems for the Marine Air Ground Task Force. It satisfies the Marine Air Command and Control System (G/ATOR Block 1) and the Ground Counter Fire/Counter Battery (G/ATOR Block 2) capabilities. The G/ATOR replaces the AN/TPS-63 and complements the AN/TPS-59 long range radar and will provide mobile, multi-functional, three-dimensional surveillance of air breathing targets, detection of cruise missiles and UAS, and the cueing of air defense weapons. The G/ATOR contributes to the extension of Sea Shield/Sea Strike by surveillance and detection of enemy air threats not seen by Navy sensors in the littorals by participating in a cooperative engagement network of sensors and shooters. G/ATOR enables Integrated Fire Control (IFC) and provides engage/fire on remote capability. G/ATOR surveillance coverage with IFC will provide unprecedented reach, volume, and precision in the execution of Operational Maneuver From The Sea, allowing Naval forces to project and sustain power deep inland. RDT&E funding increases (\$17.940M) from FY16 to FY17 to perform DT1C/DT1D test events, complete development and begin implementation of Program Protection for incorporation into the system.

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: G/ATOR Contractor Technical, Development Engineering/Block 1	52.314	12.547	21.560	0.000	21.560
Articles:	-	-	-	-	-
FY 2015 Accomplishments:					
-Continued Reliability Improvements, Transition to Production and Producibility Enhancements in support of GaN Technical Insertion.					
-Initiated Program Protection planning and Refurbishment of Engineering Development Model (EDM)-1.					
FY 2016 Plans:					
-Continue Program Protection planning, EDM-1 Refurbishment, Reliability Improvements, Transition to Production, and Producibility Enhancements in support of GaN Technical Insertion.					
-Initiate Program Protection efforts.					
FY 2017 Base Plans:					
-Continue Program Protection efforts, Reliability Improvements, Technology Protection implementation, Transition to Production, and Producibility Enhancements in support of GaN Technical Insertion.					

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Navy				Date: February 2016		
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
		FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
-Complete Program Protection planning and EDM-1 Refurbishment.						
FY 2017 OCO Plans: N/A						
Title: G/ATOR Contractor Technical, Development Engineering/Block 2		19.920	20.471	19.488	0.000	19.488
	Articles:	-	-	-	-	-
FY 2015 Accomplishments: Initiated development of G/ATOR Block 2 software.						
FY 2016 Plans: Continue development of G/ATOR Block 2 software.						
FY 2017 Base Plans: Complete development of G/ATOR Block 2 software.						
FY 2017 OCO Plans: N/A						
Title: Government Technical Support		10.924	13.989	14.100	0.000	14.100
	Articles:	-	-	-	-	-
Description: The Government Technical Support Team provides governmental support functions to the G/ATOR Program Office. Functions include technical planning, execution and analysis across multi-disciplinary competencies.						
FY 2015 Accomplishments: Continued Government support from the following activities to enable program execution: MITRE; NAVAIR; NSWC Dahlgren; NSWC Crane; Carnegie Mellon University(CMU)/Software Engineering Institute (SEI); and NSWC Pt Hueneme.						
FY 2016 Plans: Continue Government support from the following activities to enable program execution: MITRE; NAVAIR; NSWC Dahlgren; NSWC Crane; Carnegie Mellon University(CMU)/Software Engineering Institute (SEI); and NSWC Pt Hueneme.						
FY 2017 Base Plans:						

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Continue Government support from the following activities to enable program execution: MITRE; NAVAIR; NSWC Dahlgren; NSWC Crane; Carnegie Mellon University(CMU)/Software Engineering Institute (SEI); and NSWC Pt Hueneme. FY 2017 OCO Plans: N/A					
Title: G/ATOR: Management Services & Travel Articles:	1.909 -	3.221 -	3.250 -	0.000 -	3.250 -
FY 2015 Accomplishments: Continued engineering, management & logistics program office support and travel in support of system development and Marine User RAM Opportunities. FY 2016 Plans: Continue to support engineering, management & logistics program office support and travel in support of system development and Marine User RAM Opportunities. FY 2017 Base Plans: Continue to support engineering, management & logistics program office support and travel in support of system development and development tests DT1C/DTCD and G/ATOR Block 1 (GB1) OA test. FY 2017 OCO Plans: N/A					
Title: G/ATOR: Test and Evaluation Articles:	5.510 -	15.370 -	25.140 -	0.000 -	25.140 -
FY 2015 Accomplishments: -Initiated planning for G/ATOR Block 1 (GB1) Developmental Test (DT1C) and Operational Assessment (OA). -Participated in WTI/CAC2S events. FY 2016 Plans: -Continue planning for G/ATOR Block 1 (GB 1) Developmental Test (DT1C) and Operational Assessment (OA). -Initiate planning for G/ATOR Block 2 (GB 2) Development Test (DT1D) and Operational Assessment (OA). -Continue participation in WTI/CAC2S in addition to DIVEX events. Includes procurement of ammunition to support DIVEX user events. FY 2017 Base Plans:					

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
-Continue preparation for both G/ATOR Block 1 (GB 1) and G/ATOR Block 2 (GB2) Operational Assessment (OA). -Complete planning for both G/ATOR Block 1 (GB 1) Developmental Test (DT1C), and G/ATOR Block 2 (GB 2) Development Test (DT1D). -Initiate both G/ATOR Block 1 (GB 1) Developmental Test (DT1C) and G/ATOR Block 2 (GB 2) Development Test (DT1D). -Initiate procurement of ammunition (Rockets, Mortars and Artillery) to support G/ATOR Block 2 (GB 2) Development Test (DT1D). -Initiate G/ATOR Block 1 (GB 1) Operational Assessment (OA).					
FY 2017 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	90.577	65.598	83.538	0.000	83.538

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• RDTE/0604504N/0718: <i>AIR CONTROL MATCAL S</i>	3.868	1.412	0.314	-	0.314	1.519	0.980	0.633	0.646	Continuing	Continuing
• PMC/7000: <i>INITIAL SPARES-G/ATOR</i>	2.572	0.000	11.193	-	11.193	20.327	13.112	13.270	13.528	Continuing	Continuing
• PMC/4655: <i>GRND/AIR TASK ORIENTED RADAR</i>	88.338	126.866	123.758	-	123.758	124.623	220.136	270.077	283.664	379.626	1,617.088

Remarks

D. Acquisition Strategy

The Ground/Air Task Oriented Radar (G/ATOR) is a multi-role, ground-based, expeditionary radar that replaces five legacy radar systems and provides the USMC Air Defense and Air Surveillance (AD/AS) (G/ATOR Block 1), Counterfire/Targeting (G/ATOR Block 2), and Air Traffic Control (G/ATOR Block 4) capability. The AD/AS (GB1) development effort was competitively awarded in 2007 and completed Milestone C in FY14. Development of the Counterfire/Targeting (GB2) capability was initiated in FY10 with a RFI to industry, followed by a Business Case Analysis (BCA) to select the most cost effective procurement strategy. The results of the BCA indicated that a sole source contract to Northrup Grumman Electronic Systems (NGES) was the most cost effective solution. Thus, the GB2 development contract awarded in August FY15.

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Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 7	PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	9C89 / Marine Ground-Air Radar

In FY13, a BCA was performed to determine the optimum strategy for development of the Air Traffic Control (GB4) mission with a developmental contract to be awarded in FY16 per the Navy Air Control (PE 0604504N) budget. Both the AD/AS (GB1) and Air Traffic Control (GB4) capabilities require JROCM mandated Identification Friend or Foe (IFF) enhancements.

E. Performance Metrics

N/A

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

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar
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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			
G/ATOR BLOCK 1 DEVELOPMENT	C/CPIF	NORTHROP GRUMMAN SYSTEMS CORPORATION : LINTHICUM HEIGHTS, MD	104.569	52.314	Dec 2014	12.547	Dec 2015	21.560	Dec 2016	-		21.560	Continuing	Continuing	Continuing
G/ATOR BLOCK 2 SOFTWARE DEVELOPMENT	C/CPFF	NORTHROP GRUMMAN SYSTEMS CORPORATION : LINTHICUM HEIGHTS, MD	0.000	19.920	Aug 2015	20.471	Mar 2016	19.488	Mar 2017	-		19.488	Continuing	Continuing	Continuing
Subtotal			104.569	72.234		33.018		41.048		-		41.048	-	-	-

Remarks
The funding increase of \$9.013M from FY16 to FY17 completes development and begins the implementation of Program Protection for incorporation. Award dates reflected are the actual obligation date for the first incremental award. The Northrop Grumman Product Development contract is incrementally funded throughout the fiscal year.

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			
FFRDC TECHNICAL SUPPORT	FFRDC	MITRE : BOSTON, MA	1.700	1.803	Dec 2014	1.898	Dec 2015	1.750	Dec 2016	-		1.750	Continuing	Continuing	Continuing
NSWC TECHNICAL SUPPORT	WR	NSWC DAHLGREN : DAHLGREN, VA	17.272	7.612	Dec 2014	6.772	Dec 2015	6.900	Dec 2016	-		6.900	Continuing	Continuing	Continuing
NSWC TECHNICAL SUPPORT	WR	NSWC CRANE : CRANE, IN	0.379	0.158	Dec 2014	0.200	Dec 2015	0.200	Dec 2016	-		0.200	Continuing	Continuing	Continuing
GOVT TECHNICAL SUPPORT	C/FP	MCSC : QUANTICO, VA	0.131	0.485	Dec 2014	0.540	Dec 2015	0.500	Dec 2016	-		0.500	Continuing	Continuing	Continuing
FFRDC TECHNICAL SUPPORT	FFRDC	CMU/SEI : PITTSBURGH, PA	0.520	0.130	Aug 2015	0.650	Jul 2016	0.500	Jul 2017	-		0.500	Continuing	Continuing	Continuing

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

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar
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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			
NSWC TECHNICAL SUPPORT	WR	NSWC PHD : DAM NECK, VA	0.790	0.721	Dec 2014	0.759	Dec 2015	0.650	Dec 2016	-		0.650	Continuing	Continuing	Continuing
NAVAIR TECHNICAL SUPPORT	WR	NAWC WD : CHINA LAKE, CA	0.000	0.015	Apr 2015	3.170	Jan 2016	3.600	Dec 2016	-		3.600	0.000	6.785	-
Subtotal			20.792	10.924		13.989		14.100		-		14.100	-	-	-

Remarks
Award dates reflected are the actual obligation date for the first incremental award. Most activities, excluding MITRE and CMU/SEI are incrementally funded throughout the fiscal year.

Test and Evaluation (\$ 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			
PRIME CONTRACTOR TEST SUPPORT	C/CPIF	NORTHROP GRUMMAN SYSTEMS CORPORATION : LINTHICUM HEIGHTS, MD	0.040	1.521	Dec 2014	4.092	Dec 2015	3.409	Dec 2016	-		3.409	Continuing	Continuing	Continuing
TEST SUPPORT	WR	NSWC DAHLGREN : DAHLGREN, VA	0.397	0.043	Dec 2014	1.778	Dec 2015	1.828	Dec 2016	-		1.828	Continuing	Continuing	Continuing
TEST PLANNING/ SUPPORT	MIPR	AMRDEC : REDSTONE ARSENAL, AL	3.086	1.078	Dec 2014	1.322	Dec 2015	1.353	Dec 2016	-		1.353	Continuing	Continuing	Continuing
TEST SUPPORT	MIPR	JTIC : FT HUACHUCA, AZ	0.098	0.050	Dec 2014	0.100	Dec 2015	0.200	Dec 2016	-		0.200	Continuing	Continuing	Continuing
TEST PLANNING/ SUPPORT	Various	NSWC-FALLBROOK : CRANE, IN	1.985	1.199	Dec 2014	0.900	Dec 2015	0.900	Dec 2016	-		0.900	Continuing	Continuing	Continuing
TEST EVALUATION SUPPORT	C/CPIF	MCOTE A : QUANTICO, VA	1.490	0.390	Dec 2014	1.397	Dec 2015	1.399	Dec 2016	-		1.399	Continuing	Continuing	Continuing

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

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar
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Test and Evaluation (\$ 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
TEST SUPPORT	Various	NSWC CORONA : CORONA, CA	1.420	0.070	Mar 2015	0.160	Dec 2015	0.160	Dec 2016	-		0.160	Continuing	Continuing	Continuing
TEST PLANNING/ SUPPORT	Various	NSWC PHD : DAM NECK, VA	3.043	0.412	Dec 2014	1.400	Dec 2015	1.400	Dec 2016	-		1.400	Continuing	Continuing	Continuing
TEST ASSET PROCUREMENT	C/CPFF	MCSC : QUANTICO, VA	1.033	0.311	Dec 2014	1.302	Dec 2015	8.267	Dec 2016	-		8.267	Continuing	Continuing	Continuing
TEST SUPPORT	Various	3D MAW : CAMP PENDLETON, CA	0.961	0.173	Dec 2014	0.313	Dec 2015	1.948	Dec 2016	-		1.948	Continuing	Continuing	Continuing
TEST SUPPORT	Various	MACS-1 : YUMA, AZ	0.605	0.143	Dec 2014	1.670	Dec 2015	1.688	Dec 2016	-		1.688	Continuing	Continuing	Continuing
TEST SUPPORT	Various	MCTSSA : CAMP PENDLETON, CA	0.107	0.070	Dec 2014	0.786	Dec 2015	0.800	Dec 2016	-		0.800	Continuing	Continuing	Continuing
TEST SUPPORT	Various	3D LAAD : CAMP PENDLETON, CA	0.145	0.000		0.000		0.600	Dec 2016	-		0.600	Continuing	Continuing	Continuing
TEST SUPPORT	MIPR	ATC : ABERDEEN, MD	0.114	0.050	Dec 2014	0.150	Dec 2015	0.150	Dec 2016	-		0.150	Continuing	Continuing	Continuing
TEST OPERATOR SUPPORT	Various	10th or 12th MARINES : OAK FIELD, NC	0.000	0.000		0.000		1.038	Dec 2016	-		1.038	Continuing	Continuing	Continuing
Prior Years Cumulative Funding	Various	N/A : N/A	0.952	0.000		0.000		0.000		-		0.000	0.000	0.952	-
Subtotal			15.476	5.510		15.370		25.140		-		25.140	-	-	-

Remarks
The funding increase of 9.77M is due to the initiation of GB 1 and GB 2 developmental test events, initiation of the GB1 OA, procurement of test assets, and planning for the GB 2 OA.

Management Services (\$ 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
MANAGEMENT SERVICES	C/FP	MCSC : MCSC - QUANTICO, VA	3.212	1.659	May 2015	2.946	Nov 2015	2.950	Nov 2016	-		2.950	Continuing	Continuing	Continuing

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar
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Management Services (\$ 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			
TRAVEL	Various	MCSC : QUANTICO, VA	0.600	0.250	Sep 2015	0.275	Sep 2016	0.300	Sep 2017	-		0.300	Continuing	Continuing	Continuing
Subtotal			3.812	1.909		3.221		3.250		-		3.250	-	-	-

Remarks
Award dates reflected are the actual obligation date for the first incremental award. Each activity is incrementally funded throughout the fiscal year. Program management support costs will be adjusted/reduced accordingly as support efforts continue to transition to procurement funded.

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	144.649	90.577	65.598	83.538	-	83.538	-	-	-

Remarks
The funding increases of \$17.940M from FY16 to FY17 supports DT1C/DT1D test events, completes development and starts the implementation of Program Protection for incorporation into the system.

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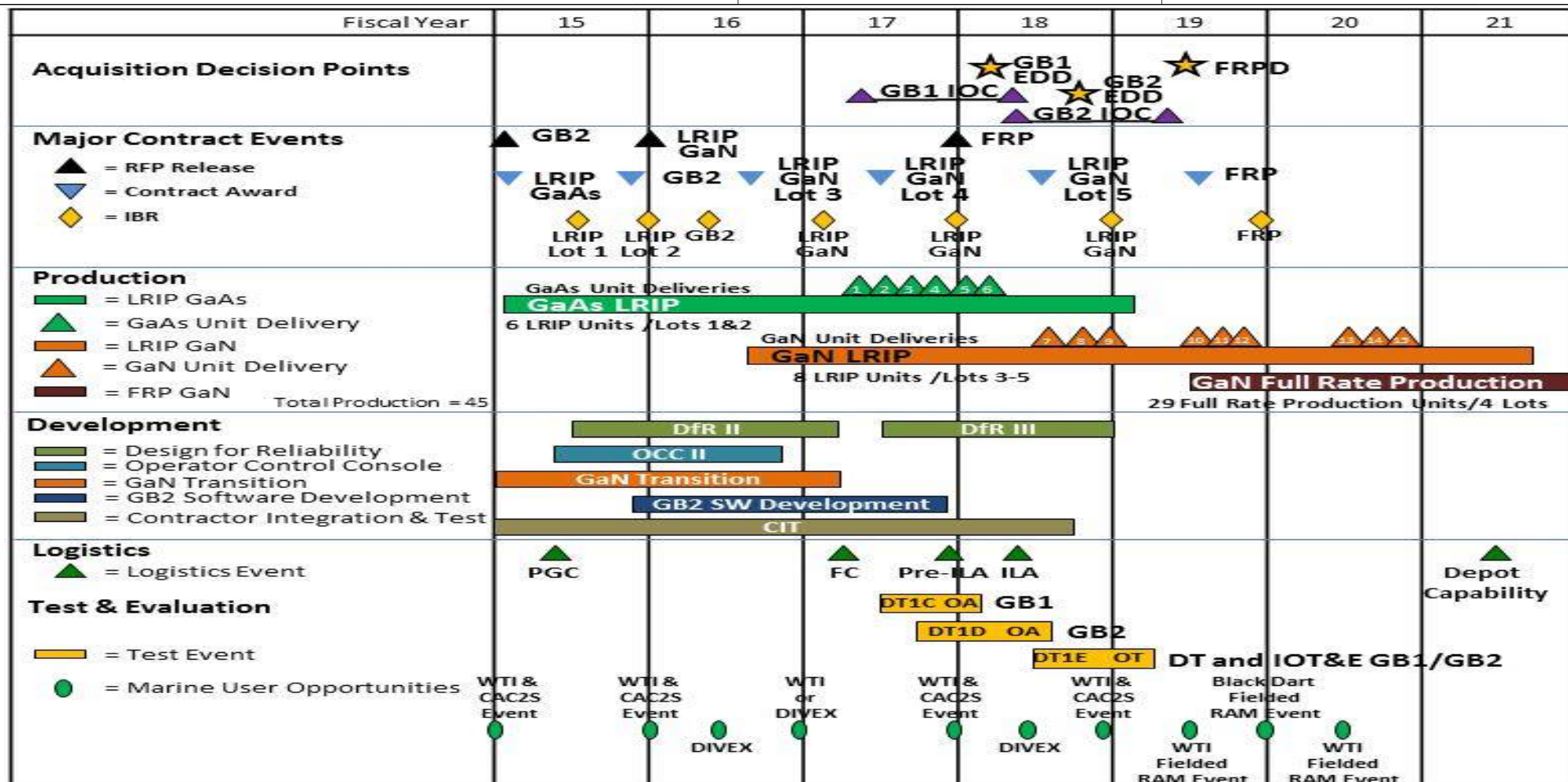
Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy

Date: February 2016

Appropriation/Budget Activity
1319 / 7

R-1 Program Element (Number/Name)
PE 0204460M / (U)Ground/Air Task
Oriented Radar (G/ATOR)

Project (Number/Name)
9C89 / Marine Ground-Air Radar



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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy		Date: February 2016
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 9C89				
Gallium Arsenide (GaAs) Radar: Low Rate Initial Production (LRIP) Award	1	2015	1	2015
Gallium Arsenide (GaAs) Radar: GB1 Developmental Test (DT1C)	3	2017	4	2017
Gallium Arsenide (GaAs) Radar: GB1 Operational Assessment (OA)	4	2017	1	2018
Gallium Arsenide (GaAs) Radar: GB1 Radar IOC	2	2017	2	2018
Gallium Nitride (GaN) Radar: LRIP Lot 3 Contract Award	3	2016	3	2016
Gallium Nitride (GaN) Radar: GaN Transition	1	2015	1	2017
Gallium Nitride (GaN) Radar: LRIP Lot 4 Contract Award	3	2017	3	2017
Gallium Nitride (GaN) Radar: GB1/GB2 Developmental Test (DT1E)	3	2018	1	2019
Gallium Nitride (GaN) Radar: GB1/GB2 IOTE	1	2019	2	2019
Gallium Nitride (GaN) Radar: LRIP Lot 5 Contract Award	3	2018	3	2018
Gallium Nitride (GaN) Radar: FRPD	2	2019	2	2019
Gallium Nitride (GaN) Radar: FRP	3	2019	4	2021
Ground Weapons Locating Radar (GWLR): GB2 Development Contract Award	4	2015	4	2015
Ground Weapons Locating Radar (GWLR): GB2 Software Development	4	2015	4	2017
Ground Weapons Locating Radar (GWLR): GB2 Developmental Test (DT1D)	4	2017	1	2018
Ground Weapons Locating Radar (GWLR): GB2 Operatonal Assessment (OA)	2	2018	3	2018
Ground Weapons Locating Radar (GWLR): GB2 IOC	2	2018	2	2019
Marine User RAM Events: Weapons Tactics Instructor / Common Aviation Command and Control System (WTI / CAC2S-1)	1	2015	1	2015
Marine User RAM Events: WTI / CAC2S-2	4	2015	1	2016
Marine User RAM Events: Division Exercise (DIVEX-1)	2	2016	3	2016

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

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)	Project (Number/Name) 9C89 / Marine Ground-Air Radar
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Marine User RAM Events: WTI or DIVEX	4	2016	1	2017
Marine User RAM Events: WTI / CAC2S-3	4	2017	1	2018
Marine User RAM Events: DIVEX-2	2	2018	2	2018
Marine User RAM Events: WTI / CAC2S-4	4	2018	1	2019
Marine User RAM Events: WTI Fielded RAM Event-1	2	2019	3	2019
Marine User RAM Events: Black Dart Fielded RAM Event	4	2019	4	2019
Marine User RAM Events: WTI Fielded RAM Event-2	2	2020	3	2020
Continued Reliability Development: Design for Reliability (DFR) II	2	2015	1	2017
Continued Reliability Development: Design for Reliability (DFR) III	3	2017	1	2019
Continued Reliability Development: Operator Control Console (OCC) II	2	2015	4	2016

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