Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational

PE 0204460M I (U)Ground/Air Task Oriented Radar (G/ATOR)

Systems Development

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	0.000	70.217	78.208	99.106	-	99.106	79.595	82.416	32.849	20.431	Continuing	Continuing
9C89: Marine Ground-Air Radar	0.000	70.217	78.208	99.106	-	99.106	79.595	82.416	32.849	20.431	Continuing	Continuing

MDAP/MAIS Code:

Other MDAP/MAIS Code(s): 386

A. Mission Description and Budget Item Justification

Ground/Air Task Oriented Radar (G/ATOR) (formerly known as the Multi-Role Radar System (MRRS)) is an expeditionary, 3-dimensional, high-mobility, multi-purpose wheeled vehicle, short/medium range multi-role radar designed to detect cruise missiles, air breathing targets, rockets, mortars, and artillery. MRRS and GWLR (Ground Weapons Locating Radar) merged into a single requirement/capability (G/ATOR) and will replace an aging fleet of single mission legacy radar systems. G/ ATOR will support air defense, air surveillance, counter-battery/target acquisition, aviation radar tactical enhancements and the final evolution will also support the Air Traffic Control mission. This project was funded under Program Element 0206313M Project C3099 prior to FY2010 and Program Element 0206313M Project 9C89 in FY2011-2012. It was moved to Program Element 0204460M in FY2013.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	75.088	78.208	77.413	-	77.413
Current President's Budget	70.217	78.208	99.106	-	99.106
Total Adjustments	-4.871	-	21.693	-	21.693
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	3.478	-			
SBIR/STTR Transfer	-2.089	-			
Program Adjustments	-	-	-5.135	-	-5.135
Rate/Misc Adjustments	-	-	26.828	-	26.828
 Congressional General Reductions Adjustments 	-6.260	-	-	-	-

UNCLASSIFIED Page 1 of 7

[#] The FY 2015 OCO Request will be submitted at a later date.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy		Date: March 2014
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 (C	G/ATOR)
<u>Change Summary Explanation</u> The funding increase from FY14 to FY15 supports Gallium Nitride (Ga Material Solution.	aN) Transition and G/ATOR Block 2 software developmen	nt as part of a Common Hardware

PE 0204460M: *(U)Ground/Air Task Oriented Radar (G/ATOR)* Navy

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2015 N	lavy							Date: Marc	ch 2014	
Appropriation/Budget Activity 1319 / 7					PE 020446	am Elemen 60M <i>I (U)Gro</i> Radar (G/AT	oùnd/Air Ta:	•	Project (N 9C89 / Mai		,	
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
9C89: Marine Ground-Air Radar	-	70.217	78.208	99.106	-	99.106	79.595	82.416	32.849	20.431	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

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. The funding increase from FY14 to FY15 supports Gallium Nitride (GaN) Transition and G/ATOR Block 2 software development as part of a Common Hardware Material Solution.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: G/ATOR Contractor Technical, Development Engineering	46.738	59.874	40.686
Articles:	-	-	-
FY 2013 Accomplishments: Provided hardware and software updates in support of government directed changes as a result of DT1B and OA testing, assisted in the development of program documentation in support of Milestone C (MS C), continued to assist the government in development of LRIP configuration in support of Transition to Production, and plan Producibility Enhancements in support of GaN Transition.			
FY 2014 Plans: Begin Technology Protection implementation, Transition to Production, begin Producibility Enhancements in support of GaN Transition, conclude Developmental Test/Operational Assessment (DT/OA). Begin plan to develop G/ATOR Block 2, continue Systems Engineering Program Management (SEPM) for G/ATOR during LRIP. FY 2015 Plans:			
	'	,	

UNCLASSIFIED
Page 3 of 7

^{*}The FY 2015 OCO Request will be submitted at a later date.

	UNULAGON ILD				
Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: M	arch 2014	
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204460M / (U)Ground/Air Task Oriented Radar (G/ATOR)		ct (Number/N I Marine Grou	r	
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)		FY 2013	FY 2014	FY 2015
Continue Technology Protection implementation, Transition to Pro Transition.	duction, continue Producibility Enhancements in support of	of GaN			
Title: G/ATOR Contractor Technical, Development Engineering/Bl		rticles:	-	-	37.589 -
FY 2013 Accomplishments: N/A					
FY 2014 Plans: N/A					
FY 2015 Plans: Support development of and Systems Engineering Program Mana	gement (SEPM) for G/ATOR Block 2 software.				
Title: G/ATOR: Test and Evaluation	A	rticles:	11.714 -	2.837 -	4.550 -
FY 2013 Accomplishments: Performed G/ATOR Developmental Test (DT1B), Field User Evaluation	uation (FUE) and Operational Assessment (OA).				
FY 2014 Plans: Conclude G/ATOR development Test (DT1B) and Operational Assevents.	sessment (OA). Participate in WTI, C2 FOS and Black Da	rt			
FY 2015 Plans: Plan for G/ATOR Developmental Test (DT1C), Operational Assessevents.	sment (OA) and C2 FOS. Participate in WTI and Black Da	ırt			
Title: Government Technical Support	A	rticles:	10.440	12.081 -	12.946 -
FY 2013 Accomplishments: Government support provided from the following activities enabled NSWC Pt Hueneme.	I program execution; MITRE, NSWC Dahlgren, NSWC Cr	ane,			
FY 2014 Plans: Government support from the following activities to enable program Hueneme, Air Traffic Control Radar Beacon System Identification					
FY 2015 Plans:					

UNCLASSIFIED

Page 4 of 7

R-1 Line #184

PE 0204460M: (U)Ground/Air Task Oriented Radar (G/ATOR)

				UNCLAS	SIFIED								
Exhibit R-2A, RDT&E Project Justi	ification: PB	2015 Navy			,				Date: M	arch 2014			
Appropriation/Budget Activity 1319 / 7				PE 02		nent (Numb I)Ground/Air I/ATOR)		Project (Number/Name) 9C89 I Marine Ground-Air Radar					
B. Accomplishments/Planned Pro	grams (\$ in I	Millions, Art	ticle Quantit	ies in Each)				FY 2013	FY 2014	FY 2015		
Government support from the following Pt Hueneme, Air Traffic Control Rad													
Title: G/ATOR: Program Office Man	agement & T	ravel Costs					A	rticles:	0.300	0.300	0.30		
FY 2013 Accomplishments: Continued Program Office Managem	nent and trave	el in support	of system de	evelopment :	and test.								
FY 2014 Plans: Continue Program Office Manageme	ent and travel	in support o	of system dev	velopment a	nd test.								
FY 2015 Plans: Will continue Program Office Manag	ement and tra	avel in suppo	ort of system	ı developme	nt and test.								
Title: G/ATOR: Engineering, Manag				·			A	rticles:	1.025	3.116	3.03		
FY 2013 Accomplishments: Continued engineering, managemen	nt & logistics p	orogram offic	ce support.										
FY 2014 Plans: Continue engineering, management Operational Assessment documenta		ogram office	e support. Su	upport includ	es MS-C do	cumentation	and support	for					
FY 2015 Plans: Will continue engineering, managem	ent & logistic	e program o	office support										
will continue engineering, managem	ient & logistic	5 program o	mice support		nplishment	s/Planned P	rograms Su	ıbtotals	70.217	78.208	99.10		
C. Other Program Funding Summa	ary (\$ in Milli	ons)						l					
			FY 2015	FY 2015	FY 2015					Cost To			
<u>Line Item</u> • PMC/4650: <i>GRND/AIR</i> TASK ORIENTED RADAR	FY 2013 89.428	FY 2014 87.215	Base -	<u>0C0</u> -	<u>Total</u>	FY 2016 -	FY 2017 -	FY 20 ⁻	<u>18 FY 2019</u> 	O Complete	180.88		
• RDTE/0604504N: AIR CONTROL MATCALS	-	2.990	1.200	-	1.200	-	-			-	4.19		
• PMC/7000: INITIAL SPARES		7.500	2.598		2.598	4.599	13.406	18.6		7 Continuing			

PE 0204460M: *(U)Ground/Air Task Oriented Radar (G/ATOR)*Navy

UNCLASSIFIED
Page 5 of 7

R-1 Line #184

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy	y				Date: March 2014
Appropriation/Budget Activity 1319 / 7		PE (Program Element (Number/Name) 0204460M	• •	Number/Name) arine Ground-Air Radar
C. Other Program Funding Summary (\$ in Millions)					
	FV 2015	FV 201	FV 2015		Cost To

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	Base	000	Total	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 PMC/4655: GRND/AIR 	-	-	89.230	-	89.230	102.952	139.743	162.958	203.053	824.920	1,522.856
TASK ORIENTED RADAR											

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 NGSC was the most cost effective solution. Thus, development award is planned for the 3rd Qtr FY15. In FY13, a BCA was performed to determine the optimum strategy for development of the Air Traffic Control (GB4) mission with a potential development contract to be awarded in FY16. Funding in FY14 and FY15 supports systems engineering activities prior to contract award, including integration studies with ATNAVICS, the Navy provided Air Traffic Control C2 systems.

E. Performance Metrics

N/A

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy

Appropriation/Budget Activity

1319 / 7

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

Page 14

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

