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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 5: System Development & Demonstration (SDD)					PE 0604376M I (U)Marine Air Grnd Task Force(MAGTF)EW for Aviatio							
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	9.647	10.080	7.832	-	7.832	3.065	3.047	2.967	3.034	Continuing	Continuing
3327: MAGTF EW Aviation Development	0.000	9.647	10.080	3.277	-	3.277	1.113	1.393	1.411	2.061	Continuing	Continuing
3371: MAGTF EW Interoperability Development	0.000	-	-	4.555	-	4.555	1.952	1.654	1.556	0.973	Continuing	Continuing

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

A. Mission Description and Budget Item Justification

This program element includes development of Electronic Warfare (EW) systems for the United States Marine Corps (USMC) tactical aircraft, USMC helicopters, unmanned air vehicles, data link vulnerability assessments, precision targeting, USN and USMC radio frequency jammers, and development and testing of EW devices on emerging platforms to combat emerging threats and emergency contingencies.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	10.568	10.080	10.111	-	10.111
Current President's Budget	9.647	10.080	7.832	-	7.832
Total Adjustments	-0.921	-	-2.279	-	-2.279
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.040	-			
• Program Adjustments	-	-	-0.083	-	-0.083
• Rate/Misc Adjustments	-	-	-2.196	-	-2.196
• Congressional General Reductions Adjustments	-0.881	-	-	-	-

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<u>Change Summary Explanation</u> * Prior to FY13, this program was funded under PE 0604270N, PU 3327. * PU 3371 has been created to administratively highlight specific work that was being done in 3327. This Project Unit continues efforts previously funded under PU 3327 and is not a new start for FY 2015. * FY13 reduction reflects sequestration & Congressional general reductions.		

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604376M I (U)Marine Air Grnd Task Force(MAGTF)EW for Aviatio				Project (Number/Name) 3327 I MAGTF EW Aviation 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
3327: MAGTF EW Aviation Development	-	9.647	10.080	3.277	-	3.277	1.113	1.393	1.411	2.061	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project unit supports the United States Marine Corps development of Marine Air Ground Task Force (MAGTF) Electronic Warfare (EW) and the various elements of its distributed System of Systems (SoS) that support the Commandant of the Marine Corps' Strategy and Vision 2025 and Joint Vision 2025. The SoS will address MAGTF EW sufficiency gaps in the areas of Electronic Attack, EW Support, and Electronic Protection with a multitude of payloads designed for carriage on a variety of organic MAGTF air and ground assets. Payload development plans follow an adaptable, modular and open architecture philosophy to combat the increasing capability gap and enable future growth at a reduced operational and sustainment cost.												
Prior to FY11, Intrepid Tiger II efforts were budgeted under Program Element (PE) 0604270N, Project Unit (PU) 0556. In FY12, Intrepid Tiger II efforts were budgeted under PE 0604270N, PU 3327												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: MAGTF EW Software Reprogrammable Payload (SRP) Articles: FY 2013 Accomplishments: Continued transition of SRP and associated components; Collaborative EW/EW Battle Management, EW Services Architecture (formerly Collaborative Online Reconnaissance Provider Operationally Responsive Attack Link), and Intrepid Tiger II(v)2 from its Joint Capabilities Technology Demonstration into a viable capability. FY 2014 Plans: Continue transition of SRP and associated components; Collaborative EW/EW Battle Management, EW Services Architecture (formerly Collaborative Online Reconnaissance Provider Operationally Responsive Attack Link), and Intrepid Tiger II(v)2 from its Joint Capabilities Technology Demonstration into a viable capability. FY 2015 Plans: In FY15, SRP was moved to Project Unit 3371.									4.441	4.075	-	
									-	-	-	
Title: Intrepid Tiger II (v)1 (ALQ-231) Articles:									5.206	4.164	3.177	
									-	-	-	

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
FY 2013 Accomplishments: Integrated Intrepid Tiger II (v)1 (ALQ-231) on United States Marine Corps rotary wing platforms to include AH-1 and UH-1 Type/Model/Series. Continued to mature hardware technology, update targeting techniques, and corrected identified software discrepancies. Implemented logistics plans to support and sustain rotary wing requirements. FY 2014 Plans: Continue to integrate Intrepid Tiger II (v)1 (ALQ-231) on United States Marine Corps rotary wing platforms to include AH-1 and UH-1 Type/Model/Series and begin efforts to integrate Intrepid Tiger II (v)1 (ALQ-231) on unmanned aerial vehicle (UAV) platforms. Continue to mature hardware technology, update targeting techniques, and correct identified software discrepancies. Implement logistics plans to support and sustain unmanned aerial vehicle requirements. FY 2015 Plans: Continue to integrate Intrepid Tiger II (v)1 (ALQ-231) on United States Marine Corps rotary wing platforms to include AH-1 and UH-1 Type/Model/Series and continue efforts to integrate Intrepid Tiger II (v)1 (ALQ-231) on unmanned aerial vehicle (UAV) platforms. Continue to mature hardware technology, update targeting techniques, and correct identified software discrepancies. Continue efforts to identify Intrepid Tiger II based solution to radar threats. Implement logistics plans to support and sustain unmanned aerial vehicle requirements. Continue research efforts to develop an enabling capability to facilitate Collaborative EW (CEW) through shared organic, national and spaced EMS sensing (ES) and coordinated non-kinetic fires (EA) in accordance with spectrum operations objectives by linking C2, operators and sensors across a network interface.				
Title: EA-6B Multifunctional Information Distribution System Block Upgrade Articles:		- -	1.841 -	0.100 -
FY 2013 Accomplishments: Developed and tested the Link-16 modification. These data link enhancements enabled the EA-6B Improved Capability III continued participation within Force Net and synthesize electronic attack contributions within Network Centric Warfare to provide greater Electronic Warfare (EW) situational awareness to the warfighter. FY 2014 Plans: Begin integration and continue testing of Link-16 modification. Link 16 Provides a North Atlantic Treaty Organization (NATO) interoperable, jam-resistant, high speed, encrypted data link for Precise Participant Location and Identification, Surveillance, Command and Control, and Electronic Warfare & Coordination. Multifunctional Information Distribution System (MIDS) Block Upgrade 2 will address obsolescence (which is an National Security Agency mandated change), frequency reallocation and provide enhanced throughput. Will modify existing MIDS Low Volume Terminal (LVT) units on the aircraft. Will add additional circuit cards, and modify chassis to enable the cryptographic modernization requirement. FY 2015 Plans:				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014
Funds for this project were vertically cut. FY 2015 efforts will wrap up Link-16 and Multifunctional Information Distribution System (MIDS) modifications and preserve project progress for future resumption.			
Accomplishments/Planned Programs Subtotals		9.647	10.080
C. Other Program Funding Summary (\$ in Millions)			
Line Item	FY 2013	FY 2014	FY 2015
			Base
			OCO
			Total
			FY 2016
			FY 2017
			FY 2018
			FY 2019
			Cost To Complete
			Total Cost
• 0587: MAGTF EW for Aviation	34.407	34.131	14.770
			-
			14.770
			7.766
			5.875
			5.920
			6.052
			Continuing
			Continuing
Remarks			
D. Acquisition Strategy			
This project unit is part of United States Marine Corps led efforts to ensure Marine Corps requirements are included in the budget process for the Future Year Defense Program and beyond. These efforts include Intrepid Tiger II(v)1 (ALQ-231), Intrepid Tiger II(v)2, Collaborative Electronic Warfare (EW)/EW Battle Management, EW Payload, and EW Service Architecture (formerly Collaborative Online Reconnaissance Provider Operationally Responsive Attack Link). These programs are the Marine Corps' initial steps to create systems to distribute EW capability across the battle space with the intent of replacing EA-6B capabilities for the Marine Air Ground Task Force (MAGTF) by 2019.			
E. Performance Metrics			
Successful completion of Intrepid Tiger II(v)1 (ALQ-231) Initial Operations Capability (IOC). Completion of Intrepid Tiger II(v)1 (ALQ-231) integration on USMC rotary wing platforms. Engineering Development Model (EDM) Lot 3 Developmental Testing/Operational Testing.			

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy																				Date: March 2014									
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Intrepid Tiger II (ALQ-231)		FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
		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																													
Milestones						IOC ▲																							
Systems Development																													
Hardware Development															IT2 Component Upgrade														
Software Development																													
Reviews																													
Test & Evaluation																													
Technical Evaluation																													
Operational Evaluation		Block 1 Test/QRA																											
Production Milestones																													
Contract Awards																													
Deliveries																													
		Lot 2 Deliveries (Qty 8)	Lot 3 Deliveries (Qty 26)				Lot 4 Deliveries (Qty 37)				Lot 5 Deliveries (Qty 13)																		

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3371: MAGTF EW Interoperability Development	-	-	-	4.555	-	4.555	1.952	1.654	1.556	0.973	Continuing	Continuing																																																				
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-																																																						
<p># The FY 2015 OCO Request will be submitted at a later date.</p> <p>Note PU 3371 has been created to administratively highlight specific work that was being done in 3327. This Project Unit continues efforts previously funded under PU 3327 and is not a new start for FY 2015.</p> <p>A. Mission Description and Budget Item Justification This project unit supports the United States Marine Corps Air-Ground interoperability by providing a variety of capabilities through multiple functions of the Software Reprogrammable Payload (SRP) when installed onboard SRP capable aircraft. The spiral development plans allow adaptable, scalable and open architecture philosophy to reduce stove pipe solutions but enable future growth at a reduced operational and sustainment cost.</p> <p>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</p> <table border="1"> <thead> <tr> <th></th> <th>FY 2013</th> <th>FY 2014</th> <th>FY 2015</th> </tr> </thead> <tbody> <tr> <td>Title: Software Reprogrammable Payload</td> <td align="center">-</td> <td align="center">-</td> <td align="center">4.555</td> </tr> <tr> <td align="right">Articles:</td> <td align="center">-</td> <td align="center">-</td> <td align="center">-</td> </tr> <tr> <td>FY 2013 Accomplishments: N/A</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY 2014 Plans: N/A</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY 2015 Plans: Begin to integrate the Spiral 2 Software Reprogrammable Payload (SRP) on the United States Marine Corps MV-22 Platform.</td> <td></td> <td></td> <td></td> </tr> <tr> <td align="right">Accomplishments/Planned Programs Subtotals</td> <td align="center">-</td> <td align="center">-</td> <td align="center">4.555</td> </tr> </tbody> </table> <p>C. Other Program Funding Summary (\$ in Millions)</p> <table border="1"> <thead> <tr> <th>Line Item</th> <th>FY 2013</th> <th>FY 2014</th> <th>FY 2015 Base</th> <th>FY 2015 OCO</th> <th>FY 2015 Total</th> <th>FY 2016</th> <th>FY 2017</th> <th>FY 2018</th> <th>FY 2019</th> <th>Cost To Complete</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>• 0587: MAGTF EW for Aviation</td> <td align="center">34.407</td> <td align="center">34.131</td> <td align="center">14.770</td> <td align="center">-</td> <td align="center">14.770</td> <td align="center">7.766</td> <td align="center">5.875</td> <td align="center">5.920</td> <td align="center">6.052</td> <td align="center">Continuing</td> <td align="center">Continuing</td> </tr> </tbody> </table> <p>Remarks</p>														FY 2013	FY 2014	FY 2015	Title: Software Reprogrammable Payload	-	-	4.555	Articles:	-	-	-	FY 2013 Accomplishments: N/A				FY 2014 Plans: N/A				FY 2015 Plans: Begin to integrate the Spiral 2 Software Reprogrammable Payload (SRP) on the United States Marine Corps MV-22 Platform.				Accomplishments/Planned Programs Subtotals	-	-	4.555	Line Item	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	• 0587: MAGTF EW for Aviation	34.407	34.131	14.770	-	14.770	7.766	5.875	5.920	6.052	Continuing	Continuing
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D. Acquisition Strategy

This project unit is part of United States Marine Corps led efforts to ensure Marine Corps requirements are included in the budget process for the Future Year Defense Program (FYDP) and beyond. This effort is for the Software Reprogrammable Payload (SRP). This program is part of the Marine Corps initial steps to create a common interoperable system to distribute multiple data types across the battle space through spiral development.

E. Performance Metrics

Successful completion of the Spiral 2 Development and Demonstration onboard MV-22 Test Platform.

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PE 0604376M: (U)Marine Air Grnd Task Force(MAGTF)EW for Aviatio
Navy

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Project (Number/Name)	Start Date	End Date	Duration (Days)	Progress (%)	Status	Notes
101	2023-01-01	2023-01-15	14	100	Completed	Project 101 completed on time.
102	2023-01-15	2023-02-01	16	75	In Progress	Project 102 is 75% complete.
103	2023-02-01	2023-02-15	14	50	In Progress	Project 103 is 50% complete.
104	2023-02-15	2023-03-01	15	25	In Progress	Project 104 is 25% complete.
105	2023-03-01	2023-03-15	14	10	In Progress	Project 105 is 10% complete.
106	2023-03-15	2023-03-31	15	0	Not Started	Project 106 has not started yet.
107	2023-03-31	2023-04-15	15	0	Not Started	Project 107 has not started yet.
108	2023-04-15	2023-04-30	15	0	Not Started	Project 108 has not started yet.
109	2023-04-30	2023-05-15	15	0	Not Started	Project 109 has not started yet.
110	2023-05-15	2023-05-31	15	0	Not Started	Project 110 has not started yet.

PE 0604376M I (U)Marine Air Grnd Task
Force(MAGTF)EW for Aviatio

3371 / MAGTF EW Interoperability Development