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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 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0304270N / <i>Electronic Warfare Development - MIP</i>
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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	3.619	0.332	0.580	0.437	-	0.437	0.481	0.494	0.503	0.514	Continuing	Continuing
2260: <i>Specific Emitter ID</i>	3.619	0.332	0.580	0.437	-	0.437	0.481	0.494	0.503	0.514	Continuing	Continuing

A. Mission Description and Budget Item Justification

Decrease in ELECTRONIC WARFARE DEVELOPMENT - MIP by \$0.018M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.

This project supports systems development and collection of Specific Emitter Identification (SEI) information from National Technical Means (NTM) to track commercial ships over 200 gross registered tons world-wide. Research and development will cover improvements and enhancements to Electronic Intelligence technology. This will include improved/next generation SEI technology for miniaturization and automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. Propagation in a multi-path signal environment will also be assessed. All work on this project will be undertaken in pursuit of goals stated by the Office of Naval Intelligence and the National Security Agency in support of the Worldwide Ship Tracking Program.

This PE is a Military Intelligence Program.

B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	0.332	0.580	0.465	-	0.465
Current President's Budget	0.332	0.580	0.437	-	0.437
Total Adjustments	0.000	0.000	-0.028	-	-0.028
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Rate/Misc Adjustments	0.000	0.000	-0.028	-	-0.028

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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

Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0304270N / <i>Electronic Warfare Development - MIP</i>	Project (Number/Name) 2260 / <i>Specific Emitter ID</i>
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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
2260: <i>Specific Emitter ID</i>	3.619	0.332	0.580	0.437	-	0.437	0.481	0.494	0.503	0.514	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports systems development and collection of Specific Emitter Identification (SEI) information from National Technical Means (NTM) to track commercial ships over 200 gross registered tons world-wide. Research and development will cover improvements and enhancements to Electronic Intelligence technology. This will include improved/next generation SEI technology for miniaturization and automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. Propagation in a multi-path signal environment will also be assessed. All work on this project will be undertaken in pursuit of goals stated by the Office of Naval Intelligence and the National Security Agency in support of the Worldwide Ship Tracking Program.

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

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Title: SENSOR FUSION	0.100	0.187	0.135	0.000	0.135
Articles:	-	-	-	-	-
Description: This effort supports systems development and information fusion of improved SEI technology for automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals.					
FY 2015 Accomplishments: - Continued task to fuse additional sources of data with SEI data for automation of hardware, national collection systems, signal processing and analysis, and de-interleaving of signals. Work toward increasing sensor fusion, collection and reporting automation helped reduce staffing and support remote access and control capability.					
FY 2016 Plans: - Continue all efforts of FY 2015, unless noted as completed above.					
FY 2017 Base Plans: - Continue all efforts of FY 2016, unless noted as completed above. - Initiate task to expand and improve ELeCtronic INTeLLigence (ELINT) information that will aid SEI signal processing, analysis, and deinterleaving.					
FY 2017 OCO Plans: N/A					
Title: SYSTEM AUTOMATION	0.132	0.201	0.153	0.000	0.153

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p align="right">Articles:</p> <p>Description: This effort supports development of an autonomous surveillance system capable of providing emitter signal information to a central location.</p> <p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> - Continued task to develop an unmanned, autonomous, remote collection and surveillance system. - Continued task to automate fusion of other sensor information with SEI data collection. <p>FY 2016 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY 2015, unless noted as completed above. <p>FY 2017 Base Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY 2016, unless noted as completed above. - Complete task to automate fusion of other sensor information with SEI data collection. <p>FY 2017 OCO Plans:</p> <p>N/A</p>	-	-	-	-	-
<p>Title: TECHNOLOGY REFRESH & COMMUNICATION ENHANCEMENT</p> <p align="right">Articles:</p> <p>Description: This effort improves SEI system performance, real-time communication and tactical use of SEI which will be expanded with next generation SEI technology.</p> <p>FY 2015 Accomplishments:</p> <ul style="list-style-type: none"> - Continued task to incorporate other SEI algorithms into deployed processing software - Continued task on integrating advanced SEI hardware with WinSEI software to support improved SEI system performance and capabilities for tactical and technical use, and which can be expanded with next generation SEI algorithms. - Continued task to incorporate further message reporting formats for dissemination of SEI data and improve SEI interoperability. - Continued task to expand collection capability to support additional radar types. <p>FY 2016 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY 2015, unless noted as completed above. 	0.100	0.192	0.149	0.000	0.149
	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
- Complete task to incorporate further message reporting formats for dissemination of SEI data and improve SEI interoperability. - Initiate task to provide software enhancements to improve SEI system performance based on mission needs and requirements, user inputs, and platform environment. FY 2017 Base Plans: - Continue all efforts of FY 2016, unless noted as completed above. FY 2017 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	0.332	0.580	0.437	0.000	0.437

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

Remarks

D. Acquisition Strategy
Not applicable.

E. Performance Metrics
MIP Program.

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy		Date: February 2016
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FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Proj 2260	
Demonstration: Installatioon and Testing	

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

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2260				
Demonstration: Installatioon and Testing	1	2015	4	2017

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