Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy											Date: February 2015	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 6: *RDT&E Management Support*						**R-1 Program Element (Number/Name)** PE 0605126N I *(U)Joint Theater Air and Missile Defense Org*						
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	1.322	4.960	6.995	-	6.995	3.238	0.071	-	-	-	16.586
3307: *Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)*	0.000	1.322	4.960	6.995	-	6.995	3.238	0.071	-	-	-	16.586

A. Mission Description and Budget Item Justification

Maritime Integrated Air and Missile Defense (IAMD) Planning System (MIPS) is an automated air and missile defense planning tool that supports the Joint Force Maritime Component Commander at the operational level of war by automatically and optimally allocating and stationing ships in support of Ballistic Missile Defense (BMD) or Anti-Air Warfare (AAW). MIPS contains United States Army Patriot and Terminal High Altitude Air Defense (THAAD) models to ensure synergistic allocation and positioning of maritime units in relation to other joint units, providing optimized mutual defense for selected defended assets against selected BMD and AAW threats. MIPS is currently developing significantly improved inorganic Ballistic Missile Defense planning capabilities through the incorporation of Long Range Surveillance and Training, Cued Engagement, and Launch on Tactical Digital Information Links (TADIL) planning functionality. In FY2015, MIPS will begin development to deliver an automated planning capability for Naval Integrated Fire Control-Counter Air (NIFC-CA) operations.

B. Program Change Summary ($ in Millions)

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	1.352	4.960	7.172	-	7.172
Current President's Budget	1.322	4.960	6.995	-	6.995
Total Adjustments	-0.030	-	-0.177	-	-0.177
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.030	-			
• Program Adjustments	-	-	-0.177	-	-0.177

Change Summary Explanation

The FY 2016 funding request was reduced by $.177 million to account for the availability of prior year execution balances.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015	
Appropriation/Budget Activity 1319 I 6				**R-1 Program Element (Number/Name)** PE 0605126N I (U)Joint Theater Air and Missile Defense Org				**Project (Number/Name)** 3307 I Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)			

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
3307: *Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)*	-	1.322	4.960	6.995	-	6.995	3.238	0.071	-	-	-	16.586
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Maritime Integrated Air and Missile Defense (IAMD) Planning System (MIPS) is an automated air and missile defense planning tool that supports the Joint Force Maritime Component Commander at the operational level of war by automatically and optimally allocating and stationing ships in support of Ballistic Missile Defense (BMD) or Anti-Air Warfare (AAW). MIPS contains United States Army Patriot and Terminal High Altitude Air Defense (THAAD) models to ensure synergistic allocation and positioning of maritime units in relation to other joint units, providing optimized mutual defense for selected defended assets against selected BMD and AAW threats. MIPS is currently developing significantly improved inorganic Ballistic Missile Defense planning capabilities through the incorporation of Long Range Surveillance and Training, Cued Engagement, and Launch on Tactical Digital Information Links (TADIL) planning functionality. In FY2015, MIPS will begin development to deliver an automated planning capability for Naval Integrated Fire Control-Counter Air (NIFC-CA) operations.

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

	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Systems Engineering	1.322	4.960	6.995	-	6.995
Articles:	-	-	-	-	-

FY 2014 Accomplishments:
Provided system updates that included incorporation of Low Range Search and Track (LRS&T), Launch on TADIL and Cued Engagement planning capabilities. Conducted test and evaluation events.

FY 2015 Plans:
Develop Long Range Search and Track (LRS&T, Cured Engagement and Launch on TADIL (LoT) planning capability by:
- Conduct System Engineering Technical Review (TRR)
- Complete contractor testing and DT&OT testing
- Achieve approval to field.

Begin developing CEC stationing, Bottom Contours and NIFC-CA planning capability by performing the following:
- Complete NIFC-CA risk reduction prototyping.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		**Date:** February 2015
Appropriation/Budget Activity 1319 I 6	**R-1 Program Element (Number/Name)** PE 0605126N I (U)Joint Theater Air and Missile Defense Org	**Project (Number/Name)** 3307 I Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
- Establish development Contract for design, development, implementation, testing and delivery of the capability. ***FY 2016 Base Plans:*** Funding increase from FY15 supports the development of the MIPS competitive contract. Commence Development of Phase 2, Increment I update to MIPS includes develop of CEC stationing, Bottom Contours and NIFC-CA planning capability by performing the following: - Receive required GFI to update the MIPS modeling to consider bottom contours, incorporate CEC capability in planning and NIFC-CA requirements. - Allocate the requirements for Bottom Contours, CEC Stationing and NIFC-CA to the MIPS system elements determining the area impacted and requiring development. - Conduct Systems Engineering Technical Review(s) (PDR/CDR) on the development ensuring the development is properly managed and risks are properly managed. - Complete development of detailed design. ***FY 2016 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	1.322	4.960	6.995	-	6.995

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• OPN/5265: *MIPS*	2.779	-	-	-	-	-	-	-	-	-	11.097

Remarks

D. Acquisition Strategy

ACAT III designation granted February 2011 and will be initiated as a Program of Record at Milestone B.
The MIPS Capabilities Development Document (CDD) is currently in Joint Staff Office and is expected to be completed early FY 2015.

Contracts:
MIPS RDT&E FY12-FY15

Exhibit R-2A, **RDT&E Project Justification:** PB 2016 Navy		**Date:** February 2015
Appropriation/Budget Activity 1319 *I* 6	**R-1 Program Element (Number/Name)** PE 0605126N *I (U)Joint Theater Air and Missile Defense Org*	**Project (Number/Name)** 3307 *I Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)*

E. Performance Metrics

FY14:
- Continued development of LRS&T, Cued Engagement, and Launch on TADIL planning capabilities.
- Conducted test and evaluation developmental tests in support of software development efforts.
- Conducted Technical Interchange Meetings (TIM) as needed to explore and resolve emergent design and requirement issues.

FY15:
- Commence development of first increment NIFC-CA planning capability, and Bottom Contours, CEC stationing model updates.
- Continue to conduct Developmental Tests (DT) and Operational Tests (OT) to support fielding the LRS&T, Cued Engagement and Launch on TADIL updated.
- Conduct TIMs as needed to explore and resolve emergent design and requirement issues.

FY16:
- Continue development of first increment NIFC-CA planning capability, and Bottom Contours, CEC stationing model updates.
- Continue to conduct DT and OT to support fielding the new software.
- Continue TIMs as needed to explore and resolve emergent design and requirement issues.