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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2015 Navy | <b>Date:</b> March 2014 |
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| <b>Appropriation/Budget Activity</b>                                                  |                    |                |                |                     | <b>R-1 Program Element (Number/Name)</b>                   |                      |                |                |                |                |                         |                   |
|---------------------------------------------------------------------------------------|--------------------|----------------|----------------|---------------------|------------------------------------------------------------|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| 1319: Research, Development, Test & Evaluation, Navy I BA 6: RDT&E Management Support |                    |                |                |                     | PE 0605126N I (U)Joint Theater Air and Missile Defense Org |                      |                |                |                |                |                         |                   |
| <b>COST (\$ in Millions)</b>                                                          | <b>Prior Years</b> | <b>FY 2013</b> | <b>FY 2014</b> | <b>FY 2015 Base</b> | <b>FY 2015 OCO #</b>                                       | <b>FY 2015 Total</b> | <b>FY 2016</b> | <b>FY 2017</b> | <b>FY 2018</b> | <b>FY 2019</b> | <b>Cost To Complete</b> | <b>Total Cost</b> |
| Total Program Element                                                                 | 0.000              | 5.829          | 1.352          | 4.960               | -                                                          | 4.960                | 7.172          | 3.132          | -              | -              | -                       | 22.445            |
| 3307: Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)        | 0.000              | 5.829          | 1.352          | 4.960               | -                                                          | 4.960                | 7.172          | 3.132          | -              | -              | -                       | 22.445            |

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

**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>B. Program Change Summary (\$ in Millions)</b> | <b>FY 2013</b> | <b>FY 2014</b> | <b>FY 2015 Base</b> | <b>FY 2015 OCO</b> | <b>FY 2015 Total</b> |
|---------------------------------------------------|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget                       | 7.573          | 1.352          | 0.824               | -                  | 0.824                |
| Current President's Budget                        | 5.829          | 1.352          | 4.960               | -                  | 4.960                |
| Total Adjustments                                 | -1.744         | -              | 4.136               | -                  | 4.136                |
| • Congressional General Reductions                | -              | -              |                     |                    |                      |
| • Congressional Directed Reductions               | -              | -              |                     |                    |                      |
| • Congressional Rescissions                       | -              | -              |                     |                    |                      |
| • Congressional Adds                              | -              | -              |                     |                    |                      |
| • Congressional Directed Transfers                | -              | -              |                     |                    |                      |
| • Reprogrammings                                  | -              | -              |                     |                    |                      |
| • SBIR/STTR Transfer                              | -0.169         | -              |                     |                    |                      |
| • Program Adjustments                             | -              | -              | 4.237               | -                  | 4.237                |
| • Rate/Misc Adjustments                           | -              | -              | -0.101              | -                  | -0.101               |
| • Congressional General Reductions                | -0.575         | -              | -                   | -                  | -                    |
| Adjustments                                       |                |                |                     |                    |                      |
| • Congressional Directed Reductions               | -1.000         | -              | -                   | -                  | -                    |
| Adjustments                                       |                |                |                     |                    |                      |

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy                                                                                                                                                                                                                                                                                                                        |                                                                                                 | Date: March 2014 |
| Appropriation/Budget Activity<br>1319: Research, Development, Test & Evaluation, Navy I BA 6: RDT&E Management Support                                                                                                                                                                                                                                                            | R-1 Program Element (Number/Name)<br>PE 0605126N I (U)Joint Theater Air and Missile Defense Org |                  |
| <u>Change Summary Explanation</u><br>Program Adjustments: Naval Integrated Fire Control-Counter Air (NIFC-CA), a new capability, enhances the air defense capability of the Fleet. Funding commencing in FY 15 is required for the inclusion of NIFC-CA into MIPS operational planning and is essential for proper placement of Fleet assets to maximize NIFC-CA mission success. |                                                                                                 |                  |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------|---------|--------------|-------------------------------------------------------------------------------------------------|---------------|---------|---------|----------------------------------------------------------------------------------------------------------|------------------|------------------|------------|
| Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |         |         |              |                                                                                                 |               |         |         |                                                                                                          | Date: March 2014 |                  |            |
| Appropriation/Budget Activity<br>1319 / 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |         |         |              | R-1 Program Element (Number/Name)<br>PE 0605126N I (U)Joint Theater Air and Missile Defense Org |               |         |         | Project (Number/Name)<br>3307 I Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS) |                  |                  |            |
| 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 |
| 3307: Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | -           | 5.829   | 1.352   | 4.960        | -                                                                                               | 4.960         | 7.172   | 3.132   | -                                                                                                        | -                | -                | 22.445     |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |         |         |              |                                                                                                 |               |         |         |                                                                                                          |                  |                  |            |
| 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 2013                                                                                                  | FY 2014          | FY 2015          |            |
| Title: Systems Engineering<br><br>Articles:<br><br>FY 2013 Accomplishments:<br>Provided system update that includes the incorporation of functionality for Bottom Contours, LRS&T, Launch on TADIL, Cued Engagement and CEC stationing planning capabilities.<br><br>FY 2014 Plans:<br>Continue to provide system updates that includes incorporation of Bottom Contours, LRS&T, Launch on TADIL, Cued Engagement and CEC stationing planning capabilities. Conduct test and evaluation events.<br><br>FY 2015 Plans:<br>Provide system update that includes development of NIFC-CA planning capability of the model updates for Bottom Contours, LRS&T, Launch on TADIL, Cued Engagement and CEC stationing.                                                                                                                                                                                                                                                                                                                                                                                                          |             |         |         |              |                                                                                                 |               |         |         | 5.829                                                                                                    | 1.352            | 4.960            |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |         |         |              |                                                                                                 |               |         |         | -                                                                                                        | -                | -                |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |         |         |              |                                                                                                 |               |         |         | Accomplishments/Planned Programs Subtotals                                                               |                  |                  | 5.829      |

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| Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy                                                                        |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             | Date: March 2014 |                     |            |
| Appropriation/Budget Activity<br>1319 / 6                                                                                      |         |         |                 | R-1 Program Element (Number/Name)<br>PE 0605126N I (U)Joint Theater Air and<br>Missile Defense Org |                  |         |         | Project (Number/Name)<br>3307 I Maritime Integrated Air and Missile<br>Defense (IAMD) Processing Sys (MIPS) |                  |                     |            |
| C. Other Program Funding Summary (\$ in Millions)                                                                              |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| Line Item                                                                                                                      | FY 2013 | FY 2014 | FY 2015<br>Base | FY 2015<br>OCO                                                                                     | FY 2015<br>Total | FY 2016 | FY 2017 | FY 2018                                                                                                     | FY 2019          | Cost To<br>Complete | Total Cost |
| • OPN/5265: MIPS                                                                                                               | 3.652   | 2.779   | -               | -                                                                                                  | -                | -       | -       | -                                                                                                           | -                | -                   | 11.097     |
| Remarks                                                                                                                        |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| D. Acquisition Strategy                                                                                                        |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| ACAT 3 designation granted February 2011.                                                                                      |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| Contracts:<br>MIPS RDT&E FY12-FY15                                                                                             |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| E. Performance Metrics                                                                                                         |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| FY13:                                                                                                                          |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Commenced development of LRS&T, Cued Engagement, and Launch on TADIL planning capabilities.                                  |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Conducted quarterly working groups to identify and manage model update priorities and resolve programmatic/technical issues. |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Conducted Technical Interchange Meetings as needed to explore and resolve design and test and evaluation requirements.       |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| FY14:                                                                                                                          |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Continue development of LRS&T, Cued Engagement, and Launch on TADIL planning capabilities.                                   |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Conduct test and evaluate developmental tests in support of software development efforts.                                    |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Conduct Technical Interchange Meetings (TIM) as needed to explore and resolve emergent design and requirement issues.        |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| FY15:                                                                                                                          |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Commence development of NIFC-CA planning capability.                                                                         |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Continue to conduct DT and OT to support fielding the new software.                                                          |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |
| - Conduct TIMs as needed to explore and resolve emergent design and requirement issues.                                        |         |         |                 |                                                                                                    |                  |         |         |                                                                                                             |                  |                     |            |