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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2016 Navy | <b>Date:</b> February 2015 |
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| <b>Appropriation/Budget Activity</b><br>1319: <i>Research, Development, Test &amp; Evaluation, Navy I BA 7: Operational Systems Development</i> |                    |                |                |                     | <b>R-1 Program Element (Number/Name)</b><br>PE 0208058N I <i>Joint High Speed Vessel (JHSV)</i> |                      |                |                |                |                |                         |                   |
|---|--------------------|----------------|----------------|---------------------|---|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| <b>COST (\$ in Millions)</b>  | <b>Prior Years</b> | <b>FY 2014</b> | <b>FY 2015</b> | <b>FY 2016 Base</b> | <b>FY 2016 OCO</b>  | <b>FY 2016 Total</b> | <b>FY 2017</b> | <b>FY 2018</b> | <b>FY 2019</b> | <b>FY 2020</b> | <b>Cost To Complete</b> | <b>Total Cost</b> |
| Total Program Element   | 37.644             | 0.974          | -              | -                   | -   | -                    | -              | -              | -              | -              | -                       | 38.618            |
| 3134: <i>Intratheater Connectors (Contract Design)</i>  | 37.644             | 0.974          | -              | -                   | -   | -                    | -              | -              | -              | -              | -                       | 38.618            |

**A. Mission Description and Budget Item Justification**

Future joint forces will be responsive, deployable, agile, versatile, lethal, survivable and sustainable. The nation will need lift assets that can provide for assured access, decrease predictability and dwell time, and have the capacity to quickly deliver troops and equipment together in a manner that provides for unit integrity. Joint High Speed Vessel (JHSV) will provide Combatant Commanders high-speed, intra-theater sealift mobility with inherent cargo handling capability and the agility to achieve positional advantage over operational distances. Not limited to major ports, the JHSV will be able to operate in austere port environments.

| <b>B. Program Change Summary (\$ in Millions)</b> | <b>FY 2014</b> | <b>FY 2015</b> | <b>FY 2016 Base</b> | <b>FY 2016 OCO</b> | <b>FY 2016 Total</b> |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| Previous President's Budget                       | 0.986          | -              | -                   | -                  | -                    |
| Current President's Budget                        | 0.974          | -              | -                   | -                  | -                    |
| Total Adjustments                                 | -0.012         | -              | -                   | -                  | -                    |
| • Congressional General Reductions                | -              | -              |                     |                    |                      |
| • Congressional Directed Reductions               | -              | -              |                     |                    |                      |
| • Congressional Rescissions                       | -              | -              |                     |                    |                      |
| • Congressional Adds                              | -              | -              |                     |                    |                      |
| • Congressional Directed Transfers                | -              | -              |                     |                    |                      |
| • Reprogrammings                                  | -              | -              |                     |                    |                      |
| • SBIR/STTR Transfer                              | -0.012         | -              |                     |                    |                      |

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| Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy |             |         |         |              |   |               |         |         |   | Date: February 2015 |                  |            |
|---|-------------|---------|---------|--------------|---|---------------|---------|---------|---|---------------------|------------------|------------|
| Appropriation/Budget Activity<br>1319 / 7               |             |         |         |              | R-1 Program Element (Number/Name)<br>PE 0208058N / Joint High Speed Vessel (JHSV) |               |         |         | Project (Number/Name)<br>3134 / Intratheater Connectors (Contract Design) |                     |                  |            |
| 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 |
| 3134: Intratheater Connectors (Contract Design)         | 37.644      | 0.974   | -       | -            | -   | -             | -       | -       | -   | -                   | -                | 38.618     |
| Quantity of RDT&E Articles                              |             | -       | -       | -            | -   | -             | -       | -       | -   | -                   |                  |            |

## A. Mission Description and Budget Item Justification

Future joint forces will be responsive, deployable, agile, versatile, lethal, survivable, and sustainable. The nation will need lift assets that can provide for assured access, decrease predictability and dwell time, and have the capacity to quickly deliver troops and equipment together in a manner that provides for unit integrity. Joint High Speed Vessel (JHSV) will provide combatant commanders high-speed intra-theater sealift mobility with inherent cargo handling capability and the agility to achieve positional advantage over operational distances. Not limited to major ports, the JHSV will be able to operate in austere port environments.

The primary objective of the T&E program is to ensure the JHSV is effective and suitable for its intended mission. The focus will be on reducing test time and cost through an appropriate combination of DT and OT events in order to achieve compatible objectives.

DT&E efforts include modeling and simulation (M&S), design analysis, inspection, component testing, system level testing, demonstration, ship trials, and PDT&T events. The JHSV T&E Program will coordinate DT&E and OT&E to bring the lead ship to Initial Operational Capability (IOC) in the most efficient and timely manner possible.

Operational testing will include an Operational Assessment (OA), Initial Operational Test and Evaluation (IOT&E) and Follow-on Operational Test and Evaluation (FOT&E). JHSV OT&E will be conducted as Multi-service OT&E events.

The objective of Live Fire Test and Evaluation (LFT&E) is to provide a timely and reasonable assessment of the survivability of the system as it progresses through its development and prior to full-rate production. The program will utilize existing commercial and military technologies to modify commercial high-speed ferry designs for military use. LFT&E is included in OT&E.

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

|  | <b>FY 2014</b> | <b>FY 2015</b> | <b>FY 2016 Base</b> | <b>FY 2016 OCO</b> | <b>FY 2016 Total</b> |
|--|----------------|----------------|---------------------|--------------------|----------------------|
| <b>Title:</b> Intratheater Connectors (Contract Design)  | 0.974          | -              | -                   | -                  | -                    |
| <b>Articles:</b>   | -              | -              | -                   | -                  | -                    |
| <b>FY 2014 Accomplishments:</b><br>Completed Post Delivery Test & Trials (PDT&T). Conduct FOT&E. Completed IOT&E. Completed Final Survivability Assessment Report. |                |                |                     |                    |                      |
| <b>FY 2015 Plans:</b>  |                |                |                     |                    |                      |

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Navy |  |  |  | <b>Date:</b> February 2015   |  |
| <b>Appropriation/Budget Activity</b><br>1319 / 7                   |  | <b>R-1 Program Element (Number/Name)</b><br>PE 0208058N / Joint High Speed Vessel (JHSV) |  | <b>Project (Number/Name)</b><br>3134 / Intratheater Connectors (Contract Design) |  |

  

|   |                |                |                     |                    |                      |
|---|----------------|----------------|---------------------|--------------------|----------------------|
| <b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>   | <b>FY 2014</b> | <b>FY 2015</b> | <b>FY 2016 Base</b> | <b>FY 2016 OCO</b> | <b>FY 2016 Total</b> |
| Complete FOT&E. Complete Assessment Documentation.<br><br><b>FY 2016 Base Plans:</b><br>N/A<br><br><b>FY 2016 OCO Plans:</b><br>N/A |                |                |                     |                    |                      |
| <b>Accomplishments/Planned Programs Subtotals</b>   | 0.974          | -              | -                   | -                  | -                    |

  

|  |                |                |                     |                    |                      |                |                |                |                |                         |                   |
|--|----------------|----------------|---------------------|--------------------|----------------------|----------------|----------------|----------------|----------------|-------------------------|-------------------|
| <b>C. Other Program Funding Summary (\$ in Millions)</b> |                |                |                     |                    |                      |                |                |                |                |                         |                   |
| <b>Line Item</b>   | <b>FY 2014</b> | <b>FY 2015</b> | <b>FY 2016 Base</b> | <b>FY 2016 OCO</b> | <b>FY 2016 Total</b> | <b>FY 2017</b> | <b>FY 2018</b> | <b>FY 2019</b> | <b>FY 2020</b> | <b>Cost To Complete</b> | <b>Total Cost</b> |
| • SCN/3043: SCN Joint High Speed Vessel                  | 10.332         | 214.000        | -                   | -                  | -                    | -              | -              | -              | -              | -                       | 1,313.585         |
| • SCN/5300: SCN Joint High Speed Vessel                  | -              | -              | 26.235              | -                  | 26.235               | 6.545          | -              | -              | -              | -                       | 32.780            |

  

**Remarks**

  

**D. Acquisition Strategy**  
Two-phased strategy with competitive preliminary design effort leading to downselect to a single contractor. FPI contract type will be used for detail design and construction.

  

**E. Performance Metrics**  
Completed the test plan development for the Total Ship Survivability Trial (TSST). Completed Initial Operational Test and Evaluation (IOT&E). Completed Live Fire Test & Evaluation (LFT&E).

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|--|------------------------|--------------------------------|-------------|---------|------------|---|------------|--------------|------------|---|------------|---------------------|------------------|------------|--------------------------|
| Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy |                        |                                |             |         |            |   |            |              |            |   |            | Date: February 2015 |                  |            |                          |
| Appropriation/Budget Activity<br>1319 / 7              |                        |                                |             |         |            | R-1 Program Element (Number/Name)<br>PE 0208058N / Joint High Speed Vessel (JHSV) |            |              |            | Project (Number/Name)<br>3134 / Intratheater Connectors (Contract Design) |            |                     |                  |            |                          |
| Product Development (\$ in Millions)                   |                        |                                |             | FY 2014 |            | FY 2015   |            | FY 2016 Base |            | FY 2016 OCO   |            | FY 2016 Total       |                  |            |                          |
| Cost Category Item                                     | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost  | Award Date | Cost         | Award Date | Cost  | Award Date | Cost                | Cost To Complete | Total Cost | Target Value of Contract |
| Ship Integration                                       | C/CPIF                 | Alion/CSC : VAR                | 6.638       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 6.638      | -                        |
| Systems Engineering                                    | C/CPIF                 | CSC : VAR                      | 3.984       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 3.984      | -                        |
| Studies & Analysis                                     | C/FP                   | Austal : Mobile, AL            | 1.300       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 1.300      | -                        |
| Subtotal   |                        |                                | 11.922      | -       |            | -   |            | -            |            | -   |            | -                   | -                | 11.922     | -                        |
| Support (\$ in Millions)                               |                        |                                |             | FY 2014 |            | FY 2015   |            | FY 2016 Base |            | FY 2016 OCO   |            | FY 2016 Total       |                  |            |                          |
| Cost Category Item                                     | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost  | Award Date | Cost         | Award Date | Cost  | Award Date | Cost                | Cost To Complete | Total Cost | Target Value of Contract |
| Development Support                                    | WR                     | NSWC-CD : Carderock, MD        | 2.000       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 2.000      | -                        |
| Integrated Logistics Support                           | C/CPIF                 | Alion : VAR                    | 1.276       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 1.276      | -                        |
| Configuration/Acquisition Management                   | C/CPIF                 | Alion/CSC : VAR                | 2.738       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 2.738      | -                        |
| Technical Data   | WR                     | NSWC-CD : Carderock, MD        | 0.755       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 0.755      | -                        |
| Subtotal   |                        |                                | 6.769       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 6.769      | -                        |
| Test and Evaluation (\$ in Millions)                   |                        |                                |             | FY 2014 |            | FY 2015   |            | FY 2016 Base |            | FY 2016 OCO   |            | FY 2016 Total       |                  |            |                          |
| Cost Category Item                                     | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost  | Award Date | Cost         | Award Date | Cost  | Award Date | Cost                | Cost To Complete | Total Cost | Target Value of Contract |
| Developmental Test and Evaluation                      | WR                     | VAR : VAR                      | 1.458       | -       | Jan 2014   | -   |            | -            |            | -   |            | -                   | -                | 1.458      | -                        |
| Operational Test & Evaluation                          | WR                     | COTF/MCOTEA/ATEC : VAR         | 6.538       | 0.974   | Jan 2014   | -   |            | -            |            | -   |            | -                   | -                | 7.512      | -                        |
| Live Fire Test & Evaluation                            | WR                     | VAR : VAR                      | 4.568       | -       | Jan 2014   | -   |            | -            |            | -   |            | -                   | -                | 4.568      | -                        |
| Subtotal   |                        |                                | 12.564      | 0.974   |            | -   |            | -            |            | -   |            | -                   | -                | 13.538     | -                        |

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|--|------------------------|--------------------------------|-------------|---------|------------|---|------------|--------------|------------|---|------------|---------------------|------------------|------------|--------------------------|
| Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy |                        |                                |             |         |            |   |            |              |            |   |            | Date: February 2015 |                  |            |                          |
| Appropriation/Budget Activity<br>1319 / 7              |                        |                                |             |         |            | R-1 Program Element (Number/Name)<br>PE 0208058N / Joint High Speed Vessel (JHSV) |            |              |            | Project (Number/Name)<br>3134 / Intratheater Connectors (Contract Design) |            |                     |                  |            |                          |
| Management Services (\$ in Millions)                   |                        |                                |             | FY 2014 |            | FY 2015   |            | FY 2016 Base |            | FY 2016 OCO   |            | FY 2016 Total       |                  |            |                          |
| Cost Category Item                                     | Contract Method & Type | Performing Activity & Location | Prior Years | Cost    | Award Date | Cost  | Award Date | Cost         | Award Date | Cost  | Award Date | Cost                | Cost To Complete | Total Cost | Target Value of Contract |
| Contractor Engineering Support                         | C/CPIF                 | CSC/Alion : VAR                | 1.698       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 1.698      | -                        |
| Government Engineering Support                         | WR                     | NSWC-CD/NSWC-DD : VAR          | 2.252       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 2.252      | -                        |
| Program Management Support                             | C/CPIF                 | Alion/CSC : VAR                | 1.964       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 1.964      | -                        |
| Travel   | Various                | NAVSEA : VAR                   | 0.436       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 0.436      | -                        |
| DAWDF  | WR                     | Not Specified : Not Specified  | 0.039       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 0.039      | -                        |
| Subtotal   |                        |                                | 6.389       | -       |            | -   |            | -            |            | -   |            | -                   | -                | 6.389      | -                        |
|  |                        |                                | Prior Years | FY 2014 |            | FY 2015   |            | FY 2016 Base |            | FY 2016 OCO   |            | FY 2016 Total       | Cost To Complete | Total Cost | Target Value of Contract |
| Project Cost Totals                                    |                        |                                | 37.644      | 0.974   |            | -   |            | -            |            | -   |            | -                   | -                | 38.618     | -                        |
| Remarks  |                        |                                |             |         |            |   |            |              |            |   |            |                     |                  |            |                          |

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| Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy |  |  |  |  |   |  |  |  |  | Date: February 2015   |  |  |  |  |  |  |  |  |  |
| Appropriation/Budget Activity<br>1319 / 7         |  |  |  |  | R-1 Program Element (Number/Name)<br>PE 0208058N / Joint High Speed Vessel (JHSV) |  |  |  |  | Project (Number/Name)<br>3134 / Intratheater Connectors (Contract Design) |  |  |  |  |  |  |  |  |  |

|                                   | FY 2014 |   |   |   | FY 2015 |   |   |   | FY 2016 |   |   |   | FY 2017 |   |   |   | FY 2018 |   |   |   | FY 2019 |   |   |   | FY 2020 |   |   |   |
|-----------------------------------|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
|                                   | 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 |
| <b>Proj 3134</b>                  |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| IOC                               |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| TSST                              |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| Final Survivability Assessment    |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| FOT&E                             |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| Complete Assessment Documentation |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |

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| <b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Navy |   |   | <b>Date:</b> February 2015 |
| <b>Appropriation/Budget Activity</b><br>1319 / 7              | <b>R-1 Program Element (Number/Name)</b><br>PE 0208058N / <i>Joint High Speed Vessel (JHSV)</i> | <b>Project (Number/Name)</b><br>3134 / <i>Intratheater Connectors (Contract Design)</i> |                            |

Schedule Details

| Events by Sub Project             | Start   |      | End     |      |
|-----------------------------------|---------|------|---------|------|
|                                   | Quarter | Year | Quarter | Year |
| <b><i>Proj 3134</i></b>           |         |      |         |      |
| IOC                               | 1       | 2014 | 1       | 2014 |
| TSST                              | 1       | 2014 | 1       | 2014 |
| Final Survivability Assessment    | 1       | 2014 | 3       | 2014 |
| FOT&E                             | 1       | 2014 | 3       | 2015 |
| Complete Assessment Documentation | 3       | 2014 | 4       | 2015 |