

**CLASSIFICATION:****UNCLASSIFIED****EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION**DATE  
May 2009APPROPRIATION/BUDGET ACTIVITY  
**RD TEN/BA 7**R-1 ITEM NOMENCLATURE  
**0208058N/JOINT HIGH SPEED VESSEL (JHSV)**

COST (In Millions)	FY 2008	FY 2009	FY 2010				
Total PE Cost	18.353	11.910	8.431				
3131 / Intratheater Connectors (Concept Studies)	4.888	3.934	1.752				
3134 / Intratheater Connectors (Contract Design)	13.465	7.976	6.679				

**A. MISSION DESCRIPTION:**

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. PROGRAM CHANGE SUMMARY:**

Funding:	FY 2008	FY 2009	FY 2010
FY09 President's Budget	18.530	11.960	8.648
FY10 President's Budget	18.353	11.910	8.431
Total Adjustments	-0.177	-0.050	-0.217
(U) Summary of Adjustments			
Congressional Rescissions	0.000	0.000	0.000
Congressional Adjustments	0.000	-0.032	0.000
SBIR/STTR/FTT Assessment	-0.153	0.000	0.000
Program Adjustments	0.000	0.000	0.000
Rate/Misc Adjustments	-0.024	-0.018	-0.217
Total	-0.177	-0.050	-0.217

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>					
<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>					<b>DATE</b> May 2009		
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 7</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0208058N/JOINT HIGH SPEED VESSEL (JHSV)</b>			<b>PROJECT NUMBER AND NAME</b> <b>3131/Intratheater Connectors (Concept Studies)</b>		
<b>COST (In Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>				
Project Cost	4.888	3.934	1.752				
RDT&E Articles Qty	0	0	0				
<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>							
<p>The Joint High Speed Vessel (JHSV) Program is a Navy led acquisition for a high-speed, shallow draft, commercial-based ship capable of intra-theater personnel and cargo lift for the Armed Services. The ship is not intended to be a combatant and must operate in benign or secured environments. The technologies supporting this capability were evaluated during the completed Analysis of Alternatives.</p> <p>JHSV capability is intended to bridge the gap between low-speed sea lift and high-speed airlift by transporting personnel, equipment, and supplies over operational distances with access to littoral offload points including austere, minor and degraded ports while in support of the Overseas Contingency Operations (OCO)/Theater Security Cooperation Program (TSCP); Intra-theater Operational/Littoral Maneuver and Sustainment; and Seabasing.</p> <p>The program is guided by four principles/assumptions:</p> <ol style="list-style-type: none"> <li>1) Leverage previous Navy, Marine Corps, Army, and SOF work with high speed vessels, including both ACTDs and leased demonstrators.</li> <li>2) Focus on commercially available, non-developmental item (NDI) platform designs and subsystems.</li> <li>3) Incorporate survivability features that meet commercial Safety of Life at Sea (SOLAS) requirements for personnel onboard and commercial (T-Ship) Anti-Terrorism/Force Protection (AT/FP) requirements.</li> <li>4) Affordability will be a prime consideration.</li> </ol>							

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<b>EXHIBIT R-2a, RDT&amp;E PROJECT JUSTIFICATION</b>			DATE May 2009
APPROPRIATION/BUDGET ACTIVITY <b>RD TEN/BA 7</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0208058N/JOINT HIGH SPEED VESSEL (JHSV)</b>	PROJECT NUMBER AND NAME <b>3131/Intratheater Connectors (Concept Studies)</b>	
<b>B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>			
	FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>	4.888	3.934	1.752
RDT&E Articles Quantity	0	0	0
<p>R&amp;D efforts for Intratheater Connector - addressing spiral technology development and risk mitigation efforts through demonstration of tools and monitoring systems for hull fatigue unique to lightweight hull forms. Continuing to conduct R&amp;D in areas involving lightweight aluminum flight decks, advanced fendering systems, and safe transport of ammunition and dangerous goods aboard lightweight vessels.</p> <p>FY 08 - Continue the Deployable Airbeam Fendering System (DAFS) study required to integrate and refine such a system for future JHSV seabasing operations. Continued alternative non-skid Phase 1 testing to address the feasibility of mechanical deck treatment as alternative to non-skid coating. Assess commercial High Expansion (HIEX) Foam for safekeeping of ordnance carried in vehicles in the mission bay. In preparation for milestone B conduct/attend In-Process Reviews (IPRs) and a Preliminary Design Review (PDR). Continue efforts in support of Developmental Testing and Evaluation.</p> <p>FY 09 - Continue DAFS Integration and alternative non-skid testing (Phase II). Continue feasibility studies of HIEX Foam for safe transport of ammunition and dangerous goods aboard JHSVs. Continue efforts in support of Developmental Testing &amp; Evaluation (DT&amp;E)</p> <p>FY 10 - Continue efforts in support of DT&amp;E. Continue modeling and simulation in support of LFT&amp;E. Continue DAFS Study and alternative non-skid testing.</p>			
<b>C. OTHER PROGRAM FUNDING SUMMARY:</b>			
Line Item No. and Name	FY 2008	FY 2009	FY 2010
SCN 3043 Joint High Speed Vessel (JHSV)	0.000	182.260	177.956
<b>D. ACQUISITION STRATEGY:</b>			
Two-phased strategy with competitive preliminary design effort leading to downselect to a single contractor. FPI contract type will be used for construction.			

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>									
<b>EXHIBIT R-3, RDT&amp;E PROJECT COST ANALYSIS</b>									DATE May 2009		
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 7</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0208058N/JOINT HIGH SPEED VESSEL (JHSV)</b>					<b>PROJECT NUMBER AND NAME</b> <b>3131/Intratheater Connectors (Concept Studies)</b>				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date				
Modeling & Simulation	C-CPIF	Alion/CSC	1.737	0.255	JAN-09	0.125	JAN-10				
Risk Mitigation Efforts	C-CPIF	Alion	0.528	0.182	JAN-09	0.025	JAN-10				
<b>Subtotal Product Development</b>			<b>2.265</b>	<b>0.437</b>		<b>0.150</b>					
Remarks:											
Integrated Logistics Support	C-CPIF	Alion	1.377	0.000		0.000					
Technical Data	WR	NSWC-CD/NRL	1.298	0.450	JAN-09	0.000					
Studies & Analyses	WR	NSWC-CD/NATICK/OSD	1.324	0.200	JAN-09	0.100	JAN-10				
<b>Subtotal Support Costs</b>			<b>3.999</b>	<b>0.650</b>		<b>0.100</b>					
Remarks:											
Developmental Test & Evaluation	WR	COTF/JITC	0.294	0.075	JAN-09	0.250	JAN-10				
<b>Subtotal Test and Evaluation</b>			<b>0.294</b>	<b>0.075</b>		<b>0.250</b>					
Remarks:											
Contractor Engineering Support	C-CPIF	CSC	2.213	0.711	JAN-09	0.384	JAN-10				
Government Engineering Support	WR	NSWC-CD/NSWC-DD	3.768	0.926	JAN-09	0.384	JAN-10				
Program Management Support	C-CPIF	Alion	3.637	1.035	JAN-09	0.384	JAN-10				
Travel	WR	NAVSEA	0.250	0.100	JAN-09	0.100	JAN-10				
<b>Subtotal Management Services</b>			<b>9.868</b>	<b>2.772</b>		<b>1.252</b>					
Remarks:											
<b>Total Cost</b>			<b>16.426</b>	<b>3.934</b>		<b>1.752</b>					

**CLASSIFICATION:**

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**EXHIBIT R-4, SCHEDULE PROFILE**

DATE  
May 2009

APPROPRIATION/BUDGET ACTIVITY  
RD TEN/BA 7

PROGRAM ELEMENT NUMBER AND NAME  
0208058N/JOINT HIGH SPEED VESSEL (JHSV)

PROJECT NUMBER AND NAME  
3131/Intratheater Connectors (Concept Studies)

Fiscal Year	2008				2009				2010			
	1	2	3	4	1	2	3	4	1	2	3	4
<b>Acquisition Milestones</b>				△ MS B								
Preliminary Design & Feasibility Studies												
Design Development		Spec Development △										
Award Lead Vessel *Army funded				△								
Award Second Vessel								△				
Award Third Vessel *Army Funded								△				
Award Fourth Vessel												△

<b>CLASSIFICATION:</b>		<b>UNCLASSIFIED</b>					
<b>EXHIBIT R-4a, SCHEDULE DETAIL</b>						DATE May 2009	
<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 7</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0208058N/JOINT HIGH SPEED VESSEL (JHSV)</b>			<b>PROJECT NUMBER AND NAME</b> <b>3131/Intratheater Connectors (Concept Studies)</b>		
Schedule Profile		FY 2008	FY 2009	FY 2010			
Milestone B		4Q					
Award Lead Vessel *Army Funded		4Q					
Award Second Vessel			4Q				
Award Third Vessel *Army Funded			4Q				
Award Fourth Vessel				4Q			

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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 7</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0208058N/JOINT HIGH SPEED VESSEL (JHSV)</b>			<b>PROJECT NUMBER AND NAME</b> <b>3134/Intratheater Connectors (Contract Design)</b>		
<b>COST (In Millions)</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>				
Project Cost	13.465	7.976	6.679				
RDT&E Articles Qty	0	0	0				
<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>							
<p>The Joint High Speed Vessel Program is a Navy led acquisition for a high-speed, shallow draft, commercial-based ship capable of intra-theater personnel and cargo lift for the Armed Services. The ship is not intended to be a combatant and must operate in benign or secured environments. The technologies supporting this capability were evaluated during the completed Analysis of Alternatives.</p> <p>JHSV capability is intended to bridge the gap between low-speed sea lift and high-speed airlift by transporting personnel, equipment, and supplies over operational distances with access to littoral offload points including austere, minor and degraded ports while in support of the Overseas Contingency Operations (OCO)/Theater Security Cooperation Program (TSCP); Intra-theater Operational/Littoral Maneuver and Sustainment; and Seabasing.</p> <p>The program is guided by four principles/assumptions:</p> <ol style="list-style-type: none"> <li>1) Leverage previous Navy, Marine Corps, Army, and SOF work with high speed vessels, including both ACTDs and leased demonstrators.</li> <li>2) Focus on commercially available, non-developmental item (NDI) platform designs and subsystems.</li> <li>3) Incorporate survivability features that meet commercial Safety of Life at Sea (SOLAS) requirements for personnel onboard and commercial (T-Ship) Anti-Terrorism/Force Protection (AT/FP) requirements.</li> </ol>							

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<b>B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>			
	FY 2008	FY 2009	FY 2010
<b>Accomplishments/Effort/Subtotal Cost</b>	13.465	7.976	6.679
RDT&E Articles Quantity	0	0	0
<p>Program Acquisition Efforts for Intratheater Connector - conducting Industry Day to engage potential shipbuilders to comment on the JHSV Performance Spec, solicitation for proposals for JHSV Preliminary Designs, evaluation of the proposals/designs, and downselect from the proposed designs to establish a competitive range for the follow-on Detail Design &amp; Construction Award. Milestone B preparation entails both statutory and regulatory documentation required for a Milestone decision.</p> <p>FY08 - Continue preliminary design efforts leading to shipbuilding contract award in 4th quarter FY08. Commence work on the Preliminary Survivability Assessment report (PSAR). Provide Operational Test Agency (OTA) support through OPTEVFOR, MCOTEA and ATEC.</p> <p>FY09 - Continue work on the Preliminary and Design Survivability Assessment report (PSAR and DSAR). Assess critical issues associated with JHSV operational capabilities and limitations, the effectiveness of the equipment configuration and interfaces, the manning concept, the concept of operations, and the risks to a successful completion of IOT&amp;E. Update the LFT&amp;E management plan and complete the Verification, Validation and Accreditation report (VV&amp;A).</p> <p>FY10 - Continue efforts for the Design Survivability Assessment (DSAR) report. Begin the test plan development for the Total Ship Survivability Trial (TSST). Continue systems engineering.</p>			
<b>C. OTHER PROGRAM FUNDING SUMMARY:</b>			
Line Item No. and Name	FY 2008	FY 2009	FY 2010
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<b>D. ACQUISITION STRATEGY:</b>			
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.			

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									May 2009		
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RD TEN/BA 7		0208058N/JOINT HIGH SPEED VESSEL (JHSV)					3134/Intratheater Connectors (Contract Design)				
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost (\$000)	FY 2009 Cost (\$000)	FY 2009 Award Date	FY 2010 Cost (\$000)	FY 2010 Award Date				
Ship Integration	C-CPIF	Alion/CSC	3.778	2.000	JAN-09	2.000	JAN-10				
Systems Engineering	C-CPIF	CSC	2.000	1.249	JAN-09	0.960	JAN-10				
<b>Subtotal Product Development</b>			<b>5.778</b>	<b>3.249</b>		<b>2.960</b>					
Remarks:											
Development Support	WR	NSWC-CD	2.000	0.000		0.000					
Integrated Logistics Support	C-CPIF	Alion	1.276	0.000		0.000					
Configuration/Acquisition Management	C-CPIF	Alion/CSC	1.138	0.886	JAN-09	0.885	JAN-10				
Technical Data	WR	NSWC-CD	0.755	0.000		0.000					
<b>Subtotal Support Costs</b>			<b>5.169</b>	<b>0.886</b>		<b>0.885</b>					
Remarks:											
Operational Test & Evaluation	WR	COTF/MCOTEA/ATEC	0.533	0.949	JAN-09	0.681	JAN-10				
Live Fire Test & Evaluation	WR	VAR	1.348	0.985	JAN-09	0.752	JAN-10				
<b>Subtotal Test and Evaluation</b>			<b>1.881</b>	<b>1.934</b>		<b>1.433</b>					
Remarks:											
Contractor Engineering Support	C-CPIF	CSC	0.659	0.593	JAN-09	0.474	JAN-10				
Government Engineering Support	WR	NSWC-CD/NSWC-DD	0.966	0.734	JAN-09	0.552	JAN-10				
Program Management Support	C-CPIF	Alion	1.051	0.480	JAN-09	0.275	JAN-10				
Travel	WR	NAVSEA	0.150	0.100	JAN-09	0.100	JAN-10				
<b>Subtotal Management Services</b>			<b>2.826</b>	<b>1.907</b>		<b>1.401</b>					
Remarks:											
<b>Total Cost</b>			<b>15.654</b>	<b>7.976</b>		<b>6.679</b>					

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EXHIBIT R-4, SCHEDULE PROFILE

DATE  
May 2009

APPROPRIATION/BUDGET ACTIVITY  
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PROGRAM ELEMENT NUMBER AND NAME  
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PROJECT NUMBER AND NAME  
3134/Intratheater Connectors (Contract Design)

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Award Lead Vessel *Army funded				△								
Award Second Vessel								△				
Award Third Vessel *Army Funded								△				
Award Fourth Vessel												△

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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RD TEN/BA 7</b>		<b>PROGRAM ELEMENT NUMBER AND NAME</b> <b>0208058N/JOINT HIGH SPEED VESSEL (JHSV)</b>			<b>PROJECT NUMBER AND NAME</b> <b>3134/Intratheater Connectors (Contract Design)</b>		
Schedule Profile		FY 2008	FY 2009	FY 2010			
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Award Lead Vessel *Army funded		4Q					
Award Second Vessel			4Q				
Award Third Vessel *Army Funded			4Q				
Award Fourth Vessel				4Q			