Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational

PE 0708730N I Maritime Tech (MARITECH)

Systems Development

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	8.347	4.815	4.347	4.321	-	4.321	4.361	4.385	4.503	4.597	Continuing	Continuing
2466: <i>NSRP ASE</i>	8.347	4.815	4.347	4.321	-	4.321	4.361	4.385	4.503	4.597	Continuing	Continuing

A. Mission Description and Budget Item Justification

The National Shipbuilding Research Program (NSRP) is an industry and enterprise wide research collaboration that seeks to reduce the Navy's shipbuilding and repair cost. The resulting technologies implemented in NSRP-ASE member shipyards, benefit both the shipyard and the US Navy.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	4.998	4.347	4.362	-	4.362
Current President's Budget	4.815	4.347	4.321	-	4.321
Total Adjustments	-0.183	-	-0.041	-	-0.041
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	_	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.183	-			
 Rate/Misc Adjustments 	-	-	-0.041	-	-0.041

Change Summary Explanation

The FY 2016 funding request was reduced by \$0.006 million to account for the availability of prior year execution balances and \$0.035 million to account for other rate/misc adjustments.

The FY 2014 funding request include reductions of \$0.183 million for SBIR transfer.

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Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy													
Appropriation/Budget Activity 1319 / 7					R-1 Progra PE 070873		•	•	Project (N 2466 / NSF	umber/Name) PP ASE			
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	
2466: <i>NSRP ASE</i>	8.347	4.815	4.347	4.321	-	4.321	4.361	4.385	4.503	4.597	Continuing	Continuing	
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-			

A. Mission Description and Budget Item Justification

NSRP ASE is a collaboration of U.S. shipyards working with the Navy customer to reduce the cost of building and repairing naval ships and improving shipbuilding industry productivity through advanced technology and processes. NSRP ASE is an innovative and proven approach to public/private cooperation to manage cost-shared R&D based on a national consensus Strategic Investment Plan. The Plan targets potential industry-wide technology and process solutions which are vetted by industry experts and builds upon the progress made over the previous years. The collaboration's organizational structure promotes teaming of industry, government and academia to achieve the continuous product and process improvements necessary for improved Navy ship affordability. Solutions include both leverage of best commercial practices and creation of industry-wide initiatives with aggressive technology transfer to, and buy-in by, multiple U.S. shipyards. Navy PEOs (Ships, Subs and Carriers) and NAVSEA are directly involved in NSRP. The Plan calls for matching government and industry investments over several years.

		FY 2016	FY 2016	FY 2016
FY 2014	FY 2015	Base	oco	Total
4.815	4.347	4.321	-	4.321
-	-	-	-	_
	4.815	4.815 4.347	FY 2014 FY 2015 Base 4.815 4.347 4.321	FY 2014 FY 2015 Base OCO 4.815 4.347 4.321

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy				Date: Febr	uary 2015					
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/I PE 0708730N / Maritime Tech (MA		Project (N 2466 / NS/	umber/Nar RP ASE	ne)					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in	<u>n Each)</u>	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total				
 Improving Manufacturing Processes Improving Production Planning Data Exchange Improving Safety & Health / Reducing Environmental Impacts Education and Training Total Ownership Cost (2) Continued technology transfer among the Navy, shipbuilding industry, acade suppliers and the R&D community. 	emia, equipment and material									
FY 2015 Plans: (1) Complete technology development projects in the four major initiative areas Technologies, Ship Production Technologies, Business Process and Informatio and Support (Regulatory Compliance, Technology Transfer and Workforce Dev GFY14 and those that will be competitively selected by industry subject matter during GFY15, targeting the following priorities in Naval shipbuilding and repair: (1) Improving Quality; (2) Reduction of Total Ownership Costs; and, (3) Increas anticipated that projects selected will continue to be focused in the following are - Promotion of Modular Construction - Reduction of Re-work - Improving Production Engineering - Improving Specifications and Standards - Improving Production Planning - Data Exchange - Improving Safety & Health / Reducing Environmental Impacts - Education and Training - Total Ownership Cost (2) Continue technology transfer among the Navy, shipbuilding industry, acader suppliers and the R&D community	n Systems, and Infrastructure elopment)) that were awarded in experts and Navy stakeholders ing Energy Efficiency. It is eas:									
FY 2016 Base Plans: (1) Complete technology development projects in the four major initiative areas Technologies, Ship Production Technologies, Business Process and Informatio and Support (Regulatory Compliance, Technology Transfer and Workforce Dev	n Systems, and Infrastructure									

PE 0708730N: Maritime Tech (MARITECH)

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 7	PE 0708730N I Maritime Tech (MARITECH)	2466 / NSI	RP ASE

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
competitively selected by industry subject matter experts and Navy stakeholders during GFY14 and GFY15,					
targeting the following priorities in Naval shipbuilding and repair:					
(1) Improving Quality; (2) Reduction of Total Ownership Costs; and, (3) Increasing Energy Efficiency. It is					
anticipated that projects selected will continue to be focused in the following areas:					
- Promotion of Modular Construction					
- Reduction of Re-work					
- Improving Production Engineering					
- Improving Specifications and Standards					
- Improving Manufacturing Processes					
- Improving Production Planning					
- Data Exchange					
- Improving Safety & Health / Reducing Environmental Impacts					
- Education and Training					
- Total Ownership Cost					
(2) Continue technology transfer among the Navy, shipbuilding industry, academia, equipment and material					
suppliers and the R&D community					
FY 2016 OCO Plans:					
N/A					
Accomplishments/Planned Programs Subtotals	4.815	4.347	4.321	-	4.321

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

N/A

Remarks

D. Acquisition Strategy

R&D projects have been solicited and awarded by an industry collaboration represented by the Executive Control Board (ECB) of the National Shipbuilding Research Program (NSRP). The Navy has entered into an agreement with the industry collaboration using "other transaction" authority pursuant to 10 U.S.C. 2371.

E. Performance Metrics

Quarterly reports and reviews

PE 0708730N: *Maritime Tech (MARITECH)* Navy

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Exhibit R-3, RDT&E I	Project C	ost Analysis: PB 2	016 Navy	,								Date:	February	2015				
Appropriation/Budge 1319 / 7	et Activity	1					•	•	lumber/Na Tech (MAF	•	_	t (Numbei NSRP AS	•					
Product Development (\$ in M		: (\$ in Millions)		FY 2	2014	FY 2	2015		2016 ase	FY 2		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	Total Cost	Target Value of Contract			
Technology Development	Various	ECB NSRP : Not Specified	7.776	4.515	Dec 2013	4.047	Dec 2014	4.021	Dec 2015	-		4.021	Continuing	Continuing	Continuing			
		Subtotal	7.776	4.515		4.047		4.021		-		4.021	-	-	-			
Support (\$ in Million	s)			FY 2	2014	FY 2	2015		2016 ase	FY 2		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	Total Cost	Target Value of Contract			
Gov't Support Services	WR	NSWCCD : Not Specified	0.425	0.225	Mar 2014	0.225	Mar 2015	0.225	Mar 2016	-		0.225	Continuing	Continuing	Continuin			
Contractor Support Services	Various	Various : Not Specified	0.146	0.075	Mar 2014	0.075	Mar 2015	0.075	Mar 2016	-		0.075	Continuing	Continuing	Continuin			
		Subtotal	0.571	0.300		0.300		0.300		-		0.300	-	-	-			
			Prior Years	FY 2	2014	FY 2	2015		2016 ase	FY 2		FY 2016 Total	Cost To	Total Cost	Target Value of Contract			
		Project Cost Totals	8.347	4.815		4.347		4.321		-		4.321	-	-	-			

Remarks

PE 0708730N: *Maritime Tech (MARITECH)* Navy

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			OLAGO							
Exhibit R-4, RDT&E Schedule Profi	le: PB 2016 Nav	y				Date	: February 2015			
Appropriation/Budget Activity 1319 / 7			R-1 Pro (PE 0708	g ram Element (N i 730N <i>I Maritime T</i>	umber/Name) Tech (MARITECH)	Project (Numbe 2466 / NSRP AS	r/Name) E			
Proj 2466	FY 2014 FY 2015 FY 2			FY 2017	FY 2018	FY 2019	FY 2020			
	1Q 2Q 3Q 4Q	1Q 2Q 3Q 4Q 1Q 2Q	3Q 4Q	1Q 2Q 3Q 4Q	1Q 2Q 3Q 4Q	1Q 2Q 3Q 4Q	10 20 30 40			
		Ship Collaborative Framework Technologies								
2016PB - 0708730N - 2466										

PE 0708730N: *Maritime Tech (MARITECH)* Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015	
Appropriation/Budget Activity	,	Project (Number/Name)		
1319 / 7	PE 0708730N I Maritime Tech (MARITECH)	2466 I NSF	RP ASE	

Schedule Details

	St	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Proj 2466					
Ship Collaborative Framework Technologies	1	2014	4	2020	

PE 0708730N: *Maritime Tech (MARITECH)* Navy