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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603564N I Ship Prel Design & Feasibility Studies							
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	46.576	3.213	15.805	12.012	-	12.012	18.990	17.976	10.842	10.132	Continuing	Continuing
0409: DDG-51 Flt III Concept Development	43.776	2.246	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	46.022
3261: TAGOS Design & Total Ship Integration	0.000	0.000	0.000	12.012	-	12.012	18.590	17.576	10.842	10.132	Continuing	Continuing
3377: T-ATS Ship Concept Development	2.800	0.967	0.962	0.000	-	0.000	0.400	0.400	0.000	0.000	0.000	5.529
3389: OPLOG IPT Development	0.000	0.000	14.843	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	14.843
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 180												
A. Mission Description and Budget Item Justification												
0409 - DDG 51 FLT III Concept Development - Develop Preliminary Analysis, Testing, and Design for introduction of DDG 51 FLT III.												
3261 - T-AGOS Design & Total Ship Integration - Ocean surveillance ships gather underwater acoustical data to support the mission of the Integrated Undersea Surveillance System by providing a ship platform capable of theater anti-submarine acoustic passive and active surveillance. Auxiliary General Ocean Surveillance Ships (T-AGOS) are operated by Military Sealift Command to support the anti-submarine warfare mission of the commanders of the Atlantic and Pacific Fleets. The two current classes of surveillance ships use surveillance towed-array sensor system (SURTASS) equipment to gather undersea acoustic data. The ships also carry electronic equipment to process and transmit that data via satellite to shore stations for evaluation. Funding will support recapitalization of the four SWATH (T-19 Class) and one SWATH (T-23 Class) Auxiliary General Ocean Surveillance ships (T-AGOS).												
3377 - The Navy requires ocean-going towing, salvage, and rescue capabilities to support Fleet operations. The Navy's current capabilities are provided by four T-ATF 166 class Fleet Tugs and four T-ARS 50 class Salvage ships which reach the end of their expected service lives starting in 2020 and 2025, respectively.												
The T-ATF Fleet Tugs perform towing at sea, salvage, and diving operations; act as a support ship for portable deep-diving equipment and submarine rescue operations; provide fire-fighting assistance; and perform oil spill pollution abatement. The T-ARS Salvage Ships perform combat salvage, lifting, emergency repair, and rescue towing of combatant or support ships damaged, stranded, scuttled, distressed, or abandoned at sea to repair yards or safe havens. The T-ATS program will recapitalize the current Fleet Tugs and Salvage Ships with a common hull Towing, Salvage and Rescue Ship (T-ATS) that is capable of performing the missions of the retiring T-ATF and T-ARS classes. RDT&E funding will provide for trade studies and program support leading to award of a Detail Design and Construction contract in FY17.												

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
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Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0603564N <i>I Ship Prel Design & Feasibility Studies</i>
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3389 - Naval Operational Logistics (OPLOG) Integration IPT Development - Develops enabling technologies for future and in-service afloat operational logistics and integrated supply force and combatant logistics requirements; and conducts cooperative initiatives with acquisition programs, program sponsors, engineering managers, the Navy science and technology community and Fleet customers. OPLOG develops integrated, cross-platform (i.e. applicable to more than one ship class/type) operational logistics and energy conservation technologies and capabilities as well as draft acquisition and operations policy ensuring future Naval systems leverage emerging logistic capabilities and technologies to provide operationally effective and energy efficient logistics delivery.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	3.332	15.805	11.645	-	11.645
Current President's Budget	3.213	15.805	12.012	-	12.012
Total Adjustments	-0.119	0.000	0.367	-	0.367
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.119	0.000			
• Program Adjustments	0.000	0.000	11.944	-	11.944
• Rate/Misc Adjustments	0.000	0.000	-11.577	-	-11.577

Change Summary Explanation

FY18 increased \$+11.944 million for T-AGOS replacement design, \$-11.729 million for appropriation transfer to NDSF (National Defense Sealift Fund) and \$+0.152 million for rate/miscellaneous adjustments.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 0409 / DDG-51 Flt III Concept Development			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
0409: DDG-51 Flt III Concept Development	43.776	2.246	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	46.022
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 180												
A. Mission Description and Budget Item Justification												
DDG 51 FLT III Concept Development study - Funding provided to evaluate design options associated with FLT III cost and feasibility. The concepts were variants of the DDG 51 Flight IIA design and included incorporation of SPY-6 (AMDR).												
DDG 51 FLT III Preliminary Design - Funding provided for preliminary design efforts associated with introduction of Flight III in FY16. Efforts included Finite Element Analysis (FEA) of the Deckhouse Structure, Electromagnetic Signatures, Electromagnetic Interference (EMI), Electromagnetic Pulse (EMP), and Radiation Hazard Analysis, Electrical Power capability increase and Distribution System analysis, Cooling Systems analysis, Topside Signature analysis, and Weight and Stability analysis.												
DDG 51 FLT III Contract Design - Funding provided to develop contract drawings and specifications for the Detail Design and Construction contracts.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Proj:0409 DDG-51 Flt III Concept Development Articles: FY 2016 Accomplishments: Contract drawings updated to include SPY-6 government furnished information (GFI) and HES-C A/C Plant vendor furnished information updates. FY 2017 Plans: N/A FY 2018 Base Plans: N/A FY 2018 OCO Plans: N/A								2.246	0.000	0.000	0.000	0.000
								-	-	-	-	-
Accomplishments/Planned Programs Subtotals								2.246	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017	
Appropriation/Budget Activity 1319 / 4				R-1 Program Element (Number/Name) PE 0603564N / <i>Ship Prel Design & Feasibility Studies</i>				Project (Number/Name) 0409 / <i>DDG-51 Flt III Concept Development</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2018</u>	<u>FY 2018</u>	<u>FY 2018</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Complete</u>	<u>Total Cost</u>
• SCN/2122: <i>DDG 51 Class</i>	4,207.664	3,660.251	3,640.792	-	3,640.792	3,819.964	3,731.008	3,392.011	3,448.012	3,834.720	102,786.832
• SCN/5300: <i>Completion of PY Shipbuilding Programs (DDG 51)</i>	0.000	15.959	51.377	-	51.377	53.966	61.011	0.000	0.000	0.000	182.313
Remarks											
D. Acquisition Strategy											
DDG 51 FLT III concept development produced contract level technical detail in support of the award of a Flight III ECP. The DDG 51 Acquisition Strategy reflects the competitive award of the FY13-17 Multi-Year Procurement in a Flight IIA configuration, and supports Flight III upgrades beginning with one of the FY16 ships.											
E. Performance Metrics											
None											

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 0409 / DDG-51 Flt III Concept Development					
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
DDG 51 FLT III Concept Study	WR	NSWC : Dahlgren, VA	2.920	0.000		0.000		0.000		-		0.000	0.000	2.920	-
DDG 51 FLT III Concept Study	WR	NSWC : Carderock, MD	3.076	0.000		0.000		0.000		-		0.000	0.000	3.076	-
DDG 51 FLT III Concept Study	WR	SPAWAR : Charleston, SC	0.285	0.000		0.000		0.000		-		0.000	0.000	0.285	-
DDG 51 FLT III Concept Study	FFRDC	JHU : Baltimore, MD	1.447	0.000		0.000		0.000		-		0.000	0.000	1.447	-
DDG 51 FLT III Concept Study	MIPR	CPSD : Columbia, SC	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
DDG 51 FLT III Concept Study	C/CPAF	BIW : Bath, ME	0.376	0.000		0.000		0.000		-		0.000	0.000	0.376	-
DDG 51 FLT III Concept Study	WR	NRL : Washington, DC	0.164	0.000		0.000		0.000		-		0.000	0.000	0.164	-
DDG 51 FLT III Concept Study	C/CPAF	Ingalls : Pascagoula, MS	0.214	0.000		0.000		0.000		-		0.000	0.000	0.214	-
DDG 51 FLT III Concept Study	C/CPAF	Seaport : Washington, DC	4.819	0.000		0.000		0.000		-		0.000	0.000	4.819	-
DDG 51 FLT III Concept Study	MIPR	DTIC : Ft. Belvoir, VA	0.002	0.000		0.000		0.000		-		0.000	0.000	0.002	-
DDG 51 FLT III Concept Study	Various	Various : Washington, DC	1.653	0.000		0.000		0.000		-		0.000	0.000	1.653	-
DDG 51 FLT III Concept Study	WR	SPAWAR : San Diego, CA	0.244	0.000		0.000		0.000		-		0.000	0.000	0.244	-
DDG 51 FLT III Concept Study	WR	NAWC : Pax River, MD	0.025	0.000		0.000		0.000		-		0.000	0.000	0.025	-
DDG 51 FLT III Preliminary Design	WR	NSWC : Carderock, MD	5.373	0.000		0.000		0.000		-		0.000	0.000	5.373	-
DDG 51 FLT III Preliminary Design	C/CPAF	Seaport : Washington, DC	6.675	0.000		0.000		0.000		-		0.000	0.000	6.675	-
DDG 51 FLT III Preliminary Design	WR	NSWC : Dahlgren, VA	2.281	0.000		0.000		0.000		-		0.000	0.000	2.281	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603564N / <i>Ship Prel Design & Feasibility Studies</i>						Project (Number/Name) 0409 / <i>DDG-51 Flt III Concept Development</i>			

Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
DDG 51 FLT III Preliminary Design	C/CPAF	BIW : Bath, ME	0.630	0.000		0.000		0.000		-		0.000	0.000	0.630	-
DDG 51 FLT III Preliminary Design	C/CPAF	Ingalls : Pascagoula, MS	0.630	0.000		0.000		0.000		-		0.000	0.000	0.630	-
DDG 51 FLT III Contract Design	C/FFP	YORK : York, PA	3.093	1.726	Mar 2016	0.000		0.000		-		0.000	0.000	4.819	-
DDG 51 FLT III Contract Design	WR	NSWC : Carderock, MD	2.094	0.520	Dec 2015	0.000		0.000		-		0.000	0.000	2.614	-
DDG 51 FLT III Contract Design	C/CPAF	Ingalls : Pascagoula, MS	0.205	0.000		0.000		0.000		-		0.000	0.000	0.205	-
DDG 51 FLT III Contract Design	C/CPAF	Seaport : Washington, DC	7.570	0.000		0.000		0.000		-		0.000	0.000	7.570	-
Subtotal			43.776	2.246		0.000		0.000		-		0.000	0.000	46.022	-

	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	43.776	2.246		0.000		0.000		-		0.000	0.000	46.022	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy			Date: May 2017		
Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies			Project (Number/Name) 0409 / DDG-51 Flt III Concept Development

		FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
		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
Proj 0409																													
DDG-51 FLIGHT III CONCEPT DEVELOPMENT: DDG 51 FLT III Contract Design																													

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603564N / <i>Ship Prel Design & Feasibility Studies</i>	Project (Number/Name) 0409 / <i>DDG-51 Flt III Concept Development</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 0409</i>				
DDG-51 FLIGHT III CONCEPT DEVELOPMENT: DDG 51 FLT III Contract Design	1	2016	4	2016

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy									Date: May 2017			
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 3261 / TAGOS Design & Total Ship Integration			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3261: TAGOS Design & Total Ship Integration	0.000	0.000	0.000	12.012	-	12.012	18.590	17.576	10.842	10.132	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
T-AGOS Design & Total Ship Integration - Ocean surveillance ships gather underwater acoustical data to support the mission of the Integrated Undersea Surveillance System by providing a ship platform capable of theater anti-submarine acoustic passive and active surveillance. Auxiliary General Ocean Surveillance Ships (T-AGOS) are operated by Military Sealift Command to support the anti-submarine warfare mission of the commanders of the Atlantic and Pacific Fleets. The two current classes of surveillance ships use surveillance towed-array sensor system (SURTASS) equipment to gather undersea acoustic data. The ships also carry electronic equipment to process and transmit that data via satellite to shore stations for evaluation. Funding will support recapitalization of the four SWATH (T-19 Class) and one SWATH (T-23 Class) Auxiliary General Ocean Surveillance ships (T-AGOS).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: T-AGOS Design & Total Ship Integration Articles: FY 2016 Accomplishments: N/A FY 2017 Plans: N/A FY 2018 Base Plans: Complete Analysis of Alternatives and obtain approval of preferred alternative at Gate 2. Draft, complete Navy staffing, and conduct Gate 3a to obtain approval for the Capability Development Document (CDD). Develop an Indicative Design based on the CDD requirements to validate the CDD content and budget. Draft and obtain approvals for early acquisition documents and start Preliminary Design. Coordinate acquisition efforts with NAVSEA, MSC, PEO SHIPS, CNO, ASN RD&A, OSD, and Fleet. FY 2018 OCO Plans: N/A								0.000	0.000	12.012	0.000	12.012
								-	-	-	-	-
Accomplishments/Planned Programs Subtotals								0.000	0.000	12.012	0.000	12.012

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017	
Appropriation/Budget Activity 1319 / 4				R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 3261 / TAGOS Design & Total Ship Integration			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2018</u>	<u>FY 2018</u>	<u>FY 2018</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Complete</u>	<u>Total Cost</u>
• 5030: T-AGOS SURTASS Ships	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	355.000	1,218.500	1,573.500
Remarks											
D. Acquisition Strategy											
Conduct a full and open competition based on a Navy design with award to a single shipbuilder for Detail Design and Construction (DD&C) of a Lead Hull with options for Follow-On Ships.											
E. Performance Metrics											
None.											

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy												Date: May 2017			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 3261 / TAGOS Design & Total Ship Integration					
Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Engineering Support	Various	Various : Various	0.000	0.000		0.000		6.775	Jan 2018	-		6.775	31.950	38.725	-
Industry Studies	C/FFP	Various : Various	0.000	0.000		0.000		2.078	Jun 2018	-		2.078	3.000	5.078	-
Model Testing	Various	Various : Various	0.000	0.000		0.000		1.543	Jun 2018	-		1.543	5.653	7.196	-
Subtotal			0.000	0.000		0.000		10.396		-		10.396	40.603	50.999	-
Support (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Milestone Documentation Support	Various	Various : Various	0.000	0.000		0.000		1.116	Jan 2018	-		1.116	3.297	4.413	-
RFP and Specification Development	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	9.965	9.965	-
Test and Evaluation Planning	Various	Various : Various	0.000	0.000		0.000		0.500	Jan 2018	-		0.500	2.275	2.775	-
Source Selection Support	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Subtotal			0.000	0.000		0.000		1.616		-		1.616	-	-	-
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.000		0.000		12.012		-		12.012	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

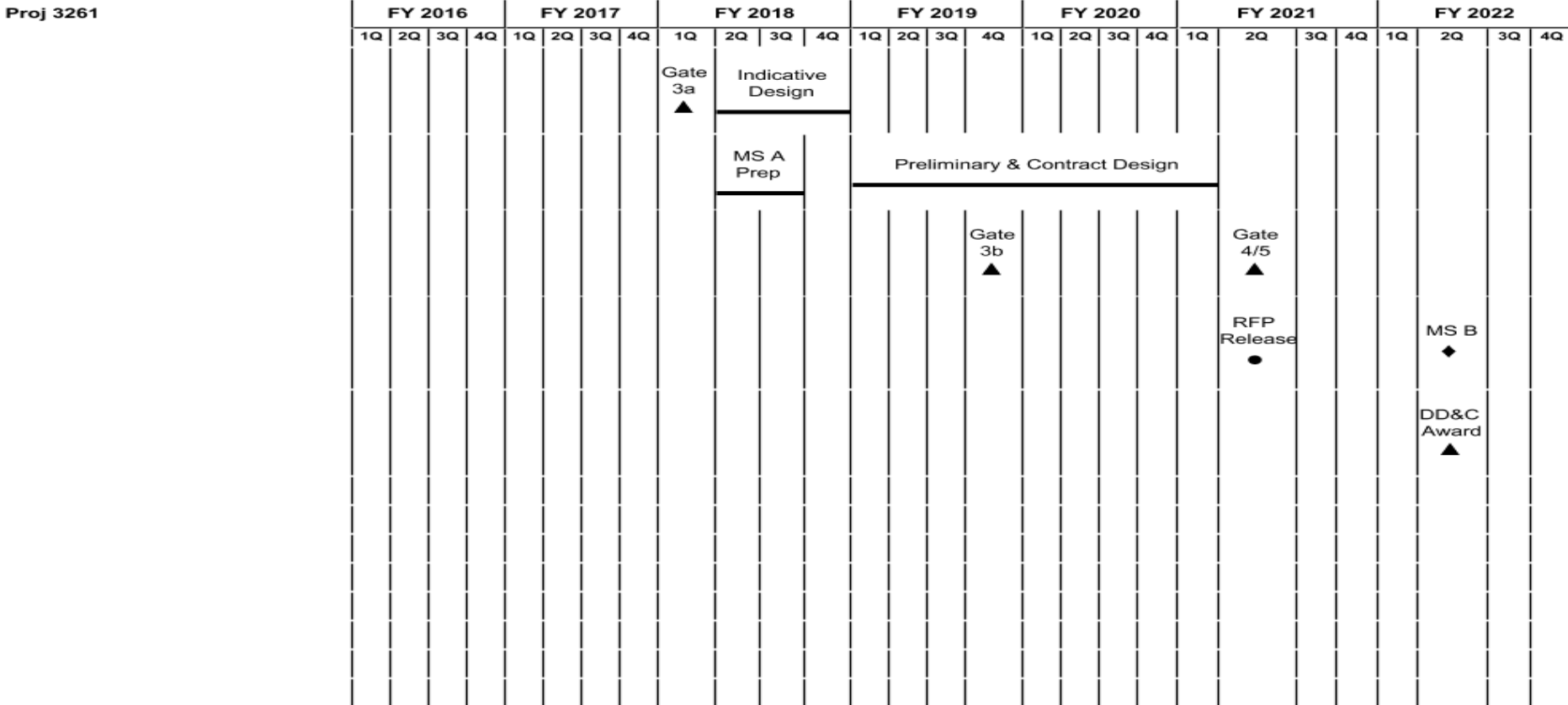
1319 / 4

R-1 Program Element (Number/Name)

PE 0603564N / Ship Prel Design &
Feasibility Studies

Project (Number/Name)

3261 / TAGOS Design & Total Ship Integration



2018OSD - 0603564N - 3261

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603564N / <i>Ship Prel Design & Feasibility Studies</i>	Project (Number/Name) 3261 / <i>TAGOS Design & Total Ship Integration</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 3261</i>				
Gate 3a	1	2018	1	2018
Indicative Design	2	2018	4	2018
Milestone A Doc Prep	2	2018	3	2018
Preliminary and Contract Design	1	2019	1	2021
Gate 3b	4	2019	4	2019
Gate 4/5	2	2021	2	2021
RFP Release	2	2021	2	2021
Milestone B	2	2022	2	2022
DD&C Award	2	2022	2	2022

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 3377 / T-ATS Ship Concept Development			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3377: T-ATS Ship Concept Development	2.800	0.967	0.962	0.000	-	0.000	0.400	0.400	0.000	0.000	0.000	5.529
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
T-ATS Design - Recapitalizes the existing T-ATF 166 Fleet Tug and T-ARS 50 Salvage Ship Classes with a common hull Towing, Salvage and Rescue Ship (T-ATS) to support Fleet operations. The T-ATF Fleet Tugs perform towing at sea, salvage, and diving operations; act as a support ship for portable deep-diving equipment and submarine rescue operations; provide fire-fighting assistance; and perform oil spill pollution abatement. The T-ARS Salvage Ships perform combat salvage, lifting, emergency repair, and rescue towing of combatant or support ships damaged, stranded, scuttled, distressed, or abandoned at sea to repair yards or safe havens.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Ship Concept Development Articles: Description: Ship Concept Development for future tug, salvage, and rescue mission capabilities. FY 2016 Accomplishments: Completed source selection, awarded four competitive Industry Studies, design contracts. Coordinated efforts with NAVSEA, MSC, PEO Ships, CNO, ASN RD&A, OSD and Fleet. FY 2017 Plans: Issue Request for Proposal (RFP), conduct source selection, and award contract for Detail Design and Construction (DD&C) of the Lead Hull. Coordinate Acquisition efforts with NAVSEA, MSC, PEO Ships, CNO, ASN RD&A, OSD and Fleet. FY 2018 Base Plans: N/A FY 2018 OCO Plans: N/A								0.967	0.962	0.000	0.000	0.000
								-	-	-	-	-
Accomplishments/Planned Programs Subtotals								0.967	0.962	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017	
Appropriation/Budget Activity 1319 / 4				R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 3377 / T-ATS Ship Concept Development			
C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u> <u>Base</u>	<u>FY 2018</u> <u>OCO</u>	<u>FY 2018</u> <u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 5035: Towing, Salvage and Rescue Ship (T-ATS)	75.000	0.000	76.204	-	76.204	77.517	79.083	75.339	76.017	186.865	646.025
Remarks											
D. Acquisition Strategy											
Lead Hull contract will be awarded in FY17.											
E. Performance Metrics											
None.											

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies				Project (Number/Name) 3389 / OPLOG IPT Development			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3389: OPLOG IPT Development	0.000	0.000	14.843	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	14.843
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Note												
Prior to FY2017, Project 3389 was funded in PE 0408042N, National Defense Sealift Fund (NDSF) under Project 3117 Naval Operational Logistics (OPLOG) Integration. This project is not a new start. For FY2018 and follow, Project 3389 funding is transferred back to PE 0408042N NDSF Project 3117.												
A. Mission Description and Budget Item Justification												
Project 3389 - Develops enabling technologies for future and in-service afloat operational logistics and integrated supply systems; defines integrated combat logistics force and combatant logistics requirements; and conducts cooperative initiatives with acquisition programs, program sponsors, engineering managers, the Navy science and technology community, and Fleet customers. OPLOG develops integrated, cross-platform (i.e. applicable to more than one ship class/type) operational logistics and energy conservation technologies and capabilities as well as draft acquisition and operations policy ensuring future Naval systems leverage emerging logistic capabilities and technologies to provide operationally effective and energy efficient logistics delivery.												
Though the operational logistics family of systems touches all aspects of Naval presence and power projection, operational logistics capability and system interfaces typically have been left to individual acquisition programs to develop and resolve. Technology development is necessary to mitigate technological and operational risk before ship acquisition programs accept new technologies. This project provides a foundation for the transition and systems development of science & technology initiatives evolving from the Office of Naval Research (ONR) Power & Energy Future Naval Capabilities (FNC), Enterprise and Platform Enablers FNC, Seabasing FNC, and from other enabling Government, industry and academia concepts to the acquisition community. Thus, this project resources continued research and development of appropriate technologies with applicability to multiple acquisition programs and defines and matures performance and interface requirements for those technologies. This project continues to identify, develop, integrate, demonstrate, and transition logistics technologies to improve the cost effectiveness of Fleet at sea logistics delivery through outreach, coordination and collaboration with industry, academia, Fleet, and Enterprise representatives.												
This project will continue to develop improved shipboard replenishment, transfer, and handling systems and components as well as asset visibility and standardized packaging technologies. This project includes development of approaches to reduce operation and maintenance costs of, and energy consumption by the logistics Fleet. This integrated suite of developed capabilities will enable multiple ship types to leverage common technologies common across DoD (Joint) and commercial transportation networks providing a more affordable, energy efficient, mission capable force. These capabilities and system-of-systems approach will be applied to concept development of future auxiliary force architectures.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Advanced Systems								0.000	1.943	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy				Date: May 2017		
Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies		Project (Number/Name) 3389 / OPLOG IPT Development		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Articles:		-	-	-	-	-
FY 2016 Accomplishments: N/A						
FY 2017 Plans: Continue land-based testing for prototype E-STREAM fueling (FAS)station. Complete design of hybrid STREAM system for legacy CLF ships. Identify market driven changes to COTS components and impacts on system integration.						
FY 2018 Base Plans: N/A						
FY 2018 OCO Plans: N/A						
Title: Logistics Architectures		0.000	0.050	0.000	0.000	0.000
Articles:		-	-	-	-	-
FY 2016 Accomplishments: N/A						
FY 2017 Plans: Conduct combat logistics force data collection and operational studies.						
FY 2018 Base Plans: N/A						
FY 2018 OCO Plans: N/A						
Title: Shipboard Energy Conservation (E-STREAM)		0.000	6.000	0.000	0.000	0.000
Articles:		-	-	-	-	-
FY 2016 Accomplishments: N/A						
FY 2017 Plans:						

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy							Date: May 2017				
Appropriation/Budget Activity 1319 / 4			R-1 Program Element (Number/Name) PE 0603564N / Ship Prel Design & Feasibility Studies			Project (Number/Name) 3389 / OPLOG IPT Development					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
Continue energy management approach improvements including energy efficient ESTREAM system and components. Data package development and prototype purchase, installations, and testing for energy initiatives including efficient shipboard replenishment at sea (RAS) ESTREAM planned for FY 2017. FY 2018 Base Plans: N/A FY 2018 OCO Plans: N/A											
Title: Shipboard Energy Conservation (Other) Articles: FY 2016 Accomplishments: N/A FY 2017 Plans: Continue energy management approach improvements including validation of energy savings from implementation of energy conservation measures, identification and evaluation of additional energy conservation concepts, transition of successful energy conservation measures of MSC and coordination with other Navy energy conservation programs to leverage successful energy reduction approaches. FY 2018 Base Plans: N/A FY 2018 OCO Plans: N/A						0.000 -	6.850 -	0.000 -	0.000 -	0.000 -	
Accomplishments/Planned Programs Subtotals						0.000	14.843	0.000	0.000	0.000	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• NDSF/0408042N/3117: 3117/Naval Operational Logistics Integration	17.927	0.000	11.729	-	11.729	8.982	9.172	9.375	9.533	0.000	66.718

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017	
Appropriation/Budget Activity 1319 / 4				R-1 Program Element (Number/Name) PE 0603564N / <i>Ship Prel Design & Feasibility Studies</i>				Project (Number/Name) 3389 / <i>OPLOG IPT Development</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2018</u>	<u>FY 2018</u>	<u>FY 2018</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Complete</u>	<u>Total Cost</u>
Remarks											
FY18 and out funds realigned to the NDSF appropriation BA05 PE 0408042N RDTE PRJ 3117											
D. Acquisition Strategy											
Not applicable for OPLOG R&D efforts											
E. Performance Metrics											
Annual Program Review											