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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy										Date: February 2018		
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 0603599N I (U)Frigate Development							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	18.910	83.080	143.450	134.772	-	134.772	75.353	77.639	70.469	72.022	Continuing	Continuing
3086: Frigate	18.910	83.080	143.450	134.772	-	134.772	75.353	77.639	70.469	72.022	Continuing	Continuing
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 374												
A. Mission Description and Budget Item Justification												
The FY 2019 funding request was reduced by \$4.608 million to account for the availability of prior year execution balances.												
In FY14, the Navy established the requirements for a lethal and survivable small surface combatant ship (later redesignated as Frigate (FF)), above that of Littoral Combat Ship (LCS) to meet future missions. Based upon the Navy's 2016 Force Structure Assessment resulting in validation of the need for 52 small surface combatants and the need to address increasingly complex threats in the global maritime environment, the Navy reassessed the capabilities required to ensure the Frigate paces future threats. With FFG(X), the Navy desires to maximize the small surface combatant capabilities in the anti-surface warfare (SUW), anti-submarine warfare (ASW), electromagnetic maneuver warfare (EMW), and air warfare (AW) mission areas, while keeping the ship affordable and as a part of a "high-low" mix of surface ships. The updated assessment was completed to support establishment of top-level FFG(X) requirements in Summer 2017 and resulted in a Navy-approved Capability Development Document (CDD).												
The FFG(X) program will continue to refine the cost estimates to support a FY20 Detail Design and Construction (DD&C) contract award. Based on the updated FFG(X) requirements, FY17 focused on efforts for the system specification (SPEC) development and on conceptual design contract development. FY18 funding continues to refine the system SPEC and to award conceptual design contracts to multiple vendors. Additionally, funds will be used to continue maturing the FFG(X) Government Furnished Equipment (GFE) baseline, continue Combat Management System (CMS) design development, coding, and test, acquisition documentation development, C4I systems development and continuing system engineering efforts to ensure mature Government Furnished Information (GFI) deliveries. Efforts in FY19 reflect the continuation of conceptual design tasking, which will support the FY19 DD&C Request for Proposal (RFP) release and to continue development and maturation of CMS, Government Furnished Equipment (GFE), C4I, and system engineering efforts. FY20 funding has been realigned to SCN 2127 to support systems engineering, cost estimating, and ship design management. The shift to SCN marks the completion of the conceptual design phase.												
FY19 RDT&E funding is critical to an effective and timely completion of contract design and specification development, which is needed to better inform and develop the Detailed Design and Construction RFP. Conceptual Design before the competitive Detail Design and Construction award allows the maturation of multiple designs to give the Navy a better understanding of cost and capability drivers across the various design options. This due diligence will provide the opportunity for the government to identify and implement cost reduction opportunities and inform the final specifications that will deliver the required capability at an affordable price and achieve the best value solution.												

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)		PE 0603599N I (U)Frigate Development			
B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	84.900	143.450	141.599	-	141.599
Current President's Budget	83.080	143.450	134.772	-	134.772
Total Adjustments	-1.820	0.000	-6.827	-	-6.827
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.820	0.000			
• Program Adjustments	0.000	0.000	-5.108	-	-5.108
• Rate/Misc Adjustments	0.000	0.000	-1.719	-	-1.719
Change Summary Explanation					
The FY 2019 funding request was reduced by \$4.608 million to account for the availability of prior year execution balances.					

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603599N / (U)Frigate Development				Project (Number/Name) 3086 / Frigate			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3086: Frigate	18.910	83.080	143.450	134.772	-	134.772	75.353	77.639	70.469	72.022	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 374												
A. Mission Description and Budget Item Justification												
<p>Frigate (FFG(X)) efforts are composed of the design and development for a more lethal and survivable multi-mission warship focused on anti-surface warfare and anti-submarine warfare capabilities (SUW/ASW), local air defense and enhanced survivability features. FFG(X) design modifications for added capability over LCS include an over-the-horizon (OTH) surface-to-surface missile system, upgraded air defense weapons and sensors, advanced electronic warfare system and improved decoys, local air defense, and enhanced survivability features. This effort will encompass design, development, and technical issue resolution to support design maturity for FFG(X) FY20 contract award. Certification and testing efforts are also required to support the FFG(X) delivery, operations, and introduction to the fleet.</p> <p>The FFG(X) design and development phases include platform design, development and risk reduction; combat system element integration; total ship system engineering and integration; combat systems and warfare systems certification; and planning and conduct of system testing. These efforts include procurement of combat and warfare system elements and/or simulators to support production representative testing in support of design, development, and certification efforts and ordnance in support of testing. Primary design modifications over the LCS will include an over-the-horizon (OTH) surface-to-surface missile system, upgraded air defense weapons and sensors, advanced electronic warfare system and improved decoys, local air defense, and enhanced survivability features.</p> <p>This funding will also include efforts and activities required for formal Developmental and Operational testing of the FFG(X). Test and Evaluation (T&E) will concentrate on verifying integration and interoperability of employed technologies and systems in the FFG(X) design to achieve the mission capabilities and performance requirements as defined in the FFG(X) Capabilities Development Document (CDD). T&E functions will include the evaluation of Critical Technical Parameters (CTP), Measures of Effectiveness (MOE), Measures of Suitability (MOS), and Key Performance Parameters (KPP).</p> <p>The FY 2019 funding request was reduced by \$4.608 million to account for the availability of prior year execution balances.</p>												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
Title: Ship Systems / C4I / Warfare Systems Engineering							80.567	142.343	131.567	0.000	131.567	
Articles:							-	-	-	-	-	
Description: The Frigate (FFG(X)) is a multi-mission ship that focuses on anti-surface warfare, anti-submarine warfare capabilities and local air defense. Specific capabilities include over-the-horizon (OTH) surface-to-surface missile system, upgraded Air Defense weapons and sensors, advanced electronic warfare system and improved decoys, horizon surface-to-surface missile system, variable depth sonar, towed array, torpedo defense, and enhanced survivability features.												

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Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0603599N I (U)Frigate Development	Project (Number/Name) 3086 I Frigate				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<p>FY 2018 Plans:</p> <p>Funding was realigned from Test & Evaluation to Ship Systems Engineering due to program restructure which delayed testing efforts one year. Additional ship systems engineering effort is in the added conceptual design efforts are captured in the FFG(X) conceptual design phase.</p> <p>Ship Systems Engineering Continue system engineering efforts related to naval architecture, machinery engineering and topside design analysis. Emphasis will be placed on the structural and stability disciplines, and incorporation of lethality and survivability enhancements to include the flow-down impacts to the supporting machinery and electrical systems in support of system Spec and evaluation of contractor designs. Continue development and refinement of the System SPEC. Begin contractor-led conceptual designs to support FY20 DD&C competition. Begin development of the Milestone B documentation. Continue efforts to support and verify cost estimates and the Independent Cost Estimate (ICE)/ Component Cost Position (CCP).</p> <p>C4I / Warfare Systems Engineering Continue system engineering efforts related to C4I and warfare systems specifications. Continue OTH systems engineering and testing efforts for integration of OTH missile. Continue CMS development efforts to ensure full ship integration aligns with platform design efforts and to integrate additional FFG(X) required capabilities. Execute CS Software efforts to support a delta System Requirements Review (SRR), which incorporates additional FFG(X) capabilities. Integrate other CS and C4I elements into total ship design. Implement additional cyber security/information assurance (IA) measures on the warfare system and C4I suite to pace the current and future threats. Begin development of the Milestone B documentation. Continue efforts to support and verify cost estimates and the Independent Cost Estimate (ICE)/ Component Cost Position (CCP).</p> <p>FY 2019 Base Plans:</p> <p>Ship Systems Engineering Continue system engineering efforts related to naval architecture, machinery engineering and topside design analysis. Emphasis will be placed on the structural and stability disciplines, and incorporation of lethality and survivability enhancements to include the flow-down impacts to the supporting machinery and electrical systems. Completion of the Final System SPEC to support DD&C release. Completion of contractor-led conceptual designs to support FY 2020 competition. Continue development of the documentation to support Milestone B in FY20. Continue efforts to support and verify updated cost estimates and the Independent Cost Estimate (ICE)/ Component Cost Position (CCP). Release of DD&C RFP.</p>							

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
C4I / Warfare Systems Engineering Continue system engineering efforts related to C4I and warfare systems specifications. Continue OTH systems engineering and testing efforts for integration of OTH missile. Continue CMS development efforts to ensure full ship integration aligns with total ship design efforts and integrate additional FFG(X) required capabilities. Execute CS Software delta System Functional Review (SFR). Integrate other CS and C4I elements into total ship design. Implement additional cyber security/information assurance (IA) measures on the warfare system and C4I suite to pace the current and future threats. Continue development of the Milestone B documentation. Continue efforts to support and verify cost estimates and the Independent Cost Estimate (ICE)/ Component Cost Position (CCP). FY 2019 OCO Plans: N/A FY 2018 to FY 2019 Increase/Decrease Statement: Decreases in funding from FY 2018 to FY 2019 reflect the conclusion of system specification and the reduction of \$4.608 million to account for the availability of prior year execution balances.						
Title: Test & Evaluation <div>Articles:</div> Description: Conduct FFG(X) test planning in support of Developmental Testing and Operational Testing (DT/OT), including Live Fire Test and Evaluation (LFT&E), and procurement of T&E Ordnance. Plan for and execute DT and C4I integration & test, cyber test and certification, warfare system integration & test and certification, aviation (manned and unmanned) integration & test and certification. Late FY17 efforts were shifted to the FFG(X) test planning leveraging the FF test planning efforts. FY 2018 Plans: Leverage FF Test and Evaluation Master Plan (TEMP) updates to build the FFG(X) TEMP. Begin testing integrated product teams (IPTs) across DoD stakeholder organizations (WIPTs) to coordinate content and refinements with stakeholder organizations. Develop LFT&E Management Plan in conjunction with DOT&E and apply for LFT&E waiver. Compile final testing analysis of FF structures and hull model test and assess potential uses for modeling and simulation in support of FFG(X). Continue to develop plan to support future updates required for land-based SIM/STIM modeling and test requirements for the integration and test of the FFG(X) platform. Continue development of test sequence network and combat system test efforts to support contracting efforts.		2.513 -	1.107 -	3.205 -	0.000 -	3.205 -

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Appropriation/Budget Activity 1319 / 4				R-1 Program Element (Number/Name) PE 0603599N / (U)Frigate Development				Project (Number/Name) 3086 / Frigate				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<p>Funding in FY18 was realigned from Test & Evaluation to Ship Systems Engineering due to program restructure which delayed testing efforts one year.</p> <p><i>FY 2019 Base Plans:</i> Continue FFG(X) Test and Evaluation Master Plan (TEMP) updates and continue WIPTs required to achieve TEMP approval. Support future updates required for land-based SIM/STIM test requirements for the integration and test of the FFG(X) platform. Begin execution of land-based SIM/STIM modeling and test efforts. Acquire LFT&E Waiver Approval to support MS B.</p> <p><i>FY 2019 OCO Plans:</i> N/A</p> <p><i>FY 2018 to FY 2019 Increase/Decrease Statement:</i> Increases in funding from FY 2018 to FY 2019 reflect the beginning of SIM/STIM modeling and testing efforts that were delayed due to the program restructure in FY 2017.</p>												
Accomplishments/Planned Programs Subtotals								83.080	143.450	134.772	0.000	134.772
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost	
• SCN/2127: Littoral Combat Ship (LCS)	1,649.692	1,162.936	749.428	-	749.428	1,228.176	849.087	1,791.867	1,791.996	3,768.664	24,792.911	
Remarks												
In FY 2017 - 2019, the SCN represents LCS procurement. Beginning in FY 2020, the SCN represents FFG(X) procurement.												
D. Acquisition Strategy												
The FFG(X) acquisition strategy is currently being developed to pursue a full and open competitive contract award in FY20.												
E. Performance Metrics												
T&E functions will include the evaluation of Critical Technical Parameters (CTP), Measures of Effectiveness (MOE), Measures of Suitability (MOS), and Key Performance Parameters (KPP).												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603599N I (U)Frigate Development				Project (Number/Name) 3086 I Frigate					
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Conceptual Design Contracts	TBD	Various : Various	0.000	2.500	Sep 2017	50.000	Feb 2018	42.500	Feb 2019	-		42.500	0.000	95.000	-
System SPEC Development	WR	Government Activites : Various	0.000	5.580	Mar 2017	1.500	Jan 2018	0.375	Jan 2019	-		0.375	Continuing	Continuing	Continuing
System SPEC Development	C/CPAF	Various Contractors : Various	0.000	2.500	Mar 2017	2.500	Jan 2018	0.875	Jan 2019	-		0.875	Continuing	Continuing	Continuing
Ship Design Modifications	C/CPAF	Lockheed Martin : Various	2.755	9.015	Dec 2016	0.000		0.000		-		0.000	0.000	11.770	-
Ship Design Modifications	C/CPAF	Austal : Mobile, AL	2.726	5.925	Dec 2016	0.000		0.000		-		0.000	0.000	8.651	-
Over the Horizon (OTH) Missile Integration	WR	NAWC, China Lake : China Lake, CA	0.067	0.585	Feb 2017	0.500	Feb 2018	0.510	Feb 2019	-		0.510	Continuing	Continuing	Continuing
Over the Horizon (OTH) Missile Integration	WR	Various : Various	0.202	1.211	Feb 2017	1.200	Feb 2018	1.274	Feb 2019	-		1.274	Continuing	Continuing	Continuing
C4I Development	WR	PEO C4I : San Diego, CA	0.250	0.162	Nov 2016	0.578	Nov 2017	0.733	Nov 2018	-		0.733	Continuing	Continuing	Continuing
C4I Development	WR	SPAWAR : San Diego, CA	0.828	2.688	Nov 2016	2.941	Nov 2017	3.094	Nov 2018	-		3.094	Continuing	Continuing	Continuing
C4I Development	WR	SPAWAR : Charleston, SC	0.919	0.988	Nov 2016	1.950	Nov 2017	1.784	Nov 2018	-		1.784	Continuing	Continuing	Continuing
Common Combat Management System Development (CMS)	C/CPIF	Lockheed Martin : Various	1.052	14.700	Jan 2017	25.980	Jan 2018	28.057	Jan 2019	-		28.057	Continuing	Continuing	Continuing
Common Combat Management System Development (CMS)	C/CPAF	Austal : Mobile, AL	0.250	0.250	Jan 2017	0.000		0.000		-		0.000	0.000	0.500	-
Common Combat Management System Development (CMS)	WR	Government Activites : Various	0.117	2.006	Nov 2016	4.148	Nov 2017	3.727	Nov 2018	-		3.727	Continuing	Continuing	Continuing
Warfare Systems Development	WR	NUWC, Newport : Newport, RI	0.150	1.350	Nov 2016	3.080	Nov 2017	3.129	Nov 2018	-		3.129	Continuing	Continuing	Continuing
Warfare Systems Development	WR	NSWC, DD : Dahlgren, VA	1.040	3.949	Nov 2016	5.571	Nov 2017	5.952	Nov 2018	-		5.952	Continuing	Continuing	Continuing
Warfare Systems Development	WR	NSWC, CD : Carderock, MD	0.115	0.330	Nov 2016	0.916	Nov 2017	0.931	Nov 2018	-		0.931	Continuing	Continuing	Continuing

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Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603599N / (U)Frigate Development				Project (Number/Name) 3086 / Frigate					
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Warfare Systems Development	C/CPAF	Lockheed Martin : Various	0.100	1.752	Dec 2016	0.660	Dec 2017	1.530	Dec 2018	-		1.530	Continuing	Continuing	Continuing
Warfare Systems Development	Various	Various : Various	0.600	3.492	Nov 2016	2.743	Nov 2017	3.358	Nov 2018	-		3.358	Continuing	Continuing	Continuing
Warfare Systems Development	WR	Government Activites : Various	0.000	1.438	Nov 2016	2.183	Nov 2017	1.699	Nov 2018	-		1.699	0.000	5.320	-
Aviation Integration Development	WR	NAWC, AD : Patuxent River, MD	0.263	1.133	Nov 2016	1.003	Nov 2017	0.994	Nov 2018	-		0.994	Continuing	Continuing	Continuing
Aviation Integration Development	WR	NSWC, DD : Dahlgren, VA	0.000	0.116	Dec 2016	0.226	Dec 2017	0.219	Dec 2018	-		0.219	Continuing	Continuing	Continuing
Subtotal			11.434	61.670		107.679		100.741		-		100.741	Continuing	Continuing	N/A
Remarks															
Ship Design Modification efforts were stopped and new conceptual design efforts and system SPECS started.															
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Government Engineering Support	WR	NSWC, CD : Carderock, MD	0.261	4.783	Nov 2016	6.888	Nov 2017	6.379	Nov 2018	-		6.379	Continuing	Continuing	Continuing
Government Engineering Support	WR	NSWC, PD : Philadelphia, PA	0.185	2.491	Nov 2016	3.392	Nov 2017	2.848	Nov 2018	-		2.848	Continuing	Continuing	Continuing
Government Engineering Support	WR	NSWC, DD : Dahlgren, VA	0.385	2.457	Nov 2016	2.644	Nov 2017	2.385	Nov 2018	-		2.385	Continuing	Continuing	Continuing
Government Engineering Support	WR	NSWC, PHD : Port Hueneme, CA	0.003	0.674	Nov 2016	0.674	Nov 2017	0.551	Nov 2018	-		0.551	Continuing	Continuing	Continuing
Government Engineering Support	WR	Government Activites : Various	0.040	0.276	Nov 2016	1.879	Nov 2017	1.716	Nov 2018	-		1.716	Continuing	Continuing	Continuing
Contractor Engineering Support	C/CPAF	Booz Allen Hamilton : McLean, VA	0.545	0.511	Feb 2017	0.741	Feb 2018	0.656	Feb 2019	-		0.656	Continuing	Continuing	Continuing

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Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603599N / (U)Frigate Development				Project (Number/Name) 3086 / Frigate					
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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/CPAF	CACI : Arlington, VA	0.037	0.438	Feb 2017	0.447	Nov 2017	0.340	Nov 2018	-		0.340	Continuing	Continuing	Continuing
Contractor Engineering Support	C/CPAF	Alion : Arlington, VA	0.486	1.556	Feb 2017	1.345	Feb 2018	1.256	Feb 2019	-		1.256	Continuing	Continuing	Continuing
Contractor Engineering Support	C/CPAF	Various : Various	0.875	1.085	Jan 2017	4.646	Jan 2018	4.520	Jan 2019	-		4.520	Continuing	Continuing	Continuing
Subtotal			2.817	14.271		22.656		20.651		-		20.651	Continuing	Continuing	N/A
Remarks Increase funding for FY 18 Engineering Support are due to conceptual design effort, GFI/GFE development, and Combat System development.															
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Model/ Hull Form Testing	WR	NSWC, CD : Carderock, MD	0.320	2.093	Nov 2016	0.257	Nov 2017	0.000		-		0.000	0.000	2.670	-
Test and Evaluation Master Plan (TEMP) Development	C/CPAF	Alion : Arlington, VA	0.130	0.420	Dec 2016	0.400	Dec 2017	0.405	Dec 2018	-		0.405	Continuing	Continuing	Continuing
Test and Evaluation Master Plan (TEMP) Development	WR	Government Activites : Various	0.000	0.000		0.450	Dec 2017	1.000	Dec 2018	-		1.000	Continuing	Continuing	Continuing
Land Based Integration & Test	TBD	TBD : TBD	0.000	0.000		0.000		1.800	Nov 2018	-		1.800	Continuing	Continuing	Continuing
Subtotal			0.450	2.513		1.107		3.205		-		3.205	Continuing	Continuing	N/A
Remarks Land Based Testing efforts were delayed a year due to program restructure.															

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Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0603599N / (U)Frigate Development				Project (Number/Name) 3086 / Frigate					
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Program Management Support	C/CPAF	Alion : Arlington, VA	0.786	1.373	Dec 2016	1.445	Dec 2017	1.246	Dec 2018	-		1.246	Continuing	Continuing	Continuing
Program Management Support	WR	Various : Various	3.423	3.253	Dec 2016	10.563	Dec 2017	8.929	Dec 2018	-		8.929	Continuing	Continuing	Continuing
Subtotal			4.209	4.626		12.008		10.175		-		10.175	Continuing	Continuing	N/A
Remarks															
Program Management Support includes Program Office support, Cost Estimation support, Acquisition Documentation Support, Design Site funds, and Program Office travel.															
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			18.910	83.080		143.450		134.772		-		134.772	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy

Date: February 2018

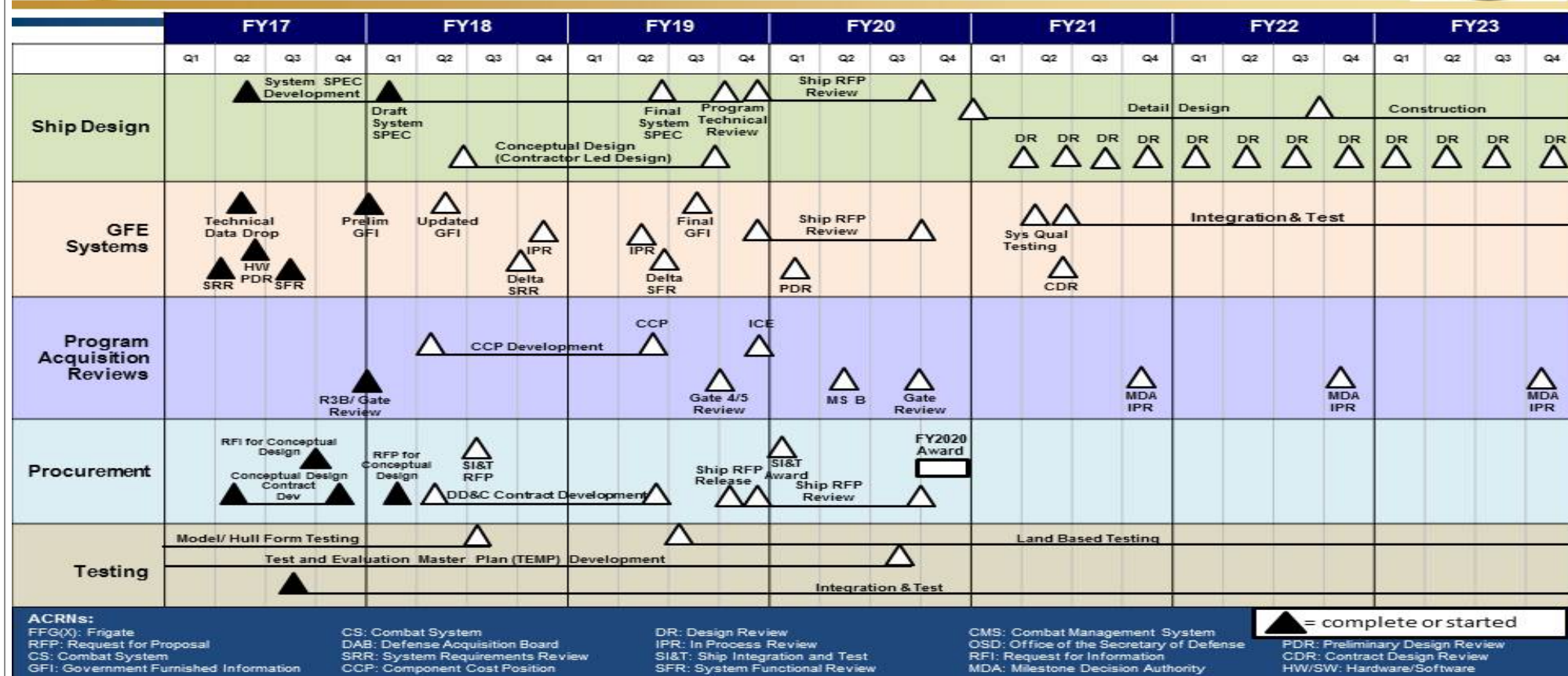
Appropriation/Budget Activity
1319 / 4

R-1 Program Element (Number/Name)
PE 0603599N / (U)Frigate Development

Project (Number/Name)
3086 / Frigate



FFG(X) Program Schedule



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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603599N / (U)Frigate Development	Project (Number/Name) 3086 / Frigate	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 3086				
SPEC Development	2	2017	3	2019
Test and Evaluation Master Plan (TEMP) Development	1	2017	3	2020
Model / Hull Form Testing	1	2017	3	2018
Technical Data Package Data Drop	2	2017	2	2017
CS Software System Requirements Review (SRR)	2	2017	2	2017
Integration and Test	3	2017	4	2023
CS Software System Functional Review (SFR)	3	2017	3	2017
Component Cost Position (CCP) Development	2	2018	2	2019
In Process Review (IPR) #1	4	2018	4	2018
Draft System SPEC Approval	1	2018	1	2018
RFP for Conceptual Design	1	2018	1	2018
DD&C Contract Development	2	2018	2	2019
CS Software Delta System Requirements Review (SRR)	4	2018	4	2018
In Process Review (IPR) #2	2	2019	2	2019
Final System SPEC Approval	3	2019	3	2019
Program Technical Review	4	2019	4	2019
Production RFP Released	4	2019	4	2019
Land Based Testing	3	2019	4	2023
CS Software Delta System Functional Review (SFR)	2	2019	2	2019
CS Software Preliminary Design Review (PDR)	1	2020	1	2020
RFP Review and Downselect	4	2019	3	2020
Detail Design	1	2021	4	2023

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy				Date: February 2018	
Appropriation/Budget Activity 1319 / 4		R-1 Program Element (Number/Name) PE 0603599N / (U)Frigate Development		Project (Number/Name) 3086 / Frigate	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
CS Integration and Test		2	2021	4	2023
System Qualification Testing		2	2021	2	2021
CS Software Critical Design Review (CDR)		2	2021	2	2021