Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy	Date: March 2014
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604378N *I Nav Integrated Fire Control-Counter Air Sys Eng*

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	94.687	35.872	21.413	15.263	-	15.263	26.167	21.647	17.319	17.647	Continuing	Continuing
3159: *Naval Integrated Fire Control-Counter Air SE&I*	94.687	35.872	21.413	15.263	-	15.263	26.167	21.647	17.319	17.647	Continuing	Continuing

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

3159 Naval Integrated Fire Control - Counter Air (NIFC-CA) Systems Engineering Integration and Test (SEI&T) project is a systems engineering effort to extend the Naval Theater Air and Missile Defense battlespace out to the maximum kinematic range of our weapons. This includes targets beyond the detection range of the shooter, including Engage On Remote (EoR) and Over the Horizon (OTH) targets. The NIFC-CA project exploits capabilities inherent in existing systems, optimizes current and emerging technologies in component system upgrades, integrates them together, and performs kill chain tests, forming an interoperable System of Systems (SoS) to maximize future air defense capabilities. As directed by OPNAV, the project is focused on SEI&T efforts to integrate the From The Sea (FTS) kill chain consisting of the E-2D Advanced Hawkeye, Cooperative Engagement Capability (CEC), AEGIS, and SM-6 missile. This PE will support efforts including system definition and architecture development, performance prediction, performance assessment, system test and risk reduction efforts, system analysis, modeling and simulation, and capability demonstrations for the FTS kill chain. The project also facilitates the development of the concept of operations with the warfighter to maximize effectiveness when deployed with the Fleet.

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	39.974	21.413	21.414	-	21.414
Current President's Budget	35.872	21.413	15.263	-	15.263
Total Adjustments	-4.102	-	-6.151	-	-6.151
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.763	-			
• Program Adjustments	-	-	-6.151	-	-6.151
• Congressional General Reductions Adjustments	-3.339	-	-	-	-

Change Summary Explanation

FY13 Congressional General Reduction (Sequestration)

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy	Date: March 2014
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0604378N *I Nav Integrated Fire Control-Counter Air Sys Eng*

FY15 decrease in funding from the previous President's Budget submit is due to the Department's decision to reduce contracted services as well as to realign resources to match expected expenditures.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604378N / *Nav Integrated Fire Control-Counter Air Sys Eng*	Project (Number/Name) 3159 / *Naval Integrated Fire Control-Counter Air SE&I*	

COST ($ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
3159: *Naval Integrated Fire Control-Counter Air SE&I*	94.687	35.872	21.413	15.263	-	15.263	26.167	21.647	17.319	17.647	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

3159 Naval Integrated Fire Control - Counter Air (NIFC-CA) Systems Engineering Integration and Test (SEI&T) project is a systems engineering effort to extend the Naval Theater Air and Missile Defense battlespace out to the maximum kinematic range of our weapons. This includes targets beyond the detection range of the shooter, including Engage On Remote (EoR) and Over the Horizon (OTH) targets. The NIFC-CA project exploits capabilities inherent in existing systems, optimizes current and emerging technologies in component system upgrades, integrates them together, and performs kill chain tests, forming an interoperable System of Systems (SoS) to maximize future air defense capabilities. NIFC-CA consists of three kill chains called From the Air (FTA), From the Sea (FTS), and From the Land (FTL). As directed by OPNAV, the project is focused on SEI&T efforts to integrate the From The Sea (FTS) kill chain consisting of the E-2D Advanced Hawkeye, Cooperative Engagement Capability (CEC), AEGIS, and SM-6 missile. This PE will support efforts including system definition and architecture development, performance prediction, performance assessment, system test and risk reduction efforts, system analysis, modeling and simulation, and capability demonstrations for the FTS kill chain. The project also facilitates the development of the concept of operations with the warfighter to maximize effectiveness when deployed with the Fleet.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Integration and Test (I&T) Integrated Product Team	15.422	8.987	6.344
Articles:	-	-	-
Description: The Integration and Test (I&T) Integrated Product Team (IPT) develops and executes the test plan to assess the FTS operational capability, performs risk reduction testing leveraging various component system tests. Test data will be used over time to verify, validate, and accredit the FTS simulation federation.			
FY 2013 Accomplishments: Completed 38 successful over land simulated engagements (Trackex) and projects Over land FTS live-fire test at White Sands Missile Range (WMSR), NM. Completed 16 successful over sea simulated engagements (Trackex) and first ever at sea FTS live-fire demonstration at Pacific Missile Test Center (PMTC), Point Mugu, CA using CG-62 USS CHANCELLORSVILLE, tactical CEC and SM-6. Verified System of Systems performance using remote sensor data to meet NIFC-CA Objectives.			
FY 2014 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604378N / *Nav Integrated Fire Control-Counter Air Sys Eng*	**Project (Number/Name)** 3159 / *Naval Integrated Fire Control-Counter Air SE&I*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Continue execution of test program including 18 successful over land simulated engagements leading up to FTS live-fire test at WSMR planned in March. Plan execution of numerous at sea simulated engagements leading to 3 FTS live-fire test at PMTC planned in June on board DDG-53 JOHN PAUL JONES. ***FY 2015 Plans:*** Continue execution of test program, support post mission analysis, and provide input and analysis of tracking exercises (TrackEx) leading to 2 FTS live fire test (LFT) events to further define the battlespace. Continue employment of Fleet Training in order to deploy capability on the Theodore Roosevelt Carrier Strike Group (TR CSG) during 2Q FY 2015.			
Title: ENGINEERING MANAGMENT AND SYSTEM DEFINITION	20.450	12.426	8.919
Articles:	-	-	-
Description: Engineering management and system definition including the development of the Systems Performance Document (SPD), SoS functional allocations, requirements, traceability, SoS trades studies, SoS information exchange requirements, interface specifications, and sensor network capability analysis. Provides for complete FTS kill chain performance analysis and interface verification through development of a federation of simulations provided directly from the FTS Programs of Record. Federated SoS simulations support architecture development, scenario development, predictive analysis for testing, and define capabilities and limitations of FTS kill chain performance analysis and interface verification through development of a federation of simulations provided directly from the FTS Programs of Record. Federated SoS simulations support architecture development, scenario development, predictive analysis for testing, and define capabilities and limitations of FTS kill chain for deployment.			
FY 2013 Accomplishments: Continued integration of updated Pillar program models into the NIFC-CA Federation to support pre-mission and post-mission analysis for NIFC-CA test events for overland and over sea testing. Conducted verification and validation efforts. Provided feedback to Pillar programs on performance deltas following Trackex and live fire scenarios overland and sea. Continues to ensure that Measure of Effectiveness (MOEs) and Measure of Performance (MOPs) are validated in test plans and interface with Pillar programs to maintain and update interface and performance specifications. Updated and maintained NIFC-CA Risk Register.			
FY 2014 Plans: Continue integration of Pillar program models into the NIFC-CA Federation to support pre-mission and post-mission analysis for NIFC-CA test events for upcoming over land and over sea trackex and live fire events scheduled for March (overland) and June (over sea). Conduct verification and initial validation efforts. Continue to ensure that MOEs and MOPs are validated in test plans and interface withPillar programs to maintain and update interface and performance specifications. Update NIFC-CA Architecture. Update and maintain NIFC-CA Risk Register.			
FY 2015 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604378N / *Nav Integrated Fire Control-Counter Air Sys Eng*	**Project (Number/Name)** 3159 / *Naval Integrated Fire Control-Counter Air SE&I*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Continue integration of Pillar program models into the NIFC-CA Federation to support pre-mission and post-mission analysis for NIFC-CA test events for upcoming over land and over sea trackex and live fire events scheduled for March. Conduct verification and initial validation efforts. Continue to ensure that MOEs and MOPs are validated in test plans and interface withPillar programs to maintain and update interface and performance specifications. Update NIFC-CA Architecture. Update and maintain NIFC-CA Risk Register. Continue employment of Fleet Training in order to deploy capability on the TR-CSG during 2Q FY 2015.			
Accomplishments/Planned Programs Subtotals	35.872	21.413	15.263

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• 0603658N: *CEC*	2.313	-	-	-	-	-	-	-	-	Continuing	Continuing
• 0604366N: *Standard Missile SM-6*	7.072	5.775	2.821	-	2.821	2.685	1.746	1.779	1.853	Continuing	Continuing
• 0604307N: *AEGIS*	8.826	-	-	-	-	-	-	-	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

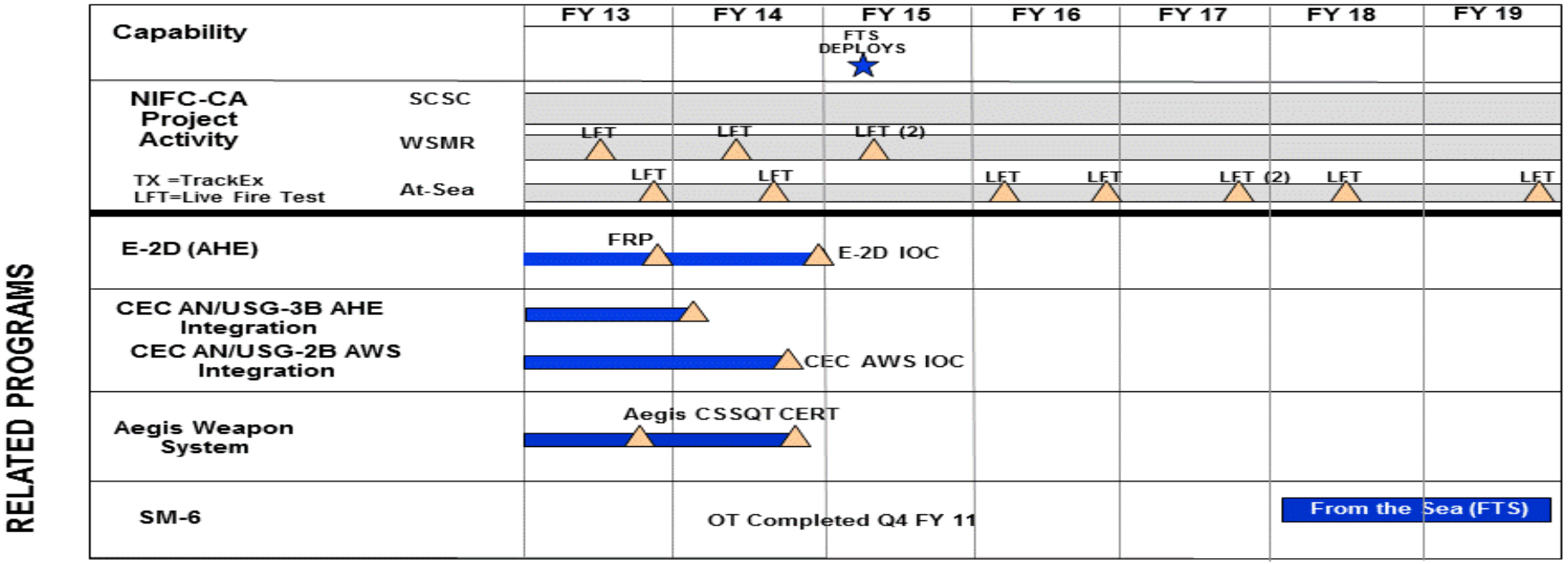
Not Applicable

E. Performance Metrics

Test Program and analysis conducted using the NIFC-CA Federation will provide data to verify NIFC-CA performance with respect to NIFC-CA MOEs, MOPs, and requirements being tracked as NIFC-CA related in the Pillar Programs. NIFC-CA Federation, once validated using test event data, will be used to update the expected performance of NIFC-CA, as required, and provide feedback to Pillar programs.

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604378N / *Nav Integrated Fire Control-Counter Air Sys Eng*	**Project (Number/Name)** 3159 / *Naval Integrated Fire Control-Counter Air SE&I*

NIFC-CA
Planning Schedule



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