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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy									Date: February 2015			
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 0604112N I (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80							
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	0.000	-	43.613	48.105	-	48.105	45.386	33.890	25.418	25.951	Continuing	Continuing
2208: CVN 21	0.000	-	35.392	35.613	-	35.613	35.386	33.890	25.418	25.951	Continuing	Continuing
4004: EMALS	0.000	-	8.221	12.492	-	12.492	10.000	-	-	-	-	30.713
Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 223												
A. Mission Description and Budget Item Justification This Navy program addresses unique technologies on Ford class carriers. The program includes: - (2208) - Development of ship hull, mechanical, propulsion, electrical, aviation, and combat support systems, subsystems and components to significantly improve aircraft carrier affordability, manpower requirements, survivability, and operational capabilities, and to meet the requirements of existing and pending regulations and statutes critical to the operation of existing and future aircraft carriers. - (4004) - Development of an advanced technology aircraft launch system in support of the CVN 78 Class design and construction schedule. The Electro Magnetic Aircraft Launch System (EMALS) will replace the current steam catapult on CVN 78 Class ships. EMALS provides better control of applied forces, both peak and transient dynamic, improved reliability and maintainability, increased operational availability and reduced operator and maintainer workload. This Program Element (PE) and associated projects represent a continuation of efforts previously funded under PE 0603512N projects 2208 and 4004 in FY 2014 and earlier.												

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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 0604112N I (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	-	43.613	38.373	-	38.373
Current President's Budget	-	43.613	48.105	-	48.105
Total Adjustments	-	-	9.732	-	9.732
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	10.000	-	10.000
• Rate/Misc Adjustments	-	-	-0.268	-	-0.268
Change Summary Explanation					
PRJ 4004 (EMALS) Cost/Funding: Added additional funds in FY 16 to support EMALS test site software integration, correction of deficiencies and resolve component obsolescence					

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0604112N / (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80				Project (Number/Name) 2208 / CVN 21			
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
2208: CVN 21	-	-	35.392	35.613	-	35.613	35.386	33.890	25.418	25.951	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 223												
A. Mission Description and Budget Item Justification <p>This project provides for the development of aircraft carrier specific technologies, the infusion of the ship technology base into existing and future aircraft carriers, and the potential realization of subsystem design capabilities not currently feasible. This project transitions the most promising technologies from the Navy technology base, other government laboratories, and the private sector into specific advanced development efforts. All systems developed in this project have the potential to support emerging requirements and other promising systems technologies for insertion into new aircraft carrier designs. The emphasis is directed toward developing ship hull, mechanical, propulsion, electrical, aviation, warfare systems, and combat support systems, sub-systems and components to significantly improve aircraft carrier affordability, manpower requirements, survivability, and operational capabilities and to meet the requirements of existing and pending regulations and statutes critical to the operation of future aircraft carriers. This project also encompasses those tasks required to support CVN 78 procurement, including, but not limited to engineering support, programmatic and program support, logistics support, modeling and simulation, test and evaluation, manpower and program related studies, and design support systems, such as the Integrated Digital Environment (IDE).</p>												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
Title: CVN 78 Class Advanced Technology Design & Development							-	18.166	10.141	-	10.141	
Articles:							-	-	-	-	-	
Description: CVN 78 Class Advanced Technology Design & Development: Continue development and transition of technologies to support CVN 78 Class Key Performance Parameters (KPPs): maintain sortie generation rate, reductions in manpower, and further recovery of weight and stability service life margins. Continue design activities to integrate the new technologies, such as the new propulsion plant and Electromagnetic Aircraft Launch System into the ship.												
FY 2014 Accomplishments: N/A												
FY 2015 Plans: Continue design, development and transition of key technologies to support CVN 21 (CVN 78 Class) KPPs which include												

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Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604112N I (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80	Project (Number/Name) 2208 I CVN 21				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
sortie generation rate, reductions in manpower, and further recovery of weight and stability service life margins. Continue design activities to integrate new technologies, such as the new propulsion plant and EMALS into the ship. Continue existing studies and commence new studies required for integrated warfare system and C4I design, integration, test, and validation efforts. Continue review Pre-Planned Product Improvement (P3I) technical data packages. Continue CVN 78 class engineering and technical support of aircraft launch and recovery systems. Continue shipbuilder system and cost engineering support to assess ship impacts from selected Engineering Change Requests (ECRs) and changes to the GFE / CFE equipment split. Assess ship impacts and implement changes to the Class design. FY 2016 Base Plans: Continue transition of key technologies to support CVN 21 (CVN 78 Class) KPPs. Continue design activities to integrate new technologies into the ship. Continue to assess ship impacts and implement changes to the Class design. Continue existing studies and commence new studies required for integrated warfare system and C4I design, integration, test, and validation efforts. Continue review of P3I technical data packages. Continue CVN 78 class engineering and technical support of aircraft launch and recovery systems. Continue shipbuilder system and cost engineering support to assess ship impacts from selected ECRs and changes to the GFE / CFE equipment split. Plan and execute the acceptance and transition of CVN 78 CFE systems to Navy In-Service and Life Cycle Management. Identify and implement cost reduction measures for the CVN 78 Class. FY 2016 OCO Plans: N/A						
Title: CVN 21 - Test & Evaluation (T&E) Articles:		- -	17.226 -	25.472 -	- -	25.472 -
FY 2014 Accomplishments: N/A FY 2015 Plans: Increase the frequency of the Post Delivery Test and Trials (PDT&T) workshops from semi-annually to tri-annually and continue updating / maintaining the notional PDT&T schedule. Continue the Developmental Test Working Group (DTWG) efforts, focusing on the collection / analysis of the DT metrics. Continue the CVN 78 Integrated Test Team (CITT) efforts to coordinate Integrated Testing (IT) to achieve synergies among DT&E, OT&E, and LFT&E as applicable to optimize CVN 78 test-related costs, schedules, and requirements validation; and to maximize the practical use of test results by all participating test communities. Complete DT/IT-3 and commence DT/IT-4, which includes: (1) completing Sortie Generation Rate Assessment (SGRA) 14; DBR land-						

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
<p>based testing using the production Multi-Function Radar; and DBR to TPX-42 land-based integration testing; (2) conducting Combat System Test (CST) Phase 2; TPX-42 shipboard testing; Operational Assessment Phase B4 (OT-B4); Advanced Weapons Elevator (AWE) Hazards of Electromagnetic Radiation to Ordnance (HERO) / Hazard of Electromagnetic Radiation to Personnel (HERP) / Electromagnetic Interference (EMI); and the Combat Systems Trial Rehearsal Review (CSTRR); and (3) continuing spiral development of the VCVN Model.</p> <p>FY 2016 Base Plans: Continue holding the tri-annual PDT&T workshops and updating / maintaining the notional PDT&T schedule. Continue the DTWG efforts, focusing on the collection / analysis of the DT metrics. Continue CITT efforts to coordinate Integrated Testing (IT) to achieve synergies among DT&E, OT&E, and LFT&E. Complete DT/IT-4, which includes: (1) completing SGRA 15 and; (2) conducting pre- and post-delivery DBR Shipboard Engineering Tests (SBETs); Combat Systems Shipboard Developmental Testing (SBDT); Special Performance Trials; Acoustic Trial; and Close-In Weapons System (CIWS) structural test firing; and (3) continuing spiral development of the VCVN Model.</p> <p>FY 2016 OCO Plans: N/A</p>					
Accomplishments/Planned Programs Subtotals	-	35.392	35.613	-	35.613

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016 Base</u>	<u>FY 2016 OCO</u>	<u>FY 2016 Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• RDTEN / 0604567N: Project Units 3108, 3179, 4007	15.217	18.867	27.648	-	27.648	30.051	30.295	27.645	25.840	Continuing	Continuing
• RDTEN / 0603512N: Project Units 2208, 4004	72.734	-	-	-	-	-	-	-	-	-	1,709.131
• SCN / 2001: Carrier Replacement Program	917.553	1,219.425	2,509.359	-	2,509.359	2,955.056	3,530.762	2,075.957	873.334	Continuing	Continuing
• SCN / 5300: Completion of Prior Year Shipbuilding Programs	588.100	663.000	123.760	-	123.760	-	-	-	-	-	1,374.860
• RDTEN / 0603570N: Propulsion Plant Development (PU 2692)	57.499	60.459	-	-	-	-	-	-	-	-	1,526.813
• OMN / 1B2B: CVN 78 Ford Class Training (12BJ0)	-	4.907	38.389	-	38.389	35.600	3.878	3.880	3.956	Continuing	Continuing

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C. Other Program Funding Summary (\$ in Millions)											
			FY 2016	FY 2016	FY 2016					Cost To	
Line Item	FY 2014	FY 2015	Base	OCO	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
Remarks											
D. Acquisition Strategy											
<p>The CVN 78 is the first ship of the CVN 78 Class of aircraft carriers designed to replace USS ENTERPRISE and the ships of the NIMITZ Class. The CVN 78 will feature a new nuclear propulsion and electrical generation/distribution system, EMALS, advanced arresting gear (AAG) system, all electric auxiliaries, warfare system improvements, survivability enhancements, improved weapons handling, and improved aircraft servicing. These design features will result in lower manpower and total ownership costs as compared to the NIMITZ Class. Additionally, the following war fighting benefits will be realized: increased sortie generation rate, improved ship self-defense capability, increased launch and recovery capability/flexibility, increased operational availability, and increased flexibility to support future upgrades.</p>											
E. Performance Metrics											
<p>Successfully complete development of TEMP 1610, Rev C and route for signature. Successfully complete all PEO C4I TIF testing. Successfully execute SGRA 12 and SGRA 13. Gain acceptance of the FSST Alternative Process as a technically-feasible and cost-effective alternative to the traditional FSST. Successfully complete the NAVAIR PIF testing and the Consolidated Afloat Networks and Enterprise Services (CANES) testing. Successfully conduct and support feasibility and tradeoff studies and data packages on new and modified shipboard systems, technologies and proposed modification. Data packages shall include information to support program decisions to integrate these efforts into the whole ship design efforts. Successfully conduct IDC shock testing and reporting in order to finalize IDC R&D efforts. Successfully complete Advanced Weapons Elevator Shock and Electromagnetic Interference (EMI) Test qualifications. Successfully complete Plasma Arc Waste Destruction System (PAWDS) Land-Based Test. Successfully create and deliver 21 Decision Memorandums (DM) for Bents/Bays 1-21.on the 03 Level (Gallery Deck) with Layer 31 information. Successfully develop the baseline Technical Data Packages for 39 systems and mature packages in preparation for final GFI arrival.</p>											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604112N / (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80				Project (Number/Name) 2208 / CVN 21					
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Advanced Design & Development	C/CPAF	HII : VA	0.000	-		5.208	Nov 2014	3.028	Nov 2015	-		3.028	Continuing	Continuing	Continuing
Advanced Design & Development	WR	NSWC CARDEROCK : MD	0.000	-		5.000	Oct 2014	1.400	Nov 2015	-		1.400	Continuing	Continuing	Continuing
Advanced Design & Development	C/CPFF	SAIC: : NM	0.000	-		0.101	Dec 2014	-		-		-	Continuing	Continuing	Continuing
Advanced Design & Development	WR	NAWCAD PATUXENT RIVER : MD	0.000	-		1.720	Oct 2014	1.500	Nov 2015	-		1.500	Continuing	Continuing	Continuing
Advanced Design & Development	WR	NSWC DAHLGREN : VA	0.000	-		1.622	Oct 2014	0.650	Nov 2015	-		0.650	Continuing	Continuing	Continuing
Advanced Design & Development	C/CPAF	RAYTHEON : VA	0.000	-		2.400	Dec 2014	1.500	Dec 2015	-		1.500	Continuing	Continuing	Continuing
Advanced Design & Development	C/CPFF	NAVSEA SEAPORT : DC	0.000	-		1.786	Dec 2014	1.750	Dec 2015	-		1.750	Continuing	Continuing	Continuing
Advanced Design & Development	Various	MISCELLANEOUS : VARIOUS	0.000	-		0.329	Nov 2014	0.313	Nov 2015	-		0.313	Continuing	Continuing	Continuing
Subtotal			0.000	-		18.166		10.141		-		10.141	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Development Test & Evaluation	C/CPAF	HII : VA	0.000	-		0.790	Nov 2014	2.797	Nov 2015	-		2.797	Continuing	Continuing	Continuing
Development Test & Evaluation	WR	NAWCAD PATUXENT RIVER : MD	0.000	-		3.530	Oct 2014	3.819	Nov 2015	-		3.819	Continuing	Continuing	Continuing
Development Test & Evaluation	WR	NSWC DAHLGREN : VA	0.000	-		1.506	Oct 2014	3.467	Nov 2015	-		3.467	Continuing	Continuing	Continuing
Development Test & Evaluation	WR	NSWC CARDEROCK : MD	0.000	-		4.000	Oct 2014	0.749	Nov 2015	-		0.749	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy												Date: February 2015			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
1319 / 4				PE 0604112N / (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80				2208 / CVN 21							
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Development Test & Evaluation	WR	SPAWAR : CA	0.000	-		1.500	Nov 2014	0.874	Nov 2015	-		0.874	Continuing	Continuing	Continuing
Development Test & Evaluation	C/CPAF	RAYTHEON : VA	0.000	-		0.374	Dec 2014	3.096	Dec 2015	-		3.096	Continuing	Continuing	Continuing
Development Test & Evaluation	WR	SSC ATLANTIC : SC	0.000	-		0.219	Nov 2014	0.229	Nov 2015	-		0.229	Continuing	Continuing	Continuing
Development Test & Evaluation	Various	MISCELLANEOUS : VARIOUS	0.000	-		1.310	Nov 2014	5.641	Dec 2015	-		5.641	Continuing	Continuing	Continuing
Development Test & Evaluation	C/CPFF	NAVSEA SEAPORT : DC	0.000	-		-		0.433	Dec 2015	-		0.433	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	COMOPTEVFOR : VA	0.000	-		3.997	Dec 2014	4.367	Dec 2015	-		4.367	Continuing	Continuing	Continuing
Subtotal			0.000	-		17.226		25.472		-		25.472	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		35.392		35.613		-		35.613	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity

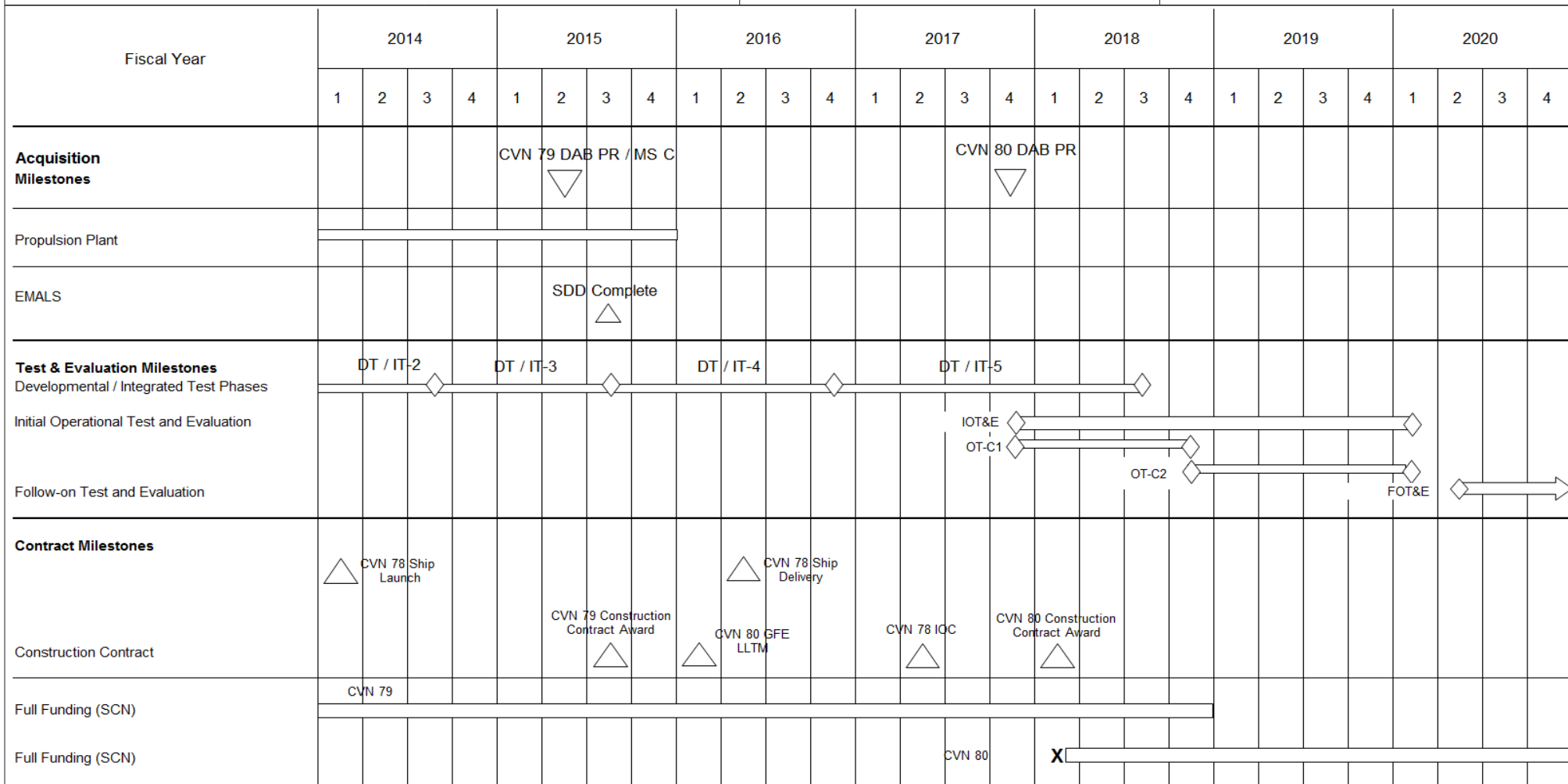
1319 / 4

R-1 Program Element (Number/Name)

PE 0604112N I (U)Gerald R Ford CI Nuc
Aircraft Carrier CVN 78-80

Project (Number/Name)

2208 I CVN 21



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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604112N / (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80	Project (Number/Name) 2208 / CVN 21	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2208				
CVN 79 DAB PR	2	2015	2	2015
CVN 80 DAB PR	4	2017	4	2017
Milestone C	2	2015	2	2015
Propulsion Plant	1	2014	4	2015
EMALS SDD Complete	3	2015	3	2015
DT/IT -2- Developmental Test / Integrated Test Phase 2	1	2014	3	2014
DT/IT -3- Developmental Test / Integrated Test Phase 3	3	2014	3	2015
DT/IT -4- Developmental Test / Integrated Test Phase 4	3	2015	4	2016
DT/IT -5- Developmental Test / Integrated Test Phase 5	4	2016	3	2018
Initial Operational Test & Evaluation	4	2017	1	2020
OT -C1 - Initial Operational Test & Evaluation - Phase C1	4	2017	4	2018
OT -C2 - Initial Operational Test & Evaluation - Phase C2	4	2018	1	2020
FOT&E - Follow-On Test & Evaluation	2	2020	4	2020
CVN 78 Ship Launch	1	2014	1	2014
CVN 78 Ship Delivery	2	2016	2	2016
CVN 78 Initial Operational Capability (IOC)	2	2017	2	2017
CVN 79 Construction Contract Award	3	2015	3	2015
CVN 80 GFE LLTM Contract Award	1	2016	1	2016
CVN 80 Construction Contract Award	1	2018	1	2018
CVN 79 SCN Full Funding	1	2014	4	2018
CVN 80 SCN Full Funding	1	2018	4	2020

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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
4004: EMALS	-	-	8.221	12.492	-	12.492	10.000	-	-	-	-	30.713
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 223												
A. Mission Description and Budget Item Justification												
This project provides for the development of an advanced technology aircraft launch system in support of the CVN 78 design and construction schedule, as well as Engineering and Life Cycle System (E&LCS) design. The Electromagnetic Aircraft Launch System (EMALS) will be the aircraft catapult for CVN 78 Class ships. EMALS provides better control of applied forces, both peak and transient dynamic, improved reliability and maintainability, increased operational availability, and reduced operator and maintainer workload.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)												
								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: EMALS								-	8.221	12.492	-	12.492
Articles:								-	-	-	-	-
Description: EMALS												
FY 2014 Accomplishments: N/A												
FY 2015 Plans: (1) EMALS SDD - Complete repeated deadload testing at the System Functional Demonstration (SFD) site to bring the EMALS system up to 4000 total deadload and aircraft launches as part of the reliability growth program. Complete planned component environmental qualification testing at various labs throughout the country. (2) EMALS Basic Ordering Agreement (BOA) ILS Order - Continue the execution of the EMALS ILS Development Program. Conduct annual logistics reviews, training in-process review (IPR) and Organizational and Intermediate (O & I) Technical Manual (TM) IPRs. Based on the development and availability of engineering source data for each of the six (6) EMALS subsystems and allocated resources, update Failure Mode Effectiveness and Criticality Analyses (FMECAs), the Logistics Management Information (LMI) database, Calibration/Measurements Requirements Summary / Instrument Calibration Procedures (CMRS/ICP), manpower analyses, O&I maintenance plans, provisioning documentation, Post Production Support Planning / Diminishing Manufacturing Sources & Material Shortages (PPSP/DMSMS) screening and analyses, and support equipment												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
<p>identification and technical data. Continue to develop training documents and the Navy Formal Training Course. Conduct Pre-Commissioning Unit Training. Complete the Maintenance Demonstration (M-Demo) at the System Functional Demonstration (SFD) facility. Complete the Shipboard Shipboard Facility Requirements Document (FRD) and the Training FRD.</p> <p>FY 2016 Base Plans: (1) EMALS BOA ILS Order - Continue the execution of the EMALS ILS Development Program. Conduct annual logistics reviews, training IPR and O & I level Interactive Electronic Technical Manual (IETM) final system level IPR. Deliver the final EMALS O & I level IETM. Procure and deliver remaining quantity of Portable Electronic Maintenance Aids (PEMAs) to the CVN 78 for IETM use. Complete the Reliability Centered Maintenance (RCM) process and the development of Maintenance Requirement Cards (MRCs) and Quality Assurance (QA) cards. (2) EMALS BOA Integrated Test & Evaluation (IT&E) Order - Maintain EMALS shore-based test site to support engineering investigations, software integration, deficiency resolution, component obsolescence, and cyber security vulnerability. Conduct EMALS land-based testing using deadloads and aircraft for the correction of deficiencies, critical reliability growth to achieve fleet operational requirements and to maintain test unit cycles above shipboard cycles. Conduct Environmental Qualification Testing (EQT) for Launch Control Subsystem (LCS) components deferred from SDD.</p> <p>FY 2016 OCO Plans: N/A</p>					
Accomplishments/Planned Programs Subtotals	-	8.221	12.492	-	12.492

C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• RDTEN / 0604567N: <i>Project Units 3108, 3179, 4007</i>	15.217	18.867	27.648	-	27.648	30.051	30.295	27.645	25.840	Continuing	Continuing
• RDTEN / 0603570N: <i>Propulsion Plant Development (PU 2692)</i>	57.499	60.459	-	-	-	-	-	-	-	-	1,526.813
• SCN / 2001: <i>Carrier Replacement Program</i>	917.553	1,219.425	2,509.359	-	2,509.359	2,955.056	3,530.762	2,075.957	873.334	Continuing	Continuing
• SCN / 5300: <i>Completion of Prior Year Shipbuilding Programs</i>	588.100	663.000	123.760	-	123.760	-	-	-	-	-	1,374.860

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C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OMN / 1B2B: CVN 78	-	4.907	38.389	-	38.389	35.600	3.878	3.880	3.956	Continuing	Continuing
<i>Ford Class Training (12BJ0)</i>											
• RDTEN / 0603512N:	72.734	-	-	-	-	-	-	-	-	-	1,709.131
<i>Project Units 2208, 4004</i>											
Remarks											
D. Acquisition Strategy											
<p>The CVN 78 is the first ship of the CVN 78 Class of aircraft carriers designed to replace USS ENTERPRISE and the ships of the NIMITZ Class. The CVN 78 will feature a new nuclear propulsion and electrical generation/distribution system, new electromagnetic aircraft launching system (EMALS), advanced arresting gear (AAG) system, all electric auxiliaries, warfare system improvements, survivability enhancements, improved weapons handling, and improved aircraft servicing. These design features will result in lower manpower and total ownership costs as compared to the NIMITZ Class. Additionally, the following war fighting benefits will be realized: increased sortie generation rate, improved ship self-defense capability, increased launch and recovery capability/flexibility, increased operational availability, and increased flexibility to support future upgrades.</p>											
E. Performance Metrics											
<p>Successfully complete Highly Accelerated Life Test (HALT) Phase II. Successfully complete System Functional Demonstration (SFD) testing. Successfully complete Environmental Qualification Testing (EQT). Successfully complete Shipset Controls Lab testing.</p>											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy													Date: February 2015		
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604112N / (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80						Project (Number/Name) 4004 / EMALS			

Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Aircraft Launch, Recovery & Support	C/CPAF	General Atomics (SDD) : CA	0.000	-		4.292	Nov 2014	-		-		-	-	4.292	-
Aircraft Launch, Recovery & Support	C/CPFF	General Atomics (ILS BOA) : CA	0.000	-		3.529	Nov 2014	2.492	Nov 2015	-		2.492	-	6.021	-
Aircraft Launch, Recovery & Support	C/CPFF	General Atomics (IT&E BOA) : CA	0.000	-		-		5.703	Nov 2015	-		5.703	-	5.703	-
Subtotal			0.000	-		7.821		8.195		-		8.195	-	16.016	-

Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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 Complete	Total Cost	Target Value of Contract
Aircraft Launch, Recovery & Support	WR	NAWC Lakehurst : NJ	0.000	-		0.400	Dec 2014	4.297	Nov 2015	-		4.297	-	4.697	-
Subtotal			0.000	-		0.400		4.297		-		4.297	-	4.697	-

			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	-		8.221		12.492		-		12.492	-	20.713	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity

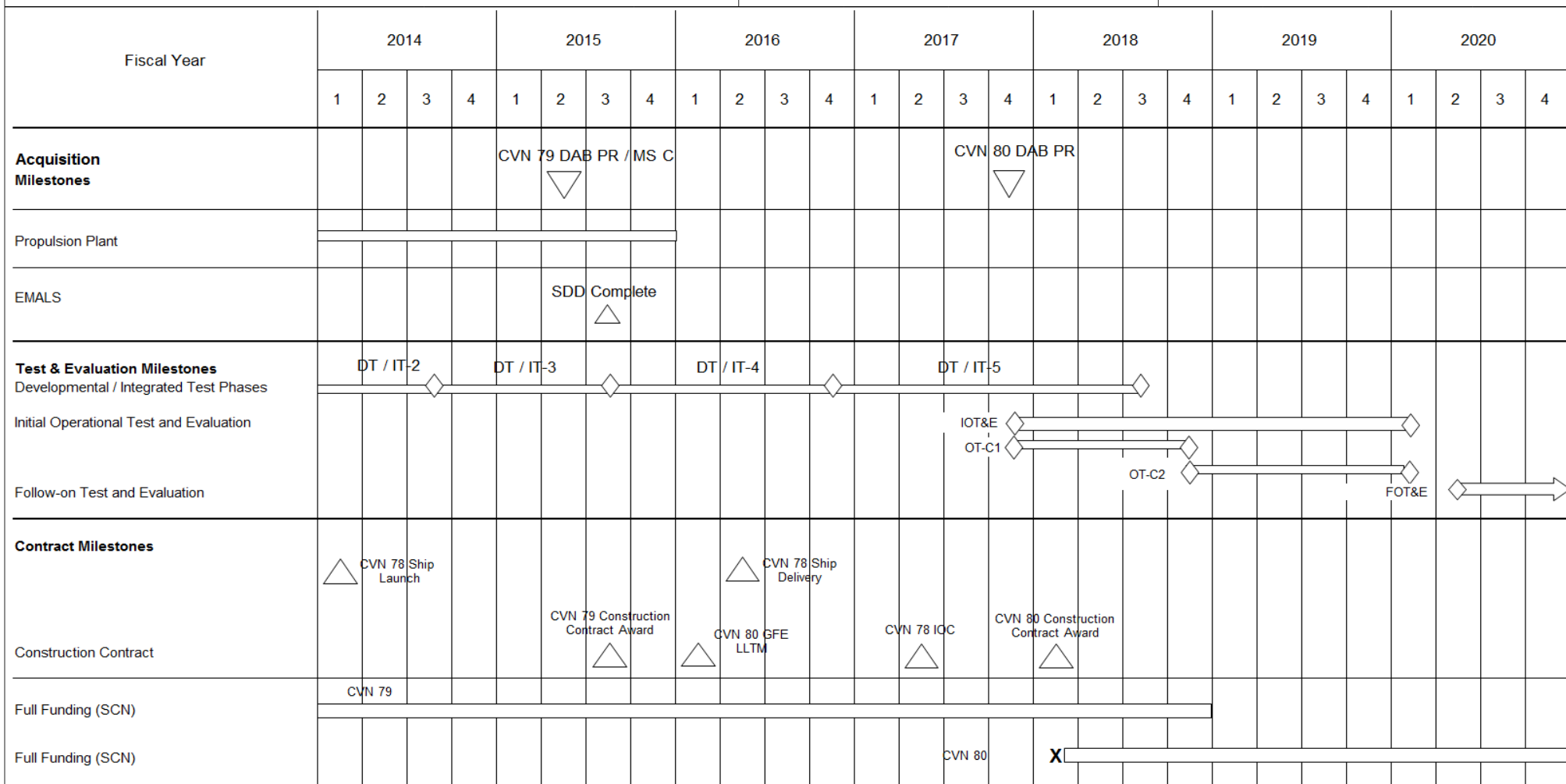
1319 / 4

R-1 Program Element (Number/Name)

PE 0604112N I (U)Gerald R Ford Cl Nuc
Aircraft Carrier CVN 78-80

Project (Number/Name)

4004 I EMALS



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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604112N / (U)Gerald R Ford CI Nuc Aircraft Carrier CVN 78-80	Project (Number/Name) 4004 / EMALS	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 4004				
CVN 79 DAB PR	2	2015	2	2015
CVN 80 DAB PR	4	2017	4	2017
Milestone C	2	2015	2	2015
Propulsion Plant	1	2014	4	2015
EMALS SDD Complete	3	2015	3	2015
DT/IT -2- Developmental Test / Integrated Test Phase 2	1	2014	3	2014
DT/IT -3- Developmental Test / Integrated Test Phase 3	3	2014	3	2015
DT/IT -4- Developmental Test / Integrated Test Phase 4	3	2015	4	2016
DT/IT -5- Developmental Test / Integrated Test Phase 5	4	2016	3	2018
Initial Operational Test & Evaluation	4	2017	1	2020
OT -C1 - Initial Operational Test & Evaluation - Phase C1	4	2017	4	2018
OT -C2 - Initial Operational Test & Evaluation - Phase C2	4	2018	1	2020
FOT&E - Follow-On Test & Evaluation	2	2020	4	2020
CVN 78 Ship Launch	1	2014	1	2014
CVN 78 Ship Delivery	2	2016	2	2016
CVN 78 Initial Operational Capability (IOC)	2	2017	2	2017
CVN 79 Construction Contract Award	3	2015	3	2015
CVN 80 GFE LLTM Contract Award	1	2016	1	2016
CVN 80 Construction Contract Award	1	2018	1	2018
CVN 79 SCN Full Funding	1	2014	4	2018
CVN 80 SCN Full Funding	1	2018	4	2020