Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604269N: *EA-18 Squadrons* 

DATE: February 2010

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	115.724	57.078	22.042	0.000	22.042	16.783	17.031	17.725	18.509	Continuing	Continuing
3063: EA-18G Development	114.527	55.485	22.042	0.000	22.042	16.783	17.031	17.725	18.509	Continuing	Continuing
9999: Congressional Adds	1.197	1.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.643

# A. Mission Description and Budget Item Justification

The EA-18G is replacing the EA-6B aircraft. The EA-18G's electronic attack upgrades the EA-6B Airborne Electronic Attack (AEA) capability to detect, identify, locate and suppress hostile emitters.

FY 2010 Estimate includes \$269K OEF Supplemental Budget Request for fuel pricing.

#### Congressional Add:

9A33A Next Generation Electronic Warfare Simulator. Provides Radio Frequency (RF) threat generation capabilities for the EA-18G Advanced Weapons Laboratory team to validate and verify the performance of mission critical Electronic Warfare systems.

# **B. Program Change Summary (\$ in Millions)**

	FY 2009	FY 2010	<b>FY 2011 Base</b>	FY 2011 OCO	FY 2011 Total
Previous President's Budget	128.689	55.446	0.000	0.000	0.000
Current President's Budget	115.724	57.078	22.042	0.000	22.042
Total Adjustments	-12.965	1.632	22.042	0.000	22.042
<ul> <li>Congressional General Reductions</li> </ul>		-0.237			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		1.600			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	-9.500	0.000			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-3.465	0.000			
<ul> <li>Program Adjustments</li> </ul>	0.000	0.000	22.042	0.000	22.042
Rate/Misc Adjustments	0.000	0.269	0.000	0.000	0.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

**DATE:** February 2010

EV 2000

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604269N: *EA-18 Squadrons* 

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 9999: Congressional Adds

Congressional Add: NEXT GENERATION ELECTRONIC WARFARE SIMULATOR

Congressional Add Subtotals for Project: 9999

Congressional Add Totals for all Projects

F 1 2010
1.593
1.593
1.593

EV 2010

**Change Summary Explanation** 

Technical: Not applicable.

Schedule: Not applicable.

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PE 0604269N: EA-18 Squadrons

3063: EA-18G Development

Bit o. Bevelopinent a Bemonstration	11 (000)										
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3063: EA-18G Development	114.527	55.485	22.042	0.000	22.042	16.783	17.031	17.725	18.509	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

#### A. Mission Description and Budget Item Justification

The EA-18G is replacing the EA-6B aircraft. The EA-18G electronic attack upgrades the EA-6B (ALQ-218, ALQ-99, USQ-113) Airborne Electronic Attack (AEA) capability to detect, identify, locate and suppress hostile emitters; provide enhanced connectivity to National, Theater and Strike assets; and provide organic precision emitter targeting for employment of onboard suppression weapon, High-speed Anti-Radiation Missile (HARM) family of weapons, to fulfill operational requirements. The performance of the aircraft is compatible with the primary strike/fighter aircraft projected to be in the inventory, allowing it to be fully integrated into specific strike packages. The EA-18G has the capability to operate autonomously or as a major node in a network-centric operation and is being designed to perform a range of Electronic Warfare/Electronic Attack functions either simultaneously or independently.

FY 2010 Estimate includes \$269K OEF Supplemental Budget Request for fuel pricing.

# B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
EA-18G Design and Avionics Integration	88.038	13.471	6.098	0.000	6.098
The EA-18G has the capability to operate autonomously or as a major node in a network-centric operation and is being designed to perform a range of Electronic Warfare/Electronic Attack functions either simultaneously or independently. Funding will be utilized for design and integration of avionics systems into the EA-18G.					
FY 2009 Accomplishments:  Continued Air Vehicle design and integration of avionics into the EA-18G.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604269N: *EA-18 Squadrons* 

3063: EA-18G Development

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Continue Air Vehicle design and integration of avionics into the EA-18G.					
FY 2011 Base Plans: Continue Air Vehicle design and integration of avionics into the EA-18G.					
EA-18G Software Development	9.202	30.929	9.514	0.000	9.514
Funding will be utilized to develop to software capabilities for the EA-18G.					
FY 2009 Accomplishments: Continued software development of the EA-18G.					
FY 2010 Plans: Continue software development of the EA-18G.					
FY 2011 Base Plans: Continue software development of the EA-18G.					
EA-18G Developmental & Operational Testing	17.287	11.085	6.430	0.000	6.430
Funding will be utilized to support required test phases of the EA-18G.					
FY 2009 Accomplishments: Continued and completed developmental testing associated with System Design & Development.					
FY 2010 Plans: Continue operational test planning. Complete Operational Evaluation (OPEVAL).					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

#### APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy PE 0

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604269N: *EA-18 Squadrons* 

**PROJECT** 

3063: EA-18G Development

#### B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue operational test planning.					
Accomplishments/Planned Programs Subtotals	114.527	55.485	22.042	0.000	22.042

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	<u>Base</u>	OCO	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	<b>Complete</b>	Total Cost
• APN/014300: <i>EA-18G</i>	1,613.698	1,627.367	1,083.882	0.000	1,083.882	2,355.947	91.030	48.961	8.480	0.000	9,291.151
• APN/05250: F-18 Series (OSIP	0.000	2.545	8.761	0.000	8.761	10.030	10.085	7.463	5.390	0.000	44.274
011-10)											

#### **D. Acquisition Strategy**

A sole source contract was awarded to Boeing (the platform manufacturer) for system design and development (SDD) under a Cost-Plus Incentive Fee/Award Fee (CPIF/AF) contract arrangement that provides incentives based on cost, schedule, and technical performance. Boeing has a subcontract with Northrop Grumman to incorporate Electronic Warfare/Electronic Attack systems into the Super Hornet. The contract has been structured to minimize the Navy's up-front investment and cancellation penalty, while reducing costs for the total program life cycle. In FY05, two F/A-18F's began modification with RDT&E funds to incorporate the Electronic Warfare/Electronic Attack systems for further development, integration, and testing. In FY06, an Engineering Change Proposal (using procurement funds) was incorporated into the SDD contract to procure the EA-18G unique airframe changes and Airborne Electronic Attack kits, respectively, for the 4 SDD aircraft. Also during FY06, groundwork for the eight (8) Low Rate Initial Production (LRIP) aircraft was initiated and a Request For Proposal (RFP) was released prior to the Milestone C authorization and awarded in the fourth quarter FY07. During FY08, a Request For Proposal (RFP) was generated and released prior to LRIP II Decision (DAB 30 April 08). OPEVAL started in September FY08 and was completed in May of FY09. FY09 will be the last year for the SDD contract. The FRP decision is scheduled for fourth quarter FY09. Contractual studies are underway for Operational Requirement Document core block II activities and those efforts will be integrated into the overall EA-18G plan/roadmap as resources permit.

#### **E. Performance Metrics**

Program achieved Full Rate Production (FRP) Decision in 4th Quarter FY2009 and FRP AEA Kit Award in 1st Quarter FY2010. Completion of FPR Delivery scheduled for 3rd Quarter FY2013.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604269N: *EA-18 Squadrons* 

3063: EA-18G Development

**Product Development (\$ in Millions)** 

				FY 2	2010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
GFE	WR	NSWC Det Crane, IN	2.072	0.008	Feb 2010	0.005	Feb 2011	0.000		0.005	0.020	2.105	Continuing
Primary Hdw Dev (ALQ-99)	WR	NSWC Det Crane, IN	25.014	0.000		0.000		0.000		0.000	0.000	25.014	Continuing
Primary Hdw Dev (Aircraft)	SS/CPAF	Boeing St. Louis, MO	949.873	4.245	Oct 2009	1.651	Oct 2010	0.000		1.651	0.000	955.769	955.769
Primary Hdw Dev (Aircraft)	Various/ Various	Various Various	3.059	0.056	Feb 2010	0.041	Feb 2011	0.000		0.041	0.156	3.312	Continuing
SDD Award Fee	SS/CPAF	Boeing St. Louis, MO	88.497	0.000		0.000		0.000		0.000	0.000	88.497	88.497
Systems Engineering	WR	NAWCAD Lakehurst, NJ	5.958	0.151	Nov 2009	0.109	Nov 2010	0.000		0.109	0.412	6.630	Continuing
Systems Engineering	WR	NAWCAD Pax River, MD	27.612	1.615	Nov 2009	1.169	Nov 2010	0.000		1.169	4.647	35.043	Continuing
Systems Engineering	WR	NAWCWD China Lake, CA	77.758	1.724	Nov 2009	1.248	Nov 2010	0.000		1.248	4.943	85.673	Continuing
Systems Engineering	WR	NAWCWD Pt. Mugu, CA	47.703	0.880	Nov 2009	0.637	Nov 2010	0.000		0.637	2.408	51.628	Continuing
Systems Engineering	WR	NSCW Det Crane, IN	13.291	0.418	Nov 2009	0.303	Nov 2010	0.000		0.303	1.144	15.156	Continuing
		Subtotal	1,240.837	9.097		5.163		0.000		5.163	13.730	1,268.827	1,044.266

#### **Remarks**

Primary Hardware development is based on current value of the SDD contract plus a projection of additional future planned requirements. To date, 100% of the award fee has been awarded.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604269N: *EA-18 Squadrons* 

3063: EA-18G Development

**Support (\$ in Millions)** 

			_										
				FY 2	2010	FY 2 Ba	2011 se	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Integrated Logistics Support	WR	Various Various	3.954	0.272	Nov 2009	0.650	Nov 2010	0.000		0.650	2.600	7.476	Continuing
Software Development	SS/CPFF	Boeing St. Louis, MO	190.437	30.864	Nov 2009	9.514	Nov 2010	0.000		9.514	25.132	255.947	255.947
		Subtotal	194.391	31.136		10.164		0.000		10.164	27.732	263.423	255.947

#### Remarks

Target values of contract includes current items on contract and projected additions.

Test and Evaluation (\$ in Millions)

Test and Evaluation	(			FY 2	2010	FY 2 Bas		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Eval	MIPR	NASA Ames Research CA	3.016	0.000		0.000		0.000		0.000	0.000	3.016	Continuing
Developmental Test & Eval	MIPR	Various Various	2.382	0.000		0.000		0.000		0.000	0.000	2.382	Continuing
Developmental Test & Eval	WR	NAWCAD Pax River, MD	108.983	2.622	Nov 2009	1.823	Nov 2010	0.000		1.823	7.997	121.425	Continuing
Developmental Test & Eval	WR	NAWCWD China Lake, CA	81.031	7.818	Nov 2009	2.324	Nov 2010	0.000		2.324	13.869	105.042	Continuing
Operational Test & Eval	WR	COTF	9.105	0.441	Nov 2009	0.283	Nov 2010	0.000		0.283	1.132	10.961	Continuing

# **UNCLASSIFIED**

R-1 Line Item #94 Page 7 of 13

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604269N: *EA-18 Squadrons* 

3063: EA-18G Development

**Test and Evaluation (\$ in Millions)** 

				FY 2	010	FY 2 Ba	-	FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Norfolk, VA											
		Subtotal	204.517	10.881		4.430		0.000		4.430	22.998	242.826	

#### **Remarks**

# **Management Services (\$ in Millions)**

				FY 2011 FY 2010 Base		FY 2 OC	 FY 2011 Total					
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost		Cost To Complete	Total Cost	Target Value of Contract				
Contractor Engineering Support	Various/ Various	Various Various	12.246	0.698	Nov 2009	0.428	Nov 2010	0.000	0.428	1.914	15.286	Continuing
Government Engineering Support	WR	NAWCAD Pax River, MD	29.058	1.235	Nov 2009	1.073	Nov 2010	0.000	1.073	4.491	35.857	Continuing
Government Engineering Support	WR	Various Various	1.191	0.000		0.000		0.000	0.000	0.000	1.191	Continuing
Program Management Support	WR	NAWCAD Pax River, MD	19.965	2.022	Nov 2009	0.632	Nov 2010	0.000	0.632	2.730	25.349	Continuing
Program Management Support	WR	CNAF Whidbey Island, WA	0.150	0.000		0.000		0.000	0.000	0.000	0.150	Continuing
Travel	WR	Various Various	1.871	0.416	Nov 2009	0.152	Nov 2010	0.000	0.152	0.666	3.105	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604269N: *EA-18 Squadrons* 

3063: EA-18G Development

**Management Services (\$ in Millions)** 

				FY 2	010	FY 2 Ba		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	64.481	4.371		2.285		0.000		2.285	9.801	80.938	

Remarks

	Total Prior		EV	2011	EV	2011	FY 2011	Cost To		Target Value of
	Years Cost	FY 2010		ase		CO	Total	Complete	Total Cost	Contract
Project Cost Totals	1,704.226	55.485	22.042		0.000		22.042	74.261	1,856.014	1,300.213

**Remarks** 

DATE: February 2010

**PROJECT** APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** PE 0604269N: *EA-18 Squadrons* 1319: Research, Development, Test & Evaluation, Navy 3063: EA-18G Development BA 5: Development & Demonstration (SDD) APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME 1319 RDT&E, N / BA-5 System Development & Demonstration 0604269N EA-18G 3063 EA-18G Development 2009 2010 2011 2012 2013 2014 2015 Fiscal Year 2 2 3 4 2 3 4 3 4 2 3 4 3 2 3 4 Acquisition Milestones SDD Full Rate Production Development Phases (IBS) Development & Demonstration Test & Evaluation Milestones IBS DT Development Test SDD OPEVAL Operational Test IBS Production FRP A/F Production Milestones Award FRP FY09 FRP AEA Kit Award LRIP II (18) Deliveries LRIP I Deliveries FRP (54) Deliveries Production Deliveries

#### **UNCLASSIFIED**

R-1 Line Item #94 Page 10 of 13

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604269N: *EA-18 Squadrons* 

**PROJECT** 

3063: EA-18G Development

# Schedule Details

	St	art	Eı	nd
Event	Quarter	Year	Quarter	Year
System Development & Demonstration Phase (SDD)	1	2009	3	2009
Operational Evaluation (OPEVAL)	1	2009	3	2009
Integrated Broadcast System (IBS) Receiver Development and Demonstration Phase	1	2009	4	2010
IBS Receiver Development Test	1	2009	4	2009
IBS Receiver Operational Testing	2	2010	2	2010
LRIP I Delivery	1	2009	4	2009
Initial Operational Capability (IOC)	4	2009	4	2009
LRIP II Delivery	1	2010	4	2010
Full Rate Production Airframe Award	2	2009	2	2009
Full Rate Production AEA Kit Award	1	2010	1	2010
FRP Decision	4	2009	4	2009
FRP	4	2009	3	2013
FRP Delivery	1	2011	3	2013

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0604269N: EA-18 Squadrons 9999: Congressional Adds

BA 5: Development & Demonstration (SDD)

Brt o. Bevelopment a Bemendiation (GBB)											
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: Congressional Adds	1.197	1.593	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.643
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

# A. Mission Description and Budget Item Justification

Congressional Add.

#### B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010
	1.197	1.593
Congressional Add: NEXT GENERATION ELECTRONIC WARFARE SIMULATOR		
FY 2009 Accomplishments: Provided Radio Frequency (RF) threat generation capabilities for the EA-18G Advanced Weapons Laboratory Team to validate and verify the performance of mission critical Electronic Warfare Systems.		
FY 2010 Plans: Provide Radio Frequency (RF) threat generation capabilities for the EA-18G Advanced Weapons Laboratory Team to validate and verify the performance of mission critical Electronic Warfare Systems.		
Congressional Adds Subtotals	1.197	1.593

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

N/A

# **D. Acquisition Strategy**

Not required for Congressional Adds.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy	<b>DATE:</b> February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604269N: EA-18 Squadrons	PROJECT 9999: Congressional Adds
E. Performance Metrics		
Not required for Congressional Adds.		