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 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0604269N *I EA-18 Squadrons*							
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	1,804.950	10.550	18.730	56.921	-	56.921	47.261	104.359	56.413	40.591	Continuing	Continuing
3063: *EA-18G Development*	1,804.950	10.550	18.730	56.921	-	56.921	47.261	104.359	56.413	40.591	Continuing	Continuing
Program MDAP/MAIS Code: 378												

A. Mission Description and Budget Item Justification

The EA-18G is replacing the EA-6B aircraft as the primary Electronic Attack platform supporting the Navy and Marine Corps, as the EA-6B is fully phased out the EA-18G will be the sole EA aircraft in the inventory. Capabilities of the EA-18G weapon system and ancillary equipment can be upgraded to accommodate and incorporate new or enhanced weapons as well as advances in technology to respond effectively to emerging future threats. E/A-18G "Flight Plan" spiral capability development is critical to the baseline of the EA-18G next generation mission system capability and maintaining tactical relevance in support of Navy Aviation Plan 2030. Development continues for design and integration of avionics systems, integration of Jamming Techniques Optimization improvements, evolutionary software upgrades via the System Configuration Set block builds and related testing. Continued advanced development engineering for improvements in reliability and maintainability are required to ensure maximum benefit is achieved through reduced cost of ownership and to provide enhanced availability.

The FY 2016 funding request was reduced by $389 thousand to account for the availability of prior year execution balances."

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	11.138	18.730	33.968	-	33.968
Current President's Budget	10.550	18.730	56.921	-	56.921
Total Adjustments	-0.588	-	22.953	-	22.953
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.500	-			
• SBIR/STTR Transfer	-0.088	-			
• Rate/Misc Adjustments	-	-	22.953	-	22.953

Change Summary Explanation

Technical: FY16 Improvements to the ALQ-218 complex emitter to significantly improve lowband geo-location, signal detection, and identification capabilities.

Schedule: Not applicable.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy											Date: February 2015	
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604269N / *EA-18 Squadrons*				Project (Number/Name) 3063 / *EA-18G Development*			
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**
3063: *EA-18G Development*	1,804.950	10.550	18.730	56.921	-	56.921	47.261	104.359	56.413	40.591	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The EA-18G is the replacement aircraft for the EA-6B. The EA-18G development program upgrades the EA-6B's Airborne Electronic Attack capability to detect, identify, locate and suppress hostile emitters; provides enhanced connectivity to National, Theater and Strike assets; and provides organic precision emitter targeting for employment of onboard suppression weapons (High-speed Anti-Radiation Missile family) 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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: EA-18G Design and Avionics Integration	0.450	0.450	15.164	-	15.164
Articles:	-	-	-	-	-
Description: 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 2014 Accomplishments:*** Continue Air Vehicle design and integration of avionics into the EA-18G. Main effort will be the continuing integration of improvements developed through the Jamming Techniques Optimization teams. Funded Jamming Techniques Optimization efforts have been significantly reduced from prior years to support the development of software related capabilities. ***FY 2015 Plans:*** Continue integration of improvements developed through the Jamming Techniques Optimization teams. ***FY 2016 Base Plans:*** Continue integration of improvements developed through the Jamming Techniques Optimization teams. Addtition of ALQ-218 complex emitter upgrade to improve low band geo-location, signal detection, and identification capabilities necessary for complex emitter geo-location and identification. ***FY 2016 OCO Plans:*** N/A					
Title: EA-18G Software Development	7.500	15.700	10.204	-	10.204

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Articles:	-	-	-	-	-
Description: Continued capability enhancements to improve the EA-18G Airborne Electronic Attack capabilities are predominantly realized through evolutionary software upgrades. Funding will be utilized to develop improved software capabilities for the EA-18G through System Configuration Set block software updates. ***FY 2014 Accomplishments:*** Funded software development efforts have been significantly increased to support the expanded development requirements of software related capabilities. FY14 funds will continue System Configuration Set block software development and integration for the EA-18G, specifically System Configuration Set builds 25X, 27X, H10 and H12. ***FY 2015 Plans:*** Continue System Configuration Set block software development and integration for the EA-18G, specifically System Configuration Set builds 25X, 27C, H10 and H12. ***FY 2016 Base Plans:*** Continue System Configuration Set block software development and integration for the EA-18G, specifically System Configuration Set builds 29C, 31C, H14 and H16. ***FY 2016 OCO Plans:*** N/A					
Title: EA-18G Developmental & Operational Testing	2.500	1.500	3.100	-	3.100
Articles:	-	-	-	-	-
Description: Funding will be utilized to support required test phases of the EA-18G. ***FY 2014 Accomplishments:*** Continued operational test of EA-18G avionics upgrades and System Configuration Set block software updates. ***FY 2015 Plans:*** Continue operational test of EA-18G avionics upgrades and System Configuration Set block software updates to include Flight Tests conducted in conjunction with various Fleet Exercises (i.e. FLEX-15). ***FY 2016 Base Plans:***					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue operational and integration test of EA-18G avionics upgrades and System Configuration Set block software updates to include Flight Tests conducted in conjunction with various Fleet Exercises (i.e. FLEX-1X). ***FY 2016 OCO Plans:*** N/A					
Title: EA-18G Flight Plan Engineering / System Configuration Set Development and Integration	-	1.000	28.353	-	28.353
Articles:	-	-	-	-	-
Description: EA-18G "Flight Plan" spiral capability development is critical to the baseline of the Growler next generation mission system capability. Funding will support the development, test and integration efforts required to maintain tactical relevance in support of Navy Aviation Plan 2030. ***FY 2014 Accomplishments:*** N/A ***FY 2015 Plans:*** Flight Plan Engineering efforts to include EA-18G improvements necessary for Growler relevance and tactical supremacy; Navy Integrated Fire Control-Counter Air system configuration set requirements to support Navy Integrated Air and Missile Defense capability requirements and enhance EA-18G Cooperative Engagement Capability. Funding supports development (hardware and software), test and integration efforts for Flight Plan requirements such as Distributed Targeting Processor-Networked to include Aided Target Recognition, Stationary Target Recognition, Maritime Multiple Target Track and Engagement, Multi-Level Security, Strike Accelerator and Advanced Tactical Data Link; Display Improvements for enhanced sensor integration; Tactical Targeting Network Technology internet protocol capability and Time Difference Of Arrival in support of Integrated Capability Package-3. ***FY 2016 Base Plans:*** Flight Plan Engineering efforts to include EA-18G improvements necessary for Growler relevance and tactical supremacy; Navy Integrated Fire Control-Counter Air system configuration set requirements to support Navy Integrated Air and Missile Defense capability requirements and enhance EA-18G Cooperative Engagement Capability. Funding supports development (hardware and software), test and integration efforts for Flight Plan requirements such as Distributed Targeting Processor-Networked to include Aided Target Recognition, Stationary Target Recognition, Maritime Multiple Target Track and Engagement, Multi-Level Security, Strike Accelerator and Advanced Tactical Data Link; Display Improvements for enhanced sensor integration; Tactical Targeting Network Technology internet protocol capability; Precision Approach and Landing Capability; Flight					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Path Control (Magic Carpet); Time Difference Of Arrival in support of Integrated Capability Package-3, and continued updates to Wingman Compatability improvements. ***FY 2016 OCO Plans:*** N/A					
Title: EA-18G Obsolescence Redesign	0.100	0.080	0.100	-	0.100
Articles:	-	-	-	-	-
Description: Develop and test design modifications to address obsolescence issues. ***FY 2014 Accomplishments:*** Develop and test design modifications to hardware components and software systems in response to EA-18G weapon system and ancillary equipment obsolescence issues. ***FY 2015 Plans:*** Develop and test design modifications to hardware components and software systems in response to EA-18G weapon system and ancillary equipment obsolescence issues. ***FY 2016 Base Plans:*** Develop and test design modifications to hardware components and software systems in response to EA-18G weapon system and ancillary equipment obsolescence issues. ***FY 2016 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	10.550	18.730	56.921	-	56.921

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
• APN/014300: *EA-18G*	1,839.918	1,503.547	-	-	-	-	-	-	-	-	15,373.657
• APN/05250: *F-18 Series (OSIP 011-10)*	22.816	22.843	10.871	-	10.871	13.805	39.017	146.341	87.708	208.613	569.862
• RDTEN/1662: *F/A-18 Improvement*	109.670	73.152	103.397	-	103.397	234.368	186.199	167.019	116.663	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

D. Acquisition Strategy

The program achieved Full Rate Production in November 2009. 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. EA-18G software upgrades are incrementally developed, integrated and fielded. Software development and integration are coordinated efforts between government activities and industry partners to field capability upgrades to the EA-18G fleet.

E. Performance Metrics

Completion of Full Rate Production Delivery of EA-18G aircraft scheduled for 1st Quarter FY2017.

Complete incorporation of EA-18G specific upgrades into the System Configuration Set block software builds to meet planned Fleet Release dates.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering (System Configuration Set / Software)	WR	NAWCAD : Pax River, MD	30.805	1.400	Aug 2014	1.500	Feb 2015	1.000	Nov 2015	-		1.000	Continuing	Continuing	Continuing
Systems Engineering (SCS/SW)	WR	NAWCWD : China Lake, CA	82.813	3.101	Nov 2013	4.814	Nov 2014	17.352	Nov 2015	-		17.352	Continuing	Continuing	Continuing
Systems Engineering (JATO/SCS/SW)	WR	NAWCWD : Pt. Mugu, CA	63.233	3.436	Nov 2013	8.012	Nov 2014	9.512	Nov 2015	-		9.512	Continuing	Continuing	Continuing
Systems Engineering (JATO/ALQ-218)	WR	Naval Research Laboratory : Washington, DC	2.522	0.200	Feb 2014	0.200	Feb 2015	0.200	Feb 2016	-		0.200	Continuing	Continuing	Continuing
Systems Engineering (JATO)	WR	NAVSEASYSCOM : Washington, DC	4.814	0.250	Feb 2014	0.250	Feb 2015	0.250	Feb 2016	-		0.250	Continuing	Continuing	Continuing
System Engineering (ALQ-218)	C/CPFF	Boeing : St. Louis	0.000	-		-		14.714	Dec 2015	-		14.714	-	14.714	14.714
Prior Year Prod Dev no longer funded in FYDP	Various	Various : Various	1,093.867	-		-		-		-		-	-	1,093.867	-
		Subtotal	1,278.054	8.387		14.776		43.028		-		43.028	-	-	-

Remarks

Addition of Systems Engineering for ALQ-218 improvement design and integration effort.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Obsolescence Redesign	TBD	TBD : TBD	0.000	0.100	Jun 2014	0.080	Jun 2015	0.100	Jun 2016	-		0.100	Continuing	Continuing	Continuing
Flight Plan Engineering/ SCS Development and Integration	Various	Various : Various	0.000	-		-		8.239	Dec 2015	-		8.239	-	8.239	-
Prior Year Support no longer funded in FYDP	Various	Various : Various	235.789	-		-		-		-		-	-	235.789	-
		Subtotal	235.789	0.100		0.080		8.339		-		8.339	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integration & Operational Testing	WR	Various : Various	112.025	0.700	Jul 2014	1.500	Jul 2015	2.000	Jul 2016	-		2.000	Continuing	Continuing	Continuing
AIM-9X Test Assets	C/CPFF	Raytheon : Tuscon, AZ	1.033	-		-		1.100	Nov 2015	-		1.100	-	2.133	2.133
Prior Year T&E no longer funded in FYDP	Various	Various : Various	106.400	-		-		-		-		-	-	106.400	-
		Subtotal	219.458	0.700		1.500		3.100		-		3.100	-	-	-

Remarks

Test Assets (AIM-120, AIM-9X) procured as live fire and E3/HERO test assets in support of EA-18G software development and weapons integration efforts specific to the EA-18G.

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support (Seaport-CSS)	C/CPFF	Wyle Lab : Pax River, MD	12.723	0.616	Nov 2013	0.616	Nov 2014	0.616	Nov 2015	-		0.616	1.073	15.644	15.644
Government Engineering Support	WR	NAWCAD : Pax River, MD	32.315	0.420	Nov 2013	0.425	Nov 2014	0.435	Nov 2015	-		0.435	Continuing	Continuing	Continuing
Program Management Support	WR	NAWCAD : Pax River, MD	22.665	0.277	Nov 2013	0.283	Nov 2014	0.283	Nov 2015	-		0.283	Continuing	Continuing	Continuing
Travel	WR	Various : Various	2.605	0.050	Nov 2013	0.050	Nov 2014	0.050	Nov 2015	-		0.050	Continuing	Continuing	Continuing
Flight Plan Engineering / System Configuration Set Development & Integration	WR	NAWCAD : Pax River, MD	0.000	-		0.700	Nov 2014	0.750	Nov 2015	-		0.750	Continuing	Continuing	Continuing
Flight Plan Engineering / System Configuration Set Development & Integration	WR	NAWCWD : China Lake, CA	0.000	-		0.300	Nov 2014	0.320	Nov 2015	-		0.320	Continuing	Continuing	Continuing
Prior Year Mgmt Svcs no longer funded in FYDP	Various	Various : Various	1.341	-		-		-		-		-	-	1.341	-
		Subtotal	71.649	1.363		2.374		2.454		-		2.454	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy			Date: February 2015
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604269N / *EA-18 Squadrons*	Project (Number/Name) 3063 / *EA-18G Development*	

	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	1,804.950	10.550		18.730		56.921		-		56.921	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

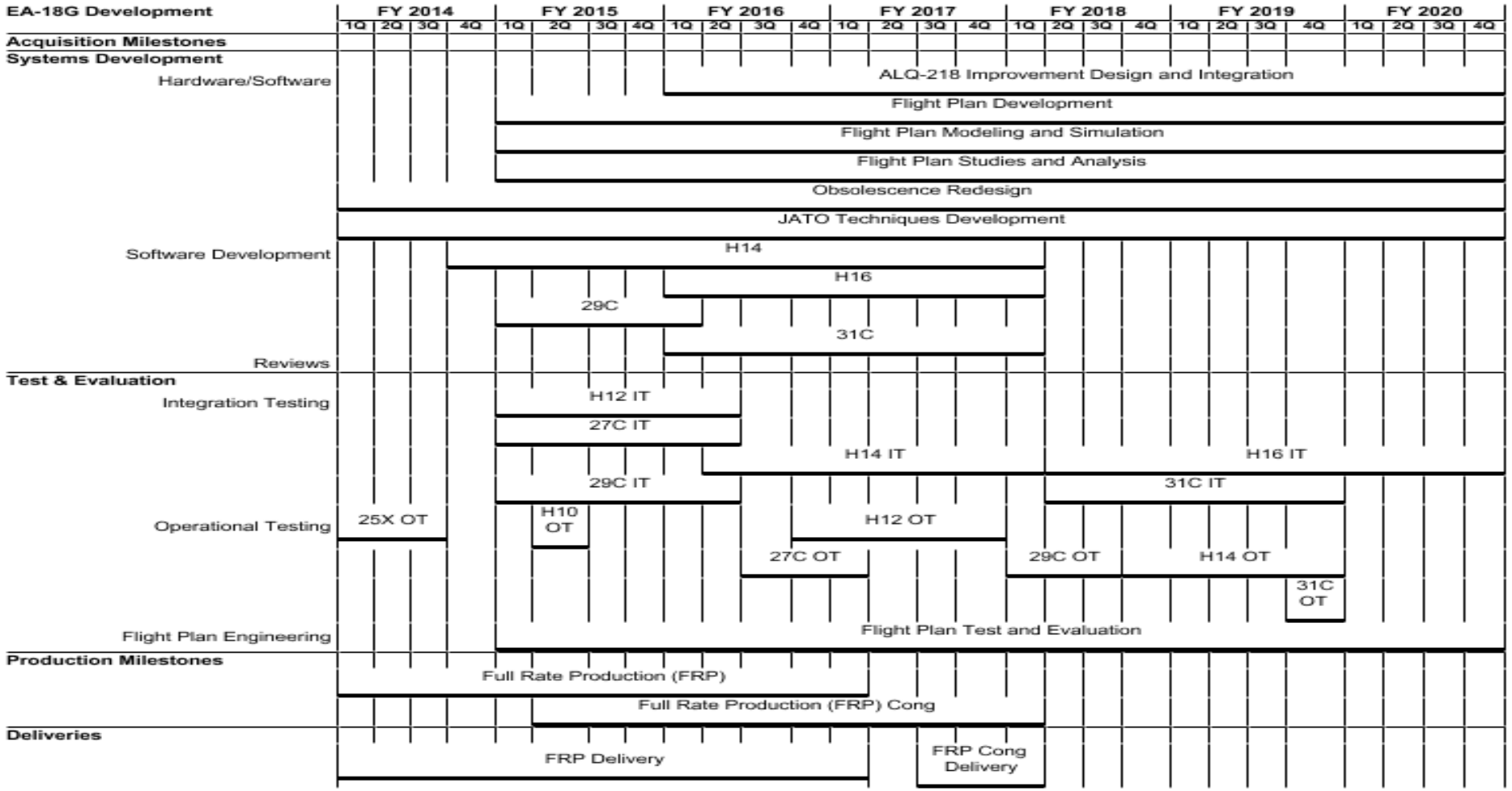
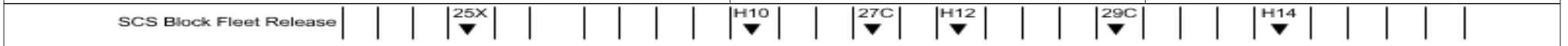


Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*



2016PB - 0604269N - 3063

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
EA-18G Development				
Systems Development: Hardware/Software: ALQ-218 Improvement Design and Integration	1	2016	4	2020
Systems Development: Hardware/Software: Flight Plan Development	1	2015	4	2020
Systems Development: Hardware/Software: Flight Plan Modeling and Simulation	1	2015	4	2020
Systems Development: Hardware/Software: Flight Plan Studies and Analysis	1	2015	4	2020
Systems Development: Hardware/Software: Obsolescence Redesign Development and Testing	1	2014	4	2020
Systems Development: Hardware/Software: JATO Techniques Development	1	2014	4	2020
Systems Development: Software Development: H14 Software Development	4	2014	1	2018
Systems Development: Software Development: H16 Software Development	1	2016	1	2018
Systems Development: Software Development: 29C Software Development	1	2015	1	2016
Systems Development: Software Development: 31C Software Development	1	2016	1	2018
Test & Evaluation: Integration Testing: H12 Integration Testing	1	2015	2	2016
Test & Evaluation: Integration Testing: 27C Integration Testing	1	2015	2	2016
Test & Evaluation: Integration Testing: H14 Integration Testing	2	2016	1	2018
Test & Evaluation: Integration Testing: H16 Integration Testing	2	2018	4	2020
Test & Evaluation: Integration Testing: 29C Integration Testing	1	2015	2	2016
Test & Evaluation: Integration Testing: 31C Integration Testing	2	2018	4	2019
Test & Evaluation: Operational Testing: H10 Operational Testing	2	2015	2	2015
Test & Evaluation: Operational Testing: H12 Operational Testing	4	2016	4	2017
Test & Evaluation: Operational Testing: 25X Operational Testing	1	2014	3	2014
Test & Evaluation: Operational Testing: 27C Operational Testing	3	2016	1	2017

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0604269N / *EA-18 Squadrons*	**Project (Number/Name)** 3063 / *EA-18G Development*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Test & Evaluation: Operational Testing: H14 Operational Testing	4	2018	4	2019
Test & Evaluation: Operational Testing: 29C Operational Testing	1	2018	3	2018
Test & Evaluation: Operational Testing: 31C Operational Testing	4	2019	4	2019
Test & Evaluation: Flight Plan Engineering: Developmental, Integration and Operational Testing	1	2015	4	2020
Production Milestones: Full Rate Production	1	2014	1	2017
Production Milestones: Full Rate Production - Congressional add	2	2015	1	2018
Deliveries: FRP Delivery	1	2014	1	2017
Deliveries: FRP Cong Delivery	3	2017	1	2018
Deliveries: SCS Block Fleet Release: H10 Fleet Release	3	2016	3	2016
Deliveries: SCS Block Fleet Release: H12 Fleet Release	4	2017	4	2017
Deliveries: SCS Block Fleet Release: 25X Fleet Release	4	2014	4	2014
Deliveries: SCS Block Fleet Release: 27C Fleet Release	2	2017	2	2017
Deliveries: SCS Block Fleet Release: 29C Fleet Release	4	2018	4	2018
Deliveries: SCS Block Fleet Release: H14 Fleet Release	4	2019	4	2019