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**Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	350.659	36.361	71.016	56.285	-	56.285	36.569	33.277	0.305	0.322	0.000	584.794
0457: <i>AIM-9X</i>	350.659	36.361	71.016	56.285	-	56.285	36.569	33.277	0.305	0.322	0.000	584.794

**Program MDAP/MAIS Code:**  
**Project MDAP/MAIS Code(s):** 442

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

The AIM-9X (Sidewinder) short-range air-to-air missile is a long term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile (AMRAAM). Air superiority in the short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M (fuze, rocket motor and warhead). Anti-Tamper features have been incorporated to protect improvements inherent in this design. AIM-9X is a Post Milestone C, Acquisition Category IC joint service program with Navy lead.

The Block II program has completed Independent Operational Testing and found to be Operationally Effective and Suitable. The program achieved USN Initial Operational Capability in March 2015 and received Full Rate Production decision in August 2015. The first Full Rate Production Lot contract was awarded in September 2015. This budget line will continue technical refresh of critical obsolete components, implement cost reduction initiatives, improve insensitive munitions performance, correct deficiencies, and increase capabilities through software enhancements, and conduct testing to ensure platform integration onto threshold US Navy aircraft.

This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate funding in the current or subsequent fiscal year.

<b>B. Program Change Summary (\$ in Millions)</b>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017 Base</u>	<u>FY 2017 OCO</u>	<u>FY 2017 Total</u>
Previous President's Budget	37.258	76.016	60.772	-	60.772
Current President's Budget	36.361	71.016	56.285	-	56.285
Total Adjustments	-0.897	-5.000	-4.487	-	-4.487
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-5.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.897	0.000			
• Rate/Misc Adjustments	0.000	0.000	-4.487	-	-4.487

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<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy / BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	
<b>Change Summary Explanation</b> Decrease in Tactical Aim Missiles by \$2.341M as required for the Department of the Navy to comply with the Bipartisan Budget Act of 2015.  Schedule: 1. AIM-9X Block II schedule has been updated to match the format presented in congressional staffer briefs. 2. The System Improvement Program II contract has been extended 9 months to complete software deficiency identified during AIM-9X Block II Operational Test (OT-C1). 3. The System Improvement Program III contract has been extended as a result of extended AIM-9X Block II Operational Test (OT-C1), and allows completion of the hardware redesigns and software rehosting onto tech refresh replacement hardware. 4. Missile software version 9.4 Development Testing (DT-D1) extension to 4th QTR 2017 reflect schedule change as a result of AIM-9X Block II Operational Testing (OT-C1) schedule adjustments for missile software version 9.3. 5. Missile software version 9.4 Integration Testing (IT-D1) start date has been moved to the end of DT-D1 to verify technical requirements and performance thresholds of the performance specification and statement of functionality (SOF) and to verify the AIM-9X Block II missile system is ready for Follow-On Operational Test and Evaluation (FOT&E, OT-D1). 6. Operation Testing OT-D1 start date has been moved to the end of IT-D1 to share results with DT and minimize program cost. 7. OT-D1 end date has moved in to reflect anticipated release of version 9.4 software to the fleet. 8. Missile software version 10.4 Development Testing (DT-D2) delay to 1st QTR FY2019 reflects schedule change as a result of AIM-9X Block II Operational Testing (OT-C1) and OT-D1, to allow completion of software rehost development onto Lot 19 hardware.  Cost: FY17 funding decrease reflects completion of threshold platform software integration requirements with the AIM-9X Block II program. Completion of one-time USN test hardware materials buy in FY16 for the AIM-9X BLK II SIP III program.  Technical: The program strategy is to first redesign the control actuation system (CAS) battery, along with the AIM-9X Block II Plus, and incorporate it into the Lot 17 (FY 2017) production missile. Next, the program will complete AIM-9X Block II software improvements (software version 9.4) and release it into Lot 18 (FY 2018) and prior missiles. The software will provide improved infrared counter-countermeasures, correct partial degraded cueing, improved lock on after launch capability, improve small target acquisition, and provide surface attack capability. Finally, the program will redesign the inertial measurement unit, the dome, and the guidance unit processor and incorporate these hardware changes into the Lot 19 (FY 2019) production missile. This last item will include a software re-host onto the weapon system (software version 10.4) to ensure new components do not degrade overall system performance. The guidance unit processor is the critical component to ensure continued production of the missile system and avoid production line gaps after Lot 18.		

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / AIM-9X
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
0457: AIM-9X	350.659	36.361	71.016	56.285	-	56.285	36.569	33.277	0.305	0.322	0.000	584.794
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**Project MDAP/MAIS Code:** 442

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

AIM-9X is a long-term evolution of the AIM-9, a fielded system, qualifying this as a research category operational systems development. The AIM-9X short range Air-to-Air missile modification program provides a launch and leave, air combat munition that uses passive Infra-Red (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile. Air superiority in the short range Air-to-Air Missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M (fuze, rocket motor and warhead). The AIM-9X Block II missile is critical to project power and win decisively in accordance with the Fiscal Year 2015 Defense Planning Guidance and CNO's Navigation Plan 2015-2019. The missile is essential to Pacific Command plans to counter threats employed by advanced Digital Radio Frequency Memory (DRFM) electronic attack, cruise missiles, and Unmanned Aerial Vehicles.

This line item completes the operational testing of the AIM-9X Block II for Full Rate Production decision, as well as continues Technical Refresh of components and software to meet threshold requirements of the capabilities production document. Specifically, the program will redesign, develop and integrate obsolete components, implement cost reduction initiatives, enhance insensitive munitions performance and incrementally improve operational flight software to fully utilize capabilities of the missile.

The program strategy is to first redesign the control actuation system (CAS) battery, along with the AIM-9X Block II Plus, and incorporate it into the Lot 17 (FY 2017) production missile. Next, the program will complete AIM-9X Block II software improvements (software version 9.4) and release it into Lot 18 (FY 2018) and prior missiles. The software will provide improved infrared counter-countermeasures, correct partial degraded cueing, improved lock on after launch capability, improve small target acquisition, and provide surface attack capability. Finally, the program will redesign the inertial measurement unit, the dome, and the guidance unit processor and incorporate these hardware changes into the Lot 19 (FY 2019) production missile. This last item will include a software re-host onto the weapon system (software version 10.4) to ensure new components do not degrade overall system performance. The guidance unit processor is the critical component to ensure continued production of the missile system and avoid production line gaps after Lot 18.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<b>Title:</b> Product Development	34.233	64.791	50.683	0.000	50.683
<b>Articles:</b>	-	-	-	-	-
<b>Description:</b> Continuation of Primary Hardware Development/Pre-Planned Product Improvement (Tech Refresh) efforts for the AIM-9X weapon system. This includes Systems Engineering / Program management, as well as support required, to ensure AIM-9X missile integration with threshold US Navy aircraft platforms.					

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<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / AIM-9X
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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

This also includes efforts to redesign missile components in order to resolve Block II component obsolescence to ensure missile producibility beyond LOT 19, implement cost reduction initiatives, and to comply with the Insensitive Munitions (IM) requirements as established by Joint Requirements Oversight Council memo dated 11 February 2009.

***FY 2015 Accomplishments:***

Implement Engineering Manufacturing Development required to redesign, integrate, test and qualify components due to obsolescence and implement cost reduction initiatives. Specific component improvements include the dome, the Inertial Measurement Unit, the processor, the control actuation system and battery, and associated operational flight software updates. In addition this line funds improvements to enhance insensitive munitions (IM) compliance. Specific components include the warhead and missile container.

***FY 2016 Plans:***

Continue Engineering Manufacturing Development required to redesign, integrate, test and qualify components due to obsolescence and implement cost reduction initiatives. Continue to develop v9.4 Block II software improvements to utilize full capability of the missile. Continue to develop missile hardware design improvements necessary to enhance IM performance.

***FY 2017 Base Plans:***

Continue Engineering Manufacturing Development required to redesign, integrate, test and qualify components due to obsolescence and implement cost reduction initiatives. Continue to develop v9.4 Block II software improvements to utilize full capability of the missile. Continue to develop missile hardware design improvements necessary to enhance IM performance.

***FY 2017 OCO Plans:***

N/A

***Title:*** Test and Evaluation

***Articles:***

***Description:*** Test and Evaluation (T&E) and associated governmental support required to ensure the AIM-9X missile integration with threshold US Navy aircraft platforms (F/A-18A+/C/D/E/F). Beginning in FY 2016 the program will join in with the US Air Force efforts in testing the next tech refresh version of software improvements to the missile, Operation Flight Software version 9.4.

***FY 2015 Accomplishments:***

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
<p align="right"><b><i>Articles:</i></b></p>	1.872	6.000	5.383	0.000	5.383
	-	-	-	-	-

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Navy **Date:** February 2016

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**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Complete OT and await final Initial Operational Test & Evaluation (OT-C1) and Beyond LRIP reports. Continue to develop and finalize T&E requirements for Block II program CPD.  <b>FY 2016 Plans:</b> Begin Developmental Testing (DT-D1) and Integrated Testing (DT/IT-D1) of Operational Flight Software version 9.4 including improvements associated with integrating the F/A-18 aircraft to utilize full capability of the Block II missile.  <b>FY 2017 Base Plans:</b> Complete Developmental Testing and Integrated Testing (DT/IT-D1) of Operational Flight Software version 9.4 including improvements associated with further integrating the F/A-18 aircraft to utilize full capability of the Block II missile.  <b>FY 2017 OCO Plans:</b> N/A					
<b>Title:</b> Management Services  <b>Description:</b> Transportation / Travel for AIM-9X effort.  <b>FY 2015 Accomplishments:</b> Continue funding transportation and travel costs associated with supporting the AIM-9X missile program.  <b>FY 2016 Plans:</b> Continue funding transportation and travel costs associated with supporting the AIM-9X missile program.  <b>FY 2017 Base Plans:</b> Continue funding transportation and travel costs associated with supporting the AIM-9X missile program.  <b>FY 2017 OCO Plans:</b> N/A	0.256	0.225	0.219	0.000	0.219
<b>Articles:</b>	-	-	-	-	-
<b>Accomplishments/Planned Programs Subtotals</b>	36.361	71.016	56.285	0.000	56.285

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

Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• WPN 2209: <i>Sidewinder</i>	68.178	92.497	70.912	-	70.912	79.542	78.837	82.048	89.589	801.020	2,001.252

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Navy	<b>Date:</b> February 2016
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<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / <i>AIM-9X</i>
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**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• MPAF 3479: <i>Sidewinder</i>	129.121	198.247	127.438	-	127.438	114.200	122.340	125.299	118.454	537.349	2,287.096
• RDTE, AF 41: <i>Sidewinder</i>	28.820	43.360	52.898	-	52.898	44.751	14.801	13.361	13.597	0.000	512.461

**Remarks**

**D. Acquisition Strategy**

Milestone C decision for LRIP was held June 24, 2011. The program received USN Initial Operational Capability (IOC) in March 2015 and Full Rate Production (FRP) Approval in August 2015 followed by contract award for FRP-1 in September 2015. The program will modify the production contract in June 2016 to award option year 1 for FRP-2 and add option year 2 for FRP-3. Option year 3 will be awarded in February 2017.

**E. Performance Metrics**

AIM-9X Block II:

1. Completed AIM-9X Block II Initial Operational Testing and Evaluation and Beyond LRIP reports(2Q FY15).
2. Complete AIM-9X Block II USN Initial Operational Capability (2Q FY15) and Full Rate Production Decision (4Q FY15).

AIM-9X Block II Tech Refresh:

1. Complete Lot 17 Cut In Engineering Change Proposal to incorporate redesigned control actuation system battery and Block II plus into production (1Q FY17).
2. Complete Development Testing for software v9.4 improvements (4Q FY17).

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / <i>AIM-9X</i>
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<b>Product Development (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Primary Hardware & Software Development	SS/CPFF	Raytheon Missile Systems : Tucson, AZ	20.632	22.721	Nov 2015	53.461	Mar 2016	45.179	Mar 2017	-		45.179	49.603	191.596	197.222
Aircraft Integration - Contract	C/CPFF	The Boeing Company : St. Louis, MO	9.339	0.000	Dec 2015	2.720	Feb 2016	1.677	Feb 2017	-		1.677	0.432	14.168	15.731
Aircraft Integration - USG	WR	NAWCWD : China Lake, CA	8.553	11.257	Nov 2014	3.719	Jan 2016	0.112	Dec 2016	-		0.112	0.000	23.641	-
USG Systems Engineering & Project Management Support	WR	NAWC AD : Patuxent River, MD	0.000	0.255	Dec 2014	2.206	Dec 2015	0.700	Dec 2016	-		0.700	0.700	3.861	-
USG Systems Engineering & Project Management Support	WR	NAWCWD : China Lake, CA	0.000	0.000		2.485	Jan 2016	3.015	Dec 2016	-		3.015	10.493	15.993	-
Prior Year Prod Dev cost no longer funded in the FYDP	Various	Various : Various	250.910	0.000		0.000		0.000		-		0.000	0.000	250.910	-
<b>Subtotal</b>			289.434	34.233		64.591		50.683		-		50.683	61.228	500.169	-

- Remarks**
- Total prior years - FY95 and prior under PE 0603715D.
  - The Primary Hardware & Software decrease from FY16 to FY17 reflects completion of one-time USN test hardware materials buy in FY16 for the AIM-9X BLK II SIP III program.
  - The decrease in Aircraft integration between FY16 to FY17 reflects completion of threshold platform software integration requirements with the AIM-9X Block II program.
  - The decrease in USG Systems Engineering & Project Management from FY16 to FY17 reflects a one time USN government lab test support requirement to ensure tech refresh improvements are incorporated into the final hardware and software design.
  - Insensitive Munitions Risk Reductions activities have been realigned from primary hardware line to USG Systems Engineering China Lake.

<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Prior Year Support Costs no longer funded in the FYDP	Various	Various : Various	0.949	0.000		0.000		0.000		-		0.000	0.000	0.949	0.949

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / <i>AIM-9X</i>
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<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			0.949	0.000		0.000		0.000		-		0.000	0.000	0.949	0.949

<b>Test and Evaluation (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Oper Test & Eval	WR	COMOPTEVFOR : Norfolk, VA	8.745	0.439	Jun 2015	0.440	Mar 2016	0.413	Mar 2017	-		0.413	4.680	14.717	-
Development Testing	WR	NAWCWD : China Lake, CA	0.000	1.433	Nov 2014	5.760	Jan 2016	4.970	Dec 2016	-		4.970	4.087	16.250	-
Prior year T&E cost no longer funded in the FYDP	Various	Various : Various	40.382	0.000		0.000		0.000		-		0.000	0.000	40.382	-
<b>Subtotal</b>			49.127	1.872		6.200		5.383		-		5.383	8.767	71.349	-

**Remarks**  
 Decrease in Development Testing from FY16 to FY17 reflects completion of DT-D1 efforts at NAWCWD China Lake to evaluate tech refresh improvements to missile hardware and software in accordance with the test and evaluation master plan (TEMP)revision e.

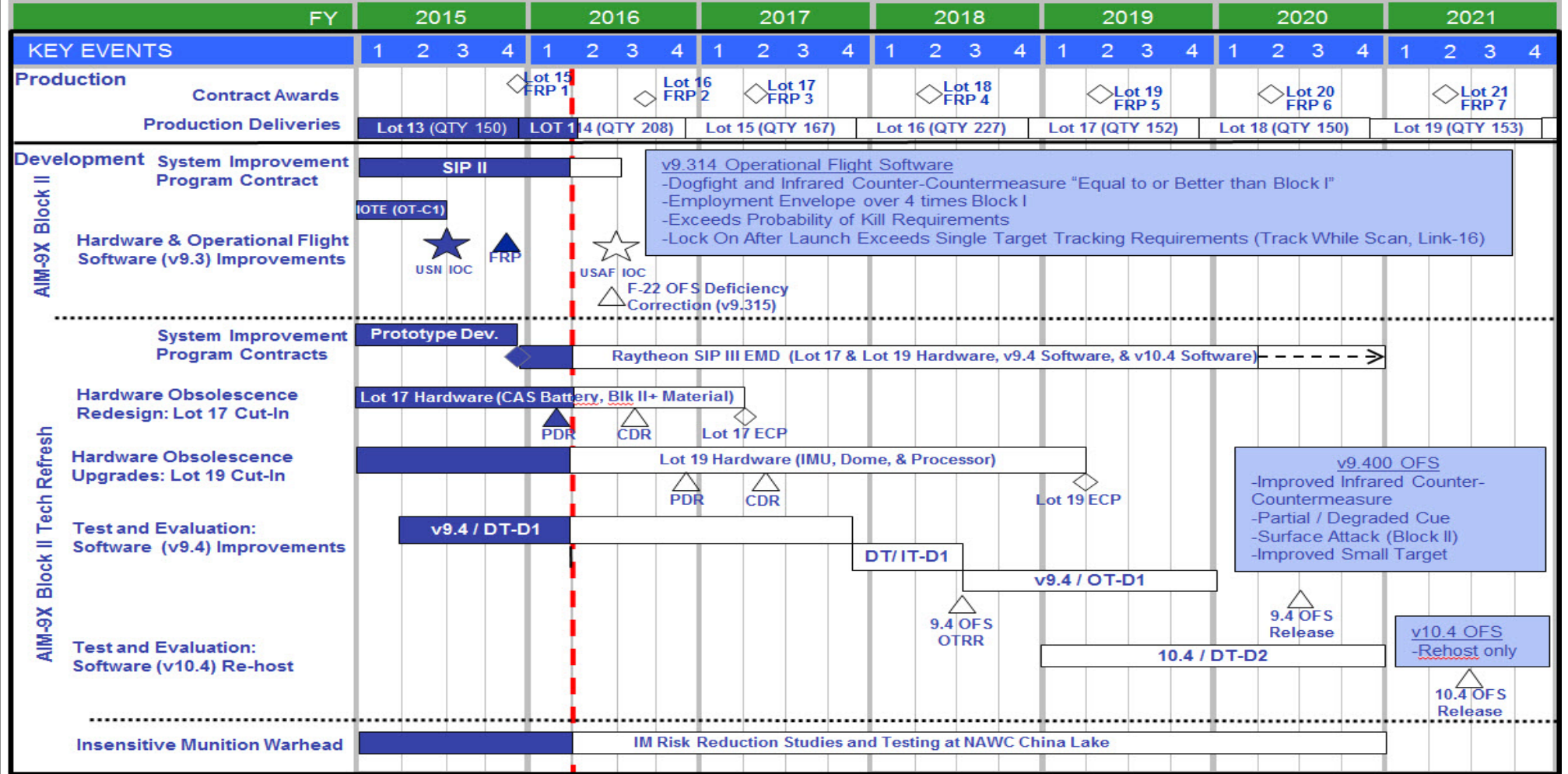
<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Transportation - Material	WR	NAVAIR : Patuxent River, MD	0.327	0.075	Oct 2014	0.075	Oct 2015	0.075	Oct 2016	-		0.075	0.150	0.702	-
Travel - Obligation throughout the year	WR	NAWCAD : Patuxent River, MD	2.789	0.181	Oct 2014	0.150	Oct 2015	0.144	Oct 2016	-		0.144	0.328	3.592	-
Prior Year Mgmt cost no longer funded in the FYDP	Various	Various : Various	8.033	0.000		0.000		0.000		-		0.000	0.000	8.033	-
<b>Subtotal</b>			11.149	0.256		0.225		0.219		-		0.219	0.478	12.327	-



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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Navy Date: February 2016

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / AIM-9X
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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / AIM-9X
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>TACTICAL AIM MISSILES</b>				
Production Milestones - Block II: Contract Awards: Lot 15 (FRP 1): QTY 167	4	2015	4	2015
Production Milestones - Block II: Contract Awards: Lot 16 (FRP 2): QTY 227	3	2016	3	2016
Production Milestones - Block II: Contract Awards: Lot 17 (FRP 3): QTY 152	2	2017	2	2017
Production Milestones - Block II: Contract Awards: Lot 18 (FRP 4): QTY 150	2	2018	2	2018
Production Milestones - Block II: Contract Awards: Lot 19 (FRP 5): QTY 153	2	2019	2	2019
Production Milestones - Block II: Contract Awards: Lot 20 (FRP 6): QTY 153	2	2020	2	2020
Production Milestones - Block II: Contract Awards: Lot 21 (FRP 7): QTY 150	2	2021	2	2021
Production Deliveries: Low Rate Initial Production 3 (WPN) QTY 150	1	2015	4	2015
Production Deliveries: Low Rate Initial Production 4 (WPN) QTY 208	4	2015	4	2016
Production Deliveries: Lot 15 (FRP 1) QTY 167	4	2016	4	2017
Production Deliveries: Lot 16 (FRP 2) QTY 227	4	2017	4	2018
Production Deliveries: Lot 17 (FRP 3) QTY 152	4	2018	4	2019
Production Deliveries: Lot 18 (FRP 4) QTY 150	4	2019	4	2020
Production Deliveries: Lot 19 (FRP 5) QTY 153	4	2020	4	2021
AIM-9X Block II: System Improvement Program Contract Award: System Improvement Program II Engineering Manufacturing Development Contract	1	2015	2	2016
AIM-9X Block II: Hardware & Software (v9.3) Improvements: Operational Test (OT-C1)	1	2015	2	2015
AIM-9X Block II: Hardware & Software (v9.3) Improvements: Operational Test Report	2	2015	3	2015
AIM-9X Block II: Hardware & Software (v9.3) Improvements: Navy Initial Operational Capability	2	2015	2	2015
AIM-9X Block II: Hardware & Software (v9.3) Improvements: Full Rate Production Milestone Decision	4	2015	4	2015

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**Exhibit R-4A, RDT&E Schedule Details: PB 2017 Navy** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / AIM-9X
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
AIM-9X Block II: Hardware & Software (v9.3) Improvements: Air Force Initial Operational Capability	3	2016	3	2016
AIM-9X Block II Tech Refresh: Tech Refresh Development Contracts: System Improvement Program III Prototype Development Contract	1	2015	4	2015
AIM-9X Block II Tech Refresh: Tech Refresh Development Contracts: System Improvement Program III Engineering Manufacturing Development Contract	4	2015	4	2020
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 17 Cut In: Lot 17 Hardware (CAS Battery & Block 2+)	1	2015	1	2017
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 17 Cut In: Lot 17 Hardware Cut-In Preliminary Design Review	1	2016	1	2016
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 17 Cut In: Lot 17 Hardware Cut-In Critical Design Review	3	2016	3	2016
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 17 Cut In: Lot 17 Hardware Cut-In Engineering Change Proposal	1	2017	1	2017
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 19 Cut In: Hardware (IMU, Dome & Processor)	1	2015	1	2019
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 19 Cut In: Lot 19 Hardware Cut-In Preliminary Design Review	4	2016	4	2016
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 19 Cut In: Lot 19 Hardware Cut-In Critical Design Review	2	2017	2	2017
AIM-9X Block II Tech Refresh: Hardware Obsolescence Redesign: Lot 19 Cut In: Lot 19 Hardware Cut-In Engineering Change Proposal	1	2019	1	2019
AIM-9X Block II Tech Refresh: Test and Evaluation: Software (v9.4) Improvements: Development Testing	2	2015	4	2017
AIM-9X Block II Tech Refresh: Test and Evaluation: Software (v9.4) Improvements: Development Test / Integrated Testing	4	2017	3	2018
AIM-9X Block II Tech Refresh: Test and Evaluation: Software (v9.4) Improvements: Operational Testing	3	2018	4	2019
AIM-9X Block II Tech Refresh: Test and Evaluation: Software (v9.4) Improvements: Software v9.4 Release	2	2020	2	2020

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2017 Navy **Date:** February 2016

<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0207161N / <i>Tactical Aim Missiles</i>	<b>Project (Number/Name)</b> 0457 / <i>AIM-9X</i>
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<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
AIM-9X Block II Tech Refresh: Test and Evaluation: Software (v10.x) Rehost: Software v10.4 Development Testing	1	2019	4	2020
AIM-9X Block II Tech Refresh: Test and Evaluation: Software (v10.x) Rehost: Software v10.4 Release	2	2021	2	2021

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