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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2013 Navy	<b>DATE:</b> February 2012
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APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				PE 0604221N: <i>P-3 Modernization Program</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.517	3.417	3.451	-	3.451	3.111	3.144	3.225	3.375	Continuing	Continuing
1152: <i>P-3 Sensor Integration</i>	1.462	1.356	1.377	-	1.377	1.316	1.332	1.361	1.405	Continuing	Continuing
3016: <i>Fatigue Life Mgmt Program</i>	2.055	2.061	2.074	-	2.074	1.795	1.812	1.864	1.970	Continuing	Continuing

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

This program provides for P-3C aircraft systems development and test in subsurface and surface surveillance, search, detection, localization, classification, attack and communications in support of Sea Shield/Sea Power 21. The P-3C Sensor Integration project integrates advanced and future Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASuW) sensors, weapons systems, and supporting technology into legacy P-3C systems and phased capabilities upgrades. The program also advances Air Acoustic Rapid Cots Insertion (ARCI) efforts by replacing legacy MIL-SPEC UYS-1 with increasingly open, Commercial Off The Shelf-based architecture. Also, P-3 Sensor Integration will expand software and hardware technology of P-3 systems to integrate additional sensor and processing capabilities, environmental prediction tools, tactical decision aides, color capabilities and communications to improve aircrew tactical proficiency and battlespace awareness. Sensor Integration is a continuous effort to integrate and test newly evolving ASW and ASuW technologies such as Improved Extended Echo Ranging and Multistatic Acoustic Coherent family of Multi-Static active systems, ARCI, Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements. The Over the Horizon (OTH) Wideband system will provide the P-3C ASuW Improvement Program aircraft the capability to conduct OTH Satellite communications which will allow the on-station aircraft to transmit real-time sensitive acoustic intelligence data which will maximize enemy detections, tracking and engagement opportunities.

Fatigue Life Management Program is required to manage P-3/EP-3 inventory fatigue life and includes ongoing structural analysis, analyzing emergent structural issues, conducting engineering studies, assessing Fleet impact, and applying new technologies such as Non-Destructive Inspection techniques.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy				DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy		PE 0604221N: P-3 Modernization Program			
BA 5: Development & Demonstration (SDD)					
B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	3.574	3.417	3.496	-	3.496
Current President's Budget	3.517	3.417	3.451	-	3.451
Total Adjustments	-0.057	-	-0.045	-	-0.045
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.039	-			
• Program Adjustments	-	-	-0.055	-	-0.055
• Rate/Misc Adjustments	-	-	0.010	-	0.010
• Congressional General Reductions Adjustments	-0.018	-	-	-	-
 <b><u>Change Summary Explanation</u></b>					
Technical: Not applicable.					
Schedule: Not applicable.					

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604221N: P-3 Modernization Program				PROJECT 1152: P-3 Sensor Integration			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1152: P-3 Sensor Integration	1.462	1.356	1.377	-	1.377	1.316	1.332	1.361	1.405	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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

This program provides for P-3C aircraft systems development and test in subsurface and surface surveillance, search, detection, localization, classification, attack and communications in support of Sea Shield/Sea Power 21.

The P-3C Sensor Integration project integrates advanced and future Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASuW) sensors, weapons systems, and supporting technology into legacy P-3C systems and phased capabilities upgrades. The program also advances Air Acoustic Rapid Cots Insertion (ARCI) efforts by replacing legacy MIL-SPEC UYS-1 with increasingly open, Commercial Off The Shelf-based architecture. Also, P-3 Sensor Integration will expand software and hardware technology of P-3 systems to integrate additional sensor and processing capabilities, environmental prediction tools, tactical decision aides, color capabilities and communications to improve aircrew tactical proficiency and battlespace awareness.

Sensor Integration is a continuous effort to integrate and test newly evolving ASW and ASuW technologies such as Improved Extended Echo Ranging (IEER) and Multistatic Acoustic Coherent (MAC) family of Multi-Static active systems, ARCI, Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements. The Over the Horizon (OTH) Wideband system will provide the P-3C AIP aircraft the capability to conduct OTH Satellite communications which will allow the on-station aircraft to transmit real time sensitive acoustic intelligence data which will maximize enemy detections, tracking and engagement opportunities.

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

	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>
<b>Title:</b> P-3 integration of ASW and ASuW sensors / weapon systems	1.462	1.356	1.377	-	1.377
<b>Articles:</b>	0	0	0		0
<b>FY 2011 Accomplishments:</b> Continued Sensor Integration effort to integrate and test newly evolving ASW and ASuW technologies such as IEER and MAC family of Multi-Static active systems, ARCI, Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements.					
<b>FY 2012 Plans:</b>					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Navy				<b>DATE:</b> February 2012	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0604221N: <i>P-3 Modernization Program</i>		<b>PROJECT</b> 1152: <i>P-3 Sensor Integration</i>	

  

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>
Continue Sensor Integration effort to integrate and test newly evolving ASW and ASuW technologies such as IEER and MAC family of Multi-Static active systems, ARCI, Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements.					
<b><i>FY 2013 Base Plans:</i></b> Continue Sensor Integration effort to integrate and test newly evolving Anti-Submarine Warfare and Anti-Surface Warfare (ASuW) technologies such as Improved Extended Echo Ranging (IEER) and Multistatic Acoustic Coherent family of Multi-Static active systems, Air Acoustic Rapid Cots Insertion, Non-acoustic ASW sensors and systems, and future Technical Refresh insertions for obsolescence and processing improvements.					
<b>Accomplishments/Planned Programs Subtotals</b>	1.462	1.356	1.377	-	1.377

  

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b><u>Line Item</u></b>	<b><u>FY 2011</u></b>	<b><u>FY 2012</u></b>	<b><u>FY 2013 Base</u></b>	<b><u>FY 2013 OCO</u></b>	<b><u>FY 2013 Total</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>	<b><u>FY 2016</u></b>	<b><u>FY 2017</u></b>	<b><u>Cost To Complete</u></b>	<b><u>Total Cost</u></b>
• APN/0538: <i>P-3 Series</i>	191.662	170.466	82.105	66.300	148.405	36.768	5.899	6.343	4.030	0.000	4,970.512

  

<b>D. Acquisition Strategy</b>
The Air Deployable Active Receiver/IEER Operational Requirements Document (ORD) (Ser# 297(1)-05-97)) for 1152 was approved on 29 December 1997. The P-3 ASuW Improvement Program ORD (Ser#355-88-94) for 2417 was approved on 30 March 1994. The Acquisition Plan (AIR-93-08A Rev 2) was approved on 30 March 1998. The Acquisition Strategy Review (AIR-ASR-26A Rev 3) was approved 29 Nov 1999 which includes Over the Horizon Wideband system.

  

<b>E. Performance Metrics</b>
Successfully complete Developmental Test.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604221N: P-3 Modernization Program				PROJECT 1152: P-3 Sensor Integration						
Product Development (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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	
Primary Hardware Development	C/FFP	LM:St. Paul, MN	8.626	-		-		-		-	0.000	8.626	8.626	
Systems Engineering	SS/CPFF	LM:Manassas, VA	11.590	-		-		-		-	0.000	11.590	11.590	
Subtotal			20.216	-		-		-		-	0.000	20.216	20.216	
Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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	
Software Development	WR	VARIOUS:Various	4.340	-		-		-		-	0.000	4.340		
Subtotal			4.340	-		-		-		-	0.000	4.340		
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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 & Evaluation	WR	NAWCAD:Pax River, MD	2.438	-		-		-		-	0.000	2.438		
Subtotal			2.438	-		-		-		-	0.000	2.438		
Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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	
Contractor Engineering Support	WR	SPAWARSYSC:Charleston, SC	0.263	-		-		-		-	0.000	0.263		
Government Engineering Support	WR	NAWCAD:Pax River, MD	4.454	1.256	Nov 2011	1.287	Nov 2012	-		1.287	5.017	12.014		
Travel	WR	NAWCAD:Pax River, MD	1.031	0.100	Oct 2011	0.090	Oct 2012	-		0.090	0.400	1.621		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2013 Navy											<b>DATE:</b> February 2012		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604221N: <i>P-3 Modernization Program</i>				<b>PROJECT</b> 1152: <i>P-3 Sensor Integration</i>					

  

Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 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
<b>Subtotal</b>			5.748	1.356		1.377		-		1.377	5.417	13.898	

  

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>	32.742	1.356		1.377		-		1.377	5.417	40.892	

  

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604221N: P-3 Modernization Program	PROJECT 1152: P-3 Sensor Integration

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Navy			<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604221N: <i>P-3 Modernization Program</i>	<b>PROJECT</b> 1152: <i>P-3 Sensor Integration</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>P-3 Sensor Integration</i></b>				
Test & Evaluation: Technical Evaluation: EER Multi-Static Active Sensor System Support	1	2011	4	2017
Test & Evaluation: Technical Evaluation: EER Multi-Static Fleet Technology Insertion	1	2011	4	2017
Test & Evaluation: Technical Evaluation: P-3 ARCI and Future Fleet Technology Insertion	1	2011	4	2017



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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604221N: P-3 Modernization Program				PROJECT 3016: Fatigue Life Mgmt Program			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3016: Fatigue Life Mgmt Program	2.055	2.061	2.074	-	2.074	1.795	1.812	1.864	1.970	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
Fatigue Life Management Program is required to manage P-3/EP-3 inventory fatigue life and includes ongoing structural analysis, analyzing emergent structural issues, conducting engineering studies, assessing Fleet impact, and applying new technologies such as Non-Destructive Inspection techniques.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: P-3/EP-3 Fatigue Life Management							2.055	2.061	2.074	-	2.074
Articles:							0	0	0		0
FY 2011 Accomplishments: Fatigue Life Management Program: Managed P-3/EP-3 inventory fatigue life including conducting structural analysis, analyzing structural issues, conducting engineering studies, assessing Fleet impact. Researched, tested and applied new Fatigue Inspection techniques to the P-3/EP-3 Fleet.											
FY 2012 Plans: Fatigue Life Management Program: Manage P-3/EP-3 inventory fatigue life including conducting structural analysis, analyzing structural issues, conducting engineering studies, assessing Fleet impact. Research, test and apply new Fatigue Inspection techniques to the P-3/EP-3 Fleet.											
FY 2013 Base Plans: Fatigue Life Management Program: Manage P-3/EP-3 inventory fatigue life including conducting structural analysis, analyzing structural issues, conducting engineering studies, assessing Fleet impact. Research, test and apply new Fatigue Inspection techniques to the P-3/EP-3 Fleet.											
Accomplishments/Planned Programs Subtotals							2.055	2.061	2.074	-	2.074
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• APN/0538: P-3 Series	191.662	170.466	82.105	66.300	148.405	36.768	5.899	6.343	4.030	0.000	4,970.512

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Navy		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604221N: <i>P-3 Modernization Program</i>	<b>PROJECT</b> 3016: <i>Fatigue Life Mgmt Program</i>
<b>D. Acquisition Strategy</b> The Fatigue Life Management Program leverages off of prior work done under P-3 Service Life Extension Program (2451). The Anti-Surface Warfare Improvement Program Operational Requirements Documents 355-88-94 was approved 30 March 94. Work will be performed by Lockheed Martin Aeronautical Systems and other industry participants along with the Naval Air Systems Command Structural Engineering Dept, AIR-4.3. This program supports the 7 June 2003 CNO approved P-3/EP-3 Sustainment Bridge to Multi-Mission Maritime Aircraft.		
<b>E. Performance Metrics</b> Successful application of system engineering processes.		

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2013 Navy											<b>DATE:</b> February 2012			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604221N: <i>P-3 Modernization Program</i>				<b>PROJECT</b> 3016: <i>Fatigue Life Mgmt Program</i>						
<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>				
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
Systems Engineering	C/CPIF	LM:Marietta, GA	7.337	1.035	Jan 2012	1.095	Jan 2013	-		1.095	4.114	13.581	13.568	
<b>Subtotal</b>			7.337	1.035		1.095		-		1.095	4.114	13.581	13.568	
<b>Management Services (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>				
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
Government Engineering Support	WR	NAWCAD:PAX RIVER, MD	5.563	0.895	Nov 2011	0.861	Nov 2012	-		0.861	2.488	9.807		
Program Management Support	WR	VARIOUS:VARIOUS	0.270	-	Nov 2011	-		-		-	0.410	0.680		
Travel	WR	NAWCAD:PAX RIVER, MD	0.700	0.131	Oct 2011	0.118	Oct 2012	-		0.118	0.433	1.382		
<b>Subtotal</b>			6.533	1.026		0.979		-		0.979	3.331	11.869		
			<b>Total Prior Years Cost</b>	<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>	
<b>Project Cost Totals</b>			13.870	2.061		2.074		-		2.074	7.445	25.450		
<b>Remarks</b>														

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	R-1 ITEM NOMENCLATURE PE 0604221N: <i>P-3 Modernization Program</i>	PROJECT 3016: <i>Fatigue Life Mgmt Program</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Navy			<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604221N: <i>P-3 Modernization Program</i>	<b>PROJECT</b> 3016: <i>Fatigue Life Mgmt Program</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b><i>Fatigue Life Mgmt Program</i></b>				
Test & Evaluation: Technical Evaluation: Inventory Fatigue Life Management/ Sustainment	1	2011	4	2017