Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

1319: Research, Development, Test & Evaluation, Navy

PE 0604264N: Air Crew Systems Development

BA 5: System Development & Demonstration (SDD)

		( - /										
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	89.792	2.620	2.717	11.401	-	11.401	16.316	13.813	13.179	5.651	Continuing	Continuing
0606: Aircrew System Development	89.792	2.620	2.717	11.401	-	11.401	16.316	13.813	13.179	5.651	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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

The Aircrew Systems Development program provides Engineering and Manufacturing Development of Aviation Life Support Systems to protect aircrew and flight deck personnel from current and future threats including: directed energy weapons, chemical/biological/radiological agents/fallout, ballistic projectiles, temperature extremes, heat/fire, low concentration oxygen environments, high dynamic forces during emergency egress, hearing loss, and high "G" forces. The program also provides development for the following capabilities: night vision capability, hearing and head protection, man mounted data display, communications, clothing, in flight restraint and stability emergency egress and descent, escape and evasion, survival and rescue, crash protection, and anthropometric sizing for small aircrew. Acquisition initiatives include: competition, the application of streamlining initiatives, use of non-developmental items, joint and tri-service developments, and the pursuit of NATO/allied cooperative ventures, which expedite introduction of new products into Navy and Marine Corps fixed and rotary wing aircraft, reduce costs, and promote commonality.

This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production decision.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	3.249	2.717	6.759	-	6.759
Current President's Budget	2.620	2.717	11.401	-	11.401
Total Adjustments	-0.629	0.000	4.642	-	4.642
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-0.602	0.000			
SBIR/STTR Transfer	-0.027	0.000			
<ul> <li>Program Adjustments</li> </ul>	0.000	0.000	4.680	-	4.680
<ul> <li>Rate/Misc Adjustments</li> </ul>	0.000	0.000	-0.038	-	-0.038

PE 0604264N: Air Crew Systems Development

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604264N: Air Crew Systems Development

BA 5: System Development & Demonstration (SDD)

#### **Change Summary Explanation**

Schedule:

#### 1. Acquisition Milestones:

A. Joint Helmet Mounted Cueing System Night Vision - Full Rate Production Decision (FRPD) changed from 2Q12 to 2Q13 and Initial Operational Capability (IOC) added to 2Q13 to align with Joint Program Office / Air Force acquisition strategy.

B. Flight Deck Cranial - Milestone C Increment 2, FRPD Increment 2, and IOC Inc 2 removed due to pending restructure of the program's Increment 2.

#### 2. Production Milestones:

A. Aircrew Endurance (AE) - Full Rate Production (FRP) 5 removed because FRP 4 production will complete the procurement of all assets. FY16 funding reallocated to Joint Helmet Mounted Cueing System Night Vision (JHMCS NV).

B. JHMCS NV - Low Rate Initial Production (LRIP) and FRP contract awards changed to align with Joint Program Office / Air Force acquisition strategy. LRIP 3 renamed to LRIP 2. FRP 1 renamed to LRIP 3. FRP 2 through 5 renamed to FRP 1 through 4.

#### 3. Deliveries:

A. AE - FRP 5 removed because FRP 4 production will complete the procurement of all assets. LRIP quantity changed from 1184 to 2124 and FRP 1 quantity changed from 3780 to 3453 to reflect actual unit price changes. FRP 4 quantity changed from 804 to 772 to meet inventory objective.

B. JHMCS NV - All LRIP and FRP titles changed to align with Joint Program Office / Air Force acquisition strategy. EOC and LRIP 1 delivery periods were shifted due to startup production problems at the vendor's facilities. All future delivery periods delayed as a result of late contract awards. LRIP 1 changed to Early Operational Capability. LRIP 2 changed to LRIP 1 and delivery dates changed from 2Q11-1Q12 to 3Q12-2Q13. LRIP 3 changed to LRIP 2 and quantity changed from 5 to 11 due to economy of scale savings which were realized by combining USN and USAF procurements. FRP 1 renamed to LRIP 3 and delivery dates changed from 1Q13-4Q13 to 1Q14-2Q14. FRP 2 renamed to FRP 1 and quantity changed from 94 to 80. FRP 1-4 quantities decreased due to Department of Navy reallocating of funding to support Chief of Naval Operations (CNO) higher priorities. FRP 3 renamed to FRP 2 and quantity changed from 103 to 62. FRP 4 renamed to FRP 3 and quantity changed from 94 to 57. FRP 5 renamed to FRP 4 and quantity changed from 85 to 83.

C. Laser Eye Protection - FRP 2 quantity updated from 455 to 267 and FRP 3 quantity updated from 465 to 318 to align with Other Procurement Navy budget. D. Flight Deck Cranial - FY12-FY17 unit cost and quantities vary depending on mix of Double Hearing Protection passive and communication hardware components being purchased. FY15-FY18 funding supports production of Triple Hearing Protection and improved cranials. Quantity increases reflect updated requirements letter from CNO (Ser N98/2U144949 dated 18 April 2012). FRP 1 quantity changed from 9839 to 14,428. FRP 2 quantity changed from 4065 to 10,538. FRP 4 quantity changed from 2420 to 4360. FRP 5 quantity changed from 2734 to 4445. FRP 6 quantity changed from 1393 to 5800.

Technical: N/A

PE 0604264N: Air Crew Systems Development

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2014 N	Navy							<b>DATE:</b> Apr	il 2013	
APPROPRIATION/BUDGET AC 1319: Research, Development, To BA 5: System Development & De	est & Evalua						ATURE w Systems		PROJECT 0606: Aircr	rew System	Developme	ent
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
0606: Aircrew System Development	89.792	2.620	2.717	11.401	-	11.401	16.316	13.813	13.179	5.651	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

# A. Mission Description and Budget Item Justification

AIRCREW SYSTEMS: Aircrew Endurance (AE), Laser Eye Protection (LEP), Flight Deck Cranial (FDC), Joint Helmet Mounted Cueing System (JHMCS), Night Vision Cueing and Display (NVCD), Enhanced Visual Acuity (EVA), and Aircrew Systems (AS).

Under the above projects, AE includes Survival Vests & Armor, Universal Camouflage, Waste Management, Hydration, Cooling and Clothing Systems. LEP includes Laser Eye Protection for noncorrective and corrective lens, Multi-Wavelength Spectacles, and Laser Eye Protection Improvement Program (LEPIP). FDC includes Improved Hearing Protection and Cranial. JHMCS NVCD includes JHMCS Night Attack. EVA includes enhanced visibility in degraded visual environment technology. AS includes State of the Art (SOA).

AIRCRAFT SYSTEMS: Aircraft systems include studies for Advanced Crash Protection (ACP), SOA, and Electronic Knee Board (EKB). EKB provides digital display that will allow aircrew to store, search, and view significant amounts of data required for mission accomplishment during flight operations.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Aircrew System Development	2.035	2.109	6.752
Articles:	0	0	0
<b>Description:</b> AE includes Survival Vests & Armor, Universal Camouflage, Waste Management, Hydration Cooling and Clothing Systems. LEP includes LEP Spectacles (both Self Protection and Multi-Wavelength), step-in visor and LEPIP. FDC includes Improved Hearing Protection and cranial. JHMCS NVCD includes JHMCS Night Attack. EVA includes enhanced visability in degraded visual environment technology. AS includes SOA.			
FY 2012 Accomplishments:  AIRCREW SYSTEMS: Aircrew Endurance (AE), Laser Eye Protection (LEP), Flight Deck Cranial (FDC), Joint Helmet Mounted Cueing System (JHMCS), Night Vision Cueing and Display (NVCD), EVA and Aircrew Systems.			
AE: Deliver AE vest system. Initial Operational Capability (IOC) of the AE vest system. Procure additional quantities. LEP: Begin Development Testing on second increment Spectacles and IOC of first increment Spectacles.			

PE 0604264N: Air Crew Systems Development

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Navy

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: System Development & Demonstration (SDD)		PROJECT 606: Aircrew Syst	<u>.                                    </u>	nent
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantit	ies in Each)	FY 2012	FY 2013	FY 2014
FDC: Complete FDC system vertification and evaluation. Complete the fin JHMCS NVCD: Address any required engineering changes discovered du EVA: Complete Milestone A and enter Technology Development phase. SOA: Continue the evaluation and authorization of the survival and clothin	ring Operational Testing.			
FY 2013 Plans:  AE: Development of new outer jacket system for inclement weather condit LEP: IOC of Multi-wave Spectacles.  JHMCS NVCD: Award of Full Rate Production contract.  EVA: Continue Technology Development  SOA: Continue a yearly evaluation and authorization of the survival and cl Commercial Off-the-Shelf items that provide upgrade performance, fill cap enhance survivibility.	othing items. Identification, testing and approval of	d		
FY 2014 Plans:  LEP: Continue research & development for next increment of threat spects EVA: Continue Technology Development.  SOA: Continue a yearly evaluation and authorization of the survival, clothit testing and approval of Commercial Off-the-Shelf items that provide upgraperformance, safety and enhance survivibility.	ng, and other aircrew systems items. Identification,			
Title: Aircraft Systems Development	A	0.585	0.608	4.649
<b>Description:</b> Aircraft Systems include studies for Advance Crash Protection Electronic Knee Board (EKB).	Artion, Crashworthy Troop Seats, State of the Art, and	ies: U	0	U
FY 2012 Accomplishments: Non Ejection Seat Endurance (NESE): Deliver all NESE cushions to fleet	. Reach Material Support Date and Navy Support Da	te.		
FY 2013 Plans: Electronic Knee Board: Continue development.				
FY 2014 Plans:  EKB: Complete Milestone B.				
	Accomplishments/Planned Programs Subto	tals 2.620	2.717	11.401

PE 0604264N: Air Crew Systems Development Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604264N: Air Crew Systems	0606: Aircrew System Development
BA 5: System Development & Demonstration (SDD)	Development	

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

	- '	•	FY 2014	FY 2014	FY 2014					<b>Cost To</b>	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	Complete	<b>Total Cost</b>
OPN/4244: Aviation Life Support	68.246	40.475	29.670		29.670	28.914	36.178	42.678	48.397	Continuing	Continuing
APN/0575: Aviation Life Support	0.987	2.473	6.267		6.267	6.691	5.886	2.250	0.000	Continuing	Continuing
Mods										_	

#### Remarks

# D. Acquisition Strategy

Commercial Off-The-Shelf /Non-Developmental Items where possible, cost plus award fee contracts. Majority of programs non-ACAT programs.

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

Aircrew Endurance: Performance Metrics to include Milestone (MS) C, Full Rate Production (FRP) and Initial Operational Capability (IOC).

Laser Eye Protection (Spectacles): Performance Metrics to include Critical Design Review (CDR), MS C, and IOC.

Flight Deck Cranial: Performance Metrics to include CDR, MS C, FRP, and IOC.

Electronic Knee Board: Performance Metrics to include Preliminary Design Review, CDR, MS B, MS C, and IOC.

PE 0604264N: Air Crew Systems Development Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

PE 0604264N: Air Crew Systems

Development

**PROJECT** 

0606: Aircrew System Development

DATE: April 2013

<b>Product Developmen</b>	nt (\$ in Mi	llions)		FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Eng Aircrew Endurance	WR	NAWCAD:Patuxent River, MD	6.729	0.297	Feb 2012	0.368	Feb 2013	0.502	Feb 2014	-		0.502	3.947	11.843	
Systems Eng Laser Eye Protection (LEP)	WR	NAWCAD:Patuxent River, MD	4.953	0.275	Dec 2011	0.352	Dec 2012	1.163	Apr 2014	-		1.163	3.163	9.906	
Systems Eng Flight Deck Cranial (FDC)	WR	NAWCAD:Patuxent River, MD	3.214	0.268	Dec 2011	0.145	Dec 2012	0.000		-		0.000	0.000	3.627	
Systems Eng Joint Helmet Mounted Cueing System Night Vision Cueing & Display	Various	Various:Various	7.729	0.054	Nov 2011	0.040	Nov 2012	0.000		-		0.000	0.000	7.823	
Systems Eng Aircrew Systems	WR	Various:Various	6.331	0.198	Dec 2011	0.289	Dec 2012	0.418	Feb 2014	-		0.418	17.414	24.650	
Systems Eng Aircraft Sys	WR	Various:Various	39.795	0.541	Dec 2011	0.606	Dec 2012	0.640	Feb 2014	-		0.640	1.299	42.881	
System Eng Enhanced Visual Acuity	WR	Various:Various	0.000	0.156	Nov 2011	0.196	Nov 2012	4.497	Apr 2014	-		4.497	20.593	25.442	
System Eng Electronic Knee Board	C/FFP	TBD:TBD	0.000	0.000		0.000		4.147	Feb 2014	-		4.147	3.808	7.955	7.955
Prior year cost no longer funded in the FYDP	Various	Various:Various	9.583	0.000		0.000		0.000		-		0.000	0.000	9.583	
		Subtotal	78.334	1.789		1.996		11.367		0.000	-	11.367	50.224	143.710	

Management Service	es (\$ in M	illions)		FY 2	2012	FY 2	2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Contractor ETS	C/CPFF	Red Inc:Lexington Park, MD	9.434	0.653	Dec 2011	0.542	Dec 2012	0.000		-		0.000	0.000	10.629	10.629
Contractor MSS	C/CPFF	Tekla:Woodbridge, VA	1.050	0.114	Feb 2012	0.130	Feb 2013	0.000		-		0.000	0.000	1.294	1.294
Travel	WR	Various:Various	0.974	0.064	Dec 2011	0.049	Dec 2012	0.034	Dec 2013	-		0.034	Continuing	Continuing	Continuing
		Subtotal	11.458	0.831		0.721		0.034		0.000		0.034			

PE 0604264N: Air Crew Systems Development

Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB	2014 Navy					DATE	: April 201	13	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, BA 5: System Development & Demonstration (SDI	•		R-1 ITEM NON PE 0604264N: Development	MENCLATURE Air Crew Systems	<b>PRO</b> 0606	JECT : Aircrew Sy	rstem Deve	elopmen	t
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	89.792	2.620	2.717	11.401	0.000	11.401			
Remarks		-			•				

PE 0604264N: *Air Crew Systems Development* Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

PE 0604264N: Air Crew Systems

Development

**PROJECT** 

0606: Aircrew System Development

Aircrew Endurance		FY 20	112			FY 2	2013			FY 2	014			FY 2	015			FY 2	2016			FY 2	2017			FY 2	2018	f
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	40
Acquisition Milestones																												
Milestones							IOC																					
System Development																												↾
Reviews					ĺ		ĺ												ĺ	ĺ		ĺ	ĺ	ĺ	ĺ	ĺ		ĺ
Production Milestones																												Γ
Contract Awards		AE Vest FRP1				AE Vest FRP 2				AE Vest FRP 3				AE Vest FRP 4														
Deliveries					est LI			P 1 (		FRP	20	ty 17	790	FRI	P36	aty 9	79	FR	P 4	Qty 7	772							

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE
PE 0604264N: Air Crew Systems

Development

**PROJECT** 

0606: Aircrew System Development

Joint Helmet Mounted Cueing System		FY	2012	2		FY 2	013			FY	2014			FY	2015			FY	2016			FY	2017			FY	2018	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestones																												
Milestones						IOC																						
						FRPD																						
System Development																								$\vdash$		一		┢
Reviews																												
Test & Evaluation																												
Production Milestones																												
Contract Awards		LRIP 2 •		LRIP 3			FRP 1				FRP 2 •				FRP 3				FRP 4				FRP 5				FRP 6	
Deliveries	İ		İ		İ		İ	İ	İ	İ	İ	İ					İ	İ		İ		İ	İ	İ	İ	İ	İ	İ
	EC	C Qty	/ 19 																									
				LRIP 1	1 Qty	y 49	LRII Qty		LRI Qty	IP 3	FR	P 1	Qty l	80	FR	P 2	Qty	62	FR	Р3	Qty	57	FR	RP 4	Qty	83	FRI Qty	

DATE: April 2013 Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0604264N: Air Crew Systems 0606: Aircrew System Development BA 5: System Development & Demonstration (SDD) Development

Laser Eye Protection		FY	201	2		FY 2	2013			FY 2	014			FY 20	015			FY 2	016			FY 2	017			FY 2	018	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	40
Acquisition Milestones  Milestones					MS C TPG		IOC																					
System Development Reviews																												
Test & Evaluation			D	т																								
Production Milestones  Contract Awards				LRIP		FRP 1				FRP 2				FRP 3				FRP 4				FRP 5				FRP 6		
Deliveries							LRIP Qty 32	FF	RP 1 305	Qty	FF	₹P 2	Qty	267				RP 3 √318				₹P 4 546			FF	RP 5 ( 1588		

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: System Development & Demonstration (SDD)

DATE: April 2013

R-1 ITEM NOMENCLATURE

PE 0604264N: Air Crew Systems

Development

Development

Flight Deck Cranial		FY	2012			FY 2	013		١	Y 2	014			FY 2	015			FY 2	016			FY 2	017			FY 2	018	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4
Acquisition Milestones																												
Milestones						IOC																						
System Development																												Γ
Reviews																												
Test & Evaluation																												Γ
Production Milestones																												Γ
Contract Awards			FRP 2			FRP 3			FRP 4					FRP 5				FRP 6				FRP 7				FRP 8		
Deliveries																												
		FF	RP 1 ( 14428	aty !	FRE	2 Qt	y 10	538	FRF	3 0	ity 19	956	FR	P4G	ity 43	360	FR	P 5 Q	ity 44	445	FR	P6C	ity 5	800	FF	RP 7 C	ity 6	86

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

PE 0604264N: Air Crew Systems

Development

**PROJECT** 

0606: Aircrew System Development

Electronic Knee Board		FY 2	2012	:		FY 2	2013			FY	2014			FY 2	015			FY 2	016			FY 2	2017			FY 2	2018	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestones																												
Milestones											MS B ▲						MS C		IOC					FOC				
System Development															$\exists$													
Reviews										PDR	CDR																	
Test and Evaluation						İ																						
														DT														
Production Milestones															$\sqcap$													
Contract Awards																		FRP 1				FRP 2						
Deliveries																			FRI Qty 1					P 2 1736				

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

R-1 ITEM NOMENCLATURE

PE 0604264N: Air Crew Systems

Development

**PROJECT** 

0606: Aircrew System Development

Enhanced Visual Acuity		FY 2	2012	2		FY 2	2013			FY:	2014	4		FY 2	015			FY 2	2016		FY	20	17			FY 2	018	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4
Acquisition Milestones																												
Milestones							MS A					MS B ▲												MS C ▲			IOC	
System Development			İ																									Τ
Reviews													PDR	CDR		TRR					SVR/PRR							
Test and Evaluation		╎		厂																								T
																				DT						от		
Production Milestones				┞											П													T
Contract Awards																								LRIP 1		LRIP 2		
Deliveries			-	$\vdash$	-										$  \cdot  $							_						╁
																								LRII	P 1	L	RIP 2	2

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604264N: Air Crew Systems

0606: Aircrew System Development

BA 5: System Development & Demonstration (SDD)

Development

# Schedule Details

	Sta	art	En	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Aircrew Endurance				
Acquisition Milestones: Milestones: Initial Operational Capability (IOC)	3	2013	3	2013
Production Milestones: Contract Awards: Aircrew Endurance Vest FRP 1	2	2012	2	2012
Production Milestones: Contract Awards: Aircrew Endurance Vest FRP 2	2	2013	2	2013
Production Milestones: Contract Awards: Aircrew Endurance Vest FRP 3	2	2014	2	2014
Production Milestones: Contract Awards: Aircrew Endurance Vest FRP 4	2	2015	2	2015
Deliveries: Aircrew Endurance Vest LRIP Qty 2124	3	2012	2	2013
Deliveries: Aircrew Endurance FRP 1 Qty 3453	3	2013	1	2014
Deliveries: Aircrew Endurance FRP 2 Qty 1790	2	2014	1	2015
Deliveries: Aircrew Endurance FRP 3 Qty 979	2	2015	1	2016
Deliveries: Aircrew Endurance FRP 4 Qty 772	2	2016	1	2017
Joint Helmet Mounted Cueing System				
Acquisition Milestones: Milestones: JHMCS IOC	2	2013	2	2013
Acquisition Milestones: Milestones: JHMCS FRPD	2	2013	2	2013
Production Milestones: Contract Awards: JHMCS LRIP 2	2	2012	2	2012
Production Milestones: Contract Awards: JHMCS LRIP 3	4	2012	4	2012
Production Milestones: Contract Awards: JHMCS FRP 1	3	2013	3	2013
Production Milestones: Contract Awards: JHMCS FRP 2	3	2014	3	2014
Production Milestones: Contract Awards: JHMCS FRP 3	3	2015	3	2015
Production Milestones: Contract Awards: JHMCS FRP 4	3	2016	3	2016
Production Milestones: Contract Awards: JHMCS FRP 5	3	2017	3	2017
Production Milestones: Contract Awards: JHMCS FRP 6	3	2018	3	2018

PE 0604264N: Air Crew Systems Development Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

R-1 ITEM NOMENCLATURE

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

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

PE 0604264N: Air Crew Systems

**PROJECT** 

Development

0606: Aircrew System Development

	Sta	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Deliveries: JHMCS EOC	1	2012	3	2012
Deliveries: JHMCS LRIP 1 Qty 49	3	2012	2	2013
Deliveries: JHMCS LRIP 2 Qty 11	3	2013	4	2013
Deliveries: JHMCS LRIP 3 Qty 71	1	2014	2	2014
Deliveries: JHMCS FRP 1 Qty 80	3	2014	2	2015
Deliveries: JHMCS FRP 2 Qty 62	3	2015	2	2016
Deliveries: JHMCS FRP 3 Qty 57	3	2016	2	2017
Deliveries: JHMCS FRP 4 Qty 83	3	2017	2	2018
Deliveries: JHMCS FRP 5 Qty 102	3	2018	4	2018
Laser Eye Protection				
Acquisition Milestones: Milestones: LEP: MS C Threat Protection Goggles	1	2013	1	2013
Acquisition Milestones: Milestones: LEP: IOC	3	2013	3	2013
Test & Evaluation: LEP/SPECTACLE: DT	1	2012	1	2013
Production Milestones: Contract Awards: Laser Eye Protection LRIP	4	2012	4	2012
Production Milestones: Contract Awards: Laser Eye Protection FRP 1	2	2013	2	2013
Production Milestones: Contract Awards: Laser Eye Protection FRP 2	2	2014	2	2014
Production Milestones: Contract Awards: Laser Eye Protection FRP 3	2	2015	2	2015
Production Milestones: Contract Awards: Laser Eye Protection FRP 4	2	2016	2	2016
Production Milestones: Contract Awards: Laser Eye Protection FRP 5	2	2017	2	2017
Production Milestones: Contract Awards: Laser Eye Protection FRP 6	2	2018	2	2018
Deliveries: Laser Eye Protection LRIP Qty 32	3	2013	3	2013
Deliveries: Laser Eye Protection FRP 1 Qty 305	4	2013	2	2014
Deliveries: Laser Eye Protection FRP 2 Qty 267	3	2014	2	2015
Deliveries: Laser Eye Protection FRP 3 Qty 318	1	2016	2	2016
Deliveries: Laser Eye Protection FRP 4 Qty 546	1	2017	2	2017

PE 0604264N: Air Crew Systems Development Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604264N: Air Crew Systems

0606: Aircrew System Development

BA 5: System Development & Demonstration (SDD)

Development

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Deliveries: Laser Eye Protection FRP 5 Qty 1588	1	2018	3	2018
Flight Deck Cranial				
Acquisition Milestones: Milestones: FDC: IOC	2	2013	2	2013
Production Milestones: Contract Awards: Flight Deck Cranial FRP 2	3	2012	3	2012
Production Milestones: Contract Awards: Flight Deck Cranial FRP 3	2	2013	2	2013
Production Milestones: Contract Awards: Flight Deck Cranial FPR 4	1	2014	1	2014
Production Milestones: Contract Awards: Flight Deck Cranial FPR 5	2	2015	2	2015
Production Milestones: Contract Awards: Flight Deck Cranial FPR 6	2	2016	2	2016
Production Milestones: Contract Awards: Flight Deck Cranial FPR 7	2	2017	2	2017
Production Milestones: Contract Awards: Flight Deck Cranial FPR 8	2	2018	2	2018
Deliveries: Flight Deck Cranial FRP 1 Qty 14,428	2	2012	4	2012
Deliveries: Flight Deck Cranial FRP 2 Qty 10,538	1	2013	4	2013
Deliveries: Flight Deck Cranial FRP 3 Qty 1956	1	2014	4	2014
Deliveries: Flight Deck Cranial FRP 4 Qty 4360	1	2015	4	2015
Deliveries: Flight Deck Cranial FRP 5 Qty 4445	1	2016	4	2016
Deliveries: Flight Deck Cranial FRP 6 Qty 5800	1	2017	4	2017
Deliveries: Flight Deck Cranial FPR 7 Qty 6867	1	2018	4	2018
Electronic Knee Board				
Acquisition Milestones: Milestones: EKB Milestone B	3	2014	3	2014
Acquisition Milestones: Milestones: EKB Milestone C	1	2016	1	2016
Acquisition Milestones: Milestones: EKB IOC	3	2016	3	2016
Acquisition Milestones: Milestones: EKB FOC	4	2017	4	2017
System Development: Reviews: EKB PDR	2	2014	2	2014
System Development: Reviews: EKB CDR	3	2014	3	2014
Test and Evaluation: EKB Developmental Testing	1	2015	3	2015

PE 0604264N: Air Crew Systems Development Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604264N: Air Crew Systems

0606: Aircrew System Development

BA 5: System Development & Demonstration (SDD)

Development

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Production Milestones: Contract Awards: EKB FRP 1	2	2016	2	2016
Production Milestones: Contract Awards: EKB FRP 2	2	2017	2	2017
Production Milestones: Deliveries: EKB FRP 1 Qty 1736	3	2016	4	2016
Production Milestones: Deliveries: EKB FRP 2 Qty 1736	3	2017	4	2017
Enhanced Visual Acuity				
Acquisition Milestones: Milestones: EVA Milestone A	3	2013	3	2013
Acquisition Milestones: Milestones: EVA Milestone B	4	2014	4	2014
Acquisition Milestones: Milestones: EVA Milestone C	4	2017	4	2017
Acquisition Milestones: Milestones: EVA IOC	3	2018	3	2018
System Development: Reviews: EVA PDR	1	2015	1	2015
System Development: Reviews: EVA CDR	2	2015	2	2015
System Development: Reviews: EVA TRR	4	2015	4	2015
System Development: Reviews: EVA SVR/PRR	1	2017	1	2017
Test and Evaluation: EVA Integrated Testing	1	2016	1	2017
Test and Evaluation: EVA Operational Testing	1	2018	2	2018
Production Milestones: Contract Awards: EVA LRIP 1	4	2017	4	2017
Production Milestones: Contract Awards: EVA LRIP 2	2	2018	2	2018
Deliveries: EVA LRIP 1	4	2017	1	2018
Deliveries: EVA LRIP 2	2	2018	4	2018