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EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						R-1 ITEM NOMENCLATURE 0604264N, AIRCREW SYSTEMS DEVELOPMENT			
COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	13.231	13.832	24.267	16.409	13.689	10.708	2.712	2.683	
0606 AIRCREW SYSTEMS DEVELOPMENT	10.581	12.387	24.267	16.409	13.689	10.708	2.712	2.683	
9999 CONGRESSIONAL ADDS	2.650	1.445							

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Aircrew Systems Development program provides engineering and manufacturing development (EMD) of Aviation Life Support Systems to protect aircrews 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, and high "G" forces. The program also provides development for the following capabilities: head protection, 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 (NDI), 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.

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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5	R-1 ITEM NOMENCLATURE 0604264N, AIRCREW SYSTEMS DEVELOPMENT	

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2006	FY 2007	FY 2008	FY 2009
FY07 President's Budget:	13.488	12.434	6.365	1.771
FY08 President's Budget:	13.231	13.832	24.267	16.409
Total Adjustments	-0.257	1.398	17.902	14.638

Summary of Adjustments

Congressional Reductions				
Congressional Rescissions				
Congressional Undistributed Reductions	-0.257	-0.052		
Congressional Increases		1.450		
Economic Assumptions			0.004	0.302
Miscellaneous Adjustments			17.898	14.336
Subtotal	-0.257	1.398	17.902	14.638

Schedule:

Realigned OPN to RDT&E to support expanded AIRCREW SYSTEMS DEVELOPMENT, hence new programs listed on schedule not on the previous President's budget.

Major changes listed below:

	FROM	TO	REASON
1. Acquisition Milestone Changes:			
a. JALEPV - MS III	4Q 05	4Q 08	Program rebaselining, LRIP 3 proposed for 4Q 07.
2. Test and Evaluation Changes:			
a. JHMCS P3I Night Attack - DT/OT	4Q 05-3Q 06	4Q 05-4Q 13	Rebaselined to JHMCS NVCD and aligned with joint USAF/USN program.
b. ESIRP - DT	1Q 04-1Q 06	1Q 06-1Q 07	Technical problems and funding shortfalls have shifted completion of DT 4 quarters.
c. CMARS - DT	4Q 05-4Q 08	1Q 08-3Q 10	Realigned DT to a new budget structure and to coincide with our acquisition strategy to integrate across the various aircraft platforms through the FYDP.
d. EJECTION SEAT ENDURANCE - DT		1Q 07-3Q 07	First year of execution.
3. Production Milestone Changes:			
a. JALEPV - FRP	4Q 05	4Q 08	Program rebaselining, LRIP 3 proposed for 4Q 07.
b. CWTS - DEL	4Q 05-4Q 09	1Q 06-4Q 13	Realigned with UH-1Y aircraft production delivery schedule.
c. ESIRP - DEL	4Q 05-3Q 06	1Q 08-4Q 13	Technical problems shifted program 4 quarters, also realigned with F/A-18 production delivery schedule.
d. CMARS - DEL	4Q 06-4Q 08	3Q 11-4Q 13	Realigned with aircraft modification schedule.

Technical:

Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT NUMBER AND NAME 0604264N, AIRCREW SYSTEMS DEVELOPMENT			PROJECT NUMBER AND NAME 0606, AIRCREW SYSTEMS DEVELOPMENT				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
0606 AIRCREW SYSTEMS DEVELOPMENT		10.581	12.387	24.267	16.409				
RDT&E Articles Qty									

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

AIRCREW MOUNTED SYSTEMS: Extreme Cold Weather Improvement Program/State of the Art (ECWIP/SOA), Personal Protective Apparel (PPA), State of the Art Survival Items (SOASI), Aircrew Accommodation Expansion Program (AAEP), Aviation Oxygen Systems (AOS), Aircrew Exposure Protection Systems (AEPS), Integrated Life Support Systems (AILSS), Common Smoke Mask (CSM), Survivor Evader Locator (CSEL), Night Vision Systems (NVS), Joint Helmet Mounted Cueing System (JHMCS), Integrated Day/Night All Weather Helmet (IDNAWH), Wide Field of View (WFOV), Night Vision Goggle (NVG), JHMCS Night Attack, Agile Frequency Laser Eye Protection (AFLEP), Laser Eye Protection Improvement Program (LEPIP), Joint Aircrew Laser Eye Protection Visor (JALEPV), Waste Management, Hydration, Universal Camouflage, Survival Vest & Armor, Common Helmet, JHMCS Night Vision Cueing Display, Non-Ejection Wide Field of View (WFOV) Night Vision Goggles (NVG), Ejection (Non-JHMCS) Wide Field of View (WFOV) Night Vision Goggles (NVG), Improved Hearing Protection, Flight Deck Cranial.

AIRCRAFT MOUNTED SYSTEMS: Systems Navy Aircrew Common Ejection Seat Pre-Planned Product Improvement (NACES P3I), Escape System Injury Reduction Program (ESIRP), Crashworthy Troop Seat (CWTS), Common Mobile Aircrew Restraint System (CMARS), formerly Mobile Aircrew Restraint System (MARS), Seat Endurance (SE), Liquid Oxygen to On-Board Oxygen Generating System (LTO), Advanced Crash Protection Systems (ACPS), Ejection Seat Endurance (ESE).

APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604264N, AIRCREW SYSTEMS DEVELOPMENT	PROJECT NUMBER AND NAME 0606, AIRCREW SYSTEMS DEVELOPMENT
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B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Improved Aircrew Endurance	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	1.525	.665	9.526	12.430
RDT&E Articles Qty				

AIRCREW MOUNTED SYSTEMS:

ECWIP/SOA: Continued evaluation and authorization of state of the art survival and clothing items. Published authorization message two times a year. WASTE MANAGEMENT: Testing and approval of Mission Extender Device to allow bladder relief without removal of seat safety harness and equipment. UNIVERSAL CAMOUFLAGE: Development and approval of a universal color for ALSS equipment that allows mission deployment to multiple terrain conditions without the need to obtain equipment in different colors. HYDRATION: Integration of water reservoirs and filtration systems with ALSS equipment. SURVIVAL VEST AND ARMOR: Upgrading the vest and armor to reduce weight and bulk through new materials, revised design, new survival items, updating survival items carried for improved capability in current theatres of operations. COMMON HELMET: Prepare and update required documentation (e.g. system engineering plan, acquisition plan, test plans) and conduct laboratory testing, development testing, aircraft system integration testing, fleet verification and demonstration, and system evaluation. JHMCS NVCD: Continue the joint USAF/USN developmental flight test of the JHMCS NVCD system. Conduct laboratory testing, development testing, aircraft system integration testing, operational test and evaluation, and other pre-Milestone C events. NON-EJECTION WFOV NVG: Prepare and update required documentation (e.g. system engineering plan, acquisition plan, test plans), procure units to conduct laboratory testing, development testing, aircraft system integration testing, fleet verification and demonstration, and system evaluation. EJECTION (NON-JHMCS) WFOV NVG: Initiate USN specific system planning, ground, airborne development test and evaluation, and operational test and evaluation for ejection seat NVG platforms. JHMCS NIGHT ATTACK: Continue development and operational test and evaluation for JHMCS Night Attack standard and wide field of view (WFOV) system for the F/A-18 aircraft. IMPROVED HEARING PROTECTION: Prepare and update required documentation (e.g. system engineering plan, acquisition plan, test plans), procure units to conduct laboratory testing, development testing, aircraft system integration testing, fleet verification and demonstration, and system evaluation. FLIGHT DECK CRANIAL: Prepare and update required documentation (e.g. system engineering plan, acquisition plan, test plans), procure units to conduct laboratory testing, development testing, aircraft system integration testing, fleet verification and demonstration, and system evaluation. AGILE FREQUENCY LASER EYE PROTECTION (AFLEP): Procure units to conduct laboratory testing, development testing and aircraft system integration testing. LASER EYE PROTECTION IMPROVEMENT PROGRAM (LEPIP): Procure units to conduct laboratory testing, development testing and aircraft system integration testing, fleet verification and demonstration and system evaluation. Prepare and update required documentation. JOINT AIRCREW LASER EYE PROTECTION VISOR (JALEPV): Procure units to conduct laboratory testing, development testing and aircraft system integration testing, fleet verification and demonstration and system evaluation. Prepare and update required documentation.

Enhanced Aircraft Safety Systems	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	9.056	11.722	14.741	3.979
RDT&E Articles Qty				

AIRCRAFT MOUNTED SYSTEMS:

NACES P3I: Completed retrofit of P3I in all T-45 and F/A-18 aircraft. ESIRP: Conducted component and system qualification testing. Continuing fleet assessment of aircrew endurance modifications for F/A-18 aircraft. CWTS: ECP approved for revised CWTS design. Contract awarded for first UH-1Y aircraft production deliveries. Next contract option exercise planned for 3rd Qtr FY07. MARS: ECP approved for SH-60B, SH-60F, HH-60H. Retrofit of H-60 legacy aircraft delayed until maintenance publications. CMARS: Leverages MARS technology and integrates webbing retractor system into all front line rotary wing aircraft. Design also includes new AIRSAVE aircrew interface. Developmental testing continues for new aircrew mounted interface. Qualification testing planned for 2nd Qtr FY07. Commenced work on aircraft integration for MH-53 and UH-1 aircraft. SE: Planning for source selection and contract award in 2nd Qtr FY08 for new generation of endurance systems to be retrofit in front line "non-ejection seat" equipped aircraft. LTO: Contract awarded to Northrop Grumman for the design, development, qualification and integration of OBOGS for the Advanced Hawkeye. Start of DT for replacement concentrator. ACPS: Planning for integration studies and leveraging Army Blackhawk Cockpit Airbag Systems for use in Navy rotary wing aircraft to start in FY08. ESE: Ejection seat endurance performance specification complete. Source selection plan in work. Contract award planned for 2nd Qtr FY07.

APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604264N, AIRCREW SYSTEMS DEVELOPMENT	PROJECT NUMBER AND NAME 0606, AIRCREW SYSTEMS DEVELOPMENT
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C. OTHER PROGRAM FUNDING SUMMARY:	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
Aviation Life Support - OPN 424400	37.764	15.461	12.750	18.093						
Aviation Life Support Mods - APN 057500	0.319	0.413	8.389	7.318						

D. ACQUISITION STRATEGY:

Commercial Off-The-Shelf (COTS)/NDI where possible, cost plus award fee contracts. Majority of programs non-Acat programs with no specific acquisition.

Exhibit R-3 Cost Analysis (page 1)										DATE:		
APPROPRIATION/BUDGET ACTIVITY										February 2007		
RDT&E,N / BA-5			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
			0604264N, AIRCREW SYSTEMS DEVELOPMENT				0606, AIRCREW SYSTEMS DEVELOPMENT					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Sys Engrg ADV CRASH PROTECTION		WX NAWCAD, PATUXENT RIVER MD				1.200	02/08	.219		.628	2.047	
Sys Engrg ADV CRASH PROTECTION		WX VARIOUS				.800	02/08				.800	
Sys Engrg EJECTION (NON-JHMCS) WFOV NVG		WX VARIOUS								3.416	3.416	
Sys Engrg SURVIVAL VEST & ARMOR		WX NAWCAD, PATUXENT RIVER MD				.961	02/08	.693	02/09	3.176	4.830	
Sys Engrg SURVIVAL VEST & ARMOR		TBD TBD				.400	02/08	.400	02/09	.400	1.200	1.200
Sys Engrg UNIVERSAL CAMOUFLAGE		WX VARIOUS						.150	02/09	.325	.475	
Systems Eng SOA		WX VARIOUS	.894	.339	02/07	.691	02/08	.814	02/09	2.343	5.081	
Systems Eng AFLEP		WX NAWCAD, PATUXENT RIVER MD				.100	02/08	.200	02/09	1.438	1.738	
Systems Eng AFLEP		TBD TBD				.250	02/08	.550	02/09	.850	1.650	1.650
Systems Eng JALEPV		WX NAWCAD, PATUXENT RIVER MD				.200	02/08	.244	02/09	.500	.944	
Systems Eng JALEPV		TBD TBD				.550	02/08	.550	02/09	1.000	2.100	2.100
Systems Eng LEPID		WX NAWCAD, PATUXENT RIVER MD				.200	02/08	.200	02/09	.450	.850	
Systems Eng LEPID		TBD TBD				.450	02/08	.350	02/09	.500	1.300	1.300
Systems Eng CWTS		WX NAWCAD, PATUXENT RIVER MD	.666	.106	02/07	1.085	02/08	.465	02/09	1.057	3.379	
Systems Eng CWTS		WX NAWCAD, CHINA LAKE CA	.045								.045	
Systems Eng EJECTION SEAT ENDUR		WX NAWCAD, PATUXENT RIVER MD		.170	02/07	.130	02/08				.300	
Systems Eng EJECTION SEAT ENDUR		WX NAWCAD, CHINA LAKE CA		.490	02/07	.170	02/08				.660	
Systems Eng EJECTION SEAT ENDUR		TBD TBD		.960	02/07	.285	02/08				1.245	1.245
Systems Eng ESIRP		SS/CPAF MARTIN-BAKER, MIDDLESEX, ENGLAND	.828			1.225	12/07				2.053	2.053
Systems Eng ESIRP		WX VARIOUS	4.122	.061	02/07	.204	02/08	.170	02/09	1.058	5.615	
Systems Eng FLIGHT DECK CRANIAL		WX NAWCAD, PATUXENT RIVER MD				1.000	02/08	.500	02/09		1.500	
Systems Eng FLIGHT DECK CRANIAL		TBD TBD						.500	02/09		.500	.500
Systems Eng JHMCS NIGHT ATTACK		WX VARIOUS	3.667	1.306	02/07	.300	02/08			.482	5.863	
Systems Eng LTO		SS/CPAF NORTHROP GRUMMAN SYS, NY	10.490	8.200	01/07	3.800	01/08				22.490	22.490
Systems Eng LTO		WX NAWCAD, PATUXENT RIVER MD	1.027	.523	02/07	.381	02/08				1.931	
Systems Eng CMARS		TBD TBD				1.500	02/08	1.500	02/09	.400	3.400	3.400
Systems Eng CMARS		WX VARIOUS				3.190	02/08	.900	02/09	1.600	5.690	
Systems Eng MARS		FFP H. Koch	2.200								2.200	2.200
Systems Eng MARS		WX VARIOUS	1.444								1.444	
Systems Eng SEAT ENDURANCE		WX VARIOUS				.450	02/08	.600	02/09	.100	1.150	
Systems Eng WASTE MANAGEMENT		WX NAWCAD, PATUXENT RIVER MD				.195	02/08	.300	02/09	.325	.820	
Systems Eng WASTE MANAGEMENT		TBD TBD				.250	02/08				.250	.250
Systems Engineering HYDRATION		WX NAWCAD, PATUXENT RIVER MD				.030	02/08	.177	02/09	.270	.477	
Systems Engrg COMMON HELMET		WX VARIOUS				.100	02/08	.100	02/09	1.550	1.750	
Systems Engrg IMPROVED HEARING PROT.		WX NAWCAD, PATUXENT RIVER MD				1.000	02/08	1.000	02/09	.250	2.250	
Systems Engrg IMPROVED HEARING PROT.		TBD TBD				.250	02/08	.250	02/09	.100	.600	.750
Systems Engrg JHMCS NVCD		WX NAWCAD, PATUXENT RIVER MD				1.508	02/08	2.300	02/09	1.990	5.798	
Systems Engrg NON-EJECTION WFOV NVG		WX NAWCAD, PATUXENT RIVER MD						1.700	02/09	1.500	3.200	
Systems Engrg NON-EJECTION WFOV NVG		WX NAWCAD, CHINA LAKE CA						.150	02/09		.150	
Systems Engrg NON-EJECTION WFOV NVG		WX NSWC DET, CRANE IN						.150	02/09	.300	.450	
SUBTOTAL PRODUCT DEVELOPMENT			25.383	12.155		22.856		15.239		26.008	101.641	
SUPPORT												
SUBTOTAL SUPPORT												
TEST & EVALUATION												
SUBTOTAL TEST & EVALUATION												
MANAGEMENT												
MGT & PROF SUPPT SRVC (NON-FFRDC)		C/CPFF L-3 COMMUNICATIONS GOVERNMENT SERVICES,, CA		.080	12/06	.080	12/07			3.152	3.312	.160
Mgt & PROF SUPPT SRVC (NON-FFRDC)JHMCS		WX VARIOUS	.041	.027	02/07	1.206	02/08	1.170	02/09	.132	2.576	
TRAVEL LTO		TO NAVAIR, PAXTUXENT RIVER MD		.125	02/07	.125	02/08				.250	
Travel NACES		TO NAVAIR, PAXTUXENT RIVER MD	.638							.500	1.138	
SUBTOTAL MANAGEMENT			.679	.232		1.411		1.170		3.784	7.276	
Total Cost			26.062	12.387		24.267		16.409		29.792	108.917	

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																	DATE: February 2007															
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME																						
RDT&E,N / BA-5					0604264N, AIRCREW SYSTEMS DEVELOPMENT					0606, AIRCREW SYSTEMS DEVELOPMENT																						
Fiscal Year	FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones																																
Waste Management																																
Hydration																																
Universal Camouflage																																
Survival Vest & Armor																																
Common Helmet																																
JALEPV - NEW																																
LEPIP - NEW																																
AFLEP - NEW																																
JHMCS NVCD																																
Non-Ejection WFOV NVG																																
Ejec (Non-JHMCS)WFOV																																
JHMCS Night Attack																																
Improved Hearing Prot																																
Flight Deck Cranial																																
CMARS																																
LTO																																
Ejection Seat Endurance																																
Test & Evaluation Milestones																																
Waste Management																																
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Production Milestones																																
Waste Management																																
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ESIRP																																
CWTS																																
MARS																																
CMARS																																
Ejection Seat Endurance																																
Deliveries																																

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Exhibit R-4a, Schedule Detail						DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5		PROGRAM ELEMENT 0604264N, AIRCREW SYSTEMS DEVELOPMENT			PROJECT NUMBER AND NAME 0606, AIRCREW SYSTEMS DEVELOPMENT				
Schedule Profile		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Waste Management - MS C/FRP					2Q				
Waste Management - SDD/User Assess				2Q-4Q	1Q-3Q				
Waste Management - DEL					3Q-4Q	1Q-4Q	1Q		
Hydration - MS C/FRP						2Q			
Hydration - DEL						3Q-4Q	1Q-4Q		
Universal Camouflage - MS C/FRP					4Q				
Universal Camouflage - SDD				2Q-4Q	1Q-3Q				
Survival Vest & Armor - MS C, FRP						2Q	2Q		
Survival Vest & Armor - SDD				2Q-4Q	1Q-4Q	1Q-4Q	1Q		
Survival Vest & Armor - DEL						3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
JALEPV - PRR, MS C/FRP				2Q, 4Q					
JALEPV - DT				2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
LEPIP - PDR					1Q				
LEPIP - DT				2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
AFLEP - PDR							2Q		
AFLEP - DT				2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Common Helmet - CDR					4Q				
Common Helmet - DT/OT				1Q-4Q	1Q-4Q	1Q-3Q			
Common Helmet - DEL					2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
JHMCS NVCD - OTRR				1Q					
JHMCS NVCD - DT/OT				1Q-4Q	1Q-4Q	1Q-3Q			
JHMCS NVCD - DEL					1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Non-Ejection WFOV NVG - MS C							3Q		
Non-Ejection WFOV NVG - DT/OT					4Q	1Q-4Q	1Q-3Q		
Non-Ejection WFOV NVG - DEL					1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q

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Exhibit R-4a, Schedule Detail						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT 0604264N, AIRCREW SYSTEMS DEVELOPMENT				PROJECT NUMBER AND NAME 0606, AIRCREW SYSTEMS DEVELOPMENT			
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Ejection (Non-JHMCS) WFOV NVG - MS C						3Q		
Ejection (Non-JHMCS) WFOV NVG - DT/OT				4Q	1Q-4Q	1Q-3Q		
Ejection (Non-JHMCS) WFOV NVG - DEL					1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
JHMCS Night Attack - CDR				3Q				
JHMCS Night Attack - DT	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
ECWIP/SOA - DT/OT	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Improved Hearing Protection - MS C				1Q				
Improved Hearing Protection - DT/OT			1Q-4Q	1Q-4Q	1Q-4Q			
Improved Hearing Protection - DEL				2Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Flight Deck Cranial - CDR, MS C			1Q	2Q				
Flight Deck Cranial - DT/OT			1Q-4Q	1Q-4Q				
Flight Deck Cranial - DEL			1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
ESIRP - DT	1Q-4Q	1Q						
ESIRP - DEL			1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
CWTS - DT	1Q-4Q	1Q-4Q	1Q-4Q	1Q				
CWTS - DEL	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
CMARS - PDR, CDR			3Q	3Q				
CMARS - DT/OT			1Q-4Q	1Q-4Q	1Q-3Q			
CMARS - MS C					4Q			
CMARS - FRP							1Q	
CMARS - DEL						3Q-4Q	1Q-4Q	1Q-4Q
MARS - DT	1Q							
MARS - DEL	1Q-4Q	1Q						
LTO - PDR, CDR	2Q	2Q						
LTO - DT/DT ASSIST	1Q-4Q	1Q-4Q	1Q-4Q	1Q				
Ejection Seat Endurance - PRR, IOC		3Q	2Q					
Ejection Seat Endurance - DT		1Q-3Q						
Ejection Seat Endurance - DEL			1Q-4Q	1Q-4Q	1Q-4Q	1Q		

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EXHIBIT R-2a, RDT&E Project Justification							DATE:		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E,N / BA-5		0604264N, AIRCREW SYSTEMS DEVELOPMENT			9999, CONGRESSIONAL ADD				
COST (\$ in Millions)		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
9999, CONGRESSIONAL ADD		2.650	1.445						
RDT&E Articles Qty		3							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
Congressional Add:

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

9061 AIRCREW Mounted Systems Development	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	2.650			
RDT&E Articles Qty	3			

The funding is needed to develop and integrate smaller and lighter night vision intensifier tubes (16 mm) for narrow and wide field of view night vision systems. The advanced intensifier tubes will be the foundation for night vision devices that can be integrated with the Joint Helmet Mounted Cueing Systems (JHMCA helmet mounted display system) to provide a night vision cueing capability. This capability is necessary for rapid targeting of air-to-air missiles and air-to-ground weapons at night. Funding for the development of enhanced night vision imaging systems and the incorporation of the capability in current and future helmet mounted cueing systems will extend current daytime only technology for night use.

RDT&E Articles are state of the art 16 mm image intensifier tubes.

A32N Ejection Seat Improvement	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		1.445		
RDT&E Articles Qty				

The funding is needed to provide SJU-4/A ejection seat performance upgrades by investigating current escape technology applications to the T/AV-8B escape system. The total scope of the program is to design, develop, test and upgrade the T/AV-8B escape system to reduce the risk of injury to aircrew for the entire escape envelope. Product area focus will be to reduce risk of injury at mode 1/2 boundary for the ejection seat, reduce opening shock of the parachute, reduce possibility of neck injuries and improve restraint.