EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-4						R-1 ITEM NOMENCLATURE 0604272N, TADIRCM		
COST ($ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	7.789	98.361	27.569	52.566	38.578	42.522	43.363	44.144
3040 ANTI-MISSILE TECHNOLOGY (TADIRCM)	7.789	17.461	27.569	52.566	38.578	42.522	43.363	44.144
3166 CH-53 DIRCM TAP		80.900						

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This element includes development of electronic warfare systems for the United States Navy (USN), United States Marine Corps (USMC), and the United States Army (USA) tactical aircraft, USMC helicopters, surface combatants, data link vulnerability assessments, precision targeting, USN and USMC communications and non-communications jammers and development and testing of electronic warfare devices for emerging threats and emergency contingencies.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget:	9.807	20.527	45.689	63.765
Current President's Budget:	7.789	98.361	27.569	52.566
Total Adjustments	-2.018	77.834	-18.120	-11.199
Summary of Adjustments				
Congressional Reductions				
Congressional Rescissions				
Congressional Undistributed Reductions	-0.151	-0.066		
Congressional Increases	0.005	80.900		
Economic Assumptions			0.077	0.508
Miscellaneous Adjustments	-1.872	-3.000	-18.197	-11.707
Subtotal	-2.018	77.834	-18.120	-11.199

C. SCHEDULE:

Project Unit 3040. Schedule changes such as Strike DIRCM System Development and Demonstration (SDD) contract, Critical Design Review (CDR), and Preliminary Design Review (PDR), reflect program restructure and Tactical Aircraft Direct InfraRed Countermeasures (TADIRCM) repricing reduction in FY 2008 and FY 2009. Program restructure moved the start of the Assault effort forward and delayed the Strike effort. Increased scope added by the AoA Executive Steering Committee affected the start and completion of the Strike and Assault Alternative of Analysis (AoA). The completion of the Early Operational Assessment (EOA) flight test, the POD contract, the EOA flight test, and the EOA Report was extended to allow for repair of damage to the lense caused by technical issues with the laser during software testing. Aquisition Milestones are now reflected in the schedule.

D. TECHNICAL:

Project Unit 3040. During the evaluation of the integration and performance of the DIRCM components into a system, excessive heat has caused component failure. As a result of technical investigations, configuration changes and corrective action for all known integration issues have been corrected at this time.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0604272N, TADIRCM	PROJECT NUMBER AND NAME 3040, ANTI-MISSILE TECHNOLOGY (TADIRCM)	

COST ($ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
3040 ANTI-MISSILE TECHNOLOGY (TADIRCM)	7.789	17.461	27.569	52.566	38.578	42.522	43.363	44.144
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The TADIRCM system provides the warfighter with protection against surface and air-to-air missiles. This project looks at the InfraRed (IR) Man Portable Air Defense (MANPAD) and surface-to-air (SAM) threat. The EOA project to flight test was funded by an FY 2005 Congressional Add and anticipates Initial Operational Capability (IOC) for Strike DIRCM in FY 2017. IOC for Assault DIRCM is anticipated in FY 2014.

Strike DIRCM is designed for fixed wing aircraft that is needed for protection against surface-to-air and air-to-air IR threats. Strike DIRCM regains airspace below 20K feet and neutralizes the IR threat.

Assault DIRCM is an advanced capability against the IR SAM threat directed at rotary wing aircraft.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

EOA and Podded DIRCM System	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	7.789	17.461	27.569	52.566
RDT&E Articles Qty				

Congressional Reductions

Design and build a podded DIRCM system, incorporating missile warning sensors, system processor and pointer/tracker, and flight test of the pod to provide an assessment of the advanced technology in simulated flight conditions. Information gained during this EOA will be leveraged to develop and field a DIRCM system for Naval aircraft by 2017. Fund efforts for completion of the AoA, completion of EOA flight testing, follow-on EOA report to Congress, and efforts to support Milestone B decision for Assault DIRCM. Development of applicable modeling and simulation models will begin in FY 2007. Award Assault SDD contract. Continue risk reduction flights prior to Strike SDD. Fund SDD efforts for Assault DIRCM. The PDR for the Assault SDD contract is scheduled for the 2nd quarter of FY 2009.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0604272N, TADIRCM	PROJECT NUMBER AND NAME 3040, ANTI-MISSILE TECHNOLOGY (TADIRCM)

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
APN-5, Line 53, Common ECM, OSIP 005-08, 057600			29.661	25.952	2.837	44.356	45.058	45.779	2,134.639	2,328.282

D. ACQUISITION STRATEGY:

The management and acquisition strategy for the TADIRCM system Initial Suitability Assessment entails a competitive phased approach to reduce risk to cost and schedule through viable competition. The EOA project awarded two contracts for the pointer/tracker/laser development, one contract for pod development, and one contract for missile warning sensors. The Naval Research Lab is the technical lead in integration of these pointer/trackers/lasers, and sensors within the pod utilizing government furnished processors and ancillary data recording equipment. The Navy selected one contractor in FY 2005 to one pointer/tracker/laser contract at the fabrication point to ensure the project does not exceed budget and can be executed as described here.

The Assault DIRCM program will leverage technology developed by the Army's Suite of Integrated InfraRed Countermeasures (SIIRCM) program. The Assault DIRCM program will address more advanced IR SAMs.

The Strike DIRCM program will maximize use of technology developed under the EOA. Strike DIRCM is a podded family of systems. The program will accomplish component redesign/repackaging necessary to survive the tactical aircraft environment. The program will conduct tests to verify that the system performance meets the tactical environment.

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2007		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-4		PROGRAM ELEMENT 0604272N, TADIRCM				PROJECT NUMBER AND NAME 3040, ANTI-MISSILE TECHNOLOGY (TADIRCM)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs 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												
Aircraft Integration	CPFF	VARIOUS		3.500	02/07	.800	12/07	.900	12/08	8.240	13.440	13.440
Ancillary Hdw Development	TBD	TBD				.400	12/07	5.300	12/08	5.900	11.600	11.600
EMD Support	TBD	TBD						.200	TBD	2.400	2.600	2.600
Modeling/Simulation	WX	VARIOUS		.300	11/06	.300	12/07	.400	12/08	1.000	2.000	
Primary Hdw Development	CPIF	GALAXY SCIENTIFIC, EGGHARBOR WA		5.715	03/07	14.179	TBD	29.935	TBD	82.048	131.877	131.877
Systems Engineering	VARIOUS	VARIOUS	4.992	0.760	12/06	1.300	VARIOUS	1.300	VARIOUS	3.470	11.822	11.822
Systems Engineering	CPFF	TEKLA, WOODBRIDGE VA		0.400	01/07						.400	.400
SUBTOTAL PRODUCT DEVELOPMENT			4.992	10.675		16.979		38.035		103.058	173.739	

Remarks:

SUPPORT												
Configuration Management	WX	VARIOUS		.100	02/07	.100	11/07	.100	11/08	.400	.700	
Development Support	WX	NAWCWD, PT MUGU CA		.350	11/06						.350	
Integrated Logistics	WX	NAWCAD, PATUXENT RIVER MD		.180	11/06	1.451	TBD	2.392	TBD	10.179	14.202	
Software Development	WX	NAWCWD, PT MUGU CA		.200	12/06	1.600	TBD	2.800	TBD	11.139	15.739	
Technical Data	TBD	TBD				.200	TBD	.800	TBD	1.700	2.700	
Studies and Analysis	WX	NSWC, CRANE DIVISION IN		.574	12/06						.574	
SUBTOTAL SUPPORT				1.404		3.351		6.092		23.418	34.265	

Remarks:

TEST & EVALUATION												
Congressional Reductions	WX	NRL, WASHINGTON DC		.250	02/07	2.759	12/07	2.000	12/08	7.098	12.107	
ENG & Evaluation	CPFF	VARIOUS	2.768			.400	11/07				3.168	3.168
ENG & Evaluation Government	WX	VARIOUS	.702	.670	11/06	.700	11/07	.500	11/08	6.200	8.772	
Live Fire Support	VARIOUS	VARIOUS		.500	03/07			3.600	VARIOUS	3.700	7.800	
Operational Test & Evaluation		VARIOUS	.162			.400	02/08			6.000	6.562	
Technical Maturation	WX	NAWCAD, PATUXENT RIVER MD		.363	12/06						.363	
Test Assets	WX	NAWCWD, CHINA LAKE CA		.250	02/07					6.152	6.402	
SUBTOTAL TEST & EVALUATION			3.632	2.033		4.259		6.100		29.150	45.174	

Remarks:

MANAGEMENT												
Direct Support Costs	WX	VARIOUS	.196	.150	VARIOUS	.045	VARIOUS	.052	VARIOUS	.278	.721	
Eng & Tech Spt	CPFF	VARIOUS	1.248	1.178	11/06	.500	11/07	.500	11/08	2.000	5.426	5.426
Government Engineering Support	WX	VARIOUS	1.514	.500	11/06	1.650	11/07	1.392	11/08	7.513	12.569	
Mgt & Prof Suppt Srvc	CPFF	VARIOUS	.331	.694	11/06	.200	11/07	.200	11/08	.800	2.225	2.225
NAWCAD/Pax Support	WX	NAWCAD, PATUXENT RIVER MD	.231	.500	11/06	.400	11/07			1.600	2.731	
NAWCWD/Pt Mugu Support	WX	NAWCWD, PT MUGU CA		.200	02/07						.200	
Travel	TO	NAVAIR	.219	.127	10/06	.185	10/07	.195	10/08	.790	1.516	
SUBTOTAL MANAGEMENT			3.739	3.349		2.980		2.339		12.981	25.388	

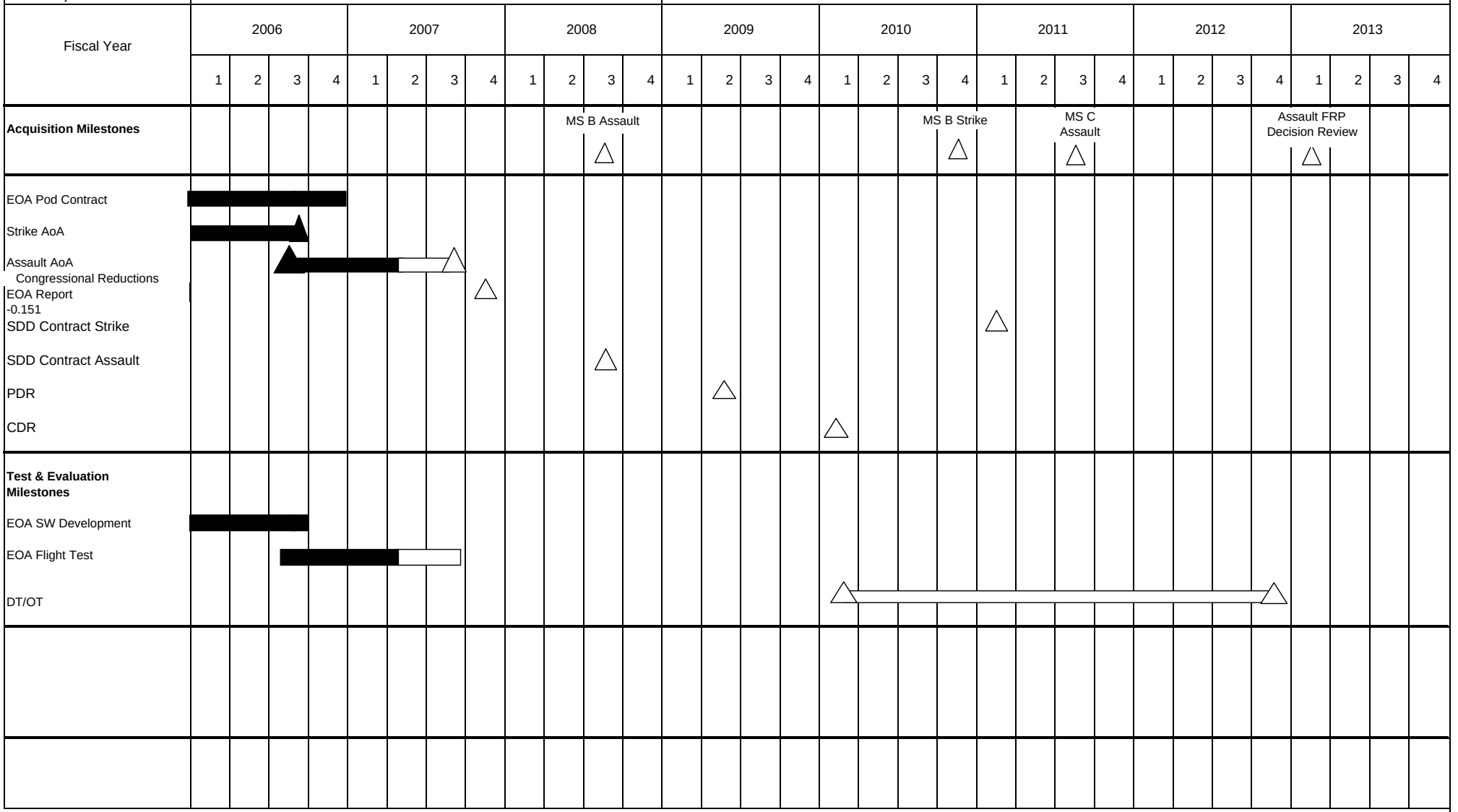
Total Cost			12.363	17.461		27.569		52.566		168.607	278.566	

Remarks:

CLASSIFICATION: **UNCLASSIFIED**

EXHIBIT R4, Schedule Profile | DATE: **February 2007**

APPROPRIATION/BUDGET A	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-4	0604272N TADIRCM	3040 TADIRCM



CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: **February 2007**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-4**	PROGRAM ELEMENT 0604272N TADIRCM				PROJECT NUMBER AND NAME 3040 TADIRCM			
Schedule Profile	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
MS B Assault			3Q					
MS B Strike					4Q			
MS C Assault						3Q		
Assault FRP Decision Review								1Q
EOA Pod Contract	1Q-4Q							
Strike AoA	1Q-3Q							
Assault AoA	3Q-4Q	1Q-3Q						
EOA Report		4Q						
SDD Contract Strike						1Q		
SDD Contract Assault			3Q					
PDR				2Q				
CDR					1Q			
EOA SW Development	1Q-3Q							
EOA Flight Test	3Q-4Q	1Q-3Q						
DT/OT					1Q-4Q	1Q-4Q	1Q-4Q	
Congressional Reductions								

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2007
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0604272N, TADIRCM	PROJECT NUMBER AND NAME 3166 CH-53 DIRCM TAP

COST ($ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
3166 CH-53 DIRCM TAP		80.900						
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This supplemental helps to accelerate the fielding of an advanced InfraRed Countermeasure (IRCM) capability for United States Navy (USN)/United States Marine Corps (USMC) rotary wing platforms. This capability will significantly increase platform survivability against Man Portable Air Defense (MANPADs) and is required to defeat advanced threats expected to be encountered in the Global War on Terrorism (GWOT) theaters. Without this capability USN/USMC rotary wing platforms will be limited in their ability to engage/complete missions in support of GWOT. This effort will entail the qualification and tests required to field an advanced IRCM capability on the CH-53E,in addition to the non recurring engineering costs necessary to address the limitation of the current Assault Support Equipment (ASE) Missile Warning Sensor (MWS) capability on forward deployed USN/USMC rotary wing platforms.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Qualification Tests	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		80.900		
RDT&E Articles Qty				
Congressional Reductions				

This funding will accomplish the qualification tests required to field an advanced IRCM capabiity on the CH-53E and the non recurring engineer costs necessary to address limitations of the current ASE MWS capability on forward deployed USN/USMC rotary wing platforms. The advanced IRCM capabiity requires system integration and engineering manufacturing development to existing hardware and software configuration of the CH-53 platform. Ancillary hardware development is required to support optimal utilization of IRCM detecting, tracking and targeting of the sensors and lasers. Modeling and simulation will support development of software and operability testing. The MWS will be integrated on multiple forward deployed USN/USMC rotary wing platforms. Additional ancillary hardware development is required to support A Kit development for the MWS.

C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable

D. ACQUISITION STRATEGY:

Qualification of the CH-53E DIRCM capability for operational use will occur in FY 2007. Contract execution of this effort is planned for the 2nd quarter of FY 2007. Upon completion of validating the CH-53E DIRCM is suitable for operational use, An Engineering Change Proposal will be executed in FY 2008 followed by a contract award for the procurement of the CH-53E DIRCM B-Kits. In addition, a contract award will be executed to modify the several USN/USMC platforms to accommodate an enhanced Ultra Violet MWS capability. This strategy is quick reaction response to provide a capability in support of GWOT.