EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2006	

APPROPRIATION/BUDGET ACTIVITY REASEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA 7						R-1 ITEM NOMENCLATURE 0204571N, CONSOLIDATED TRAINING SYSTEMS DEV	
COST ($ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	20.322	43.615	17.857	21.874	20.425	22.767	26.036
0604 TRNG RANGE & INST DEV (TRID)	1.965	2.614	2.970	3.795	3.877	4.283	4.089
1427 SURFACE TACTICAL TEAM TRAINER (STTT)	8.135	5.685	5.466	5.803	5.954	6.049	6.160
2124 AIR WARFARE TRAINING DEVEP	1.412	1.420	1.687	1.726	1.763	1.801	1.840
3087 TOTAL SHIP TRAINING SYSTEM (TSTS)	1.342	15.852			5.790	5.195	4.726
3093 TACTICAL COMBAT TRAINING SYSTEM (TCTS)	7.468	16.044	7.734	10.550	3.041	5.439	9.221
9999 Congressional Adds		2.000					

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

The Surface Tactical Team Trainer (STTT) will develop the Battle Force Tactical Training (BFTT) System to provide realistic Combat System level team training including a means to link surface ships together for coordinated Unit and Battle Group level training using Distributed Interactive Simulation (DIS). The migration of selected modules of the BFTT software to Windows NT from UNIX OS is underway. The Congressional adds initiate the development of the Distributed Shipboard Classroom which provides a capability for shipboard instructors to utilize current online multimedia training technology to improve the quality, quantity and effectiveness of mission critical, military, safety and administrative training mandated by OPNAV, TYCOM and Fleet directives. The Navigation Seamanship and Shiphandling Training (NSST) System effort develops integrated COTS based navigation and shiphandling trainers to support navigation team training in Fleet Concentration Areas, as well as developing and integrating shipboard virtual reality shiphandling trainers for use onboard surface ships. Total Ship Training System (TSTS) is a Pre-Planned Program Improvement (P3I) to the BFTT system that connects combat system, navigation/ship control, engineering/propulsion, and damage control training, simultaneously exercising all primary elements of the crew in realistic combat-like conditions. TSTS will leverage off the technical architecture of the current BFTT configuration to provide expanded support for a total ship training capability.

The Training Range and Instrumentation Development Systems (TRIDS) program provides development of may range systems including arange electronic warfare simulator, advanced weapons training systems, laser training systems, Tactical Aircrew Combat Training System (TACTS), Large Area Tracking Range (LATR), Test and Training Enabling Architecture (TENA) interoperability, combat training system improvements, and shallow water range technology.

The AWTD program provides development of many aviation training systems, including mission rehearsal simulation technologies and the Aviation Training Technology Integration Facility (ATTIF).

The Tactical Combat Training System (TCTS) will provide the Navy a replacement for the TACTS and LATR system. TCTS will also provide fleet deployable instrumentation for at sea training and tactics development. By providing a rangeless capability, the system will greatly increase the area where live instrumented training can be conducted. Initial fielding of a Non-Developmental Item (NDI) Pod system is planned at NAS Key West. The program incorporates an evolutionary development (incremental) towards a system capable of supporting a broad spectrum of naval platforms through weapons simulations, participant weapons system stimulation, open architecture, and a high capacity/long range secure datalink.

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2006

| APPROPRIATION/BUDGET ACTIVITY
RDT&E, N / | **BA 7** | PROGRAM ELEMENT NUMBER AND NAME
0204571N, CONSOLIDATED TRAINING SYSTEMS | | | | | PROJECT NUMBER AND NAME
0604, TRNG RANGE & INST DEV (TRID) | |

COST ($ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
0604 TRNG RANGE & INST DEV (TRID)	1.965	2.614	2.970	3.795	3.877	4.283	4.089	
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project develops specialized instrumentation systems for fleet readiness training while minimizing life cycle costs. Tasks include development of the following: electronic warfare simulators and associated subsystems, target control systems, Tactical Aircrew Combat Training System (TACTS), Large Area Tracking Range (LATR) improvements, Test and Training Enabling Architecture (TENA) interoperability, combat training systems improvements, underwater technology, ranges interoperability and information architecture, and assorted Advanced Weapons Training Systems (AWTS), such as Imaging Weapons Training System (IWTS), Remote Strafe Scoring System (RSSS), and weapon and countermeasure simulations for use with various range training systems.

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /	BA 7	PROGRAM ELEMENT NUMBER AND NAME 0204571N, CONSOLIDATED TRAINING SYSTEMS	PROJECT NUMBER AND NAME 0604, TRNG RANGE & INST DEV (TRID)

B. ACCOMPLISHMENTS / PLANNED PROGRAM: Large Area Tracking Range (LATR)

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	1.002	1.490	1.574	
RDT&E Articles Qty				

Developed Block 4.0 software upgrade, analyzed range integration requirements, and developed hardware upgrades. Redesigned, integrated and tested modules to eliminate obsolete components on the LATR power conditioner. Completed operational test and evaluation and integration of Block 4.0 software upgrade. Complete design, integration and test of LATR Block software 5.0/5.1 baseline upgrade. Complete design, integration, and test of participant instrumentation packages (PIP) modules to address obsolescence, high failure components and to improve operability and performance. Conduct and complete vulnerability testing of the Ground System Rehost. Conduct and complete security testing and assessment for LATR system certification and accreditation for Ground System Rehost. Initiate and complete development, test and integration of software and hardware modifications to system test sets. Develop interface software using Test and Training Enabling Architecture (TENA) to increase Tactical Training Range systems interoperability with other services training instrumentation.

Combat Training Systems Development

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	.963	1.124	1.396	
RDT&E Articles Qty				

Developed additional training capabilities for the Control and Computational Subsystem (CCS), Personal Computer Based Joint Display Subsystem (JDS), and developed a formalized interface between the CCS and Large Area Tracking Range (LATR). Complete Semi-annual CCS Block upgrades. Complete Test Set Upgrade and system rehost. Complete formalization of CCS/LATR integration. Develop stand alone Electronic Warfare Processor (EW PROC). Enhance capability for Advanced Systems Operator Console (ASOC), Tactical Aircrew Combat Training System Communication Protocol Analyzer (TCPA) and enhanced Radar Display Subsystem (RADS).

EXHIBIT R-2a, RDT&E Project Justification	DATE:
	February 2006

APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /	**BA 7**	**0204571N, CONSOLIDATED TRAINING SYSTEMS**	0604, TRNG RANGE & INST DEV (TRID)

C. PROGRAM CHANGE SUMMARY

Funding:	FY 2005	FY 2006	FY 2007
Previous President's Budget:	2.031	2.654	2.984
Current President's Budget:	1.965	2.614	2.970
Total Adjustments	-0.066	-0.040	-0.014

Summary of Adjustments			
Congressional Undistributed Reductions	-0.002	-0.028	
Economic Assumptions		-0.012	0.015
Program Adjustments	-0.064		-0.029
Subtotal	-0.066	-0.040	-0.014

Schedule:
LATR recertification moved from 3Q FY05 to 2Q FY06.

Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification	DATE:
	February 2006

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / **BA 7**	**0204571N, CONSOLIDATED TRAINING SYSTEMS**	0604, TRNG RANGE & INST DEV (TRID)

D. OTHER PROGRAM FUNDING SUMMARY:

E. ACQUISITION STRATEGY:
 The Training Range and Instrumentation Development (TRID) program is a non-ACAT program. The integrated program teams that develop new TRID capabilities include contractors whose products and services are obtained by means of competitive awards, Indefinite Deliveries/Indefinite Quantity (IDIQ), and cost-type contracts. Individual delivery orders are awarded for specific development efforts.

	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Exhibit R-3 Cost Analysis (page 1)										**DATE:** February 2006		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 7		**PROGRAM ELEMENT** 0204571N, CONSOLIDATED TRAINING SYSTEMS					**PROJECT NUMBER AND NAME** 0604, TRNG RANGE & INST DEV (TRID)						
Cost Categories												
PRODUCT DEVELOPMENT												
Sys Eng/Software/Hardware Development	VARIOUS	VARIOUS	82.995	.718	VARIOUS	1.086	VARIOUS	1.320	VARIOUS	6.965	93.084	
Systems Eng	WX	NAWCAD, PATUXENT RIVER MD		.550	1/10/2005	1.010	12/1/2005	1.061	12/1/2006		2.621	
Systems Eng	VARIOUS	VARIOUS		.160	VARIOUS	.200	VARIOUS	.200	VARIOUS	6.900	7.460	
SUBTOTAL PRODUCT DEVELOPMENT			82.995	1.428		2.296		2.581		13.865	103.165	
Remarks:												
SUPPORT												
Develop Support Equip	TBD	VARIOUS	10.377							.100	10.477	
Software Development	VARIOUS	VARIOUS		.375	VARIOUS	.100	VARIOUS	.100	VARIOUS	.549	1.124	
SUBTOTAL SUPPORT			10.377	.375		.100		.100		.649	11.601	
Remarks:												
TEST & EVALUATION												
Dev Test & Eval	TBD	NAWCWD, CHINA LAKE CA	5.145	.010	11/5/2005						5.155	
Oper Test & Eval	TBD	NAWCWD, CHINA LAKE CA		.005	11/5/2005						.005	
SUBTOTAL TEST & EVALUATION			5.145	.015							5.160	
Remarks:												
MANAGEMENT												
PM SUPPORT-TSD ORLANDO	VARIOUS	VARIOUS	2.877	.137	VARIOUS	.218	VARIOUS	.289	VARIOUS	1.556	5.077	
Program Mgmt Sup	TBD	NAWCWD, CHINA LAKE CA		.010	VARIOUS						.010	
SUBTOTAL MANAGEMENT			2.877	.147		.218		.289		1.556	5.087	
Remarks:												
Total Cost			101.394	1.965		2.614		2.970		16.070	125.013	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile	DATE: **February 2006**

APPROPRIATION/BUDGET / **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development	PROJECT NUMBER AND NAME 0604 (TRID) Large Area Tracking Range

Fiscal Year	2005				2006				2007				2008				2009				2010				2011			
	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

LATR GPS REC UPGRADE

LATR ADIU UPGRADE

LATR LDP REHOST

LATR Recertification

LATR RW Resize

Block 5.0 LATR Upgrade

Block 5.1 LATR Upgrade

Block 6.0 Upgrade

Block 6.1 Upgtade

Block 6.2 Upgrade

LATR/TCTS Tech Transfer

CLASSIFICATION:						
Exhibit R-4a, Schedule Detail				DATE: **February 2006**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**				PROJECT NUMBER AND NAME 0604 (TRID) Large Area Tracking Range		
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
LATR GPS REC UPGRADE	4Q	1Q-2Q					
LATR ADIU UPGRADE	4Q	1Q-2Q					
LATR LDP Rehost		1Q-4Q	1Q-2Q				
LATR Recertification		2Q-4Q					
LATR RW Resize		3Q-4Q	1Q-4Q				
Block 5.0 LATR Upgrade IOC	1Q						
Block 5.1 LATR Upgrade IOC	3Q-4Q	1Q-2Q					
Block 6.0 LATR Upgrade IOC		3Q-4Q	1Q-2Q				
Block 6.1 LATR Upgrade IOC			3Q-4Q	1Q-2Q			
Block 6.2 LATR Upgrade IOC				3Q-4Q	1Q-2Q		
LATR/TCTS Tech Transfer					3Q-4Q	1Q-4Q	1Q-2Q

EXHIBIT R4, Schedule Profile	DATE:
	February 2006

APPROPRIATION/BUDGET ACTIVITY	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0604 (TRID) Combat Training Systems Development

Fiscal Year	2005				2006				2007				2008				2009				2010				2011			
	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
JDS IOC
Semi-Annual Blk Upgrades

Semi-Annual Blk Upgrades
LATR/TACTS Interface

Test Set Rehost Dev
PDR
CDR
T&E
IOC
Semi-Annual Blk Upgrades

EW Processor
PDR
CDR
T&E
IOC
Semi-Annual Blk Upgrades

ASOC Upgrade

TACTS Com Pro Anal
PDR
CDR
T&E
IOC
Semi-Annual Blk Upgrades

Radar Display Subsystem
PDR
CDR
T&E
IOC
Semi-Annual Blk Upgrades

TTR Common Display
PDR
CDR
T&E
IOC

Link 16 TACTS Intregration
PDR
CDR
T&E
IOC

F/A-18 E/F TACTS GPS
PDR
CDR
T&E
IOC

R-1 Shopping List Item No 176

CLASSIFICATION:							
Exhibit R-4a, Schedule Detail					DATE: **February 2006**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**					PROJECT NUMBER AND NAME 0604 (TRID) Combat Training Systems Development		
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
JDS IOC	1Q						
Semi-annual Block Upgrades	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q		
LATR/TACTS Interface	1Q-3Q						
Test Set Rehost	1Q						
PDR							
CDR							
T&E	1Q						
IOC	1Q						
Semi-Annual Block Upgrades	3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q		
EW Processor							
PDR	1Q-3Q						
CDR	4Q	1Q-2Q					
T&E		2Q-4Q					
IOC		4Q					
Semi-Annual Block Upgrades			1Q-4Q	1Q-4Q	1Q-4Q		
ASOC Upgrade	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q		
TACTS Com Pro Anal							
PDR	1Q-3Q						
CDR	4Q	1Q-2Q					
T&E		2Q-4Q					
IOC		4Q					
Semi-Annual Block Upgrades			1Q-4Q	1Q-4Q	1Q-4Q		
Radar Display Subsystem							
PDR	1Q-3Q						
CDR	4Q	1Q-2Q					
T&E		2Q-4Q					
IOC		4Q					
Semi-Annual Block Upgrades			1Q-4Q	1Q-4Q	1Q-4Q		
TTR Common Display							
PDR				1Q-3Q			
CDR				3Q-4Q	1Q		
T&E					1Q-3Q		
IOC					3Q-4Q	1Q	
Link 16 TACTS Integration							
PDR		1Q-3Q					
CDR		4Q	1Q-2Q				
T&E			3Q-4Q	1Q-2Q			
IOC				3Q-4Q			
Link 16 TACTS Integration							
PDR		1Q-3Q					
CDR		4Q	1Q-2Q				
T&E			3Q-4Q	1Q-2Q			
IOC				3Q-4Q			

R-1 Shopping List Item No 176

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE: **February 2006**		

APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development			PROJECT NUMBER AND NAME 1427 Surface Tactical Team Trainer (STTT) (1427/3087)			
COST ($ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		9.477 *	21.537 *	5.466 *	5.803 *	11.744 *	11.244 *	10.886 *
RDT&E Articles Qty		N/A	N/A	N/A	N/A	N/A	N/A	N/A

 *Includes project units 1427/3087

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Battle Force Tactical Training (BFTT) Program provides realistic joint warfare training across the spectrum of armed conflict; realistic unit level team training in all warfare areas; a means to link ships together which are in different homeports for coordinated training; external stimulation of shipboard training systems; and simulation of non-shipboard forces. BFTT uses a distributed architecture, integrating existing training systems, and uses Distributed Interactive Simulation (DIS) protocols. BFTT provides ships' Commanding Officers and Battle Group/Battle Force Commanders with the ability to conduct coordinated realistic, high stress, combat system level team training as an integral part of the Afloat Training Organization. BFTT provides a baseline capability/system that meets the Operational Requirements Document (ORD). Stimulators/Simulators (STIM/SIM) provides standardized Radio Frequency (RF), Intermediate Frequency (IF), and/or Digital injection into surface ship radars and fire control systems for training of shipboard operators/teams as part of the BFTT System. The Distributed Shipboard Classroom provides a capability for shipboard instructors to utilize current online multimedia training technology to improve the quality, quantity and effectiveness of mission critical, military, safety and administrative training mandated by OPNAV, TYCOM and Fleet directives. It initiates development of the active electronic countermeasures training capability to BEWT and to the BFTT software. NSST System effort develops integrated COTS based navigation and shiphandling trainers to support navigation team training in Fleet Concentration Areas, as well as developing and integrating shipboard virtual reality shiphandling trainers for use onboard surface ships. The Total Ship Training System (TSTS) addition to BFTT connects combat system, navigation/ship control, engineering/propulsion, and damage control training, simultaneously exercising all primary elements of the crew in realistic combat-like conditions.

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
			February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-7	0204571N Consolidated Training Systems Development	1427 Surface Tactical Team Trainer (STTT) (1427/3087)	

B. Accomplishments/Planned Program

		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		5.653	5.685	5.466
RDT&E Articles Quantity		N/A	N/A	N/A

Develop conjunctive Training Systems improvements and interface upgrades in response to evolving Combat System capabilities. Respond to Fleet prioritized Training Systems capabilities in multiple mission areas including AAW, SUW, ASW, BMD, EW areas.

		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		1.501	0.000	0.000
RDT&E Articles Quantity		N/A	N/A	N/A

Funding is provided for the software development for the Multi-Mission Team Trainer (MMTT) Phase 2. The MMTT Phase I replaced the Device S14A13 Tactical Advanced Simulated Warfare Integrated Trainer (TASWIT), which modernized the outdated software and minimizes the life cycle support costs. Phase 2 replaces the Device 20F15 Tactical Advanced Combat Direction and Electronic Warfare (TACDEW) System, which drastically reduces the life cycle support of the Fleet's combat system level and battle group level team training capability. Effort was complete in FY05.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development		PROJECT NUMBER AND NAME 1427 Surface Tactical Team Trainer (STTT) (1427/3087)	

B. Accomplishments/Planned Program (Cont.)

		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		0.981	0.000	0.000
RDT&E Articles Quantity		N/A	N/A	N/A

Funding is being provided specifically for TOMAHAWK operator and team training development and integration into BFTT. Effort was complete in FY05.

		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		1.342	15.852	0.000
RDT&E Articles Quantity		NA	NA	NA

The Total Ship Training System (TSTS) connects combat system, navigation/ship control, engineering/propulsion, and damage control training, simultaneously exercising all primary elements of the crew in realistic combat-like conditions. TSTS is inclusive of the Navigation Seamanship & Shiphandling Trainer (NSST); Engineering Operations & Casualty Control Trainer (EOCCT); Combat System Casualty Control Trainer (CSCCT); Damage Control Training & Management System (DCTMS); Training Exercise & Management System (TMS); Naval Gunfire Support Trainer (NGST) (formerly VAST); and the Augmented Reality Fire Fighting Trainer (ARFF). TSTS efforts include system/software engineering, software design, software development, system integration and test. FY05 Congressional Plus up of $1M provided to analyze requirements, design, develop and deliver a functional prototype with related documentation for elements of TSTS. Prototypes of the various TSTS hardware and software subsystems will be designed and documented in a design specification including, Personnel Management subsystem, Communication Audio Capture subsystem, and the Video Capture subsystem.

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	DATE:
	February 2006

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME
RDT&E, N / BA-7	0204571N Consolidated Training Systems Development

B. PROGRAM CHANGE SUMMARY:

	FY 2005	FY 2006	FY 2007
Funding:			
Previous President's Budget:	9.569	21.864	9.914
Current FY07 PRESBUD Budget:	9.477	21.537	5.466
Total Adjustments	-0.092	-0.327	-4.448
Summary of Adjustments			
Small Business Innovation	-0.077		
Program Adjustments	-0.005		-4.532
Economic Assumptions		-0.099	0.084
Execution Adjustments	-0.010		
Congressional Undistributed Reductions		-0.228	
Subtotal	-0.092	-0.327	-4.448

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development	PROJECT NUMBER AND NAME 1427 Surface Tactical Team Trainer (STTT) (1427/3087)

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
OPN 276200 (Surface BFTT/TSTS portion only)	34.252	34.56	13.404	27.045	34.389	37.44	28.486	0	209.576

D. ACQUISITION STRATEGY:

The BFTT acquisition strategy for system development utilizes the spiral development model, as mandated by OSD. Incremental acquisition and fielding, utilizing commercial off-the-shelf technology to the extent possible, is in accordance with the BFTT ACAT IVM Milestone III approved documentation.

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: **February 2006**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0204571N Consolidated Training Systems Development				PROJECT NUMBER AND NAME 1427 Surface Tactical Team Trainer (STTT) (1427/3087)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development		NAVSEA 02	11.498			0.600		1.163		1.119	TBD		14.380	14.380
Ancillary Hardware Development	*	NAVSEA 02	0.999					1.163		0.000			2.162	2.162
Component Development	*												0.000	0.000
Ship Integration								0.291		0.279	TBD		0.570	
Ship Suitability													0.000	
Systems Engineering	*	PHD / NUWC Newport / CDSA / NSWC Crane / NAVSSES / NAVSEA 02	23.531			1.127	01/05	2.463	01/06	0.830	TBD	Continuing	Continuing	N/A
Training Development													0.000	
Licenses	*	CDSA	3.663			0.142	01/05						3.805	N/A
Tooling													0.000	
GFE			2.497									0.000	2.497	2.497
Award Fees			0.357									0.000	0.357	0.357
Subtotal Product Development			42.544			1.869		5.080		2.228		Continuing	Continuing	

Remarks:

*WX/RX/RCP

Development Support													0.000	
Software Development	*	NAWC Orlando / NAVSSES / CDSA / NAVSEA 02	49.634			5.804	01/05	10.283	01/06	2.588	TBD	Continuing	Continuing	N/A
Training Development													0.000	
Integrated Logistics Support													0.000	
Configuration Management													0.000	
Technical Data	*	NAWC Orlando	11.072			0.946	01/05						12.018	N/A
GFE													0.000	
Award Fees													0.000	
Subtotal Support			60.706			6.750		10.283		2.588		Continuing	Continuing	

Remarks:

*WX/RX/RCP

R-1 Shopping List Item No 176

Exhibit R-2 RDTEN Budget Item Justification
(Exhibit R-2, Page 16 of 34)

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2006**					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0204571N Consolidated Training Systems Development				PROJECT NUMBER AND NAME 1427 Surface Tactical Team Trainer (STTT) (1427/3087)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	*	NAWC Orlando / CDSA / NAVSSES / NAVSEA 02	5.469			0.426	01/05	4.174	01/06	0.071	TBD	Continuing	Continuing	N/A
Operational Test & Evaluation													0.000	
Live Fire Test & Evaluation													0.000	
Test Assets													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal T&E			5.469			0.426		4.174		0.071		Continuing	Continuing	N/A

Remarks:

*WX/RX/RCP/IPR

Contractor Engineering Support													0.000	
Government Engineering Support	*	CDSA / NAVSSES	4.315			0.432	01/05	2.000	01/06	0.579	TBD	Continuing	Continuing	N/A
Program Management Support													0.000	
Travel													0.000	
Labor (Research Personnel)													0.000	
SBIR Assessment													0.000	
Subtotal Management			4.315			0.432		2.000		0.579		Continuing	Continuing	N/A

Remarks:

*WX/RX/RCP

Total Cost				113.034	0.000		9.477		21.537		5.466		Continuing	Continuing	

Remarks:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006	

| APPROPRIATION/BUDGET ACTIVITY
RDT&E, N / | | **BA 7** | PROGRAM ELEMENT NUMBER AND NAME
0204571N, CONSOLIDATED TRAINING SYSTEMS | | | | PROJECT NUMBER AND NAME
2124, AIR WARFARE TRAINING DEVELOPMENT | |

COST ($ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
2124 AIR WARFARE TRAINING DEVEP	1.412	1.420	1.687	1.726	1.763	1.801	1.840	
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project transitions new training system technologies for use in naval aviation training. Products from this effort are directly tied to the Navy and Marine Corps Aviation Simulation Master Plans ($479M), the MH-60R/S master plan, the Multi-Mission Maritime Aircraft (MMA) program, and will support the development and design of future naval aviation training/mission rehearsal systems. Tasks include: 1) Advanced training systems specification development to provide for modular, High Level Architecture (HLA) compliant, high fidelity Distributed Mission Training (DMT) and mission rehearsal capabilities, ashore and afloat. Mission rehearsal is defined as the practice of planned tasks and functions critical to mission success using a true-to-life, interactive representation of the expected operating environment. Technologies to be developed and integrated include: 1) DMT weapons server, weather server, common mission training stations, high resolution helmet mounted, and/or flat panel displays, photographic quality image generation, portable source initiative (PSI) database reuse, advanced environmental effects modeling, fused radar/infra-red/electro-optic and acoustic sensor simulations, physics-based IR stimulations; and 2) the Aviation Training Technology Integration Facility (ATTIF), which is a man-in-the-loop test bed for the integration of software, hardware, and networked systems. New technologies will include intelligent computer generated forces (CGFs) as virtual and constructive entities for threat or friendly interaction. Additionally, "man-in-the-loop" intelligent agents will be integrated to the ATTIF, including an HLA node for participation and benchmarking fleet exercises in the synthetic battle space. This ATTIF capability provides a window to fleet aviators for critical comment, evaluation, and fine tuning of new and innovative technologies before final transition to the Fleet. Debrief/AAR and intelligent training support tools are focused on human performance enhancements for Fleet readiness and distributed mission training exercises.

Metrics - These technology transitions will both lower total ownership costs (TOC) of the training systems (life-cycle visual system database re-use, reduced instructor manning profiles, software-based fidelity enhancements), and increase fleet readiness by enhancing overall system fidelity to the projected operating environments. NASMP/MCSMP readiness improvements are conservatively forecast at 14-28% following associated technology upgrades to stand alone, or networked simulators.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /** **BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N, CONSOLIDATED TRAINING SYSTEMS**	PROJECT NUMBER AND NAME 2124, AIR WARFARE TRAINING DEVELOPMENT

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	.353	.327	.417	
RDT&E Articles Qty				

Develop and integrate ATTIF modular architecture components for Navy DMT, deployable E-2C crew station, intelligent synthetic forces, and tactical scenario control. Demonstrate low-cost DMT configurations, while maintaining or increasing fidelity.   Demonstrate low cost training and mission rehearsal configurations and evaluate variable fidelity cockpits. Demonstrate instructor support technology including advanced scenario generation, multi-SAF control, automated measures of performance (MOP), and debrief/AAR products for NASMP. Analyze GOTS/COTS alternatives for network centric warfare connectivity in the simulated battlespace, while reducing training system life cycle costs.

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	.494	.369	.329	
RDT&E Articles Qty				

Integrate IR (NVG & Forward Looking Infra-Red (FLIR) sensor simulation)) with Sensor Host government software. Perform risk reduction, integration and productization of Sensor host for Navy DMT and legacy devices. Demonstrate GOTS capability for cost-effective database materialization, and develop PSI/RSD specifications for implementation on DMT, deployed trainers, legacy, and new visual system upgrade programs. Develop texture storage, PSI material reference processes/standards, and automated applications for R/T publishing, R/T shadows, R/T combat effects, and very high resolution visuals.

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	.268	.355	.486	
RDT&E Articles Qty				

Develop/specify and evaluate intelligent training support tools (ITST) for application to NASMP, MH-60R, MMA, and large scale coalition-level battle exercises. Specify, test and integrate human performance-centered design into NASMP common components, the ATTIF/DMT testbed, and deployable systems. Develop automated performance measurement and after-action review (AAR) specifications and products that increase instructor efficiency and training efficacy in a reduced instructor manning environment.

EXHIBIT R-2a, RDT&E Project Justification				DATE:
				February 2006

| APPROPRIATION/BUDGET ACTIVITY
RDT&E, N / | **BA 7** | PROGRAM ELEMENT NUMBER AND NAME
0204571N, CONSOLIDATED TRAINING SYSTEMS | | PROJECT NUMBER AND NAME
2124, AIR WARFARE TRAINING DEVELOPMENT |

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	.297	.369	.455	
RDT&E Articles Qty				

Provide for upgraded and modular Mission Training Station (MTS) designs to lower NASMP/platform simulator life-cycle costs, improve instructor effectiveness and provide for multi-SAF exercise utilization. Analyze, develop, and integrate ATTIF modular architecture components for F/A-18 cockpit avionics, MH-60R avionics, intelligent instructor operator agents, small footprint E-2C, TACAIR/MMA common GUI initiatives, and intelligent synthetic forces. Upgrade common IOS/MTS human interface to be Joint Mission Planning System (JMPS) compatible, next generation threat system (NGTS) compatible, MCSMP TEN compatible, and JSAF compatible, thereby maximizing ROI for mission training station-related technology investments for multi-platform exercises.

R-1 Shopping List Item No 176

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /** **BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N, CONSOLIDATED TRAINING SYSTEMS**	PROJECT NUMBER AND NAME 2124, AIR WARFARE TRAINING DEVELOPMENT

C. PROGRAM CHANGE SUMMARY

Funding:	FY 2005	FY 2006	FY 2007
Previous President's Budget:	1.458	1.442	1.742
Current BES / President's Budget:	1.412	1.420	1.687
Total Adjustments	-0.046	-0.022	-0.055

Summary of Adjustments

Congressional Undistributed Reductions	-0.017	-0.015	
Economic Assumtions		-0.007	0.009
Program Adjustments	-0.029		-0.064
Subtotal	-0.046	-0.022	-0.055

Schedule:

Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 7	PROGRAM ELEMENT NUMBER AND NAME 0204571N, CONSOLIDATED TRAINING SYSTEMS	PROJECT NUMBER AND NAME 2124, AIR WARFARE TRAINING DEVELOPMENT

D. OTHER PROGRAM FUNDING SUMMARY:	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
APN Line 22. BA-7 BLI 0705 Common Ground Equipment (USMC Federation Simulators)	0.000	19.415	31.616	23.829	39.629	32.993	31.723		179.205
APN Line 16. BA-7 BLI 0705 Common Ground Equipment (Fleet Aircrew Simulator Training (FAST))	53.743	86.026	50.359	51.375	51.922	54.972	51.669		400.066

Related RDT&E
(U) P.E. 0604245N, Project # H2279, Sub-Project Title: USMC H-1 Upgrades

E. ACQUISITION STRATEGY:
Air Warfare Training Development (AWTD) is a joint 6.4 R&D technology transition team, tied closely to the Navy and Marine Corps Aviation Simulation Master Plans. A true, multidisciplinary, joint Integrated Product Team (IPT) approach is utilized through a combination of reimbursable and direct cite/MIPR contract processes to accomplish the IPT's principal objectives. These technology transitions continue to successfully target improvements in fleet readiness, and reductions in total system life cycle costs. AWTD R&D investment directly supports achievement of cost-wise readiness metrics for the Naval Aviation Training enterprise team.

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					DATE:						
Exhibit R-3 Cost Analysis (page 1)						February 2006					
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /	BA 7	0204571N, CONSOLIDATED TRAINING SYSTEMS				2124, AIR WARFARE TRAINING DEVELOPMENT					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
System Engineering	SS-CPFF	L3 Communications Corp. Arlington TX	3.775	.360	2/25/2005	.350	VARIOUS	.550	VARIOUS	2.200	7.235	7.235
System Engineering	SS-FFP	Information Network Systems Inc. PA		.148	1/14/2005	.698	VARIOUS	.763	VARIOUS	3.272	4.881	4.881
System Engineering	SS-FFP	Aptima Woburn MA		.164	1/14/2005						.164	.164
System Engineering	WX	NAWCTSD, ORLANDO	5.104	.343	1/1/2005						5.447	
SUBTOTAL PRODUCT DEVELOPMEN			8.879	1.015		1.048		1.313		5.472	17.727	

Remarks:

SUPPORT												
Develop Support Equipment	SS-FFP	CACI, Inc. Alexandria VA	.857	.145	12/8/2004	.150	VARIOUS	.150	VARIOUS	.711	2.013	2.013
SUBTOTAL SUPPORT			.857	.145		.150		.150		.711	2.013	2.013

Remarks:

TEST & EVALUATION												
Developmental Test and Evaluation	WX	NAWCAD, PATUXENT RIVER MD	4.833	.240	1/1/2005	.207	VARIOUS	.209	VARIOUS	.912	6.401	
SUBTOTAL TEST & EVALUATION			4.833	.240		.207		.209		.912	6.401	

Remarks:

MANAGEMENT												
Travel	TO	NAVAIR HQ, PATUXENT RIVER MD	.164	.012	1/2/2005	.015	1/1/2006	.015	1/1/2007	.251	.457	
SUBTOTAL MANAGEMENT			.164	.012		.015		.015		.251	.457	

Remarks:

Total Cost			14.733	1.412		1.420		1.687		7.346	26.598	

Remarks:

CLASSIFICATION:

EXHIBIT R4, Schedule Profile

DATE: **February 2006**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0204571N/Consolidated Training Systems Development	2124/Air Warfare Training Development

Fiscal Year	2005				2006				2007				2008				2009				2010				2011			
	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

NASMP

Acquisition
6.4 RDT&E Milestones
TRANSITION TO NASMP — TRANS. TO NASMP & MH-60R — TRANS. TO NASMP — TRANS. TO NASMP — TRANS. TO NCTE — TRANS. TO NCTE — TRANS. TO JFCOM

ATTIF MOD Architecture
ATTIF Integr. & modifications

Software (specifications & GOTS)
Weapons Server Software
NGTS Common GUI
C-DMTS (ATTIF Integr.) (3)
Intelligent Trng Support Tools (Maritime)
Baseline F/A18C, Lot 1 Int to ATTIF Architecture — TACAIR — Int to ATTIF MARITIME — ITST — Int to ATTIF MMA — Int to ASW AIRVAST — Int to FST / NCTE — Int to DMOC — Int to JFCOM

Test & Evaluation
Milestones
WEAPS server Oceana/Lemoore
WEAPS Server Maritime (Base/H-60R)
C-DMTS Spec/Demo
ITST AAR toolset DEMO
H-60R — MARITIME — ASWVAST — FST — DMOC — JFCOM
(TRR DEMO)

Sensor stimulation (3)
Sensor Host Specs (2)
AV-8B — MH-60S — MH-60R — Oceana

Combat/Environ. effects
Helmet-mounted cueing w/sensor fusion
Super resolution IGs w/sensors
Deployed SIMS (DMT/Sensor capable)
MMA/NUCAV JSF DMT specs/Demo
JHMCS F/A-18C — AIR VAST DEMO — F/A-18 E/F — GICM LINK — MV-22 — DEPCOVED SIMS JOINT — MMA — FINAL DEMO

Production Milestones
N/A   See above transitions to NASMP

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CLASSIFICATION:

Exhibit R-4a, Schedule Detail				DATE: **February 2006**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**				PROJECT NUMBER AND NAME 2124/Air Warfare Training Development			
Schedule Profile	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Transition Milestones		1Q	1Q,4Q	4Q	4Q	4Q	4Q
ATTIF MOD Architecture							
ATTIF integration & modifications	4Q	4Q	4Q	4Q	4Q	4Q	4Q
Software (specifications & GOTS)							
Weapons Server software (F/A18C)							
Int to ATTIF (NGTS GUI)	1Q, 4Q						
Int to ATTIF (C-DMTS) (4)	4Q	4Q		4Q	4Q	4Q	4Q
Int Trng Supp Tools, (ITST) MARITIME			2Q				
Test and Evaluation (Prototypes)							
WEAPS server Upgrades Oceana/Lemoore	2Q, 4Q						
WEAPS server Upgrades MARITIME (3)	4Q		1Q, 4Q	2Q	2Q	2Q	2Q
C-DMTS Spec/Demo	2Q	1Q					
ITST/AAR toolset DEMO (2)			1Q				
Sensor Host stimulation (3)	4Q	2Q, 4Q					
Sensor Host specs (2)	2Q						
Combat/Environ. Effects			1Q				
Helmet-mounted cueing w/sensor fusion			4Q	3Q	3Q	4Q	4Q
Super resolution IGs w/sensors			4Q				
Deployed SIMS (DMT/Sensor capable)			4Q	4Q	4Q	4Q	
MMA / NUCAV JSF DMT Specifications (3)			4Q				

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		BA 7	PROGRAM ELEMENT NUMBER AND NAME 0204571N, CONSOLIDATED TRAINING SYSTEMS				PROJECT NUMBER AND NAME 3093, TACTICAL COMBAT TRAINING SYSTEM (TCTS).

COST ($ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
3093 TACTICAL COMBAT TRAINING SYSTEM (TCTS).	7.468	16.044	7.734	10.550	3.041	5.439	9.221	
RDT&E Articles Qty	2	3	1					

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Tactical Combat Training System will provide the Navy a replacement for major portions of the Tactical Aircrew Combat Training System (TACTS) and Large Area Tracking Range (LATR) system. TCTS will also provide fleet deployable training for at sea training and tactics development. By providing a rangeless capability, the system will greatly increase the area where live instrumented training can be conducted. Initial fielding of a Non-Developmental Item (NDI) Pod system is planned at NAS Key West. The program incorporates an evolutionary development (incremental) towards a system capable of supporting a broad spectrum of naval platforms through weapons simulations, participant weapons system stimulation, open architecture and a high capacity/long range secure data link. The Milestone Decision Authority approved program rebaseline on May 23, 2005.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /**	BA 7	PROGRAM ELEMENT NUMBER AND NAME **0204571N, CONSOLIDATED TRAINING SYSTEMS**	PROJECT NUMBER AND NAME 3093, TACTICAL COMBAT TRAINING SYSTEM (TCTS).

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	7.468	16.044	7.734	
RDT&E Articles Qty	2	3	1	

Qualify and complete the NDI Rangeless Pod system for use at small range. Develop and deliver Integrated Logistics products for fielding the NDI pod at NAS Key West. Develop F/A-18 (C/D/E/F) Internal Subsystem (IS). Initiate testing of TCTS system for deployed airwing training. Initiate development of instrumentation package for rotary wing and transport aircraft. Develop and implement track exchange interface between TCTS live monitor and TACTS Control and Computation Subsystem (CCS). Define Test and Training Enabling Architecture (TENA) compliant interface between TCTS and an Advance Display System. Develop and deliver Integrated Logistics products for the IS and for fielding the TCTS system aboard deployed carriers. Develop data link uplink control for the live monitor systems. Initiate development of Fixed Ground Subsystem (FGS) for use at large ranges. FY05 continued development of the Internal Susbystem for the F/A-18. FY06 will initiate the development of the Fixed Ground Subsystem for delivery of the larger Navy training ranges and development of the Advanced Data link waveform, and Rack-mounted Subsystem for Rotary Wing and Transport aircraft. FY07 will continue the development of the JTRS advance data link.

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2006

APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /	**BA 7**	**0204571N, CONSOLIDATED TRAINING SYSTEMS**	3093, TACTICAL COMBAT TRAINING SYSTEM (TCTS).

C. PROGRAM CHANGE SUMMARY

Funding:	FY 2005	FY 2006	FY 2007
Previous President's Budget:	9.375	16.288	8.312
Current President's Budget:	7.468	16.044	7.734
Total Adjustments	-1.907	-0.244	-0.578

Summary of Adjustments			
Congressional Undistributed Reductions	-0.148	-0.170	
Economic Assumptions		-0.074	0.042
Program Adjustments	-1.759		-0.620
Subtotal	-1.907	-0.244	-0.578

Schedule: The following milestones have changed to better reflect program status and MDA rebaseline approval:

From:	To:
Phase 3 Fixed Range (FGS, RS, CGTS) FY05 3Q/4Q	Phase 2 MSC FY06 3Q
Phase 3 MS B FY06 1Q	Phase 3 MSB FY06 3Q
Phase 4 Advanced Datalink FY06 2Q/4Q	Phase 4 MSB FY06 1Q
Phase 1 DT FY05 1Q	Phase 5 Battle Group FY-10 - FY-12
Keywest IOC FY05 3Q	Phase 1 (NDI)DTC1-1, DTC1-2/DT Assist, OTB-3 FY05 3Q
Beaufort IOC FY08 4Q	Phase 1 NDI - Transportable (GS, AS) FRP FY074Q
Phase 2 DTB2-1, 2-2A, 2B, 2-3, 2-4, 2-5, OTC2-1 FY05 2Q - FY07 1Q	Phase 2 Internal Subsystem (IS) LRIP FY06 3Q
IOC Lemoore FY08 4Q	Phase 2 Internal Subsystem (IS) FRP FY07 4Q
IOC CVW-5 FY07 1Q	IOC Key West FY06 2Q
IOC Oceana FY09 1Q	IOC CVW-5 FY07 3Q
IOC Yuma FY07 3Q	IOC Beaufort FY08 4Q
IOC Cherry PT FY09 3Q	IOC Fallon FY09 1Q
	IOC Oceana FY09 2Q
	IOC Cherry Pt. FY09 3Q

Technical:
        Not applicable

UNCLASSIFIED

		DATE:
EXHIBIT R-2a, RDT&E Project Justification		February 2006

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / **BA 7**	**0204571N, CONSOLIDATED TRAINING SYSTEMS**	3093, TACTICAL COMBAT TRAINING SYSTEM (TCTS).

D. OTHER PROGRAM FUNDING SUMMARY:	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
									0.000
Related OPN: Weapons Range Support Equipment, LI 4204	42.864	59.456	56.226	41.696	60.655	59.875	60.825		
Related APN: Other Production Charges, LI 0725	6.079	10.275	19.501	22.878	28.439	25.983	23.066		

E. ACQUISITION STRATEGY:

TCTS will employ an evolutionary acquisition strategy to procure a base Non-Developmental Item System and evolutionary development of the system to meet the full ORD requirements.
TCTS will be a cooperative program with the USAF P5 CTS program. The USAF awarded a 10-year contract in June 2003.
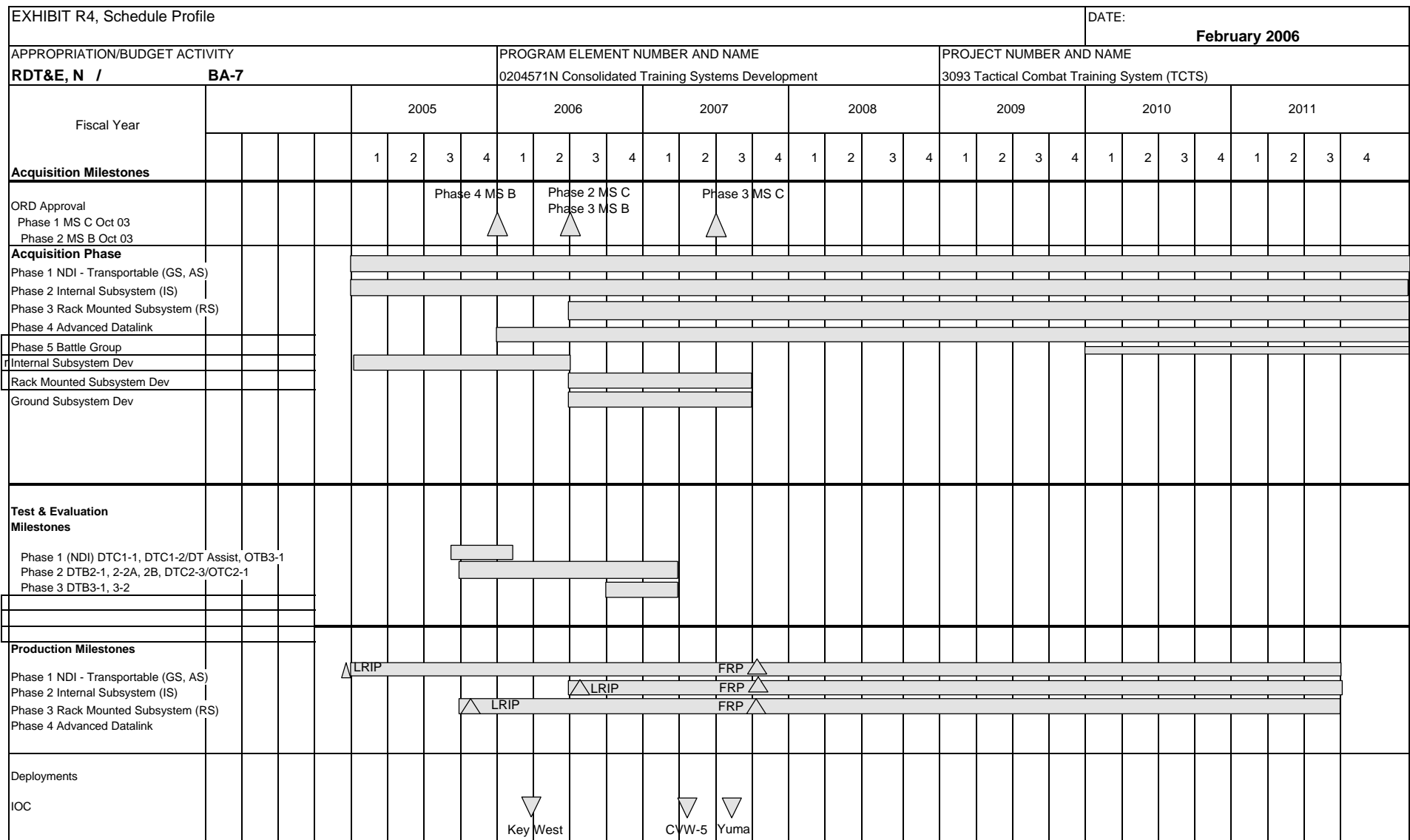
	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Primary Hdw Development	SS CPFF	CUBIC DEFENSE APPS, INC, SAN DIEGO, CA	1.783	1.673	12/04	2.610	11/05				6.066	6.066
SUBTOTAL PRODUCT DEVELOPMEN			1.783	1.673		2.610					6.066	
Remarks:												
SUPPORT												
Integrated Logistics Sup	SS CPFF	CUBIC DEFENSE APPS, INC, SAN DIEGO, CA				1.062	1/06	.511	TBD		1.573	1.573
Integrated Logistics Sup	VARIOUS	VARIOUS	.230	.158	VARIOUS					1.733	2.121	
Software Development	SS CPFF	CUBIC DEFENSE APPS, INC, SAN DIEGO, CA		1.242	12/04	3.555	1/06	4.531	TBD		9.328	9.328
Software Development	SS CPFF	CUBIC DEFENSE APPS, INC, SAN DIEGO, CA								19.746	19.746	19.746
SUBTOTAL SUPPORT			.230	1.400		4.617		5.042		21.479	32.768	
Remarks:												
TEST & EVALUATION												
Dev Test & Eval - ETS (NON-FFRDC)	VARIOUS	VARIOUS		.137	VARIOUS	.430	VARIOUS	.260	VARIOUS	.980	1.807	
Dev Test & Eval - Reimb Fld Spt	TBD	NAWCAD, PATUXENT RIVER MD	.082	1.309	10/04	1.995	1/06	.482	TBD		3.868	
Dev Test & Eval - Reimb Fld Spt	VARIOUS	VARIOUS		.430	VARIOUS	.430	VARIOUS			1.600	2.460	
SUBTOTAL TEST & EVALUATION			.082	1.876		2.855		.742		2.580	8.135	
Remarks:												
MANAGEMENT												
Contractor Eng Sup	SS CPFF	CUBIC DEFENSE APPS, INC, SAN DIEGO, CA	.040			4.225	1/06	.650	TBD		4.915	4.915
Contractor Eng Sup	VARIOUS	VARIOUS				.200	VARIOUS	.200	VARIOUS	3.050	3.450	
Government Eng Sup	WX	NAWCAD, Pax River MD	.267	2.248	VARIOUS	1.102	VARIOUS	.880	VARIOUS	2.740	7.237	
Program Mgmt Sup	WX	NAWCAD, Pax River MD	.187	.130	VARIOUS	.285	VARIOUS	.085	VARIOUS	.294	.981	
Program Mgmt Sup	WX	TSD Orlando FL		.139	11/04	.150	11/05	.135	11/06	.405	.829	
Travel	TO	NAVAIR HQ, PATUXENT RIVER, MD	.055	.002	10/04						.057	
SUBTOTAL MANAGEMENT			.549	2.519		5.962		1.950		6.489	17.469	
Remarks:												
Total Cost			2.644	7.468		16.044		7.734		30.548	64.438	
Remarks:												

DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 7

PROGRAM ELEMENT 0204571N, CONSOLIDATED TRAINING SYSTEMS

PROJECT NUMBER AND NAME 3093, TACTICAL COMBAT TRAINING SYSTEM (TCTS)

CLASSIFICATION:

EXHIBIT R4, Schedule Profile		DATE: **February 2006**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0204571N Consolidated Training Systems Development	3093 Tactical Combat Training System (TCTS)

Fiscal Year				2005				2006				2007				2008				2009				2010				2011			
Acquisition Milestones				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

ORD Approval
  Phase 1 MS C Oct 03
  Phase 2 MS B Oct 03

Phase 4 MS B
Phase 2 MS C
Phase 3 MS B
Phase 3 MS C

Acquisition Phase
Phase 1 NDI - Transportable (GS, AS)
Phase 2 Internal Subsystem (IS)
Phase 3 Rack Mounted Subsystem (RS)
Phase 4 Advanced Datalink
Phase 5 Battle Group
Internal Subsystem Dev
Rack Mounted Subsystem Dev
Ground Subsystem Dev

Test & Evaluation Milestones

  Phase 1 (NDI) DTC1-1, DTC1-2/DT Assist, OTB3-1
  Phase 2 DTB2-1, 2-2A, 2B, DTC2-3/OTC2-1
  Phase 3 DTB3-1, 3-2

Production Milestones

Phase 1 NDI - Transportable (GS, AS)
Phase 2 Internal Subsystem (IS)
Phase 3 Rack Mounted Subsystem (RS)
Phase 4 Advanced Datalink

LRIP   FRP
LRIP   FRP
LRIP   FRP

Deployments

IOC

Key West   CVW-5 Yuma

R-1 Shopping List Item No 176

Exhibit R-2 RDTEN Budget Item Justification
(Exhibit R-2, Page 31 of 34)

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: **February 2006**			
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-7**		PROGRAM ELEMENT 0204571N Consolidated Training Systems Development			PROJECT NUMBER AND NAME 3093 Tactical Combat Training System (TCTS)			
Schedule Profile		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
ORD Approval								
Phase 1 NDI - Transportable (GS, AS)		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Phase 2 Internal Subsystem (IS)		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Phase 3 Rack Mounted Subsystem (RS)			3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Phase 4 Advanced Datalink			1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Phase 5 Battle Group							1Q-4Q	1Q-4Q
Phase 1 MS C								
IOC Key West			2Q					
Phase 2 MS B								
Phase 2 MS C			3Q					
IOC CVW-5				2Q				
Phase 3 MS B			3Q					
Phase 3 MS C				3Q				
IOC Yuma				3Q				
Phase 4 MS B			1Q					
Phase 1 DT/OT				1Q-2Q				
Phase 2 DT/OT		4Q	1Q-4Q	1Q				
Phase 3 DT/OT				4Q	1Q			

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /**	**BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N, CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME 9999, Congressional Adds				
COST ($ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
9999 Congressional Adds		2.000					
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

3087 Congressional Plus up of $1M provided for Total Ship Training System to analyze requirements, design, develop and deliver a functional prototype with related documentation for elements of TSTS. Prototypes of the various TSTS hardware and software subsystems will be designed and documented in a design specification including, Personnel Management subsystem, Communication Audio Capture subsystem, and the Video Capture subsystem.

9794 The Sea Target Laser Aim Scoring System (STLASS) provides real-time, quantitative feedback on critical aspects of laser guided weapon employment not currently available from existing Navy laser scoring systems. This feedback has been proven to significantly improve flight crew weapon delivery capabilities during nearly a decade of use by the U.S. Army. The system consists of three major components: A Base Station, Target Kit and Aircraft Flight Data Unit. STLASS will be adapted to existing Navy seaborne targets to support Navy H-60 armed helicopter training and readiness events requiring laser scoring capability.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N, CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME 9999, Congressional Adds

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

3087 Total Ship Training System (TSTS)	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost		1.000		
RDT&E Articles Qty				

Design and develop a functional prototype with related documentation for elements of TSTS.

9794 STLASS	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost		1.000		
RDT&E Articles Qty				

Continue the design and development efforts required for adaptation of a STLASS base station, target and flight data unit to Navy H-60 configuration requirements.

Exhibit R-2 RDTEN Budget Item Justification
(Exhibit R-2, Page 34 of 34)