

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: February 2005
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APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7	R-1 ITEM NOMENCLATURE 0204571N Consolidated Training Systems Development
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COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	21.900	22.433	42.248	22.952	30.543	21.555	23.928	27.201
1427 Surface Tactical Team Trainer (STTT)	14.294	8.190	5.771	5.554	5.819	6.067	6.180	6.327
2449 Distributed Shipboard Trainer	0.959							
3087 Total Ship Training Capability (TSTC)*	0.289	1.379	16.093	4.360	8.041	6.149	5.578	5.102
0604 Training Range and Instrumentation Development Systems (TRIDS)	2.135	2.031	2.654	2.984	3.800	3.883	4.292	4.095
3093 Tactical Combat Training System (TCTS)	2.644	9.375	16.288	8.312	11.103	3.639	6.023	9.783
2124 Air Warfare Training Development (AWTD)	1.579	1.458	1.442	1.742	1.780	1.817	1.855	1.894

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

*** In FY 04 and FY 05 just funded NSS Trainers**

The 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 (NSS) Training 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 Training Range and Instrumentation Development Systems (TRIDS) program provides development of many range systems including range 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.

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7	R-1 ITEM NOMENCLATURE 0204571N Consolidated Training Systems Development	
<p>The AWTD program provides development of many aviation training systems including mission rehearsal simulation technologies, and the Aviation Training Technology Integration Facility (ATTIF).</p> <p>The TMS encompasses the requirements analysis and software development associated with the Navy's Maritime Development Agent function as part of the Joint Simulation System (JSIMS). The BFTT will develop the BFTT Electronic Warfare Trainer (BEWT) and applicable BFTT system software to provide EW operator and team training for Fleet EW Systems.</p> <p>The Tactical Combat Training System (TCTS) will provide the Navy a replacement for the Tactical Aircrew Combat Training System (TACTS) and Large Area Tracking Range (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.</p>		

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 2 of 37)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2005	
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) (1427/2449/3087)			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	15.542*	9.569*	21.864*	9.914*	13.860*	12.216*	11.758*	11.429*
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

***Includes project units 1427/3087/2449**

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. BFTT software modules are being migrated from UNIX/TAC to a Windows-NT/PC Operating System (OS). 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. NSS Training 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 Capability (TSTC) 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.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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) (1427/2449/3087)

B. Accomplishments/Planned Program

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	9.567	6.661	5.771	5.554
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

Continue to develop BFTT Link simulation software; develop/integrate new s/w capabilities and system interfaces; develop BG level Display and Debrief software; NTMF integration; BFTT Shore s/w development; Training I/F development for CG47-58 (AEGIS B/L 1 & 2); shock test; debrief s/w development and Fleet Battle Experiments; develop BFTT AIC training for AEGIS; Develop BFTT/TSSS Training on FFG CORTS; CMTpc Integration; Database Architecture & Content Improvements; Common Operating Procedure (COP) for Over The Horizon (OTH) Maritime Data; Common Operating Picture for LAWEX; Fleet Generated Requirements for B/L 2.0/2.1 and Improvements to B/L 2.2 and 2/3; Objective Based Training (Integrated Phase I/II); Readiness Measurement; JSAF Integration into BFTT (1st phase): BFTT-to-Sea (multi-ship demo); database Architecture & Content Improvements; JSAF Modifications for EW (2nd Phase); Database Improvements; AEGIS B/L 7 phase 1C; SQQ-89 Weapons Control; Scenario/Data Management via SIPRNET; Remote Reset of OBTs from BOPC; Improved Data Collection; Integrate Shore Based Aviation Trainers (E-2C, SH-60B, and P3-C). Embedded TBMD Training and JSIMS Integration/engineering will be developed after FY05. All shore based combat system team trainer funding was curtailed in FY94, therefore, BFTT is the Fleets only combat system level team training capability.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.451	1.548	0.000	0.000
RDT&E Articles Quantity	N/A	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.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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) (1427/2449/3087)

B. Accomplishments/Planned Program (Cont.)

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.959	0.000	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

Congress appropriated and authorized funding for development of the Distributed Shipboard Classroom in conjunction with the Battle Force Tactical Training Improvement Program. 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. The pilot project will provide an opportunity to assess the acceptance of Sailors and shipboard instructors to utilizing multimedia communications technology to accomplish individual and group training in the 24X7 work day at sea.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.868	0.981	0.000	0.000
RDT&E Articles Quantity	N/A	NA	NA	NA

Funding is being provided specifically for TOMAHAWK operator and team training development and integration into BFTT.

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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) (1427/2449/3087)

B. Accomplishments/Planned Program (Cont.)

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	2.408	0.000	0.000	0.000
RDT&E Articles Quantity	N/A	N/A	N/A	N/A

This funding supports the integration of Battle Force Tactical Training (BFTT) with the Total Ship Training Systems components. The efforts that will be accomplished are software engineering, interface specification, development, integration and testing, as well as systems engineering.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.289	0.379	16.093	4.360
RDT&E Articles Quantity	N/A	NA	NA	N/A

The Total Ship Training Capability (TSTC) 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. TSTC 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 (TEAMS); Virtual At-Sea Trainer (VAST); and the Augmented Reality Fire Fighting Trainer (ARFF). TSTC efforts include system/software engineering, software design, software development, system integration and test.

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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) (1427/2449/3087)

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget	15.785	8.657	6.118	5.606
FY06 President's Budget	15.542	9.569	21.864	9.914
Total Adjustments	-0.243	0.912	15.746	4.308
Summary of Adjustments				
Inflation	-0.001	0.000	0.000	0.000
FY04 SBIR	-0.205	0.000	0.000	0.000
Program Adjustments	0.000	-0.002	-0.554	0.012
Section 8105/8122/8131	0.000	-0.086	0.000	0.000
Cancelled Accounts	-0.037	0.000	0.000	0.000
Total Ship Training Sys Fielding, Integration & Support	0.000	1.000	16.300	4.296
Subtotal	-0.243	0.912	15.746	4.308

Schedule:
Not Applicable.

Technical:
Not Applicable.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2005
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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) (1427/2449/3087)
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D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN 276200 (Surface BFTT/TSTC portion only)	32.386	35.571	57.313	39.57	48.188	35.211	38.322	29.456	0	316.017

E. 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.

UNCLASSIFIED

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME							
RDT&E, N / BA-7			0204571N Consolidated Training Systems Development				1427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S3087)							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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		AAI/MD & EWA/WV/ Govworks	11.498					1.163		1.119	TBD		13.780	13.780
Ancillary Hardware Development	*	NSWC Crane/ Govworks	0.999					1.163		1.120	TBD		3.282	3.282
Component Development													0.000	
Ship Integration								0.291		0.279	TBD		0.570	
Ship Suitability													0.000	
Systems Engineering	*	CDSA/NSWC Crane/ Govworks/NAVSESS	20.795	2.736	01/04	1.135	01/05	2.790	01/06	0.923	TBD	Continuing	Continuing	N/A
Training Development				0.000		0.000							0.000	
Licenses	*	CDSA/NSWC Crane/ Govworks	2.342	1.321	01/04	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			38.488	4.057		1.277		5.407		3.441		Continuing	Continuing	
Remarks: *WX/RX/RCP/IPR														
Development Support													0.000	
Software Development	*	NAWC/NAVSESS TSD/CDSA/Govworks/	41.698	7.936	01/04	6.488	01/05	10.283	01/06	4.389	TBD	Continuing	Continuing	N/A
Training Development													0.000	
Integrated Logistics Support													0.000	
Configuration Management													0.000	
Technical Data	*	NAWC TSD/NSWC Crane/Govworks	9.657	1.415	01/04	0.946	01/05						12.018	N/A
GFE													0.000	
Award Fees													0.000	
Subtotal Support			51.355	9.351		7.434		10.283		4.389		Continuing	Continuing	
Remarks: *WX/RX/RCP/IPR														

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME							
RDT&E, N / BA-7			0204571N Consolidated Training Systems Development				1427 Surface Tactical Team Trainer (STTT) (22449/29106/29107/S3087)							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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	*	NSWC Crane/NAWC TSD/CDSA/Govworks/NAVSESS	4.242	1.227	01/04	0.426	01/05	4.174	01/06	1.505	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			4.242	1.227		0.426		4.174		1.505		Continuing	Continuing	N/A
Remarks: *WX/RX/RCP/IPR														
Contractor Engineering Support													0.000	
Government Engineering Support	*	CDSA/NSWC Crane/Govworks/NAVSESS	3.408	0.907	01/04	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			3.408	0.907		0.432		2.000		0.579		Continuing	Continuing	N/A
Remarks: *WX/RX/RCP/IPR														
Total Cost			97.493	15.542		9.569		21.864		9.914		Continuing	Continuing	
Remarks:														

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development			PROJECT NUMBER AND NAME 0604 Training Range and Instrumentation Development (TRID)			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	2.135	2.031	2.654	2.984	3.800	3.883	4.292	4.095
RDT&E Articles Qty								
<p>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.</p>								

R-1 SHOPPING LIST - Item No.

175

UNCLASSIFIED

Exhibit R-2a, RD TEN Budget Item Justification
(Exhibit R-2a, page 11 of 37)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2005
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development	PROJECT NUMBER AND NAME 0604 Training Range and Instrumentation Development (TRID)
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(U) B. Accomplishments/Planned Program

Large Area Tracking Range (LATR)	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.029	1.023	1.518	1.589
RDT&E Articles Quantity				

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 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.106	1.008	1.136	1.395
RDT&E Articles Quantity				

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).

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development	PROJECT NUMBER AND NAME 0604 Training Range and Instrumentation Development (TRID)

(U) C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget	2.216	2.050	2.128	2.616
FY06 President's Budget	2.135	2.031	2.654	2.984
Total Adjustments	-0.081	-0.019	0.526	0.368
Summary of Adjustments				
Congressional undistributed reductions		-0.019		
SBIR/STTR Transfer	-0.008			
Program Adjustments			0.507	0.308
Economic Assumptions			0.019	0.060
Reprogrammings	-0.073			
	-0.081	-0.019	0.526	0.368

Schedule: The following milestones have changed to better reflect program status:

FROM: LATR GPS OT&E 2Q/05 LATR ADIU OT&E 2Q/05 JDS IOC 1Q/04 LATR/TACTS INTERFACE 3Q/04	TO: LATR GPS REC UPGRADE 4Q/05 LATR ADIU UPGRADE 4Q/05 JDS IOC 1Q/05 LATR/TACTS INTERFACE 3Q/05	ADD: LATR RECERTIFICATION 3Q/06 BLOCK 5.1 UPGRADE 3Q/05 ASOC UPGRADE 1Q/05 EW PROCESSOR: PDR 1Q/05 CDR 4Q/05 T&E 2Q/06 IOC 4Q/06 SEMI-ANNUAL BLK UPGRADE IOC 4Q/07	TACTS/COM PRO ANAL: PDR 1Q/05 CDR 4Q/05 T&E 2Q/06 IOC 4Q/06 RADAR DISPLAY SUBSYSTEM: PDR 1Q/05 CDR 4Q/05 T&E 2Q/06 IOC 4Q/06
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Technical:
 Not Applicable

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

CLASSIFICATION:

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D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>
Related OPN: Weapons Range Support Equipment BLI 420400	1.200									
E. ACQUISITION STRATEGY:										
<p>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.</p>										

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:												
Exhibit R-3 Cost Analysis (page 1)								DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT		PROJECT NUMBER AND NAME							
RDT&E, N / BA-7			0204571N Consolidated Trai		0604 Training Range and Instrumentation Development (TRID)							
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
Systems Engineering and Software Hdw Development (Misc. < \$1M)	Various	Various	82.995	1.455	1Q/05	1.460	1Q/06	1.749	1Q/07	Continuing	Continuing	
Subtotal Product Development			82.995	1.455		1.460		1.749		Continuing	Continuing	
Remarks:												
Development Support (Misc. <\$1M)	Various	Various	10.377	0.551	1Q/05	1.169	1Q/06	1.210	1Q/07	Continuing	Continuing	
Subtotal Support			10.377	0.551		1.169		1.210		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT		PROJECT NUMBER AND NAME							
RDT&E, N / BA-7			0204571N Consolidated Train		0604 Training Range and Instrumentation Development (TRID)							
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 (Misc. <\$1M)	Various	Various	5.145	0.015	1Q/05	0.015	1Q/06	0.015	1Q/07	Continuing	Continuing	
Subtotal T&E			5.145	0.015		0.015		0.015		Continuing	Continuing	
Remarks:												
Program Management Support	Various	Various	2.877	0.010	1Q/05	0.010	1Q/06	0.010	1Q/07	Continuing	Continuing	
Travel												
SBIR												
Subtotal Management			2.877	0.010		0.010		0.010		Continuing	Continuing	
Remarks:												
Total Cost			101.394	2.031		2.654		2.984		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 175

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																				DATE:																
Large Area Tracking Range (LATR)																				February 2005																
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME																					
RDT&E, N / BA-7					0204571N Consolidated Training Systems Development										0604 (TRID) Large Area Tracking Range																					
Fiscal Year	2004				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	1	2	3	4				
Acquisition Milestones																																				
LATR GPS REC UPGRADE																																				
LATR ADIU UPGRADE																																				
LATR Recertification																																				
Block 5.0 LATR Upgrade																																				
Block 5.1 LATR Upgrade																																				
Deliveries																																				

R-1 SHOPPING LIST - Item No. 175

* Not required for Budget Activities 1, 2, 3, and 6

UNCLASSIFIED

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EXHIBIT R4, Schedule Profile															DATE: February 2005																	
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME												
RDT&E, N / BA-7										0204571N Consolidated Training Systems Development										0604 (TRID) Combat Training Systems Development												
Fiscal Year	2004				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	1	2	3	4
Acquisition Milestones																																
JDS IOC										[Bar]																						
Semi-Annual Blk Upgrades										[Bar]																						
LATR/TACTS Interface										[Bar]																						
Test Set Rehost Dev										[Bar]																						
PDR										[Bar]																						
CDR										[Bar]																						
T&E										[Bar]																						
IOC										[Bar]																						
EW Processor										[Bar]																						
PDR										[Bar]																						
CDR										[Bar]																						
T&E										[Bar]																						
IOC										[Bar]																						
ASOC Upgrade										[Bar]																						
TACTS Com Pro Anal										[Bar]																						
PDR										[Bar]																						
CDR										[Bar]																						
T&E										[Bar]																						
IOC										[Bar]																						
Radar Display Subsystem										[Bar]																						
PDR										[Bar]																						
CDR										[Bar]																						
T&E										[Bar]																						
IOC										[Bar]																						
Deliveries										[Bar]																						

R-1 SHOPPING LIST - Item No. 175

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CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:			
Combat Training Systems Development						February 2005			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME				
RDT&E, N / BA-7	0204571N Consolidated Training Systems Development				0604 (TRID) Combat Training Systems Development				
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
JDS IOC	1Q-4Q	1Q							
Semi-annual Block Upgrades	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q					
LATR/TACTS Interface	1Q-4Q	1Q-3Q							
Test Set Rehost	1Q-4Q	1Q							
PDR		1Q							
CDR		3Q							
T&E		4Q	1Q						
IOC			1Q						
EW Processor									
PDR		1Q-3Q							
CDR		4Q	1Q-2Q						
T&E			2Q-4Q						
IOC			4Q						
ASOC Upgrade		1Q-4Q	1Q-4Q						
TACTS Com Pro Anal									
PDR		1Q-3Q							
CDR		4Q	1Q-2Q						
T&E			2Q-4Q						
IOC			4Q						
Radar Display Subsystem									
PDR		1Q-3Q							
CDR		4Q	1Q-2Q						
T&E			2Q-4Q						
IOC			4Q						

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

Exhibit R-4a, RD TEN Budget Item Justification
(Exhibit R-4a, page 20 of 37)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development			PROJECT NUMBER AND NAME 3093 Tactical Combat Training System (TCTS)			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	2.644	9.375	16.288	8.312	11.103	3.639	6.023	9.783
RDT&E Articles Qty	4	2	1	1				

(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.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2005
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development	PROJECT NUMBER AND NAME 3093 Tactical Combat Training System (TCTS)
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B. Accomplishments/Planned Program

Tactical Combat Training System	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	2.644	9.375	16.288	8.312
RDT&E Articles Quantity	4	2	1	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.

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development	PROJECT NUMBER AND NAME 3093 Tactical Combat Training System (TCTS)

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget	2.819	9.461	16.165	8.563
FY06 President's Budget	2.644	9.375	16.288	8.312
Total Adjustments	-0.175	-0.086	0.123	-0.251

Summary of Adjustments

Congressional undistributed reductions		-0.084		
SBIR/STTR Transfer	-0.059			
Program Adjustments		-0.002	-0.031	-0.393
Economic Assumptions			0.154	0.142
Reprogrammings	-0.116			
Subtotal	-0.175	-0.086	0.123	-0.251

Schedule: The following milestones have changed to better reflect program status:

From:	To:
Phase 3 Fixed Range (FGS, RS, CGTS) FY04 4Q	Phase 3 Fixed Range (FGS, RS, CGTS) FY05 3Q/4Q
Phase 3 MS B FY05 3Q	Phase 3 MS B FY06 1Q
Phase 4 Advanced Datalink FY06 1Q/4Q	Phase 4 Advanced Datalink FY06 2Q/4Q
Phase 1 DT FY04 4Q	Phase 1 DT FY05 1Q
Keywest IOC FY05 4Q	Keywest IOC FY05 3Q
Beaufort IOC FY09 1Q	Beaufort IOC FY08 4Q
Phase 2 DTB2-1, 2-2A, 2B, 2-3, 2-4, 2-5, OTC2-1 FY05 3Q - FY06 1Q	Phase 2 DTB2-1, 2-2A, 2B, 2-3, 2-4, 2-5, OTC2-1 FY05 2Q - FY07 1Q
IOC Lemoore FY07 2Q	IOC Lemoore FY08 4Q
IOC CVW-5 FY06 1Q	IOC CVW-5 FY07 1Q
IOC Oceana FY07 3Q	IOC Oceana FY09 1Q
IOC Yuma FY09 3Q	IOC Yuma FY07 3Q
IOC Cherry PT FY09 4Q	IOC Cherry PT FY09 3Q

Technical:
Not Applicable

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT NUMBER AND NAME 0204571N Consolidated Training Systems Development			PROJECT NUMBER AND NAME 3093 Tactical Combat Training System (TCTS)				
D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY2011</u>	<u>To Complete</u>	<u>Total Cost</u>
Related OPN: Weapons Range Support Equipment, LI 4204	1.188	2.291	3.780	8.402						
Related APN: Other Production Charges, LI 0725	7.205	8.475	15.064	19.458						
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.										

R-1 SHOPPING LIST - Item No. 175

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CLASSIFICATION:												
Exhibit R-3 Cost Analysis (page 1)									DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			0204571N Consolidated Trai			3093 Tactical Combat Training System (TCTS)						
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 Hdw Dev. Electronics	CPIF	Cubic, San Diego	1.783	2.184	1Q/05	0.931	1Q/06			1.340	6.238	6.238
Subtotal Product Development			1.783	2.184		0.931		0.000		1.340	6.238	
Remarks:												
Software Dev. Electronics	CPIF	Cubic, San Diego		3.451	1Q/05	5.508	1Q/06	2.997	1Q/07	18.184	30.140	30.140
Integrated Logistics Support	Various	Various	0.230	0.631	1Q/05	1.123	1Q/06	0.575	1Q/07	Continuing	Continuing	
Subtotal Support			0.230	4.082		6.631		3.572		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 175

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CLASSIFICATION:												
Exhibit R-3 Cost Analysis (page 2)										DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT 0204571N Consolidated Train		PROJECT NUMBER AND NAME 3093 Tactical Combat Training System (TCTS)							
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 (Misc. <\$1M)	WX	NAWCAD, Pax River, MD	0.082	0.772	1Q/05	3.288	1Q/06	1.486	1Q/07	Continuing	Continuing	
Test Assets												
Subtotal T&E			0.082	0.772		3.288		1.486		Continuing	Continuing	
Remarks:												
Contractor Engineering Support	CPIF	Cubic, San Diego	0.040	0.207	1Q/05	1.215	1Q/06	0.978	1Q/07	6.061	8.501	8.501
Government Engineering Support	WX	NAWCAD, Pax River, MD	0.267	1.730	1Q/05	3.744	1Q/06	1.954	1Q/07	Continuing	Continuing	
Program Mangement Support	WX	NAWCAD, Pax River, MD	0.187	0.310	1Q/05	0.318	1Q/06	0.210	1Q/07	Continuing	Continuing	
Travel		NAWCAD, Pax River, MD	0.055	0.090	1Q/05	0.161	1Q/06	0.112	1Q/07	Continuing	Continuing	
Subtotal Management			0.549	2.337		5.438		3.254		Continuing	Continuing	
Remarks:												
Total Cost			2.644	9.375		16.288		8.312		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 175

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																	DATE: February 2005																
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	2004				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	1	2	3	4	
Acquisition Milestones																																	
ORD Approval																																	
Acquisition Phase																																	
Phase 1 NDI - Transportable (TGS, AS)																																	
Phase 2 Shipboard (SGS, IS)																																	
Phase 3 Fixed Range (FGS, RS, CGTS)																																	
Phase 4 Advanced Datalink																																	
Participant Subsystem Dev																																	
Internal Subsystem																																	
Rack Mounted Subsystem																																	
Ground Subsystem Dev																																	
Track Interface																																	
Uplink Control																																	
ECE/CGTS Development																																	
Test & Evaluation Milestones																																	
Phase 1 (NDI) DTC1-1, DTC1-2/DT Assist																																	
Phase 2 DTB2-1, 2-2A, 2B, 2-3, 2-4, 2-5, OTC2-1																																	
Phase 3 DTB3-1, 3-2, 3-3, 3-4, 3-5, OTB3-1																																	
Site Acceptance Test																																	
Production Milestones																																	
Phase 1 NDI - Transportable (TGS, AS)																																	
Phase 2 Shipboard (SGS, IS)																																	
Phase 3 Fixed Range (FGS, RS, CGTS)																																	
Phase 4 Advanced Datalink																																	
Deployments																																	
IOC																																	

R-1 SHOPPING LIST - Item No. 175

* Not required for Budget Activities 1, 2, 3, and 6

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CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2005		
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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
ORD Approval								
Phase 1 NDI - Transportable (TGS, AS)	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q				
Phase 2 Shipboard (SGS, IS)	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q				
Phase 3 Fixed Range (FGS, RS, CGTS)		3Q-4Q	1Q-4Q	1Q-4Q				
Phase 4 Advanced Datalink			2Q-4Q	1Q-4Q				
Phase 1 MS C	1Q							
IOC Key West		3Q						
Phase 2 MS B	1Q							
Phase 2 MS C		3Q						
IOC CVW-5				1Q				
Phase 3 MS B		3Q						
Phase 3 MS C				3Q				
IOC Yuma				3Q				
Phase 4 MS B			2Q					
Phase 1 DT/OT		1Q-3Q						
Phase 2 DT/OT		2Q-4Q	1Q-4Q	1Q				
Phase 3 DT/OT			3Q-4Q	1Q-3Q				

R-1 SHOPPING LIST - Item No. 175

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Exhibit R-4a, RD TEN Budget Item Justification
(Exhibit R-4a, page 28 of 37)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development			PROJECT NUMBER AND NAME 2124/Air Warfare Training Development				
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		1.579	1.458	1.442	1.742	1.780	1.817	1.855	1.894
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.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA7	PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development	PROJECT NUMBER AND NAME 2124/Air Warfare Training Development

B. Accomplishments/Planned Program

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.562	0.364	0.340	0.431
RDT&E Articles Quantity				

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 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.476	0.517	0.380	0.340
RDT&E Articles Quantity				

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 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.344	0.275	0.350	0.502
RDT&E Articles Quantity				

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.

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

Exhibit R-2a, RDTEN Budget Item Justification
(Exhibit R-2a, page 30 of 37)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2005
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development	PROJECT NUMBER AND NAME 2124/Air Warfare Training Development
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B. Accomplishments/Planned Program (Cont.)

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.197	0.302	0.372	0.469
RDT&E Articles Quantity				

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. 175

UNCLASSIFIED

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development	PROJECT NUMBER AND NAME 2124/Air Warfare Training Development			
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget		1.640	1.476	1.509	1.820
FY06 President's Budget		1.579	1.458	1.442	1.742
Total Adjustments		-0.061	-0.018	-0.067	-0.078
Summary of Adjustments					
Congressional undistributed reductions			-0.018		
SBIR/STTR Transfer		-0.030			
Program Adjustments				-0.096	-0.101
Economic Assumptions				0.029	0.023
Reprogrammings		-0.031			
Subtotal		-0.061	-0.018	-0.067	-0.078
Schedule:					
MTS/Common Instructor Operator Station specifications will slip from FY04 to FY05. Visual display solutions for deployed simulation will slip from FY06 to FY07. Schedule slip due to budget reductions.					
Technical: Not applicable.					

R-1 SHOPPING LIST - Item No. 175

UNCLASSIFIED

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT NUMBER AND NAME 0204571N/Consolidated Training Systems Development			PROJECT NUMBER AND NAME 2124/Air Warfare Training Development				
D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>
APN Line 24. BA-7 BLI 0705 Common Ground Equipment (USMC Federation Simulators)	3.453	0.000	19.753	31.616	23.829	39.629	32.993	31.723		
APN Line 17. BA-7 BLI 0705 Common Ground Equipment (Fleet Aircrew Simulator Training (FAST))	29.819	64.034	94.997	55.359	58.375	59.422	62.472	59.269		
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.										

R-1 SHOPPING LIST - Item No. 175

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			0204571N/Consolidated Training Systems Development			2124/Air Warfare Training Development						
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
Systems Engineering	MIPR	Air Force Research Lab	2.772	0.506	11/04	0.368	11/05	0.349	11/06	Continuing	Continuing	
Systems Engineering	WX/PID	NAWCSTD & NAMRL	5.104	0.577	01/05	0.672	01/06	0.982	01/07	Continuing	Continuing	
Systems Engineering	MIPR	ONR	0.120								0.120	
Systems Engineering	WX	NAWCWD, CA	0.753								0.753	
Systems Engineering	MIPR	USAF ACADEMY	0.040								0.040	
Systems Engineering	WR	NPGS	0.090								0.090	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			8.879	1.083		1.040		1.331		Continuing	Continuing	
Remarks:												
Trainer Development Support	RX/PID	NAWCAD, Pax River, MD	0.857	0.166	11/04	0.169	11/05	0.171	11/06	Continuing	Continuing	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Support			0.857	0.166		0.169		0.171		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			0204571N/Consolidated Training Systems Development			2124/Air Warfare Training Development						
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
Prototype Test & Evaluation	WX	NAWCAD, Pax River, MD	4.269	0.202	01/05	0.218	11/05	0.220	11/06	Continuing	Continuing	
Prototype Test & Evaluation	WX	NCTAMSLANT	0.564								0.564	
Subtotal T&E			4.833	0.202		0.218		0.220		Continuing	Continuing	
Remarks:												
Travel	WX	NAWCAD, Pax River, MD	0.164	0.007	11/04	0.015	11/05	0.020	11/06	Continuing	Continuing	
Subtotal Management			0.164	0.007		0.015		0.020		Continuing	Continuing	
Remarks:												
Total Cost			14.733	1.458		1.442		1.742		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 175

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