CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION						DATE May 2009	
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**			R-1 ITEM NOMENCLATURE **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**				
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Total PE Cost	14.824	27.505	49.293				
0604 / TRAINING RANGE & INSTR DEV (TRID)	1.304	3.818	3.833				
1427 / SURFACE TACTICAL TEAM TRAINER (STTT)	5.690	5.850	8.303				
2124 / AIR WARFARE TRAINING DEVELOPMENT	1.688	1.755	1.773				
3087 / CURRUCULUM & TRAINER DEVELOPMENT	0.000	10.436	26.591				
3093 / TACTS/LATR REPLACEMENT	3.442	3.014	8.793				
9999 / CONGRESSIONAL ADDS	2.700	2.632	0.000				

A. MISSION DESCRIPTION:

0604 - The Training Range and Instrumentation Development Systems (TRIDS) program provides development of range systems including a range electronic warfare simulator, advanced weapons training systems, laser training systems, Tactical Aircrew Combat Training System (TACTS), Large Area Tracking Range (LATR), and Training Enabling Architecture (TENA) interoperability, combat training system improvements, and undersea warfare range technology (previously called shallow water range technology)

1427/3087/3087A - The Surface Tactical Team Trainer (STTT) develops Battle Force Tactical Training (BFTT) system capabilities and interfaces to provide realistic combat system coordinated Team, Unit, and collective Strike Group/Force level training events using Distributed Interactive Simulation (DIS) protocols. Curriculum and Trainer Development develops the Total Ship Training System (TSTS) as a Pre-Planned Product Improvement (P3I) to the BFTT system that facilitates evolving combat system interfaces, implements High Level Architecture (HLA) and common modeling for future interoperability and integrates advanced technology and open design required for future combat systems. The need for transforming training is documented within the Office of Force Transformation (OFT) Military Transformation Initiative, DoD Training Transformation Plan, the Chief of Naval Operations Fleet Response Plan (FRP), and Commander United States Fleet Forces Command (CUSFFC) Fleet Readiness Training Plan (FRTP). FY08 Congressional Add supports development of a voice command recognition and assessment capability to the Total Ship Training System (TSTS) Support System and completes preparation for demonstration in FY09.

2124 - The Air Warfare Training Development (AWTD) program provides technology development and risk mitigation for aviation training systems, including mission rehearsal simulation technologies and the Aviation Training Technology Integration Facility (ATTIF). The ATTIF provides for incremental development, prototype evaluation, and final fleet T&D prior to technology transition.

3093 - The Tactical Combat Training System (TCTS) will provide the Navy a replacement for the TACTS and LATR systems. 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 as NAS Key West is complete. The Program incorporates 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.

9C57A - Undersea Warfare (USW) Training is essential to effective USW warfighting operations, i.e. the "Fight as you Train" principle. The Navy's Supportability Peer Review Process Work Group - SupWG, whose membership spans across the US Navy, National laboratories, and private industry representatives, develops common core Training elements in support of the US Navy's warfighting missions. The ultimate goal of the working group is to achieve theater-wide common, interoperable, and high fidelity USW training baselines for the shipboards, undersea, airborne, and shore-based USW communities.

B. PROGRAM CHANGE SUMMARY:

Funding:	FY 2008	FY 2009	FY 2010
FY09 President's Budget	9.620	28.017	22.149
FY10 President's Budget	14.824	27.505	49.293
Total Adjustments	5.204	-0.512	27.144
(U) Summary of Adjustments			
Congressional Rescissions	0.000	0.000	0.000
Congressional Adjustments	2.700	2.584	0.000
SBIR/STTR/FTT Assessment	-0.095	0.000	0.000
Program Adjustments	2.600	-3.068	27.136
Rate/Misc Adjustments	-0.001	-0.028	0.008
Total	5.204	-0.512	27.144

Schedule:
TRIDS CHANGES:
Added LATR block upgrades due to LATR service life extension.

AWTD Changes:
R2/R-2a/R4 - minor wording changes for better technical accuracy. The R-4 was updated to show:
1. AWTD response to multiple platform requirements across the FYDP for Risk Mitigation, Software/Data Commonality, and Technology Transition (top row).

Technical:
N/A

2. New common component technology transitions to programs such as Navy Aviation Simulations Master Plan (NASMP), MH-60R/S, E-2D, Unmanned Aerial System (UAS), and Multi-Mission Aircraft (MMA) (second row).

3. Major project categories to be prototyped and tested in the ATTIF (third row).

4. Major task performance areas are specifications, analyses, and government-owned software (GOTS). Intermediate milestones/activities from the previous schedule have been updated.

	FROM:	TO:
ATTIF Modular/Open Products types Integ. Test & Prototypes	FY08 4Q	FY08 1Q and 4Q. Other milestones clearly shown in the
SOFTWARE & GOTS		
Instructor/Human Systems Integration workload reduction (I2WRT) tools.	No Changes	
TEST and EVALUATION MILESTONES		
Deployed SIMS (DMT/Sensor Capable	FY10 4Q	FY10 1Q, 4Q
TCTS CHANGES		
Acquisition Milestones Phase 5 MS B	FY09-10	FY10 1Q. Should have shown as FY10 1Q only development and design schedule
Acquisition Phase		
Phase 1 NDI - Trans (GS/AS)	FY08-FY10 4Q	FY08 -FY10 4Q. Reflects better definition of project plan
Phase 2 Internal Subsystem (IS)	FY08-FY10 4Q	FY08 FY10 4Q. Reflects better definition of project plan
Phase 3 Rack-Mounted Subsystem	FY08-FY10Q	FY08-FY10 4Q. Reflects better definition of project plan
Advanced Datalink Dev		Effort continues through FYDP
Test and Evaluation Milestones		
Phase 2 internal Subsystem (IS)	FY07 DTB2-1, 2-2A	Completed

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**				PROJECT NUMBER AND NAME **0604/TRAINING RANGE & INSTR DEV (TRID)**		
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Project Cost	1.304	3.818	3.833				
RDT&E Articles Qty	0	0	0				

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project develops specialized instrumentations 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 Systems (IWTS), Remote Strafe Scoring System (RSSS), and weapon and countermeasure simulations for use with various range training systems.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **0604/TRAINING RANGE & INSTR DEV (TRID)**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.845	3.325	3.833
RDT&E Articles Quantity	0	0	0

LATR: Designed, integrated and tested modules to eliminate obsolete components in the LATR Pod. Completed design, integration and test of LATR software 5.0 baseline upgrade. Completed design, integration, and test of participant instrumentation packages (PIP) modules to address obsolescence, high failure components and to improve operability and performance. Conducted and completed installation of the Ground System Rehost. Conducted and completed security testing and assessment for LATR system certification and accreditation for Ground System Rehost. Complete development, test and integration of software and hardware modifications to system test sets. Developed interface software using Test and Training Enabling Architecture (TENA) to increase Tactical Training Range systems interoperability with other services training instrumentation. Completed development of LATR rotary wing re-size and LATR Datalink emulator. Complete development, test and integration of LATR data translator. Complete follow-on obsolescence study to identify sub-projects required through FY10. Complete ground system and PIP refresh sub-project. Complete semi-annual system block upgrades.

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.459	0.493	0.000
RDT&E Articles Quantity	0	0	0

TACTS: Developed additional training capabilities for the personal computer based Joint Display Subsystem (JDS) and the Electronic Warfare Processor (EW PROC). Enhanced capability for Advanced Systems Operator Console (ASOC), enhanced Radar Display Subsystem (RADS), and ancillary systems interfaces. Continued development and deployment of LINK 16 interface for TTR applications. Complete Semi-annual CCS Block upgrades.

C. OTHER PROGRAM FUNDING SUMMARY:

N/A

D. ACQUISITION STRATEGY:

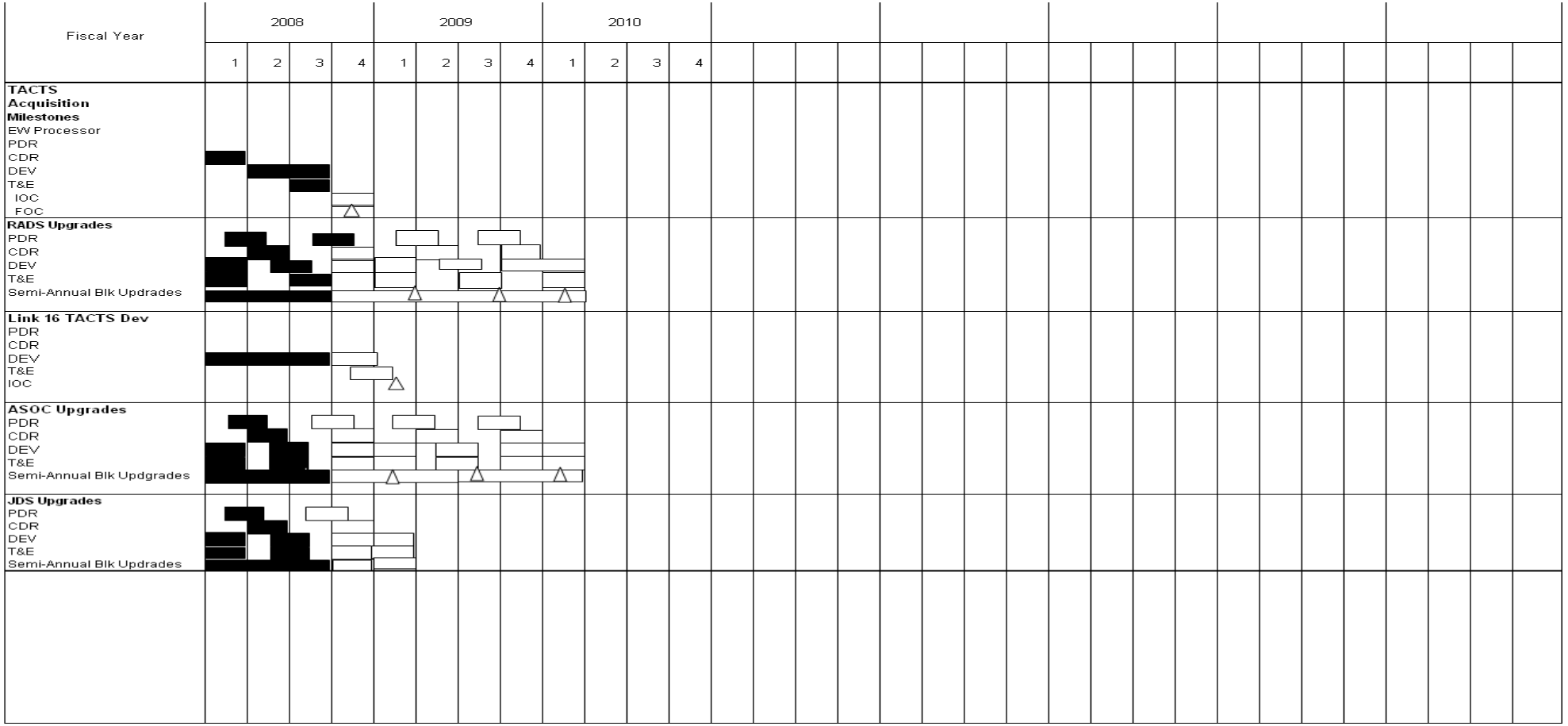
The Training Range and Instrumentation Development (TRID) program is a non-ACAT program. The integrated program teams that develop new TRID capabilities include government and contractor engineering personnel.

E. MAJOR PERFORMERS:

Performer = Tybrin Corp
Location = Ridgecrest, CA
Description = Product Development
FY 2008 Award Date = 11/07
FY 2009 Award Date = 11/08
FY 2010 Award Date = 11/09

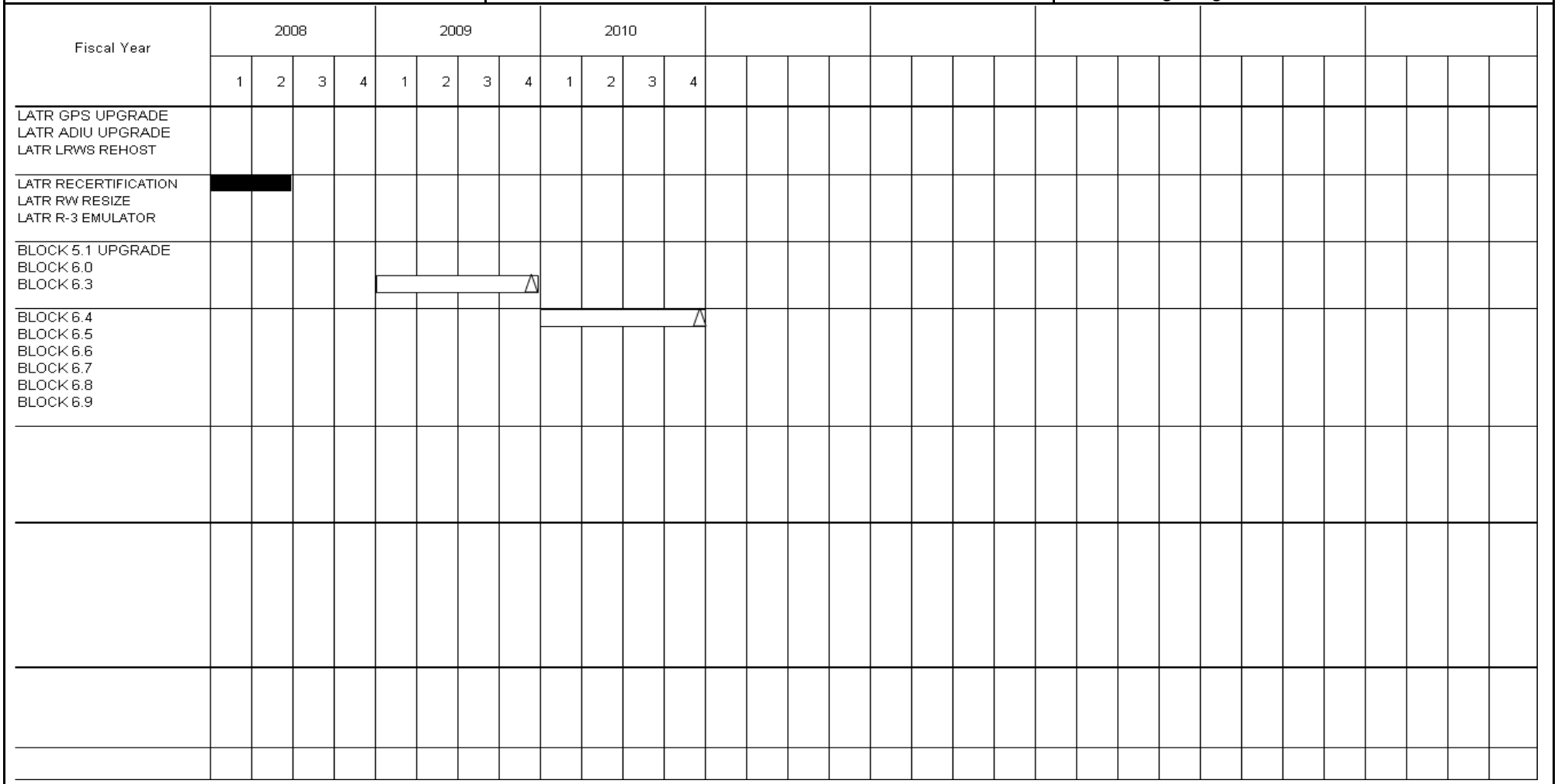
CLASSIFICATION:	UNCLASSIFIED											
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS									DATE May 2009			
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**		PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**				PROJECT NUMBER AND NAME **0604/Training Range & Instr Dev**						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost ($000)			FY 2009 Cost ($000)	FY 2009 Award Date	FY 2010 Cost ($000)	FY 2010 Award Date		Total Cost ($000)	Target Value of Contract
Systems Engineering	Various	Various	88.047			0.000		0.000				
Systems Engineering	Various	NAWC-AD, PAX RIVER, MD	2.213			1.085	VAR	1.120				
Systems Engineering	Various	NAWC-WD, CHINA LAKE	1.267			1.282	VAR	0.950				
Systems Engineering	SS FFP	TYBRIN CORP. CA	0.275			1.150	NOV-08	1.370	NOV-09			
Systems Engineering	Various	NSWC CORONA	0.000			0.081	VAR	0.120	VAR			
Systems Engineering	Various	NAVAIR TSD ORLANDO	0.000			0.220	VAR	0.273	VAR			
Subtotal Product Development			**91.802**			**3.818**		**3.833**				
Remarks:												
Software Development	Various	Various	10.576			0.000		0.000				
Subtotal Support Costs			**10.576**			**0.000**		**0.000**				
Remarks:												
Developmental Test & Evaluation	Various	Various	5.299			0.000		0.000				
Subtotal Test and Evaluation			**5.299**			**0.000**		**0.000**				
Remarks:												
Program Management Support	Various	Various	2.513			0.000		0.000				
Subtotal Management Services			**2.513**			**0.000**		**0.000**				
Remarks:												
Total Cost			**110.190**			**3.818**		**3.833**				

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-4, SCHEDULE PROFILE		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **0604/Training Range & Instr Dev**



CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-4a, SCHEDULE DETAIL					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**			PROJECT NUMBER AND NAME **0604/Training Range & Instr Dev**			
Schedule Profile	FY 2008	FY 2009	FY 2010				
TACTS							
EW PROCESSOR							
- PDR							
- CDR	1Q						
- DEV	2Q-3Q						
- T&E	3Q						
- IOC	4Q						
- FOC	4Q						
Link 16 TACTS T &E	4Q	1Q					
RADS- SEMI ANNUAL BLK UPGRADES	1Q-4Q	1Q-4Q	1Q				
BLOCK 6.4 UPGRADE			1Q-4Q				
BLOCK 6.5 UPGRADE							
BLOCK 6.6 UPGRADE							
BLOCK 6.7 UPGRADE							
BLOCK 6.8 UPGRADE							
BLOCK 6.9 UPGRADE							
LATR RECERTIFICATION	1Q-2Q						
LATR RW RESIZE							
LATR R-3 EMULATOR							
BLOCK 5.1 UPGRADE							
BLOCK 6.0 UPGRADE							
BLOCK 6.3 UPGRADE		1Q-4Q					
- T&E	1Q, 2Q-3Q, 4Q	1Q					
- SEMI-ANNUAL BLK UPGRADES	1Q-4Q	1Q					
LATR							
LATR GPS UPGRADE							
LATR ADIU UPGRADE							
LATR LRWS REHOST							
- T&E	1Q, 3Q	1Q, 3Q	1Q				
- SEMI-ANNUAL BLK UPGRADES	1Q-4Q	1Q-4Q	1Q				

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-4, SCHEDULE PROFILE		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **0604/Training Range & Instr Dev**



CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-4a, SCHEDULE DETAIL (CONTINUATION)					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**			PROJECT NUMBER AND NAME **0604/Training Range & Instr Dev**			
Schedule Profile	FY 2008	FY 2009	FY 2010				
JDS UPGRADES							
- PDR	1Q-2Q, 3Q-4Q						
- CDR	2Q, 4Q						
- DEV	1Q, 2Q-3Q, 4Q	1Q					
- T&E	2Q-3Q, 4Q	1Q					
- SEMI-ANNUAL BLK UPGRADES	1Q-4Q	1Q					
ASOC UPGRADES							
- PDR	1Q-2Q, 3Q-4Q	1Q-2Q, 3Q-4Q					
- CDR	2Q, 4Q	2Q, 4Q					
- DEV	1Q, 2Q-3Q, 4Q	1Q, 2Q-3Q, 4Q	1Q				
- T&E	1Q, 2Q-3Q, 4Q	1Q, 2Q-3Q, 4Q	1Q				
- SEMI-ANNUAL BLK UPGRADES	1Q-4Q	1Q-4Q	1Q				
LINK 16 TACTS DEV							
- PDR							
- CDR							
- DEV	1Q-4Q						
- IOC		1Q					
- FOC	4Q						
RADS UPGRADES							
- PDR	1Q-2Q, 3Q-4Q	1Q-2Q, 3Q-4Q					
- CDR	2Q, 4Q	2Q, 4Q					
- DEV	1Q, 2Q-3Q, 4Q	1Q, 2Q-3Q, 4Q	1Q				

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**				PROJECT NUMBER AND NAME **1427/SURFACE TACTICAL TEAM TRAINER (STTT)**		
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Project Cost	5.690	5.850	8.303				
RDT&E Articles Qty	0	0	0				

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 Organizations, the Tactical Training Groups and C2F/C3F Fleet Synthetic Training Exercises (FSTs). BFTT provides a baseline capability/system that meets the Operational Requirements Document (ORD). 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 Organizations, the Tactical Training Groups and C2F/C3F Fleet Synthetic Training Exercises (FSTs). Without an operating BFTT system, the ship will be unable to complete system level testing impacting overall combat system operability testing.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **1427/SURFACE TACTICAL TEAM TRAINER (STTT)**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	5.690	5.850	8.303
RDT&E Articles Quantity	0	0	0

K1427:

Funds develop critical Battle Force Tactical Training (BFTT) System improvements, software/database corrections, and interface upgrades required to preserve training capability in response to evolving combat system capabilities (e.g. AEGIS Modernization) and to Fleet prioritized Training Systems capabilities in multiple mission areas including Anti-Submarine Warfare, Electronic Warfare, Air Warfare, Strike Warfare, Ballistic Missile Defense, Anti-Surface Warfare, and Amphibious Warfare. There are approximately sixty-one (61) discrete systems (radars, combat systems, navigation systems, etc.) that BFTT interfaces with which drive system upgrades. Without an operating BFTT system, the ship will be unable to complete system level testing impacting overall combat system operability testing.

Efforts include architecture migration, model database improvement, scenario development, system/software/safety engineering, program management, security/safety assessment, documentation, software design, software development, Software Trouble Report (STR) corrections, and system integration, test and evaluation, logistics support and life cycle sustainment planning.

FY08 Accomplishments included: Government Acceptance Testing (GAT) for BFTT Build 3.3.2 Phase II; software engineering efforts, architecture migration analysis, model database improvements, documentation development and logistics support for the BFTT Total Ship Training System capability; and testing and certification of the permanent BFTT upgrade to the Aegis Combat Trainer System (ACTS) Superset for legacy Aegis Baselines 5.3.9, 6.1.7, and 6.3.2.

FY09 Planned Accomplishments include: Complete Build 3.3.2 certification to support the CG Modernization CS improvements; development of the BFTT Security Classification Guide (SCG) in accordance with SCG OPNAVINST S5513.1F and program protection plan; scope and define BFTT Build 3.4 development addressing Obsolescence issues, security network redesign, and incorporation of Ballistic Missile Defense (BMD) and Anti-Submarine Warfare (ASW) interface upgrades (conjunctive BFTT system improvements with BMD and ASW programs); and continue development and integration of new software capabilities and system interfaces to address emergent requirements.

FY10 Planned Accomplishments include: Government Acceptance Testing (GAT), testing, certification, and safety assessment of BFTT Obsolescence Build (T46D); scope and define BFTT database improvements, architecture and content improvements to support LSD 41/49 Class mid-life combat system upgrade; and continue development and integration of new software capabilities and system interfaces to address emergent requirements.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION)		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **1427/SURFACE TACTICAL TEAM TRAINER (STTT)**

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. and Name	FY 2008	FY 2009	FY 2010	Total Cost
OPN 276200 (Surface (N86) BFTT/TSTS portion only)	20.332	21.008	25.256	66.596

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.

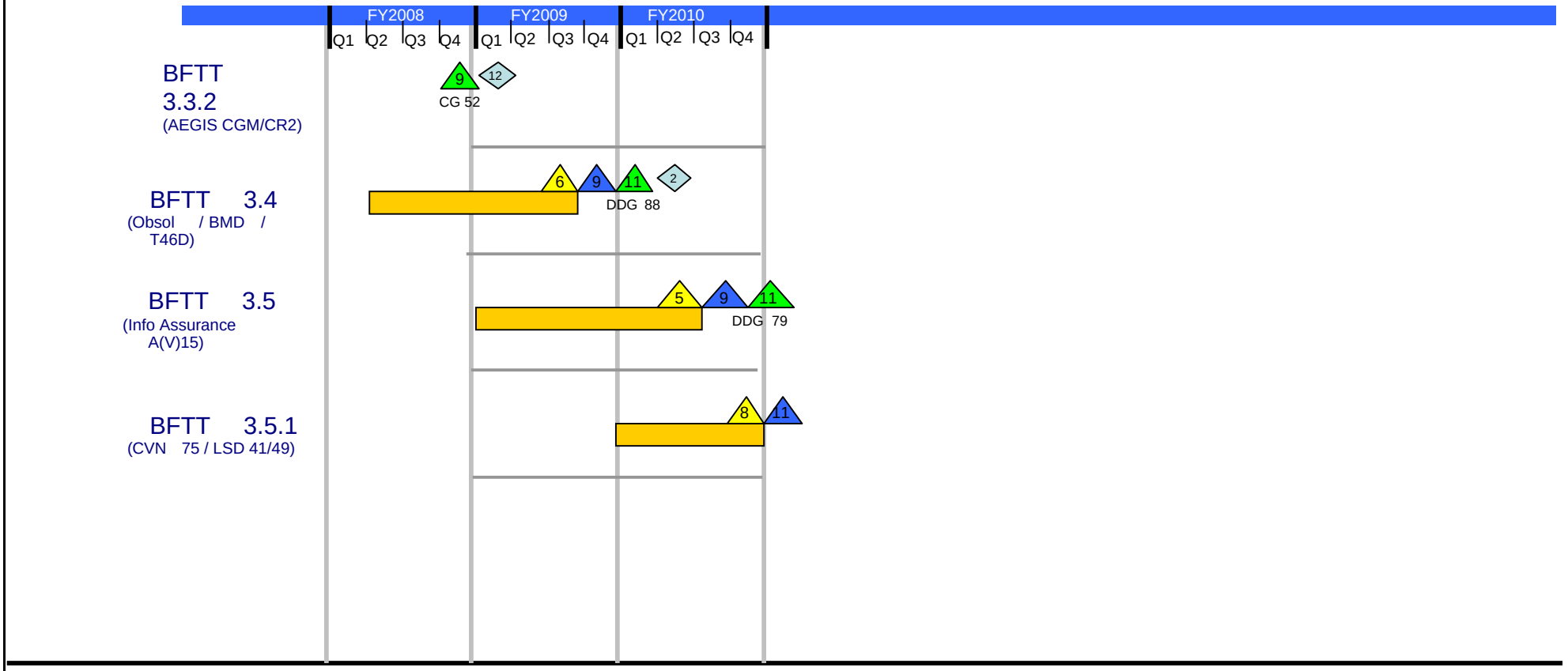
E. MAJOR PERFORMERS:

CDSA Dam Neck
NSWC PHD
NSWC Dahlgren
NUWC Newport

CLASSIFICATION:	UNCLASSIFIED											
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS									DATE May 2009			
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**		PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**					PROJECT NUMBER AND NAME **1427/Surface Tactical Team Trainer (STTT)**					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost ($000)			FY 2009 Cost ($000)	FY 2009 Award Date	FY 2010 Cost ($000)	FY 2010 Award Date		Total Cost ($000)	Target Value of Contract
Hardware Development	WR/CPFF	NAVSEA 02/CDSA	2.515			0.475	FEB-09	3.246	FEB-10			
Systems Engineering	WR/REQN	CDSA/NSWC PHD/NUWC Newport/NSWC Dahlgren/NAVSEA 02	4.569			1.616	DEC-08	1.564	DEC-09			
Subtotal Product Development			**7.084**			**2.091**		**4.810**				
Remarks:												
Software Development	WR/REQN	CDSA/NUWC Newport/NAVSEA 02	6.571			2.262	FEB-09	1.997	FEB-10			
Subtotal Support Costs			**6.571**			**2.262**		**1.997**				
Remarks:												
Developmental Test & Evaluation	WR/REQN	NSWC PHD/CDSA/NAVSEA 02	1.036			0.897	DEC-08	0.604	DEC-09			
Subtotal Test and Evaluation			**1.036**			**0.897**		**0.604**				
Remarks:												
Government Engineering Support	WR/REQN	CDSA/NSWC Dahlgren	1.979			0.600	JAN-09	0.892	JAN-10			
Subtotal Management Services			**1.979**			**0.600**		**0.892**				
Remarks:												
Total Cost			**16.670**			**5.850**		**8.303**				

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-4, SCHEDULE PROFILE		DATE May 09
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **1427/Surface Tactical Team Trainer (STTT)**

PEO IWS 7C BFTT Software Build Schedule (Notional)



UNCLASSIFIED Pre -Decisional Notional

Legend: DEVELOPMENT # GAT # ET&E # DELIVERY # WSESRB

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-4a, SCHEDULE DETAIL						DATE May 2009	
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**			PROJECT NUMBER AND NAME **1427/Surface Tactical Team Trainer (STTT)**			
Schedule Profile	FY 2008	FY 2009	FY 2010				
BFTT 3.3.2 DEVELOPMENT	1Q-4Q	Q1-2Q					
BFTT 3.3.2 GAT	2Q						
BFTT 3.4 DEVELOPMENT	2Q-4Q	1Q-4Q	1Q-3Q				
BFTT 3.3.2 ET&E	3Q						
BFTT 3.3.2 DELIVERY	4Q						
BFTT 3.3.2 CS WSERB		1Q					
BFTT 3.5 DEVELOPMENT		1Q-4Q	1Q-4Q				
BFTT 3.4 GAT		3Q					
BFTT 3.4 ET&E		4Q					
BFTT 3.4 DELIVERY			1Q				
BFTT 3.5.1 DEVELOPMENT			1Q-4Q				
BFTT 3.4 WSERB			2Q				
BFTT 3.5 GAT			2Q				
BFTT 3.5 ET&E			3Q				
BFTT 3.5.1 GAT			4Q				
BFTT 3.6 DEVELOPMENT							
BFTT 3.5 DELIVERY							
BFTT 3.5.1 ET&E							
BFTT 3.5 WSERB							
BFTT 3.5.1 WSERB							
BFTT 3.5.1 DELIVERY (CVN 75)							
BFTT 3.5.1 DELIVERY (LSD 42)							
BFTT 3.6 GAT							
BFTT 3.x DEVELOPMENT							
BFTT 3.6 ET&E							
BFTT 3.6 DELIVERY							

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/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 2008	FY 2009	FY 2010				
Project Cost	1.688	1.755	1.773				
RDT&E Articles Qty	0	0	0				

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 (NASMP) and (MCASMP) ($479M), the MH-60R/S master plan, the F/A-18C-F Requirements Procurement Plan (RPP), the Multi-Mission Maritime Aircraft (MMA/P-8) program, and will support the development and design of future naval aviation training/mission rehearsal systems, (fixed and deployed). Tasks include: 1) Advanced training systems specification development to provide for common, modular, High Level Architecture (HLA)-compliant, high fidelity Distributed Mission Training (DMT) and mission rehearsal capabilities, ashore and afloat. Technologies to be developed and intetraged include: intelligent semi-automated forces technology, Advanced Net-ready weapons simulation, AA/A-G, weather server, common Mission Training Station (MTS) technologies, advanced visual-sensor technology, high-resolution helmet mounted, and/or flat panel displays, 20-20 visual acuity image generation, Navy portable source initiative (NPSI) common dataset technology, common software/date/database reuse technologies, advanced environmental effects modeling, fused radar/infra-red/electro-optic and acoustic sensor simulations, physics-based Infra Red (IR) stimulations; and final T&E within the Aviation Training Technology Integration Facility (ATTIF), NAWCAD, which is a man-in-the loop test bed for the integration of software, hardware, and operational equipment. This ATTIF capability provides a window to fleet aviators for critical comment, evaluation, and fine tuning of new, interoperable, and innovative technologies before final transition to the Fleet. Master Training Station (MTS), Debrief/AAR and intelligent training support tools for the virtual environment are focused on human performance enhancements for Fleet readiness and distributed missions, training, all levels.

Metrics - These technology transitions will both lower total ownership costs (TOC) of the training systems, and life-cycle costs, including: visual system database re-use, reduced instructor manning profiles, software-based fidelity enhancements, and increased fleet readiness by enhancing overall system fidelity to the projected operating environments. Naval Aviation Simulator Master Plan (NASMP) / Marine Corps Simulator Master Plan (MCSMP) readiness improvements are conservatively forecast at 14-35% following associated technology upgrades to stand alone, or networked simulators. Individual technology transition investments have routinely exceeded 300+% financial Return on Investment (ROI). Technology readiness levels (TRLs), fleet readiness and financial metrics are used.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **2124/AIR WARFARE TRAINING DEVELOPMENT**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.734	0.807	0.550
RDT&E Articles Quantity	0	0	0

HUMAN SYSTEMS INTEGRATION: (MTS, Intelligent SAF technologies) . Provide for modular Mission Training Station (MTS) designs to lower NASMP/Platform simulator life-cycle costs, integrate VOICE-Capable Semi-Automated-Forces (SAF) technologies, improve instructor effectiveness and provide for milti-SAF exercise utilization. Analyze, develop, and integrate open architecture components for FA-18C-F, MH-60R/S, UAS, E-2C/D & USMC mission areas, intelligent instructor operator agents, TACAIR/MMA common GUI initiatives, common threat system formats and Next Generation Threat System (NGTS) connectivity, Joint SAF and MCSMP TEN compatibility, performance measurement, and after-action review (AAR)/debrief, thereby maximizing ROI for mission training station-related technology investments for multiple platforms.

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.294	0.246	0.479
RDT&E Articles Quantity	0	0	0

SENSORS: Integrate common IR and Forward Looking Infra-Red (FLIR) sensor simulation) with Government, Off the Shelf Software (GOTS). Perform risk reduction, advanced displays T&E, integration and production of Sensor host for Navy Distributed Mission Training (DMT) and legacy devices. Demonstrate GOTS capability for cost-effective database materialization, and develop NAVAIR Portable Source Initiative (NPSI) specifications and processes for implementation on DMT, deployed trainers, legacy, and new visual system upgrade programs. Develop texture storage, sensor-environmental effects, NPSI material reference processes/standards, and automated applications for Real Time (RT) publishing, R/T shadows, R/T combat effects and very high-resolution visuals.

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.331	0.404	0.408
RDT&E Articles Quantity	0	0	0

SYSTEMS ENGINEERING & INTEGRATION: Integrate and test open architecture Live Virtual Constructive (LVC) components for Navy DMT, deployable readiness and rehearsal systems (formerly E-2C/D crew stations only), intelligent synthetic forces, and tactical scenario-control. Demonstrate low-cost LVC capable DMT & DMRT configurations, and virtual range technologies, while maintaining or increasing fidelity. Analyze GOTS/COTS alternatives for network centric warfare connectivity in the simulated battle space, while reducing training system life cycle cost.

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.329	0.298	0.336
RDT&E Articles Quantity	0	0	0

VISUALS: AWTD visual engineering provides for risk mitigation and next generation visual system prototype test and evaluation for both stand-alone and small footprint deployable devices. Supporting the NASMP and T/M/S programs, advanced visual system display configurations are assessed, and developed to include next generation helmet-mounted displays (HMDs), laser visual systems, and associated technologies.

CLASSIFICATION:	UNCLASSIFIED		
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION)			DATE May 2009
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDTEN/BA 7	**0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	**2124/AIR WARFARE TRAINING DEVELOPMENT**	

C. OTHER PROGRAM FUNDING SUMMARY:

Related RDT&E

PE 0604245N, Project #H2279, Sub-Project Title: USMC H-1 Upgrades

Line Item No. and Name	FY 2008	FY 2009	FY 2010	Total Cost
Simulators	75.329	41.129	41.073	157.531
Training (FAST)	51.375	51.922	43.987	147.284

D. ACQUISITION STRATEGY:

Air Warfare Training Development (AWTD) is a 6.4 RDT&E joint technology transition program tied to the Naval Aviation Simulation Master Plan (NASMP) and the various platform simulation master plans with the purpose of transitioning advanced training and mission rehearsal technologies. AWTD provides risk mitigation, test and evaluation, and prototype development for stand-alone, distributed, and deployed training systems for the warfighter utilizing an IPT approach and a combination of reimbursable and direct cite Time and Materials (T&M) contracts.

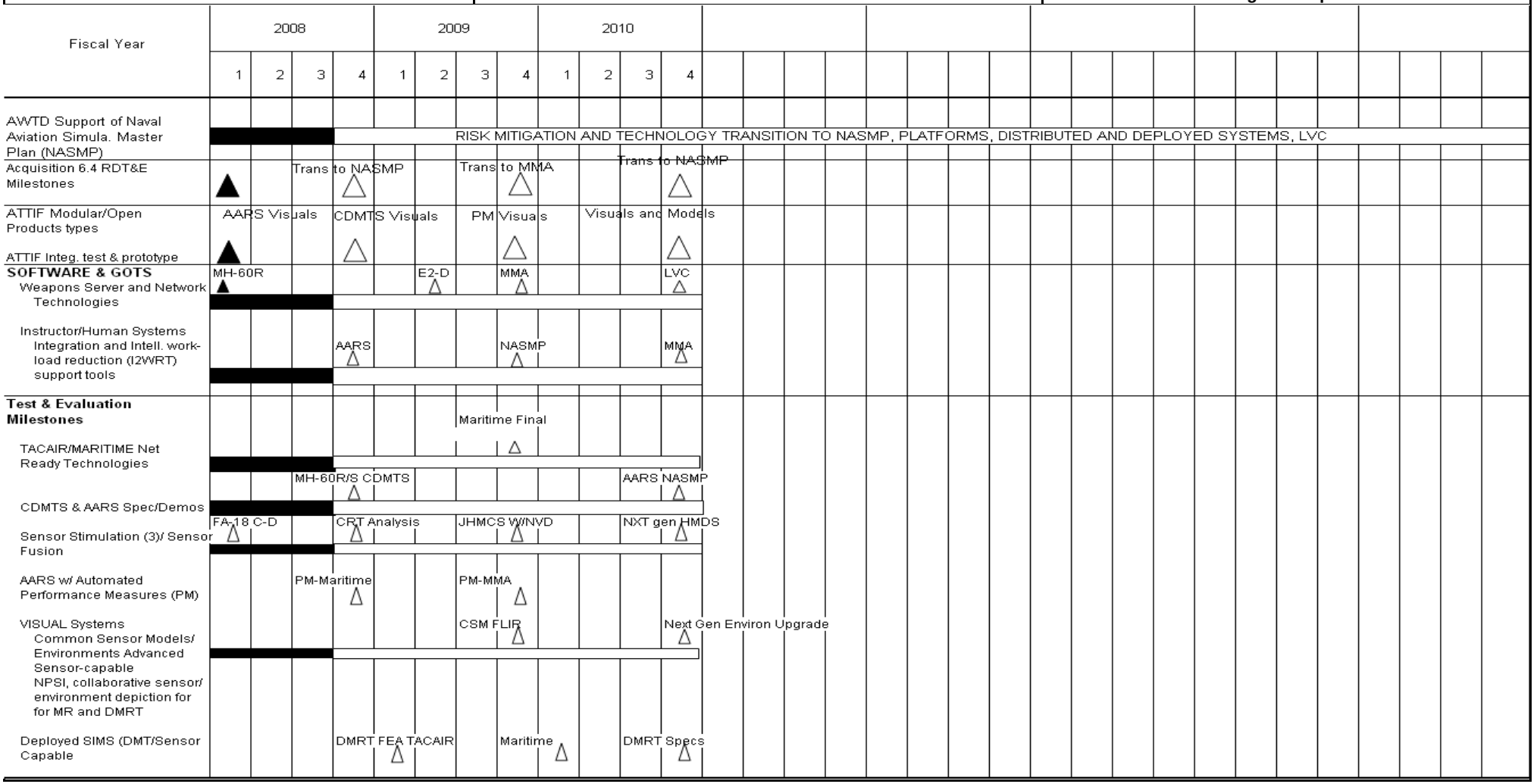
E. MAJOR PERFORMERS:

Performer = NAVAIR TSD
Location = Orlando, FL
Description = Systems Engineering
FY 2008 Award Date = 11/08
FY 2009 Award Date = 2/09
FY 2010 Award Date = 2/10

Performer = NAWC-AD
Location = Pax River, MD
Description = Provide prototype T&E and NASMP integration
FY 2008 Award Date = 2/08
FY 2009 Award Date =
FY 2010 Award Date = Various

CLASSIFICATION:	UNCLASSIFIED											
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS									DATE May 2009			
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**		PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**					PROJECT NUMBER AND NAME **2124/Air Warfare Training**					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost ($000)		FY 2008 Award Date	FY 2009 Cost ($000)	FY 2009 Award Date	FY 2010 Cost ($000)	FY 2010 Award Date		Total Cost ($000)	Target Value of Contract
Systems Engineering (Adv Sensor)	Various	NAVAIR TSD ORLANDO	9.061			0.040	VAR	0.030	VAR			
Systems Engineering (ITST)	Various	NAVAIR TSD ORLANDO	3.523			1.021	FEB-09	0.919	FEB-10			
Systems Engineering (Visuals)	Various	NAWC-AD PAX RIVER	0.794			0.250	VAR	0.300	VAR			
Systems Engineering (Synthetic)	Various	NPS	0.000			0.059	VAR	0.100	VAR			
Subtotal Product Development			**13.378**			**1.370**		**1.349**				
Remarks:												
Software Development	VARIOUS	L3 COMMUNICATIONS	1.529			0.181	VAR	0.184	VAR			
Subtotal Support Costs			**1.529**			**0.181**		**0.184**				
Remarks:												
Developmental Test & Evaluation	Various		5.543			0.100	VAR	0.125	VAR			
Subtotal Test and Evaluation			**5.543**			**0.100**		**0.125**				
Remarks:												
Program Management Support	Various	VARIOUS	0.000			0.085	VAR	0.094	VAR			
Travel	Various	VARIOUS	0.443			0.019	VAR	0.021	VAR			
Subtotal Management Services			**0.443**			**0.104**		**0.115**				
Remarks:												
Total Cost			**20.893**			**1.755**		**1.773**				

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-4, SCHEDULE PROFILE		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **2124/Air Warfare Training Development**



CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-4a, SCHEDULE DETAIL					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**			PROJECT NUMBER AND NAME **2124/Air Warfare Training**			
Schedule Profile	FY 2008	FY 2009	FY 2010				
AWTD Support of Naval Aviation Sim. Master Plan (NASMP)	1Q-4Q	1Q-4Q	1Q-4Q				
Acquisition 6.4 RDT&E Milestones	1Q, 4Q	4Q	4Q				
ATTIF Modular/Open Product Types							
- ATTIF Integ. Test, & Prototype	1Q-4Q	4Q	4Q				
Software & GOTS							
- Weapons Server and Network Technologies	1Q-4Q	1Q-4Q	1Q-4Q				
- AARS w/ automated Performance Meas. (PM)	4Q	4Q					
- VISUAL Systems							
-- Common Sensor Models/Environments,	1Q-4Q	1Q-4Q	1Q-4Q				
-- Advanced sensor-capable NPSI, collaborative sensor							
-- /environment depiction for MR & DMRT							
Deployed SIMS (DMT/Sensor capable)		1Q	1Q, 4Q				
- Instructor/Human Systems Integration and intell. workload							
- reduction (I2WRT) support tools	1Q-4Q	1Q-4Q	1Q-4Q				
Test & Evaluation Milestones							
- TACAIR/MARITIME Net Ready Technologies	1Q-4Q	1Q-4Q	1Q-4Q				
- CDMTS & AARS Spec/Demos	1Q-4Q	1Q-4Q	1Q-4Q				
- Sensor stimulation (3) / Sensor Fusion	1Q-4Q	1Q-4Q	1Q-4Q				

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**				PROJECT NUMBER AND NAME **3087/CURRUCULUM & TRAINER DEVELOPMENT**		
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Project Cost	0.000	10.436	26.591				
RDT&E Articles Qty	0	0	0				

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Total Ship Training System (TSTS) supports DoD Training Transformation and the updated Surface Warfare Training Manual COMNAVSURFOR INST 3502.01D (1 July 07) requirements which call for continuous learning and realistic mission training environments with measurable warfighter performance linked to readiness across the training continuum from inport CONUS to in-theater mission rehearsal. TSTS Spiral 1 is the cornerstone of shipboard embedded training and critical to accomplishing Training Transformation Governance Board (T2GB) strategy and objectives for warfighting performance improvements in the areas of Anti-Submarine Warfare (ASW), Ballistic Missile Defense (BMD), and Surface Warfare and Information Warfare improvements. The TSTS Combat System Trainer (CST) enhancement to BFTT shall employ a spiral development process to allow continuous incremental implementation of core training system functionality and critical warfighting training capabilities in multiple mission areas as prioritized by the Fleet. TSTS will improve upon the current BFTT DIS interoperability limitations and model databases by developing the requisite architecture and associated computer programs to facilitate the transition to HLA and common modeling, scenario generation and control and assessment. Migration to TSTS is required to ensure continued, persistent Fleet Synthetic Training (FST) interoperability. TSTS will integrate existing and emergent onboard training and assessment system capabilities to simulate realistic, train like you fight , combat-like conditions across combat systems, engineering, damage control and navigation systems. It shall provide a continuous shipboard organic learning environment interoperable with NCTE through On-Demand, Just In Time (JIT), scenario-driven, Objective Based Training (OBT), and mission rehearsal capabilities initially available in port, and ultimately underway and in-theater.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **3087/CURRUCULUM & TRAINER DEVELOPMENT**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	0.000	10.436	26.591
RDT&E Articles Quantity	0	0	0

K3087:

Funds develop the Total Ship Training System (TSTS) core capabilities. TSTS shall be implemented as a System of Systems (SoS) capability. In the near term, TSTS development is focused on Combat Systems, Navigation and Seamanship, and Damage Control Training (DCT); in the long term, TSTS will expand to include Engineering, Logistics, Aviation, Visit, Board, Search, and Seizure (VBSS), Medical, Sentry/Lookout, Intelligence, and Security Force training. Development of TSTS Spiral 1 includes development of the completely redesigned, re-architected, and enhanced Combat System Trainer with the following characteristics: decoupled models and entity database; Fleet Synthetic Training (FST) High Level Architecture (HLA) compatibility; FST filtering improved training system usability; readiness based assessment objective based planning; and high band width encryption. TSTS shall integrate internal environments and interoperate with external environments via the Navy Continuous Training Environment (NCTE). The TSTS common integrating element will be the Training Management System (TMS) capability. Establishing the architecture of the TMS is also part of TSTS Spiral 1 development. The need for transforming training is documented within the Office of Force Transformation (OFT) Military Transformation Initiative, DoD Training Transformation Plan, the Chief of Naval Operations Fleet Response Plan (FRP), and Commander United States Fleet Forces Command (CUSFFC) Fleet Readiness Training Plan (FRTP). TSTS efforts include scenario development, knowledge management, common environment system/software engineering, technical system design, software design, safety assessment, program management, software development, system integration, test and evaluation and logistics support. Prototypes of the various TSTS hardware and software subsystems will be designed and documented in design specifications.

FY09 Planned Accomplishments include: Continues development and integration of TSTS Spiral 1 identified by the Total Ship Training Capability (TSTC) Initial Capabilities Document (ICD). This includes overall system development, and development of the Training Management System (TMS) and the Combat System Trainer (CST) components of TSTS. TSTS Spiral 1 efforts include overarching architecture definition/development, configuration management, integrated logistics efforts, software development, System Test and Evaluation (T&E), and certification. TSTS TMS component development includes planning services, training objectives, training scenario, data collection, debrief material, permission to train, and knowledge management. TSTS CST component development includes interfaces to platform unique sensor, weapon and combat system elements like Aegis Advanced Capability Build (ACB12). The TSTC ICD defines TSTS as the Combat Systems Training program targeted to meet COMNAVSURFOR's requirements for synthetic combat systems crew training for AEGIS Modernization, CVN-72 CAPSTONE upgrade, CVN-78, and all subsequent ships after FY12. TSTS supports DoD Training Transformation and the updated Surface Warfare Training Manual COMNAVSURFOR INST 3502.01D (1 July 07) requirements which call for continuous learning and realistic mission training environments with measurable warfighter performance linked to readiness across the training continuum from inport CONUS to in-theater mission rehearsal. TSTS Spiral 1 is the cornerstone of shipboard embedded training and critical to accomplishing Training Transformation Governance Board (T2GB) strategy and objectives for warfighting performance improvements in the areas of Anti-Submarine Warfare (ASW), Ballistic Missile Defense (BMD), and Surface Warfare and Information Warfare improvements within the Open Architecture (OA) and COTS modernization standards for shipboard systems in FY10. Efforts will include EDM/prototype development of the completely redesigned, re-architected, and enhanced Combat System Trainer (CST) with the following characteristics: decoupled models and entity database; Fleet Synthetic Training (FST) High Level

Architecture (HLA) compatibility; FST filtering improved training system usability; readiness based assessment objective based planning, high band width encryption. CST must be fielded by FY10 to address the BFTT technology obsolescence window and preserve training capability in support of AEGIS Modernization.

FY10 Planned Accomplishments: Continues overall TSTS Spiral 1 system development, TMS and CST component development. For all identified requirements for TSTS Baseline 1, development of TSTS will start the Design Phase for the Training Management System Services. The combat system stimulation elements of the Combat System Trainer (CST) component support the stimulation of a training environment for the Aegis Modernization and CVN-78 platforms. ASW, BMD, IW enhanced Warfighter capabilities and requirements identified in FY09 stall start development. Integration of the Service Oriented Architecture elements of Training Management Systems shall start design phase to allow integration of planning and assessment tools into shipboard training systems. Requirements engineering for the SSDS CVNs.

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. and Name	FY 2008	FY 2009	FY 2010	Total Cost
OPN 276200 (Surface (N86) BFTT/TSTS portion only)	20.332	21.008	25.256	66.596

D. ACQUISITION STRATEGY:

The TSTS acquisition strategy for system development utilizes the spiral development model, as mandated by OSD and incremental acquisition and fielding, utilizing commercial off-the-shelf technology to the extent possible.

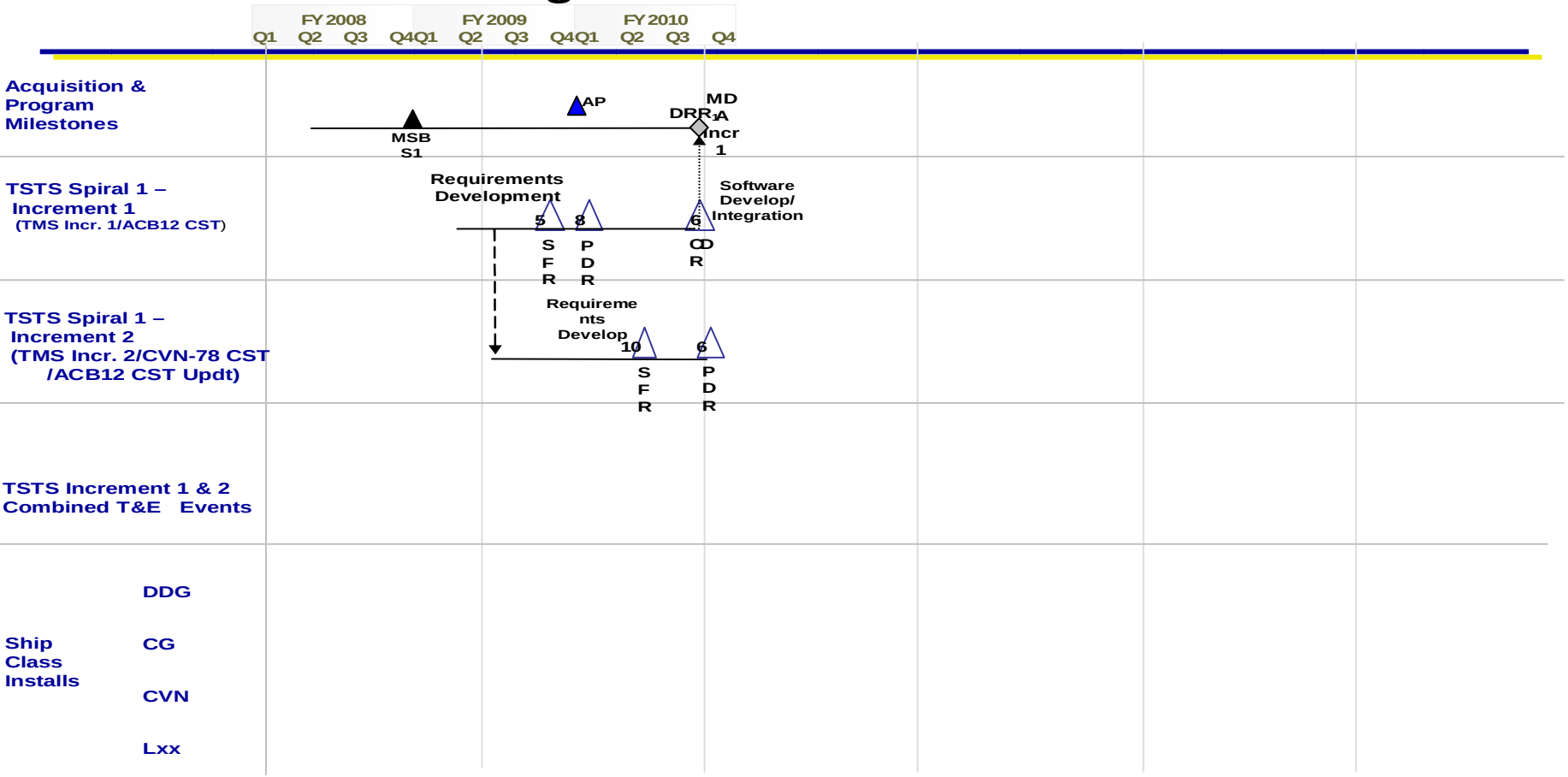
E. MAJOR PERFORMERS:

CDSA Dam Neck
NSWC Dahlgren
NSWC PHD
NUWC Newport

CLASSIFICATION:		UNCLASSIFIED										
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS									DATE May 2009			
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**		PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**					PROJECT NUMBER AND NAME **3087/Curriculum & Trainer Development**					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost ($000)			FY 2009 Cost ($000)	FY 2009 Award Date	FY 2010 Cost ($000)	FY 2010 Award Date		Total Cost ($000)	Target Value of Contract
Hardware Development	CPFF	NAVSEA 02	11.801			1.500	MAR-09	2.200	MAR-10			
Ship Integration			1.725			0.000		0.000				
Systems Engineering	WR/REQN	NSWC PHD/CDSA/NUWC Newport/NSWC Dahlgren/NAVSEA 02	1.292			2.964	DEC-08	2.657	DEC-09			
Subtotal Product Development			**14.818**			**4.464**		**4.857**				
Remarks:												
Software Development	WR/REQN	NSWC PHD/CDSA/NUWC Newport/NSWC Dahlgren/NAVSEA 02	4.435			3.824	MAR-09	19.040	MAR-10			
Technical Documentation	WR/REQN	NSWC PHD/CDSA/NUWC Newport/NSWC Dahlgren/NAVSEA 02	1.100			0.548	DEC-08	0.000				
Subtotal Support Costs			**5.535**			**4.372**		**19.040**				
Remarks:												
Developmental Test & Evaluation	WR/REQN	NSWC PHD/CDSA/NAVSEA 02	2.800			0.400	DEC-08	1.070	DEC-09			
Subtotal Test and Evaluation			**2.800**			**0.400**		**1.070**				
Remarks:												
Government Engineering Services	WR/REQN	CDSA/NSWC Dahlgren	0.165			1.200	JAN-09	1.624	JAN-10			
Subtotal Management Services			**0.165**			**1.200**		**1.624**				
Remarks:												
Total Cost			**23.318**			**10.436**		**26.591**				

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-4, SCHEDULE PROFILE		DATE May-09
APPROPRIATION/BUDGET ACTIVITY RDTEN/BA 7	PROGRAM ELEMENT NUMBER AND NAME 0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	PROJECT NUMBER AND NAME 3087/Curriculum & Trainer Development

TSTS Integrated Master Plan Overview



CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-4a, SCHEDULE DETAIL						DATE May 2009	
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**			PROJECT NUMBER AND NAME **3087/Curriculum & Trainer Development**			
Schedule Profile	FY 2008	FY 2009	FY 2010				
TSTS DEVELOPMENT (INCREMENT 1)	2Q-4Q	1Q-4Q	1Q-4Q				
TSTS MILESTONE B		1Q					
TSTS DEVELOPMENT (INCREMENT 2)		2Q-4Q	1Q-4Q				
INCREMENT 1 SFR		3Q					
INCREMENT 1 PDR		4Q					
INCREMENT 2 SFR			1Q				
INCREMENT 1 CDR			3Q				
INCREMENT 2 PDR			3Q				
TSTS DT/EOA							
INCREMENT 2 CDR							
INCREMENT 1 GAT							
INCREMENT 1 TRR							
TSTS DT/OT							
INCREMENT 1 DT&E							
INCREMENT 1 CG 62 CERTIFICATION							
INCREMENT 2 GAT							
INCREMENT 2 TRR							
INCREMENT 1 AIE							
INCREMENT 2 ET&E							
INCREMENT 2 DDG 53 CERTIFICATION							
TSTS MILESTONE C							
TSTS FOT&E							

CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**				PROJECT NUMBER AND NAME **3093/TACTS/LATR REPLACEMENT**		
COST (In Millions)	FY 2008	FY 2009	FY 2010				
Project Cost	3.442	3.014	8.793				
RDT&E Articles Qty	0	0	0				

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Tactical Combat Training System (TCTS) will provide the Navy a replacement for major portions of the Tactical Aircrew Combat Training System (TACTS) and Large Area Tracking Range (LATR). 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 was 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 (MDA) approved program rebaseline on May 23, 2005. The MDA approved acquisition streamlining February 2006, which included six additional R,D,T&E test articles, in FY07, to support Operational Test.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **3093/TACTS/LATR REPLACEMENT**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	3.442	3.014	8.793
RDT&E Articles Quantity	0	0	0

TCTS: Qualified and completed the NDI Rangeless Pod system fielded at NAS Key West, including the complete Integrated Logistics products and training. Developed and implemented track exchange interface between TCTS live monitor and TACTS Control and Computation Subsystem (CCS). Defined Test and Training Enabled Architecture (TENA) compliant interface between TCTS and an Advance Display System. Developed F/A-18 (C/D/E/F) and AV-8B Internal Subsystem (IS) and began qualification testing. Initiated development of the Fixed Ground Subsystem and data link uplink control for fielding at larger navy training ranges. Develop and deliver Integrated Logistics products for the IS and for fielding the TCTS system for deployed and fixed Range applications. Initiated the development of a Rack-Mounted subsystem for use on rotary wing and transport aircraft. Continue development of the Advanced Data link waveform and the Joint Tactical Radio System (JTRS) advance data link. FY10/11 reprogram of APN-7 (0204571N BLI 0725) funds to RDT&E to address and fund development of the JTRS radio and synchronize the budget to schedule. Develop shipboard ground subsystem and related training range integration.

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. and Name	FY 2008	FY 2009	FY 2010	Total Cost
4204	5.670	7.643	5.392	18.705
Related APN; Other Production Charges, LI 072500	20.643	27.788	23.861	72.292

D. ACQUISITION STRATEGY:

TCTS will employ an evolutionary incremental acquisition strategy to procure a base Non-Developmental Item Systems and development of the system to meet the full ORD requirements. TCTS is a cooperative program with the USAF P5 CTS program. The USAF awarded a 10-year contract in June 2003.

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION)		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **3093/TACTS/LATR REPLACEMENT**

E. MAJOR PERFORMERS:

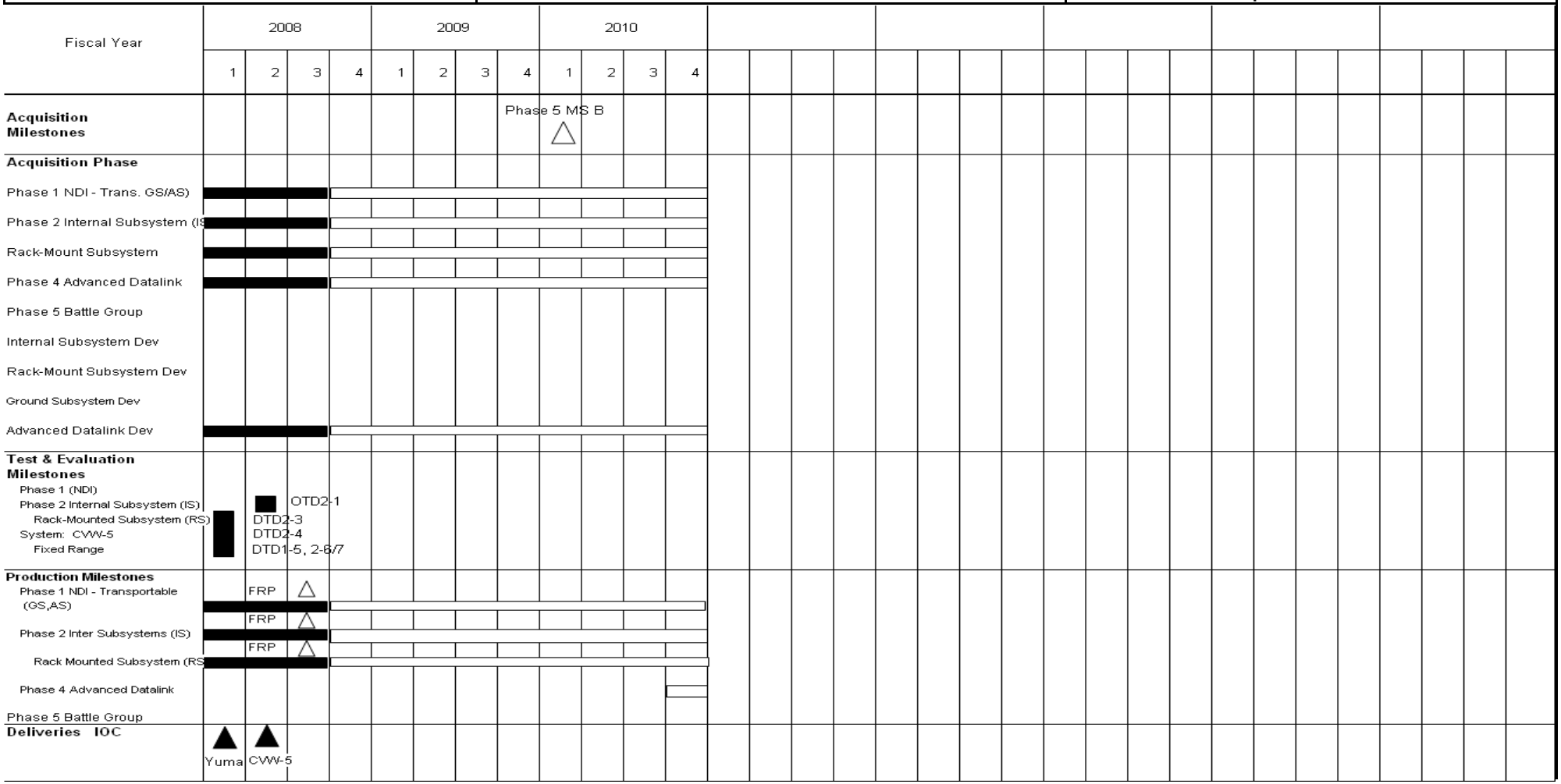
Performer = Rockwell Collins, Inc.
Location = Cedar Rapids, IA
Description = Range Instrumentation Waveform
FY 2008 Award Date =
FY 2009 Award Date = 11/08
FY 2010 Award Date = 11/09

Performer = General Dynamics
Location = Phoenix, AZ
Description = JTRS SS F-K
FY 2008 Award Date = 3/08
FY 2009 Award Date = 11/08
FY 2010 Award Date = 11/09

Performer = Cubic DAI
Location = San Diego, CA
Description = TCTS ADL
FY 2008 Award Date =
FY 2009 Award Date = 11/08
FY 2010 Award Date = 11/09

CLASSIFICATION:	UNCLASSIFIED											
EXHIBIT R-3, RDT&E PROJECT COST ANALYSIS									DATE May 2009			
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**		PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**					PROJECT NUMBER AND NAME **3093/TACTS/LATR Replacement**					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY Cost ($000)		FY 2008 Award Date	FY 2009 Cost ($000)	FY 2009 Award Date	FY 2010 Cost ($000)	FY 2010 Award Date		Total Cost ($000)	Target Value of Contract
Primary Hardware Development	SS CPAF	CUBIC DEFENSE APPL	9.811			0.000		0.000				
Award Fees			1.090			0.000		0.000				
Subtotal Product Development			**10.901**			**0.000**		**0.000**				
Remarks:												
Software Development	SS CPAF	CUBIC DEFENSE APPL	9.701			0.690	NOV-08	1.825	NOV-09			
Software Development	SS CPAF	ROCKWELL COLLINS	4.072			1.486	NOV-08	5.277	NOV-09			
Integrated Logistics Support	Various	VARIOUS	0.503			0.000		0.045	VAR			
Contractor Eng Sup	SS CPAF	CUBIC DEFENSE APPL	0.914			0.000		0.000				
Award Fees		VARIOUS	1.530			0.000		0.000				
Subtotal Support Costs			**16.720**			**2.176**		**7.147**				
Remarks:												
Developmental Test & Evaluation	Various	VARIOUS	2.948			0.209	NOV-08	0.225	NOV-09			
Operational Test & Evaluation	WR	OPER T&E NORFOLK VA	0.043			0.000		0.000				
Subtotal Test and Evaluation			**2.991**			**0.209**		**0.225**				
Remarks:												
Contractor Engineering Support	Various	VARIOUS	0.827			0.150	NOV-08	0.535	NOV-09			
Government Engineering Support	Various	VARIOUS	4.232			0.477	NOV-08	0.884	NOV-09			
Travel	Various	VARIOUS	0.012			0.002	VAR	0.002	VAR			
Subtotal Management Services			**5.071**			**0.629**		**1.421**				
Remarks:												
Total Cost			**35.683**			**3.014**		**8.793**				

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-4, SCHEDULE PROFILE		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **3093/TACTS/LATR Replacement**



CLASSIFICATION:	UNCLASSIFIED						
EXHIBIT R-4a, SCHEDULE DETAIL					DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**			PROJECT NUMBER AND NAME **3093/TACTS/LATR Replacement**			
Schedule Profile	FY 2008	FY 2009	FY 2010				
Acquisition Milestones							
- Phase 5 MS B			1Q				
- Phase 4 MS C							
Acquisition Phase							
- Phase 1 NDI - Transportable (GS, AS)	1Q-4Q	1Q-4Q	1Q-4Q				
- Phase 2 Internal Subsystem (IS)	1Q-4Q	1Q-4Q	1Q-4Q				
- Phase 5 Battle Group							
Deliveries IOC	1Q, 2Q						
- Fixed Range	1Q						
Production Milestones							
- Phase 1 NDI - Transportable (GS, AS)	1Q-4Q	1Q-4Q	1Q-4Q				
- Phase 2 Internal Subsystem (IS)	1Q-4Q	1Q-4Q	1Q-4Q				
-- Rack-Mount Subsystem (RS)	1Q-4Q	1Q-4Q	1Q-4Q				
- Phase 4 Advanced Datalink	1Q-4Q	1Q-4Q	1Q-4Q				
- Advanced Datalink Dev			4Q				
Test & Evaluation Milestones							
- Phase 1 (NDI)							
- Phase 2 Internal Subsystem (IS)	2Q						
-- Rack-Mount Subsystem (RS)	1Q						
- System: CV-5	1Q						
-- Rack-Mount Subsystem (RS)	1Q-4Q	1Q-4Q	1Q-4Q				
- Phase 4 Advanced Datalink	1Q-4Q	1Q-4Q	1Q-4Q				
- Phase 5 Battle Group							
- Internal Subsystem Dev							
- Rack-Mount Subsystem Dev							
- Ground Subsystem Dev							

CLASSIFICATION:	UNCLASSIFIED	
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION		DATE May 2009
APPROPRIATION/BUDGET ACTIVITY **RDTEN/BA 7**	PROGRAM ELEMENT NUMBER AND NAME **0204571N/CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT**	PROJECT NUMBER AND NAME **9999/CONGRESSIONAL ADDS**

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	1.158	1.595	0.000
RDT&E Articles Quantity	0	0	0

ASW Training Interoperability Enterprise Demo Test PU 9C57A: FY08 Congressional Add for Undersea Warfare (USW) Training is essential to effective USW warfighting operations, i.e. the "Fight as you Train" principle. The Navy's Supportability Peer Review Process Work Group - SupWG, whose membership spans across the US Navy, National laboratories, and private industry representatives, develops common core Training elements in support of the US Navy's warfighting missions. The ultimate goal of the working group is to achieve theater-wide common, interoperable, and high fidelity USW training baselines for the shipboards, undersea, airborne, and shore-based USW communities.

The SupWG supplies open architecture training products, developed through a successful build-test-build, best-of-breed process to support rapid technology improvement and deployment. SupWG training technology is a scalable, configurable, hardware independent modular software solution, designed to support both deployed combat systems and shore based training systems. SupWG products support a wide range of USW platforms including AN/SQQ-89A(V), 15 Surface Combatant; Improved Performance Sonar (IPS) Surface Combatant; Littoral Combat Ship (LCS) ASW Mission Package; DDG1000 Zumwalt Class; P-8A Poseidon (formerly the Multimission Maritime Aircraft or MMA), P-3 Tactical Operational Readiness Trainer (TORT) and SH-60B/MH-60R/SH-60F Tactical Operational Flight Trainers (TOFT) shore based trainers.

	FY 2008	FY 2009	FY 2010
Accomplishments/Effort/Subtotal Cost	1.542	1.037	0.000
RDT&E Articles Quantity	0	0	0

Total Ship Training System (TSTS) PU 3087A: FY08 Congressional Add supports development of a voice command recognition and assessment capability to the Total Ship Training System (TSTS) Support System and completes preparation for demonstration in FY09 ($1.037M). The voice recognition capability is to be used to monitor the performance of Officers during a training scenario and to support the automated assessment of their performance. This will reduce the shipboard manpower requirements to run and assess a shipboard team training event.