

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N
PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

(U) COST: (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE
R0151	2,948	2,715	2,914

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element supports all naval warfare task areas and provides technical and analytical support to the fleet operating forces to develop and evaluate tactics for newly evolving force structures, new and existing weapon system employment, and changing threat scenarios to improve and measure force readiness.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

R-1 Line Item 156

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605155N	PROJECT NUMBER: R0151
	PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation	PROJECT TITLE: Intertype Tactical Development and Evaluation

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$200) Developed a method of in-current minesweeping. Developed tactics for safe current sweeping techniques for the Mine Counter Measure(MCM)-1 class ship against specific magnetic influence mine threats.
- (U) (\$95) Development of a methodology to defend computer networks against intrusion. Developed a formal set of guidelines for protecting Naval computer networks against new and sophisticated intrusion techniques. Consolidated and analyzed the existing doctrine and identified areas for more robust security measures.
- (U) (\$102) Developed Tactics Techniques and Procedures for the employment of Interactive Multi-dimensional Acoustic Trainer (IMAT) as a Tactical Decision Aid (TDA) for defensive and offensive submarine tactics.
- (U) (\$100) Developed a method of employing an AN/SQQ-89 as a tactical training aid. Developed guidance and a tactical decision aid for the tactical employment of the SQQ-89 in littoral waters. Determined the optimum setup of the equipment for the predicated environmental conditions.
- (U) (\$200) Developed tactics for MCM in support of Explosive Ordnance Disposal (EOD) craft. Developed a system for determining the vulnerability of EOD Type 3 craft against specific foreign influence mines which have recently been exploited and modeled.
- (U) (\$110) Developed a method of coordinating National and tactical reconnaissance planning. Developed a method for integrating tactical reconnaissance and national reconnaissance information. Provided a planning aid that identifies the strengths and weakness of each system type and provided recommended usage of tactical assets to support Carrier Battle Group/Amphibious Ready Group/Marine Expeditionary Unit (CVBG/ARG/MEU) operations.

R-1 Line Item 156

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

- (U) (\$227) Developed a methodology for Unmanned Aerial Vehicle (UAV) usage in support of Strike and Special warfare operations. Developed Tactics, Techniques and Procedures for employing Medium Altitude Endurance Unmanned Aerial Vehicles (MAE UAV) and Tactical UAV to enhance Reconnaissance/Surveillance/Target acquisition (RSTA) battle management and Electronic Combat functions in support of strike warfare and Special Operations Forces. Loss of ES-3 has elevated the requirement for investment in an airborne, tactical electronic surveillance (ES) capability.
- (U) (\$93) Evaluated small craft tactics in the littoral waters. Developed Tactics Techniques and Procedures using multiple weapons systems in dealing with high-speed small boat threat attacks.
- (U) (\$ 94) Developed a method of employing tactical oceanographic information. Consolidated cross community guidance and procedures into a single relevant tactical publication that provides a single point reference source in dealing with the littoral environment.
- (U) (\$109) Evaluated combined Maritime Patrol Aircraft, ARG/CVBG (Carrier Battle Group)tactics. Developed a series of tactics for using the modified Maritime Patrol Aircraft (MPA) in support of ARG/MEU Special Operations Command (SOC) operations. Built off of recent lessons learned in support of Battle Damage Assessment (BDA), Maritime Interdiction/Interception Operations (MIO), and gunfire missions.
- (U) (\$98) Updated/modified/developed Battle Group Anti Submarine Warfare (ASW) tactics. Developed and tested tactics to optimize CVBG effectiveness in countering specific rest of world diesel submarine attacks in tactically relevant littoral environments.
- (U) (\$102) Coordination of VQ/VPU (Special Mission P-3 squadrons) tactics with a CVBG. Developed coordinated tactics for use of special mission MPA aircraft in support of the CVBG. Due to the retirement of the ES-3, the special mission MPA was used to support the CVBG. Current tactics do not address this integration.
- (U) (\$107) Developed tactics for electronic attack protection of MCM and MEU forces. Identified and ranked

R-1 Line Item 156

UNCLASSIFIED

Budget Item Justification
(Exhibit R-2, page 3 of 9)

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605155N	PROJECT NUMBER: R0151
	PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation	PROJECT TITLE: Intertype Tactical Development and Evaluation

current shipboard and airborne systems that support electronic attack in the littoral environment. Developed a methodology in which these systems can support MCM and MEU forces in an escalating hostile littoral environment.

- (U) (\$106) Developed employment tactics for use of the E-2C EMDU. Developed Tactics Techniques and Procedures for employment of the E-2C Mission Computer Upgrade/Advanced Control Indicator Set (MCU/ACIS). Determine system detection and tracking overland performance and mission endurance.
- (U) (\$90) Developed S-3 depth bomb tactics. Developed Tactics Techniques and Procedures for employment of MK-80 series weapons against shallow water diesel submarine. Project required research and analysis of existing data on depth bomb performance.
- (U) (\$ 75) Developed employment tactics for using the Joint Direct Attack Munitions from Naval aircraft. Developed carrier air wing strike and target area tactics for interdiction strikes using the increased capabilities of Joint Direct Attack Munitions (JDAM) weapons.
- (U) (\$287) Updated/modified/developed tactics for combat search and rescue. Developed improved Tactics Techniques and Procedures to support Combat Search and Rescue (CSAR) missions that account for modern aircraft capability against modern threats such as mobile Surface to Air Missiles (SAMS), Man Portable Air Defense System (MANPADS), etc.
- (U) (\$240) Developed torpedo selection/employment for 5th Fleet Area of Operations (AOR). Similar to project 99-01; developed Tactics Techniques and Procedures for employment of MK-46/48/50 torpedoes against submarines using high fidelity, range dependent model for another high interest area of the world. Only lightweight torpedoes currently funded.
- (U) (\$ 97) Tactical integration of the phototelesis system into the CVBG.
- (U) (\$ 50) Tactics defending against littoral small craft against submarine

R-1 Line Item 156

UNCLASSIFIED

Budget Item Justification
(Exhibit R-2, page 4 of 9)

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605155N	PROJECT NUMBER: R0151
	PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation	PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$150) Developed and evaluate the MCM tactics against the cluster dig mine type. Developed improved procedures in the location and sweeping of such mines
- (U) (\$174) Tactical employment of Apache helicopters in the PACFLT AOR and the specific coordination measures required to support mixed Army/Navy tactical employment of air assets.
- (U) (\$ 42) Program Support.

2. (U) FY 2001 PLAN:

- (U) (\$240) Develop the Tactics, Techniques and Procedures (TTP) to effectively employ various assets to accomplish Time Critical Strike.
- (U) (\$110) Explore, analyze, and construct baseline standardization for SSC/ACC (Surface Combatant Commander/ Air Combatant Commander)Coordination.
- (U) (\$205) Develop tactics, techniques, and procedures for decisive Suppression of Enemy Air Defenses (SEAD) without relying solely on enemy radar emissions
- (U) (\$200) Develop the procedures to tactically employ selected ASW Tactical Decision Aids (TDAs)to fully support the planning, execution, and performance assessment of the ASW search

R-1 Line Item 156

UNCLASSIFIED

Budget Item Justification
(Exhibit R-2, page 5 of 9)

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605155N	PROJECT NUMBER: R0151
	PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation	PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$120) Develop a matrix for a number of foreign and US mines pertinent to current operations. The document will include all mine parameters relevant to Mine Warfare (MIW) operations (dedicated and organic systems).
- (U) (\$110) Establish the Tactics, Techniques and Procedures (TTP) to effectively employ the Cooperative Engagement Capability within the Composite Warfare concept.
- (U) (\$210) Establish the Tactics, Techniques and Procedures to actively defend Navy/Marine Corps information systems at the tactical level (CVBG/ARG) with the focus on Defensive-Information Assurance (D-IA) / Computer Network Attack (CNA), Computer Network Defense (CND) and Computer Network Exploitation (CNE).
- (U) (\$110) Develop and evaluate a tactic for amphibious littoral air defense.
- (U) (\$13) Evaluate existing ASW sensor capabilities to detect and localize a diesel submarine bottomed in shallow water and optimize the associated tactics.
- (U) (\$125) Establish Tactics, Techniques, and Procedures (TTP) for the incorporation of Psychological Operations (PSYOP) into the Rapid Response Planning Process (R2P2) in support of (ARG)-(MEU) operations
- (U) (\$190) Develop light weight torpedo (LWT) attack tactics which include target-specific weapons aimpoints and weapons presets. The project will evaluate the Probability of Hit (Phit) for the MK-46 and MK-50 in order to optimize LWT selection, and determine the number of LWT required for this target
- (U) (\$200) Analyze lethality of Hellfire against this database of targets based on the aimpoints/impact point.
- (U) (\$209) Develop and refine tactics to employ the AN/SQQ-89 with TRAFS to detect a threat representative torpedo and evaluate current torpedo evasion and countermeasure employment of AN/SQQ-89/TRAFS
- (U) (\$165) Establish Tactics, Techniques, and Procedures for development of a Jamming Control Authority (JCA) to provide directive Electronic Attack/Communications Electronic Attack cueing, targeting, and post mission effectiveness reports in support of airborne offensive strike operations.

R-1 Line Item 156

UNCLASSIFIED

Budget Item Justification
(Exhibit R-2, page 6 of 9)

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605155N	PROJECT NUMBER: R0151
	PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation	PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$285) Determine optimum sweep tactics for fields containing more than one mine type. These sweep tactics will provide the optimum sweep current pulse cycle when sweeping more than one mine type.
- (U) (\$ 69) Program Support.
- (U) (\$ 40) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.
- (U) (\$114) Develop tactics, techniques and procedures for employment of the F/A-18 as an aerial mining platform.

3. (U) FY 2002 PLAN:

- (U) (\$110) Development of Tactics Techniques and Procedures to employ the SIPRNET and associated IT21 equipment as method for managing the Force Over The horizon Coordinator (FOTC)Database.
- (U) (\$110) Establish Tactics, Techniques, and Procedures for development of a Battle Force / Battle Group Interface Control publication.
- (U) (\$285) Develop tactics, techniques, and procedures for protection of a High Value Unit (Carrier/Amphibious ship) with the NULKA self defense system.
- (U) (\$180) Targeting Process for Attacking Time Critical Targets using emergent target menseration systems.
- (U) (\$110) Develop tactics, techniques, and procedures for defending against Small Boat Attacks using Swarm tactics with an Armed Helo.
- (U) (\$180) Develop tactics, techniques, and procedures defining the effectiveness of EA-6B Jamming on Anti-Ship Missile's and proper employment of such systems.
- (U) (\$110) Establish Tactics, Techniques, and Procedures for LHA/LHD Air Control Tactics in a MEF environment.

R-1 Line Item 156

UNCLASSIFIED

Budget Item Justification
(Exhibit R-2, page 7 of 9)

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605155N	PROJECT NUMBER: R0151
	PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation	PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$160) Establish, and publish the Damage Curves for Mine Hunting Class 51 and MCM 1.
- (U) (\$110) Develop tactics, techniques, and procedures for doing Anti-Submarine Warfare Using the A-Comms communications system.
- (U) (\$180) Establish Tactics, Techniques, and Procedures for employment of the CIT system.
- (U) (\$200) Establish Tactics, Techniques, and Procedures for Torpedo Employment in a Korean geographic area in support of the current Op plan.
- (U) (\$225) Establish Tactics, Techniques, and Procedures for Mine Counter Measure Reconnaissance Tactics.
- (U) (\$110) Establish Tactics, Techniques, and Procedures for Helicopter Intercept of Low Slow Flyer.
- (U) (\$240) Develop tactics, techniques, and procedures for employment of the MHC Dyad Influence Sweeping system.
- (U) (\$150) Establish, and publish the tactics, techniques, and procedures for Preemptive Launch of IR Decoys in a hostile landing zone.
- (U) (\$150) Develop Tactics Techniques and Procedures to delineate Air Defense Command Relationship for CVBG Support ARG.
- (U) (\$110) Develop tactics, techniques, and procedures for employment of the P-3 in an Naval Surface Fires Supporting role
- (U) (\$150) Develop tactics, techniques, and procedures for employment of E-2C II as an Overland Surface Detection and Tracking asset.
- (U) (\$ 44) Program Support.

B. (U) PROGRAM CHANGE SUMMARY:

R-1 Line Item 156

UNCLASSIFIED

Budget Item Justification
(Exhibit R-2, page 8 of 9)

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N PROJECT NUMBER: R0151
PROGRAM ELEMENT TITLE: Fleet Tactical Development and PROJECT TITLE: Intertype Tactical
Evaluation Development and Evaluation

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY2002</u>
(U) FY 2001 President's Budget:	3,100	2,917	2,912
(U) Inflation Adjustment			
(U) Program Adjustment	-17	-31	+2
(U) Execution Adjustment	-91	-145	
(U) Congressional Recission	-12	-26	
(U) NWCF Rate Adjustment			
(U) SBIR	-32		
(U) FY 2002 President's Budget Submission	2,948	2,715	2,914

(U) Schedule: Not applicable.
(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 156

UNCLASSIFIED

Budget Item Justification
(Exhibit R-2, page 9 of 9)