



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

IN REPLY REFER TO
OPNAVINST 1540.55
N869
28 March 1994

OPNAV INSTRUCTION 1540.55

From: Chief of Naval Operations

Subj: SHIPBOARD TRAINING ENHANCEMENT PROGRAM (STEP)

Ref: (a) OPNAVINST 1500.8M (NOTAL)
(b) OPNAVINST 1500.73 (NOTAL)
(c) OPNAVINST 3502.4A (NOTAL)

Encl: (1) STEP Guidelines
(2) STEP Organizational Diagrams

1. Purpose. To establish the Shipboard Training Enhancement Program (STEP) and the management approach to be used in accordance with references (a), (b) and (c).

2. Background. Shipboard training packages meeting the fleets needs are vital to Navy training and demand is increasing as resources are diminishing. Lower cost and significant improvements in the quality and availability of microcomputers and audio/visual presentation and distribution systems such as Compact Disc Read-Only-Memory (CD-ROM), multimedia and interactive courseware (ICW) and authoring software systems make a cost-effective alternative to classroom training available. Standardized control over the process is required to prevent wasted resources and redundant efforts.

3. Discussion. This instruction describes the scope of the Shipboard Training Enhancement Program (STEP). This program encompasses all shipboard training packages and is established to provide coordinated, systematic and central determination of training requirements, development, distribution, maintenance and life cycle support of STEP training materials.

4. Applicability. This program applies to all classes of surface ships, including aircraft carriers, and is designed to enhance all aspects of shipboard training, with the exception of:

- a. Nuclear propulsion
- b. Tactical training



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- c. Aviation and Submarine Warfare specific programs
- d. Embedded training related to specific equipment or systems, e.g., SQQ-89 On Board Trainer (OBT)
- e. Electronic Warfare On Board Trainer (EWOBT)

5. Responsibilities. STEP program responsibilities are defined in enclosure (1) and are summarized below.

a. Chief of Naval Operations (CNO)- Provide overall policy, guidance and coordination for program goals and objectives, as well as approve and sponsor training programs.

b. Systems Commanders (SYSCOM): Commander Naval Sea Systems Command (COMNAVSEASYSKOM), Commander Naval Air Systems Command (COMNAVAIRSYSKOM) and Commander Space and Naval Warfare Systems Command (COMSPAWARSYSKOM) - Responsible for the procurement of all training systems ensuring STEP packages meet fleet requirements and facilitating with OPNAV and the Chief of Naval Education and Training (CNET) for the transfer of life cycle maintenance of associated training programs to STEP.

c. Chief of Naval Education and Training (CNET) - Designated the STEP Coordinator (STEPCC), and as such will be the executive agent responsible for managing and providing administrative support.

d. Training Agents (TA): Bureau of Medicine and Surgery (BUMED), Naval War College (NAVWARCOL), United States Naval Academy (USNA), Commander in Chief, U.S. Pacific Fleet (CINCPACFLT), Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT), Commander Naval Reserve Force (COMNAVRESFOR) - Maintain an awareness of STEP packages, and report the availability of complementary materials to STEPCC.

e. STEP Fleet Coordinators (STEPFC): Commander, Training Command, U.S. Atlantic Fleet (COMTRALANT); Commander, Training Command, U.S. Pacific Fleet (COMTRAPAC); and Chief of Naval Technical Training (CNTT); Commander Afloat Training Group Atlantic (COMAFLOATRAGRULANT); Commander Afloat Training Group Pacific (COMAFLOATRAGRUPAC) - Formulate an integrated list of their requirements to support STEP package development, maintain an awareness of STEP packages, report the availability of complementary materials to STEPCC, provide Subject Matter Experts (SME) for STEP package development and conduct preliminary review and recommend forwarding to the Fleet for final approval of newly developed STEP packages.

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f. Type Commanders (TYCOM): Commander Naval Surface Force, U.S. Atlantic Fleet (COMNAVSURFLANT), Commander Naval Surface Force, U.S. Pacific Fleet (COMNAVSURFPAC), Commander Mine Warfare Command (COMINWARCOM), Commander Naval Air Force, U.S. Atlantic Fleet (COMNAVAIRLANT) and Commander Naval Air Force, U.S. Pacific Fleet (COMNAVAIRPAC) - Review training requirements and reports to initiate and prioritize requests for STEP packages and submit these to the Surface Warfare Training Review Board (SWTRB), provide subject matter experts (SME) for STEP package development and participate in the final review and fleet approval of all STEP packages.

g. Reserve STEP Coordinator: Commander Naval Reserve Force (COMNAVRESFOR) - Consolidate and approve reserve unit requests and submit to the STEPC. Conduct preliminary review and recommend final approval of newly developed STEP packages for reserve training.

h. Fleet and Naval Reserve units - Report training needs via respective TYCOM or COMNAVRESFOR requesting development of applicable STEP packages. Use the Navy Training Feedback System Form (OPNAV 1500/39).

i. STEP Executive Review Board (STEP ERB) - CNO (N869) will chair periodic reviews with CNET, SYSCOMS, and TYCOMS to prioritize requirements and discuss issues related to STEP development. The STEP ERB will coordinate with the Surface Warfare Training Review Board (SWTRB) to take advantage of existing resources and streamline training development and management.

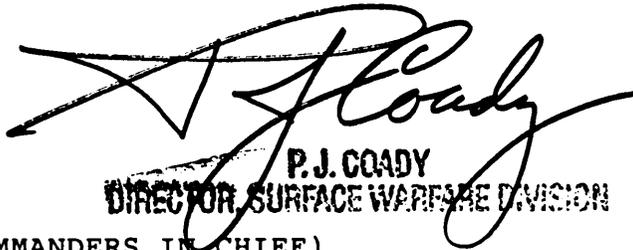
j. Other Activities - All Navy activities that produce training materials that may be applicable to shipboard training will provide a copy to STEPC for possible inclusion in STEP distribution.

6. Forms and Reports

a. OPNAV 1500/39 (Rev. 1/92) Navy Training Feedback System Form, S/N 0107-LF-013-7400 may be obtained through normal Navy Supply channels under NAVSUP P-2002, Navy Stock List of Publications and Forms.

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b. The reports noted in this instruction are exempt from reports control by SECNAVINST 5214.2B.



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STEP GUIDELINES

1. Purpose. To establish the Shipboard Training Enhancement Program (STEP), and STEP management approach to be used in accordance with reference (a).
2. Mission. The Shipboard Training Enhancement Program (STEP) encompasses all shipboard training packages and is established to provide coordinated, systematic and central determination of training requirements, development, distribution, maintenance and life cycle support of STEP training materials.
3. Organization and Responsibilities.
 - a. Chief of Naval Operations (CNO)
 - (1) Provides overall policy, guidance and coordination for program goals and objectives.
 - (2) Approves and provides sponsorship for training programs and makes appropriate program submissions to support the budgetary process as follows:
 - (a) CNO (N7) is the General Military Training (GMT) program and resource sponsor. As the GMT program sponsor, N7 is responsible for final approval and support for all GMT, including any STEP packages which provide GMT.
 - (b) CNO (N869) is the Shipboard Training Enhancement Program (STEP) resource and program sponsor. As the program sponsor N869 is responsible for determining program objectives, phasing, support requirements for providing funds to CNET (STEP) to support administration of STEP and the development and life cycle maintenance costs of materials in STEP packages (except GMT packages). N869 is also the primary Navy spokesperson on matters related to the requirement for development and progress of STEP.
 - b. Systems Commanders (COMNAVSEASYSKOM, COMNAVAIRSYSKOM, COMSPAWARSYSKOM).
 - (1) Responsible for the procurement of all training systems (including embedded training) required for introduction of new or modernized equipment, subsystem or system (E/S/S).
 - (2) Coordinates training requirements with the STEP Coordinator to ensure STEP packages meet fleet requirements.
 - (3) Once the development and introduction process is

Enclosure (1)

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complete, facilitates the transfer of life cycle maintenance of associated training programs to STEP, under the cognizance of CNET.

c. Chief of Naval Education and Training (CNET) - STEPC is the executive agent responsible for managing and providing administrative support. In this capacity, CNET will:

(1) Make appropriate Program Objective Memoranda (POM) and budget submissions for administrative support of the overall program as well as the development, procurement, and life cycle support of STEP packages.

(2) Coordinate reviews of STEP training requirements with Systems Commanders and Type Commanders to match training requirements with embedded capabilities and to develop STEP packages that enhance the use of embedded training capabilities.

(3) Identify available training resources related to STEP requirements to avoid duplication of effort. This should include screening of Defense Instructional Technology Information System (DITIS), Defense Automated Visual Information System (DAVIS), or other systems and assisting fleet users (including Naval Reserve) to describe desired training materials in standard terms.

(4) Design and develop appropriate STEP packages in response to fleet requirements and current standards utilizing the most appropriate cost-effective media option(s). Use Subject Matter Experts (SME) from existing training developmental assets (schoolhouses, SYSCOMS, etc.) to develop STEP packages, relying on contractor services only as organic capabilities are exceeded. As necessary provide Training Development Expert (TDE) to work with the SME and developer.

(5) Approve the final STEP package, after Fleet review and recommendation.

(6) Provide guidelines and materials for fleet implementation and evaluation of STEP packages. This should include a fleet feedback mechanism in each STEP package.

(7) Establish a robust quality assurance (QA) program to ensure high-quality STEP packages for the Fleet. Conduct initial package testing and evaluation utilizing SMEs.

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(8) Coordinate STEP product sampling by fleet users prior to fleet-wide distribution to ensure acceptability.

(9) Approve final package for distribution.

(10) Serve as central repository for STEP materials.

(11) Assume maintenance and life cycle support of approved STEP packages.

(12) Publish a newsletter providing information on advances in training technology related to STEP and status of programs under development.

(13) Publish an annual catalog of current STEP materials, including information on obtaining materials.

d. Training Agents (TA): BUMED, NAVWARCOL, USNA, CINCPACFLT, CINCLANTFLT, COMNAVRESFOR

(1) Appoint single point of contact for coordinating STEP matters.

(2) Maintain awareness of available STEP packages and include, as part of the classroom courses, instruction on the use of STEP materials which support or reinforce the classroom course.

(3) Report the availability of training materials within their organization suitable for inclusion (with or without modification) in a STEP package.

(4) Ensure that classroom curriculum and related STEP packages are complementary.

e. STEP Fleet Coordinators (STEPFC): COMTRALANT, COMTRAPAC, CNTECHTRA, COMAFLOATRAGRULANT, COMAFLOATRAGRUPAC.

(1) Coordinate with other training coordinators to submit a single prioritized list of their requirements to support the STEP development process.

(2) Maintain awareness of available STEP packages and include, as part of the classroom courses and afloat training, instruction on the use of STEP materials which support or reinforce classroom courses or afloat proficiency training

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(3) Report the availability of training materials within their organization suitable for inclusion (with or without modification) in a STEP package.

(4) Ensure that classroom curriculum and related STEP packages are complementary.

(5) Conduct preliminary review and recommend approval of newly developed STEP packages to CNET.

(6) Identify available SME and Technical Development Experts (TDE) and ensure their involvement in the development and review of STEP packages.

f. TYCOMS: COMNAVSURFLANT/PAC, COMNAVAIRLANT/PAC and COMINEWARCOM

(1) Identify training objectives and courses to be met by STEP packages.

(2) Review training requirements/reports.

(3) Initiate and prioritize requests for STEP packages.

(4) Provide SME support as requested.

(5) Participate in the final review and fleet approval of all STEP packages intended for fleet use prior to production and distribution.

(6) Appoint a single point of contact for coordination of STEP matters.

g. Reserve STEP Coordinator: COMNAVRESFOR

(1) Appoint a single point of contact for coordination of Naval Reserve STEP matters.

(2) Consolidate and approve reserve unit requests and forward to STEPC.

h. Fleet and Naval Reserve units report training needs to STEPC via respective TYCOM or COMNAVRESFOR and request development of applicable STEP packages. Use the Navy Training Feedback System Form (OPNAV1500/39).

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i. STEP Executive Review Board (STEP ERB)

(1) Will meet periodically to discuss issues related to STEP development in order to achieve maximum efficiency from limited STEP funds. CNO (N869) will chair the meeting, with STEPC acting as the executive agent.

(2) Membership shall consist of representatives from:

- Chief of Naval Operations (CNO N7)
- Chief of Naval Operations (CNO N85)
- Chief of Naval Operations (CNO N86)
- Chief of Naval Operations (CNO N88)
- Chief of Naval Education and Training (CNET)
- Naval Education and Training Program Management Support Activity (NETPMSA)
- Commander Training Command, U.S. Atlantic Fleet (COMTRALANT)
- Commander Training Command, U.S. Pacific Fleet (COMTRAPAC)
- Commander Naval Surface Force, U.S. Atlantic Fleet (COMNAVSURFLANT)
- Commander Naval Surface Force, U.S. Pacific Fleet (COMNAVSURFPAC)
- Commander Naval Air Force, U.S. Atlantic Fleet (COMNAVAIRLANT)
- Commander Naval Air Force, U.S. Pacific Fleet (COMNAVAIRPAC)
- Commander Mine Warfare Command (COMINWARCOM)
- Commander Naval Reserve Force (COMNAVRESFOR)
- Commander Naval Air Reserve Force (COMNAVAIRESFOR)
- Commander Naval Surface Reserve Force (COMNAVSURFRESFOR)
- Commander, Naval Sea Systems Command (COMNAVSEASYSKOM)
- Commander, Space & Naval Warfare Systems Command (COMSPAWARSYSKOM)
- Chief of Naval Technical Training (CNTECHTRA)
- Commander, Afloat Training Group, Atlantic (AFLOATRAGRULANT)
- Commander, Afloat Training Group, Pacific (AFLOATRAGRUPAC)

4. Process. Enclosure (2) provides a graphical depiction of the STEP package development. The STEP package development process and management plan, including requirements determination,

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planning, development and approval, distribution and maintenance or life cycle support is described below:

a. Requirements Determination Phase.

(1) Inputs Phase - Inputs are generated from many sources including the Navy Training Feedback System Form, OPNAV 1500/39. Several common sources are discussed below:

(a) Observed deficiency. These may be identified by activities such as Command Assessment of Readiness and Training (CART), Total Ship Training Availabilities (TSTA), Combat System Assessments (CSA), Afloat Training Group (ATG), or deficiencies observed during exercises, availabilities or routine operation.

(b) Specific training need. Identified in response to a training requirement already in the domain of surface on board training. These consist primarily of training designed to assist individuals in achieving Personnel Qualification Standards (PQS) and in satisfying General Navy Training (GNT) requirements.

(c) Windfall Packages. Windfall packages are existing training materials that are determined to be of value but not originally developed to meet a STEP requirement. These include commercially developed programs (such as computer-based mathematics training), programs developed for other services, and Navy programs developed to meet other training requirements.

(2) Collection Phase - Inputs are gathered from all sources by CNET (STEP/C), reviewed and compiled, then analyzed to compare fleet STEP requirements to available training resources and to establish cost estimates for each package. The requirements are next passed to the STEP ERB (SWTRB) to be prioritized, approved and funded as resources permit.

b. Planning Phase. The planning phase starts after the STEP ERB has approved a requirement and consists of the identification of resources, development of a project plan and assignment to the Subject Matter Expert (SME) for development.

(1) Identification of Resources - The first resource that should be identified is an appropriately qualified developmental asset (schoolhouse, etc.) to be assigned as STEP package developer.

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(2) Development of a Project Plan - This phase includes an extensive search of training resources to locate any existing training that may satisfy the STEP requirement either partially or completely.

(3) Assignment for Development - After STEPC approves the project plan they will assign it to a Navy developmental asset (for example schoolhouse) with the appropriate SME for STEP package development. STEPEC will monitor package development, provide TDE if required, and ensure the package follows certain guidelines:

The package should conform to published Interactive Course-Ware (ICW) standards and specifications appropriate for the material. Self-instructional material should be considered due to shipboard manning limitations. The design must consider shipboard environment, equipment, and space limitations. ICW packages should include record keeping appropriate for the specific training material. Content media and materials must comply with all applicable safety requirements, and use of the package must not detract from safely operating the ship. Materials should be standardized when possible to maximize use of existing fleet training programs, and multipurpose instructional equipment (hardware and software) and minimize the time required to become familiar with the use of the training packages. Materials should also be generic in content (non-ship specific) unless indicated otherwise by fleet or specific ship requirements.

c. Development and Approval - The typical STEP package is:

(1) Developed by Navy schoolhouses. Contract services may be utilized only if STEPC determines development requirements exceed the capabilities of CNET assets. Contract services should be minimized in order to eliminate acquisition time and reduce overall cost.

(2) Developed using organic assets (learning resource centers, audio visual centers, etc.) or other Navy owned facilities. The development should contain the following elements:

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Procedures for training, equipment (including software) operation, evaluation, and testing.
Specific guidance and direction to the instructors or administrators who will use the package.
The actual training material.
A Feedback/Evaluation form.
A Life Cycle Maintenance Summary page.
Statement of safety precautions.

(3) The preliminary STEP package is first submitted to the parent STEPFC, if applicable, for preliminary review.

(4) The preliminary STEP package is next submitted to fleet and/or SYSCOM representatives for review and feedback, then revised by the developer.

(5) The final STEP package is submitted to STEPC for final approval.

d. Distribution Phase. The STEP package is distributed by STEPC (CNET) to the appropriate customers. A STEP catalog is maintained, revised and distributed at least annually by NETPMSA on CD-ROM to a master distribution list provided by the TYCOMs, Naval Reserve, and other shore activities. Feedback forms are distributed with all copies of STEP.

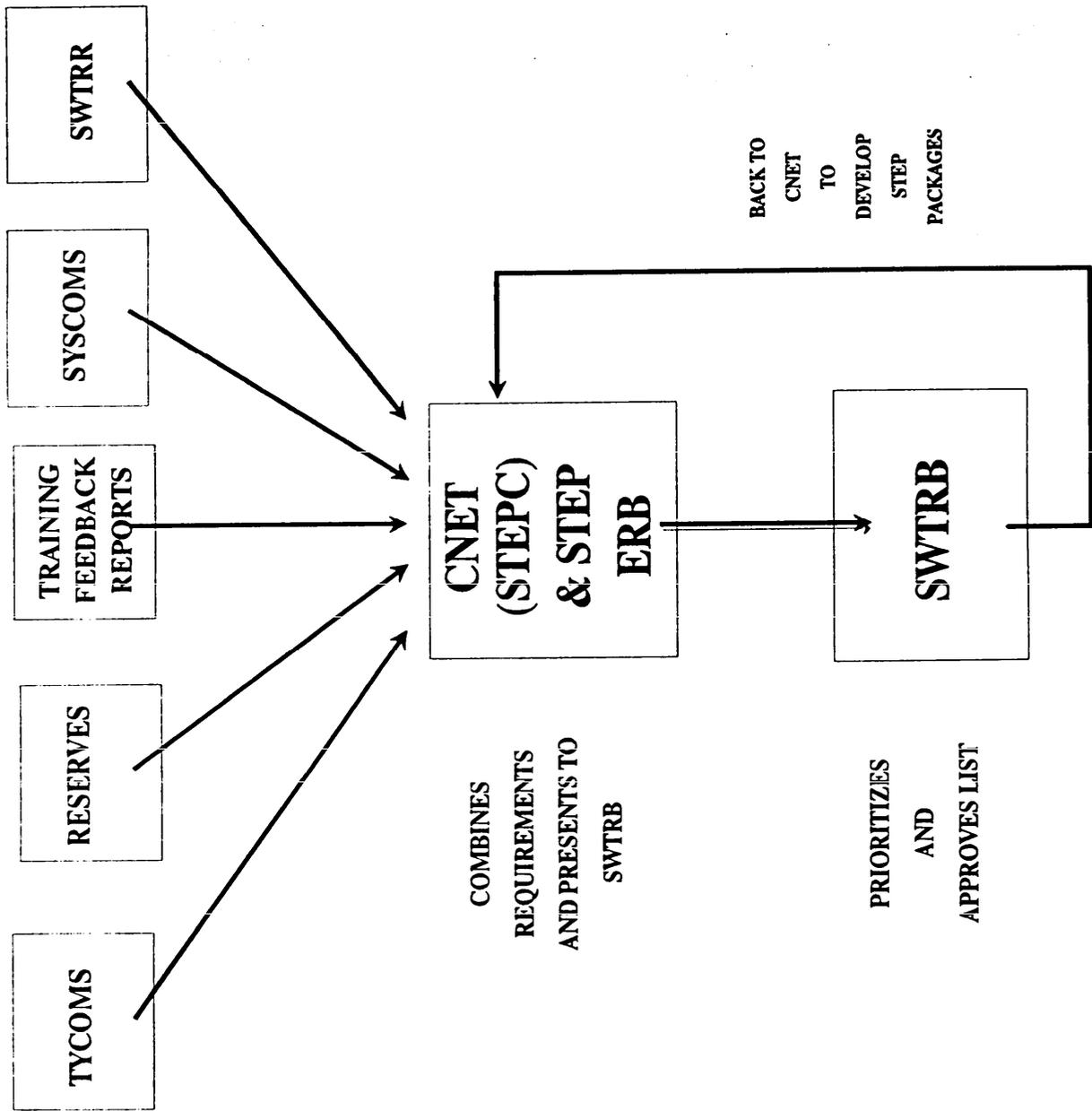
e. Maintenance and Life Cycle Support Phase. CNET is responsible for life cycle maintenance of all approved STEP packages. This responsibility includes:

(1) Designating a Configuration Control Manager for each package (normally the Course Curriculum Model Manager of a related schoolhouse course)

(2) Collecting and analyzing feedback reports and recommended changes. Directing package revision as necessary.

(3) Routinely validating the currency and continued requirement for each package.

REQUIREMENTS INPUTS



STEP PROGRAM DEVELOPMENT

