



STANDARD OPERATING PROCEDURES FOR THE COAST GUARD'S TRAINING SYSTEM

Volume 1

Coast Guard Training System Standard Operating Procedures: Introductions and Definitions

United States Coast Guard Force Readiness Command
December 2022

Intentionally Blank

Table of Contents

Table of Contents	i
SECTION I: Introduction	1
Introduction	1
Purpose	1
Target Audience	1
Background	1
Responsibility	2
References	2
SECTION II: FORMAT	3
Style.....	3
Format.....	3
Contents.....	3
Packaging/Delivery.....	3
SECTION III: REVIEW/ CHANGES	4
Frequency.....	4
Review Standards.....	4
Review/Change Process.....	4
SECTION IV: DEFINITIONS	5
Introduction	5
Purpose	5
Glossary.....	5

Intentionally Blank

SECTION I: Introduction

Introduction

Standard operating procedures (SOPs) establish clear processes, define terminology, and enable consistent, quality outputs from the Coast Guard Training System (TRASYS). SOPs also ensure both internal and external customers are in alignment with required system inputs and outputs.

Purpose

- To identify and standardize processes, procedures, and guidelines for the Coast Guard Training System.
- To provide a standardized methodology to prospective contractors responsible for producing training-related materials for CG use.
- To provide standardized definitions, especially for emerging technology and processes.

Target Audience

All members of USCG involved in the analysis, design, development, implementation, and evaluation of performance or training interventions in support of the USCG TRASYS. The audience includes HPT practitioners, contractors, members assigned as instructors, and USCG Headquarters program managers.

Background

Lack of standardized policy, processes, definitions, and procedures has plagued the USCG TRASYS for years. One of the Workforce Performance and Training Strategy (1999; updated 2007) strategic action items was, “Formalize a Coast Guard Workforce Performance Support System by aligning and developing policies, processes, structures, staffing, and tools.”

More recently, FORCECOM’s Modernized Ready Learning strategy says, “We will connect all learning activity to skill-based institutional and occupational competencies and credentials to support workforce career-long tailored training within our mission-driven organization. Rather than forcing a set path to achieve desired competence, we will embrace multiple avenues of achievement, giving credit where credit is due for demonstrated academic or on-the-job ability and performance.” (Page 10)

The USCG’s TRASYS SOPs establish standards and processes for the TRASYS to accelerate improvements in workforce performance and take advantage of Human Performance Technology (HPT).

“We will fully integrate processes, infrastructure, workforce support, and capabilities to enhance readiness and resilience.”

ADMIRAL LINDA L. FAGAN
United States Coast Guard Strategy
October 2022

Responsibility

The FORCEOM Training Division, as the technical authority for HPT and Training, is responsible for all TRASYS SOPs. Updates will necessarily require the collective wisdom of the larger USCG TRASYS's members and will be carried out by chartered work groups.

The current suite of SOPs are:

- | | |
|--|---|
| 1 Introduction and Definitions | 8 Non-Instructional Interventions |
| 2 Analysis | 9 Performance Qualification Guides |
| 3 Evaluation | 10 Testing |
| 4 Job Aids | 11 Structured On-The-Job Training (SOJT) |
| 5 Resident Instruction | 12 TBD |
| 6 Curriculum Outline | 13 Professional Development |
| 7 Advanced Distributed Learning (ADL) | 14 High Risk Training (HRT) |

References

The following Commandant Instructions establish policy for the TRASYS.

CIM 1500.10C	Performance, Training and Education Manual (Change 3)	16 Oct 2017
CI 1550.23	Training Evaluation Policy	28 Jul 1998
CI 1550.9	Management of the Coast Guard's Training System	12 Aug 1991
CI 1550.26	FORCECOM Commercially Contracted "C" School Courses	14 Dec 2018
CI 1554.1	Development and Management of Interactive Courseware (ICW) for Coast Guard Training	03 Feb 1999
CI 1554.2	Unit Learning Centers	09 Mar 2006
CI 7302.2	Class "C" School Funding Process	19 Feb 1999

SECTION II: FORMAT

Style

SOPs shall:

- Be prescriptive "how-to" guides
- Include as many job aids and examples as possible.

Examples must be:

- Concise
- Tailored to the audience.

Format

All SOPs shall use:

- This SOP as the template
- Hyperlinked text to the maximum extent possible.

Contents

Each SOP shall include at a minimum:

- Table of contents
- Glossary
- Job aids, when appropriate
- Templates, when appropriate
- References to original work, when appropriate
- Recommendations for additional reading, when appropriate.

The first section of each SOP shall include:

- Introduction
- Purpose
- Target Audience
- Background
- Responsibility.

Packaging/Delivery

SOPs shall be:

- Packaged in both Microsoft Word (.doc or .docx) and Portable Document Format (.pdf) formats
- Forwarded electronically to FORCECOM Training Division (FC-T).

The SOP will be hosted online in PDF format at FC-T's home website.

SECTION III: REVIEW/CHANGES

Frequency

All SOPs will be **reviewed every two years** for currency and accuracy.

Review Standards

When reviewing SOPs, members should concentrate on:

- Completeness
- Usability, accuracy, and appropriateness of examples
- Logical flow and visual display.

Review/Change Process

Submit comments and suggested changes directly to FC-T staff via email at cghowto@uscg.mil

Timely and logical user input is critical to ensure these SOPs remain relevant and useful. Changes other than minor edits require review and comments by the TRACEN training directors.

Approval rests with FC-T.

SECTION IV: DEFINITIONS

Introduction

Establishing and providing clear and up-to-date definitions in the rapidly changing world of human performance and training are critical to USCG's effectiveness. Including authoritative definitions in this SOP allows FORCECOM to update the definitions far more quickly than through FORCECOM Instructions or Commandant Instructions.

Purpose

To impart standard definitions, especially for emerging technology and processes.

Glossary

Accomplished Performer (AP)

An individual who routinely produces accomplishments at or above standard. Often intended to mean the best performer currently on the job; a person whose skill or performance exemplifies the optimal or desired state. A subject matter expert may or may not qualify as an accomplished performer.

ADDIE

An instructional systems design (ISD) model that employs a systematic approach to training. Each phase has outcomes that provide input for the subsequent phases. The acronym stands for each stage of the process: Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model is the formally recognized ISD model used by Department of Homeland security components.

Advanced Training

Training that provides the member with the skills and knowledge necessary to perform unit- and billet-specific requirements.

Affective Domain

Learning that focuses on acquired attitudes, beliefs, perceptions, values, feelings, and emotions (e.g., self-confidence, responsibility, respect, dependability, and personal relations).

Artificial Intelligence (AI)

A machine that simulates human cognitive processes, such as perceiving, reasoning, learning, interacting with the environment, problem solving, and creativity. AI is technically the *capability* of the machine to simulate human processes, not the machine itself.

Asynchronous Learning

Form of training where the trainer and the learners do not participate simultaneously in time or location; for example, asynchronous e-Learning.

Augmented Reality (AR)

An enhanced version of reality created by the use of technology to overlay digital information onto real-world environments through a mobile or head-mounted device.

Behavior

The actions (tasks and steps) a person takes to produce an output. Actions can be either overt (i.e., observable) or covert (i.e., cannot be observed such as thinking or decision-making).

Blended Learning/Training

A performance intervention combining any of two training modalities.

Chunking

A method of presenting information wherein information is organized into smaller units to facilitate short-term memory retention.

Community of Practice (CoP)

An organized social learning group of professional people who share the same interests in resolving an issue, improving skills, and learning from each other's experiences.

Cost-Benefit Analysis

An examination of expected or perceived costs in relation to expected or perceived gains, typically conducted when contemplating new actions or considering new interventions.

e-Learning

The acquisition of knowledge that takes place through electronic technologies and media.

Electronic Performance Support Solution (EPSS)

An electronic, packaged (self-contained) Advanced Distributed Learning (ADL) solution or job aid that unifies relevant support and reference information, media, and guidance at a single, accessible point, and is organized in a logical and consistent way to not cause a significant decrease in performance. An EPSS can be built into an equipment's operating system or provided as a stand-alone software application or a handheld data assistant.

Embedded Training

Performance support that is provided by capabilities built into or added onto operational systems to enhance and maintain the skill proficiency necessary to operate and maintain that equipment/item.

See also [Electronic Performance Support Solution \(EPSS\)](#) and [Job Aid](#).

Enabling Objectives

A statement that describes a physical or thinking skill (i.e., discrimination or generalization) and defines in measurable and observable terms a step necessary to accomplish the related TPO.

Evaluation

A multilevel, systematic method for gathering data about the effectiveness of training programs. Measurement results are used to improve the offering, determine whether the learning objectives have been achieved, and assess the value of the training to the organization.

Evaluation: Level 1—Reaction

The first level of Kirkpatrick's Four Levels of Evaluation. It measures participants' reaction to and satisfaction with a training program.

Evaluation: Level 2—Learning

The second level of Kirkpatrick’s Four Levels of Evaluation. It measures the participant’s acquisition of cognitive knowledge or behavioral skills.

Evaluation: Level 3—Behavior

The third level of Kirkpatrick’s Four Levels of Evaluation. It measures the degree to which training participants can transfer what they have learned to workplace behaviors.

Evaluation: Level 4—Results

The fourth level of Kirkpatrick’s Four Levels of Evaluation. It measures the effect of the learning on organizational performance.

Facilitated Online Training (FOT)

Instructor-led training that happens remotely. FOT is an online classroom led by a live instructor.

Formal Training

A course developed to fulfill a programmatic requirement and that meets all of the following conditions:

1. Is produced and delivered by either a Coast Guard Training Center (TRACEN), a government agency or, or a commercial contractor.
2. Occurs within one of more of the following training environments: residential, exportable, remote, online, facilitated online, structured-on-the-job, or blended-learning.
3. Has a Coast Guard course number.

Front End Analysis

A systematic process for describing new performance; determining inhibitors to competent performance; and recommending skills and knowledge (S/K), environmental (ENV), motivation/incentive (M/I) and assignment and selection (A/S) interventions that must be put in place for Coast Guard workers to achieve optimum performance.

Human Performance System

The aggregated system that includes accession, training, education, and professional development.

Human Performance Technology (HPT)

A group of methods, processes, and approaches used to improve human performance by solving or avoiding problems, and taking advantage of new technologies, methods, and other opportunities. HPT is a systematic approach to improving human productivity, competence, and capability. The goal of HPT is to identify and develop a set of interventions (or solutions) that solve or mitigate barriers to performance (e.g., lack of skill or knowledge, a flawed environment, ineffective reward or incentive systems, poor motivational structures, wrong people assigned to jobs, or new or unique equipment or systems).

Instructional Method

An activity that an instructional designer creates, and a facilitator implements, to deliver content to learners; also known as a method, activity, instructional strategy, design strategy, training technique, or exercise.

Examples include case studies, ELAs, games, simulations.

Job Aid

A storage place for information, other than the brain, that is accessed on –the-job, in real time and puts the user under stimulus control. A guide that supports on-the-job performance by helping

personnel execute tasks otherwise done infrequently, are too complex to memorize, or are comprised of critical steps. Job aids may supplement or replace training.

Examples include simple checklists, document templates, aviation repair procedures.

See also [Electronic Performance Support System](#).

Job Task Analysis (JTA)

An analysis during which information about the difficulty, importance and frequency of tasks for a job or function is gathered, and recommendations for how best to support the task-level performance under review are provided. Job aids and train/no train decisions utilize task data collected on each of the tasks determined necessary to perform the particular job.

"Just-in-Time" Training

On-demand learning presented through various instructional techniques.

Examples include CGHowTo, game simulation, SpeL, virtual collaboration room, real-time learning event.

Kirkpatrick Evaluation Model

A training evaluation process developed by Dr. Donald Kirkpatrick for determining the effectiveness of training, consisting of four levels: reaction, learning, behavior, and results.

See also [Evaluation: Level 1 through Level 4](#).

know-lecture

An on-demand, flexible, and easy-to-consume modularized course. A know-lecture is broken down into small chunks and designed to acknowledge what a student already knows

Learning Content Management System (LCMS)

A software application(s) used to manage the creation, storage, use and reuse of learning content, and that stores content in granular forms (e.g., learning objects) retrievable for "on-command" learning.

Learning Management System (LMS)

A software tool that: manages user learning interventions; allows users to register, complete, track electronic training (e.g., mandated training (MT), blended solutions (part e-Learning and part resident)), and take surveys; includes tools for competency management, analyzing skills-gap problems, succession planning, educational analysis; and may include resource management tools (e.g., textbook ordering, classroom booking). The Coast Guard's LMS tracks completion of resident training programs at training centers, DoD facilities, and commercial schoolhouses.

Master Training Specialist

An instructor who has achieved a level of excellence beyond that of a basic instructor by updating and improving their professional knowledge and skills; communicating the instructional design process; and evaluating instructional effectiveness. Master training specialists often provide subject matter expertise to instructional design projects; play a key role as advisors, mentors, and role models for Coast Guard instructors; and set the example of professional decorum and loyalty to the Coast Guard Training System.

Microlearning

An educational strategy that breaks complex topics down into short-form, stand-alone units of study that can be viewed on-demand.

Examples include any learning content that can be consumed in five minutes or less or covers 1 to 2 learning objectives, such as an e-learning module; video; infographic; or three to five pages of structured, well-spaced text like a blog or newsletter.

Mixed reality (MR)

A spectrum of immersive experiences that connects and blends physical and digital worlds through AR and VR applications.

Non-Resident Course

Training that does not require travel to a specific training location.

Examples include e-Learning and Performance Qualification Guide (PQG).

Occupational Analysis (OA)

A process that measures an occupation's job performance requirements and world of work at a particular point in time. OA, as an integral part of the Rating Performance Qualifications (RPQ) process.

"On-command" Learning

Training that the service requires to attain a standard level of competence or expertise on the job. Examples include advanced training required to perform a job or pre-arrival training for cutter crews.

On-the-Job Training (OJT) – A method of teaching new skills and knowledge while performing job duties.

Structured On-the-Job Training (SOJT). An activity where knowledge, skills and abilities are attained at the worksite by use of a qualified OJT Monitor/instructor who introduces tasks in a priority sequence of activities, provides feedback, and measures and evaluates outcomes.

Unstructured On-the-Job Training (UOJT). An activity where knowledge, skills and abilities are attained at the worksite by employees without a planned, measured or a monitored approach with inconsistent and unpredictable outcomes.

Other Government Agency Training

Formal Training acquired from another government agency (e.g., Army, Navy, the Federal Law Enforcement Training Center) in accordance with the delivering agency's policies and processes.

Performance Analysis (PA)

A process where the behavior of individuals or organizations is studied to identify training solutions and provide a comprehensive list of recommendations to eliminate performance gaps and improve performance; also known as a (performance) gap analysis or (performance) needs assessment.

Performance Based Training

An outcome-based method of instruction that measures the member's ability to perform the task using the prerequisite knowledge.

Plan of Action and Milestones (POAM)

The documentation a manager to describe their plans to achieve a successful project. A POAM includes project scope, objective statement, schedule, roles/responsibilities, project resources, assumptions/constraints, risk analysis/contingency plan, quality assurance, and POAM approval/project alignment.

Pre-Arrival Training

Training essential for a member to have completed prior to arriving at their new unit and that is normally conducted on a TDY basis before a member PCSs or may be conducted en route.

Rapid Prototyping

A type of formative evaluation that uses a working portion of the final product for immediate implementation by a group who then evaluates the portion; developers continue to develop and improve the final product based on the group's responses.

Remote Training

The overarching term for training delivered where students are not collocated with the instructor.

An example is facilitated online training (FOT).

Resident Training

A course that involves students traveling (either local or TDY) to a physical training space, usually a training center; can include exportable training.

Self-Paced eLearning (SPeL)

Instruction that provides learning solutions to support Coast Guard mission requirements; is accessible on demand via a computer using technology appropriate to the user's environment; focuses on supporting a measurable change in behavior or attitude that provides tangible benefits to the mission; and whose solutions are deliverable over a network to ease maintenance updates and tracked to provide decision support and accountability.

Shareable Content Object Reference Model (SCORM)

A set of specifications that, when applied to course content, produces small, reusable learning objects. A result of DoD's Advance Distributed Learning (ADL) initiative, SCORM-compliant courseware elements can be easily merged with other compliant elements to produce a highly modular repository of training materials.

Simulation

A realistic representation of a system, subsystem, situation, or device that imitates or emulates a real situation, and can provide an opportunity for the learner to access computer-controlled models of physical elements (e.g., parts, equipment) and social elements (e.g., people) to practice skills and receive feedback on performance without affecting equipment or environment.

Strategic Needs Assessment

A formal evaluation that examines the external and internal factors that affect performance within the context of an organization's business strategy, and identifies the gaps between the current and desired conditions.

Synchronous Learning

Instruction where interaction between instructors and students occurs instantly.

Tailored Training

Instruction that provides correct, targeted training informed by evolving mission requirements and is reflective of the skills, experience, and needs of each individual.

Terminal Performance Objective (TPO)

A statement that describes the task students will be required to do upon completion of the instruction and to graduate from the course.

Training Requirements Analysis (TRA)

A process where the scope of the analysis project is narrowed explain only to the program manager (or other client) only what the performance needs are and what training intervention is best suited to meet those needs in a cost-effective manner.

Virtual Reality (VR)

A Computer-generated simulation that uses a head-mounted display that allows viewers to explore a fully rendered digital environment and virtually manipulate objects with handheld controls and voice commands.

Virtual Training

Remote electronic learning (e-Learning), either synchronous or asynchronous, that is either instructor led or self-paced.