

ARGONNE NATIONAL LABORATORY

Decision and Information Sciences Division
Emergency Preparedness Group

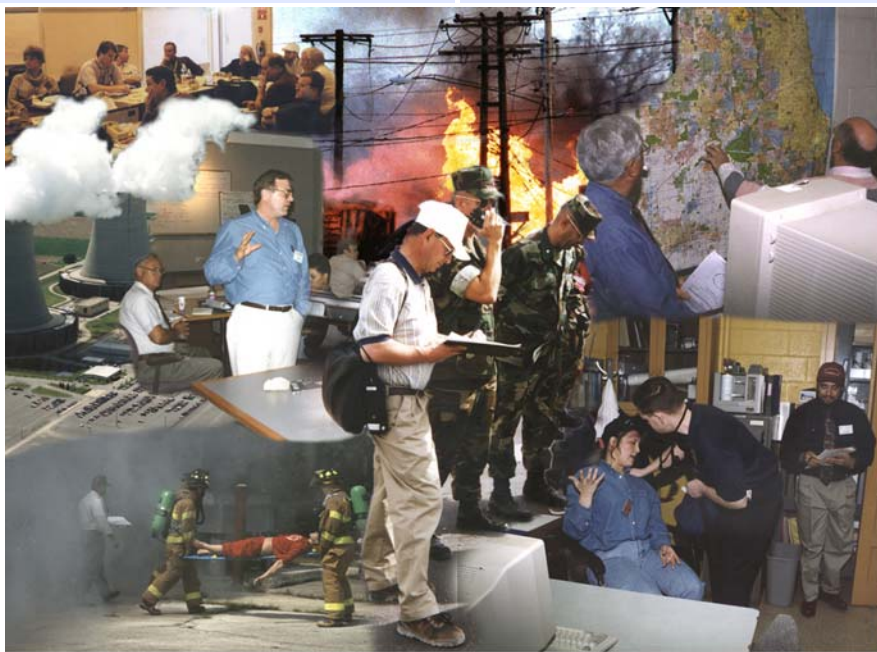
Controller/Evaluator Practicum – Enhancing Classroom Training with Field Practice

Challenge: Most traditional controller and evaluator training takes place in the classroom or during pre-exercise briefings. The focus is on fundamental principles, and the format includes lectures, discussions, and in-class activities. Participants lack opportunities to apply principles and concepts to realistic situations. The link between theory and practice is missing.

This missing link is critical because controllers and evaluators who participate in field exercises must execute their roles effectively. Their efforts directly affect the exercise's quality and outcome and the future performance of emergency response professionals. Their ability to conduct, document, and interpret can determine whether exercise results are valid and meaningful and, more important, whether critical changes need to be made to facility plans and training programs.

Solution: Argonne's practicum for the U.S. Department of Energy (DOE) establishes the link between theory and practice. Designed for those with some prior experience or formal classroom training, the course challenges controllers and evaluators during two highly realistic emergency scenarios. The two exercises are presented on successive days, so most participants play both controller and evaluator and are evaluated in each role.

The fully staged exercises include pre-scripted problems—unexpected events—that demand immediate and effective response. Activities take place at five locations: the incident site; the fire department dispatch center, which receives notification about the incident; an operations center; a press center that handles the media and presents “live” news broadcasts; and a control cell for off-site authorities.



Advantages: During the practicum, participants must translate principles into concrete action and demonstrable skills. Trainers assess the quality of that translation, providing correction before controllers and evaluators begin judging others during actual field exercises.

In addition, the practice scenarios provide opportunities for making quick judgments and decisions. Learning to respond to these demands sharpens "emergency response reflexes," a critical skill for all emergency professionals.

Technical Concept: The practicum begins with an introduction to the site and to actual safety procedures. During the briefing that follows, participants examine site maps, photos, and videos, and then tour the location. They also review fundamental principles taught in the classroom, study the site's emergency response plan, and learn about the exercise scenarios.

Status: The practicum, drawing participants from DOE facilities around the country, has also been attended by personnel from FEMA, U.S. Coast Guard, U.S. Army, state and local governments, and emergency preparedness support contractors. Feedback from participants has been used to refine, focus, and add new discussion modules to the course.

Technical Concept (cont.):

Each exercise runs two hours and begins with pre-exercise briefings. The scenario involves members of the facility's actual emergency response groups and volunteers who play victims, evacuees, etc. Instructors and players introduce problems and obstacles during the exercise—such as deliberately throwing the exercise timeline off track or entering a simulated contaminated area without proper protective clothing. This situation forces the controllers to make decisions during play and requires the evaluators to be perceptive in documenting and interpreting events and actions.

After the exercise, evaluators develop a log of events, debrief and critique players' actions, and document findings in written reports. Instructors close the loop by discussing the errors and obstacles that were scripted into the exercise and by examining how the participants responded.

Future Plans: The course will continue to be available for DOE and other government agencies. A mobile version of the course, conducted at an organization's facility using its procedures and equipment, will add flexibility. The course can be easily modified to meet the organization's particular training needs.



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