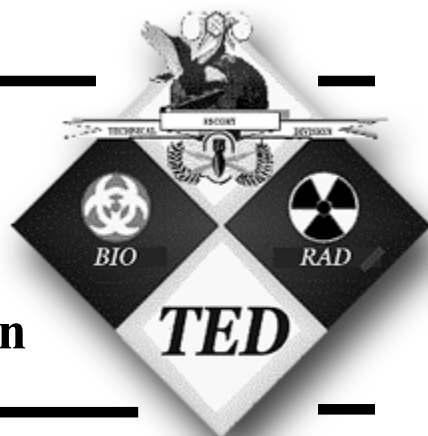

The Cutting Edge of Technology

In Transition From OSHA to STEPO— The Mission of the Technical Escort Division



By Staff Sergeant Aaron D. Glad

With the varying missions of the units trained at the Ordnance Missile Munitions Center and School Technical Escort Course, the Technical Escort Division's mission continues to transition with evolving technology and enhancement to training methods to better support the personnel trained.

The mission of the Technical Escort Division is to train U.S. military, Department of Defense civilians, and international students, providing them the capability to perform worldwide, no-notice missions. These missions involve field sampling, detection, identification, decontamination, mitigation, and remediation of hazards associated with chemical and biological materials in compliance with international, federal, state, and local laws.

The following supported organizations or agencies are currently trained at the Technical Escort Course:

- U.S. Army Chemical School.
- Army Technical Escort Unit (TEU).
- Army Special Operations.
- Army Reserves.
- Army National Guard (WMD CST).
- Forces Command units.
- Joint Component Services (Marine Corps, U.S. Navy).
- Defense Threat Reduction Agency.

Evolving technology has increased the protection and stay time in "Level A" protection by developing the self-contained toxic-environment protective outfit (STEPO). In June 2001, the Technical Escort School began training students on the STEPO system.

The components of the STEPO system are modified commercial off-the-shelf items. The chemical protective suit is a one-piece, totally encapsulating garment that is designed to remain serviceable for five 4-hour missions involving the contamination and decontamination process. The chemical protective suit is available in four sizes (small, medium, large, and extra large) to fit the 5th percentile Army female to the 95th percentile Army male and civilian users. It is constructed from a multilaminated material and incorporates a large visor to provide a wide field of vision.

The system also comes with a rebreather—a positive-pressure closed-circuit system that filters and recirculates

the user's exhaled air—approved by the National Institute of Occupational Safety and Health (NIOSH). The rebreather is worn under the protective suit and provides up to 4 hours of breathing air to the user. The system can incorporate a self-contained breathing apparatus (SCBA) that is also NIOSH-approved and can be worn under the protective suit. The SCBA incorporates a 60-minute air bottle. The system also has the capability of using a supplied air system (cascade), via a hose line, which would provide more air time versus the SCBA. However, the hose encumbers the user.

The Technical Escort Division has a 7-acre compound at Redstone Arsenal, Alabama, to conduct 3 weeks 3 days (131.5 academic hours) of technical training for students with the following curriculum:



Instructors demonstrate sealing and overpacking a leaking chemical munition, wearing STEPO, during training at the Technical Escort Course.

Nuclear, Biological, and Chemical Operations—provides students with the knowledge and capability to perform chemical accident/incident response-and-assistance missions, as a part of the U.S. Army Technical Escort Unit, in the following areas:

- Military chemicals identification and detection.
- Personal protective equipment.
- Chemical munitions identification.
- Chemical munitions leaking, sealing, and packaging.
- Personnel and equipment decontamination.

Hazardous-Waste Operations—provides students with the knowledge and capability to perform hazardous-materials incident response operations that meet the 40-hour course requirement, according to 29 Code of Federal Regulations (CFR) 1910.120, in the following areas:

- Regulations, rights, and responsibilities.
- Control of hazardous energy.
- Permit required for confined space.
- Commercial chemicals.
- Field survey instruments.
- Site safety plan.
- Site characterization.

Environmental Sampling—provides students with the knowledge and capability to perform operations, according to the Environmental Protection Agency's standard protocols, in the following areas:

- Soil, sediment, and sludge sampling.
- Water sampling.
- Drum sampling.
- Field screening.
- Chip, wipe, and sweep sampling.
- Environmental quality assurance and quality-control procedures.
- Field sampling plans.

To provide the most up-to-date training, the following classes will be integrated into the curriculum this year:

- Summer 2001, Biopak 240 rebreather, to be used with the STEPO system.
- Fall 2001, Confined Space Training Facility, provides students hands-on training.

As future technology and techniques change, the Technical Escort Division also will change to stay on the cutting edge.

Elementis Regamus Proelium!

Staff Sergeant Glad is an instructor at the Technical Escort School, Redstone Arsenal, Alabama. His previous assignments include the 793d Military Police Battalion, Germany; 69th Chemical Company, Germany; the Technical Escort Unit, 2d Armored Cavalry Regiment, Fort Polk, Louisiana; and Johnston Island. SSG Glad is J5 and instructor qualified. He is a graduate of the U.S. Army Chemical School's Basic Noncommissioned Officer Course and has completed more than 2 years of college.

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Any article containing information or quotations not referenced in the story should carry appropriate endnotes.

Contributors are encouraged to include black-and-white or color photos, artwork, and/or line diagrams that illustrate information in the article. Include captions for any photographs submitted. If possible, include photographs of soldiers performing their missions. Hard-copy photos are preferred, but we will accept digital images originally saved at a resolution no lower than 200 dpi. Please do not include them in the text. If you use PowerPoint, save each illustration as a separate file and avoid excessive use of color and shading. Please do not send photos embedded in PowerPoint or Microsoft Word documents.

Articles should generally come from contributors with firsthand experience of the subject being presented. Articles should be concise, straightforward, and in the active voice.

Include your full name, rank, current unit, and job title. Also include a list of your past assignments, experience, and education; your mailing address; and a fax number and commercial daytime phone number.

Include a statement with your article stating that your local security office has determined that the information contained in the article is unclassified, nonsensitive, and releasable to the public. We do not require a hard copy of the clearance.

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