



The Safe Jobsite

AFIT course provides engineers OSHA construction safety standards training.

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Building, maintaining and protecting sustainable Air Force facilities and infrastructure requires a blend of Civil Engineer skill sets or trades. Typically, as a project's scope of work increases, so does the number of trades required, and consequently the work complexity and risk become greater as well. This rise in complexity and risk affects, and potentially impacts, worker safety.

Like musicians in a symphony, each trade needs to know its instruments, how to use them, when to use them and what role they play as part of the larger whole. Safety training can provide these skills and knowledge, and contribute to increased worker welfare and project quality.

The Department of Labor's Bureau of Labor Statistics 2012 Census of Fatal Occupational Injuries found nearly 18 percent of all workplace fatalities occurred in the construction industry; no other single industry had more fatalities. The fatal injury rate for construction (9.9) is nearly three times that of the all-worker fatal injury rate (3.4). Interestingly, according to the BOL's report the fatal injury rate for those involved in heavy and civil engineering construction in government works was relatively low, with only 20 deaths in 2012.

Despite this lower fatality rate, there is still a need to educate military and civilian engineers to recognize, communicate and abate the safety risks associated with the work they perform. As the education branch of the CE career field, The Civil Engineer School at the Air Force Institute of Technology recognized this need, and in early 2014, obtained authorization from the DOL's Occupational Safety

and Health Administration, or OSHA, to provide construction health and safety training.

The Air Force has long operated a comprehensive safety program managed by the Air Force Safety Center at Kirtland Air Force Base, N.M. Among other duties, AFSEC is responsible for the promulgation and enforcement of the 91-series of Air Force instructions (AFIs on safety). Chief among these is AFI 91-203, Air Force Consolidated Occupational Safety Instruction, a document that should be familiar to every Air Force CE.

The Air Force and OSHA agree that training is a major component in providing safe working conditions and executing a proactive managed health and safety program. OSHA has established standardized training programs for several key industries, including construction, and has developed curricula to support 10- and 30-hour courses to educate construction workers of their rights. Although OSHA cannot require employers, including the Air Force, to administer the 10- and 30-hour courses, many private employers consider their completion a prerequisite for either employment or work on a particular jobsite. OSHA considers employer commitment and employee involvement to be a "key element" in well managed safety programs, where training is a foundational component of fostering a mutually beneficial employer-employee relationship.

While most military engineers receive job specific safety training as part of technical school and career progression training there hasn't, until now, been training that has the

potential to reach every military and civilian engineer, no matter the grade, job or experience level.

As authorized by OSHA, the Civil Engineer School at Wright-Patterson AFB, Ohio, provides both 10- and 30-hour construction health and safety training courses. The school teaches the bodies of knowledge necessary to satisfy OSHA's strict program requirements, while tailoring additional lessons specifically to the needs of Air Force engineers. This blended approach to construction safety provides students the opportunity to obtain an OSHA 10- or 30-hour card while concentrating on career specific standards that apply to the work conducted around the Air Force.

The courses offered by The Civil Engineer School are more than just an immersion into the history and structure of OSHA, standards for construction safety and Air Force guidance. They are an opportunity to gather members of a unit in a week dedicated to discussing safety issues that CEs face at installation, command and Air Force levels. It is a chance to discuss how engineers can work together more safely, while partnering with wing safety and contracting, as well as non-government contractors to ensure all workers on an installation are performing their tasks safely.

The Civil Engineer School is currently engaged with units to provide week-long courses in OSHA construction standards for up to 40 military and civilian members. While all ranks and grades of both military and civilian members from any flight may apply, military E-5 to O-3 and civilian equivalents from squadron's operations and engineering flights will be considered as primary audience members. Craft-specific, unit, group, wing and MAJCOM safety representatives will also be considered primary audience as well. Squadrons interested in securing on-site course dates

or obtaining additional information can contact The Civil Engineer School at http://www.afit.edu/CE/Course_Desc.cfm?p=WMSS%20500.

Capt. Delorit and Capt. Burwinkle are instructors at The Civil Engineer School, AFIT, Wright-Patterson AFB, Ohio. Both are OSHA Outreach Trainers, authorized to offer OSHA 10- and 30-hour courses in Construction Safety.



Following OSHA and Air Force guidance keeps safety in the forefront as civil engineers get the job done. (Courtesy Photo)

AFI 91-203

The 1,000-page AFI is inundated with safety standards that in many cases are taken directly from the Code of Federal Regulations (CFR, Title 29, Part 1926, Construction and Safety Health Regulations). This CFR was written by OSHA as dictated by the 1970 Occupational Safety and Health Act, a key document in U.S history. The act established the requirement (known as the General Duty Clause) for employers to provide their employees a workplace free from recognized safety hazards. Before The OSH Act and OSHA, no such protection was guaranteed to public and private workers in the United States.

