Security Engineer for 120A Warrant Officer Basic Course

By Chief Warrant Officer Four Bobby B. Bowlin

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Introduction

Adding the Security Engineering Course to the Warrant Officer Basic Course for 120A will significantly increase our area of influence. The skills learned from this course will not only enable 120A to function effectively within the Department of Public Works (DPW) but also considerably improve the proficiency of the Army Protection Program (APP). This improvement in proficiency will instill confidence in the 120A's ability to design effective countermeasures against potential attacks on Army facilities and infrastructure. Moreover, the Security Engineering Course will enhance the skills and career development of 120A personnel, making them more valuable assets to the Army.

The U.S. Army Corps of Engineers (USACE) Omaha District teaches the Security Engineering Course. The typical student is a military police or protection technician. The topics taught during the Security Engineering Course are developed from regulations guiding the Army Physical Security, Protection and Antiterrorism Programs. AR 525-2 tasks USACE as the Army Protection Program lead for Security Engineering. During the Security Engineering Course, students learn to use Unified Facilities Code (UFC) 4-020-01 and the Department of Defense (DOD) Security Engineering Facilities Planning Manual, conduct antiterrorism design reviews, perform security engineering site surveys, and learn protection design techniques, including applying the DOD Minimum Antiterrorism Standards for Buildings from UFC 4-010-01. Students can use the skills and techniques learned during the course in the warfighting function of protection when conducting base camp master planning operations.

UFC 4-020-01 includes all aspects of the antiterrorism design process, from assembling an antiterrorism design team to completing the Design Basis Threat (DBT) worksheet. The DBT determines the level of protection needed for a project and the design strategies necessary to reduce the threat. The DBT is attached to DD Form 1391, *Military Construction Project Data Sheet*, to justify the antiterrorism-related costs associated with protection design strategies used in construction. The antiterrorism office typically conducts design reviews in each phase to verify that the required antiterrorism mitigation is correctly added and implemented. Due to limited experience in engineering design and construction, these offices often implement protective measures that exceed necessary requirements.

The DOD adopted Minimum Antiterrorism Standards for Buildings, requiring ground-level threat mitigation for all DOD construction. UFC 4-010-01 has 21 standards for different elements of buildings, which apply to all DOD-occupied buildings. UFC 4-010-01 recognizes that most conventional construction methods offer reasonable protection from low-level threats, and all new construction and renovation/modernization projects that cost more than 50 percent of the current building value for old buildings must comply with UFC 4-010-01.

A security engineering survey is required for all renovation and new military construction projects. During the survey, physical security requirements are identified for the specific site or facility being constructed. The proposed security engineer works with the antiterrorism protection office to determine if mitigation methods can be made through policy changes or if physical features need to be added to the design to meet the desired level of protection. During this process, the antiterrorism design team must weigh the protection requirement against cost and how the protection measure will affect the ability to conduct operations.

If the survey results determine that protection requirements exceed the minimum antiterrorism standards, UFC 4-020-01 provides design tools and cost modifier tables to support DD Form 1391. The Security Engineering Course explains how to use these tables and other tools developed by the Engineer Research and Development Center (ERDC)

to address specific threats. However, the design knowledge and experience that a 120A can bring to the team would help to achieve an optimal balance between strategic goals and effective implementation.

As the operations officer and Deputy G34 for the Pennsylvania Army National Guard (PAARNG) for the past three years, I have become very knowledgeable about the pillars of protection. I have effectively communicated protection requirements to the Construction and Facilities Management Office (CFMO) and design teams within PAARNG, leveraging my experience as a 120A. During that time, I saved PAARNG more than 3 million dollars by eliminating excess design features, reducing construction costs, and streamlining project timelines. This substantial cost savings underscores the financial and operational benefits of integrating antiterrorism and physical security features into all new facilities, ensuring readiness against evolving threats.

As the Army transitions into multidomain operations—and considering the recent years of attacks and access control point probes at military bases—sustainable protection is no longer optional; it is an operational imperative. The 120A and Engineer Branch must be positioned to deliver effective solutions to the protection of our forces. Adding the Security Engineering Course instruction to the 120A Warrant Officer Basic Course will solidify the 120A as a valued asset to DPW and protection teams at Army installations—Continental United States (CONUS), Outside Continental United States (OCONUS), and forward-deployed.

This addition will elevate the skills of the 120A and reinforce their crucial role in the era of multidomain operations. As professional military education undergoes modernization, now is the optimal time to incorporate this course. Additionally, all new 120As will graduate from the Warrant Officer Basic Course with a Security Engineering certification, expanding the pool of security engineering-trained Soldiers across all Army components.

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