

OVERCOMING TECHNICIAN TRAINING CHALLENGES IN AFGHANISTAN



PROJECT	TECHNICIAN TRAINING IN AFGHANISTAN
CLIENT	US ARMY
KEY OBJECTIVES	<ul style="list-style-type: none"> ▶ OVERCOME LANGUAGE AND LITERACY CHALLENGES ▶ PROVIDE IN-DEPTH TRAINING ON INTERNAL COMPONENTS ▶ PROVIDE EACH STUDENT WITH VIRTUAL EQUIPMENT

As part of this training effort, US Army Training Chief Jones* was sent to Helmand province to provide ordnance training to British instructors and ANA troops on the maintenance and repair of small arms that would enable the ANA to run its own repair facility in Afghanistan.

CHALLENGE

A critical challenge in training the ANA was to overcome the language barrier. This could be addressed to some degree with interpreters; however, there was also the more obscure and complex issue of transforming rural farmers—who had little technical experience or machinery know-how—into maintenance technicians capable of effectively troubleshooting and resolving technical issues.

“The ANA has limited resources for its repair facilities,” explains Chief Jones. “They can’t afford to waste equipment parts as a result of incorrect troubleshooting. They need to understand the inner workings and operations of the small arms to reduce mistakes and achieve high first-time-right fix rates.”

BACKGROUND

Afghanistan’s southern Helmand province, bordering with Pakistan, is a key holding area for the NATO International Security Assistance Force (ISAF) and Afghan National Army (ANA). These groups face daily threats from insurgents ranging from Taliban fighters to warring tribal groups heavily involved in the province’s lucrative opium trade.

Led by the British 16 Air Assault Brigade, the ISAF in Helmand province is tasked with providing the secure environment necessary for redevelopment to take place, allowing Afghan refugees to return to their homes and participate in the reconstruction process. More and more, this task includes providing the ANA with training, so it can increasingly contribute to securing its own country.

* Name has been changed

SOLUTION

Before traveling to Afghanistan, Chief Jones loaded training materials that he thought would help ensure his mission's success onto his laptop. The central part of these materials were two sets of NGRAIN Virtual Task Trainer™ (VTTM) solutions, developed previously by NGRAIN for the US Army National Guard and US Air Force. The VTTs leverage 3D equipment simulations to provide small arms parts familiarization, field strip, cycle of operations, and maintenance and repair procedure training.

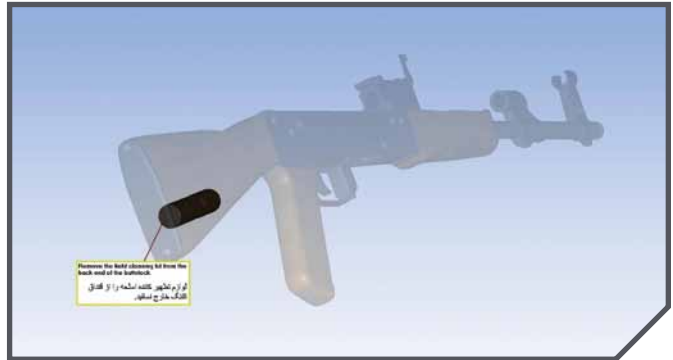
Throughout his 15-month deployment, Chief Jones used the VTTs as instructional aids to train Afghan students on equipment breakdown and functions, while also ensuring the British instructors he was training had the comprehensive knowledge required to carry on with training efforts after this departure.



Information and instruction can be provided in any language

RESULTS

“The VTTs allowed me to provide more in-depth training,” says Chief Jones. “Without them I wouldn’t have been able to show students internal system components or, most importantly, their operations. With the VTTs, less mechanically inclined students were able to wrap their heads around the inner workings of the systems, which will help them more effectively troubleshoot issues down the road.”



With NGRAIN, students can view internal parts

The ANA does not have the resources to allow for experimentation in the resolution of equipment issues. Troubleshooting needs to be right the first time or it risks wasting precious resources on incorrect part replacement.

There was also the side benefit that students could sit at their own desks, working with their equipment while the VTTs were being shown. Previously, students would have to crowd around the instructor, listening to an interpreter as the instructor described the machine’s internal operations.

“I’ve been doing this for nearly twenty years,” [...] “The NGRAIN VTTs gave me—for the first time in my career—the ability to view the internal system operations in motion, and I’m a better instructor as a result.”

US Army Training Chief Jones