

A virtual training programme to counteract IED threats



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Improvised explosive devices (IEDs) are one of the main threats met by troops serving on international missions, especially in Afghanistan, and tend to cause a great number of casualties. As these homemade bombs are usually located on roads, it is vital to recognize them and carry out a controlled explosion with the aim of saving lives, plus guaranteeing circulation and the operational flow of the troop.

To do this, soldiers learn basic rules of action in the face of an IED that are summarized as the FIVE Cs: Confirm – Clear – Call – Cordon – Control.



US Army

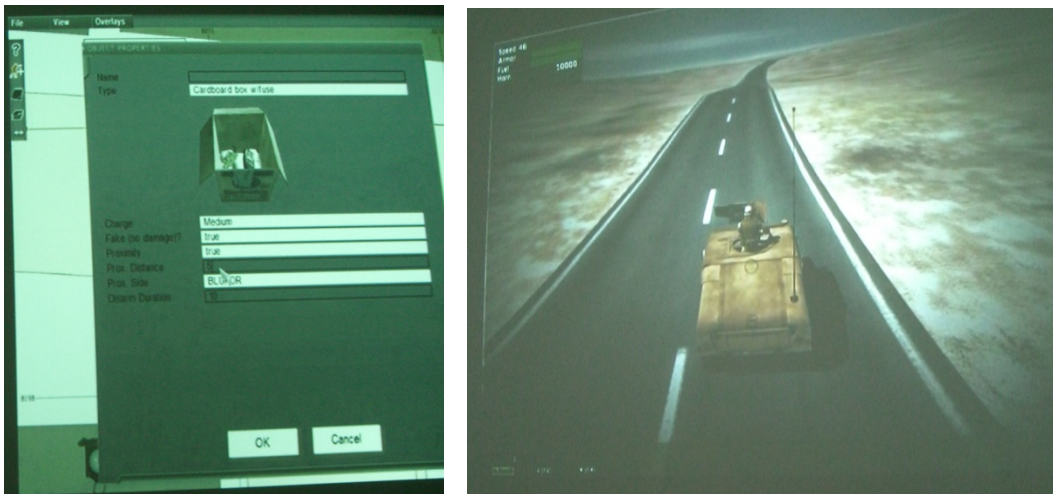
C-52 of 3/2 Stryker Brigade Combat Team

Soldiers from the Marine Corps who travel on missions in the Near East receive specific training on recognising combatants and improvised explosive devices, at the Twentynine Palms military base (California), through the Virtual Battle Space 2 (Recognition of Combatants - Improvised Explosive Device) program in the Battle Simulation Center of the Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms in California.



US Army (Derek L. Kuhn)

The film "Serious Games I" by filmmaker Harum Farocki (2009) shows us this computer simulation programme that recreates a mountainous landscape in Afghanistan, where an armoured unit must patrol. Just as in the classroom environment, you find several rows of tables and at each of these, a team of four soldiers who each have their own individualized avatars, viewing the image on their individual laptop computers. At the same time, in another adjoining room, the instructor prepares their itinerary and places the various explosive traps that the soldiers must negotiate. In this film we see the unit fall into an ambush and a vehicle gunner is hit by a sniper, the avatar corresponding to the soldier whose name appears in a red rectangle.



Furthermore, in Marine Base Camp Lejeune (North Carolina), instructor Captain Douglas Orr, Branch Head of Explosive Obstacles and Hazards, remarked that the soldiers are trained in the basics, essential question, and always according to the specific zone where they will be deployed; since "the tactics, techniques and procedures" have a very short and dynamic life span, specific education does not prove effective since it would create in the soldier a false sense of control and security in the situation, which would put him at even greater risk by not being vigilant when faced with something new. The soldiers are also trained in the management of sophisticated equipment, like the new Counter Bomber, which is a device that detects suicide bombers over 100 yards away. (US Army, 2011).



Centro de Excelencia contra Artefactos Explosivos Improvisados - Ministerio de Defensa de España

NATO's Counter Improvised Explosive Devices(C-IED) Centre of Excellence, located in the Hoyos de Manzanares Engineering Academy (Madrid) is the first international organisation exclusively dedicated to this type of explosive, where the allied forces of the Atlantic Alliance and the European Union can exchange knowledge on the composition of explosive equipment, their detection and deactivation. Furthermore, to increase the safety of military personal in danger zones, the Spanish Ministry of Defence, in its fight against IEDs, decided to substitute the armoured BMRs in 2010 for new RG-31s28 and armoured Lincas28 that have frequency jammers and more reinforced armoured plating, with several protective layers that offer its occupants better protection if an IED is activated in its passage in Afghanistan where, according to a report by the UN Security Council, there has been a spectacular increase, seriously affecting the civilian population (it was calculated that in 2009 some 2,000 Afghans and 442 soldiers from the ISAF died as a result of these devices).

The fact that from what we can see for the year, the Spanish forces were confronted by almost one incident per month (Spanish Ministry of Defence, 2011):

15/04/2011.- Spanish soldiers in Afghanistan deactivate an IED hidden in a motorbike (Qala i Naw)

04/04/2011.- An IED activated in the path of an armoured vehicle in Afghanistan, without casualties (Badghis)

11/03/2011.- Spanish troops deactivate an IED in the outskirts of Ludina.

01/02/2011.- An IED deactivated in the outskirts of Qala i Naw.

At the Twentynine Palms base (California), marines carry out open air training exercises in a zone that recreates an Afghan enclave. The filmmaker Farocki (Serious Games II, 2010) recorded one of these with the participation of 300 extras who acted as the Afghan and Iraqi populations beside the marines who carried out patrols and maintained order. The film has a similar feel to a video game.



“Virtual reality” is also present in the US Army, not just regarding the military training programmes, but also in military health, for example, in therapies for treating post-traumatic stress disorder. In the Fort Lewis base (Seattle) a therapy session was recorded, with several soldiers who, via the computer simulation “Virtual Iraq” and equipped with the relevant glasses, relived specific combat situations with sound effects included. The purpose of the

programme is for the veterans to confront their fears, in order to overcome them. To do this, the therapist selects an area (urban structure, interurban network) as well as various incidents (ambush, attack, etc.) that the soldier beside him, sometimes standing and other times seated, has to overcome. In the documentary Serious Games III (Farocki, 2009) and Serious Games IV (2010), these therapeutic experiences were depicted, at the same time as analysing the making of the videogame. It is very similar in principle to the training programme, although in the latter the images are rendered at a higher quality: it is better perfected and more detailed: for example, you can see the shadows cast on the basis of the position of an imaginary sun.

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