

Dstl 'briefcase bomb' donated to Royal Logistic Corps Museum

The Royal Logistic Corps (RLC) incorporates the Army's Explosive Ordnance Disposal regiments whose bomb disposal experts are called upon to assist the police when suspected explosives are discovered, such as unexploded bombs dropped from enemy aircraft during world war two and devices planted by terrorists.

This task provided a great opportunity for a mechanical engineering and an electronics engineering apprentice to put some of their skills into practice.

The interactive briefcase displays a fake bomb and includes a circuit connecting up fake dynamite, a battery and a 7-segment timer. This deceptively simple circuit hides another underneath, which controls the interactive element of the exhibit. When a hinged lid is opened, the timer starts to count down to zero, and the user has 10 seconds to 'defuse' the bomb by pressing one of three buttons to break the circuit. If the circuit is broken, the timer stops, but if the incorrect button is pressed, the countdown continues to zero activating flashing lights and an explosion noise.

The Defence Science and Technology Laboratory (Dstl) is recognised as a global authority in explosives analytics using state-of-the-art facilities. Its experts give evidence in support of the criminal justice system in the UK as well as assisting international partners.

Joe, a Dstl engineer, said:

The briefcase bomb game tests quick logical thinking, mixed in with the time pressure of making the correct choice. It really puts you on the spot. I found it interesting to imagine myself in the player's position and then design it with that perspective in mind.

Engineer Helen from Dstl added:

We really enjoyed the opportunity to produce an exhibit for the RLC Museum. The main aim of such outreach and collaboration projects is to inspire young people to pursue careers in science and engineering – and what a fun project to do it with!

RLC Museum Director, Simon Walmsley, said:

I would very much like to thank Dstl's apprentices and supporting staff who have made an outstanding product for the RLC Museum to

use with visitors.

The device supports our STEAM – Science, Technology, Engineering, the Arts and Maths learning schemes. Selecting the correct button (cutting a wire) to render the device safe, requires a quick analytical thought process and also a basic knowledge of electrical circuitry, all under time pressure. Not everyone gets it right...

One of the stories the RLC Museum captures is explosive ordnance (bomb) disposal, particularly in Northern Ireland during OP Banner. We have a number of exhibits supporting this story and having the ability to help the visitor understand this trade and the pressures Explosive Ordnance Disposal (EOD) Operators are under, by using this mobile interactive device is fantastic. Being mobile, this device can be used at the front of the museum and at external events in the summer.