There can be few military CBRN professionals who have not heard of, or attended, the Counter Terrorism Technology Centre (CTTC) at Suffield. CTTC is the pre-eminent CBRN training establishment in the world, most of the world's leading CBRN defence military forces – namely the United Kingdom, Canada, Singapore, Australia, and those that don’t usually have a good reason not to (the Czechs, for example, also have an impressive training facility). “Quantity has a quality all of its own,” one of Stalin’s maxims and it is applicable to Suffield, which includes a training area that dwarfs other national training areas such as Salisbury Plain (approximately four times smaller) or Bergen (approximately seven times smaller). What is, and the fact that it has unlimited airspace, access to electromagnetic frequencies, etc., is important. It is the combination of this with the live agent capability and training scenarios that gives Suffield its cachet.

While DRDC Suffield has been around since the late 1940s, the CTTC has only been in existence since December 2001 and was created to deal with some of the smaller threats and also some of the foreign students. Yet it is important to note that the Centre does not after training per se, instead it is only there to help deliver other nations training programmes. Lieutenant Colonel Corry explained “We don’t conduct the training we facilitate the training. For the first responder community we have a mandate to train, but, I don’t get into the tactics, techniques and procedures, for example, I leave that to the commander. I provide the facilities and the safety staff to allow them to improve in their own regard for that. For example, our joint incident response unit (JIRU) forms part of our national response team and they come and train a couple of times a year, for about six weeks in total. They send me suggestions of what they would like to see incorporated or constructed in their training centre, this then improves their drills. It is a moving target – as money becomes available we can add different things to the training centre.”

CTTC is the world’s leading CBRN training centre ©CTTC

Stress relief

It isn’t necessarily hands-off, however; the Centre borrows heavily from the research side to provide experts who can provide insights in debriefings of things that might work better. “Our scientists provide the safety staff for the chemical scenarios, and they also instruct various levels and do my CBRN 101 training.” said Lieutenant Colonel Corry. “They also pass on knowledge – one of my groups, for example is an admiral group and even though we don’t have any reason to destroy we still have the legacy sites that they do clean-up on, or the odd round that turns up. They have been doing it for years, and the experience they can pass on through debriefs and how to deal with the end scenario is invaluable. As well as that, we have the medical component on the research side that use the domestic swine model, so the medical community can see on a live subject the effect of CWA and also the ability of the Med CM to deal with those symptoms, and that pays huge dividends as well.”

The swine model provides a great deal of training for the medical community in both CBRN and non-CBRN matters – conventional wounds are also dealt with. This allows all aspects of a CBRN incident to be trained, from inception to hospital room, but we only succumb to CTC’s (in testing its own problems, as other nations look at what Suffield provides (and how much it changes) and come to the conclusion that not only could they save money by not sending their professionals to CTC, but they could also gather information (and cold hard cash) by delivering their own site. The Czechs and Swedes have a well-established live agent training area, but the French are building one at Mourmelon; the Australians have expressed an interest, while the Swedes, Indians, Brazilians, Portuguese, and the Japanese already have a live agent training capability. While CTC could happily cope with itself with training Canadian first responders and military units. It is in the interest of the Suffield base to ensure that it is at the forefront of training, and the experience that the foreign guests bring with them help hone this ability. Lt. Col. Corry explained what the differences between CTC and

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these facilities were: “The only two nations that I know of that have outdoor facilities are the Czechs and the Slovaks. I have visited both and their outdoor training facilities are very small and very stand-orientated – they are geared towards individual training rather than collective training. We have the only area where you can do large groups and team training, from deployment to hot zone and back out.

“It is also the issue of production of live agent,” he continued. “We are co-located with the research and development centre, our small-scale facility synthesises all the CVA for experimental trials and produced the same CVA for use in our training. Due to the Chemicals Weapon Convention, other countries would be hard pressed to isolate and have to start from scratch and that is a big issue. We are unique in that regard. I know the Australians are interested in setting up their own programme – they currently come out and train here on an annual basis and their government equivalent of DHS came out to see what we required and set up their own facility.”

Yet while CTTC has a healthy balance in this credit side, there is nothing to say that other nations won’t be able to overcome some of these issues and provide a challenge to Suffield’s supremacy in live agent testing. Suffield needs to be able to continually improve to ensure it provides individuals with the experience that they need. A new development that has been tested for the last couple of years is the development of an urban terrain area. I want to build up an urban terrain scenario so I have the plans to do that as money becomes available and we will build different parts of it,” said Lt. Col. Corry.

Taking it outside

Suffield does have a range of scenarios it can already create; there are large scale sets for tunnels, caves, subway platforms and clandestine labs. This would be about taking the urban scenario into the great outdoors. “There are certain pieces of the terrain that terrorists with a CBRN device would focus on,” said Lt. Col. Corry. “So we want to create those targets and give them to the community to work with. We have a number of scenarios that we can bring together to meet this challenge; the traffic accident, the subway, I have an indoor facility that allows me to set up baggage carousels, check in booths, so it can look like an airport; I can set up stores or post offices, or hotel rooms depending on the threat you want. I can do all that now. What I am talking about is for the outdoors and set up a much larger urban setting so that teams can come in and set up their command and control. It would have power stations and water treatment plants – this is a sort of high risk, specialist targets that you can’t facilitate for training purposes. BATUS is already set up with an urban village – Porton Village – and it already has these features. Currently I can take advantage of that for things like noise when they have a gap in their training programme, but the issues when BATUS has its battlegroups going through and they have no spare capacity, which is why I want to increase them in the experimental proving ground dedicated to the training and trials that we do at the center.”

The Colonel explained this was still a far way off – in the five year timeframe – but this is not the only challenge that the Centre has. Not only is CTTC involved in facilitating the training for a range of agencies and nations, but it also has to do testing and evaluation, and the latter has not progressed as quickly as other elements. “Trials and evaluation [T&E] inevitably take people away from the research side, which is really done for the military on the chem side,” he said. “My bio programme is a little more robust, and when you have people away from the research centre in Ottawa to do radiological and that moves along fairly well. It is a work in progress, however. I have the mandate to set it up as there is no other place in Canada to do the T&E of the platform of equipment that is out there. We can provide data on kit that we have tested to various civilian agencies. If we have tested it for the military, we could tell the various municipalities what does or does not work.

“This information is on a need to know however, military enquiries would go through me. On the civilian side we would deal with it through a provincial organization, such as the Emergency Measures Organization or Public Safety, which is supposed to be the federal agency to provide standardization across the country. We are in the process of trying to set that up as well. It has been lacking at the federal level, the co-ordination and standardization oversight for the first responder community.”

Another thing that the centre is keen to encourage is the sending of teams, rather than individuals, to be trained. Currently only one city, Toronto, does this and while the concept of ‘train the trainer’ might be fine, individual experience of Suffield cannot provide the team with the confidence that is needed to remain collected during an emergency. “This is the major advantage of Suffield – the fact that it provides realistic scenarios in a live agent environment, something that has to be experienced to be beneficial – it cannot be simulated. I have been an infantry officer for 36 years and I barely have to see anything replace firing live bullets,” said Lt. Col. Corry. You can be a simulator and fire blanks, or simulations, but it is difficult to prepare you for firing that first bullet down range. So while simulation enhances your ability it doesn’t replace that actual event – the stress aren’t there. The people who come here after a couple of iterations don’t feel the stress that they did the first time – they are here, they gain confidence in their detectors and protective equipment.”

CBRN is almost universally agreed to be getting more difficult. Issues such as forensics and EOD/IED are forcing units, both military and civil, to prepare to provide solutions for these problems. While tactics, techniques and procedures (TTPs) can be developed, it will be down to CRTC to ensure they work in the environment they are designed for. “As Lt. Col. Corry suggested, it may well be that some of the legal and environmental challenges will be too great, and the political will too weak, to overcome and CRTC will remain unchallenged, but I doubt it. There is a strong will in Central and Eastern Europe (CEE) to become Kings of CBRN, the Czechs, for example, are investing heavily, and it may well satisfy a number of political objectives to become a centre of note for CBRN defence and start attracting other NATO or EU nations. Much of the value of the training will come from the experience of the trainers, or facilitators, and with these CEE nations both investing in their forces and sending them on operations – then their centres will grow in reputation. Yet it is not a quick process – and neither is it an exclusive one. There is nothing to say that CRTC cannot work with another centre – and the work that CRTC will be doing on their Urban Terrain Scenario will guarantee they will remain the pre-eminent supplier of CBRN confidence for sometime.