Pandemics and Military Readiness

Position of the Belgian military trade union ACMP-CGPM

The coronavirus is placing a host of stresses on the military's day-to-day operations. And like the rest of our countries, the creeping threat of the virus has reached numerous pockets of the military.

It began with preemptive steps such as cutting short the large-scale military exercise *Defender 2020* with NATO countries in Europe and banning on all domestic travel not deemed mission-critical. The past week, the Belgian defence headquarters took the unprecedented step of postponing military redeployments.

Other large-scale field exercises are canceled too. Recruiting stations shuttered. And most alarming: a steady rise in coronavirus infections aboard warships, in operational units, among troops deployed in other countries, in military schools and basic training units, and at boot camps.

It is no surprise that the military has elected to cancel or cut back many live training exercises. During an epidemic, training events, like basic training can disseminate the virus, potentially on a massive scale. Large exercises require the movement of people — via planes, trains, and trucks — to a set location, raising the specter of viral spread. Naturally, this will present readiness dilemmas — from dulled skills to a potential contraction in allied engagements and interoperability. The challenge, however, may be even more significant than initially realized. Decreased training is not solely a function of a reduction in live training exercises. Indeed, many of those tasked with provisioning training at mission training centers are no longer physically clocking into the office.

The pandemic is bearing down on military readiness. And with predictions that the outbreak could last for months, concerns are growing inside the armed forces that the virus could seriously erode the military's preparedness to fight. Therefore defence organizations need to start planning for the longer-term implications.

They should particularly worry about the implications for boot camp for fresh recruits, given how much the military relies on new entrants. If the services shut down boot camp and basic training facilities, that stops the flow of personnel into the military. The Belgian armed forces lose about 35 percent of its young recruits every year. That means they lose three percent of its strength every month.

Depending on how long the pandemic lasts, that could really put a dent in military capabilities. Canceling or postponing war games or field exercises is one thing, but if people don't go in basic training, there's nothing. The military has to be looking at how to cope with its training establishment. That could be a shutdown. They could redesign the training, scale it back, pace people out. That gets at very fundamental aspects of military capability.

Positive effects

However, the need for the military to hunker down and take extra precautions to minimize the outbreak could have positive effects on military readiness too. For military preparedness is supported by many elements, not just day-to-day preparations and training. It also rests on mental health and family well-being. So one could take advantage of this kind of a moment to rest. For most parts of our military can probably use a month or two of rest.

But ultimately, the military may have little choice but to accept a lower level of readiness and incur more risk, at least temporarily.

This leads to question what may be the long-term implications of the crisis on future military readiness? Indeed, as training and military professionalism are increasingly highlighted as key factors in overall battlefield effectiveness, how can the military maintain its training regime in the midst of a global pandemic?

One simple remedy may be to double down on what the troops already know, love, and likely will be doing anyway during the pandemic — video gaming. As the coronavirus deepens its global reach, the military can deploy training *virtually* at the point-of-need to help maintain troop readiness.

Point-of-Need Virtual Training

Distributed virtual training is a natural solution to the challenges posed by the current pandemic. It can be deployed at the point-of-need, allowing warfighters in disparate locations — from the comfort of their living room couch, to a military base or a deployment — to train for individual and collective skills. Indeed, many virtual training solutions already exist or are under development.

Individual Training

At present, the military utilizes desktop classroom training for a significant portion of its individual training needs in the early stages of instruction. Training for pre-deployment safety, equipment, and medical procedures is provided in both traditional and computer-based formats. Desktop training applications provide warfighters singular insight into the "switchology" of their system, from an AH-64 Apache helicopter to the *overhead weapon system* of an armored personnel carrier. Computer-based training games allow sailors to develop a mental map of the inside of the future assigned frigate. New programs combine emerging virtual reality and augmented reality technology with commercial off-the-shelf systems to develop low-fidelity simulators that can be utilized for training anywhere, at any time — from the dorm room to a classroom.

Collective Training

Likewise, virtual solutions also exist for collective training needs — from mission preparation to mission rehearsal. *Virtual Battlespace 3* is a multiplayer battlefield virtual simulation system that allows users to train for individual, crew, team, platoon, and company collective warfighting tasks.

What Can Be Done Now?

The truth, however, is that the military is not currently set up to deliver distributed virtual training at a large scale. If the coronavirus causes longer-term exercise cancellations and base closures, the military's state of readiness could be severely impaired. Yet, there are some short-term solutions that could be implemented to deliver training now, at the point-of-need.

Many of the training applications previously mentioned require a warfighter to visit a designated training facility, but transferring training "off-base" is technically possible. Converting classroom-based instruction, such as pre-deployment medical or equipment training, to a web-based program, is a simple solution. Unclassified game-based training programs could also be made available to warfighters remotely at their point-of-need, with web-based contractor support.

Scaffolding the Military's Future Training Needs

More than simply challenging military readiness, however, the coronavirus can also act in many ways as a driver to better meet the military's future training needs. Virtual training solutions and protocols put in place for the purposes of this crisis might pay warfighting dividends later. Indeed, while a rich debate is ongoing within the corridors of our defence staffs on the character of future competition and combat, there is a shared recognition that the future joint force must acquire the ability to fight across and through *multiple domains* (land, air, sea, space and cyber domain). The goal is to inject greater fluidity into joint operations and improve overall combat effectiveness in a military environment marked by rapid cycles of disruptive technological change. However, such a goal is arguably aspirational without a realistic test, experimentation, and training environment, which the live environment will fail to provide.

Hence the fact that the military will be increasingly pushed to experiment and train within a synthetic — virtual and constructive — environment. The increased use of a synthetic environment can be chalked up to cost savings, security, and the mitigation of safety risks. More importantly, however, the employment of a synthetic environment also provides a higher-fidelity and more immersive experimentation and training experience, allowing warfighters to fail, regroup, and adopt new innovations before the first shot is fired or the first sortie is deployed.

In the midst of the corona pandemic, maintaining readiness while also respecting strict socialdistancing guidelines is paramount. Virtual training, with some effort, can meet today's needs, while also creating the scaffolding of the military's future synthetic training needs.