IN THE WORLD of competitive field trials, Labrador Retrievers reign supreme. Their energy, biddability and athleticism catapult them to national championship honors year after year.

Trainer and hunter Lane Kjellsen’s skill in honing his Labs’ natural ability earned numerous trophies and titles. Kjellsen even became an AKC Field Trial judge so he could contribute more to the sport that he loves.

But recently, competitive events have declined for Kjellsen as he turned his talents to a different hunt – one in which the result can mean life or death. Focusing Labrador’s keen noses on the search for explosives is the goal at K2 Solutions, the detection dog training center that Kjellsen founded in North Carolina.

His dogs can be spotted around the country, protecting sports stadiums, concert arenas, airport terminals and more.

“Dogs work well in any type of social environment, are tractable to humans, and their mobility gives them an advantage over any other type of technical device,” said Kjellsen, a former Army Special Operations Unit member who employs trainers and behaviorists from US and British military backgrounds, as well as law enforcement and dog sports. “Their innate hunting ability can be used to hunt explosives by substituting their natural prey with the explosives scent.”

And today, that ability to serve man by alerting them to bombs and firearms is more in demand than ever. As acts of homegrown terrorism and mass shootings become everyday news in the United States, government
agencies, schools, malls and theaters are seeking the services of detection dogs with one major problem: there are not enough dogs to serve the growing need.

The US Government imports about 80 to 90 percent of their working dogs from Europe, which has a rich heritage for breeding and training dogs for police/military style competitions and certifications.

German Shepherds and Belgian Malinois remain the most popular choice for patrol dogs by law enforcement, and many are dual-purpose canines that also perform detection work.

But the breeds in greater demand for public detection work are sporting dogs, including Labradors, Golden Retrievers, German Shorthaired Pointers and Vizslas. These breeds are less intimidating to the public, and their incredible hunting instinct is easily transferred to searching for explosives.

Due to growing terrorism threats and consequent demand for working dogs within Europe and around the world, there is now a shortage of foreign dogs available to protect the United States.

“The irony is that as a nation we do not typically out-source the production of resources needed for national security. It is even more difficult to accept the fact, that as a nation, we cannot meet our own needs for working dogs when we have so many breeders and dogs within our borders,” said Scott Thomas, former breeding program manager of the TSA Canine Breeding and Development Center.

The TSA’s detection dog breeding program was eliminated in 2012 as part of budget cuts. This spurred Thomas to write the American Kennel Club and ask for support in encouraging a domestic breeding program that would reduce the need to rely on foreign sources for national protection.

AKC Board Member Dr. Carmen Battaglia, a long-time German Shepherd fancier, has been fascinated since he was a child with the amazing contributions that his breed has made to the military. When he became president of the German Shepherd Dog Club of America in the early 1990s, he organized a trip by the club’s board to the Department of Defense canine center at Lackland Air Force Base in San Antonio, Texas.

This began a long-time relationship between Battaglia and the military dog team, resulting in many trips to Lackland and Battaglia being named as an advisor to the TSA’s canine program. When Battaglia received the letter from Thomas regarding help with a US breeding program, he took the matter to the AKC Board of Directors, which formed the AKC Detection Dog Task Force to document the current state of detection dogs use in the United States and explore how to increase the domestic supply of this crucial national resource.

“AKC has always been a leader in purpose-bred pure-bred dogs. And these purpose-bred pure-bred dogs that have the skills, ability and breeding to produce the traits needed for detection dogs to successfully do their important jobs” Battaglia said. “It is a natural role for AKC to assist in meeting this national need to protect our country.”

The AKC committee, headed by AKC Senior Vice President Mark Dunn, interviewed key stakeholders involved in bomb detection including people from academia, government, military, policing, training and breeding programs. This includes comparative costs of foreign versus domestically-bred dogs, availability of domestically-bred dogs, and non-classified requirements for “green” (minimally-trained) dogs. HR 2810 has passed the House and as of this writing is under consideration in conference.

Goffe also was invited to testify on the issue before a Senate committee in October 2017, where she expressed the dire need for these dogs to protect the country.

“Experts recognize that there is no better or more efficient way to detect explosives than through the use of high quality, specially trained scent detector dogs. Since the terrorist attacks on 9-11, and subsequent attacks worldwide, global demand for high quality explosives detection dogs has skyrocketed,” Goffe said. “A shortage of appropriate, domestically-bred dogs available for work as explosive detection dogs presents a significant threat to U.S. security.”
Networking/Education

The first AKC US Detection Dog Conference took place in early 2017 to start a conversation about increasing the domestic supply of detection candidates. The stakeholders and speakers included members of government, academia and private training/breeding facilities. A second conference will be held Aug. 28-30, 2018, in Durham, NC, and breeders are invited to attend and learn more about the issue.

In addition, the AKC committee members have conducted research to talk to the experts about the issue and needs, including visits to Lackland AFB, Auburn University Canine Performance Department, and the University of Pennsylvania Working Dog Center.

Breeder Outreach

AKC works with thousands of breeders around the country, but most are unaware of the detection dog shortage. The AKC Feasibility Study committee is taking steps to communicate the need to breeders through presentations to kennel clubs and parent clubs and articles in AKC newsletters and magazines.

Most training programs want to purchase dogs at about a year of age so they are ready to move into advanced training. But this can be difficult as not all breeders are willing or able to keep a puppy for several months so some training centers have started puppy programs so they can accept younger dogs.

The Right Stuff

The most successful detection dogs are developed from field/working lines known to produce dogs that can work all day without losing interest or energy.

"I look for drive, detection ability, tractability and intelligence," Kjellsen said. "The field-line dogs have been bred for a long time with a purpose to work. These are the type of dogs that can end up in rescue as their owners do not understand how to channel their energy into jobs."

When the government receives a detection dog candidate, they must pass a stringent health examination, including hip, elbow and lumbar radiographs, and then undergo an evaluation for these key traits:

- **Sociability** – Dogs must be sociable enough to be easily handled by people and to be at ease around people of all types, but should not be so sociable that they are distracted by the presence of people.
- **Environmental Stability** – Dogs must not show fear or nervousness around loud and/or strange noises; they must show physical rigor whether working in very hot or cold temperatures; and they must be bold and willing to walk/climb on strange surfaces.
- **Desire to Obtain Reward** – The dog's drive to obtain its reward is the key to the dog working. Detection dogs are trained on toys, such as Kongs or tennis balls. The dogs must want that toy more than anything. Food is not used as a reward on the job as it is difficult for handlers to carry, and there is too much food in the environment that could confuse the dog.
- **Hunting Ability** – The dogs must show intense drive to keep hunting, even when they are not finding anything, without getting frustrated and without giving false alerts.
Prevention is Key

The role of detection dogs is not just about finding bombs, but also about preventing potential terrorists. Having detection dogs in public view is a major deterrent against crime.

There are efforts to build technical devices that recreate the ability of a dog’s scent glands, “but they are dependent on humans to direct them or physically move the suspicious substance to the device whereas dogs proactively hunt and look for the substance,” Kjellsen said.

In addition, machines are not always visible to criminals and terrorists, whereas dogs are working the crowds.

Fortunately, K2 dogs have not had to stop a terrorist trying to commit a crime. But Kjellsen says he knows they are doing their job as they regularly detect similar scents, including firearms carried by undercover police.

“Dogs are the most effective method to security personnel to expand the security perimeter, add mobility to the security force, cause detectable human behaviors, provide a deterrent, detect mobile explosives and provide early warning,” he said. “All these factors increase the likelihood that even if a determined terrorist attempted to attack an event, he or she would likely be forced either to initiate his assault prior to reaching his intended target or choose to abandon the plan.”

For more information about the AKC US Detection Dog Conference 2018 or the AKC Detection Dog Task Force, contact the author at pxl@akc.org or call 919-816-3749.