## Dog Use Dogged by Questions Sherry L. Harowitz

When the homeland security threat alert gets raised to orange, one response at many government-operated public facilities like subway stations is to bring in bomb sniffing dogs. But to what standard have those dogs been trained?

Dogs are trained "to a variety of inconsistent standards and under various conditions. In fact, there is no consistent definition as to what even constitutes an explosives detection canine," according to Terry Bohan, chief of the National Canine Training and Operations Support Branch of the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF).

Bohan, who made his remarks at a congressional hearing on the use of dogs in homeland security, noted further that fewer than 50 percent of the law enforcement canine teams are associated with a recognized federal canine training program. ATF has one such program in the government; another is the Transportation Security Administration's National Explosives Detection Canine Team Program.

Should national standards be mandated? A more flexible approach, such as best practices guidelines, was championed by Michael Moriarty, associate provost and vice president of Auburn University, who spoke on behalf of the university's Canine and Detection Research Institute. The institute conducts federally funded research into such issues as a dog's olfactory sensitivity and the effectiveness of detector dogs under varying conditions.

An effort to develop best practices is now being undertaken by the Scientific Working Group on Dog and Orthogonal Detector Guidelines (SWGDOG), whose members include representatives from academia, the scientific community, government, and private industry. The group, which held its first meeting in September, hopes to "evaluate methods, techniques, protocols, quality assurance, education, and research relating to detector dogs," according to its bylaws.

SWGDOG has an ambitious agenda, with plans to publish for public comment a panoply of draft guidelines this year, covering issues such as terminology, kenneling, selection of handlers, and presentation of evidence in court.

Meanwhile, within government, some efforts to set standards have been undertaken. Even as early as 1996, Congress (prompted by the Olympic Village bombing) directed ATF to develop odor-recognition standards for bomb-detection K-9s, and since August 2004, all Justice Department components have been directed to use only ATF-certified canines. To address these mandates, ATF has developed the National Odor Recognition Testing (NORT) initiative, which is being pilot- tested at ATF's Canine Training Center, Bohan said. He suggested that NORT could become the standard to which all dogs would be certified.

Bohan also discussed ATF's training methodology, which he noted has been validated independently by the Energy Department's Oak Ridge National Laboratories. The challenge in training is to prepare dogs for the universe of explosives compositions—numbering beyond 19,000—that they might encounter in the real world.

The training facility cannot go through each possible combination, explained Bohan. Instead, training focuses on five basic families of explosives chemicals. "This ensures that the canines can detect explosives compounds to which

they have never previously been exposed," Bohan noted, adding: "In fact, during the final certification, the canines are tested on some explosive materials they have not seen in training."

ATF helps state, local, and federal law enforcement "have proficient explosives-detection canines and...the ability to evaluate and rectify shortcomings," said Bohan.

It is also important that the industry continue to look for ways to adapt dogs to new detection needs, noted Moriarty. "For example, the AU Canine program conducted research, developed training procedures, and supported the Department of Energy in fielding the first-ever operational chemical warfare agent detector dog teams," Moriarty told Congress.

"We are also collaborating with AU Engineering in developing inertia-enhanced global positioning systems and remote command issuing/reporting equipment with which to equip dogs for non-line-of-sight applications such as building searches, search and rescue, long-range autonomous tracking of persons, and surveillance for intruders along perimeters of critical infrastructure and for border protection," he added.

Another advancement in the use of detection dogs has occurred in response to the Madrid and London transit system bombings. Previous to those events, dogs "would search persons who were presented to them by their handler as a stationary group, but would ignore a moving crowd," explained Ralph Eugene Wilson Jr., chief of police for the Atlanta subway system, known as MARTA.

Auburn, which had a program to search moving persons, and MARTA teamed up late in 2004 to demonstrate these teams to others, including representatives from the Los Angeles Police Department and Sussex County in the U.K., both of which had plans to form K-9 teams trained to search moving groups to address the new transit threat.