SWGDOG SC8– SUBSTANCE DETECTOR DOGS
Accelerant Detection

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Statement of purpose: To provide best practice guidelines for training, certification and documentation pertaining to accelerant detector canines.

1. Initial Training

1.1. The training shall be conducted by a qualified accelerant detector canine team trainer.

1.2. The training course shall include the training of the accelerant detection canine on the accelerants listed in Section 2.1.2 below. Specific accelerants within each class shall be selected from listings published by national organizations such as the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) and the American Society of Testing and Material (ASTM).

1.3. The training shall include varying quantities (typically varying by orders of magnitude) of the various substances both burned and unburned. Those substances are dependent on the region and mission and operational deployment needs.

1.4. The training shall include exposing the canine to various heights and depths of training aid placement in different training scenarios.

1.5. Initial training shall represent all conditions that could be encountered during a certification process.

1.6. The initial training shall continue until the accelerant detection canine team is certified or deemed not certifiable.

2. Canine/Handler Team Certification:

2.1. Parameters of certification test

2.1.1. Certification shall not be on quantities less than the limit of quantification of an accredited laboratory. Typically no less than 1 microliter on a clean (unburned) matrix (i.e., tissue, paper towel) and no less than 20 microliters on a previously burnt matrix or unburned materials found in the working environment (i.e., carpet, backing materials, wood).

2.1.2. The canine shall be tested on accelerants from the following classes: (Ignitable Liquids Reference Collection)

2.1.2.1. Gasoline

2.1.2.2. Light petroleum distillates

2.1.2.3. Medium petroleum distillates

2.1.2.4. Heavy petroleum distillates

2.1.3. The test shall include an Odor Recognition/Mixed Matrix test and at least 2 other searches resembling searches within the normal operational environment (see categories below) designed to evaluate the canine's ability to recognize the odor, respond to the odor and the handler's ability to recognize this response. All odors for which the dog will be certified must be tested but not all odors will necessarily be in each type of search and some searches shall contain no odors (blanks). The recommended maximum time to complete an individual search is listed below but disqualification due to time shall be left to the discretion of the certifiers. The test shall end if the certifiers determine that the dog/handler team is no longer working. If using fewer odors in a particular scenario, more replications of each odor are needed as listed below (e.g., if the test involves only 2 odors, 4-6 articles / odor should be used to increase the reliability). At least one of these searches shall include spiked and un-spiked burnt materials. Types of searches and suggested maximum search times are listed below:

2.1.3.1. Odor Recognition/Mixed Matrix test: search 2-6 cans sized from 1 liter to 3.8 liters (1 quart-1 gallon) for each odor, spending 1 minute per can.

2.1.3.2. Articles (i.e., clothing)/baggage/parcel searches: 2-6 articles per odor, searching 2-6 bags per minute.

2.1.3.3. Person and crowd searches: 2-6 persons per odor, searching 1 person per minute.

2.1.3.4. Building/room searches: 1 room (including furniture) per odor for rooms measuring 18.6 –111.5 m^2 (200-1200 sq. ft.). Search time should approximate 1.5 minute per 9.3 m^2/ 28 m^3 (100 sq.ft./1000 cu. ft.).

2.1.3.5. Motor vehicle searches: including interiors and exteriors of passenger cars and trucks, 2-6 vehicles per odor, spending 3 minutes per vehicle.

2.1.3.6. Open area/perimeter searches: search 93 – 930 m^2 (1,000-10,000 sq. ft.) per odor, spending 1-3 minutes per 93 m^2 (1000 sq. ft.).

2.1.3.7. Sample location/pinpoint accuracy test: 1 odor per 0.3 meters (1 foot), 1 minute per odor.

2.1.4. For successful certification, the canine/handler team shall achieve at least a 90% confirmed alert rate for certification, and a false alert rate not to exceed 10%, as defined and calculated in SC 2.

2.1.5. Excessive handler errors, as defined by the certifying authority, shall result in failure of the team

2.2. Use of distracters
    2.2.1. Natural distracters are normally present and vary depending on the certification area.
    2.2.2. Placing artificial distracters in the certification area is acceptable, but not mandatory.
    2.2.3. Care must be taken not to place artificial distractions in a manner that causes them to be contaminated with the test substance odor.

2.3. Certification for accelerant detection dogs shall be comprised of a comprehensive assessment, which includes elements of odor recognition as outlined in SWGDOG General Guidelines.

2.4. Certification scenarios shall be varied from one certification to the next.

3. Maintenance Training

3.1. This type of training is meant to improve and enhance the performance of the handler, canine and the canine team.

3.2. In training, challenging situations are purposely sought because there is much one can learn even when mistakes are made.

3.3. Teams shall be challenged to improve and enhance their abilities.

3.4. Training shall include the following variables:
    3.4.1. A variety of locations, environments and times of day.
    3.4.2. A variety of training aid amounts.
    3.4.3. A variety of heights, depths, containers and distraction odors.
    3.4.4. Various types of searches (i.e., article, building, vehicle, open area, odor recognition).
    3.4.5. A variety of search time durations.
    3.4.6. A variety of blank searches.
    3.4.7. Materials that have been burnt to varying degrees.

3.5. The canine team shall conduct regular objective-oriented training sufficient to maintain operational proficiency:
    3.5.1. Routine training, conducted solely by the handler to maintain the dog's proficiency and to reinforce odor recognition, is an acceptable form of training but must be combined with supervised training on a frequent basis.
    3.5.2. Supervised training is conducted by a qualified trainer other than the handler and is the best approach to improve performance, identify and correct training deficiencies and assess proficiency.

3.6. Maintenance training shall represent all conditions that could be encountered during a certification process.

4. Training aids (accelerants)

4.1. All training will be done on actual accelerants.

4.2. Training accelerants shall be packaged and labeled in a manner safe for both the handler and canine throughout the training process.

4.3. Training accelerants shall be maintained in a manner to avoid loss or destruction.

4.4. Storage of training accelerants shall be in a manner to prevent odor contamination or physical contamination, i.e., the aids shall be stored in separate containers.

4.5. The source of the training aids shall be reliable and have documentation that contains the name of product, where and when it was purchased, and how it was handled, stored and manipulated.

4.6. Security of the training aids shall follow local, state and federal guidelines.

4.7. Disposal or destruction of the training aids shall follow local, state, and federal guidelines.

5. Documentation

5.1. The handler, organization, and or agency shall maintain records of proficiency, seizures, deployment and utilization. Documents indicating timed performance are relevant.

5.1.1. Training records shall contain the following information:

5.1.1.1. Date and time of training exercise.
5.1.1.2. Name of trainer.
5.1.1.3. Type and amount of training aid used.
5.1.1.4. Depth or height of hide.
5.1.1.5. Location of training exercise.
5.1.1.6. Type of training (e.g., vehicle, luggage, building, open area).
5.1.1.7. The training objective, outline of the training scenario, and outcome.
5.1.1.8. Additional information including weather and light conditions.
5.1.1.9. Name of canine and handler.
5.1.1.10. Method used to extinguish fire (if applicable).
5.1.1.11. Other information required by the organization and/or agency.

5.1.2. Certification records, kept by the certifying authority and the handler shall contain:

5.1.2.1. The date certified.
5.1.2.2. Certification authority i.e., agency, professional organization
5.1.2.3. Name of individual administering certification test.
5.1.2.4. Type of accelerants.
5.1.2.5. Location of certification.
5.1.2.6. Name of canine and handler.

5.1.3. Deployment and utilization records shall include:
5.1.3.1. Date and time.
5.1.3.2. Location of deployment.
5.1.3.3. Length of search.
5.1.3.4. A description of the activity.
5.1.3.5. Search results.
5.1.3.6. Any other information required by the organization and/or agency.

6. Use of records and documentation

6.1. Reliability of the canine team shall be based upon the results of certification and proficiency assessments.

6.2. Training records do not necessarily reflect reliability.

6.3. Training records are necessary to illustrate the type and amount of training that the team has experienced before and after certification.

6.4. Confirmed operational outcomes can be used to determine capability.

6.5. Unconfirmed operational outcomes shall not be used to determine capability in that they do not correctly evaluate a canine team's proficiency