# SWGDOG SC8– SUBSTANCE DETECTOR DOGS Human Remains Detection (HRD) Land and Water

Posted for Public Comment 1/14/09 - 3/14/09. Approved by the membership 9/15/09.

**Statement of purpose:** To provide recommended best practice guidelines for training, certification and documentation pertaining to human remains (cadaver) detection canines on land and /or water. The following guidelines pertain to land and water or a combination of both applications.

# 1. INITIAL TRAINING

- 1.1. The canine trainer shall be competent in human remains detection and utilize a structured curriculum with specific training and learning objectives.
- 1.2. The training course shall include training on the complete spectrum of human remains at varying stages of decomposition. All training aids shall be treated as biohazardous material. The procurement, use, handling, storage and disposal of training aids shall be in compliance with applicable local, state and federal requirements. Examples of training aids include the following:
  - 1.2.1. Human blood (fresh and old).
  - 1.2.2. Human decomposition material (tissue, adipocere, wet and dry bone, body fluids).
  - 1.2.3. Burned human tissue.
- 1.3. The quantity and type of substances used shall be dependent on the region, mission and operational deployment needs of the canine team.
- 1.4. Training shall include exposing the canine to a variety of different types of searches, locations and environments.
- 1.5. The training shall include varying quantities of target odors, containers and varying lengths of placement time.
- 1.6. The canine shall be trained to perform an effective independent search on or off-lead without excessive handler guidance.
- 1.7. Handler/trainer training shall include the following:
  - 1.7.1. Search planning, techniques, tactics and equipment.
  - 1.7.2. Dog handling techniques.
  - 1.7.3. First aid for dog and handler.
  - 1.7.4. National Incident Management System (NIMS) (ICS 100 and 200, IS 700) courses are available online.
  - 1.7.5. Additional training as specified by local, state and federal requirements.
  - 1.7.6. Proper use, handling, storage and disposal of biohazardous materials.

- 1.7.7. Legal aspects and courtroom testimony as outlined in Sub Committee 6's document.
- 1.7.8. Crime scene/evidence preservation/and record keeping.
- 1.7.9. In addition, water safety shall be included for HRD water teams.
- 1.8. The initial training should continue until the HRD canine team is certified or deemed unacceptable.

## 2. CERTIFICATION

- 2.1. Certification for HRD canines shall be comprised of a comprehensive assessment together with either an odor recognition assessment or a double-blind assessment, or both as outlined in SWGDOG General Guidelines.
  - 2.1.1. Odor recognition assessment
    - 2.1.1.1. The handler shall be advised of the parameters of the search.
    - 2.1.1.2. The handler shall know the number of target objects, but not the placement.
    - 2.1.1.3. The evaluating official shall know the desired outcome of the search.
  - 2.1.2. Comprehensive assessment
    - 2.1.2.1. The handler shall be advised of the parameters of the search, yet shall not know the desired outcome.
    - 2.1.2.2. The handler shall not know the number or placement of the target objects.
    - 2.1.2.3. The evaluating official shall know the desired outcome of the search.
    - 2.1.2.4. The assessments shall include a blank search.
  - 2.1.3. Double-blind assessment
    - 2.1.3.1. No participant or observer present at the assessment location(s) shall be aware of the parameters of the search.
- 2.2. Ideally, the certification shall be designed in a manner that resembles searches conducted in the canine team's normal operational environment.
- 2.3. The test shall be designed to evaluate:
  - 2.3.1. The canine's ability to recognize the odor.
  - 2.3.2. The canine's ability to respond to the odor.
  - 2.3.3. The handler's ability to recognize the canine's alert.
  - 2.3.4. The handler's ability to articulate where the material is located.
- 2.4. For successful certification, the canine team shall achieve a 90% confirmed alert rate with no false alerts.
- 2.5. A canine team that fails the certification process shall complete a corrective action plan before making another attempt to certify.

# 3. MAINTENANCE TRAINING

- 3.1. Maintenance training is meant to sustain and enhance the performance of the handler, canine and the canine team.
- 3.2. In training, situations are purposely sought where the capabilities of the canine and handler are challenged within the operational environments for which the team may be deployed.
- 3.3. Routine maintenance training is essential in order to maintain mission readiness. A canine team shall spend a minimum of 16 hours per month in routine land and/or water training to maintain the proficiency level of the team.
- 3.4. The canine team shall conduct regular objective-oriented training sufficient to maintain and enhance operational proficiency. Maintenance training shall include the following:
  - 3.4.1. Routine training, conducted solely by the handler to maintain the canine's proficiency and to reinforce odor recognition, is an acceptable form of training but must be combined with supervised training on a regular basis.
  - 3.4.2. Supervised training, conducted by a competent trainer other than the handler, in order to improve performance, identify and correct training deficiencies and perform proficiency assessments is considered a best practice.

# 4. TRAINING AIDS

- 4.1. Training shall be done on actual human remains in varying stages of decomposition to conform to best practices.
  - 4.1.1. The source of the training aids shall be reliable and documented.
- 4.2. The training aids shall be labeled and packaged in a manner safe for both the handler and canine throughout training.
  - 4.2.1. Each label shall contain, at minimum, the type of training aid, a biohazard label and the date the training aid was acquired.
- 4.3. Each training aid shall be properly stored (either frozen, air dried, or refrigerated) and secured in a safe manner.
- 4.4. Each training aid shall be maintained in a manner to avoid loss, destruction and cross contamination.
- 4.5. Handling and care of training aids shall include the following:

- 4.5.1. Each training aid shall be handled in accordance with biohazard safety standards for proper handling, storage and disposal.
- 4.5.2. Each training aid shall be rotated on a regular basis, evaluated to determine the level of decomposition and replaced if contaminated.
- 4.5.3. Storage of training aids shall be in a manner that prevents odor and physical contamination, i.e., each range of decomposing cadaver materials should be stored in separate containers.
- 4.6. Disposal and or destruction of the training aids shall follow local, state or federal guidelines pertaining to biohazardous materials.

# 5. RECORDS AND DOCUMENT MANAGEMENT

- 5.1 The handler/organization/agency shall maintain training, and/or deployment/utilization records. Documents shall be retained in accordance with federal, state and unit guidelines. Records may include but are not limited to the following data:
  - 5.1.1. Training records shall include:
    - 5.1.1.1. Name of handler and canine.
    - 5.1.1.2. Date and time training was conducted.
    - 5.1.1.3. The trainer's name and position.
    - 5.1.1.4. Type and amount of training aid used.
    - 5.1.1.5. Height and/or depth of the hide.
    - 5.1.1.6. Location where training took place.
    - 5.1.1.7. Type of training (wilderness, disaster, land, water, buried, etc.).
    - 5.1.1.8. The training objective (to frame the result of the training scenario).
    - 5.1.1.9. Additional information may include: weather conditions, terrain.
    - 5.1.1.10. Other information as required by the organization and/or agency.
    - 5.1.1.11. Set Time
  - 5.1.2. Deployment and utilization records shall include:
    - 5.1.2.1. Name of handler and canine.
    - 5.1.2.2. Date and time of deployment.
    - 5.1.2.3. Location of deployment.
    - 5.1.2.4. Requesting agency.
    - 5.1.2.5. Length of search.
    - 5.1.2.6. Description of search.
    - 5.1.2.7. Type of search (wilderness, disaster, water, etc.).
    - 5.1.2.8. Results of search.
    - 5.1.2.9. Location of a positive find, using GPS coordinates (when available).
    - 5.1.2.10. Other information as required by the organization and/or agency.
  - 5.1.3. Certification records
    - 5.1.3.1. Name of canine and handler
    - 5.1.3.2.Date team certified

- 5.1.3.3.Certification authority, i.e., agency, professional organization, and/or individual(s)
- 5.1.3.4. The standard or guideline under which the canine team is certified
- 5.1.3.5. Name of individual(s) awarding certification.
- 5.1.3.6. Search area types included in certification assessment
- 5.1.3.7. Type and amount of materials included in certification assessment
- 5.1.3.8.Location of certification
- 5.1.3.9.Set Time

#### 6. USE OF RECORDS AND DOCUMENTATION

- 6.1. Records may be discoverable in court proceedings and may become evidence of the canine team's reliability. Record retention policy shall be determined by department/organization guidelines
- 6.2. Training records are necessary to illustrate the type and amount of training that the team has experienced before and after certification
- 6.3. Confirmed operational outcomes can be used as a factor in determining capability
- 6.4. Unconfirmed operational outcomes shall not be used as a factor in determining capability in that they do not correctly evaluate a canine team's proficiency (i.e., residual odor can be present or concealment may preclude discovery)

# LAND APPLICATIONS

- **7.** *INITIAL HRD DETECTION TRAINING ON LAND* shall include exposing the canine to a variety of different types of search locations and environments including the following variables:
  - 7.1. Ground surface.
  - 7.2. Elevated position not to exceed 2 meters ( $\approx$ 6 ft).
  - 7.3. Buried at least 15 to 61 centimeters (6 to 24 inches) depending on soil composition.

## 8. CANINE TEAM CERTIFICATION

- 8.1. Parameters of the test: The test area shall not be an area that is normally used for daily or routine training of the canine team.
  - 8.1.1. Prior to the start of the certification, the handler will inform the evaluator how the canine will respond when the target odor is detected.
  - 8.1.2. The human remains detector canine shall be tested on at least two of the suggested materials in the complete spectrum of materials as identified in sections 1.2.1 and 1.2.2.

- 8.1.3. Recommended minimum quantities of materials for certification shall be set in accordance with mission requirements.
- 8.1.4. Placement of the aids shall include the following:
  - 8.1.4.1. Ground surface.
  - 8.1.4.2. Elevated position not to exceed 2 meters ( $\approx$ 6 ft).
  - 8.1.4.3. Buried 15 to 61 centimeters (6 to 24 inches) depending on soil composition.
- 8.1.5. The test shall include blank areas containing freshly disturbed soil uncontaminated by human remains.
- 8.1.6. Animal remains distractors shall be included in at least one search area.
- 8.1.7. The certification shall include scenarios resembling searches within the normal operational environment. The test shall include at least four individual search areas with a minimum of one blank area, from at least two of the categories listed below. Individual search areas may contain multiple target odors. The test shall be designed to evaluate the canine's ability to recognize the odor, respond to the odor and the handler's ability to interpret this alert. Search categories and suggested maximum search times utilized in certifications are listed below:
  - 8.1.7.1. Wilderness searches shall cover a minimum of 4050 m<sup>2</sup> ( $\approx$ 1 acre) in 30 minutes/acre depending on the scent quantity and source.
  - 8.1.7.2. Urban searches shall cover a minimum of 4050 m<sup>2</sup> ( $\approx$ 1 acre) in 30 minutes. The area searched and search time may vary depending on the scent quantity and source.
  - 8.1.7.3. Building/structure searches shall cover a minimum 93 m<sup>2</sup> (≈1000 sq. ft.) in 30 minutes. The area searched and search time may vary depending on the scent quantity and source. Vehicle searches (interior and exterior) shall cover a minimum of three to six vehicles. Search time should be three minutes per vehicle.
  - 8.1.7.4. Disaster area search time may be dictated by the difficulty of the scenario.
- 8.1.8. The minimum set time of training aids shall be no less than 30 minutes and no more than 24 hours. The maximum set time may be extended as dictated by the mission of the agency.
- 8.1.9. For successful certification, the canine team shall achieve at least a 90% confirmed alert rate for certification, with no false alerts.

# 8.2. Use of distractors

- 8.2.1. Natural distractors are normally present and vary depending on the certification area.
- 8.2.2. Care must be taken not to place artificial distractions in a manner that causes contamination with the test substance odor. Target odors should not be placed near areas with decomposed human waste.
- **9.** *MAINTENANCE TRAINING FOR HRD LAND* shall include the following components:

- 9.1. A variety of locations, environmental conditions and times of day.
- 9.2. A variety of training aid amounts and the full spectrum of decomposition of those training aids.
- 9.3. A variety of heights, depths, containers and distraction odors.
- 9.4. A variety of types of searches including wilderness, disaster, vehicles, buildings, open areas and shoreline (based on mission specific requirements).
- 9.5. A varied duration of search times.
- 9.6. A variety of search area sizes.
- 9.7. A variety of blank searches.
- 9.8. A variety of searches that include animal distractors.

# WATER APPLICATIONS

- 10. INITIAL HRD TRAINING ON WATER shall include exposing the canine to a variety of different types of search locations and environments including the following variables:
  - 10.1. Shoreline searches.
  - 10.2. Shallow, deep, still and swift running water from a watercraft.
  - 10.3. Cadaver material at varying depths of water.
  - 10.4. Blank areas which do not include human remains but may include animal remains.
  - 10.5. Empty unused training aid containers.
  - 10.6. Varying quantities of target odors, containers and lengths of time of placement.

## 11. CANINE TEAM CERTIFICATION

- 11.1. Parameters of the test: The test area shall not be an area that is normally used for daily or routine training of the canine team.
  - 11.1.1. Prior to testing on water, the canine team shall successfully perform an odor recognition test on land.
  - 11.1.2. Proofing/verification of the certification area should be conducted prior to the actual certification using a certified canine team who is not

- participating in the certification. This practice is designed to show that the trained odor is present in the target locations and nowhere else.
- 11.1.3. Prior to the start of the certification, the handler will articulate to the evaluator the canine's alert to the target odor.
- 11.1.4. Handlers are required to wear personal flotation devices (PFD) when on a boat, pier or near the water. PFD is optional for the canine.
- 11.1.5. The human remains detector canine shall be tested on at least two of the suggested materials in the complete spectrum of materials as identified in sections 1.2.1. and 1.2.2.
- 11.1.6. Recommended quantities of materials for certification shall be no less than 30 grams (1oz).
- 11.1.7. Placement of the aids shall include all of the following:
  - 11.1.7.1. Shoreline assessment no less than 46 meters (50 yd) in length, no more than 4 meters (≈12 ft) from shore, no greater than 1 meter (≈3ft) in depth and spending no longer than 15 minutes to search the area.
  - 11.1.7.2. Boat assessment: in calm water (lake or pond) no less than 90 x 90 meters (≈100 by 100 yd) assessment area with the area divided into four quadrants. Scent material shall be placed in a depth of between 3.0 to 3.5 meters (≈10 to 11 ft) in one of the quadrants. The canine's response shall be within a radius of 2 meters (≈6 ft) of the highest concentration of the target odor. Search time in the boat shall be no more than 45 minutes per 90 meter² area.
  - 11.1.7.3. The training aids shall be placed no less than 30 minutes prior to testing.
  - 11.1.7.4. All training aids shall be removed at completion of certification.
- 11.1.8. Ideally, the test shall be designed in a manner to resemble searches within the normal operational environment.
- 11.1.9. The test shall be designed to evaluate:
  - 11.1.9.1. The canine's ability to recognize the odor.
  - 11.1.9.2. The canine's ability to respond to the odor.
  - 11.1.9.3. The handler's ability to interpret the canine's alert.
  - 11.1.9.4. The handler's ability to articulate where the submerged material is located.
- 11.1.10. For successful certification, the canine team shall achieve a 90% confirmed alert rate and no false alerts.

# 12. MAINTENANCE TRAINING FOR HRD – WATER shall include:

- 12.1. A variety of locations, environmental conditions, and times of day.
- 12.2. A variety of training aid amounts and the full spectrum of decomposition.
- 12.3. A variety of depths, containers and distraction odors.

- 12.4. A variety of types of searches to include all types of water (still, slow-moving and fast-flowing water).
- 12.5. A varied duration of search times.
- 12.6. A variety of search area sizes.
- 12.7. A variety of blank searches.
- 12.8. A variety of searches that include animal distractors.