

**SWGDOG SC9 – HUMAN SCENT DOGS**  
Searching for Human Remains in Disaster Environments  
Posted for Public Comment 4/24/12 – 6/22/12

**Searching for human remains in disaster environments utilizes** canines to search for, detect and/or locate human remains in debris resulting from both man-made and natural catastrophic events.

**Statement of Purpose:** To provide recommended guidelines for training, certification, and documentation pertaining to canine teams trained to search for human remains in disaster environments, including structural collapse.

***1. INITIAL TRAINING***

- 1.1. The handler training shall be conducted by a competent trainer from an entity that utilizes a structured curriculum with specific training and learning objectives.
- 1.2. Handler training shall include the following topics:
  - 1.2.1. Search techniques and tactics.
  - 1.2.2. Proper use of personal protective equipment (PPE).
  - 1.2.3. Environmental conditions affecting odor dispersion in order to enable the handler to maximize search efficiency.
  - 1.2.4. First aid for the canine team and the subject or victim.
  - 1.2.5. Pertinent National Incident Management System (NIMS) classes (i.e., ICS 100, ICS 200, and IS 700 and any applicable updates) which can be taken online.
  - 1.2.6. Structural collapse awareness training.
  - 1.2.7. Confined space awareness training.
  - 1.2.8. Hazardous materials (HazMat) awareness training.
  - 1.2.9. Proper use, handling, storage and disposal of biohazardous materials.
- 1.3. The canine training shall be conducted by a competent canine trainer from an entity that utilizes a structured curriculum with specific training and learning objectives.
- 1.4. Initial training shall include sufficient obedience training to ensure the canine will operate effectively based on mission requirements.
- 1.5. Initial training shall include a behavioral assessment of the canine in search and rescue applications to dismiss canines prone to unprovoked attacks on humans or animals.
- 1.6. The canine shall be trained to perform an effective and controlled search.
- 1.7. The initial training of the canine shall include training of a determined specific final response (bark).

- 1.8. Initial training shall include exposing the canine team to a variety of disaster locations, expected situations, and a variety of distractors that may include live people, animal remains, and noise.
- 1.9. The training shall be structured to meet the typical mission requirements of the canine team's department or organization.
- 1.10. The quantity and type of substances used shall be dependent on the region, mission and operational deployment needs of the canine team.
- 1.11. The training shall include training on the appropriate 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:
  - 1.11.1. Human decomposition material (tissue, adipocere, wet bone, and body fluids).
  - 1.11.2. Burned human tissue.
- 1.12. The canine team's training shall be continued until a level of operational proficiency is achieved and the team is certified.

## **2. CANINE TEAM ASSESSMENTS**

- 2.1. Assessments are part of certification, maintenance training and proficiency testing.
- 2.2. Each assessment is the evaluation of a search.
- 2.3. The canine team shall be assessed using an odor recognition assessment, a comprehensive assessment and a double-blind assessment.
- 2.4. Odor recognition assessment tests the following:
  - 2.4.1. The ability of the canine to locate and bark to indicate the presence of human remains in a controlled setting.
  - 2.4.2. The canine's ability to remain at the target location and to exhibit a focused bark response/indication for 30 seconds (a minimum of six barks may be interspersed with digging and attempts to penetrate) without handler influence.
- 2.5. An odor recognition assessment shall be set-up as follows:
  - 2.5.1. An area containing a minimum of five props shall be set up in a controlled setting.
  - 2.5.2. The props should be made or constructed of materials that give the optimum control of scent (e.g., barrels, concrete sewer pipe). The props need to be constructed to prevent canine penetration and shall include:
    - 2.5.2.1. One blank prop.
    - 2.5.2.2. Two props with distractions, e.g., food, animal remains, live person.

- 2.5.2.3. One prop with human remains.
  - 2.5.3. The human remains and all distractors will be placed at least ten minutes before the start of the assessment.
  - 2.5.4. The starting point shall be measured and clearly marked.
  - 2.5.5. This distance shall be approximately 23 meters (25 yd) from the starting point to the first prop.
  - 2.5.6. The handler shall have a clear line of sight to the canine in the prop area.
  - 2.5.7. The handler shall remove the canine's leash before the exercise begins.
  - 2.5.8. The handler shall not move from the starting point.
  - 2.5.9. The team shall have five minutes to complete the exercise.
  - 2.5.10. The successful outcome shall be the canine locating and barking at the concealed human remains.
  - 2.5.11. No false alerts are permitted.
- 2.6. A comprehensive assessment tests the following:
- 2.6.1. The ability of the canine team to find concealed human remains on limited-access and full-access disaster sites.
- 2.7. A comprehensive assessment shall be set up as follows:
- 2.7.1. Two separate search sites shall be prepared. They shall be separated by a minimum of 6 meters ( $\approx$  20 ft). One of these search sites shall be used as a handler limited-access site, the other as a handler full-access site.
  - 2.7.2. When conducting concurrent testing, the search sites shall be visually separated.
  - 2.7.3. Each search site shall be a rubble pile which consists of a partially or completely collapsed structure with an area approximately 600 – 1400 m<sup>2</sup> (10,000 – 15,000 sq ft). The composition of the rubble piles shall consist of concrete, wood, and miscellaneous mixed materials.
  - 2.7.4. The limited-access site shall have a minimum average height or depth of 2 meters ( $\approx$  6 ft).
  - 2.7.5. The full-access site has no height or depth requirement.
  - 2.7.6. Each search site shall contain enough hiding locations to accommodate potential false holes, up to four victims and a maximum of three distractions.
  - 2.7.7. The limited-access site starting point shall be located where the handler has limited view of the search site. The victims shall be placed in such a way that the handler cannot see the dog locate the first victim.
  - 2.7.8. The starting point for the full-access site shall be determined by the canine handler.
  - 2.7.9. Barriers or banner tape can be used to identify search or unsafe areas.
  - 2.7.10. Certifying agencies shall ensure proper site safety measures.
  - 2.7.11. The human remains detector canine shall be tested on at least two of the suggested materials in the appropriate spectrum of materials as identified in section 1.11.
  - 2.7.12. The targets shall be placed as follows:
    - 2.7.12.1. A total of four to six targets shall be placed at least 20 minutes before the evaluation begins.
    - 2.7.12.2. Zero to four targets shall be placed in the full access search site.

- 2.7.12.3. One to four targets shall be placed in the limited access search site.
- 2.7.12.4. The targets shall be separated by a minimum of six meters ( $\approx$  20 ft).
- 2.7.12.5. All targets shall be concealed from both handler and canine.
- 2.7.12.6. The hiding areas for the fully concealed targets should be constructed to prevent canines from accessing the target.
- 2.7.12. One or more search sites shall be contaminated with distractors:
  - 2.7.12.1. The scent distractors should be placed to enable the evaluators to determine if the dog is alerting to the distractor or human remains.
  - 2.7.12.2. The placed-scent distractors shall include animal remains and food.
  - 2.7.12.3. The placed-scent distractors shall be hidden and inaccessible to the canine.
  - 2.7.12.4. There should be noise distractions such as running generators, machinery, rescue tools, etc. Noise distractions may be supplied by audiotapes.
- 2.7.13. Proofing/verification of the certification area shall be conducted prior to the actual certification using a certified canine team who is not participating in the certification. This team shall be available throughout the certification to proof the targets when they are relocated.
- 2.7.14. Search procedures:
  - 2.7.14.1. The team shall have 20 minutes to search each site. This includes the canine indicating human remains and the handler identifying the area of the canine's alert.
  - 2.7.14.2. Full-access search site procedures include the following:
    - 2.7.14.2.1. The site shall be completely accessible to the handler.
    - 2.7.14.2.2. The handler may access the site from any point.
    - 2.7.14.2.3. The response of the team shall consist of the canine barking a minimum of three times at the same target and the handler interpreting the canine's alert.
    - 2.7.14.2.4. The handler shall mark the area identified by the canine's alert as specified by the certifying agency. Once a response/indication is marked, it is final.
    - 2.7.14.2.5. If between the first and third bark, a handler verbally communicates with his dog in order to keep him barking at a target, the find shall be considered a miss.
    - 2.7.14.2.6. Barking may be interspersed with digging, scratching or any other attempt to get to the target.
    - 2.7.14.2.7. The canine may reposition itself while alerting to the target location.
    - 2.7.14.2.8. If the canine leaves the target location before barking three times, the indication process (three bark requirement) starts over.
  - 2.7.14.3. Limited-access search site procedures include the following:
    - 2.7.14.3.1. The site shall provide access to only one well-marked portion of the perimeter.
    - 2.7.14.3.2. The canine shall initially search out of the handler's sight in order to locate the first target.

- 2.7.14.3.3. The handler shall access the site to mark the response/indication location and restart the canine.
- 2.7.14.3.4. The handler shall remain within a 1.5 meters (5 ft) radius of the prior response/indication location or return to the starting point (as directed by the evaluator) while the canine continues to search for human remains.
- 2.7.14.3.5. If the handler returns to the starting point, he or she may not access the site until the dog barks 3 times again.
- 2.7.15. Successful completion of the assessment includes the following:
  - 2.7.15.1. A 75% alert rate, which includes a minimum of one find on the limited-access site.
  - 2.7.15.2. No false alerts. It is the handler's responsibility to report when the canine has alerted.
  - 2.7.15.3. The handler's demonstration of the ability to maintain control of their canine.
- 2.8. Double-blind assessments shall only be conducted in situations where safety is not an issue, such as odor recognition assessments.

### **3. CANINE TEAM CERTIFICATION**

- 3.1. Certification for the named canine team shall consist of a comprehensive assessment every three years. This shall be complemented with periodic proficiency assessments throughout the year.
  - 3.1.1. Certification does not relieve the canine team from regular maintenance training, proficiency assessments, and following other recommended SWGDOG guidelines.
  - 3.1.2. The certifying officials should not be routinely involved in the day to day training of the canine team being evaluated.
  - 3.1.3. Specific assessment criteria are articulated by each discipline.
  - 3.1.4. Handler errors, when excessive, may result in failure of the team.
  - 3.1.5. A mission-oriented test environment shall be used.
- 3.2. Certification shall consist of a number of assessments that together form the full test.
  - 3.2.1. Each assessment is the evaluation of a search.
  - 3.2.2. Targets used in the day to day training activities of the team being certified shall not be used in the certification process.
  - 3.2.3. The certification shall be comprised of a comprehensive assessment together with either an odor recognition assessment or a double-blind assessment, or both.
- 3.3. For successful certification, the canine team shall achieve at least a 75 % positive alert rate, and no false alerts. It is the handler's responsibility to report when the canine has alerted.

- 3.4. A canine team that fails the certification shall complete a corrective action plan before making another attempt to certify.

#### **4. MAINTENANCE TRAINING**

- 4.1. The canine team shall conduct regular objective-oriented training sufficient to maintain and enhance operational proficiency. Maintenance training shall include the following:
  - 4.1.1. Correcting identified deficiencies or operational concerns.
  - 4.1.2. A variety of search locations, location sizes and environmental conditions.
  - 4.1.3. Varied durations of search times.
  - 4.1.4. Varied times of day/night.
  - 4.1.5. A variety of blank searches.
  - 4.1.6. A variety of distractors in the search area that may include live people, animal remains and noise.
  - 4.1.7. A variety of set times.
  - 4.1.8. A variety of targets and numbers of targets where applicable.
  - 4.1.9. A variety of training aid amounts and the appropriate spectrum of decomposition of those training aids.
  - 4.1.10. A variety of methods of concealment.
- 4.2. Training conducted solely by the handler to maintain the canine's proficiency is acceptable, but should be periodically combined with supervised training.
  - 4.2.1. Supervised training, by a competent trainer or instructor, is recommended in order to monitor and improve performance, identify and correct training deficiencies, and perform proficiency assessments.
- 4.3. A canine team shall complete a minimum of 16 hours of training per month to maintain and improve the proficiency level of the team.
- 4.4. The canine team shall undergo periodic proficiency assessments as outlined in section 2 - the Canine Team Assessments. These assessments should include a variety of odor recognition assessments, comprehensive assessments and/or double-blind assessments.

#### **5. RECORD KEEPING AND DOCUMENT MANAGEMENT**

- 5.1. The handler/department or organization shall document training, certification, proficiency assessments and discipline-related deployment data.
  - 5.1.1. Training and proficiency assessment records may be combined or maintained separately.
  - 5.1.2. Discipline-related deployment records shall be maintained separately from training, certification and proficiency assessment records.
  - 5.1.3. Training and discipline-related records should be standardized within the department or organization.

- 5.2. Training records may include but are not limited to the following data:
  - 5.2.1. Name of handler and canine.
  - 5.2.2. Names of individuals conducting or assisting with training.
  - 5.2.3. Time and date training took place.
  - 5.2.4. Location and environmental conditions of training.
  - 5.2.5. Training design (non-blind, single-blind or double-blind). Type and amount of training aid used.
  - 5.2.6. Location of targets.
  - 5.2.7. Set time.
  - 5.2.8. Size of search area.
  - 5.2.9. Length of session.
  - 5.2.10. Search results.
  - 5.2.11. Deficiencies and corrective measures implemented.
  - 5.2.12. Other information required by department or organization.
  
- 5.3. Certification records shall be maintained by the certifying authority and the handler, and include the following information:
  - 5.3.1. Name of canine and handler.
  - 5.3.2. Date team certified.
  - 5.3.3. Certification authority, i.e., agency, professional organization, or individuals. The standard or guideline under which the canine team is certified.
  - 5.3.4. Name of individuals awarding certification.
  - 5.3.5. Location of certification.
  - 5.3.6. Search area types included in certification assessment.
  - 5.3.7. Description and number of targets and distractors used in the certification assessment.
  - 5.3.8. Set time.
  
- 5.4. Proficiency assessment records maintained by the handler and department or organization may include, but are not limited to, the following data:
  - 5.4.1. Name of handler and canine.
  - 5.4.2. Names of individuals conducting assessment.
  - 5.4.3. Time and date assessment took place.
  - 5.4.4. Location and environmental conditions.
  - 5.4.5. Assessment design (single-blind or double-blind).
  - 5.4.6. Search area types included in proficiency assessment.
  - 5.4.7. Description and number of targets.
  - 5.4.8. Location of targets.
  - 5.4.9. Set time.
  - 5.4.10. Size of search area.
  - 5.4.11. Proficiency assessment results.
  - 5.4.12. Other information required by department or organization.
  
- 5.5. Supervisory review of all records is recommended.

- 5.6. Digitally formatted records are recommended to facilitate compiling and analyzing data.
- 5.7. Records may be discoverable in court proceedings and may become evidence of the canine team's reliability. Record retention policy shall be determined by the canine team's department or organization guidelines.
- 5.8. Training records are necessary to illustrate the type and amount of training that the team has experienced before and after certification.
- 5.9. Confirmed operational outcomes can be used as a factor in determining capability.
- 5.10. 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).
- 5.11. Veterinary records:
  - 5.11.1. Veterinary records shall be maintained in a manner that allows accessibility by the handler, department and organization.
  - 5.11.2. Vaccinations required by state or local law should be documented in the veterinary record of the canine.