

Department of Homeland Security
Federal Emergency Management Agency

National Urban Search and Rescue Response System

A Component of the National Response Framework
Emergency Support Function 9



Canine Search Team Certification Evaluation Handbook Human Remains Detection – Bark Alert

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Table of Contents

CHAPTER 1: INTRODUCTION	1
1-1. Mission Statement	1
1-2. Objectives	1
1-3. Evaluation Documents.....	1
1-4. Definitions	1
1-5. Process/Implementation	2
1-6. Code of Conduct	3
1-7. Aggression Policy.....	3
1-8. Evaluation Guidelines	4
CHAPTER 2: CANINE SEARCH TEAM CERTIFICATION EVALUATION-HRD	7
2-1. Ground Rules	7
2-2. Evaluation Procedures	7
CHAPTER 3: ELEMENT DESCRIPTIONS	9
3-1. Element 1 – Obedience	9
3-2. Element 2 – Odor Recognition and Bark Indication.....	10
3-3. Element 3 – Direction and Control.....	13
3-4. Element 4 – Agility.....	15
3-5. Element 5 – Rubble Site.....	18
3-6. Performance Criteria and Evaluation Form Guidelines.....	21
CHAPTER 4: EVALUATION PLANNING/LOGISTICS	25
4-1. Personnel.....	25
4-2. CE-HRD Criteria for Rubble Element.....	26
CHAPTER 5: CE-HRD EVALUATOR PREREQUISITES	27
5-1. Application Process.....	27
5-2. Lead Evaluator	28
APPENDIX A: FULL-SIZED FORMS	29
APPENDIX B: SCENE SAFETY ESTABLISHMENT CHECKLIST	37
APPENDIX C: US&R CODE OF CONDUCT	39
APPENDIX D: GLOSSARY OF TERMS	41

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Index of Figures

Figure 1: Location of Bark Props.....	12
Figure 2: Course Layout / Canine Directability Diagram.....	15

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CHAPTER 1: INTRODUCTION

1-1. Mission Statement

The mission of the FEMA National Urban Search and Rescue (US&R) Response System (the System) Canine Subgroup is to assist System task forces in the acquisition, training, certification, and maintenance of Canine Search Teams (CSTs).

Note: Interpretations and clarifications of this document shall be made by the Canine Subgroup (CSG). Any system maintenance issues shall be received by the CSG.

1-2. Objectives

The objectives for a standardized Canine Search Team-Human Remains Detection (CST-HRD) Certification process are as follows:

- Provide a uniform and objective process to determine the current skill levels of CST-HRD in the System.
- Provide score sheets to the respective task forces regarding the observations made during the evaluation. This information can be used for further CST-HRD development and improvement. (It is intended that the respective Search Team Managers and Canine Coordinators/Managers will be involved in the process.)
- Maintain a current roster of certified CST-HRD.

1-3. Evaluation Documents

The CST-HRD Certification Handbook

- **Certification Evaluation (CE) Descriptions** – Chapter 2
- **CE Performance Criteria and Evaluation Form Guidelines** – Chapter 3, Section 6
- **Full-Sized Forms** – Appendix A
- **Scene Safety Establishment Checklist** – Appendix B
- **US&R Code of Conduct** – Appendix C
- **Glossary of Terms** – Appendix D

1-4. Definitions

- **Bark Props** – Items used to conceal human remains used to test the canine to perform the bark indication.
- **Canine Search Specialist (CSS)** – A rostered handler who has completed the Canine Search Specialist Course

- **Canine Search Team-Live Find (CST-LF)** – A certified CST-LF team is comprised of a search canine and a handler who have successfully attained CST-LF Certification, which includes successful completion of the Foundation Skills Assessment-Live Find (FSA-LF) and the Canine Search Team Certification Live Find (CE-LF).
- **Foundation Skills Assessment-Live Find (FSA-LF)** – An assessment of the basic disaster search skills that is used to determine the team’s next step in the evaluation process.
- **Canine Search Team Certification Evaluation-Live Find (CE-LF)** – An evaluation of the minimal skills identified as necessary for a team to operate in disaster environments.
- **Canine Search Team Certification Evaluation-Human Remains Detection (CE-HRD)** – An evaluation of the minimal skills identified a necessary for a team to operate in disaster environments.
- **Canine Search Team Certification Preparation-Live Find (CP-LF)** – An event that utilizes all of the resources for a CE-LF in order to prepare and maintain teams for certification.
- **Hosting Agency** – A task force which sponsors a canine event in conjunction with FEMA.
- **Event** – Any training, evaluation, deployment, or gathering that is sponsored, sanctioned, or authorized by FEMA.

1-5. Process/Implementation

- The Canine Search Specialist (CSS) must be rostered on a System task force.
- The canine shall be a minimum of 18 months old before participating in the CE-HRD.
- CE-HRD evaluators shall be selected from the FEMA CE-HRD Evaluator Roster. Elements I, III, and IV may be selected from the FEMA CE-LF Evaluator Roster.
- Two rostered evaluators OR one rostered evaluator and the sponsoring task force Canine Coordinator (or his/her designee) will administer the CE-HRD, which will be valid for three years.

The Canine Coordinator/designee must meet the following requirements:

Canine Handler

- Must be rostered on a System task force
- Must have been a certified CSS for at least three years
- Must have completed the Canine Search Specialist Training Course

Non-Canine Handler

- Must be rostered on a System task force
- Must have been a Search Team Manager for at least three years
- Must have completed the Canine Search Specialist Training Course

- Site requirements have been determined and are described in Chapter 3.

1-6. Code of Conduct

- All participants in the event must abide by the US&R Code of Conduct.
- Violation of the Code of Conduct may result in loss of certification, loss of evaluator status, and/or referral to appropriate authorities.

1-7. Aggression Policy

Each sponsoring organization shall be responsible for assuring that aggressive behavior is modified, or the canine shall not be eligible to participate in events.

I. Definition

Canine aggression is an attempted or actual unprovoked attack on another canine or person. A canine may also be evaluated as aggressive if it exhibits significant warning signs of imminent unprovoked attack (continuous growling, snarling, fear-barking, etc.).

II. Policy

Canine aggression toward people and/or other canines is unacceptable.

III. Repercussions

In the event that a canine demonstrates aggressive behavior at any CE-HRD, the following procedures will be followed:

- **Canine Attacks a Person** – Upon an unprovoked attack, the canine will be removed from the CE-HRD. The evaluator will forward an account of the attack to the Canine Subgroup. The Canine Subgroup will immediately notify the Task Force Representative of the incident and forward findings at the conclusion of the review process. The canine is not permitted to participate in a CE-HRD during the review process.

- **Canine Attacks Another Canine** – If a canine attacks another canine at a CE-HRD, the evaluator shall immediately review the incident and determine if the canine will be allowed to continue. The evaluator will forward an account of the attack to the Canine Subgroup. The Canine Subgroup will immediately notify the Task Force Representative of the incident. The canine is not permitted to participate in a CE-HRD during the review process.

1-8. Evaluation Guidelines

- The hosting task force has the option of administering the CE-HRD as a segmented evaluation. Elements I, III, and IV may be administered separately from Elements II and V, but the testing team must complete these elements within six months of the completion of the original test of Elements I, III, and IV.
- Element II may be offered during element V if a human remains source is unavailable when Elements I, III, and IV were offered.
- A CST-HRD that has passed Elements I, III, and IV within the previous six months at a CE-HRD, may take Elements II and V, if offered, at any subsequent CE-HRD. This option must be approved by the team's task force.
- Elements I, III, and IV may be evaluated by a rostered CST-LF evaluator in place of a rostered CST-HRD evaluator, Canine Coordinator, or designee.
- The team must successfully complete all required skills in Elements I-V of the CE-HRD. If a team fails one of the following skills during the obedience element: heeling, emergency stop, or long down/wait, a single opportunity to re-attempt the failed skill will be permitted on the same day. This skill must be re-tested and successfully completed prior to allowing the team to proceed to the rubble portion of the evaluation.
- The team must also complete five of the six obstacles listed in the Agility Element of the CE-HRD, including the four mandatory obstacles.
- The evaluators must reach a majority consensus.
- Evaluations will be recorded on the appropriate score sheet.
- At the conclusion of the process, the evaluation and comments will be reviewed with the respective CSS.
- Copies of the completed CE-HRD score sheets will be forwarded to the CSS, the Canine Coordinator, and the CSG Leader.
- The evaluator will submit an After Action Report (AAR) to the CSG Leader within ten days of the search portion of the CE-HRD.

- When a CST-HRD has successfully completed the CE-HRD, the team must recertify within three years of its last certification month. Failure of a CE-HRD attempt within the three year certification period will result in the immediate loss of certification, regardless of the team's original certification expiration date. No certification extensions or grace periods will be granted.

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CHAPTER 2: CANINE SEARCH TEAM CERTIFICATION EVALUATION-HRD (CE-HRD)

2-1. Ground Rules

- No training aids (balls, food, toys, etc.) shall be allowed, except where specified.
- A toy reward is allowed on the rubble and at the indication station.
- No collars or search vests are permitted on agility or rubble search exercises.
- Muzzles are not permitted in any phase of the evaluation process.
- No short lead, traffic lead, training tab, or other weighted object may be attached to the collar at any time.
- No prong, choke, or electronic collars will be allowed.
- No practice on any element will be permitted before the test.
- The handler must maintain control of the canine at all times.
- Abuse (e.g., physical, mental, verbal, etc.) of the canine is not acceptable at any time.
- The handler is responsible for the care and safety of the canine at all times.
- Safety procedures will be followed. The following safety gear is required for the rubble site:
 - Helmet
 - Gloves
 - Long pants
 - Long sleeved shirt
 - Eye protection
 - Safety toe, steel shank safety boots
 - Knee protection
- Aggression will not be tolerated at any time.
- All testing teams may complete all five elements if time allows unless excused by consensus of the evaluators for reasons of aggression, lack of safety or control, injury, at handler request, or for failing two or more of the first four elements.

2-2. Evaluation Procedures

- The evaluators shall determine the testing area.
- A non-testing, CST-HRD shall pre-test all elements.

- Rescue and medical capabilities must be readily available.
- Any accident/injury shall be reported immediately to the evaluator or his/her designee.

CHAPTER 3: ELEMENT DESCRIPTIONS

3-1. Element 1 - Obedience

I. Rationale

The canine should be under the control of the handler, capable of heeling through crowds, and non-aggressive to people and other canines. For its own safety, the canine must respond to an emergency stop command. The purpose of the long wait is to evaluate the reliability of the canine to remain in place when the handler is out of sight.

II. Required Skills

- Non-aggressive to stranger
- Non-aggressive to canine on Figure 8
- Heels through crowd, with turns and changes of pace
- Demonstrates emergency stop
- Stays on long wait for five minutes

III. Aggression Testing

The handler ties the canine and leaves it unattended. The handler then proceeds to a designated area out of the canine's sight. After a minimum of one minute out of sight, a stranger unties the canine and returns the canine to the handler.

A CST-HRD completes a Figure 8 around two testing team handlers with their canines (post team) on lead, sitting at their side and spaced about eight feet apart. Non-testing teams may be used if fewer than three teams are testing. The testing team shall complete the pattern, which will include a reverse change in direction, on loose lead, passing within two feet of each of the post teams. During the exercise all three canines will be evaluated for aggression.

IV. Heeling

The CST-HRD must perform the following commands as directed while heeling off lead through a group of no fewer than five milling people; evaluators may be used as millers at the discretion of the evaluators. Heeling is defined as the canine maintaining position at either side of the handler so as to be attentive to the handler and under his/her control. Additional or repetitive commands are acceptable.

- Right turn
- Left turn

- About turn
- Halt
- Change of pace (normal, fast, slow)

V. Emergency Stop

The canine shall be placed on a stay command 25 yards from the handler. Upon direction from the evaluator, the handler shall call his/her canine. The handler will then stop the canine when directed by the evaluator. Once the stop command has been issued, an immediate change in gait is required; and the canine must then come to a stop. The canine may drop, sit, or stand. The handlers may give multiple commands. The canine shall remain stationary until released or recalled by the handler at the direction of the evaluator.

VI. Long Wait

The canine may be placed next to the handler's pack and will be placed five feet away from any other canine. The lead must be removed from the canine and may not be placed in front of the canine. Upon direction from the evaluator, the handler shall give the canine the wait command, and the handler will proceed to a designated area out of the canine's sight. The canine must be under the supervision of a monitor.

Time starts when the evaluator states "leave the canine". The canine may sit, stand, or shift position, but shall not move more than a body's length in any direction from the location in which the canine was placed until the handler returns to the canine. After five minutes, the evaluator will direct the handlers to return to the canines. If needed, handlers may hand signal the canines to stay while returning. The exercise is complete when all handlers have returned to their canines and the evaluator states "exercise complete". No release will be allowed by any team until the "exercise complete" command has been issued.

Evaluators should take into consideration the comfort of the canine (i.e., they should not select a place that is too hot, located on anthills, etc.). An effort should be made to set up the exercise so that the handlers walk away from the canines from the front as opposed to going behind the canines. If a canine breaks down or becomes overly disruptive, an Evaluator may quietly lead the canine away from the others.

3-2. Element 2 - Odor Recognition and Bark Indication

I. Rationale

In disaster search, a strong independent bark indication on a human remains source is the only indication method that can be recognized when out of sight. With this information, the Search Team Manager can request other resources as needed to confirm the scent location.

II. Required Skills

- The canine must recognize the bark prop that contains the human remains source, which will be one of three.
- The canine may investigate all of the bark props, but must remain at the correct bark prop after the handler indicates the 30 seconds is to begin, by raising his/her hand or verbalizing. The time may be started any time after a bark. The canine may re-position around the prop; however, it cannot move away from the bark prop once the handler calls it as an indication of human remains scent.
- The canine must perform a “focused bark indication” for 30 seconds. (A minimum of three barks is required. (The barks may be interspersed with digging and attempts to penetrate.).)
- The handler does not communicate with the canine after the detection of scent.

III. Handler Information

The team will have five minutes to perform the exercise. The marked starting point will be a line paralleling the bark props for 50 feet and 25 yards from the front of them. The handler may move anywhere behind this line. The handler will remove the canine’s leash before the exercise begins. The canine may be given a hand signal and voice command to send the canine to the bark props. If the canine does not go directly to the bark props, the handler may use additional commands, as necessary, to direct the canine to the bark prop location. The location of the victim will be unknown to the testing handler(s).

The handler may direct the canine toward the bark prop area; but once the handler has informed the evaluators, by raising his/her hand, that the canine has detected human remains scent, the handler may not communicate with the canine in any way. Once the canine has committed to the human remains bark prop, it must remain focused, stay at the human remains bark prop, and demonstrate an “independent of handler” bark indication for thirty (30) seconds. (A minimum of three barks is required. The barks may be interspersed with digging and attempts to penetrate.)

Two official timers will participate in the exercise. One timer will begin timing the exercise as soon as the handler sends the canine. The second timer will time the 30-second indication, after a bark and when the handler informs the evaluators that the canine is indicating the human remains bark prop. The handler will be told when he or she may go to the canine. The canine will not be allowed to access the human remains source. When the exercise has been completed, the handler may reward the canine, then leash the canine and quickly leave the area.

IV. Construction and Location of Bark Props

Three identical bark props will be positioned in as isolated an area as the site permits. The bark props should be made/constructed of materials that provide the optimum control of scent (example: barrels, concrete sewer pipe, etc.). Ideally, scent should be detectable from the front only. A slightly recessed, snug fitting cover with holes at the bottom for scent to escape should be in place. This cover may have a handle/grab bar on the inside for the victim to hold, or it may be secured in place.

The starting line shall be measured and clearly marked. This distance is to be 25 yards from the starting line to the bark props, paralleling the front of the props for 50 feet. The bark props should be placed in a straight line and spaced 20 feet apart as indicated in Figure 3-1.

Evaluators must have a clear view of the canine's work, and there shall be no known distractions placed in the search area.

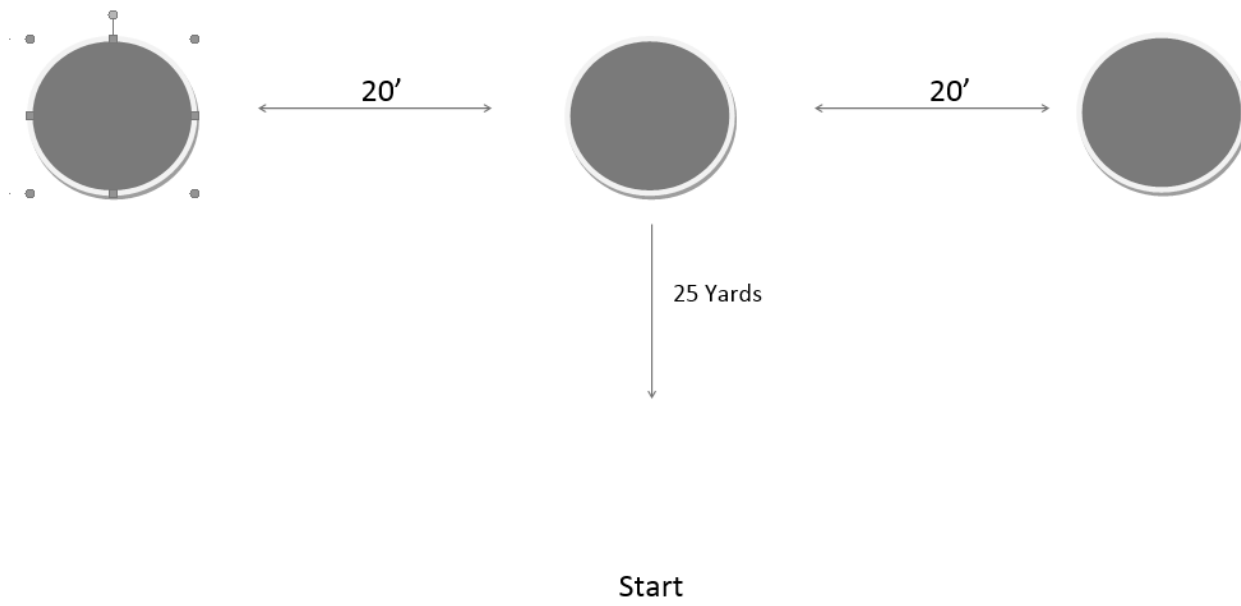


Figure 1: Location of Bark Props

V. Human Remains Source Placement

A human remains source will be placed in any **one** of the three human remains bark props at least ten minutes before the canine is sent. The other two bark props will not contain any placed scent. Effort should be made to ensure that there is no residual scent of any kind in the two negative bark props.

VI. Human Remains Source Material

- The permitted weight range of human remains source material is a minimum of 30 grams and a maximum of 300 grams.
- Bone only, teeth only, hair only, and pseudo aids will not be used.
- Human remains sources must be identified on the Evaluation Score Sheet indicating description and weight of material.

3-3. Element 3 - Direction and Control

I. Rationale

In order to search areas that the handler may not access, or to avoid hazardous areas, the canine must demonstrate the ability to be directed and controlled by the handler. The canine should respond to audible and/or visual signals.

II. Required Canine Skills

- Ascends each required elevation at the direction of the handler
- Waits on elevation until directed by handler

III. Handler Information

The handler will remove the canine's leash before the exercise begins.

The handler is responsible for counting the five seconds that the canine must remain on the target obstacle. The evaluator may intervene to assist at his/her discretion. If the canine is anticipating the "off" command, the evaluator will not intervene. If the element is showing an overall lack of control, the evaluator will not intervene.

IV. Directability

On the first go out, the canine must ascend a specified elevation without stepping onto any other elevation. The handler may stop the canine and redirect or recall the canine and restart as many times as time allows. If the canine ascends the incorrect elevation first, the canine must be recalled and restarted. This rule applies to the first direction only. After beginning the course, if the canine returns to the handler and crosses the start line (or is touched by the handler), the canine must start over. If the canine goes to the wrong elevation any time after the first go-out, the canine must go back to the last correct elevation and proceed from there.

The team will have three minutes to complete the course. The evaluators will designate the elevation to which the canine shall be sent (right, left, or center). The handler will direct the canine to a series of elevations. The pattern will include a go-out, a right, left, go-

back, and recall. The canine must ascend the elevations and remain there for five seconds. The canine may sit, stand, or lie down. The handler may issue multiple commands.

The canine will be directed to ascend four or five designated elevations and stay for five seconds on each elevation, ending the exercise with a recall to the handler. (See the Canine Directability Diagram displayed in Figure 3-2.) Diagonals will only be used to and from the starting position.

V. Course Layout and Construction

- The course shall consist of an appropriately-sized area in which to perform the identified exercises and be cleared of hazards and distractions to the canine.
- The course will be configured in a diamond shape. The area should be as uncluttered as possible (approximately 75 yards clear). The start shall be an eight foot base line or starting line that is clearly marked. (See Figure 3-2.)
- The center elevation shall be 25 yards from the base of starting line. All other elevations shall be 25 yards from the center elevation.
- The elevations should be clearly visible to the canine. Elevations should be approximately 36 inches x 24 inches in size, 15 inches to 30 inches high, and stable. The purpose is to provide simple, stable, distraction-free targets on which to demonstrate directability skills.
- The elevations may consist of two or three different types of objects or they may be uniform in structure.

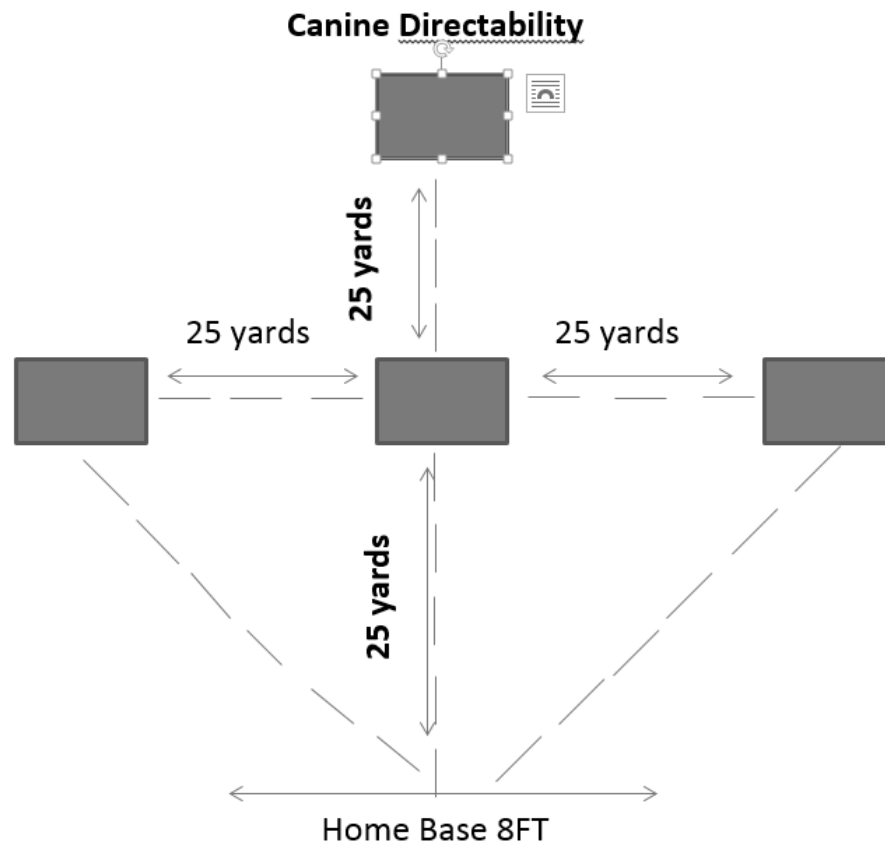


Figure 2: Course Layout / Canine Directability Diagram

3-4. Element 4 - Agility

I. Rationale

Agility training allows the canine to develop confidence on the rubble. The canine should be able to search the rubble without being overly concerned about its safety.

II. Required Skills

- Completes five of six obstacles, including the four mandatory obstacles
- Demonstrates stop and turn on any obstacle
- Precedes handler

III. Handler Information

- The agility course will include the following obstacles:
 - Ladder
 - Elevated plank
 - Unsteady/wobbly surface
 - Tunnel

- The team shall have five minutes to complete the agility course.
- The handler will be directed to the clearly-marked beginning of the course. The handler shall remove the canine's collar and leash before starting. The course should be run in the sequence as numbered. However, if a canine refuses an obstacle, at the handler's discretion, the team may complete the course and re-attempt the obstacle in the remaining time. The canine should work as independently as possible following the handler's direction. Multiple commands are permitted.
- The canine should negotiate the obstacles confidently and carefully.
- The canine should negotiate the obstacles under handler control.
- If the handler precedes the canine, the evaluator will instruct the handler to restart the canine on the obstacle. The handler may lift the canine off the obstacle or turn it around to restart.
- The handler may slow, stop, or encourage the canine as needed, and may assist the canine, if needed, for safety reasons. Any physical assistance will require a restart of the obstacle.
- The handler shall demonstrate his ability to command the canine to stop and turn, which will be performed on any elevated obstacle (not on the support) and in full view of the evaluators (i.e., not in the tunnel).
- The handler is responsible for the welfare and safety of his canine. If this ground rule is compromised, the evaluator(s) may intercede with a warning and/or termination of the element or the evaluation for that team. The handler should not use an unreasonable number of attempts when the canine is obviously unable or unwilling to comply. The canine should be willing to negotiate unfamiliar obstacles based on his training and his confidence in his handler.
- The canine will be judged on negotiating the ladder by going up only. How the canine exits the obstacle is at the discretion of the handler.
- The goal is to demonstrate the canine's ability to perform the required skills as well as the canine's confidence in the handler and willingness to undertake unfamiliar agility obstacles.

IV. Obstacles (* denotes mandatory completion)

- *The Little Giant ladder (or the ladder on the FEMA cache list) extended to 8.5 feet, secured at an approximate 45-degree angle
- *A plank elevated at least six feet and no more than eight feet off the ground (The 12 inch wide by 12 foot long plank is to be stable.)
- *An approximately three foot high, unsteady, wobbly surface constructed by covering four sawhorses with a four foot by eight foot sheet of 5/8 inch plywood. A variety of debris items shall be placed on top of the plywood, not to exceed two feet in height and constructed to provide access to the canine either by walking up an incline or by jumping no more than three feet high.
- *A dark, narrow tunnel/passageway containing at least one right-angle turn. The canine should not be able to see through to the end of the tunnel. Partial covering of the exit is permitted. The canine should be able to fit into the tunnel without crawling.
- A seesaw (a 16 foot long by 12 inch wide plank placed on a 55 gallon drum)
- A slick, slippery/unpleasant surface
- A moving plank (12 feet long by 12 inches wide) suspended on two barrels
- An object that requires the canine to crawl on its belly (must be adjusted to approximately one half the height at the withers of each canine)

V. Obstacle Placement

- The course shall be constructed to include six of the obstacles listed above.
- The course may be set up as six separately constructed obstacles or as a combination. If two or more obstacles are combined, the canine must have the opportunity to complete each of the obstacles independently. The obstacles must be designed to test the canine on the elements described.
- The course must be designed in such a way that the canine can precede the handler.
- Obstacles should be clearly numbered.
- The following obstacles must be included in the course:
 - Ladder
 - Elevated plank
 - Unsteady, wobbly surface
 - Tunnel

3-5. Element 5 – Rubble Site

I. Rationale

The rubble search demonstrates the ability to integrate all of the previously evaluated elements into an effective search team.

II. Required Skills

A. Handler Tasks

- Establishes scene safety
- Informs evaluators of canine's bark indication/location of each human remains source
- Negotiates the rubble in a safe manner and without the assistance of other personnel
- Demonstrates appropriate canine care, safety, and welfare

B. Canine Tasks

- Responds to handler's direction and control
- Searches independently
- Presents focused bark indicating human remains on two sources with no false indications
- Demonstrates commitment to each human remains source
- Demonstrates agility
- Indicates repetitively and independently of handler

III. Handler Information

- Handler establishes scene safety.
- Scene safety interview may include the following questions:
 - What time did the structure collapse?
 - What type of occupancy was the structure (school, office, apartment bldg., etc.)?
 - What is the number of suspected missing persons?
 - Has this structure been searched before?
 - Has a structural engineer checked the building?
 - What were the findings?
 - Is it safe to enter?

- Are blueprints available?
 - Has Hazmat checked the building and, if so, what were the findings?
 - Have the utilities been secured? How and by whom?
 - Gas
 - Electric
 - Water
 - Is Heavy Rescue available?
 - Is Medical available?
 - Is there a veterinarian available?
- Five minutes shall be allotted for the briefing/interview process. The team shall be allowed 15 minutes to search the rubble for two human remains sources. The handler should inform the evaluators of the search strategy. The handler may not access the rubble site in any areas identified as inaccessible due to safety concerns or those areas that are not part of the search area. The evaluation team will be in attendance during the briefing. Evaluators will then proceed to predetermined locations to view the rubblework before the team's 15-minute time starts.
- One of the evaluators will brief the handler. The briefing will include information regarding any areas that are off limits. These areas will be clearly marked and will not contain human remains sources.
- The handler will remove the canine's collar and leash. The handler may direct the canine to search but shall not encourage the canine's indication. The canine will be required to perform the first bark indication out of sight before the handler can enter the search area.
- The handler may not touch any evaluation props or move any debris in the search area.
- The evaluation procedure is as follows:
 - The handler will send the canine on an independent search from the pre-determined starting point. When the handler hears the canine barking, or is advised by an evaluator that the canine is barking, the handler shall notify the evaluator of the indication (at least three repetitive barks). The evaluator then instructs the handler to go to the canine. The handler may now verbally praise and encourage the canine. The handler must proceed directly and safely to the area indicated by the canine.
 - The handler will promptly identify the human remains source by interpreting the canine's actions. On the first indication, if the handler is unable to quickly locate the human remains source by the canine's actions, he/she must immediately leave the site at the direction of the evaluators and restart the search from the starting point. The canine does not need to return to the starting point. At this point, the indication process (the three bark requirement) starts over. After

identifying the area of the first indication, the handler will have full access to the search area and may direct/control the canine for the remainder of the allotted time. The handler may reward the canine with a toy or food on the rubble.

- The bark indication consists of a minimum of three barks at the same human remains source. If a handler verbally communicates with his canine between the first and third bark, the team loses that human remains source. Barking may be interspersed with digging, scratching, or any other attempt to get to the human remains source. The canine may reposition itself while indicating at the human remains source location. If the canine leaves the human remains source location before barking three times, the indication process (the three bark requirement) starts over.
- The handler shall flag/mark the finds as indicated by the canine, unless the handler declares a false indication. Once an indication has been marked, it is final.
- The handler must perform a physical assessment of the canine after the search.
- The handler may reward the canine with a toy on the rubble
- The handler shall have five minutes to debrief to the evaluators after the search time is completed, or after the handler calls the search complete.

IV. Course Construction

- New, unused human remains source locations should be created for the evaluation. They shall be located in areas that are out of the handler's sight. The evaluators must have a clear view of the canine's work.
- No distractions will be purposefully placed within the search area.
- The rubble site shall have a minimum average height of 10 feet and consist of an area of 5,000 to 8,000 square feet. The intention is to provide criteria to adjust the footprint of the pile based on its complexity and height, with more complex rubble reduced in square footage and less complex rubble increased in square footage. It should consist predominantly of concrete or of a mixture of materials common to disaster sites. Banner tape is to be used to reduce the search area when larger rubble sites are being used.
- Site will be accessible at only one well-marked portion of the perimeter and located where the handler cannot see the canine indicating.

V. Human Remains Source Placement

- The human remains source shall be concealed from both handler and canine.
- The human remains source will be separated by a minimum of 20 feet.

- The hiding areas shall be constructed to prevent canines from accessing the human remains source.
- The hiding areas should be inaccessible to canines, not visible to handlers, and no more than three feet below the surface. The scent should be contained, and every effort should be made to control the scent flow.
- The human remains source must be in place for at least 20 minutes before the canine is sent.

VI. Human Remains Source Material

- Human remains source material must consist of tissue or of bone and tissue. The permitted weight range of human remains source material is a minimum of 30 grams and a maximum of 300 grams.
- Bone only, teeth only, hair only, or pseudo aids will not be used.
- Human remains sources must be legally acquired and be identified on the score sheet, indicating description and weight of materials.

3-6. Performance Criteria and Evaluation Form Guidelines

The evaluators shall consider the following list of key skills when determining the team's success for each of the elements.

I. Ground Rules

Handler is required to follow all ground rules.

- **Did Not Complete** – Handler did not follow all ground rules.
- **Completed** – Handler followed all ground rules.

II. Canine Obedience

A. Non-aggressive to stranger in absence of handler

- **Did Not Complete** – Demonstrates aggression
- **Completed** – Does not demonstrate aggression

B. Non-aggressive to canine on Figure 8 pattern

- **Did Not Complete** – Demonstrates aggression
- **Completed** – Does not demonstrate aggression

C. Heels through crowd, with turns and change of pace

- **Did Not Complete** – Does not maintain heel, is distracted
- **Completed** – Maintains heel, is attentive to handler

D. Emergency Stop

- **Did Not Complete** – Does not show an immediate change in gait and does not stop
- **Completed** – Shows immediate change in gait and stops

E. Long Wait for five minutes

- **Did Not Complete** – Does not stay within the designated area
- **Completed** – Stays within the designated area (additional commands allowed)

III. Odor Recognition and Bark Indication Station

A. Canine barks (at least three barks) and remains focused for 30 seconds.

- **Did Not Complete** – Does not bark (at least three barks) and remain focused for 30 seconds
- **Completed** – Barks (at least three barks) and remains focused for 30 seconds

B. Canine stays at the human remains bark prop after detection of scent.

- **Did Not Complete** – Leaves after indication
- **Completed** – Stays after indication

C. Canine indicates independently of handler and remains focused for 30 seconds.

- **Did Not Complete** – Does not indicate independently, does not remain focused for 30 seconds
- **Completed** – Indicates independently and remains focused for 30 seconds

D. Handler does not communicate with the canine after detection of scent.

- **Did Not Complete** – Handler communicates after detection of scent.
- **Completed** – Handler does not communicate after detection of scent.

IV. Direction and Control

A. Ascends elevation and completes pattern

- **Did Not Complete** – Does not go up on elevations and complete pattern
- **Completed** – Goes up on elevation and completes pattern

B. Waits to leave elevation until directed by handler

- **Did Not Complete** – Does not wait to leave elevations until directed
- **Completed** – Waits to leave elevations until directed

V. **Canine Agility**

A. Completes required obstacles under handler's control

- **Did Not Complete** – Does not complete five obstacles (including the four required)
- **Completed** – Completes five or more obstacles (including the four required)

B. Canine precedes handler

- **Did Not Complete** – Handler precedes the canine.
- **Completed** – Handler directs canine over obstacle without preceding canine.

C. Demonstrates "stop" and "turn".

- **Did Not Complete** – Does not demonstrate behavior
- **Completed** – Demonstrates behavior

VI. **Rubble Site**

A. Handler establishes scene safety.

- **Did Not Complete** – Does not complete scene safety
- **Completed** – Completes scene safety

B. Handler demonstrates canine care/safety/welfare.

- **Did Not Complete** – Does not demonstrate canine care/safety/welfare
- **Completed** – Demonstrates canine care/safety/welfare

C. Canine is responsive to handler direction and control.

- **Did Not Complete** – Does not respond to commands
- **Completed** – Is responsive to commands

D. Canine searches independently.

- **Did Not Complete** – Does not search independently
- **Completed** – Searches independently

- E. Canine makes focused indication on two human remains sources with no false indications.
- **Did Not Complete** – Does not bark repetitively (at least three barks) and/or makes false indications
 - **Completed** – Barks repetitively (at least three barks) at human remains sources with no false indications
- F. Canine displays focused commitment to each human remains source.
- **Did Not Complete** – Loses interest in human remains source
 - **Completed** – Maintains interest in human remains source
- G. Canine indicates independently of handler.
- **Did Not Complete** – Does not indicate independently of handler at human remains source
 - **Completed** – Indicates independently of handler at human remains source
- H. Handler informs evaluators of canine's indication/location of each human remains source.
- **Did Not Complete** – Does not recognize indication and/or cannot identify human remains source location by the canine's actions
 - **Completed** – Recognizes indication, correctly identifies location of human remains source by the canine's actions
- I. Handler identifies and marks human remains source.
- **Did not Complete** – Does not identify and mark each human remains source
 - **Completed** – Identifies and marks each human remains source
- J. Canine demonstrates agility/ability to negotiate rubble.
- **Did Not Complete** – Does not negotiate the rubble in a safe manner
 - **Completed** – Negotiates the rubble in a safe manner
- K. Handler demonstrates agility/ability to negotiate rubble.
- **Did not Complete** – Does not negotiate the rubble in a safe manner and without assistance
 - **Completed** – Negotiates the rubble in a safe manner and without assistance

CHAPTER 4: EVALUATION PLANNING/LOGISTICS

The following information is supplied to administer the CE-HRD.

4-1. Personnel

I. Incident Commander

The Incident Commander shall be identified.

II. CE-HRD Evaluator Team

This team consists of the following personnel:

- Two rostered HRD evaluators

OR

- One rostered HRD evaluator and the sponsoring task force Canine Coordinator/designee

The evaluator will be designated by the host and must be a rostered HRD evaluator.

The Canine Coordinator/designee must meet the following requirements:

- Canine Handler
 - Must be rostered on a System task force
 - Must have been a Canine Search Specialist for at least three years
 - Must have completed the Canine Search Specialist Training Course
- Non-Canine Handler
 - Must be rostered on a System task force
 - Must have been a Search Team Manager for at least three years
 - Must have completed the Canine Search Specialist Training Course

Elements I, III, and IV may be evaluated by a rostered CST-LF evaluator in place of a rostered CST-HRD evaluator or designee.

Evaluators may not test and evaluate in the same event.

III. Lead Evaluators

The roles and responsibilities of lead evaluators include the following:

- Responsible for all evaluators and shadows
- Approve the human remains source locations

- Responsible for a consensus of pass/fail for each team
- Forward CE-HRD results to the Canine Subgroup
- Ensure that the Safety Officer understands his/her role:
 - Where to stand on the pile
 - Removing flagging tape/markers

The current roster of qualified evaluators is maintained by FEMA.

No evaluator may evaluate a spouse, ex-spouse, parent, sister, brother, or significant other.

IV. Support Personnel:

- Medical and veterinary service (must be readily available)
- Safety Officer
- Logistics Officer
- Staging Officer
- Timers
- Communications Officer
- Milling people

4-2. CE-HRD Criteria for Rubble Element

New, unused human remains source locations should be created for the evaluation. Evaluators must have a clear view of the canine's work.

The rubble site shall consist of an area of 5,000 to 8,000 square feet. It should consist predominantly of concrete or of a mixture of materials common to disaster sites. Banner tape is to be used to reduce the search area when larger rubble sites are being used.

CHAPTER 5: CE-HRD EVALUATOR PREREQUISITES

Note: All applications to become an evaluator must be approved by the applicant's Program Manager/Training Coordinator and the Canine Coordinator. The number of rostered evaluators is at the discretion of the individual task force.

5-1. Application Process

1. Submit endorsed application to the Canine Subgroup.
2. Upon application approval, request shadow evaluator assignments from CE-HRD hosts.
3. Complete shadow requirements within 18 months of initial application approval date.
4. Become a rostered evaluator by FEMA.

I. Canine Handler

- A. Prior to submitting an application, the candidate must meet the following requirements:
 - Shall be a current System task force member
 - Hold past or current FEMA CST-HRD or CST-LF handler certification
 - Have a minimum three years of experience as a FEMA certified CST-HRD or CST-LF
- B. Upon application approval, the candidate must do the following:
 - Shadow evaluate at least two CE-HRD (minimum ten teams total)
 - Administer a CE-HRD under the supervision of a rostered evaluator
 - Complete the Canine Search Specialist Training Course

II. CE-LF Evaluator

- A. Prior to submitting application the candidate;
 - Shall be a current System task force member
 - Shall be a current or past rostered FEMA CE-LF Evaluator
- B. Upon approval of application, the candidate must do the following:
 - Shadow evaluate at least two CE-HRD (rubble only) (minimum three teams total)

III. Non-Canine Handler

A. Prior to submitting application, the candidate must have held the following positions:

- Must be a current System task force member
- Must have been a Search Team Manager for a period of at least three years

B. Upon approval of application, the candidate must do the following:

- Shadow evaluate at least two CE-HRD (minimum ten teams)
- Administer a CE-HRD under the supervision of a rostered evaluator
- Complete the Canine Search Specialist Training Course

IV. Non-Canine Handler (HRD) CE-LF Evaluator

A. Prior to submitting application the candidate;

- Shall be a current System task force member
- Shall be a current or past rostered FEMA CE-LF Evaluator

B. Upon approval of application, the candidate must do the following:

- Shadow evaluate at least two CE-HRD (rubble only) (minimum three teams total)

5-2. Lead Evaluator

The lead evaluator must be a CE-HRD evaluator and must do the following to maintain status:

- Evaluate at least one CE-HRD every three years
- Attend HRD evaluator conference calls as scheduled
- Receive approval of Program Managers upon their review

APPENDIX A: FULL-SIZED FORMS

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DHS/FEMA National US&R Response System
 Application for Canine Search Team Certification Evaluation-HRD

(Please Type)

(Delivery and receipt of this application does not guarantee acceptance. It is the responsibility of the applicant to ensure acceptance or denial of this application)

CSTCE-HRD Date:	CSTCE-HRD Location:
-----------------	---------------------

Recert: <input type="checkbox"/> Yes <input type="checkbox"/> No	Number of Prior Attempts:
--	---------------------------

Applicant's Personal Information

Name:	Task Force:
-------	-------------

Address:

City:	State:	Zip Code:
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Contact Phone:	Email Address:
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Emergency Contact:	Emergency Contact Phone:
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Canine Information

Canine's Name:	Breed:	Indication: <input type="checkbox"/> Bark <input type="checkbox"/> Passive
----------------	--------	--

DOB:	Date of Rabies Vaccination:
------	-----------------------------

My canine and I are physically sound and are currently under no restrictions. I understand and accept that the decisions of the evaluators are final. I affirm that I have read, understand and will abide by the DHS/FEMA/US&R Code of Conduct and understand that violation of said rules and Code of Conduct may result in loss of certifications, loss of evaluator status and/or referral to the appropriate authorities. I further affirm that I understand that abuse of the canine is not permitted at any time.

Applicant Signature:	Date:
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The above team is in compliance with the DHS/FEMA policy on aggression and is approved to participate in this evaluation.

Task Force Approval

Program Manager/Training Coordinator	Canine Coordinator
--------------------------------------	--------------------

_____	_____
(Signature)	(Signature)

_____	_____
(Printed Name)	(Printed Name)

Date:	Date:
-------	-------

Address: _____	Address: _____
_____	_____
_____	_____

Email:	Email:
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Phone:	Phone:
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FEMA

DHS/FEMA National US&R Response System
Canine Search Team Certification Evaluation-HRD Score Sheet

Date: _____

Name of Handler: _____

Name of Canine: _____

Task Force: _____

Location: _____

Evaluator (print): _____

Evaluator (signature): _____

Handler has successfully completed all elements per the CSTCE-HRD: Yes No Indication: Bark Passive

Element	Required Skills	C	DNC	Comments				
Ground Rules	Handler followed all ground rules							
Obedience	Human aggression test							
	Canine aggression test							
	Off-lead heeling							
	Emergency stop							
	Long wait							
Indication Station	Barks repetitively and stays focused for 30 seconds							
	Stays at the HR source location/Bark Prop after indication of scent							
Time - 5 min	Handler does not communicate with canine after indication of scent							
Direction and Control	Goes up on elevation							
	Waits on elevation until directed by handler							
Time - 3 min	Completes assigned pattern							
Agility Time - 5 min	Must complete five (5) of six (6) obstacles, including the four (4) mandatory obstacles (Ladder, Plank, Tunnel, Wobbly Surface)	Order	Obstacles		K9 Precedes Handler		Stop, Turn On Any Obstacle	
			C	DNC	C	DNC	C	DNC
	*Ladder							
	*Elevated Plank							
	*Tunnel							
	*Wobbly Surface							
	See Saw							
	Slick Surface							
	Crawl							
Moving Plank								
Rubble Test		C	DNC	Interview Items		C	DNC	
Brief Time - 5 min	Handler scene safety/interview			Scene safety?				
	Canine is responsive to handler direction and control			Other Questions		Noted		
	Canine searches independently			Time of collapse?				
Search Time - 15 min	Team finds two (2) scent sources (no false indications)			Type of occupancy?				
	Canine shows commitment to each scent source			Suspected missing?				
	Handler informs evaluators of canine's indication/location of each scent source			Searched before?				
	Canine indicates independently of handler			Structural Eng. Check?				
	Handler demonstrates appropriate canine care/safety/welfare			Findings?				
	Canine agility/ability to negotiate rubble			Safe/Entry?				
	Source 1 Time: _____ Source 2 Time: _____ Total Time: _____			Prints?				
Source 1: Type _____ Amount _____								
Source 2: Type _____ Amount _____								
Comments: (please use separate sheet for more comments if necessary)				HazMat checked?				
				Findings?				
				Utilities: who/how secured?				
				Gas Elec Water				
				Rescue?				
				Medical?				
Vet?								

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FEMA

FEMA National US&R Response System
Canine Search Team Certification Evaluation-HRD Evaluator Application **(Please Type)**

Applicant's Personal Information

Date of Application:	Task Force:	
Name:		
Address:		
City:	State:	Zip Code:
Contact Phone:	Email Address:	

Prerequisites

1.	<input type="checkbox"/> FEMA Certified Canine Search Team HRD/LF for three years.
	<input type="checkbox"/> OR Search Team Manager for three years.

Upon Approval of Application

	Upon Approval of Application	Date	Location
1.	Shadowed Two HRD CE's		
2.	Administered a CE-HRD		
3.	CSST (may be completed prior to approval)		
4.	Rostered by DHS/FEMA		

I affirm that I have read, understand and will abide by the FEMA/US&R Code of Conduct and understand that violation of said rules and Code of Conduct may result in loss of certifications, loss of evaluator status and/or referral to the appropriate authorities. I further affirm that I understand that abuse of the canine is not permitted at any time.

Applicant Signature:	Date:
----------------------	-------

Task Force Approval

The Program Manager/Training Coordinator and Canine Coordinator recommend the applicant for Evaluator.

Program Manager/Training Coordinator	Canine Coordinator
_____	_____
(Signature)	(Signature)
_____	_____
(Printed Name)	(Printed Name)
Date:	Date:
Address: _____	Address: _____
_____	_____
_____	_____
Email:	Email:
Phone:	Phone:

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APPENDIX B: SCENE SAFETY ESTABLISHMENT CHECKLIST

Time of the collapse:	Date/Time
Type of Occupancy	Task Force out
Number of Suspected Missing Searched Before?	Date/time In Hazards
Checked by Structural Engineer?	Victims #L/#D
Findings?	● = incomplete search
Safe to enter?	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"><input type="checkbox"/></div> <div style="text-align: center;"><input type="checkbox"/></div> <div style="text-align: center;"><input type="checkbox"/></div> </div>
Prints available?	SAFE TO ENTER SOME HAZARDS DO NOT ENTER
HazMat checked?	
Findings?	
Utilities: Who & How secured?	
Gas	
Electric	
Water	
Heavy Rescue Available	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">V Suspected VICTIM</div> <div style="text-align: center;">Ⓟ Confirmed LIVE</div> <div style="text-align: center;">Ⓢ Confirmed DEAD</div> <div style="text-align: center;">Ⓢ Removed VICTIM</div> </div>
Medical Available?	
Veterinary Available?	

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APPENDIX C: US&R CODE OF CONDUCT

The National US&R Response System Code of Conduct can be found in the US&R Operations Manual.

Below is a summarization of the Code of Conduct, which can be used as a quick reference card. Consult a current copy of the Operations Manual for the latest revision.

<ul style="list-style-type: none">• Respect the value of life and the welfare of victims
<ul style="list-style-type: none">• Demonstrate respect for public and private property
<ul style="list-style-type: none">• Be aware of cultural issues including race, religion, gender and nationality
<ul style="list-style-type: none">• Follow Chain of Command
<ul style="list-style-type: none">• Abide by all DHS/FEMA regulations and AHJ law enforcement practices including the handling of sensitive information
<ul style="list-style-type: none">• Not possess or use any type of firearms
<ul style="list-style-type: none">• Follow DHS/FEMA direction regarding dress code and personal protective equipment
<ul style="list-style-type: none">• Not possess or use alcohol or illegal drugs
<ul style="list-style-type: none">• Procure equipment through appropriate channels
<ul style="list-style-type: none">• Not steal
<ul style="list-style-type: none">• Not accept gratuities
<ul style="list-style-type: none">• Not take personal advantage of any situation and/or opportunity that arises.
<ul style="list-style-type: none">• Demonstrate respect for other assigned personnel

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APPENDIX D: GLOSSARY OF TERMS

Abuse – Physical or psychological maltreatment of the canine

Aggression – An attempted or actual unprovoked attack on another canine or person

Bark Props – Items used to conceal human remains in order to test the canine to perform the bark indication

Care and Safety of Canine – Includes appropriate vet check, offers canine water, stripping of vest and collar while searching

Control of Canine – While remaining in the specified search area (according to the site parameters), the handler is able to recall or halt the canine if the canine enters, or attempts to enter unsafe, site-specific areas. These areas (including the other search site) will be legitimate, real-world hazardous areas and identified in the briefing.

False Indication(s) – Any location incorrectly identified by the handler as human remains source

Indication – A trained behavior exhibited by the canine in response to the odor of human remains. The only acceptable indication is a minimum of three barks

PPE for Rubble Search – Helmet, gloves, long pants/long sleeves, and safety toe/steel shank boots, which must be worn by the handler. Handler must also have eye protection and knee pads on hand, as they may be required by the hosting task force.

Repetitive Barking – Three barks directed at the same human remains source that may be interspersed with digging, scratching, or any other attempt to access the human remains source. The canine may reposition itself while indicating at human remains source location.