



Integrating Search Dog Teams with Ground Operations: What the Searcher Needs to Know

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Introduction:

- Myth #1: *"Dogs always track right from the PLS to the subject"*.
- Myth #2: *"Dogs don't find anyone"*.
- The Truth is somewhere in between. Dogs are just one resource – just like an ATV, ground team, swift water team, or any other resource. They are a good resource if properly trained, and if deployed correctly.

How does the dog team work?

- The dog team is 1 dog and 1 handler.
- The dog's anatomy - 220 million receptor cells in nasal area, compared to 5 million for humans, allows dogs to smell at 500ppt. Olfactory center of brain is 40 times larger than ours. Moisture on nose captures scent, dissolves it, and transmits it to brain. They also "taste" scent through organs in the roof of the mouth. It is their olfactory system that gives them their view and understanding of the world around them.
- What does the dog smell when tracking people? Skin "rafts" – skin cells shed from the body at a rate of 40,000 per minute, with bacteria attached. This is the source of human scent. It rises with the heat of your body and disperses around you, then rising again in the heat and light, and settling in the cool areas.
- Scent discrimination is the dog's ability to distinguish one person's scent from all others, and to locate that person in an area contaminated by other human scent. If you are searching for any human, such as in an avalanche or building collapse, then a dog need not be scent discriminating. But in the case of lost or missing persons, scent discrimination is critical.
- If it's a "team", what does the handler do? The handler uses the environment, such as terrain, and weather conditions (e.g. the action of wind, heat, humidity, etc. on scent) to put the dog in the best position to pick up scent. Thus a team's tactics is largely determined by time of day, terrain, weather, physical structures, etc. Scent moves up to ridges with sun and warmth of day, and down into valleys and drainages at night. It moves toward bodies of water by day, and away at night.
- A handler must be able to "read" their dog, know when their dog is on scent, interpret what dog is doing and "saying," and have enough confidence to trust their dog.
- The "alert" – A dog must be able to give a trained alert to the handler. Some dogs will stay with the subject, sit and bark (typically used by dogs working structural collapse), or the dog may do a "recall and refind", continually going back and forth between the handler and subject until all are together (typical of wilderness teams).

Tracking dog or air scent dog? Is there really a difference?

- Myth #3: *"Dogs are either tracking dogs or air scent dogs"*.
- Truth: They are search dogs! It is true that there are "certifications" (many units prefer to call them "evaluations" in tracking and air scent, but the reality is that "tracking" is when a dog is following a track, usually following scent on the ground, and air scent is working scent that is in the air. However, many good dogs will track when they are able to, and air scent when the opportunity exists. I prefer to train all dogs first to put their nose down and track, because lifting the nose is the dog's natural inclination. After tracking skills are firmly established, I move into air scenting, allowing the dog to lift its nose. Reality – we want our dogs to take the fastest route to the subject, even if they have to air scent to short cut a track. Tracking or air scenting is not a "type" of search dog, it what the dog is doing at that moment to locate or follow a given scent.

In a search, is there a difference between a search and rescue dog and LE K9

- Some law enforcement dogs are suitable for missing person searches, while others are not. Many LE dogs are

trained to track along with their primary mission, usually bite, drugs, accelerant, explosives, etc. But for bite or apprehension dogs, tracking is not their primary mission, only a means to an end. Most departments will not want to use a bite dog to track an innocent missing person, even on leash. Also, there is one basic principle about dogs – the more jobs a dog has to master, the less well he does any one of them.

- Corrections dogs trained in tracking (non-bite) are an excellent resource for search managers.
- Wildlife law enforcement (“game wardens”) dogs are often trained to work older tracks and are also a good resource for wilderness search.
- Patrol or “bite” dogs are trained in hot pursuit (hot tracks); SAR dogs typically work tracks 8-12 hours old or longer. SAR dogs also work off leash in clearing large areas rapidly.
- Since the 2010 decision of the U.S. Court of Appeals for the 4th Circuit, *Melgar v. Green and Montgomery County*, police bite dogs can now be worked on non-criminals only under exigent circumstances, and after an attempt has been made to locate a non-bite dog resource, and then only on a 15” leash or less. That’s fine for urban work, but doesn’t do us much good in a rural or wilderness search.
- Wilderness SAR dogs work off leash, and often travel long distances, sometimes far from the handler, locating the subject and returning to the handler to alert.
- Most wilderness search dogs are a volunteer resource. It is costly to take an officer and dog team off of patrol and use them in an extended search.

What makes a good search dog?

- Myth #4: “A good dog will have made hundreds of finds.” Nothing could be more nonsense! Many good dogs have only a couple finds in their entire career. It’s not whether a dog makes the find, but what they contribute to the whole search effort. The dog that cleared an area and told us that the subject is not there is as important as the crew that made the find.
- Myth #5: “A dog is ‘certified’ so therefore it’s a good dog.” First, there are a number of different organizations, at the national and state levels that provide for dog “evaluations”, but they are not “certifications”. There is no certification required to work a dog (except in Georgia, where it is a misdemeanor to work a search dog without a license from Georgia Emergency Management.). In addition, most evaluations are based on a one-time field test. And these are not reliable because, like people, dogs can have good days or bad days, or they just may have been lucky on that day. Therefore, to really know if a dog is reliable, it should be trained and evaluated on a regular, on-going basis. I believe that the standards of major K9 or rescue organizations are excellent guidelines for SAR dog organizations. However, there is no substitute for the organization maintaining its own written standards for evaluations and training. Local standards can be tailored to the unit, to the local terrain, and to the types of searches the organization commonly works. The standards should be published and available to search managers. But most important, dog teams should be constantly reviewed and evaluated for continuing reliability and effectiveness – and that should not be left to one examination that may have taken place years ago under limited or controlled testing circumstances. One “certification” does not make a qualified search dog or dog team!
- A good search dog team should be reliable and not give false alerts. A handler that incorrectly informs command that a dog showed interest in an area may cause command to unnecessarily put resources there.

Why should search dogs be used? What are they best at?

- Dogs can help determine a direction of travel so we know where to put our resources.
- Can clear larger sectors more quickly than ground teams, and far more effectively than most ATV teams, and given an equal number of crew members, they can do so with a higher POD.
- Effective in finding subjects not likely to call out for help.
- Effective in hasty search of subject’s home and immediate area.
- Can be placed farther out in search area, moving back toward PLS to confine search area.
- Effective at night – and often preferred time of day during the hot days in summer
- Effective in getting off trails and roadways and clearing adjacent wooded areas under handler’s direction.
- Can more easily penetrate dense vegetation, culverts, etc.
- Effective on children or mentally handicapped who may be “hiding from strangers”, or on evasive subjects – they can’t run or hide from a dog.
- Can be used as a strike team. For example, if a ground team locates a clue or item belonging to the subject, a dog team can be brought to the area to pick up the track from that point.

- Can locate cadaver or buried subject missed by ground teams.
- Assures family that all available resources have been utilized.

Why do you dispatch several dog teams to a search? Isn't one dog enough?

- Look at the tasks above. Do you think one dog team is enough?
- Remember Myth #1? One dog team rarely tracks a lost subject from the PLS to the end. Dog teams are most effective when several teams are deployed in a coordinated fashion.

What is the most effective way to deploy and manage search dog teams?

- Ideally, dog teams should be coordinated by a senior handler, who can help plan dog missions, assign the appropriate dog for the mission, and brief and debrief handlers. Many search managers want to know only whether a dog is a "tracking dog" or "air scent dog". However, selection of a team for an assignment requires knowing more than that. One dog team may be more suited to a mission than another. For example, some dogs may work better in daylight, while others may work just as well at night. Some dogs may be "high drive" and range far from their handler, and be more suited to clear large areas. Others may work more methodically, or work better on leash or along highways. And some teams are more experienced and more reliable than others. Teams that train together know each other's capabilities
- Scent is a clue. A handler assigned to debrief dog teams can piece together the scent clues just as we piece together other clues to understand what a subject has done. In debriefing, we can piece together all of the information from what the dogs have done, evaluating areas of interest, looking for consistencies and common patterns, and plotting those on the map. In other words, we can "put together the pieces of the scent puzzle."

Suggested Procedures Prior to Arrival of Dog Teams

- **Conduct the hasty search as usual**
 - Conduct hasty search as usual, while being careful not to contaminate scent area.
 - No need to wait on arrival of dog teams to begin.
 - Okay to put searchers in the field if dogs are scent discriminating.
- **Do your part to reduce scent contamination**
 - As usual, locate command and staging away from PLS/LKP or subject's scent area.
 - Try to reduce scent contamination at PLS/LKP.
 - Where possible, please turn off vehicle engines, especially diesel, or remove from scent area.
 - Secure subject's vehicle, campsite, bedroom, and personal articles and protect from scent contamination.
 - If nursing home, please request staff not to enter room.
 - Please glove before touching subject's vehicle, bedding, or personal articles.
 - Do not sit in subject's vehicle (in case we have to swipe seat or headrest with a gauze pad to make our own scent article).
 - If entering vehicle for search or to collect ID, please glove. Do not sit or remain for long.
 - Treat as a crime scene until released by law enforcement.
- **What you should know about scent articles.** Handlers usually prefer to obtain their own scent articles. However, trained personnel charged with obtaining an article should follow these protocols.
 - Glove and treat articles as though contaminated with bodily fluids.
 - Bag article only in unused and untouched zip lock bag.
 - Use a trash bag only if unscented and unused for any other purpose.
 - Obtain item from upper body – hat, shirt, pillow case.
 - Does not have to be fabric; can be a drinking bottle, keys, leather glove, if necessary.
 - Avoid shoes and socks – this is odor to us, but not human scent for dogs.
 - Avoid articles touched by others (shared bedding) or placed in a common laundry.
 - First handler on scene will cut the article and individually bag it for other dog teams.

Staging dog teams

- Please stage dogs away from vehicle exhaust and generators.
- Stage in shaded area away from direct sun during hot weather.

What to expect when assigned to a search dog crew

- The handler is the crew chief, unless command specifies otherwise.
- Ideal crew consists of two to three crew members plus the handler, and typically not more.
- The handler's job is to work the dog, and to understand and interpret what the dog is saying through body language and changes in demeanor. The handler's eyes should be on the dog at all times.
- It is helpful if the crew members know the local area, conditions, terrain, population, and potential hazards.
- The crew should assist the handler as needed, and where capable handle navigation and communications.
- Be prepared to follow the dog off trail, through vegetation and water crossings. Therefore you should be dressed properly, wear over the ankle boots, and be adequately prepared with a SAR pack, 2-3 liters of water, rain gear in all weather, a flashlight and extra batteries at all times of day and night, and a snack. You may be out longer than expected, so have enough time to complete the mission.