



ANIMALS WITH JOBS

Putting Instinct and Training to Work

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CHAPTER ONE

Animals in the Military

Corporal Dustin Borchardt, a K-9 handler with the US Army, has worked for more than six years with his four-legged partner, a German shepherd named Pearl. The pair met at Fort Campbell on the Kentucky-Tennessee border when Pearl was still a puppy. Together they trained for a year and a half, learning explosive detection, security, and bite techniques.

Since then, Borchardt and Pearl have served together on multiple missions. They also deployed to Afghanistan, where they worked with the First Special Forces Group and the Tenth Special Forces Group to detect explosives and protect the troops. “Pearl had 30 plus confirmed finds ranging from home-made to military-grade explosives and multiple unconfirmed,” says Borchardt. “We were able to get everybody back home safe. We did our job, and nobody got hurt.”⁴ During their deployment, Pearl saved Borchardt’s life multiple times.

After Afghanistan, Borchardt and Pearl joined the 100th Military Police Detachment based in Stuttgart, Germany. In this role, they worked as part of a North Atlantic Treaty Organization (NATO)-led peacekeeping force in Kosovo, in southeastern Europe. Borchardt and Pearl spend the majority of their time searching vehicle traffic at the entrance gate to Camp Bondsteel, which is the US Army’s main base in Kosovo and is also the NATO peacekeeping force’s headquarters. Borchardt describes some of their other duties: “We go out with [explo-

sive ordnance disposal units] and assist with route and [helicopter landing zone] clearances. If there's a special event . . . we'd be involved with searching the event and providing security.”⁵

After their morning duties at the gate, Borchardt and Pearl return to the base's kennel area. They spend the rest of the day practicing drills or running on an outdoor obedience course. The daily training exercises help keep Pearl's mind and senses sharp.

The bond that Borchardt and Pearl have formed is more than just a working relationship. When Pearl is ready to retire from her military job, Borchardt plans to adopt her and keep her with him. “She's the best dog in the world. She's got my back, and I've got hers. It's been a really amazing experience working with her, and I've loved every minute of it,”⁶ he says.

Throughout history, animals of all shapes and sizes have played an essential role in assisting soldiers and sailors. While horses and dogs are most commonly spotted working with the military, other animals such as rats, mules, dolphins, and sea lions have also performed valuable military work.

Military Working Dogs

Dogs have fought next to soldiers for centuries. The ancient Egyptians, Greeks, Romans, and others trained dogs as sentries and scouts. Sometimes, dogs accompanied soldiers into battle. In World War I, military dogs helped find wounded soldiers, carried supplies, and worked as messengers. During World War II, the first K-9 corps was created and recognized in the United States in 1942.

Today military working dogs are an important part of armed forces worldwide. In the United States, dogs work in all branches of the military. They train for specific jobs, such as tracking, explosive detection, patrol, search and rescue, and apprehension of suspects. These brave animals have saved thousands of lives in their service. Today's military dogs are treated like fellow soldiers by the troops with whom they serve.

Training the Dogs

In the United States, military working dogs and their handlers train at the 341st Training Squadron at Lackland Air Force Base in San Antonio, Texas. The US Department of Defense finds suitable puppies from breeders and operates a dog breeding program at Lackland. Puppies live with foster families for the first several months of their lives, where they are exposed to different environments and socialized. Around seven months of age, the puppies return to Lackland and enter puppy training. During this training period, evaluators determine whether the puppy shows the qualities needed for a military working dog, such as being a good listener and quick to learn new skills. The puppies that are not selected for further military dog training may still be trained for other jobs or adopted as family pets.

Next, selected dogs attend Dog Training School (DTS) at Lackland, which is like a boot camp for working dogs. At DTS,

US Marines and their military-trained dog halt during a security patrol in Afghanistan's Helmand Province. Military dogs perform a variety of jobs including tracking, explosive detection, patrol, search and rescue, and the apprehension of suspects.



dog trainers from all branches of the military train dogs for the fundamental skills needed as a military working dog. DTS typically lasts four to seven months. Trainers assess a dog's detection and patrol work skills along with its temperament and intelligence. The dogs undergo clear signals training, which means they do not always need an immediate physical reward such as a treat to reinforce their behavior. The word yes replaces a physical treat or toy reward. Technical Sergeant Michael Iverson, an instructor at the training school, explains: "Just with the simple use of the word 'yes,' the dog knows what it's being rewarded for, rather than [the handler] worrying about giving a tangible reward to the dog at the immediate moment it performs the task properly."⁷

Military dog training is based on this positive feedback model with verbal rewards. The dog's desire for this reward is essential to their motivation. "When dogs get assigned to field units, they want a dog that's motivated, really wants to do the task, and is really happy to do it—all through reward-based systems. . . . They have to be able to do this without any reinforcement—other than the handler's praise and affection,"⁸ says Iverson.

About 50 percent of the dogs in DTS earn the title of military working dog. Unsuccessful dogs can move into other roles, such as helping soldiers learn the basics of dog handling.

Working Around the World

Brand-new military working dogs are assigned to US military bases worldwide. Often, the dogs will work their entire careers at the same base. At each base, the kennel master assigns a handler to the dog. Before being sent on a mission, the dog must learn to trust and respect its handler. The dog and handler build trust, respect, and a bond through obedience training. Once trust has been established, the handler and dog do patrol training, which strengthens the pair's bond and gives the dog a sense of protecting its handler.

Bomb-Sniffing Bees

Scientists are training bees to sniff out bombs and other explosives. Honeybees naturally stick out their tongue, called a proboscis, for food and can be trained to do the same when they detect another substance. Scientists are training the bees by exposing them to the odor of explosives such as dynamite or C4 plastic explosive and then giving the bees a sugar water reward. This method, called classical conditioning training, teaches the bees to associate a specific odor with food, and they automatically stick out their tongues. Researchers believe that the bomb-sniffing bees could eventually be used to sniff explosives in airports and other security checkpoints.

Researchers are also developing ways to use bomb-sniffing bees to detect buried land mines. When released over a minefield, the bees tend to gather in places where mines are buried in the hopes of finding food. In eastern Europe, a team of researchers is exploring how to use drones and bees to detect mines. The flying drones capture video footage of the bees as they work that can later be analyzed by computers to reveal the land mines' locations.

Military working dogs go through detection training as the primary mission of the team (the dog and its handler). A dog's sense of smell is ten thousand to one hundred thousand times more powerful than a human's sense of smell. Detection training gives dogs guidance on using their superior smelling skills. Each dog trains to detect either explosive materials or narcotics. "You never want to confuse the two materials. When the dog alerts to a detection, you want to know exactly which material you're dealing with, because you handle those situations very differently,"⁹ says US Air Force major William Roberts, commander of the 341st Training Squadron. Each handler trains with his or her dog and learns its specific behaviors when it picks up a scent.

Military working dogs and their handlers train every day. The training serves a dual purpose. It hones a dog's skills for patrol

work, detection, and obedience tasks. Training also maintains a strong bond between a dog and its handler. Dog handlers train, groom, and know every detail about their canine partners. To become a certified team, the dog and handler work through a real-life detection training scenario that includes all the scents the dog has learned to detect. If the dog and handler successfully locate each odor, they become a certified military working dog team.

On the Job in Japan

At Kadena Air Base in Okinawa, Japan, a German shepherd named KitKat works daily with his handler, Staff Sergeant David Maestas. Each day, the team has breakfast at 4:00 a.m. Thirty minutes later, KitKat and Maestas head to the main Security Forces building, where they put on their gear and attend a morning meeting to get information about the day's planned operations. Once the meeting ends, KitKat and Maestas return to the kennels. Maestas completes any administrative paperwork, and then they head out to the obedience yard. Maestas tests KitKat on his off-leash obedience skills. After the session, they start the day's assignments.

Often KitKat and Maestas spend part of their day on foot patrols, completing building checks and searching vehicles at the base's gates for anything dangerous, such as explosives. After these rounds, the dog and handler go to the base post office and check incoming mail for suspicious contents. "The importance of this job cannot be [overstated]," Maestas says. "We lead the way and make sure the path is clear. I trust my dog to ensure the people behind me are safe."¹⁰

Next KitKat and Maestas perform controlled-aggression training. In this training, the team practices commands that can be used if the team encounters hostile people. Another handler helps with the training by pretending to be a threat. The handler gives the dog

"The importance of this job cannot be [overstated]. We lead the way and make sure the path is clear. I trust my dog to ensure the people behind me are safe."¹⁰

—Staff Sergeant David Maestas

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ORGANIZATIONS AND WEBSITES

Alliance of Therapy Dogs

www.therapydogs.com

The Alliance of Therapy Dogs is a national organization for therapy dogs that provides certification, registration, and support for members. Its website has information and news about therapy dogs and how to become a therapy dog handler.

American Kennel Club

www.akc.org

The American Kennel Club is a nonprofit organization that promotes expert information related to health and training for all dogs. Its website includes information and articles about dog breeds, training, military working dogs, police dogs, and service dogs.

Americans with Disabilities Act

www.ada.gov/service_animals_2010.htm

The Americans with Disabilities Act is a website hosted by the US Department of Justice Civil Rights Division. It has information about laws and regulations relating to service dogs and serves as a valuable resource for service dog owners to know their rights.

Assistance Dogs International

<https://assistedogsinternational.org>

Assistance Dogs International is a nonprofit organization serving a coalition of organizations that train and provide service dogs to people worldwide. Its website has several resources, including information about public access laws in regions around the world.

Canine Partners for Life

<https://k94life.org>

Canine Partners for Life is a nonprofit organization dedicated to training service dogs and companion dogs to help people with various disabilities. Its website has information, news, and personal stories about service dogs and their impact on people's lives.

FOR FURTHER RESEARCH

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Joe Layden, *Warrior Dog: The True Story of a Navy SEAL and His Fearless Canine Partner*. New York: Macmillan, 2020.

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