“CRY HAVOC AND LET SLIP THE DOGS OF WAR”

SPECIAL OPERATIONS FORCES AND THE MILITARY WORKING DOG

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Preface

My interest in dogs and the U.S. Military Working Dog Program is purely academic. I do not own a dog nor have a particular affinity towards dogs. However, through research, I discovered what many have found before me—technology has not erased military employment opportunities for dogs in the 21st Century. In fact, military working dogs are particularly relevant to U.S. Special Operations Forces.

I would like to acknowledge the assistance of my wife who served as my best editor.

Abstract

"Cry Havoc and Let Slip the Dogs of War" *Special Operations and the Military Working Dog* by Major Joe Whelan, U.S. Army Special Forces, 60 pages.

This paper examines the potential for military working dogs to support Special Operations Forces (SOF). Modern technology has not eliminated the operational prospective for the military employment of dogs. Canine olfactory superiority, advanced hearing, and ability to detect movement offer significant military employment potential. Military working dogs can be trained for scouting, patrolling, building and ship searches, countermine, counterdrug and tracking. When used properly, dogs are an inexpensive and efficient force multiplier.

Qualitative research using correlational data comprises the monograph's methodology. Military working dog capabilities, limitations, and historical employment will be discussed and then compared to Special Operation Forces principal missions and collateral activities.

The conclusion demonstrates that dogs have a wider role to perform in today's operational environment and that military working dogs can augment and complement SOF operations. Nearly every SOF mission can benefit from the inclusion of dogs—particularly in support of Stability and Support Operations conducted in developing countries that cannot employ or sustain complex and technologically sophisticated equipment. Military working dogs are a proven, low technology, combat and combat support capability and may have a future role in support of Special Operations Forces.

Disclaimer

The views expressed in this academic research paper are those of the author and do not reflect the official policy or position of the U.S. Government or the Department of Defense.

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Introduction

"Cry, "Havoc!" and let slip the dogs of war."

William Shakespeare
"*Julius Caesar*"

Dogs have competently served military ventures for over 2500 years. At one time during WWII, there were nearly 15,000 trained military working dogs in the U.S. inventory serving a broad range of duties from patrolling to delivering messages. Today the U.S. military maintains fewer than 1,400 dogs.[1] Although historic declines in dog utilization are apparent, today's operational environment clearly begs for an enhanced military working dog capability—particularly with U.S. Special Operations forces.

Technology preempted the decline of military working dog usage. During the Cold War, the Warsaw Pact's numerical equipment superiority encouraged the development of equipment and doctrine designed to intercept and kill the enemy in depth in a high intensity conflict. Accordingly, the U.S. military focused on sophisticated technological solutions. The dog as a low-technology system saw little development during this period. As a result, military working dogs had limited use in an era of bipolar superpowers and nuclear brinkmanship.

[1] U.S. Air Force, "Military Working Dog Fact Sheet," (37th Training Wing Public Affairs, Lackland AFB TX, 1999): 1.

However, since the disintegration of the Soviet Union and the end of the Cold War, the world has profoundly changed. The facts and assumptions that dictated U.S. doctrine have changed. The growth of free markets and the globalization afforded by information technology has created a different operational environment. Economic integration and political fragmentation, most noticeable in the last fifteen years, continue to shape and define the geostrategic landscape of the 21st Century. The tensions associated with these newfound freedoms and shifting demographics have fostered uncertainty and instability in the emerging multi-polar world.

John F. Kennedy said it best in his 1963 State of the Union address, "The mere absence of war is not peace." With the end of the cold war afforded by the dissolution of the Soviet Union and the Warsaw Pact, the nature of conflict has changed. The physical distance between combatants and non-combatants has closed and it is becoming increasingly difficult to differentiate between belligerents and friends. Some argue that general war has become too costly in terms of casualties and equipment and a new "fuzzy" war is emerging. Doctrinally, this "fuzzy" war is referred to as Military Operations Other Than War (MOOTW) or Stability and Support Operations (SASO). As innocuous as these titles appear, these operations are in fact rift with hazards.

Currently some 37,400 United Nations military and civilian personnel, provided by eighty-nine countries, are engaged in fifteen operations around the world.[2] The United States participates in many of these stability and support operations, which are characterized not by the overwhelming lethality of modern weapon systems, but by subtlety and finesse. U.S. soldiers work amongst indigenous populations and the traditional boundaries that once clearly identified our adversaries are now blurred

[2] United Nations, "The UN in Brief," available from http://www.un.org/Overview/brief.html; Internet; accessed on 22 November 2000.

In MOOTW, traditional doctrine and advanced technology will not provide all of the dominance previously enjoyed by the U.S. military. Advanced technology is becoming more accessible as many of our enemies are closing the technology gap and finding solutions to mitigate U.S. lethality.[3] Conflicts that attempt to defeat American national will through low technology means can expose the U.S. military's "Achilles heel." [4] Tactically, adversaries may exploit low technology means to negate the U.S. high technology advantage. Examples of this technique include using obscurants to defeat laser-guided weapons, minefields to counter superior mobility, human shields to protect combatants or key military locations, and fighting in urban areas.

The Russian involvement in Chechnya demonstrates the difficulties a technically sophisticated force may face while fighting in urban terrain. The Russian army required tens of thousands of soldiers to defeat Chechnyan rebels numbering in the hundreds. The complexity of the urban environment coupled with the Chechnyan's mastery of the cities and their willingness to fight amongst the people marginalized the Russian military superiority. Ultimately, with blatant disregard for civilian casualties and indiscriminate destruction, the Russians used their superior firepower to level the city of Grozney. The Russian technique and their callousness to world opinion is not a viable option for the United States. U.S. Army doctrine acknowledges that similar environments will diminish the use of some highly lethal weapon systems.[5]

The operational environment has changed and despite the technological advances made by military forces war "…will remain a dirty, frightening, physically and emotionally draining environment in which death and destruction are the tools of the victor."[6] Special

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[3] Department of the Army, *TRADOC PAM 525-5—Draft* (Washington, D.C.: United States Printing Office, 2000) 1-2.

[4] In this context, the author feels that the U.S. Achilles heel is that the U.S. Army is trained and equipped to fight a conventional war—one that our adversaries will want to avoid at all costs.

[5] *TRADOC PAM 525-5—Draft*, 1-2.

[6] Joint Publication 525-5 Draft, (July, 2000) II-9.

Operations Forces are ideally suited for this new operational continuum-- one where observance of cultural sensitivities, keen intellect, and superior training will be principal concerns in selecting the appropriate U.S. military forces to accomplish the mission. In order to remain operationally unique and strategically relevant, SOF must maintain their technological edge and continue to invest in the quality and skills of their individual operators.[7] It is evident that technologic solutions will not be a panacea for many of SOF's operational concerns. Therefore, SOF should also consider some low technology alternatives to augment existing capabilities—one such alternative is military working dogs.

There is no one remedy to countering the challenges of the 21st Century. This paper offers a critical look at one low-technology asset, the military working dog, to determine whether dogs can increase the effectiveness of SOF operators. The intent is not to create an additional SOF mission, but to evaluate a combat proven capability resident in the United States inventory to ascertain its utility to current and future SOF missions.

Problem Statement

The advent of technologically sophisticated weaponry developed in the last thirty years does not mitigate the contributions of some low-technology assets such as the military working dog. One of the distinctive problems encountered by SOF is that the bulk of their operations are conducted with developing nations whose industrial, political, and military infrastructures are not prepared to support sustained operations. These conflicts are often fought within a foreign political and cultural environment that renders

[7] U.S. SOF, *Posture Statement 2000 (*2000*)* 35.

the technological advantages and military sophistication of the U.S. both irrelevant and ineffective.[8]

Much too often our security assistance program provides standard or obsolete United States military and civilian equipment to allied forces. Oftentimes, this equipment exceeds the technical ability and budget of the host nation to service, maintain, or repair. The resultant frustrations on both the United States and on the host nation are counterproductive to the mutual goals the parties are attempting to attain.[9] Dogs are a low-technology option that can augment a security assistance program and more importantly, can be logistically sustained by any host nation.

This monograph examined the applicability and suitability of the military working dog for assignment to Special Operations Forces. The paper analyzed past and current usage of military working dogs and discusses their capabilities, strengths and weaknesses in the context of current SOF doctrinal missions. The paper then presents "narrowly focused" recommendations regarding a neglected, low technology United States military capability that may have a role to play in future SOF operations. The paper's intent is not to endorse or assign an opinion regarding the direction of current SOF activities, but to suggest additional tools to complement current operations.

Significance

> *No measure of the extent of a dog's sense of smell, hearing and visual detection of movement over those of persons has ever been accurately made. Accurate measurement of the degree of superiority is not important outside a laboratory because we know that under almost any set of circumstance, a properly trained dog can smell, hear, and visually detect movement infinitely better than a person.*[10]

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[8] LTC William Thornton, *The Role of Military Working Dogs in Low Intensity Conflict*, (Langley Air Force Base: 1990) v.

[9] Ibid.

[10] Department of the Army, DA Pam 190-12 *Military Police Military Working Dogs* (Washington, D.C.: United States Government Printing Office, 1993) 3.

Canine olfactory superiority, advanced hearing, and ability to detect movement offer significant military employment potential. When used properly, military working dogs are an inexpensive and efficient combat force multiplier—particularly in stability and support operations. History illustrates significant military contributions made by dogs and modern technology has not eliminated their operational potential for future conflicts. Working dogs are utilized extensively by many nations throughout the world. Possible working dog employment options for SOF elements include force protection (psychological deterrence and early warning), countermine, booby-trap detection, counterdrug, crowd control, explosive detection, search and rescue, and scouting/patrolling.

Given the diversity and complexity of today's operational environment, is the SOF community effectively utilizing all available resources to accomplish their missions? Has the latest revolution in military affairs and our reliance on technology obscured a simpler, non-technological solution to the ageless quandary of locating a threat—whether it is a person or a material? Is there an expanded role for military working dogs in future SOF operations? An analysis of current threats, SOF doctrinal missions and working dog capabilities indicates there is an expanded role for dogs in SOF.

Historical Review

Military working dogs have led patrols, detected poison gas and booby traps, defended base perimeters, pulled sleds, led rescue teams to the wounded, located enemy caves and bunkers, and even parachuted into combat. Few animals have served man more nobly in war than the dog. Military employment of dogs exists in the earliest records of war. Evidence of this relationship can be found in Egypt beginning around 1600 B.C. Archeological records indicate that Asiatic nomads who invaded the region brought with them the chariot, horses, and massive war dogs.[11]

The earliest known battle dog was a mastiff type that was domesticated during the Stone Age. Persians, Greeks, Assyrians, and Babylonians all recognized the tactical advantage of war dogs and deployed them in great numbers as forward attacking elements. During the Peloponnesian War (431-404 B.C.), historical evidence reveals that the Corinthians utilized the dogs for defense.

During the battle of Versella, women led hordes of war dogs against the Romans. Having experienced first hand the effectiveness of dogs against their own army, the Romans adopted them for their use and sent formations of attack dogs encased in body armor and razor-sharp spikes, to harass and disrupt enemy formations. One Greek biographer recorded that even in the face of men armed with swords, the ferocious dogs would not cower.

In 1695, the British obtained one hundred savage dogs in Havana, Cuba and transported them to Jamaica. These dogs participated in the Maroon War, a guerrilla

[11] Mary Elizabeth Thurston, *The Lost History of the Canine Race* (Kansas City: Andrews and

action fought by renegade African slaves. During the Spanish Morocco War, dogs surfaced as tactical decoys. The Riffs camouflaged the animals in similar garments sending them to run along the front lines. In the limited visibility of blowing sand and haze, they drew fire from the Spanish, who in turn revealed their gun positions.[12]

Most European countries built up military dog training schools in the years leading up to World War I. Germany had been experimenting with dogs since 1870, subsidizing a network of village clubs that specialized in breeding and training dogs for Army work. Ironically, the Germans had been steadily buying up the best British breeds so that when war broke out, they had 6,000 dogs for active service whereas the British had one military working dog.[13] During WWI, dogs provided three main services: ambulance assistance (locating wounded men and pulling ambulance carts), messenger service, and sentry detail. Dogs were also used to pull machine guns, lay communication wire, carry ammunition, and perform traditional sentry duties. Jack Russell terriers were enlisted to combat the hordes of rats that often infested the trenches.[14] Estimates of the total number of dogs used by all nations during WWI were approximately 75,000.[15]

Despite the accumulated military use of dogs throughout the ages, they were not a viable U.S. military asset prior to World War II. Sled or Sledge dogs were the only military working dogs in the U.S. inventory prior to the onset of war and were vital in the search and rescue of downed aircrews during their northern transit from the United

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McMeel, 1996) 28.

[12] Michael G. Lemish, *War Dogs Canines in Combat* (Washington: Brassey's, 1997) 3.

[13] Jilly Cooper, *Animals in War* (London: William Heinemann LTD, 1983) 58. Interestingly, the British only had one working dog in service at the outbreak of the war. Furthermore, the Brits killed over 400,000 dogs and cats in London for fear of the expected German bombing. Sadly, this minimized the eligible pool of dogs to train for war service.

[14] Lemish, 11.

[15] Fairfax Downey, *Dogs for the Defense*, (New York: 1955), 3.

States to Europe. These search and rescue dog teams were credited with saving over 100 aircrew members.[16]

Once the working dog program was mobilized for WWII service, thousands of dogs were brought on active duty. Over three thousand patrol dogs were utilized by the U.S. Coast Guard to safeguard the nation's coastlines. Sentry dogs guarded installations throughout the world and scout dogs walked point in the Pacific and China-India-Burma theaters. Dogs were particularly valuable in routing out bypassed Japanese soldiers during the Pacific island-securing operations. Dogs were further employed to carry messages, locate wounded men, lay communication wire, and assist in transporting small quantities of ammunition and other essentials.[17] By the end of the war, the total number of dogs employed by the Axis and Allied Powers exceeded 250,000 of which the U.S. employed around 19,000.[18]

During the Korean War, the U.S. used less than thirty-five dogs. Nonetheless, canine-led patrols were credited with reducing their casualties by sixty to sixty-five percent. Toward the end of the war, the U.S. Army authorized one dog platoon for each of the five divisions in Korea, but the war ended before the training could be completed.[19]

In March 1965, military working dogs were approved for use in Vietnam. By July 17, forty teams had been deployed to three air bases. By the end of the year, there were ninety-nine dog teams in the country. By September 1966, more than 500 dog teams were deployed to ten bases. In the seventeen months between July 1965 and December 1966, not a single Viet Cong sapper team penetrated a base guarded by

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[16] C.B. Colby, "Men, Dogs, and Machines—Save Flyers Who Crash in the Arctic," *Popular Science* (November 1945): 208.

[17] John M. Behan, *Dogs of War* (New York: Charles Scribner's Sons, 1946) 19-20.

[18] Robert D. Laird, "The Involvement of the Air Force DOD Dog Program the Detachment 37," Historical Office, Air Force Logistics Command (September 1979): 3.

[19] Denzil F. Frost, A *Centralized Source of Information for the military working dog Program*

sentry dogs. In the Vietnam conflict, over 4000 dogs saw service and the U.S. lost 281 dogs killed in action. [20]

The Vietnam dog program had two elements—one was a U.S. initiative and the other was the South Vietnamese Army program. The U.S. program proved enormously successful but the South Vietnamese Army program failed for various cultural reasons.[21]

Even thought science and technology showed significant advances in the detection of explosive mines since World War II, little could be done mechanically to detect many types of explosive booby traps effectively used by North Vietnam Army and Vietcong forces. The Vietcong maintained a very primitive, yet effective arsenal of booby traps and mines. The cruder the device, the more difficult it was to detect by mechanical means. To respond to this threat, the U.S. military initiated its first dog countermine and counter tunnel program—both concepts were validated by their success. Troops also used scout, sentry, water, and tracking dogs in Vietnam and based on compilations of monthly after-action reports during the war, army dog teams conducted over 84,000 missions. These teams were directly responsible for more than 4,000 enemy killed and over 1,000 captured. By locating caches of supplies, the dog teams recovered more than 1,000,000 pound of rice and corn, located over 3,000 mortars and exposed at least 2,000 tunnels and bunkers.[22]

Following the Vietnam War, military working dogs played an active role in peacekeeping missions throughout the world. Missions to Grenada, Panama, and Haiti were supported by military working dogs. Desert Storm saw the employment of over

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(Fort Leavenworth, KS: U.S. Army Command and General Staff College, 1990) 17.

[20] Tom Newton, "History of the DOD MWD Program," available from http://community-2.webtv.net/Hahn-50thAP-K9/K9History10; Internet; accessed on 16 Nov 2000.

[21] The Vietnamese were not accustomed to using dogs as tools and were unable to appreciate their utility. Additionally, the daily rations of the ARVN soldier was relatively low compared to his American counterpart and they were unwilling to spare food for dogs. Approximately 90% of their dogs died of malnutrition. Finally, the Vietnamese reportedly augmented their own diets with their working dogs.

[22] Lemish, 240.

eighty U.S. military working dog teams from the Army, Air Force and Marines (the French used about 1,117 dogs).[23] One U.S. dog team is credited with finding 167 caches of explosive during a sixty-day tour[24] and another team found a large commercial ship rigged with explosives.[25]

Today, U.S. military working dogs are deployed throughout the world. Presently, they are guarding soldiers and equipment and are searching for contraband in Bosnia and Kosovo. These tasks contribute immeasurably to U.S. force protection measures. Additionally, with the dangers imposed by thousands of unexploded mines in the Balkans, the mine detector dog program has been resurrected.

The peacetime mission of the military working dog program supports the Military Assistance to Civil Authorities (MACA) in accordance with DOD Directive 3025.15.[26] U.S. Federal agencies employ approximately 3,000 dogs. The Customs Administration fields 450 dogs at airports and our borders for narcotics and explosives detection. The Drug Enforcement Administration, in conjunction with the Border Patrol and JTF 6, patrols along the U.S. border with dogs. The Secret Service has approximately thirty-five dogs and is routinely augmented by military dog teams. The Central Intelligence Agency has a seven-dog canine corps and the Agriculture Department runs a fifty dog Beagle Brigade to check for foods that could carry plant and animal diseases.[27] Following the Vietnam War, these federal agencies sustained and even increased the demand for working dogs as the military's demand for dogs dropped.

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[23] Newton, Internet; accessed on 16 Nov 2000.

[24] Lemish, 248.

[25] SSG James Leach, "Operation Desert Storm and Desert Shield" (Oral History Interview, DSIT AE 058, 1991) 6.

[26] Jim Winthrop, "The Oklahoma City Bombing: Immediate Response Authority and other Military Assistance to Civil Authority (MACA)," *Army Lawyer* (July 1997): 3.

[27] David E. Kaplan, "Bomb-Sniffing Tests Provoke a Dogfight," *U.S. News and World Report* (November 1997): 42.

In summary, the dog has had a long and distinguished association with man and his military ventures. However, the U.S. military's inconsistent military working dog program has prevented the optimal utility of dogs. During major conflicts and operations, military working dog resources have been hastily resurrected to enhance combat capabilities. Today, the military working dog primarily supports the law enforcement community with little consideration given to their tactical employment.

How Can Dogs Be Employed?

Special Operation Forces are ideally suited and doctrinally appropriate to employ military working dogs. As with any highly specialized capability, it is equally important to understand the limitations of military working dogs. The following chapter will discuss capabilities and limitations of working dogs in the context of the nine SOF principal missions and seven collateral missions. The chapter will conclude by recommending employment options and considerations for military working dogs.

Capabilities and Limitations

Living organisms, which are excellent detectors of other life forms, are referred to as biosensors. The dog is the most common, familiar and adept biosensor although geese, guinea hens, and marine mammals are also exceptional examples of biosensors.[28] Similar to any mechanical system, biosensors have capabilities and limitations. The following paragraphs will emphasize some strengths and weaknesses of the dog.

Capabilities

Inherent capabilities that make the dog a valuable military asset include the following. The dog:

- Is light, compact, highly mobile, can cover more area in less time than a man and is easily transported. Dogs can even be transported by static-line and free-fall parachute and rappelling.
- Excels in a variety of combat environments and is very effective in limited visibility conditions such as night and fog.

[28] Sam Ridgeway, "Navy Marine Mammals," *Science*, 1988, 1-3.

- Can go nearly everywhere man can go, plus many places man cannot.
- Operates well in all climates at minimal cost and with minimal maintenance and supply requirements.
- Breeds selected for military service have excellent intelligence.
- Is a proven combat and combat support multiplier.
- Can be an excellent deterrent and force protection asset. Dogs have a strong psychological impact on humans.
- Is difficult for man to detect.
- Cannot be exploited by the enemy for intelligence if captured.
- Is inexpensive to produce when compared to modern electronic systems, plus there are no electrical malfunctions and does not require batteries.
- Has no moral or political persuasions.
- Can distinguish between dummies and real targets with tremendous pin pointing capability.
- Olfactory sense is greater than one parts per billion—more than forty times greater than that of a human. Dogs are also more versatile and considerably less expensive than most mechanical attempts to replicate.
- Hearing is twenty-seven times greater than man.
- Is capable of being recalled and reused quickly.
- Can be used as a weapons system to eliminate threats. Dogs have powerful jaw muscles. A German Shepard can exert between 400-700 pounds of pressure, whereas the average human can achieve only forty-five to sixty pounds.[29]

Limitations

The dog's limitations include the following. The dog:

- Is subject to outside influences that can have a direct bearing on its behavior and performance, such as noise, decomposing bodies, dust, and engine exhaust fumes. Males can be distracted by females; both sexes can be distracted by other dogs, other animals, people, food, or anything that may strike the dog's curiosity.
- Can tire, become fatigued, be injured, and display unanticipated reaction to stressors when he does not want to work—all of which effect performance.
- Reflects the mood of its handler—if a handler becomes excited and agitated, so will his dog.
- Cannot be expected to work under every type of combat environment, and must be considered an ancillary combat resource to be used once a timely, comprehensive intelligence plan of the battlefield has been conducted and analyzed.
- Cannot be turned on and off with a switch.[30]
- Dogs and handlers are not readily interchangeable and require some confidence building and training to build a team.
- Must be acclimated to the prevailing environmental conditions. Mine detector dogs may be required to be sensitized to the operational area.

Numerous research programs are exploring technological options to mechanically reproduce the dog's olfactory capabilities. The research has produced machines that can replicate some of the dog's capabilities in laboratory settings. However, the major

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[29] Lemish, 220.

challenge lies in producing equipment that is suitable for the rugged field conditions required by military service and which is not prohibitively expensive. This equipment must be deployable, easily transportable, and simple to operate. Currently there are no systems available that can replicate the effectiveness of military working dogs on the battlefield. Appendix B lists some of the on-going research programs with canine olfactory senses.

SOF Principal Missions

Special Operations Forces are organized, trained, and equipped to accomplish nine principle missions: Counterproliferation, Combating Terrorism, Foreign Internal Defense, Special Reconnaissance, Direct Action, Psychological Operations, Civil Affairs, Unconventional Warfare, and Information Operations.[31] Dogs can be trained for scouting, patrolling, tracking, and building and ship searches and increase the effectiveness of SOF operators in the conduct of these missions.

Direct Action

Direct Action (DA) is a SOF principal mission that "conducts short-duration strikes and other small-scales offensive actions to seize, destroy, capture, recover, or inflict damage on designated personnel or material."[32]

Direct Action missions include raids, ambushes, other offensive operations, and those activities associated with the employment and discovery of mines and minefields. Military working dogs are ideally suited for countermine activities and can assist in the

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[30] Frost, 12.
[31] Joint Publication 3-05, *Doctrine for Joint Special Operations*, (Virginia, 1998) II-4.
[32] Ibid., II-3.

detection and recovery of minefields. In Vietnam, dogs assisted coastal patrol boats in the detection of shallow water mines.[33]

Military working dogs have also proven their utility on other "basic" combat skills. Dogs have alerted their handlers to potential ambush sites and worked at observation posts to alert friendly troops to potential belligerents. Depending on the weather conditions, a dog can detect a person from a distance of as much as 1,000 meters.[34] Dogs are also very effective at detecting booby traps and trip wires. The Israelis routinely use dogs to counteract terrorist trip wires. Security dogs have also been used as lethal deterrents to defeat entry to special weapons and munitions sites.

Special Reconnaissance

Special Reconnaissance (SR) is "the reconnaissance and surveillance actions conducted by SOF to obtain or verify, by visual observation or other collection methods, information concerning the capabilities, intention, and activities of an actual or potential enemy or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. It includes target acquisition, area assessment, and post strike reconnaissance."[35]

Despite the sophistication of technical intelligence gathering means, some intelligence must be gathered by human assets near the target area. Military working dogs may have a role in assisting reconnaissance personnel during daylight or darkness by detecting enemy presence, helping the patrol to avoid discovery, and locating enemy outposts in their movement toward the objective. Before the Okinawa invasion during

[33] Countermine is a SOF collateral activity and will be discussed in more detail in a subsequent chapter.

[34] MAJ Mike Alberston, "Use of military working dogs in Peace Support Operations," *News From the Front* (June 1998) 2.

[35] Joint Publication 3-05, II-5.

WWII, dogs and handlers went ashore on reconnaissance missions and provided essential intelligence that facilitated the subsequent amphibious landing.[36] Twenty years later, dogs were also utilized effectively on long-range reconnaissance patrols in Vietnam.

Coastal Patrolling and Interdiction is a maritime special reconnaissance mission where dogs may be utilized. These missions may be stand-alone or in support of other fleet and joint efforts such as riverine, amphibious assault, blockade, and counterdrug operations. The U.S. Navy successfully used war dogs on patrol boats to locate the scent of enemy divers underwater throughout the waterways of South Vietnam.[37]

Foreign Internal Defense and Unconventional Warfare

Foreign Internal Defense (FID) is a SOF principal mission designed to "organize, train, advise, and assist host-nation military and paramilitary forces to enable these forces to free and protect their society from subversion, lawlessness and insurgency."[38] Whereas Unconventional Warfare (UW) is designed to "organize, train, equip, advise, and assist indigenous and surrogate forces in military and paramilitary operations. Both of these operations are normally of long duration." [39]

Training indigenous forces of other nations is an integral part of a geographic CINC's engagement plan. SOF is ideally suited to assist in shaping the international environment through Foreign Internal Defense and Unconventional Warfare. Normally, these operations are conducted in developing countries that lack the technological sophistication of the United States. Indigenous forces must be provided methods

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[36] Kathryn Willis, "Marines' Best Friend," *Marines*, August 1999, 20.

[37] John C. Burnam, *Dogs Tags of Courage* (Fort Bragg, CA, 2000) viii. Even human beings underwater secrete smells that travel to the surface that dogs can detect.

[38] Joint Publication 3-05, II-6.

[39] Ibid.

commensurate with their technologic capability. Dogs are a low-technology asset that has a role in supporting America's allies in combat and stability and support operations.

Combating Terrorism

Combating terrorism (CBT) is a SOF principal mission designed to preclude, preempt, and resolve terrorist actions throughout the entire threat spectrum. CBT is comprised of two elements, antiterrorism and counterterrorism. Antiterrorism measures are those defensive actions taken to reduce vulnerability to terrorist acts whereas counterterrorism is an offensive measure taken to prevent, deter, and respond to terrorism.[40]

Military working dogs are an excellent augmentation asset for use in an antiterrorism program and have an annex dedicated to their use in JP 3-07.2 *Joint Tactics, Techniques, and Procedures of Antiterrorism*.[41] Some employment possibilities include patrolling perimeters and critical facilities, searching for explosives, augmenting access control points, serving as a deterrent in riot and crowd control situation, serving as an early warning indicator for intrusions, tracking known and unknown threats, and serving as an augmentation to military law enforcement capabilities.

Military working dogs can be similarly integrated into the SOF force protection plan. An example of military working dogs supporting a SOF mission would be security for the Joint Commission Observers (JCO) located in Bosnia. Patrol/Sentry dogs could guard the JCO houses that are embedded in the civilian communities. Additionally, dogs could accompany the observers while on patrol—both dismounted and mobile patrolling.

[40] Ibid., II-7 to 11-8.

[41] Joint Pub 3-07.2 *Joint Tactics, Techniques, and Procedures of Antiterrorism* (Fort Monroe, VA, 1998) N-1.

During the Gulf War, SOF coalition support teams observed the Kuwaiti and Saudi Arabian border stations using dogs as early warning.[42]

Military working dogs can augment counterterrorism operations similar to techniques employed by law enforcement dogs. For instance, dogs can distract and subdue a suspected belligerent and assist in protecting non-combatants. Dogs can detect booby traps in and around the target site. Finally, dogs are particularly effective in building and ship searches and could help find hiding personnel and assist in the recovery of sensitive materials.

The British Army has had profound success with their dogs in Northern Ireland. Dogs have been sniffing out explosives, weapons and ammunition, tracking terrorists and dispersing riots. They have also been credited for uncovering a great deal of terrorist equipment.[43]

Other Missions

The remainder of SOF's principal missions, Psychological Operations, Civil Affairs, Counterproliferation of Weapons of Mass Destruction, and Information Operations (IO), can be supported indirectly by military working dogs in their contribution to the previous principal missions and collateral activities. Further examples where dogs are assisting conventional soldiers today include patrolling (both foot and mobile), riot control (crowd manifestations), closing off or isolating an area, and conducting vehicle searches and other population control measures. These missions have a direct correlation to some of SOF's activities and should be further developed for SOF use.

[42] Personal interview with LTC Starshak, CGSC Instructor, dated 1 December 2000.

[43] Personal interview with Major Doug Chalmers, Royal Irish Regiment, British Army, dated 20 October 2000.

SOF Collateral Activities

To reflect the changing international environment, SOF has developed collateral activities that augment the nine principal missions. There are many employment possibilities where military working dogs can support SOF. The seven collateral activities are Coalition Support, Combat Search and Rescue, Counterdrug Activities, Countermine Activities, Foreign Humanitarian Assistance, Security Assistance and Special Activities.[44]

Combat Search and Rescue

Combat Search and Rescue (CSAR) is a SOF collateral activity that penetrates enemy air defense systems and conducts joint air, ground, or sea operations to recover distressed personnel. These operations are normally conducted deep within hostile or denied territory. They can be performed at night or in adverse weather, during wartime or contingency operations. [45]

Battlefield casualties in these types of missions can be diverse in both number and type. Soldiers can be wounded and buried in debris or earth. The search and rescue dog can greatly enhance the capabilities of Combat Search and Rescue personnel as they look for hidden, injured, or unconscious men—particularly true during night or in adverse weather.

It is a natural tendency for injured personnel to seek a hiding place into which they can crawl and thus protect themselves from further injury. These hiding places may be overlooked by search teams. Therefore, trained dogs using their keen senses may assist in locating such injured personnel.[46]

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[44] Joint Publication 3-05, II-12.
[45] U.S. SOF, *Posture Statement 2000 (*2000*)* 44.
[46] Thornton, 15.

Counterdrug Activities

Counterdrug (CD) activities is a SOF collateral activity that trains host-nation counterdrug forces and domestic law enforcement agencies on critical skills required to conduct individual and small-unit operations in order to detect, monitor, and interdict the cultivation, production, and trafficking of illicit drugs targeted for use in the United States.[47]

The Counterdrug mission is very similar to Foreign Internal Defense and Unconventional Warfare missions in that SOF trains indigenous forces to address their internal security concerns through an enhanced in-house capability. SOF counterdrug activities help shape the international environment by complementing the geographic Combatant Commander's regional counterdrug campaign or the U.S. Ambassador's country-specific counterdrug plan. Normally, these operations are conducted in developing countries that lack the technological sophistication of the United States. Military working dogs are a suitable low-technology augmentation to support the host-nation efforts and are used extensively by law enforcement and other militaries throughout the world.

SOF is engaged in counterdrug operations throughout the world. With a focus on cross-cultural communication and language skills, SOF trains host nation counterdrug forces on critical tasks required to conduct small-unit counterdrug operations. Perhaps the most visible of these operations is SOF involvement in U.S. Southern Command. In Colombia, a U.S. Special Forces battalion has trained and equipped one Colombian Army Counterdrug Battalion with an operational end state of training a complete brigade dedicated to counterdrug operations. SOF has also trained and advised the counterdrug programs in other countries such as Thailand, Malaysia, Namibia, Pakistan, and

[47] Joint Publication 3-05, II-12

Turkmenistan with future operations planned this year in Egypt, Kenya, Laos, and Cambodia.[48]

Military working dogs are used extensively by other nations in counterdrug operations and should be considered an inexpensive force multiplier in U.S. SOF operations. In Russia, for example, drug trafficking on their border with Tajikistan and Afghanistan are common occurrences. Dogs are used extensively to patrol these rugged, porous borders. A Russian border policeman attests, "The gorges of the Pamir Mountains with their streams, rivers and dense mountain bush mean that technology is of little use in these conditions, and that is why the dogs are so valuable."[49]

To combat the growing use of marijuana and other drugs in Southeast Asia, a drug detection course was added in January 1971 to the DOD military working dog program. Qualified patrol dogs demonstrating exceptional curiosity, eagerness and ability to retrieve were selected as the dogs most likely to succeed in the program. The first dogs trained for marijuana detection were tested under a variety of field conditions and proved highly successful. Even samples sealed in plastic bags and glass jars, and samples packaged with other substances intended to mask the marijuana scent were easily detected by the dogs.

After these successes, the marijuana detector dog program was expanded and cocaine, hashish and heroin were introduced to extend the dog's capabilities and utility. Now the Department of Defense has more than 500 drug detector dogs in service at bases around the world.[50]

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[48] U.S. Special Operations Forces, *Posture Statement 2000* (Virginia, 2000) 18-29.

[49] Alexei Muknin, "Russian Dogs: A Border Guards Best Friend," *The Russia Journal*; available from http://community-1.webtv.net/Hahn-50thAP-K9/K9History9/; Internet; accessed 16 November 2000.

[50] 341st Training Squadron home page; available from http://community-2.webtv.net/Hahn-50thAP-K9/K9History10; Internet; accessed on 16 Nov 2000.

Countermine Activities

Countermine (CM) activities is a SOF collateral activity that trains host-nation personnel in their recognition, identification, marking, and safe destruction of mines, booby-traps and other explosive devices. Countermine also provides instruction in program management, medical, and mine-awareness activities.[51]

Mines are an inexpensive, relatively risk-free means to produce casualties and deny terrain. They were employed as early as 1277 by the Chinese against the Mongol invaders and since then, more than 100 million mines have been laid in the world. [52] Unfortunately, mines do not discriminate between combatants and non-combatants and are responsible for killing or maiming hundreds of innocent civilians every day. To respond to this humanitarian crisis, SOF has become heavily engaged in countermine programs throughout the world in support of the CINC's theater engagement plan. The ultimate goal of a SOF countermine training mission is to create a proficient indigenous force capable of attending to their own security concerns. Similar to the counterdrug missions, these operations are normally conducted in developing countries that lack the technological sophistication of the United States. Appendix A lists countries with existing mine difficulties.

The U.S. has an efficient and proven low technology countermine capability—the military working dog. Dogs are a particularly effective detection 'tool' for survey, area reduction, and road and route clearance. Mine dogs should be used in pairs with each dog checking the same ground individually. The Soviet Army used countermine dogs in Afghanistan with great success. In Barikot Afghanistan, the Soviets were completely

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[51] Joint Publication 3-05, II-12.

[52] United Nations, "Sensor Technologies For The Detection Of Antipersonnel Mines A Survey Of Current Research And System Developments," Paper presented at the International Symposium on Measurement and Control in Robotics Brussels, 9-11 May 1996; available from http://www.autoctrl.rg.ac.bc/ismcr96.html; Internet: accessed on 10 November 2000.

encircled by rebel forces. Teams, led by dogs, cleared over twenty-eight kilometers of mine-infested roads to enable the breakout.[53]

Military working dogs are a viable option to augment the mine detection arsenal of America's friends and allies. Dogs are readily available, they are certainly as foot mobile as host nation ground and security forces, easily transported, require little logistical support, and they have a high reliability rate when used properly. Effective use of trained military working dogs in combination with metal detectors and associated equipment can significantly reduce a mine/booby trap threat.[54] Worth noting is the recent resurrection of this capability in the U.S. conventional forces. Mine Dogs, not used since Vietnam, are now being trained and used in Bosnia and Kosovo by military law enforcement in support of U.S. troops.

Foreign Humanitarian Assistance

Foreign humanitarian assistance (FHA) is a SOF collateral activity that attempts to relieve or reduce the result of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or that can result in great damage to, or loss of, property. This assistance is of limited scope and duration and it supplements or complements the efforts of host-nation civil authorities or agencies.[55]

SOF are well suited to perform foreign humanitarian assistance activities in remote areas because of their rapid deployability, regional orientation, organic communication capability, and ability to sustain operations under adverse environmental conditions. SOF can assess the needs of an area quickly and communicate this assessment to a Joint Force Commander or ambassador to assist in designing a plan to

[53] G. Ustinov, "Service Place—Afghanistan: Courageous Men." *Izvestiya*, 1985, 3-6
[54] Thornton, 4.
[55] Joint Publication 3-05, II-12

alleviate suffering. In support of foreign humanitarian assistance, Civil Affairs is particularly important in organizing civilian infrastructure and Psychological Operations personnel are integral to fostering popular support.[56]

Search and Rescue Dogs can complement a foreign humanitarian mission in the location of casualties resulting from such natural disasters as earthquakes and floods. Notwithstanding the humanitarian urgency of the situation, such support is an effective method for projecting a positive United States image, making good use of assets, providing alternative training opportunities, and enhancing the relationship between SOF and the host nation. In August 1999, the Turkish government requested U.S. assistance to mitigate the effects of a massive earthquake. Part of the humanitarian assistance package was five dog teams that were credited with saving four lives.

Other Missions

Depending on the operational mission requirements, military working dogs may have a supporting role in the conduct of Coalition Support, Security Assistance and Special Activities. At a minimum, military working dogs provide important force protection measures—particularly in stability and support operations where the rules of engagements are often restrictive. In this case, military working dogs can be used as an additional measure in the escalation of threat as an alternative to deadly force.

Under certain circumstances, patrol dog teams can also effectively augment security procedures to protect key personnel. They may be used as part of the residence watch to secure the VIP's quarters, around conference sites, or at control points with a building. In addition, they may help safeguard luggage after is has been cleared by security personnel.[57] Dogs are capable of creating a formidable

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[56] Ibid.

[57] Department of the Army, FM 19-35 *Military Police Working Dogs*, 27.

psychological deterrent. Deterrence is particularly relevant to force protection and security and can clearly reduce the threat and preclude escalation to deadly force.

Military Working Dog Program Considerations

There are essentially two approaches to effectively integrating military working dog teams into SOF. The first approach is to attach military working dog teams to SOF on an “as required “ basis. The second approach is to develop a military working dog capability resident within SOF.

In the first scenario, military working dog teams would be requested as needed to support a developing mission. Military Police Working Dog Teams would be attached for the conduct of the mission.

There are several disadvantages of using attached working dog teams. First, SOF would be competing for a limited resource. Military Police working dog teams are a finite resource and are heavily tasked. Secondly, policemen are oriented toward law enforcement activities and would require substantial training to gain the trust and confidence necessary to work alongside a SOF element. With the current Military Police working dog operational tempo, establishing a habitual relationship with a dog team would be challenging. Thirdly, law enforcement personnel will not have special infiltration skills required for some SOF missions.

The foremost advantage to attaching dog teams is the burden of training and maintaining dog and handler proficiency falls on the supporting unit. This arrangement would negate the requirement to train SOF personnel in an additional specialty. Additionally, logistical overhead is minimized. The military policemen augmentees would be integrated into mission planning and would return to their parent unit at the conclusion of the mission.

Disadvantages of a working dog program resident to SOF include levying an additional skill requirement on the SOF dog handler. In order to be certified by the DOD Dog School, the handler would be required to attend approximately eleven weeks of initial training and supervisors will attend an additional four weeks of training. Additionally, dogs require daily training and attention and the handlers must be detailed to the program for a determined period. SOF would also be responsible for developing, sustaining and supporting a military working dog program. Training and program maintenance require additional resources. Finally, SOF dog teams could be susceptible to DOD takings for additional support.

The advantages of a SOF resident dog capability are that the military working dog handler would be a SOF non-commissioned officer and would possess a thorough knowledge of SOF operations. Integrating the military working dog team would be seamless. In addition, SOF would not have to compete against the Department of Defense commitments for the existing military working dog resources.

Perhaps the most important argument for a resident SOF dog capability is the military police working dog teams are trained for law enforcement missions. SOF would require dogs trained for their specific operational requirements—most of which are not being trained today. For instance, should SOF require a dog to detect booby traps during a building assault, it would not be reasonable to expect a military police dog team to maintain a level of proficiency in an operation that does not support their mission essential task list. A resident dog capability will preclude an extensive pre-mission train-up. SOF would retain flexibility in the design and implementation of their program.

Military Working Dog Considerations

Military working dogs should be considered similar to any other specialized piece of equipment. There are specific operational parameters that allow optimization of the equipment. The following are issues to consider in developing a military working dog program.

- Military working dogs will always be employed with an appropriately trained and qualified handler. Each dog should have only one assigned handler so that the dog will maintain an aggressive attitude toward all other persons. A handler may be assigned to more than one dog. The handler should not leave the dog unattended during employment, including rest periods. Dogs and their handlers should whenever possible travel together.[58]
- The Staff Judge Advocate should be consulted prior to military working dog utilization to determine legal requirements and/or local restrictions
- Visits to military working dog kennels or training areas by other than the assigned handler and maintenance personnel in the performance of their official duties will be limited to avoid unduly exciting the dogs. Visits without official purpose should be prohibited.
- The psychological deterrent value of military working dog teams can be increased by conducting periodic public demonstration. Demonstrations should be as realistic as possible, commensurate with safety, and should include all phases of the dog's training, including drug and explosives detection. Publicity for these demonstrations helps to increase attendance to gain full deterrent benefit.

[58] Department of the Army, DA PAM 190-12 *Military Working Dog Program,* 57.

Training and Certification

> *The Mission of the DOD Dog Center is to provide trained military working dogs and handlers for the Department of Defense, other government agencies and allies through training, logistical, veterinary support and research and development for security efforts worldwide.*
>
> *DOD Dog School* [59]

The 341st Training Squadron (TRS) located at Lackland Air Force Base is responsible for obtaining and training all Defense Department dogs. The 341st TRS manages the tasking of 1,394 Army, Air Force, Navy and Marine Corp's military working dogs worldwide.[60]

U.S. military working dogs and handlers are trained at the 341st TRS. All dogs are initially trained as patrol dogs and are capable of scouting, searching, and attacking. Those dogs exhibiting special characteristics are further trained as detection dogs for either explosives or drugs. The 341st TRS offers two training courses designed to produce capable handlers. Potential SOF dog handlers would attend these courses for certification.[61] The initial handlers course is eleven weeks long and is called the Military Working Dog Handler Course. The course descriptions and prerequisites are described below.

> This course provides training in the knowledge and skills needed to perform duties as a military working dog handler capable of handling dogs trained in patrol or detector tasks. Training includes safety procedures; maintenance of a dog to include grooming, inspecting health checkpoints, diseases, internal and external parasites, first aide, feeding and watering, medication and veterinary clinic procedures; maintenance of kennel and equipment; principles of conditioning; obedience, obedience course, controlled aggression, scouting, building search, vehicle patrol, conditions under gunfire, tracking, acting as a decoy; maintaining proficiency of dog

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[59] Department of Defense Dog School, "Mission Statement"; available from http://dodmwd.lackland.af.mil/; Internet; accessed on 19 November 2000.

[60] U.S. Air Force, "Military Working Dog Fact Sheet," (37th Training Wing Public Affairs, Lackland AFB TX, 1999): 1

[61] Presently, the regulation governing military personnel attending the handlers courses require the serviceman to be a military policeman. Requests for waivers are outlined in AR 190-12 *Military Working Dogs.*

> teams; advice on the use of dog teams; maintaining records, reports, and forms; concepts of utilization; employment of search techniques; reaction to behavioral changes; explosive and chemical safety procedures; and legal considerations of military working dog use.[62]

According to AR 190-12, the following are prerequisites to attend training.

- Must be Military Police (MOS 95B) or DOD Civilian Guard and must meet medical requirements (IAW AR 190-12 & AR 40-501)
- The handler will be a volunteer and exhibit a high degree of affection for dogs
- In addition, the handler should show qualities of reasonable intelligence; resourcefulness; patience; dependability; and reliability

The second course taught by the 341st TRS for advanced dog handling is the Supervisors Course and is three weeks long. The course description is listed below:

> This course provides instruction on the management and supervision of the military working dog Program at the unit level. Provides training for DOD personnel and international students. Instruction includes transportation requirements for military working dogs and teams; a kennel section's operational responsibilities; resources required to operate a military working dog section; procedures for management of military working dog teams during air base survivability operations; principles of conditioning; procedures for procurement and maintenance requirements of drug training aids; evaluating employment of military working dog teams; proficiency training requirements for a military working dog; procedures for procurement and maintenance requirements of explosive training aids; evaluation and remedial action procedures for military working dog teams; aspects of dog care and conduct protocol training on a potential detector dog. [63]

According to AR 190-12, the prerequisites for attendance are: must be a qualified dog handler (ASI Z6) and have 2 years experience; must meet medical requirements (IAW AR 190-12 & AR 40-501); must be in the grade of SGT (E-5) through MSG (E-8); and hold the position of kennel master or military working dog trainer

[62] LTD 701st MP Home Page; available from http://www.lackland.af.mil/701stmpbn/MWDHC.htm; Internet; accessed on 18 November 2000.

To maintain their proficiency, dogs require constant training. Military working dog teams have a required task list that must be accomplished every day, much like the maintenance given to any other item of sophisticated equipment. Every day the military working dog teams are not on a mission, teams must conduct training to maintain their level of proficiency and competence. The military working dog maintains its values as a detecting tool only if it receives constant proficiency training. Likewise, the handler who does not practice his or her skill loses the ability to "read" the dog's responses.[64]

Because of the potential for loss of life or serious bodily injury in the explosives detection function is so great, the certification of handlers and dogs as an explosives detection team is mandatory. Bomb dogs must maintain a proficiency of ninety-five percent or greater on finding hidden explosives. Dog teams must be recertified under any of the following three conditions--when a new handler is assigned to a dog; when a dog team's proficiency training has been interrupted for thirty days or more consecutive days for any reason; and when an explosive detection team fails to maintain the minimum proficiency standard of ninety-five percent or better detection.[65]

The proficiency standard for narcotic detection dogs is ninety percent. Failure to maintain an average that meets or exceed this minimum standard for three or more consecutive months result in automatic decertification of the team.

Military working dogs have a useful working life of approximately ten years. Once a detector dog is unable to achieve minimum certification standards, the dog is returned to patrol duties. When a dog cannot perform patrol duties, it is returned to the 341st TRS and is used to train new handlers. Dogs not fit for continued military service are euthanized.

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[63] Ibid.

[64] Department of the Army, DA PAM 190-12 *Military Working Dog Program*, 15.

[65] Ibid., 13.

Logistics and Support

By agreement between the military departments, the Department of the Air Force has been assigned the procurement responsibility for the Department of Defense Military Working Dog Program.[66] The Air Force is also charged with supervising the integrated material management responsibilities for military working dogs related to equipment and supplies.

Breeds of Dogs Used

Through the years, a number of different canine breeds have been tested for the military working dog program. The German Shepherd and Belgian Malinois have proven to be the best choice as the standard military working dog. However, other breeds are frequently used based on user requirements and the availability of these breeds. Sporting breeds are used when there is a requirement for dogs to be trained only as drug or explosive detectors. The German Shepherd and Belgian Malinois have the best overall combination of keen sense of smell, endurance, speed, strength, courage, intelligence and adaptability to almost any climatic condition.

A dog's world is significantly different from a human. A dog's vision is inferior to man's although it can detect movement, however slight, at greater distances. A dog depends less on visual impressions than on its superior senses of hearing and smell. A German Shepherd's and Belgian Malinois hearing ability is much better than man's; however, for close examination of its environment, these breeds rely mostly on their keenest sense –

[66] AR 700-81/AFR 400-8/OPNAVINST 10570.1/MCO 10570.1: 2

smell. The highly developed senses of hearing and smell, along with a generally superior personality and disposition, make German Shepherds and Belgian Malinois the most versatile working dog breeds, and the ones best suited for general military duties.[67]

Procurement

There are essentially two methods to procure a trained working dog—DOD procurement or through a contracted civilian breeder/trainer. To requisition a military working dog team requires two separate transactions. Handlers are requested by a personnel action whereas dogs are obtained as a supply function. Military working dogs and handlers will normally be assigned and moved together as teams. The DOD Dog School presently trains four types of dogs for military employment. These are Patrol, Patrol/Narcotics Detector, Patrol/Explosives Detector, and Small Breed Detector Dog Narcotic.[68] Additionally, single purpose narcotics and explosive dogs are supplied to specific federal agencies.

Dogs are purchased from American breeders and from selected foreign breeders. In 1999, the military bought 154 American dogs with the average cost from $3,300 to $4,000. That same year, the military purchased 125 European dogs. Their average cost, including associated costs such as shipping and kenneling, was $3,265.[69] Male and female dogs are accepted but females must be spayed. Dogs must be between twelve and thirty-six months old, and weigh at least fifty-five pounds, stand at least twenty-two inches tall at the shoulders and be in good physical condition. Prior to procurement, prospective dogs undergo extensive temperament and physical evaluations. They are tested for gun shyness, aggressiveness and basic searching

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[67] Tom Newton, "History of the DOD MWD Program"; available from http://community-2.webtv.net/Hahn-50thAP-K9/K9History10; Internet; accessed on 16 Nov 2000

[68] Department of the Army, AR 190-12 *Military Working Dog* (Washington, D.C.: United States Government Printing Office, 1993) 3.

behavior. Their physical examination includes a blood test for heartworm disease, radiographs of their hips and elbows and a thorough physical examination from head to tail. Only if the animal is found to be both temperamentally and physically sound will it be procured for the program.[70]

Should the DOD Dog School be unable to accommodate SOF dog requirements, another alternative to pursue in obtaining trained dogs is to locally purchase them from civilian breeders/trainers. As one precedent, the Department of Defense's Office of Special Technology contracted with a civilian firm to train mine detection teams for the Balkans. Six dogs were subsequently purchased and sent for use in Bosnia where they worked as part of an integrated team that included engineers or deminers using mine detector sets, mine probes, surveying instrument, and other mine-detection equipment.[71] This option will require a waiver granted by the DOD Dog School.

A civilian certified dog would cost between $4,500 and $8,000. Important to note is that certification standards differ between breeders. A civilian trained dog acquired for military use should have a certification standard equivalent to the DOD Dog School. A similar standard would ease some of the subsequent recurrency and certification issues.

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[69] Vince Crawley, "Dog Trainers Barking Up Wrong Tree," *Air Force Times* (April 2000) 16.
[70] Newton, Internet; accessed on 1 Nov 2000.
[71] Albertson, 4.

Summary

It is impossible to estimate how many lives and how much manpower has been saved by military working dogs throughout history. Certainly, their value is out of proportion to the small numbers employed. The military working dog program, in many ways, has been inconsistent in U.S. military history. Every major U.S. conflict has necessitated the resurgence of military dog combat capabilities. During WWII and Vietnam, the U.S. Army requested the expertise of British war dog trainers, submitting to their experience and knowledge. America was becoming more reliant upon technology and mechanization to fight their wars, an effort that seems to parallel the Industrial Revolution. The canine, an efficient and cost-effective tool for saving lives, simply was swept aside as military commanders focused more on technological advances.[72]

Dogs have a wider role to perform in the current operational environment. Nearly every SOF mission can benefit from the inclusion of military working dogs. Possible SOF working dog employment options include force protection (psychological deterrence and early warning), countermine, booby-trap detection, counterdrug, crowd control, explosive detection, search and rescue, and scouting/patrolling. Many of these missions open the door for SOF access to a country. For instance, Appendix A shows countries with existing mine problems. Many of these countries qualify for demining initiatives in support of the regional CINC's engagement program. These efforts would not only benefit the host

nation but may also provide vital access to a nation otherwise inaccessible to the U.S. Government.

It is also apparent as missions to developing nations expand, low technology alternatives must be explored. As proximity to indigenous populations close and the identity of combatants and non-combatants blur, it becomes clear that non-lethal alternatives must be refined. The increased potential for conflict in urban settings creates an environment for collateral damage and civilian casualties that may preclude the use of high-tech firepower. These converging policies and geo-political and environmental factors forecast future conflict and humanitarian scenarios that would be well supported by military working dogs. Dogs offer low-tech and non-lethal capabilities that can be employed as a force multiplier and force protector while limiting damage and casualties.

[72] Lemish, 9.

Conclusions

The analysis of past working dog contributions and an examination of current SOF missions suggest that dogs should have an expanded role in future special operations missions. There are specific mission profiles where SOF can benefit from working dog capabilities and their roles should be carefully considered. The following recommendations serve as a guide for further action and discussion.

Recommendations

Develop a SOF military working dog study group comprised of SOF representatives from each service and relevant military working dog experts to further study the inclusion of dogs in SOF. Foremost in this panel would be subject matter experts from the DOD Dog School at Lackland AFB. Additional experts to consult are U.S. allies currently utilizing dogs such as the British, Germans, Israelis, and Czech Republic—all have robust and effective working dog programs. Their experiences will assist SOF in developing an efficient and capable program from inception.

The SOF panel should conduct a closer analysis by type of mission, both primary missions and collateral activities to define the command's focus in

introducing a military working dog capability. Their analysis will then be fed to a designated pilot team for the development of tactics, techniques and procedures.

The pilot team should be an operational SOF element from an Army Special Forces Group, Navy SEAL Team or Air Force Special Tactics Squadron. The pilot team would be comprised of SOF NCOs/CPOs (Chief Petty Officer) that can dedicate a minimum of two years with the program. The handlers and their dogs would be initially trained and certified at Lackland Air Force Base. Sustainment and continuing certification will be conducted at the unit's home station. To minimize logistical footprint, recommend that a memorandum of understanding be developed with the appropriate authority to utilize existing kennel space and kennel masters at their home station.

Suggested further research

- Who are the bill payers for a military working dog program? Can Joint Combined Exercises for Training (JCET), African Crisis Response Initiative (ACRI), Joint Contact Team Program (JCTP), and other program funding be utilized to purchase and train military working dogs?
- What are necessary actions to be taken for non-law enforcement personnel to attend the DOD dog trainer courses?
- What are the mechanisms to authorize by MTOE military working dogs in SOF? Procedures are outlined in DA PAM 190-12.

- Conduct a detailed cost analysis of a SOF military working dog program. Attempt to determine potential cost savings in manpower saved from utilizing dogs as force multipliers.
- Explore whether obtaining trained dogs through civilian breeders is a viable option. What are the costs associated with on-going training certification? Can civilian training courses be utilized to certify SOF dog handlers?

Potential for Countermine Operations

Annex A: Country Landmine and Demining Data

					Hidden Killers 1998	
Country (1)	**Region**	**UN Landmine Database 1997**	**Hidden Killers 1994**	**DOS Cable Latest Estimates**	**Low Range**	**High Range**
Afghanistan	Asia	10,000,000	10M	UN Est	**5,000,000**	**7,000,000**
Angola	Africa	15,000,000	9-20 M	6 M	**6,000,000**	**15,000,000**
Azerbaijan	Europe	100,000	A	NR	100,000	100,000
Bosnia-Herzegovina	Europe	3,000,000	A	600K-1M	**600,000**	**1,000,000**
Burundi	Asia	Unk	A	Unk	50,000	50,000
Cambodia	Asia	6,000,000	7-9 M	4 - 6 M	**4,000,000**	**6,000,000**
Chad	Africa	70,000	A		50,000	70,000
China	Asia	10,000,000	A	Millions ?	10,000,000	10,000,000
Colombia	Latin America	1,500	A	APL (17K) & UXO	1,500	1,500
Costa Rica	Latin America	Unk	1-2K	3 - 4 K	1,000	2,000
Croatia	Europe	3,000,000	1 M	MAC Est	**400,000**	**400,000**
Cyprus	Europe	17,000	A	17 K	17,000	17,000
Denmark	Europe	9,900		Unk	9,900	9,900
Ecuador	Latin America	60,000		Unk	60,000	80,000

Egypt	ME	23,000,000	A	> 20 M	22,500,000	22,500,000
Eritrea	Africa	1,000,000	1-2M	500K-1M	**1,000,000**	**1,000,000**
Ethiopia	Africa	500,000	500K	2 - 4 M	500,000	500,000
Falkland Is (Malvinas)	Latin America	25,000	25-30K		25,000	25,000
Georgia	Europe	150,000	A	Unk	150,000	150,000
Guatemala	Latin America	1,500	A	UXO	1,500	2,000
Honduras	Latin America	35,000	A	Unk	15,000	35,000
Iran	ME	16,000,000		Not Tasked	16,000,000	16,000,000
Iraq (Kurdistan)	ME	10,000,000	A	Not Tasked	**10,000,000**	**10,000,000**
Israel	ME		A	NR	260,000	260,000
Jordan (3)	ME	206,193	A	437,000	206,193	206,193
Korea (ROK) (4)	Asia	206,193	A		250,000	250,000
Latvia	Europe	17,000	A	NMA	Unk	Unk
Lebanon	ME	8,795	20 K	NR	8,795	35,000
Liberia	Africa	18,250	1K	NMA		
Libya	Africa	Unk	A	Not Tasked	100,000	100,000
Mauritania	Africa	Unk	A		10,000	10,000
Morocco	Africa		A	Unk	200,000	200,000
Mozambique	Africa	3,000,000	>1M	New est.	**1,000,000**	**1,000,000**
Namibia	Africa	50,000	A	50K	**50,000**	**50,000**
Nicaragua	Latin America	108,297	132K	85K	**85,000**	**85,000**
Panama	Latin America			NR		(UXO/APL) 5,000
Rwanda	Africa	250,000	50K	50-100 K	100,000	250,000

Somalia	Africa	1,000,000	A	Not Tasked	**1,000,000**	**1,000,000**
South Africa	Africa			NMA	250,000	250,000
Sri Lanka	Asia	Unk	A	100 K	25,000	25,000
Sudan	Africa	1,000,000	A	Not Tasked	**1,000,000**	**1,000,000**
Syria (6)	ME	Unk	A	NMA	100,000	100,000
Tadjikistan	Europe	Unk	A	50- 60K	100,000	100,000
Thailand	Asia	Unk	A		100,000	100,000
Uganda	Africa	Unk	A	Unk	50,000	50,000
Ukraine	Europe	1,000,000		NR	1,000,000	1,000,000
Vietnam	Asia	3,500,000		NR	3,500,000	3,500,000
Yemen	ME	100,000	20K	>85K	100,000	100,000
Yugoslavia (8)	Europe	500,000			500,000	500,000
Zaire	Africa	Unk		NR	50,000	50,000
Zambia	Africa			NR	100,000	100,000
Zimbabwe	Africa	Unk	A	2.2 M	200,000	2,200,000
Number of Countries	**93**	**70**	**59**		**64**	**64**
TOTAL		**108,738,377**			**86,830,830**	**102,468,593**

SOURCES: UN Landmine Database (Demining Program and country reports); U.S. Army National Ground Intelligence Center estimates; and U.S. Department of State Hidden Killers 1998 cables from embassies and consulates.

Appendix B: Potential Technologies

Sensor technology	Maturity	Cost and complexity
Passive infrared	Near	Medium
Active infrared	Near	Medium
Polarized infrared	Near	Medium
Passive electro-optical	Near	Medium
Multi-hyper spectral	Far	High
Passive mm-wave	Far	High
mm-Wave radar	Near	High
Ground penetrating radar	Near	Medium
Ultra-wideband radar	Far	High
Active acoustic	Mid	Medium
Active seismic	Mid	Medium
Magnetic field sensing	Near	Medium
Metal detection	Available	Low
Neutron activation analysis	Near	High
Charged particle detection	Far	High
Nuclear quadruple reson.	Far	High
Chemical sensing	Mid	High
Biosensors	Far	High
Dogs	Available	Medium
Prodding	Available	Low

NATO report published in March 1996 that makes a classification of potential sensor technologies.

Appendix C: Phone Contacts

Name	Organization	Contact
Major Kelly Mann, DVM	DOD Dog School, Lackland Air Force Base	(210) 671-3991 Kelly.mann.lackland.af.mil
Mr. Tom Newton	HAHN military working dog Website	Hahn-50thAP-K9@webtv.net
Les Grant	Foreign Military Studies Office	
SSG Stanley	Fort Leavenworth Kennel Master	(913) 684-2108; DSN: 552-2108 or 552-2107
Mr. David Frost	TN Dept of Safety: Special Operations/Tactical Squad	(615) 741-5660
Trooper Brad Lund	TN Dept of Safety: Special Operations/Tactical Squad	(800) 811-5122
Mr. Gary Emery	341st PAO	(210) 671-0863 Gary.emery@afsfc.lackland.af.mil
COL Carry Carpenter, DVM	341st Chief Veterinarian	2800 Craw Av. Lackland AFB, TX, 78236 (210) 671-3991
MAJ Howard Hunt	MP School, Fort Lenordwood, MO	DSN: 676-8083
MAJ Rob Dillon	Cdr, LTD 701st MP Lackland, AFB	(210) 671-6878 Rob.Dillon@AFSFC.Lackland.Af.mil
MAJ Donna Rivera or Ms. Judy Saul (Pentagon)	USAPOA	(703) 697-2914 DSN: 227-2914
SSG Redican	FORSCOM Program Manager Fort McPherson	(404) 464-5895 DSN: 367-5895
MAJ John Probst	Cdr. 341st TRS, Lackland AFB	2800 Craw Street Lakeland AFB, TX 78236 Phone: (210) 671-5178 A/V: 673-3400
CW2 Riley	341st	(210) 671-5178
Mr. Bob Dameworth	Chief, DOD MWD	(210) 671-0893 Robert.Dameworth@AFSFC.Lackland.AF.mil

Glossary

AT Antiterrorism	IO Information Operations
CA Civil Affairs	JCO Joint Commission Observer
CBT Combating Terrorism	MOOTW Military Opn Other Than War
CD Counterdrug	MWD Military Working Dog
CM Countermine	MWDT Military Working Dog Team
CP Counterproliferation	NCO Non-commissioned Officer
CPO Chief Petty Officer	PSYOP Psychological Operations
CT Counterterrorism	SA Special Activities
CSAR Combat Search and Rescue	SAR Search and Rescue
DA Direct Action	SASO Stability and Spt Operations
DOD Department of Defense	SOF Special Operations Forces
FID Foreign Internal Defense	SR Special Reconnaissance
HN Host Nation	UW Unconventional Warfare

Civil Affairs (CA): A SOF principal mission that facilitates military operations and consolidate operational activities by assisting commanders in establishing, maintaining, influencing, or exploiting relations between military forces and civil authorities, both governmental and non-governmental, and the civilian population in a friendly, neutral, or hostile area of operation.[73]

Coalition Support: A SOF collateral activity that integrates coalition units into multination military operations by training coalition partners on tactics and techniques and providing communications. [74]

Counterproliferation (CP): A SOF principal mission that combats the proliferation of nuclear, biological, and chemical weapons across the full range of U.S. efforts, including the application of military power to protect U.S. forces and interests; intelligence collection and analysis; and support of diplomacy, arms control, and export controls. Accomplishment of these activities may require coordination with other U.S. government agencies.[75]

Information Operations (IO): A SOF principal action taken to achieve information superiority by affecting adversary information and information systems while defending one's own information and information systems.[76]

Military Operations Other Than War (MOOTW): Operations that encompass the use of military capabilities across the range of military operations short of war. These military actions can be applied to complement any combination of the other instruments of national power and occur before, during, and after war.[77]

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[73] Joint Publication 3-05, II-9.
[74] Ibid., II-11.
[75] Ibid., II-10.
[76] Ibid.
[77] Joint Staff, "Joint Doctrine Encyclopedia," (Washington D.C. U.S. Government Printing Office, 1997) 513.

Military Working Dog (WMD): Dogs required by the armed services for a specific purpose, mission, or combat capability. These include Scout, sentry, patrol, tracker, narcotic/ contraband, explosives, and mine and tunnel dogs. The dogs may be used with or without handlers, according to policies established by the military or governmental agency concerned.[78]

Military Working Dog Handler: A Military Policeman who is qualified to care for, use, and maintain the proficiency of a trained military working dog for the purpose of accomplishing a specific mission.[79]

Military Working Dog Team: A military working dog and its handler that is trained to work together in performing law enforcement and/or physical security duties.[80]

Mine and Tunnel Detector Dogs: A military working dog trained to detect mines and locate tunnels and bunkers.

Narcotic Detector Dog: A military working dog trained specifically to detect the presence of marijuana and its derivatives. They are also capable of detecting hard narcotics such as opium, cocaine and heroin.

Olfactory Sense: The ability to detect and discriminate odors at various concentrations.

Patrol Dog: A military working dog that is the most versatile single-purpose asset available. This dog can expand law enforcement capabilities and increase the physical security posture of a military installation. Flexibility of employment is enhanced due to its ability to perform numerous tasks.[81]

Psychological operations: A SOF principal mission to induce or reinforce foreign attitudes and behaviors favorable to the originator's objectives by conducting planned operations to convey selected information to foreign audiences to influence their emotion, motives, objective reasoning, and ultimately, the behavior of foreign government, organization, groups, and individuals.[82]

Recovery Operations: Operations to locate, recover, and restore personnel, or material held captive, isolated, or threatened in areas sensitive, denied, or contested to friendly control. These operations employ unconventional tactics, techniques, clandestine search, indigenous assistance, and the frequent use of ground combat elements.[83]

Security Assistance: A SOF collateral activity that provides training assistance in support of legislated programs which provide U.S. defense articles, military training,

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[78] AR 700-81/AFR 400-8/OPNAVINST 10570.1/MCO 10570.1: 1; FM 19-35: 1-59; DOD Directive 5200.31.

[79] Department of the Army, *FM 19-35*, 2.

[80] Ibid., 2.

[81] Ibid., 11-27.

[82] Joint Publication 3-05, II-9.

[83] Ibid.

and other defense-related services by grant, loan, credit, or cash sales in furtherance of national policies or objectives.[84]

Security and Support Operations (SASO): The use of military capabilities for any purpose other than war. [85]

Sentry Dog: A military working dog trained to assist in providing tactical or non- tactical security in and about fixed military installations as part of a physical security element. A sentry dog is a powerful psychological deterrence against intruders and attack threat; a highly aggressive animal able to work either on or off-leash, and controlled at all times by a skilled handler. Sentry dogs are trained to develop distrust, suspicion, and the inclination to attack all human beings other than their assigned handlers. This behavior pattern makes the sentry dog an extremely effective early warning asset. [86]

Search and Rescue: A military working dog that is highly trained to locate injured personnel, day or night, under all weather and terrain conditions.[87]

Special activities: A SOF collateral mission subject to limitation imposed by Executive Order and in conjunction with a presidential finding and congressional oversight, plan and conduct actions abroad in support of national foreign policy objectives so that the role of the U.S. government is not apparent or acknowledged publicly.[88]

Special Operations Forces: Those active and reserve component forces of the military Services designated by the Secretary of Defense and specifically organized, trained, and equipped to conduct and support special operations. Also, called SOF. (Joint Pub 1-01.)[89]

Tracker Dog: A highly trained military working dog able to work silently (day or night) on a 25 foot leash following a "ground scent" over terrain not holding a visual sign, and to "signal" the handler when it is nearing the subject being tracked. This dog in an integral part of a reconnaissance element used to detect direction of enemy movement.[90]

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[84] Ibid.

[85] Department of Army, *FM 101-5 Operational Terms and Graphics* (Washington, D.C.: U.S. Government Printing Office, 1997) 1-143.

[86] Department of the Army, *FM 19-35*, 2, 28-36.

[87] Joint Publication 3-05, II-9.

[88] Ibid.

[89] SOF will be used extensively throughout the paper and unless specifically identified, topics will pertain to Army, Navy, and Air Force special operations personnel.

[90] Department of the Army, *FM 19-35*, 2, 28-36.

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