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The Use of Dogs in Defense and Security Management in Turkey

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Abstract: The terrorism gained a new dimension after the terrorist attack on 11 September, 2001 and became unlimited like globalization. It is seen that today most of the wars are being made in urban areas or under the framework of UN for the purpose of "peace making" and "peace keeping". But the Fight In Built Up Areas / Military Operations on Urbanized Terrain (FIBUA/MOUT) always brings together different requirements such as a different doctrine, tactic, technique, procedure, planning, training and equipment. As it is known, because of their having learned the cage life, their getting used to live with humans and their properties suitable for duties, the dogs have been one of the closest friends of human beings. These characteristics make the dogs superior to other animals, and make them advantageous for the mission in defense and security management, rural and urban areas, and mission against terrorism. It is required to know these cute and friendly animals and know how to benefit from them. This article focuses on possibility and capability of use of dogs in defense and security management in Turkey examples.

Key Words: Turkey, management, defense, security, dog.

Türkiye'de Köpeklerin Savunma ve Koruma Amaçlı Kullanımı

Özet: Terör, 11 Eylül 2001 tarihinde terörist saldırıdan sonra yeni bir boyut kazanmış ve küreselleşme gibi sınırsız olmuştur. Bugün savaşların kentsel alanlarda ya da "barışı sağlama" amacı veya "barışı korumak" için BM çerçevesinde yapıldığı görülmektedir. Bununla beraber, kentleşmiş arazi alanlarındaki askeri operasyonlar/mücadeleler her zaman, farklı doktrin, farklı gereksinimi, farklı taktiği, tekniği, prosedürü, planlamayı, eğitimi ve ekipmanı gerektirmektedir. Bilindiği gibi, kafes hayatı öğrenmiş, insan ile birlikte yaşamaya alışkın ve görev için uygun özellikleri ile köpekler insanın en yakın arkadaşlarından biri olmuştur. Bu özellikler köpekleri diğer hayvanlardan üstün kılar. Savunma ve güvenlik yönetimi, kırsal ve kentsel alanlarda ve terörizme karşı görev için onları avantajlı hale getirir. Bu sevimli ve samimi hayvanları bilmek ve onlardan yararlanmak için onları tanımak ve bilmek gereklidir. Bu makalede, Türkiye'de savunma ve güvenlik yönetimi için köpeklerin kullanım yeteneği üzerinde durulmaktadır.

Anahtar Kelimeler: Türkiye, savunma yönetimi, emniyet, köpek.

Introduction

The steady increase in the world population and in the urbanization influences the social life and changes the settlements from global villages to global cities. The terrorism gained a new dimension after the terrorist attack on 11th September, 2001 and became unlimited like globalization. The world processed a rapid chance as a result of these attacks. People realize that they are not living as in the past and many things have changed, when they look at the near past. This process has accelerated more especially after the 11th September attacks and there appeared a mixed picture full of concerns about defense and security. This mixed picture in fact has a well-known name which is "Terrorism".

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On September 12th 2001 many commentators and analyst argued that the terrorist attacks in New York City and Washington D.C. have made our worst fears a reality. Yet regardless of the terrifying events of that day we have fortunately not seen our worst fears become reality. Local, national and international terrorism have caused thousands of casualties each year and indeed the events on September 11th 2001 have made us aware that terrorist groups and individuals with similar ambitions are willing and capable of killing and injuring thousands of innocent civilians²⁴.

By now a large network of intelligence and security agencies around the world were cooperating on terrorist issues. Based on a largely US and European network set up before the Gulf War, the network had been extended to include a number of friendly Arab countries, Russia and other member states of the former Soviet Union, and countries in the Far East, including the Philippines, Malaysia and Singapore. This is ensured that a number of attempts to mount attacks around the millennium were foiled and suspects arrested²⁵.

For the vast majority of possible terrorist targets, significant expenditure to reduce vulnerability is not justified by the low ambient risk²⁶. Today, a terrorist attack has to be effective and shocking to achieve its aim. For this reason, how many people can be reached is more important than how many people are affected by the attack. This situation changed the application areas of the terrorists. Before, actions like kidnapping for causing a sensation and assassinating the critical persons such as senior leaders were enough. But today suicide bombings in crowded places in big cities and mines laid on the ways of soldiers and/or civilians in rural areas causes more sensation. Thanks to this, terrorism affects masses of people by showing itself both in urban and rural areas²⁰.

It is seen that today most of the wars are being made in urban areas or under the framework of UN for the purpose of "peace making" and "peace keeping". Turkish Armed Forces has served and still serves in Korea, Somali, Bosnia-Herzegovina, Kosovo and Afghanistan under the framework of North Atlantic Treaty Organization (NATO) and UN to achieve these missions. Most of these missions have been fulfilled and are still fulfilled in Urban Areas.

This article focuses on as follows; first the mission in urban terrains is discussed. Then,

the discourse on the characteristics of the dogs and the selection, training and aims of the use of dogs are presented. Further, the situation in Turkey is examined. Finally, some findings and implications are discussed and offered.

Missions in Urban Terrains

In fact, when the war history is examined, it is seen that in the wars since the World War II, the cities and settlements (Urban Terrains) were used mostly for the purpose of destroying the resistance of the enemy and causing casualties. Its most striking examples occurred in Leningrad and Stalingrad between German and Russian Units. These combats had a crucial role in the change of the direction of the war.

When the tactic doctrines of the armies of the world are examined, it is understood that the war objectives have been changed, fight in built up areas [Military Operation on Urbanized Terrain (FIBUA / MOUT)] are launched when necessary and when the place is fully secured by the allied forces. Because of the high rate of risk, time-consuming and difficult environmental conditions, bypassing around the urban area and controlling and isolating the area outside, from the critical points are mostly preferred¹¹. Lieutenant General John P. Abizaid consists of all the urban areas as a complex manmade physical terrain is superimposed on existing natural terrain and consists of structures and facilities of various types. A population of significant size and density inhabits, works in, and uses the manmade and natural terrain. An infrastructure upon which the area depends may also occupy manmade terrain and provides human services and cultural and political structure for the urban area and often beyond, perhaps for the entire nation²¹.

As it is known that today's wars occur within the borders of the countries that are least developed or still developing, and terrorist attacks are generally launched in metropolises and large cities. From this point of view, the metropolises, roads, streets, sites, wards, crossroads, underground and over ground structures, rail networks, tubes, skyscrapers of the cities and settlements are nightmares for the armed units and General Law Enforcement (gendarmerie, police, and coast guards) forces. Because of this property, FIBUA/MOUT always brings together different requirements such as a different doctrine, tactic, technique, procedure, planning, training and equipment. While the general law enforcement forces serve in missions equal to the missions of military units, the special security forces mostly serve in patrolling and check point services, controlling the critical points, buildings and facilities, securing and monitoring the airports, harbors, education, health and sports institutions, hotels, sites and shopping centers, making the concerts and shows be completed without troubles, protecting the banks, securing the transportation of valuable belongings and money, protecting very important persons.

In these missions, finding the explosives used in terrorist attacks and making them ineffective gain importance. Both the electronic devices and trained dogs are used in the detection of explosives. As a result of the researches conducted by the Russian scientist Ivan Petroviç Pavlov on dogs, conditioned reflex behaviors were developed and at the beginning the dogs used as a sentry, message, and forward observer were used in Nazi concentration camps by Germany especially during the World War II. At that time, Germany had an army including 200.000 trained dogs. Americans used the dogs in especially overrunning the Pacific Islands under the control of Japan to find the secret fire locations and research the wounded persons in the forest. However, the Soviet Union trained the dogs to search for food under the ammunition railway cars. Later, she sent the hungry dogs to the enemy after having loaded Trinitrotoluen (TNT) explosive on them. The explosives were detonated, while the dogs were moving⁸. As it is seen, both the preventive measures were taken and casualties were inflicted on the enemy by using the various characteristics of the dogs.

As it is known, because of their having learned the cage life, their getting used to live with humans and their properties suitable for duties, the dogs have been one of the closest friends of human beings. It is required to know the characteristics of these cute and friendly animals and know how to benefit from them.

The Characteristics of the Dogs

A dog receives information about the environment with the help of its senses of sight, hearing, smell, taste, and touch. There are sensitivity differences between a dog and a human. The angles of sight of a dog and a human are different from each other. A person's angle of sight is 190 degrees, but a dog's angle of sight is totally 250 degrees. Moreover the ears of a dog can hear high frequencies better than the ears of a human. While human beings can perceive 18000-20000 cycles per second, dogs can perceive 80000 cycles per second. But the dog nose is not subject to the phenomenon of adaptation, or "nose-fatigue," which human experience. The human sense of smell has become accustomed to it. Strong and repulsive scents will take longer than faint ones, but eventually the sensation fades. The dog, however, by following a track for great lengths of time, demonstrates that he/she is capable of detecting the same scent without undergoing this process of adaptation. Beings get used to the strong smell after a short time and their sensitivity decreases, but the dogs' sensitivity does not decrease even if they follow the same smell for a long time and they do not have difficulty in distinguishing it. The talented nose of a dog also has the capability of perceiving little difference in tailing for a long time²³. At the same time, the dog can perceive the different impressions such as the trainer's actions with the lead and harness (the sense of touch) or footsteps (the sense of hearing). These characteristics make the dogs superior to other animals, and make them advantageous for the missions in defense and security management, rural and urban areas, and missions against terrorism.

The Selection, Training and Aims of the Use of Dogs

The lifespan of dogs is 12 years, 9 years of which are active. The approximate developmental stages and ages of dogs are shown in Table-1. The dogs reaching maturity after successfully completing these periods are selected and trained according to the specialization subjects determined in relation to the needs of their country and security forces.

There are many specialization subjects, but the dogs are trained in Reconnaissance (Patrol) Dog (RD), Track Dog (TD), Search and Rescue Dog (SARD), Detector Dog (DetD) branches. The Detector Dogs are specialized in Mine Detection Dog (MDD), Bomb Detection Dog (BDD) and Drug Detection Dog (DDD) branches. Spirit and physical development and character of dog are generally shaped in age two. From this point, a trained dog can be used for 9 or 10 years. When the dogs become adults, they are divided into branches according to their race, instincts and talents. For the duties' being fulfilled effectively, the selected dog's race, the presence of his ancients doing the same job and its type are important. Furthermore, it is required that the dog has the necessary instincts and its talents are suitable for the duty.

There are many different dog races around the world. Their training differs according to their races. For example, while some races of dogs are convenient for the patrolling and tracking duties, the others are convenient for searching-rescuing and detecting duties. For this reason, the dogs have to be trained according to the selected missions after their race, natural tendencies and talents are identified, because the basis is same, but all duties require different training methods.

Table	1.	Developmental	Stage	and	Ages	of	a
		Dog (5)					

Tablo 1. Bir köpeğin gelişme dönemleri ve yaşı

DEVELOPMENTAL STAGES	AGE		
Neonatal Period	Birth to 12 days		
Transitional Period	13 to 20 days		
Awareness Period	21 to 23 days		
Canine Socialization Period	21 to 49 days		
Human Socialization Period	7 to 12 weeks		
Fear Imprint Period	8 to 11 weeks		
Seniority Classification Period	10 to 16 weeks		
Flight Instinct Period	4 to 8 months		
Second Fear Period	6 to 14 months		
Maturity Period	1 to 4 years		

According to the data, 2004 – 2005 crime tables, was given in the official website of the General Security Directorate of Turkey and as seen in Table-2. There is an increase in the illegal actions both in the many areas of the world and in Turkey. The dogs trained by the security forces can be used to prevent these actions and other illegal events as shown on the opposite of them in the table.

Reconnaissance (Patrol) Dog (RD): Reconnaissance dog may be used on gate duty or other entry control functions. The dog's primary function is deterrence and protection of the handler. The function of the patrol dog is to pursue, attack, and hold any intruder who attempts to avoid apprehension or escape from custody¹⁰. The reconnaissance dog is the one that have the capability of identifying the strangers from distant places. The reconnaissance dog's contribution to the law and order effort is most effective when it is utilized as a walking patrol. The law enforcement duties that a reconnaissance dog can perform as a walking patrol include checking or clearing buildings and patrolling parking lots, family housing areas, and troop billet areas. Mobility significantly increases the potential area of coverage⁹. The reconnaissance dog is thought to respond to the audio-visual stimulus, sound of weapon, loneliness, and humans, to be aggressive, and to have the capability of solving problems. These are seen as the necessary properties.

Table 2. 2004-2005 Crime Table of the General Security Directorate of Turkey(6)

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CRIME	2004 2005 CANINE		THOUGHTS				
Migrant	56.430	57.428	RD, TD, AbK				
Human Trafficking	896	834	RD, TD, AbK				
Public Security	353.578	487.762	RD, TD, AbK				
Terrorism	2.239	2.592	RD, TD, AbK				
Counterfeit money	70.312	287.557	DetD	Exchange, YTL, TL			
Drug	11.138	6.837	DDD	Opium, Basic morphine oin			
	4.331	6.002	DDD	Hashish (kg)			
	125	40	DDD	Cocaine (kg)			
	8.414.98 6	7.043.56 9	DDD	Captagon, Ecstasy			
	99	1.691	DDD	Acetic anhydride (It)			
Arm	1.673	1.859	DetD	Pistol, Rifle			
Ammunition	44.082	38.816	DetD				
Expertise	85.533	111.581	DetD	30.45 % increase			
Ballistic inquiry	37.858	55.072	DetD	45.46 % increase			
Trace inquiry	6.420	7.523	DetD	17.18 % increase			
Chemical	18.561	22.695	DDD	9.47 % increase			
Biological	8.083	10.012	DDD	23.86 % increase			
Bomb disposal	561	553	BDD	1.42 % decrease			
Crowd control	5.263	9.588	RD, TD, AbK	Show, Meeting			

Tablo 2. Türkiye'de 2004-2005 yıllarında genel güvenlik kayıtlarında suç dağılımı

The reconnaissance dog having the properties stated above has the capability of securing the critical locations, roads, bridges, buildings, and facilities in rural and urban areas, of being used as the deterrent force, and of fulfilling the activities of the general law enforcement and special security forces in their check and control points. The reconnaissance dog has the ability to identify from a distance (200-250) the strangers entering the area, building, and facility in the rural area it protects and to warn its unit. It fulfills these missions more successfully at nights, in quiet and serene places. One of the most important characteristics of a reconnaissance dog is it assaults by order and stops the assault by order. The fact that its aggressiveness and deterrence are on highest level and under its owners control makes it easy to be used in urban areas, crowd control, riots, and against illegal groups.

Because of these properties, the reconnaissance dog can be used by the armed forces in special mission in urban areas, in the security of control and contact points, in the protection, research and clearance of critical areas, buildings, facilities, in making the suspected people ineffective, in accompanying the captives and prisoners, in separating the elements other than war elements, in being deterrent in the crowd control and riots without destroying the environment. They can be used by the general law enforcement and special security forces in patrolling and check and control point duties, controlling the buildings and facilities, securing the airports, harbors, education, health and sports institutions, hotels, sites and shopping centers, making the concerts and showed to complete without troubles, protecting the banks, securing the transportation of valuable belongings and money, protecting very important persons²².

Given two-way spill-over effect between instability in a region and instability in a country, it is meaningful to see regional instability as a threat for a stable country in an unstable region. Instability in a neighbor or between two or more neighbors can be regarded as a threat because it provides suitable ground for emergence of all kinds of new generation threats such as terrorism, migration, poverty and drug trafficking among many other ills. Perceived threats can be either actual (inferred from more or less definite signals of intent) or "potential" (inferred from some state of environment or the mere capability of the opponent).

Turkey has 8 neighbor countries including Greece (203km.), Bulgaria (269 km.), Georgia (276 km.), Armenia (328 km.), Azerbaijan (18 km. with autonomous Nakhichevan), Iran (560 km.), Iraq (384 km.) and Syria (911 km.). The land border length of Turkey is 2.949 km., the beach length is 6.530 km., and total length (except islands and Marmara see) is approximately 9.479 km¹³. Most of these borders are not based on natural barriers and there occurs troubles in the control of them. They are used by the terrorist organizations especially for drug, arm and human trafficking. So, one of the areas where the reconnaissance dogs are required more is the border units for securing the borders. Furthermore, the urban areas are used for crowd control, riots and illegal activities by the terrorist organizations. The reconnaissance dog can be used for preventing and/or deterring these activities by the general law enforcement forces.

The reconnaissance dog can be used for a long time by the general law enforcement forces since their service areas are mostly urban areas and the dogs have the opportunity to relax outside their working hours. However, as the duties of the armed forces are mostly fulfilled under difficult field conditions and they are longlasting, the dogs should have spares. The dog's using the transportation vehicles outside the service transports increases its efficiency. If the security forces do not pay attention to this subject, it can cause difficulty in their duties later.

Tracker Dog (TD): The tracking dog is not a weapon. But it is a sensor that allows the handler and tracker to increase its radius of perception. The tracking dog would fulfill its missions by identifying and acquiring a track from sign or scent. Tracking dog is trained to follow only one scent on the ground. Dog acquires a scent, usually by sniffing an enemy footprint or blood trail identified at an incident site. The dog then follows this scent picture amid hundreds of other odors on the trail. This scent is as unique as a person's fingerprint or written signature³. Tracker dog can locate a perpetrator or enemy personnel starting at a certain spot approximately 1/2-day-old trail and following scent approximately up to 5 km that has fallen off of the person onto the ground. Being brave, adapting rapidly to the changeable conditions, being sure of itself are taught to the tracker dogs and are required.

The dog having the characteristics stated above is able to distinguish the scent easily. With the help of its quick, alert, active character and sensitivity to the environment and the scent, it can find the friendly forces in the urban areas, in crowd control, and riots. Moreover, it has the capacity and capability of finding and following the enemies entering complex structures, preventing the activities of the friendly forces, ambushing and then pretending to be innocent in civilians by altering his appearance.

Because of these properties, the tracker dog can be used by the armed forces in duties such as identifying the Unconventional Warfare elements in urban areas, gaining and maintaining contact with the enemy. But, it can be used by the general law enforcement forces and special security forces in duties such as revealing the activities of the terrorist organization in the mission area, and following and nabbing the criminals.

The struggle of the security forces with terrorism and illegal activities resembles a drive. They always have to follow the illegal elements and maintain the contact with them when they gain it for being successful and preventing the activities. The tracker dog, as its names tell, can be used to follow and maintain the contact with unfriendly forces. But the efficiency of the tracker dog lessens in unknown regions, and in difficult and rigorous terrains such as the Southeast region in Turkey, in the regions having high altitude differences, cliffs, rocky places, and rivers, dense forests in long and tiring tracking. For this reason, they should use the transportation vehicles during tracking.

Search and Rescue Dog (SARD)

The important characteristics that the search and rescue dog is required to have are excellent scenting capability, strong drives (prey, pack, play, etc.), physical endurance/stamina, high degree of intelligence, high degree of trainability¹. Many different breeds are used in search and rescue, but larger dogs are the best suited for this challenging work. Search and Rescue dog must be able to swim, climb stairs and ladders, climb over trees and logs, and through unimaginable debris. But despite its great physical agility and strength, the most important aspect of choosing a candidate for the program is the dog's temperament. In general, the dog must be hard-working and has an affinity for retrieving or fetching objects. In fact, search and rescue dogs do their jobs for rewards, which can be in the form of a treat, praise, or a play a game¹⁷. In training process, the search and rescue dog is taught to respond searching in the middle of the night, searching in rubble piles they've never worked on, searching for victims at a significant depth, reaching the victims through subterranean tunnels, rappelling, with searches immediately afterward, and encountering unusual distractions such as cadaver scent¹⁶ and these are additional thought as the necessary properties for their regular training program.

The search and rescue dog having the properties stated above are generally used in the search of living creatures because of its strong, tough structure and high level sense of scent. With the help of its ability to answer, it can inform the allies early about the sabotage and ambush of the enemy in the urban areas, and so reduces the casualty. It made it possible to identify the enemy and activities of it in the search of building and facility.

The search and rescue dog can be used more effectively and more efficiently by the armed forces in the urban areas in restricted environments preventing the maneuvers of the allies such as the building ruins and closed roads during war time. It can be used by the general law enforcement and special security forces in natural disasters such as an earthquake, avalanche, and in field search.

According to the Turkey Earthquake Website, Turkey is on the Mediterranean-Himalaya seismic line from the Strait of Gibraltar to Indonesia. Since there are many little panels between the big panels, a major part of the country is on the seismic line¹⁸. In the last 58 vears, 58.202 citizens have lost their lives, 122.096 people have been injured, and approximately 411.465 buildings have collapsed or been seriously damaged because of earthquakes. In relation with this information, 1.003 citizens die of the earthquakes and 7.094 buildings collapse in every year on average⁴. According to many seismologists, Turkey will meet this disaster again in near future. Even though it is not wished, in such a disaster major helpers will be the search and rescue dogs.

Detector Dog (DetD)

The detector dog is generally used for finding the materials that are not alive, but prevent the activities of the allies, and are not wanted. The detector dog is mostly used in the duties such as detecting mines, bombs and narcotic materials. While the mine dogs are used for military purposes, the bomb dogs are used both in the military and in the general law enforcement and special security forces. The drug detection dogs are generally used for the general law enforcement forces.

Despite the fact that the different duties require different properties, the same characteristics and training methods are used for all the detector dogs. Because of this, playing games since it is required for finding a hidden material or object, being successful in the trainer-toy test, having an unchangeable nature, strength, retrieving property, sensitivity to water and food, the instinct of search are taught to the detector dog in the training process and these are thought as the necessary properties. The dogs having these characteristics can be used in the duties for detecting mines, bombs and narcotic materials.

Mine Detection Dog (MDD)

The mine detector dog has the ability to actively find trip wires, booby traps, metallic and nonmetallic mines¹⁵. A mine dog's training and superior sense of smell enables him to detect a wide variety of foreign landmines. When combined with the handler's ability to interpret his/her dog's responses and to judge their significance, the mine detector dog can provide the commander with a sight picture of the emplacement of all types of mines, a warning of minefields and their boundaries, assistance in the detection of mines missed by other mine detection and clearance assets and/or confirmation of their finds, and trip wire detection when properly trained². In the training process of the mine detector dog, the high level of intelligence, an unchangeable nature, and little aggressiveness are taught and demanded as the necessary properties.

The mine detector dog has the capacity to find all types of explosives, firstly the antipersonnel and anti-tank mines that are laid by the enemy in the areas higher than the land level (2,5-180 cm in diameter) and deeper (2,5-30 cm in diameter) with little mistakes because of its superior sense of scent and researcher nature. These levels are as much as a human and bayonet lengths.

The mine detector dog has the capacity and ability to find the mines laid by the enemy in the mission areas of the allied units in rural and urban areas. A mine detector dog completing the advanced detecting training is able to detect every type of explosives in all field and natural conditions and to warn its partner early. They can achieve these missions also in the urban areas in restricted environments preventing the maneuvers of the allied units such as the building ruins and closed roads during war time.

Because of these characteristics, the mine detector dog can be used in the duties such as clearing the mission areas and keeping the maneuver directions open in the rural and urban terrains. As it is known, in recent times the use of mines in borders has been limited in international arena. In this context, the clearance of the mines in the borders of Turkey becomes a current issue.

The types of the explosives used by the terrorist organizations which suffered heavy casualties in their struggle against the security forces change in time. In addition to the common explosives, the explosives made of ammonium nitrate, tubes and materials used in daily life and maintained easily can be used as an explosive. Especially in rural areas, they want to launch strikes with remotely controlled explosives. Finding these mechanisms working with the cable or cordless systems causes some difficulties. So, training the dogs according to all explosive types gains importance. The batteries of the controlled systems laid far from the explosive can be found by the dogs. But this method requires the use of two dogs simultaneously. While one of the dogs is finding the remote control system, the other finds the explosive. For this reason, training and using the two dogs separately gain importance.

Bomb Detection Dog (BDD)

Bomb dog is a vital part of today's security forces. It not only detects the presence of explosives but also provides peace of mind when an area is confirmed as being free of any explosive devices. The right temperament is just as important as a good sense of smell in the selection of bomb detection dogs. The bomb dog needs to be friendly and outgoing, with a strong hunting instinct and an intense work drive, compulsive desire to play with a toy, which is a critical part of training the explosive detection dog, get along well with people, because so much of what they do is in crowded areas. In laboratory tests, bomb sniffing dogs were able to detect odor concentrations as small as one to two parts per billion. Dogs are also remarkably good at detecting a target odor even when mixed with lots of other smelly stuff. A dog can detect dynamite through dirty diapers, or C4 through smelly socks¹⁴.

The bomb dog with its high level sense of scent and distinguishing has the capacity and ability to identify all kinds of explosives and demolition materials, such as C3, C4, TNT, gunpowder, etc., in buildings, vehicles, suitcases, valises, and on humans at a high rate of percent. In the training process of the bomb dogs, the training methods for the mine detector dog are used and demanded as the necessary properties.

A bomb detector dog completing the advanced detecting training like a mine detector dog is capable of detecting, with little mistake, every type of explosives, booby traps, arms and ammunitions hidden in the field and urban terrains and warning its partner early. The bomb dog can achieve its missions also in the urban terrains in restricted environments preventing the maneuvers of the allied units such as the building ruins and closed roads during war time and in most difficult conditions.

The bomb dog can be used by the armed forces for the identification of the bombs used by the enemy in the maneuvers directions of the allies in the rural and urban terrains. It can clear and keep open the trapped critical regions, buildings, facilities and the check and control points. It is able to detect the arms and ammunitions belonging to the enemy. They can be used for protecting the allies from the enemy's booby tarps, assassinations and suicides with bomb during the activities in the buildings or facilities. It can be used by the general law enforcement and special security forces for preventing the bomb attacks that can be launched in transportation, communication, health, education places, tourism facilities, meetings, concerts, shows, crowd controls, and riots.

The terrorist organizations use mostly suicide bombing attacks. The suicide bombing whose main aims is to cause panic, destroy the morale and resistance of the community and inflict casualty as much as possible is a kind of operational strike committed by the death of the suicide bomber²⁰. The suicide bombing causes heavy casualties and damages. It attracts the attention of the communication channels and reaches large sums of audiences as it has news value. Even though it is very primitive and easy, it can be committed wherever and whenever it is wanted. There is no fear of being caught and interrogated. After the suicide is committed, an escaping plan is not needed and even if the bomber is caught by the security forces, the suicide can be committed¹⁹. All of these properties of the suicide bombing comprise the new global threat and preferred by the terrorist organizations. The bomb dog has the capability and ability to diagnose early the assassination and the suicide bombing. But, it should be taken into consideration that the bomb dog will die, when the strike is $completed^{21}$.

Drug Detection Dog (DDD)

The drug detection dog with its high level sense of scent and distinguishing has the capaci-

ty and ability to identify the hashish kinds, drugs having a natural basis such as liquid, powder, shellac, opium, morphine, heroin, codeine, cocaine and crack, and stimulating substances such as captagon, ecstasy, drugs causing imagination such as hashish and Lysergic acid diethylamide (LSD) hidden in areas, buildings, facilities, vehicles, carriers (suitcases, valises) and on humans.

The entire secrets of rest are important in selection program. Only dogs that are fanatic retrievers, will lock onto thrown objects, and prefer a vigorous game of tug-of-war to meek surrender of the article are chosen. The introductory phase of training establishes in the dog's mind that finding the narcotic is a highly rewarding experience, which is followed by abundant praise. It differs from other dogs with this characteristic. In the training process of the drug dogs, the training methods for the mine and bomb detector dogs are used and demanded as the necessary properties.

The drug detection dog is mostly used by the general law enforcement and special security forces. The war time is the period when the unfair profit is gotten more easily and the controlling is more difficult. In these periods, the trafficking increases. Moreover, it is known that Turkey is used as a gateway in drug trafficking. For this reason, it can be used for the purpose of protecting the health of the community, preventing the drug trafficking and reducing the financial resources of the terrorist organizations.

The Situation in Turkey

It was thought that the economic troubles in the years the Republic of Turkey was founded could be overcome with support to agriculture and in 1937 the Agricultural Combinations and the State Agricultural Enterprises were founded. With the outbreak of the World War II, the isolated and fruitless fields were improved and directed to production to produce the food stuffs the army needed. In 1949 the Agricultural Combinations and the State Agricultural Enterprises were united and the State Production Farms were founded to increase the fruitfulness, diversify the yield and improve the quality. In 1984 they were reorganized under the name of the General Directorate of Agricultural Enterprises, and the State Production Farms and Stud Fields were combined and gathered under the General Directorate of Agricultural Enterprises (TİGEM) to maintain the

basic products and service necessary for the agriculture and the industry related to agriculture, to operate these according to the trade principles and make profit²⁴. As it is seen, the State has benefited from animals for the purpose of production, they have not been considered as a tool to meet the necessities of the areas of defense and security management.

For this reason, the Military Veterinary School and Training Centre in Gemlik firstly comes to one's mind when the production of dogs for security purposes is considered. This institution dating back to ancient times is followed by the United Nations Drug Control Program (UNDCP), the Dog Training Center in Gölbaşı/Ankara/Turkey belonging to the General Security Directorate and founded in 1997 with the contributions of the European Commission and the Turkish Police Foundation⁷, the Gendarmerie Horse-Dog Training and Profession Acquisition Course Central Command (JAKEM) in Nevsehir which was founded in 2003 for providing training for soldiers about agriculture and stock raising, making them keep and improve the knowledge they have, contributing to the social progress and national economy⁷. It is known that Turkish Air Forces Command, Special Forces Commands and National Intelligence Organization continue their activities in their own Dog Training Center.

As it is understood, all these institutions continue their production and training activities according to their missions and needs. These institutions mostly serve for defense and security, the General Directorate of Agricultural Enterprises (TIGEM) mostly serve for agriculture and stock rising. The personnel leaving the state institutions or especially security forces found special Dog Training Centers for trade. This fact makes the production and training activities in Turkey multi-dimensional. The systems of dog production and training which meet the needs can not be founded. This should not be thought strange, since when looked at the developed counties it is seen that the street dog concept is special to Turkey.

Especially the western countries benefit from the dogs as much as possible and gains importance to the production and training of dogs according to their needs. So, they create their own race. It is seen that they use the dog races they created efficiently in all missions. For example the German Shepherd Dog is a race created by Germans and can be used in all missions. In Turkey there are races such as Akbaş, Çatal Burun, Kangal, Kars Çoban and Türk Tazısı, but they are not used when needed as they are not trained appropriately.

As it is known that to create a race suitable for the mission is a long-lasting and difficult job. The defense and security managements require long processes. When the history of Turkey is examined, it is seen that nearly there are not any periods when there is no war or struggle with terrorism. So, the dog races appropriate for the missions can be created or a dog race suitable for the conditions of Turkey can be developed by the help of hybridization. But, for achieving this, first of all it is required that the appropriate policies should be developed, these policies should be legalized, the institutions which will use these should be identified and then they should begin to be applied.

It naturals that the dogs used by the Armed Forces in borders, and the dogs used by the general law enforcement forces such as the police and the gendarmerie serving in metropolises and in urban terrains or the dogs used as a pet have different qualities. Despite this, the basic education of the dogs is same up to a specific level. The dogs completing the basic training can serve in the necessary branch after completing the advanced training.

From this point of view, it is not possible to say that the production, training and care of the dogs are carried out with full control. To make this real, while the agricultural and stock raising activities are being carried out under the General Directorate of Agricultural Enterprises, the defense and security services can be gathered under a security unit. The production and training of dogs according to the requirements can be brought under control by the unity of the public and special institutions serving for the same objective. The cost and effectiveness can be maintained by the unity of the activities of the institutions serving for the same aim. The productivity on the desired rates can be gotten from the dogs produced. So, the extra produced dogs can be used for the needs of the special organizations. Moreover, the convenience of the dogs' care to the health regulations is also important. At a level it is beneficial to organize the production, training and care of the dogs. The principle that the planning is made by only single hand, the application is made by different hands should be used.

Conclusion

It has become a common fact that the technological materials and equipments are sometimes insufficient during the missions of the Armed Forces, the general and special security forces, in these cases the trouble can be overcome by the help of the trained animals. The other living creatures can achieve some of the missions stated above, but the dogs can be used actively in all these missions. For this reason;

The trained dogs should be used by the maneuver units to secure the critical points in the battle fields and in the urban terrains, to maintain the control and security of roads, maintain the security between the control and check and contact points, to escort the captives and prisoners, to isolate the civilians, to patrol for deterrence and without causing harm.

They should be used in the tracking missions to find the allies getting lost in the urban areas, to follow the enemies trying to escape, sabotage and ambush in the complex buildings, to find the enemies which have sabotaged and ambushed, but pretend to be innocent in civilians by altering his appearance, to identify the Unconventional Warfare elements, to gain and keep contact with the unfriendly forces.

The search and rescue dogs should be used to inform the allies early about the sabotage and ambush of the enemy, to identify the enemy in building searches, to find the living creatures under the ruins.

The detector dogs should be used to search and find the traps and mines that are not active, but can affect the activities of the allies, and that generally have just laid, have different structures, and cannot be identified by the electronic equipments and detectors, and including explosives, and should be used to find all kinds of explosives and demolition materials, hashish kinds, drugs and stimulating substances having a natural basis, drugs causing imagination in buildings, military vehicles, suitcases, valises, and on humans.

The races such as Akbaş, Çatal Burun, Kangal, Kars Çoban and Türk Tazısı should be used in Patrol, Tracker, Search and Rescue, and Detector branches according to the needs of defense and security management in Turkey.

Even though it is a long-lasting and difficult job, creating a race suitable for the mission should be tried or a dog race suitable for the conditions of Turkey should be developed by the help of hybridization.

The policies should be developed not only in agriculture and stock raising areas but also in the defense and security areas suitable for the conditions of world and country, these policies should be legalized, the institutions which will apply these should be identified and then they should begin to be applied.

The production and training centers belonging to the defense and security forces should be united under the same framework. The production of dogs should be made according to the needs of the institutions. In other words, the planning should be made by only single hand; the application should be made by different hands.

Shortly, the trained dogs should be actively used not only as fiends at home in daily life, but also as mission elements benefited while overcoming the troubles throughout life.

References

1. Anonymous.

http://www.ardainc.org/about_dog.html. American Rescue Dog Association Website, ARDA Search Dogs, Erişim tarihi: 09.03.2013

2. Anonymous.

http://www.fas.org/irp/doddir/army/ar190-12.pdf. Army Regulation 190-12, Military Police, Military Working Dog Program, Headquarters Department of the Army, Washington, DC, 4 June 2007,Erişim tarihi: 09.03.2013

3. Anonymous.

http://www.military.com/forums/0,15240,123098 ,00.html. Day Matthew A, Lt Col, The Combat Tracking Team, Marine Corps Gazette, Erişim tarihi: 09.03.2013

- 4. Anonymous. http://www.deprem.gov.tr. Deprem, Official Website , Depremle ilgili teknik bilgiler. Erişim tarihi: 09.03.2013
- 5. Anonymous.

http://www.diamondsintheruff.com/Development alStages.html. Diamonds in the Ruff, Training for Dogs & Their People, Developmental stages & socialization: What happens when - how your puppy changes and develops. Erişim tarihi: 09.03.2013

 Anonymous. http://www.egm.gov.tr/basin. Emniyet Genel Müdürlüğü, Official Website, Emniyet Genel Müdürlüğü 2005 yılı değerlendirme toplantısı, Table is formed by General Security Directorate of Turkey official website Erişim tarihi: 09.03.2013 7. Anonymous.

http://www.kom.gov.tr/Tr/KonuDetay.asp?id=10 &BKey=49. Emniyet Genel Müdürlüğü Köpek Eğitim Merkezi Official Website, Köpek Eğitim Merkezi Şube Müdürlüğü, Erişim tarihi: 09.03.2013

- Anonymous. http://www.evcilkutuphane.com/yazi/kopeginsavas-sırasında-kullanilmasi. Evcil Kütüphane, Köpeğin savaş sırasında kullanılması Erişim tarihi: 09.03.2013
- 9. Anonymous.

http://www.fas.org/irp/doddir/army/fm3-19-17.pdf. FM 3-19.17 Military Working Dogs, The role of the military working dog, Chapter 1, p.1-7, Department of the Army, Washington, DC, Erişim tarihi: 09.03.2013

- Anonymous. http://globalsecurity.org/military/library/policy/army/fm/19-10/Ch11.htm. FM 19-10, Employing Military Working Dog Teams, Chapter 11 Erişim tarihi: 09.03.2013
- Anonymous.http://www.adtdl.army.mil/c gibin/atdl.dll/fm/90-10/toc.htm. FM 90-10, Military Operations on Urbanized Terrain, Headquarters Department of Army (1979), Washington, DC, p.2-3 Erişim tarihi: 09.03.2013
- Anonymous. http://www.jandarma.tsk.mil.tr/egtk/birlikler/JA KEMKligi.htm. Jandarma Genel Komutanlığı Official Website, Jandarma Eğitim Komutanlığı, Erişim tarihi: 09.03.2013
- 13. Anonymous.

http://www.abgm.adalet.gov.tr/ferhatkonya.pdf. Konya F (1976): Defence Against Terrorism Review (DATR), Centre of Excellence - Defence Against Terrorism, Ankara. aklanması, organize suç, yasadışı göç, Schengen uygulamaları, Syposium overview, March 30-31, 2004, Ankara, Erişim tarihi: 09.03.2013

- Anonymous. http://www.lovable-goldenretriever.com/bomb-dogs.html. Lovable Golden Retriever, Bomb Dogs, Erişim tarihi: 09.03.2013
- 15. Anonymous.http://www.olivedrab.com/od_wardogs_roles.php.Olive-Drab, War Dog Roles, Erişim tarihi: 09.03.2013

16. Anony-

mous.http://www.searchdogfoundation.org/98/ht ml/1_irondog.html Search Dog Foundation, Iron Dog, Canine Search Team Disaster Training, Skill Competition, Erişim tarihi: 09.03.2013

17. Anonymous.

http://www.wikifido.com/page/Search+and+Resc ue+Dogs. The dog lover's guide to dogs and dog rescue, Search and Rescue Dogs, Erişim tarihi: 09.03.2013

18. Anony-

mous.http://www.sayisalgrafik.com.tr/deprem. Türkiye Deprem Sitesi, Türkiye ve Depremler, Erişim tarihi: 09.03.2013

- 19. Begeç S. Yönetimde yeni küresel tehdit: Terörizm ve bombalı intihar eylemi. Stratejik Araştırmalar Dergisi 2000; 68: 11-12.
- 20. Ganor B.: Suicide Terrorism: an overview, Defence Against Suicide Bombing (DASB) Course, Center of Excellence Defence Against Terrorism (CoE - DAT), Ankara, 2005.
- John PA. Lt. Gen.USA, Doctrine for Joint Urban Operations, p.1-2, 3, Joint Publication 3-06,. USA 16 September 2002.
- 22. Knorr K Historical Dimensions of National Security Problems, Lawrence, University Press of Kansas, at p.78, 1976.
- 23. Pearsall MD, Verbruggen H. Scent training to track, search, and rescue, pp.1-12, Alpine Books, USA., 1982.
- 24. Roberts GB. Hostis Humani Generis: The Threat of WDM Terrorism and How NATO is Facing the Ultimate Threat. Vol: 2, No: 1, p.1, 2009.
- 25. Smith M: The Nature of Contemporary Terrorism and Dimensions that Terrorism Reached, Global Terrorism and International Cooperation, p.49, The Turkish General Staff Printing House, Ankara. 23-24 March 2006.
- 26. Woo G. Terrorism Threat Assessment and Management, Vol: 2, No: 1, p.101, Defence Against Terrorism Review (DATR), Centre of Excellence
 Defence Against Terrorism (CoE DAT), Ankara 2009.