## Good research paper about air defense artillery

Sociology, Violence



Around the world, the United States Army is one of the strongest war forces. They face many instances of war because many countries see the United States as the "world power" in the economical and political arena. As such, the country needed to create an army that would stand up to any other country in time of war. The United States faced threats from all over the world because of their role as a member of the United Nations group of allies. From as early as 1917, the United States improved on their weaponry and formed one of the most powerful air attack army. The duty of the air defense artillery officer is to lead the group of soldiers to launch aerial attacks using missiles and to survey the enemy from a distance. In addition, branch sole duty is to protect the United States armed forces from any instance of aerial attacks. With the threats to the core of the country, the United States government developed a group that would make the entire nation safe from attacks from hostile nations. The evolution of the United States Army's Air Defense Artillery weapons has made it possible for America to counter most air threats since the birth of Air Defense in 1917 until present day.

No one wants to imagine the horrific idea of waking one morning to the breaking news that their safe have is under attack by a missile strike. The horror of having nowhere to run or nowhere to hide is unimaginable in today's society. However, with the knowledge of having an army that specifically protects the country form such attacks adds comfort to everyone. The expression Air defense refers to any form of combative form or weaponry that specializes in "surface to air missiles" or any anti-aircraft weapons. Infante (n. d) The ADA's business is war fare as the group is

trained to preserve the peace, and be ready to fight, win and return." In the United States, the army uses the term to refer to any group composed of mainly air defense tactics such as the Patriot Missile System, the Avenger Air Defense System, the Terminal High Altitude Area Defense System (THAAD) and the Patriot Missile System. The Avenger Missile System fires the FIM-92 Stinger missile that causes far reaching damage when used. The Air Defense Artillery sector forms part of the United States Coast Artillery group. On June 20, 1968, the army separated the Air Defense Artillery Branch was separated, and on December 1, 1968, the Air Defense branch began to cross regular field guns with missiles.

The end of the Cold War brought some of the most urgent threats of nuclear war and nuclear attacks on the world. The Soviet and Middle Eastern territories offer some of the most serious threats of war on the United States. With their small number of missiles, these nations seek to prevent the United States and other members of the Allies from offering assistance to neighboring countries. In reality, there are a number of nations who seek to any and every means to destroy the perfect model of democracy and freedom that exists in many parts of the world.

The simplicity of war before 1917, changed immensely. There is no longer the simple use of cannons, muskets, bullets, spears and swords to fight wars; instead there is an increase in more sophisticated weapons such as ballistic missiles. If a country does not have a program to counterattack, then these enemies will find means and ways to threaten the very existence and weaknesses in the United States.

The Air Defense Artillery continues to improve its methods to counterattack

missile attacks from hostile territories. Kappell (2012), postulates that every piece of the system's puzzle creates a complicated and significant part that increases the capabilities of the system. The system can monitor 360 degrees in twenty kilometers, either during the days or at nights, while capturing videos and finding targets that would not be visible otherwise. "Most of all, the system helps soldiers keep an area secure and safe" (Kappell, 2012). One can say this system, when combined with the correct strategy, can create one of the most effective strategy of war. In fact, if the soldiers determine where the enemies are at all times, they have the element of surprise on their side. The United States employed this strategy as they hunted the infamous Bin Laden. United States soldiers were able recognize the various Al-queda members from a distance and launch their attack.

In order to understand the importance of the Air Defense Artillery, one must first its role in the armed forces. America is not the only country that has this unit of soldiers. Every country has one if they hope to keep the citizens safe from attacks. The fundamental nature of air defense unit is to identify any hostile craft and demolish these crafts on sight. The key issue is to hit the target while it is in motion in three-dimensional space. The strategy is technical as the attack must coordinate with the target and the timing in the correct position. As such the United States army carries out successful training centers for these soldiers.

One can conclude that the power of the armed forces of the United States in countries Afghanistan and Iran in recent years show the need for the United States to continue the extensive program to keep their air defense unit in

top shape. Training ensures that the missiles have to be channeled to hit the mark, or predict the position of the target and the time that the missile may reach the position. Without the necessary improvements to war strategies, hostile countries hold the upper hand. The end result is horrifying.

Democracy would surely be lost, and the world would suffer as a result.

During the twentieth century the air defense unit was one of the quickest developing aspects of military technology. It made use of the constantly changing structures of the aircraft industry while it exploited the different technological techniques of war. The air defense group showed interest in the development of radar, computing and the use of guided missiles to further their cause. The reality is that other countries are making use of technology to advance their various armed forces. Therefore, it would be foolish if the United States does not follow this trend in order to protect the country, and assist other oppressed nations in their fight for freedom and equality.

The process of improving how to calculate the projected missiles is a far cry from the original electromechanical analog methods that were used in the 1930s. The evolution of air defense encompasses areas of technical fire control, weapons, sensors, and command and control. The new strategies are important today. One may say that prior to the 1930s the armies made use of other primitive methods, and yet they were successful in war. This argument is logical, yet one must recognize that technology impacts on every aspect of the society and war is just one such aspect. In fact, there is no point in a country shying away from using technology to enhance the skills and prowess of their armies, as every other country with the

opportunity, takes it.

The initial sensors that the military used in World War I and the years before the 1930s fell short of the superiority of the new technological weapons. Up until the 1950s ballistic munitions represented the customary weapons of war. Later, the guided missiles took over from the prehistoric short range missiles. This handicap allowed hostile groups the advantage as the short range missiles proved to be ineffective. The targets were difficult to destroy completely, and damaged aircrafts found it impossible to return to base or even find a friendly airstrip. These issues became important and the United States worked hard to embrace and master the use of the Air Defense Artillery program.

The world knows that America has a strong military unit and this only materialized because of the use of the Air Defense Artillery unit. After World War I, the army recognized that the ground defense was good as an offensive war plan if they deploy the soldiers rapidly across the present aircraft routes. The fact is that this method can be detrimental to an army, and as a result the air defense unit made of air space even while they fight on the ground. The air defense gains the advantage as they can see the area around more clearly than on the ground.

Since 1917, the United States armed forces use a number of weapons to ensure victory in war. The surface-to-air missile (SAM), became serious reality after the second World War. The American realized that they needed a weapon that they could launch from the ground, and which would remove the threat of any air missile or aircraft. It is an anti-aircraft missile that the army improve on over time to become one of the most powerful missile

launchers of the late 1900s. The United States modified the weapon and later created a model that the army could launch from ships.

The strength of the United States naval force required as much weaponry as the ground forces and this led to the evolution of the "shipborne" systems. Eventually the army redesigned the models to make them smaller so that these missiles provided the means to launch from the tiniest possible holes. Throughout history the ground missile changed names, but still represented a missile unit that the armed launched from land and sea. Historical records show that the American Nike Ajax, the Soviet's S-75 Dvina, Patriot, S-300, SM3, Stinger, and Strela – 3are similar in nature and represent modified versions of the first surface – to – air missile.

Over the years, Air Defense Artillery group used a number of systems to make them one of the powerhouse armies in the world. The United States designed and used the Patriot System to communicate, control, command, and guides the missile that used in war. These four functions make the army almost unbeatable, as the four functions, when combined, offer a coordinated, integrated, and secured mobile system in the air. Of course, other countries have these systems, but the United States army find themselves have the advantage as they have designed the missile and so they understand its use.

The Patriot system boasts four chief operational purposes. The system served the purpose of communications, domination and power, radar supervision, and missile regulation. In essence these purpose, when combined formed a highly coordinated, safe, combination of their mobile air defense system. The reloading of the missile is effective as it used M985

GMT HEMTT truck that houses a Hiab crane. The crane removes the used missile cylinders from the launcher and then exchanges the used canisters for new ones. This practical skill is useful in war as the army does not have to worry about the soldiers getting hurt. With one less issue to worry about the United State soldiers have more time to carry out other parts of their war plans.

The improvement to the weapons used by the United States Army adds to their improved performance in the various wars fought against hostile nations. These new weapons add to the superiority of the skills and techniques of the American Army. The introduction of the MIM-104 Patriot was first used by the United States and other Allied armies. The weapon is one of the surfaces to air missile that uses advanced airborne interceptor missile and superior performing radar systems which helps in the fight against hostile nations.

The events of World War II led to the United States army developing a large air defense system centered on the larger cities. This system came about because of the 90 mm and 120 mm guns which were guided by radars. However, the general lack of achievement with guns against even the smallest propeller bombs, the message became clear. The defense of the system required interceptor crafts. In spite of the efforts by the United States, the problem continued into the 1950s with eth 75 millimeter Skysweeper system. This system was powerful as it was automated and had radars, computers, power, and guns that automatically loaded on a single powered framework. In fact, the Skysweeper took over from the smaller guns that were used in the past.

Nevertheless, the situation changed when the guided missile came into effect. The Germans introduced the guided missile after the World War. They hoped to use it in the World War, but could not do so. In fact, none of the guided missiles were operational during that war. It was not until a few years later that the systems developed into more practical weapons of destruction. The late entry of the development of the system caused the United States to begin their personal upgrades of their defense system. One could say that the timing was appropriate as the United States was better able to improve on their version of weapon, based on what they knew of the German's version. The Nike Ajax replaced the larger guns that once created victory for the Americans in the war. The effect of this replacement caused an increase in the strength of the United States power as an army to reckon with in times of war.

In addition, the Terminal High Altitude Area Defense (THAAD) is a product of the United States skills and knowledge in weaponry. The anti – ballistic missile weapon, is effective in its design to gun down any type of ballistic missiles from short, medium or even long range. There is no warhead on the missile, but instead it depends on the kinetic energy in order to destroy any oncoming missile. The THHAD is further designed to minimize the possibility of nuclear tipped warheads exploding. In fact, the kinetic energy reduces the risks that associated with destroying a missile in the air. The weapon could defend the country against and Scud missile that a country could launch. The United States is not the only territory that is familiar with the THAAD, but the fact that the United States designed the missiles gives them the personal advantage or edge when using the weapon.

Hostile countries are always familiar with the plans, weapons and movements of their enemies. The knowledge that one nation has this weapon of power gives them some amount of immunity as hostile countries are mindful of the attacks on the United States. Dole (1996) notes that the well-timed manner in which the United States army deploys the national missile defense system is effective, as it reduces the incentives for other countries to expand or obtain transnational ballistic missiles, and as such this inhibits as well as counter the production of missiles and weapons that cause mass destruction (Dole 1996). In addition, the Rumsfeld Commission notes that nations that seek to undermine and threaten the United States by engaging in an ICBM attack that is capable of achieving their goal within five years. By preparing and deploying a BMD, the United States discourages the capability of another nation developing an ICBM that serves as a well-organized way of attack from those the hostile nations (1998) around the world

One can argue that the readiness of any military group comes with being prepared physically and by working conjunction with other diplomatic organizations to carry out successful war mission. Bush (2001) notes it is important that armed forces carry out comprehensive work that changes the relationship from one based on a nuclear equilibrium of terror, to one based on universal responsibilities and widespread interests. In addition countries need to look at the world in a new and pragmatic way in order to preserve peace for generations to come (Bush 2001). However, the likelihood of this is far-fetched as hostile nations set their sights on fighting for trivial causes. Therefore, it is import and for countries to be prepared for the eventualities

of war.

During the Vietnam War, the Air Defense Artillery systems protected air bases rather than fighting on the ground. The weapons of choice provided geographical advantage mainly because of the serious military capabilities of their weapons that they used in war. The diversity of the missions determined the approach of the Air Defense Artillery systems and how they were distributed. On many occasions the artillery units helped the battalions. Regardless of the position in the army, the Air Defense Artillery departments assisted in protecting the armory, the field artillery, the airfields, and the infantry units.

Despite the fact that the defense missions were designed to be use in air attacks, they were also used as weapon systems in direct and indirect warfare. In fact, the M163 Vulcan, MIM23 HAWK, and the M42A1 Sky sweeper were designed as ground missiles, but were used widely in the Vietnam War in air and ground attacks. The use of these weapons gave the United States army the edge over the Vietnamese and allowed them to dominate the war. The M163 Vulcan was one of the most deadly weapons that the Americans used in the war. The personnel, full-tracked armored carrier possessed superior qualities to travel across any terrain. It included a raised tower that included a 6-barrel M61 Vulcan Gatling cannon which fired high 20-mm explosives and could withstand missiles or bullet attack. The M163 Vulcan provided the much needed protection for soldiers on the ground. In fact while the weapon was designed to provide air defense against low flying crafts, it provide the support for the soldiers on the ground. In addition, the Vulcan was beneficial to the soldiers on the small bases because it provided

a high firing rate with heavy rounds of ammunition that could destroy any grounds target that stood in close proximity.

The fact that terrorists attacked the United States on September 9, 2011, the country needs to heighten its efforts and prepare for the inevitable war. The fact is that terrorism is rampant in the global arena and nuclear weapons have become quite popular, the United States needs to be prepared for the other attacks. The weapons of the past served there purposes then, but the question is whether or not the United States can withstand an attack on its home soil. Of course the United States army is in Afghanistan fighting for world peace and one would say that this makes them prepared for any eventualities. The fact is that many soldiers die in ground attacks and this number is greater than air attacks.

The reality is that the means and ways of war have changed tremendously. Technology has changed and therefore, it has changed the way people think and act. Once there were simple weapons, now it is missiles that can be launched from miles away and create more serious damages. Therefore, there is a strong need for the United States to develop ballistic missile defense (BMD) that can withstand form of war. The hostile nations continue to gain new warfare and create more technological advanced weapons that could destroy the world. The reality is that the terrorist groups will attack at any time: without warning and without reason.

In concluding, many changes take place in the world today. The advance in technology changes the way individuals look at life and their situations. War is just one of the ways that the society has changed. Nonetheless, the United States has always been successful in defending their rights and the right of

nation that fall under the hostile attacks of terrorist and dictators. Since 1919, the United States has strengthened its efforts to create weapons that can help to protect their country, and if the need arises, they can protect other countries that need help.

The United States success in weaponry and war stems from the fact that they have embraced the advancement in technology and have improved on the types of weapons that they use in war. The use of air defense artillery is only one of the ways that the United States seeks to maintain its position as one of the world's greatest military power. In fact, many countries across the world copy the designs of the missiles that the United States created, yet the changes in the structure of wars have led them to create more advanced weapons.

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