Technology during world war ii assignment

History



Radar and Bombsites. Both technologies played a crucial role in the defensive and offensive strategies of all the countries involved. During World War II RADAR saw its first use in combat operations. Although radar came of age during the war (Gobble) it is often referred to as the weapon that won the war and the invention that changed the world.

Radar was a technology that allowed land bases to detect Incoming aircraft and direct their anta-alarm defenses In the direction of the Incoming aircraft. Radar was also seed in an offensive strategy by giving aircraft the ability to attack targets at night and during inclement weather. Although the use of aircraft in combat wasn't a new concept in World War II, the development of the bombsites helped to make them a strategic weapon. Bombsites technology allowed for more accurate bombing runs and precision targeting of military and industrial locations.

By factoring in altitude, air speed, and ground speed, World War II bombsites allowed bombers to fly at higher altitudes during their bombing missions which provided safety to the bombers and their crews from nit-aircraft guns and defending fighter aircraft. Radar Radar technology works by transmitting strong, short pulses of radio energy into the air in a specific direction using what is called a directional antenna. When these pulses hit an object like a ship, or aircraft they bounce off the object and back to the antenna.

These signals are then converted into an electric signal and shown on screen where they can be viewed by an operator. The position of a detected target Is determined by measuring the time It takes the signal pulse to travel to the target, ounce off, and return to the transmitting antenna. Combining this

with the direction the antenna is pointing, gives the targets position.

Bombsites A bombsites Is a device used by aircraft to sight a target from the alarm and then accurately drop a bomb on that target.

When a bomb Is dropped from an airplane It does not fall straight down but actually moves forward as it falls. This is caused by the horizontal movement of the plane in flight. A falling bomb is also affected by the air resistance created by falling through the air, which causes the bomb to always be Enid the plane when it strikes the target. A bombsites determines, in real time, both the range and the course of the plane so as to calculate the proper moment for releasing a bomb.

On the 7th of September 1940, the first wave of over 600 German bombers flew up the River Thames to attack the docks. This was the first night of a bombing campaign called the Blitz. Men and women living along the Thames believed "the whole world was on fire." For the next 56 nights London was bombed from dusk to dawn. Conclusion With the technology coming into WI, the war had changed. By building and reading new bomb sights, the Germans could easily bomb London from the air with out worry of artillery below.

Many civilians were killed in these bombing however, Londoner continued to go to work and move with every day life. Another new piece of technology, Radar, was also introduced in WI. This created a new era of technology based warfare. It is said that Radar could have stopped the bombing of Pearl Harbor as the Radar had picked up the incoming bombers. However, as

Radar was only new and introduced, higher Captains didn't believe what they were seeing was real and avoided it.