

# Technology in the Holocaust | Sample Essay

## **What did you learn about WW2 in your study of one or more of the following: the Holocaust; resistance and collaboration; technology of warfare.**

The technology of warfare, the resistance of certain parties and collaboration of others and finally, especially the Holocaust are perhaps some of the aspects of WW2 which have the largest resonating impact on the world. Courage of the resistance will go onto inspire many, the technology borne out of the necessity of WW2 is continuing to cause issues today and finally the atrocities of the Holocaust left a deep, ugly scar on the world that's still felt. The resistances that cropped up independently of one another and widespread, from France to Yugoslavia, to Germany serve as the only positive aspect amidst the horror of the 'Final Solution' and the birth of the atomic bomb.

One such resistance movement was the French resistance under Charles de Gaulle. Initially the French resistance consisted of many different groups with a wide range of beliefs. They formed fighting groups called the Maquis. Charles de Gaulle tried to co-ordinate the different groups until Jean Moulin united most of them in the National Resistance council in 1943. Their aims were to collect intelligence on the Germans and sabotage the 'German war machine'. However they were mainly only successful at the former. The group was set back when Moulin was arrested and killed in June 1943. Another successful resistance group was Tito's in Yugoslavia. This group, the Partisans consisted of 28 brigades of 3000-4000 people by the end of 1942. They operated a guerilla warfare campaign which was highly successful and the German army was driven out of Serbia by September 1941 and all of Yugoslavia by March

1945 (although at this point the soldiers were needed elsewhere anyway). There were also resistance groups within Germany, usually among the youth. Examples of groups were the Edelweiss Pirates, the White Rose and the Kreisau Circle. The White Rose was led by Hans and Sophie Scholl who were quite openly handing out anti-Nazi leaflets and were executed in Feb 1945. The Kreisau Circle had many members who were connected to the attempted assassination of Hitler in July 1944. Each of these groups had varying degrees of success but often civilian populations paid for their actions as reprisals were carried out such as when the Nazis wiped out the Czech village Lidice and murdered 340 of its residents or the massacre of 642 people in the French village Oradour-sur-Glane.

While many chose to resist, many also chose to collaborate with the Germans. Many did so because while living outside the borders of Germany, they were of German descent. Others out of self-interest or belief in Nazi ideals. In Vichy France Marshal Petain created a German-collaborating semi-Fascist regime. Doriot led the PPF and organised the League of French Volunteers against Bolshevism to fight the Russians on the eastern front. Others joined the Milice, an auxiliary police force. Ante Pavelic was chosen to run a puppet government in Croatia from 1941-1945. he organised the Ustasa to massacre thousands of Serbs, Jews and gypsies. He used the chaos of the war to act on age-old grudges against the Serbs. When the war ended however many leading collaborators were tried. Many more were killed in summary executions. Women who had been too close to German soldiers sometimes had their heads shaved and were shunned. It's estimated that there were about 30,000-40,000 summary executions in France.

The lead up to the Holocaust had already began in 1933. A series of anti-Jewish laws became steadily more extreme and constraining was out into place. In April 1933 there was a

boycott of Jewish shops and Jews were driven from the judiciary and teaching positions. In Sept 1935 the Nuremberg Laws banned marriage between Aryans and Jews to prevent mischlinge (mixed race children). By 1937 Jews were denied basic rights such as entering public parks and keeping pets. On Nov 9th 1938 the first real attack on Jews took place in Kristallnacht. Jewish businesses were burnt down. Over 20,000 Jews were imprisoned. The ghettos were set up soon after this as thousands of Jews were herded into cramped, walled in towns with appalling living conditions and paltry food. The largest ghetto in Poland had 450,000 inhabitants. Poor sanitation led to the deaths of 96,000 alone. These ghettos were essentially concentration camps. From here many were brought on to work or extermination camps such as Auschwitz or Treblinka. All of these factors show how hostility against Jews were growing before the war broke out. All of these ended eventually with Hitler's 'Final Solution' as he began to become desperate to quickly wipe out the Jewish population of Poland. The laws and ghettos were simply the slow but steady build up to the horrors of the extermination camps.

The Holocaust led to the deaths of an estimated 6 million Jews. It was the systemic massacre of residents of concentration camps through the use of gas chambers. Examples of such camps were Bergen-Belsen, Auschwitz, Treblinka and Sobibor. In Auschwitz up to 10,000 Jews were killed everyday. These camps occupants were generally worked extremely hard with little food which weakened them considerably. However as they failed to die quickly enough for Hitler's liking he took up a more extreme method. Those who were unable to work such as children, the elderly and pregnant women were sent to gas chambers upon entering the camp. Scientific experiments, particularly by Joseph Mengele were also carried out on those in the camp. The experiments had few scientifically relevant results. In 1944 labour shortages began to slow the pace of the 'Final Solution'. In 1945 as the Russians entered Eastern Europe the

Nazis attempted to hide their actions by forcing occupants of the camps to march westwards, half starved and weakened as they were. Himmler ordered such an evacuation of Auschwitz in Jan 1945. Hundreds of thousands of prisoners died on the 'death marches' from exhaustion. To this day the Holocaust is still a delicate subject. There's still much bitterness and controversy over it today. One of the most shocking aspects of it were the use of scientific methods and systemic record keeping, which shows the truly inhumane nature of the Nazis who carried out these acts.

The technology of warfare made enormous advances during WW2. New fighter aircraft such as the British Spitfire, American Mustang and Japanese Zero which were much faster and more effective were developed. Sirens were put under the German Stuka to make them all the more intimidating. By 1943 the Allies aircraft was far superior and they improved all the more. The American Liberator and Flying Fortress were particularly deadly. On the Eastern the Soviet Union was able to beat Germany on aircraft production due to the foresighted move to shift the aircraft factories to the west of Russia, out of the range of the German Luftwaffe. The German's in contrast were losing a quarter of their fighter planes every month in the 1944-1945 and struggling to replace them. Tanks also saw a significant improvement. German Panzer divisions played a large role early on, on Hitler's Blitzkrieg tactics. Tanks improved as the war progressed, with larger, more armoured American Shermans and German Panthers. However tanks could easily be destroyed using tank-busting aircraft such as the American Swordfish plane.

The biggest tank battle in history took place in Kursk in July 1943. Radar, invented in 1943 was another technological achievement which had enormous importance during the war, especially during the Battle of Britain, July to October 1940. Radar was developed by Robert Watson-

Watt and Sir Henry Tizard. It was used to detect metallic objects, as they reflected waves when a radio transmitter was trained on them. The equipment was improved with the introduction of IFF (Identification Friend or Foe) which allowed it to identify friendly aircraft from enemy aircraft. These advances in technology had enormous influence on the war, saving countless civilian lives. The improvement in aircraft made WW2 entirely different to any war that had come before as planes held huge importance, especially in German Blitzkrieg tactics.

Arguably the most important new development of technology was the Manhattan Project. In Oct 1939 Albert Einstein, a Jewish refugee, wrote to President Roosevelt, warning him of the likelihood that the Germans were developing an atomic bomb. However very little action was taken on this until 1941. After the bombing of Pearl Harbour in Dec of that year the Americans became serious about their research into nuclear weapons. The Manhattan Project, costing \$2 billion was set up. Dr. Robert Oppenheimer was put in charge. The country's top physicists, chemists, mathematicians and metallurgists worked on it. The project was successful and on the 16th of July 1945 the first atomic bomb was detonated at 5:30 am in Los Alamos in the New Mexico desert. The desert sand was turned to glass and the tower from where the bomb detonated was vapourised. This creation had deadly consequences as atomic bombs were later dropped on Hiroshima, Japan, on August 6th 1945 and later Nagasaki. 60% of Hiroshima was incinerated in the detonation of the bomb and more than 70,000 people died instantaneously. Many more died later from burns and radiation sickness. This essentially ended the war but went on to have many repercussions. It led to the Cold War, in which Russia and America competed to create the strongest atomic bombs and the issue of nuclear weapons is still an issue today. Due to the massive destructive power of these bombs it's a big worry that any of the powers possessing atomic weapons might one day decide to use them, setting off a chain of events which would have terrible consequences for the population.

In conclusion, WW2 was a hugely important time in history, for many reasons as the effects of many of its aspects are still felt today.