Abstract

Strategic bombing played an important role in the European theater and contributed greatly to the war effort. The Allies, specifically the United States Army Air Force and the British Royal Air Force, used strategic bombing effectively. The British had different means of strategic bombing and used their resources differently compared to their American counterpart. The British went for a larger picture method of strategic bombing meaning they wanted to destroy the enemy countryside and have lasting destruction. The RAF followed a different path of targeting while the Americans went with a more traditional way of bombing by going for associated war industries and destroying physical structures. Both organizations used strategic bombing to to secure victory. Each force had the common goal of defeating Nazi Germany and worked together to accomplish this goal, but utilized strategic bombing in different ways to secure victory and reach their common objective.

Strategic Bombing: The Underrated Total War Action

The British Royal Air Force and the United States Army Air Force were the two main forces behind strategic bombing within Europe during World War II. Both organizations utilized strategic bombing, but not in the same way. Different means of the bombings were chosen by both groups and to understand how they differed, I examined the targets each organization selected, the planning of carrying their missions out, as well as the planes and technologies each organization used. The airplanes and their technologies that were examined were the American Boeing B-17 Flying Fortress and B-24 Consolidated Liberator and for the British Avro Lancaster.

Research

When I began this project, I was unsure of where to begin but knew I wanted to write about aerial warfare and how its contribution in World War II was important. After extensive research, I decided to look at Bomber Command, the organization in charge of the bombings within the British Royal Air Force (RAF), and the United States Army Air Force (USAAF). For this paper, I conducted extensive primary source research as well as secondary research for scholarly books and articles written by other researchers. The place most heavily utilized was the National Archives located in College Park, Maryland. The other archive that provided me with research material was the British National Archives. I searched through online collections as well as making an in-person trip to the archives in College Park to conduct ~~r~~esearch. I was limited in gathering documents on the RAF due to the fact that I could not go to the British Archives in person and some documents were not available online but was able to review documents from the British War Department within the online collection in the British Archives online. The commanding officers of both organizations, Sir Arthur “Bomber” Harris and Carl Spaatz, wrote about their experiences during the war and how they coordinated their strategic bombing plans. Their firsthand accounts were important to understanding why and how they carried out their strategic bombings. My researching process did not end until my final draft was submitted. Throughout my entire process, I continued researching and collected information that supported my thesis.

Findings

The British Royal Air Force and United States Army Air Force were organized differently. Those differences are key in our understanding of how these organizations carried out strategic bombing. The Americans went with a more traditional way of bombing by going for associated war industries and destroying physical structures while the British differed from their American counterpart. The British wanted larger land area destroyed by strategic bombing meaning they went for overall destruction of the country side and for it to be permanent.

The Americans

Even though America did not enter the war until 1941, she kept an eye on the happenings in Europe. Franklin Roosevelt, knowing that America and her allies cannot be left vulnerable, decided to send in one unit of American air forces, the Eighth Air Force (Davis, 2003). The Eighth Air Force, led by Carl Spaatz, went operational in 1942 and conducted their first mission in August 1942 against Northern railways in Northern France (Overy, 1995). The Eighth's targets were railways and other related military industries. This idea of hitting key industries would stay with the USAAF throughout the war. The development of these ideas was based off of General Billy Mitchell's, an airman from World War I, ideas as well as the Air Tactic School (Mitchell, 2009). The school and Mitchell defined strategic bombing as destruction by any means necessary via bombardment through the air with targets chosen to either cripple the enemy's war making capabilities or its will to fight on. With this definition in mind, the Americans went for German industries such as major depots, steel mills, oil refineries and production areas, transportation areas, and any industry relating to the war effort. They also used indirect attacks of economic and social structures including communication lines, electric power grids, and food production and distribution centers. The American philosophy was to destroy the war industry and the military efforts to keep the German army from being operational. If the bombings did their jobs correctly, the military would be left with scarce resources for their war making. Before the Army Air Force could even accomplish their missions, they needed reliable planes to carry them out.

The Boeing B-17 Flying Fortress and B-24 Liberator were the American number one choices. The B-17 was a plane seen as indestructible. It was heavily armored, had high ceilings and long ranges. Because of its innovations, the plane could fly during the day and still be in one piece when it returned (Davis, 2003). The Flying Fortress was made for accuracy and capability. The plane's design included a large tail making flying at high altitudes easier to control. The Flying Fortress could climb higher and avoid enemy fire better than both the B-24 and the British Avro Lancaster, making it able to fly indiscreetly, drop its bomb load, then fly back to base safely. The Flying Fortress had altitude and durability, the Liberator on the other hand had the bombload. The B-24, the Consolidated Liberator, was the highest produced bomber of the time, with over 18,000 models produced (Matricardi, 1981). This plane was based on a request that called for a plane better than the B-17 with more speed, range, and altitude. Even though it had more variability, it was not as indestructible as the Flying Fortress. The Liberator was a complex plane and certain parts were not as solid as others. If the enemy hit it in a certain location, the plane could be blown apart completely. For the most part, these planes were solid planes, and, because of the confidence in their planes' capabilities, the Americans decided to bomb during the

day (Overy, 1995). While this does not seem like a big deal, the British were astonished that the Americans would do this. Running missions during the day leaves your sorties (groups of planes that go on missions) susceptible to enemy attacks. However, the Americans were more suited for daylight missions because of the precision targeting they conducted and their technologies were more accurate during the day than at night.

The British

In the beginnings of World War II, the RAF as restricted to reconnaissance missions and attacking shipping ports (Baslow, 2011). Later, they chose more specific targets such as railways, dams, and other infrastructural areas, but that changed because of the lack of accuracy with hitting the desired targets. By 1940 and into 1941, the call to switch from specific targets to more spread out area bombings became apparent. Many higher officials, including Winston Churchill, advocated for this idea of area bombings and, in 1942, that idea became official. Area bombing had more effect on enemy morale because they destroyed more within a greater radius, thus having a bigger effect on the populous in that area. Area bombing made target selection more effective for the British because they took out more targets within a set area rather than one select target (Overy, 1995). Following the method of high area bombing, the British conducted their missions only at night (Davis, 2003). Since there was no need for high accuracy, nightly bombings made more sense and were much safer for the crews. Along with the shift to area bombing, the idea of destroying enemy morale came along with it. The man who cultivated this idea was Hugh Trenchard, the Father of the Royal Air Force. The most relevant idea of his theory was that psychological damage greatly outweighed physical damage (Meilinger, 2003). It was the impression that mental affects will do more harm than destroying buildings. For the British, the plane mostly used was the Avro Lancaster. This plane was introduced in 1942 after the failure of the Avro Manchester aircraft (Matricardi ,1981). It was built with better control when in flight and more holding capacity that allowed for heavier bombardment of areas. This plane had more speed and lift power when going up into the air compared to any other plane and had the capability of carrying its own weight once again fully loaded. The Lancaster was only plane with the capability of carrying the “Grand Slam” a 22,000-pound bomb used for destroying concrete and resulting in destruction all around the impact zone (Bomber Command Canada, n.d.).

Future Studies

Aerial warfare was continuously used after World War II and was highly important in future wars, especially that of the Vietnam War. Looking at what the Air Forces of the time had to work with showed that they were capable of waging a highly-advanced war and the growth of its abilities during the war and the post war period. For future research, there are no limits. New information is uncovered every day and by no means did I look through every single document available. New information can always be added and refined. Aside from what was discussed above, the status of the two organizations post-WWII can be examined as well as specifically how air warfare was conducted by the Americans in the Korean and Vietnam War. Eventually, I would want to study the strategic bombings during the Vietnam War and how they compare or differ from that of World War II.

Conclusion

Overall, as the Combined Bomber Force, the RAF and USAAF destroyed almost all of Germany's Coke, Ferroalloy, and Synthetic rubber industries, 90 percent of German fuel, coal, and rubber capacity, and 90 percent of its steel capacity by 1945. The USAAF and RAF destroyed almost the entire war industry of Germany and more. Just by bombing, the Allies hindered Germany war production, which granted time for their military forces to collect themselves and attack the enemy directly. Each organization had the same end goal: defeating Germany. The paths they took with strategic bombing to achieve said goal went in different directions. Even with the different directions, The RAF and USAAF ultimately accomplished their common objective. Germany was defeated and strategic bombing helped make that happen.

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