4-18-2012

A Missed Opportunity? Assessing the Likely Effectiveness of an Allied Bombing Raid on Auschwitz

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Abstract
What if the Allies had pursued the bombing of the extermination camps at Auschwitz? Could the Allies have put together an effective bombing campaign that would have saved a significant number of lives at the death camps?

This journal article is available in Momentum: https://repository.upenn.edu/momentum/vol1/iss1/11
A Missed Opportunity?

Assessing the Likely Effectiveness of an Allied Bombing Raid on Auschwitz

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STSC-212

Professor Matthew Hersch

December 9, 2011
Introduction

A great deal of scholarly work has been devoted to the question of why the Allies did not bomb the crematoria at Auschwitz-Birkenau. Essentially all of the commentators on the issue agree on the basic point that not only did the Allies fail to bomb the extermination camp at Auschwitz-Birkenau but they did very little to prepare for such a bombing. Indeed, the Allies never ordered photoreconnaissance of the camp, nor did they ever prepare a target report assessing the possibility of bombing the death camp.

However, commentators on the subject strongly disagree over the question of why Allied political and military leaders did not order a more earnest preparation for a bombing of Birkenau. Many in the literature assert that given the information provided to them, the Allied leaders should have investigated the possibility of bombing Birkenau more intently. These commentators consequently question the integrity of the motives of Allied leaders. Other contributors to the literature vehemently defend the actions of Allied leaders. They assert that based on the information provided to them, Allied leaders came to the rational conclusion that a raid on Birkenau would either have been unfeasible or ineffective.

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1 A stylistic note: The complex at Auschwitz contained three camps – Auschwitz I, the main camp; Auschwitz II (also known as Birkenau), the extermination camp; and Auschwitz III (also known as Buna Monowitz), a slave labor camp for the nearby I.G. Farben factory. Discussions of humanitarian efforts to bomb “Auschwitz” typically focus on efforts to bomb the crematoria and gas chambers located in Auschwitz II/Birkenau. For the sake of clarity, this paper will refer to the extermination camp as “Birkenau,” and will use the phrase “Auschwitz” only in relation to the camp as a whole.

This paper will largely put aside the debate over why a political force never materialized in support of bombing Birkenau. It will focus instead on the counterfactual question of what might have happened had Allied leaders intently pursued the possibility of bombing the death camp. The paper will begin with an examination of when such preparation for bombing Birkenau might reasonably have begun. The remainder of the paper will be divided into three main parts: the first will assess if and when a raid on Birkenau would have been feasible had it been given the necessary political backing; the second will focus on the costs associated with such a raid; and the third will evaluate the number of lives that such a raid likely would have saved. In all, the paper will illustrate that while an American bombing of Birkenau was feasible, such an endeavor likely would have saved few lives.

*The Start of Planning*

The majority of the analysis in this paper will focus on the question of what would have happened had American military and political leaders chosen to prepare for and carry out a bombing raid on Birkenau. It should be noted, though, that in order for a political force to develop in favor of bombing Birkenau, the leaders of the Allied camp would have had to be aware of the atrocities that were occurring there. Consequently, we will first examine when the Allied governments became aware of the mass murder taking place at Birkenau, so as to gauge when political backing for bombing Birkenau might reasonably have developed.

The evidence is clear that certain members of the Allied camp became aware of the murders taking place at Auschwitz by early-to-mid July of 1944. It was at this point in time that summaries of the Vrba-Wetzler report – a 30-page, detailed description of the camp compiled by
two escaped prisoners – reached the Allied governments. Of particular note is the fact that such summaries reached the State Department and the War Department on 8 July and 16 July, respectively. Granting, in reality many members of the American government did not learn about the contents of the Vrba-Wetzler report until much later. However, given that the report did reach a number of quite influential government organizations in July of 1944, it does not seem unreasonable to envision a counterfactual scenario where someone who did read the Vrba-Wetzler in July of 1944 might have set the wheels in motion for a plan to bomb Birkenau.

We next turn to the question of whether preparation for bombing Auschwitz might realistically have begun prior to July of 1944. In 1981, famed Holocaust historian Martin Gilbert published a book indicating that no one in the Allied camp was aware of the atrocities taking place at Auschwitz prior to the release of the Vrba-Wetzler report. However, after the publication of Gilbert’s book, the British government declassified a number of documents indicating that certain individuals in the British intelligence services may have actually known about the mass-murder taking place at Auschwitz prior to the Vrba-Wetzler report. After studying these documents, Richard Breitman concluded that by 1943, British intelligence had collected information from a number of different sources that, when aggregated, formed a compelling picture of the mass murders that were being conducted at Auschwitz. It is unclear, however, whether anyone in the British intelligence service ever synthesized the information that was available regarding Auschwitz. In fact, under pressure to provide more urgent military information, British intelligence officers may never have connected the dots regarding the

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5 Gilbert, *Auschwitz and the Allies*
information they had about Auschwitz. Furthermore, even if British intelligence did uncover the secret of what was happening at Auschwitz, there is no evidence to suggest that anyone outside of the service was ever told about it.

It thus seems fair to conclude that prior to receiving the Vrba-Wetzler report, no one who had the power to initiate preparation for a bombing raid on Auschwitz was aware of what was going on there. Consequently, even if Allied leaders had had the best of intentions and had made bombing Birkenau a top priority, preparation for a raid on the death camp could not realistically have begun until mid-July of 1944.

**Feasibility of Bombing Birkenau**

Having established that preparation for bombing Birkenau might reasonably have begun in mid-July of 1944, we turn to the question of if and when such a raid might have been feasible. In order to successfully bomb Birkenau, the Allied air forces would have needed accurate information regarding the camp’s location, the construction and position within the camp of the crematoria and gas chambers, as well as the German defenses in the area.\(^7\) We will therefore begin our discussion of the feasibility of bombing Birkenau with an examination of the available intelligence about the camp.

As mentioned earlier, the Allies never explicitly ordered photo-reconnaissance (PR) of the death camp at Birkenau. However, in January of 1944, Allied intelligence prepared a memorandum identifying the I.G. Farben synthetic rubber plant at Monowitz as a military target and requesting photographic cover of the plant.\(^8\) The first successful PR mission over the I.G.

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\(^7\) Rice, 159
\(^8\) I.G. Farben Auschwitz Aiming Report, 21 January 1944; reprinted in Neufeld and Berenbaum, 240 ff.
Farben plant, which was located a mere 8 kilometers from Birkenau, took place on 4 April 1944. Although the photographs from this mission do not show the Birkenau camp itself, they do show the Auschwitz I main camp and the rail spur to Birkenau. In addition, a photograph from a subsequent PR mission on 26 June 1944 shows the entirety of the Birkenau camp. This was, in fact, the first of over thirty photographs to be taken of the Birkenau extermination complex during PR missions over the Farben plant.

In reality, American photo interpreters never identified the crematoria or gas chambers in the photos of Birkenau captured during these PR missions. According to Dino Brugioni, a former photo interpreter and one of the founders of the National Photographic Interpretation Center, this failure can in large part be attributed to the instructions and information provided to the photo interpreters; because photo interpreters were told to focus on the I.G. Farben Factory and were never informed that mass murder was being carried out at Birkenau, they paid little attention to the Birkenau camp accidentally captured in the photographs of the Farben factory. However, had a serious preparation for a raid on Birkenau been undertaken, the photo interpreters would have been instructed to focus specifically on the Birkenau complex, and they would have been provided with the details of the Vrba-Wetzler report. Brugioni posits that had this been done, the interpreters “would have quickly located the gas chambers and crematoria.” Consequently, it seems fair to conclude that the Allies possessed the photo intelligence they needed to bomb Birkenau as early as 26 June 1944, weeks before the Vrba-Wetzler report reached the Allied governments.

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9 Dino A. Brugioni, “The Aerial Photos of the Auschwitz-Birkenau Extermination Complex”, printed in Neufeld & Berenbaum, 52
10 See figure 4-2 in Neufeld and Berenbaum
11 Brugioni, 57
12 Brugioni, 52-57
13 Brugioni, 56
Having established that the Allies had the intelligence necessary to carry out a bombing raid on Birkenau, we turn to the question of whether the Allies had the technical capabilities to carry out such an attack. The literature contains a number of retrospective proposals for how the Allies could have bombed the crematoria and gas chambers at Birkenau. These include the use of: 1) American B-17 or B-24 heavy bombers, 2) American B-25 mid-range bombers, 3) American P-38 fighter-bombers and 4) RAF special-purpose Mosquito aircraft.

However, there are a number of reasons to believe that had Allied leaders ordered a bombing raid on Birkenau, such a raid would have been conducted by heavy bombers. For one, Birkenau was on the outer edge of the range of all the aforementioned aircraft except for the heavy bombers, and so it is not clear that a raid by any of the other planes would have been feasible. In addition, only American heavy bombers typically operated in the area, so using a different type of aircraft would have been a break from normal operating procedure. Further, because other types of planes were seldom used in the area, the possibility of using anything but American heavy bombers may not even have crossed the minds of the Allied air commanders entailed with the task of planning a raid on Birkenau. Owing to all of these factors, we will disregard other potential modes of attack and focus only on the prospects of a bombing raid on Birkenau by American heavy bombers.

There is no doubt that the heavy bombers of the United States Fifteenth Air Force could have reached Birkenau from their base in Foggia, Italy. Beginning on 7 July 1944, the Fifteenth’s heavy bombers regularly operated within a 35-mile radius of Auschwitz, bombing factories

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14 A number of commentators discuss the range of these aircraft. See, for example, Levy, 283-4; Kitchens, 97-8; and Neufeld & Berenbaum, 7
15 Neufeld & Berenbaum, 7
related to German oil production. Moreover, on 13 September 1944, such planes accidentally dropped bombs on the SS barracks at Auschwitz as part of sorties against the nearby I.G. Farben plant. The evidence is thus abundantly clear that by the time the Vrba-Wetzler report reached the Allies in mid-July of 1944, American heavy bombers were capable of reaching the extermination camp at Birkenau. Furthermore, the evidence suggests that upon reaching Birkenau, American bombers would most likely have been successful in destroying the crematoria. Ronald Rice, an air force officer and historian, offers perhaps the most in-depth analysis of the technical feasibility of bombing the crematoria. After using three different methods to assess the likely results of an air raid on Birkenau, Rice concludes that had twenty-two bombers attacked each of four main crematoria at Birkenau, they would have had between a 90 and 99.5 percent chance of hitting each of the crematoria.

**Costs Associated With Bombing Birkenau**

Having shown that bombing the crematoria at Birkenau was technically feasible by the spring of 1944, we turn our attention to an assessment of what the various costs of such a raid would have been. For one, we must ask what the cost of a raid on Birkenau would have been in terms of diverted military resources. A number of commentators on the subject have posited that diverting resources to a bombing of Birkenau could have hampered the Allied war effort. After all, the Fifteenth Air Force was engaged in operations that were quite important to the Allies: from July 1944 onwards, the Fifteenth focused its efforts on destroying Germany’s petroleum industry, an

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19 Rice, 171
20 See, for example, Rosen, 472
endeavor that David Wyman describes as “one of the most decisive factors in Germany’s
defeat.”\footnote{Wyman, “Why Auschwitz was Never Bombed” 42}

However, although bombing Birkenau would have diverted resources from the important
efforts of the Fifteenth, the magnitude of the diversion would have been quite small. Of all the
estimates for how many bombers would have been required in a raid on Birkenau, Foregger’s
figure of 160 is the highest.\footnote{Foregger, “Technical Analysis of Methods to Bomb the Gas Chambers at Auschwitz,” 407. By contrast, Erdheim estimates that such an endeavor would have required about 100 bombers (155). Rice, as mentioned, figures approximately 22 bombers per crematoria, for a total of 88.} Daily operations reports indicate that on 7 June 1944, the Fifteenth Air Force had 1,146 heavy bombers, of which approximately 914 were ready for duty.\footnote{Daily Operations Report Eight and Fifteenth Air Forces, 7 June 1944, USAFHRA File Number 519.308-2, cited by Rice, 164} Consequently, conducting a bombing raid on Auschwitz would have at worst diverted
approximately one-fifth of the Fifteenth’s operational planes for one day. Despite the importance
of the Fifteenth’s operations to the Allied war effort, it is hard to think that such a small
diversion would have had any tangible effort on the outcome of the war.

On a related note, we must also ask how many American planes and personnel would
have been lost in an attack on Auschwitz owing to the resistance posed by German fighter planes
and anti-aircraft guns. By the spring of 1944, the weakened Luftwaffe rarely attacked American
planes in Upper Silesia,\footnote{Erdheim, 143-4} and so flak was the only real threat to American bombers. As of
August of 1944, the I.G. Farben plant at Auschwitz had 79 heavy flak guns, one of the largest
concentrations of flak units in East Upper Silesia.\footnote{Joseph Robert White, “Target Auschwitz: Historical and Hypothetical German Responses to Allied Attack,” Holocaust and Genocide Studies 16 (Spring 2002): 58} For this reason, James Kitchens III asserts
that it would have been difficult for American bombers to avoid these anti-aircraft guns in an
attack on Auschwitz.\textsuperscript{26} There is evidence to suggest, however, that the resistance from German flak would not have been as impeding a factor as Kitchens suggests. Of the 79 heavy flak guns located at the IG plant, only 18 could be pointed in the direction of Birkenau, and many of these were not added until August of 1944.\textsuperscript{27} Moreover, it is unclear whether German gunners would even have targeted American planes that were not attacking the Farben plant.\textsuperscript{28}

In any case, given that the majority of the anti-aircraft guns were situated about the IG Farben plant, it seems reasonable to suppose that any raid on Birkenau would have incurred fewer losses than one of a comparable size on the Farben plant. In total, the Fifteenth Air Force dropped 866 tons of bombs on the Farben plant, at a cost of six aircraft.\textsuperscript{29} By all predictions, an American raid on Birkenau would have required fewer than 800 tons of bombs,\textsuperscript{30} and so we could hardly expect the Americans to have lost more than four or five planes in such an endeavor. It thus seems fair to conclude that the costs to the American military, both in terms of diverted resources and lost planes and personnel, would not have been prohibitively high.

In addition to the costs to the American Air Force, however, we must also assess the collateral damage that an attack on Auschwitz would have caused. A map of the Auschwitz-Birkenau complex reveals that at the closest point, the barracks of prisoners were less than 600 feet from the crematoria, and so the chances were significant that a stray bomb could have caused the deaths of many inmates.\textsuperscript{31} James Kitchens performs a rather extensive analysis of the

\textsuperscript{26} Kitchens, 91
\textsuperscript{27} White, 58
\textsuperscript{28} Erdheim, 141
\textsuperscript{29} White, 58-9
\textsuperscript{30} Levy estimates that approximately 200 tons would have been needed (285-6). Rice, similarly, estimates 220, 500-pound bombs per crematoria, an estimate equivalent to 220 tons for the four crematoria (171). Foregger estimates that about 400 tons would have been needed (407)
\textsuperscript{31} See Gilbert’s map, \textit{Auschwitz and the Allies}, 195
collateral damage that a raid on Birkenau likely would have caused. He estimates that a raid by heavy bombers would have led to a minimum of 500 to 1000 prisoner deaths, with the possibility of 2000 to 3000 in adverse circumstances. These numbers derive from his assumptions that approximately 400 five-hundred-pound bombs would have been required to destroy the four main crematoria at Auschwitz, that the camp population was approximately 36,000, and that the Circular Error Probable (CEP) – the radius of the target in which half of the bombs would fall – was at best 500 feet.\textsuperscript{32}

However, both Erdheim and Rice make compelling arguments that Kitchens estimates are too high. Erdheim astutely points out that many of the inmates living in Birkenau were slave laborers outside the camp, and so only 50 to 60 percent of the prisoners were actually present in the camps during the day. Since an American bombing raid on Auschwitz most likely would have occurred by daylight, we can reduce Kitchens’ estimates of the collateral deaths by 40 to 50 percent on this basis.\textsuperscript{33} Rice, meanwhile, points out that it is overly simplistic to predict the number of deaths on the basis of the Circular Error Probable, since bombs that miss their target tend to fall along the flight path of the airplane. Consequently, although it may be that half of the bombs dropped would have fallen more than 500 feet from the crematoria, the American bombers could have chosen a flight path so that relatively few of these bombs would actually have fallen on the barracks.\textsuperscript{34}

On the basis of Erdheim and Rice’s arguments, we can certainly reduce our estimates of the collateral deaths that would have been incurred by a bombing of Birkenau. However, the

\textsuperscript{32} Kitchens, 253-4
\textsuperscript{33} Erdheim, 145
\textsuperscript{34} Rice, 177-9
evidence is clear that we cannot reduce our estimates to zero. Indeed, while Erdheim and Rice both argue that Kitchens estimates are too high, they also acknowledge, in Erdheim’s words, that “high-altitude bombing was not a precise weapons delivery system.”\textsuperscript{35} As a result, a significant number of collateral deaths would undoubtedly have occurred.\textsuperscript{36} It should be noted, though, that while a number of prisoners may have been killed in a bombing of Birkenau, the Nazis would have ultimately murdered the vast majority of these prisoners. A bombing of Birkenau would thus have created few additional deaths, even if there had been a significant number of prisoner casualties.\textsuperscript{37}

\textit{Estimating the Number of Lives Saved by Bombing Birkenau}

Having examined the feasibility and costs associated with a potential bombing of Birkenau, we turn our attention to the question of what would have happened had the Allies succeeding in destroying the crematoria and gas chambers at Birkenau. Not surprisingly, the efficacy of a bombing of Birkenau would have depended heavily on its timing; the earlier the killing installations had been destroyed, the more lives could potentially have been saved.

Most commentators on the subject agree that had the gas chambers and crematoria at Auschwitz been destroyed by May or June of 1944, a significant number of lives would likely

\textsuperscript{35} Erdheim, 147; Rice, 178
\textsuperscript{36} Unfortunately, neither Erdheim nor Rice estimates the actual number of collateral deaths that would have occurred. With little technical knowledge about the technical capabilities of World War II bombers, I could hardly come up with an estimate any more sophisticated than Kitchens’, so the assessment that the number would have been “significant although less than Kitchens’ estimates” will have to suffice.
\textsuperscript{37} Although beyond the scope of this paper, there is an interesting debate over whether the fact that most of the prisoners killed in a bombing of Birkenau would have died anyway can be used to justify such a raid. Wyman and Erdheim argue that it can. In 1944, however, a number of Jewish organizations actually objected to the idea of bombing Auschwitz because they found the possibility of killing Jewish prisoners to be unpalatable (see Rubinstein, 163)
have been saved.\textsuperscript{38} During these two months alone, 400,000 Jews, primarily from Hungary, were murdered at Auschwitz.\textsuperscript{39} Killing so many Jews in so short a time period required all the resources that were available at Auschwitz: not only were the crematoria used to full capacity in these months, but the Nazis resorted to mass shootings and outdoor cremation in addition.\textsuperscript{40} Given that the Nazis struggled to kill at such a rapid rate even when utilizing the crematoria,\textsuperscript{41} it seems inevitable that their efforts would have been impeded had the crematoria and gas chambers been destroyed in these months. A raid on Auschwitz in May or June of 1944 consequently would have saved many of the 400,000 Jewish lives taken by the Nazis in those two months.

However, while a bombing of Auschwitz in May or June 1944 likely would have saved many lives, any bombing after the deportations from Hungary ended on 11 July 1944 would have been of doubtful efficacy. From this date through November, when the last gassings at Auschwitz took place, the killing machine at Auschwitz operated at just over 10 percent of its peak capacity. An average of 1,300 Jews were killed per day in that span, compared with as many as 12,000 per day in May and June.\textsuperscript{42} As pointed out by Richard Levy and Joseph Robert White, it seems quite likely that the Nazis would have found other ways to kill this reduced number of people even without the gas chambers and crematoria. For instance, the Nazis could have resorted to shooting their victims and burning their bodies in outdoor pits that used local birch trees for fuel. The evidence in fact indicates that in May and June of 1944, the Nazis killed

\textsuperscript{38} Even some usually harsh critics of a bombing raid on Auschwitz admit that a raid as early as May or June 1944 would likely have been effective. Levy, for example, admits that such a bombing would have caused a “disruption” in the Nazis’ mass-murder of the Jews (280), and White suggests that a raid in May would have had “theoretical lifesaving prospects” (65)

\textsuperscript{39} White, 64

\textsuperscript{40} Eyewitness reports of Mordowicz and Rosin, two escaped prisoners; quoted in Gilbert, 232

\textsuperscript{41} Levy, 280

\textsuperscript{42} Levy, 280
as many as 6000 people per day in this manner; the 1,300 Jews per day killed from July onward thus represented less than a quarter of this capacity.\(^{43}\) Although the shooting and incineration method likely would have been sufficient, the Nazis would have had other options as well. For instance, in addition to the four main crematoria, there existed an older and smaller killing installation at Birkenau, called Bunker 2 (later re-named Bunker V), which was capable of gassing and cremating approximately 700 people per day.\(^{44}\) This unit was located away from the other killing installations, and did not appear in the Vrba-Wetzler report, so it likely would have survived any bombing of Birkenau.

While acknowledging that the Nazis could have adopted other means of murder, David Wyman provides two reasons why he believes that a bombing of Auschwitz would nonetheless have saved lives. First, Wyman argues that in light of the tremendous resources that mass shootings would have required, the Nazis would have been “forced to reassess the extermination program.” Second, Wyman argues that the changeover to a new method of murder would have taken time, thereby slowing the whole process.\(^{45}\)

A brief glimpse at the records of the two men in charge of Auschwitz in 1944, namely Otto Moll and Rudolf Franz Ferdinand Hoss, reveals that Wyman’s arguments carry little weight. Throughout the war, Moll and Hoss had proven to be innovative men deeply committed to the ruthless slaughter of the prisoners of Auschwitz. Hoss, for example, was responsible for the introduction of Zyklon-B as the chemical used in the gas chambers; Moll, likewise, made a number of improvements to the methods of outdoor cremation, and was known to gleefully cast

\(^{43}\) Levy, 281  
\(^{44}\) White, 64-66  
live babies into the fires of burning bodies. Given their track records, it seems unlikely that it would have taken Hoss and Moll long to transition to new methods of killing. Moreover, these diabolical men would hardly have paused to reassess the extermination program in light of the resources it would have required.

Conclusion

This analysis has definitively shown that if American leaders had seriously investigated the possibility of bombing Birkenau upon receiving the Vrba-Wetzler report in mid-July of 1944, they would have discovered that such a raid was entirely possible. Indeed, by this point in time the Allies had taken reconnaissance photographs of the camp and were already flying bombing missions in the area. Had a raid on Auschwitz been ordered, Allied bombers would likely have destroyed the camp’s four main crematoria, at little cost to the American armed forces. Yet our analysis has also shown that by the time the Allies received the Vrba-Wetzler report in mid-July, the window to save a large number of lives had already closed. Even if the Allies had destroyed the crematoria at this point in time, in all likelihood the Nazis would merely have transitioned to killing by alternate methods.

It should be noted that we cannot use this retrospective analysis that few lives would have been saved by bombing Birkenau to judge whether Allied leaders acted appropriately. We must evaluate the actions of these individuals on the basis of what they knew about the feasibility of bombing Birkenau, not on what we now know more than 60 years later. However, while on the basis of this paper we cannot determine whether Allied leaders acted in a morally justifiable manner, we can conclude that they should in no way be held accountable for

46 White, 64-67
the deaths of Birkenau’s victims. Since roughly the same number of people would have been killed regardless of the actions of Allied leaders, blame for the horrible murders at Auschwitz must be placed solely on the shoulders of the Nazi perpetrators.