

America's Heavy Bombers and the Great Air Raids of August 1943

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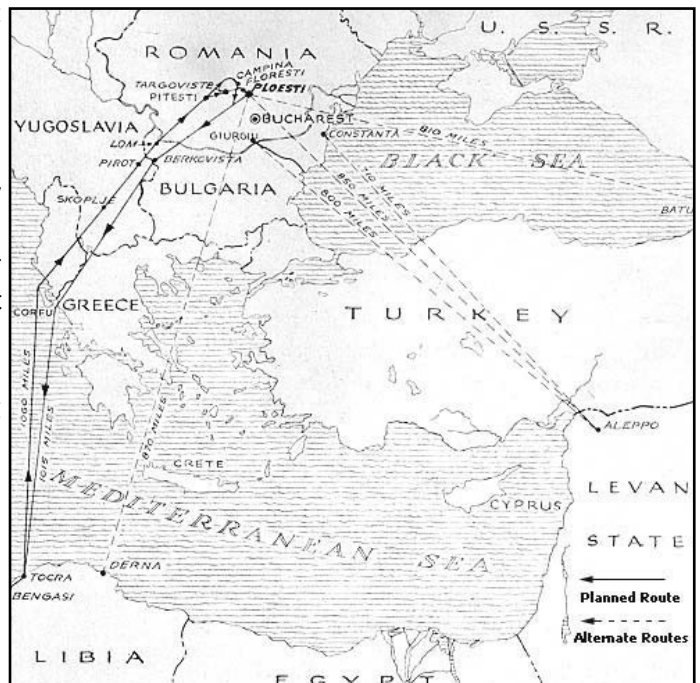
Paths to the Present
FLASHBACK

August 1943, marked two of the most famous U.S. heavy bomber raids of World War II – the August 1st raid by the Ninth Air Force (9 AF) on the Rumanian oil fields at Ploesti and the daring August 17th dual raid by the Eighth Air Force (8 AF) on the massive Messerschmitt complex at Regensburg and the ball bearing plants at Schweinfurt. At the time both became, in turn, the largest and most ambitious American air raids on Nazi Europe. They also set the tone for the massive future attacks on German and French targets in 1944 and 1945. Not only were they the most devastating attacks of the war, to that point, they were also the most costly in terms of air crews and bombers. Nonetheless, the lessons learned from these bold sorties led to improved flying formations, bombing tactics, training, and most importantly, fighter cover. Of interest to those at what was then called the Warner Robins Air Services Command (WRASC) many of the Consolidated B-24 *Liberators* and Boeing B-17 *Flying Fortresses* that fought in World War II were serviced by the work force at Robins Field, Georgia.

Ploesti

The largest single source of fuel for the German military during World War II was the oil refinery complex at Ploesti, Rumania. In 1942, as the British 8th Army retreated into Egypt and the situation in the Middle East deteriorated, Allied leaders decided to attempt air strikes on Ploesti. But, only one heavy bomber, the Consolidated B-24D *Liberator*, had the necessary range (barely) to fly the 1,100 miles from North Africa to Rumania. Moreover, the only air worthy B-24Ds had to be brought from China where Colonel Harry A. Halverson's 23 *Liberators* had been bombing Japanese coastal shipping and air bases in Manchuria.

From the summer of 1942 to the

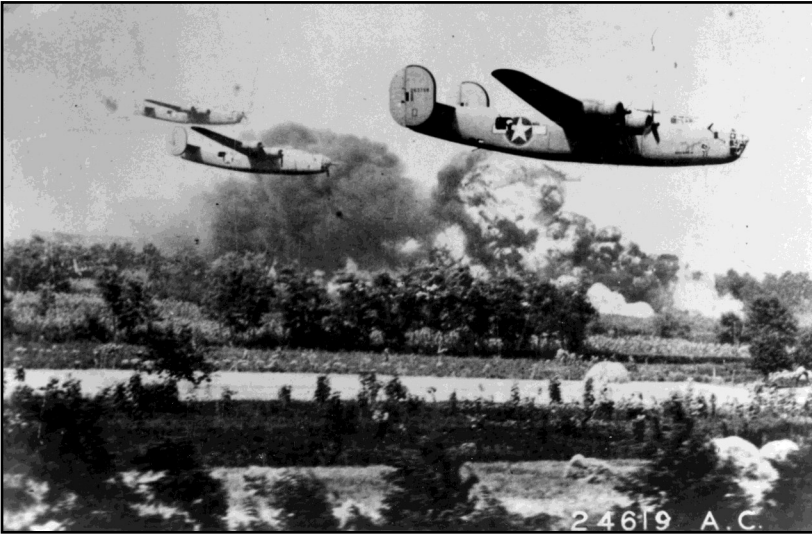


Approximate Route of Flight of Ploesti Mission



Col Leo Johnson, 44th Bomb Group
Commander

spring of 1943 these handful of aircraft made several hit-and-run raids which, although significant, failed to have a major effect. In the summer of 1943, circumstances changed causing Allied leaders to decide on a larger assault. For one thing, there were now more of the B-24Ds available to be moved from 8AF in England to the 9 AF in North Africa. Secondly, the defeat of the German Afrika Korps in May and the subsequent Allied invasion of Sicily brought the refinery closer to new Allied airfields and made its destruction more imperative than ever.



Liberators during the raid on the Ploesti oil refinery bombing mission

During June and July 1943, the 9 AF collected 177 *Liberators*; borrowing 124 from the 8AF. The bomb groups were reorganized in the north Libyan Desert in July. The main units included the 376th and 98th Bomb Groups (BGs) from the 9 AF and the 44th, 93rd, and 389th BGs from the 8 AF. Conditions on the bases were primitive and were not helped by the presence of millions of grasshoppers, which hung on the underside of the mess tents and periodically dropped into mess tins.

For three weeks the groups flew support missions for the Italian campaign. Then in July they began a twelve-day training course that stressed low-level bombing runs. They soon discovered that the entire contingent would undertake Operation Tidal Wave; a mass raid on the Rumanian oil refineries. In the very early hours of 1 August 1943,

the bombers began taking off. The 376th BG was the lead group followed by the 93rd, 98th, 44th and 389th. Each aircraft carried 12,500 pound bombs and full fuel tanks. They lost three planes at the start due to engine failure, one of them carrying the lead navigator.

It was a clear summer day and as the planes crossed land they veered right coming in at minimum altitude toward the target. The lead group arrived over the target area around 1400 hours. From this point things began to go wrong. The 376th turned south for its bomb run too soon and was subsequently followed by the 93rd. While the lead groups dropped their loads with relative surprise and with comparatively few casualties, the loss of the lead navigator, the 376th's early run, and the fact that the 389th temporarily got lost, lead the remaining groups to arrive over the target late. They flew into a holocaust of enemy fire.

Particularly hard hit was the 389th whose specific target was the refinery at Campina. Planners thought it would be an easier target since there were no barrage balloons. The 389th had been assigned the longest route because their aircraft had been fitted with fuselage tanks but, this additional weight also made them very vulnerable. All the crews were concerned with fuel consumption and since the planes in the rear of the formation had had to fight the lead planes' prop wash all the way to the target they were particularly low on fuel.



2Lt Lloyd H. Hughes

The 389th was led by Colonel Jack Wood. There were anxious moments when the group first turned down the wrong valley. After correcting the error they flew in on the target which was marked by bellowing black smoke. The group split into three sections to hit the refinery from three directions. It proved a successful tactic, as the group totally destroyed the Campina refinery. But the cost was high. Several planes went down over the target. Among these was that of 2Lt Lloyd H. Hughes, Jr, who was posthumously awarded the Medal of Honor for pressing his attack despite being hit by



Liberator "Hail Columbia", the lead bomber for the 98th Bomb Group



Ploesti oil refinery burning after attack

at least a dozen artillery shells. Exploding fuel eventually engulfed his aircraft which hit the ground and exploded. Altogether nine B-24s from the 389th failed to return paying the price for being the last to arrive over the target.

Of the 177 *Liberators* which took part in the Ploesti raid, 54 failed to return. Altogether 532 airmen were lost. While a couple dozen were rescued and around 100 captured (some later escaping), nearly 400 died. Moreover, while the target was severely damaged, the plants which these brave men had fought so hard to destroy were repaired and operating at pre-mission capacity within two months. But, the short delay did have a positive effect hampering German fuel resupply efforts both in the Italian and the Russian theaters of war. In the end, this greatly facilitated Allied victory in both areas.

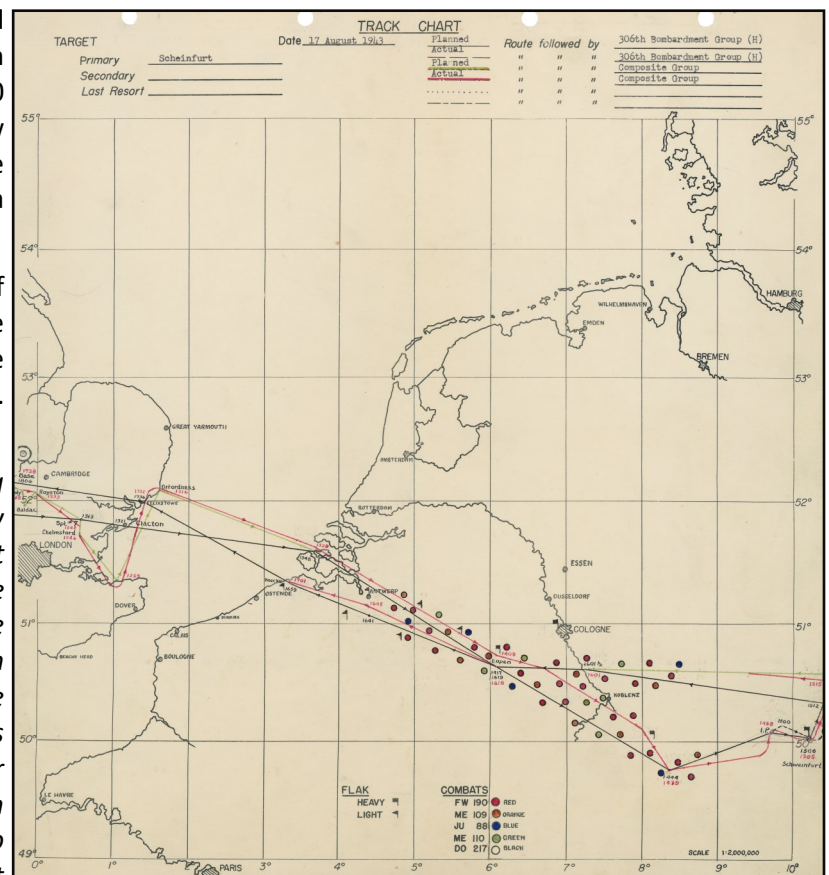
Regensburg and Schweinfurt

In a very real sense the story of the second great raid of August 1943 was a story of the Boeing Model 299 heavy bomber first built in 1935 and later designated the Boeing B-17 *Flying Fortress*. It was America's first great four-engine

long-range, heavy bomber and although it was not the most comfortable beast aloft, it was easy to fly and capable of surviving colossal structural damage. One of the most famous examples of this was a B-17 from the 301st BG nicknamed "Phyllis" during an October 2, 1942 raid on the Meaulte aircraft factory in France. Even though it was hit by sixteen canon shells and 300 small-caliber bullets and even though several crew members passed out due to a lack of oxygen, the pilot, Lt Charles W. Paine Jr. successfully made a wheels-up landing at Gatwick.

At its most basic level, the 8 AF leaders' concept of bombing embraced a determined belief in the application of maximum firepower. The commander of the 379th BG, Colonel Maurice A. Preston later declared:

It was like lining up the cavalry, shooting your way in and then shooting your way out again. This was definitely the concept of the early Air Corps leaders--also the concept of the design of the aircraft. The Flying Fortress was simply an aircraft with a lot of guns hanging on it. There was the idea of massing aircraft together to mass the firepower. If it didn't work, the answer was to get still more aircraft up and even more firepower. The fellows who had to do it weren't too keen on it, but we had to get on with it.



Track chart of the Schweinfurt-Regensburg mission on 17 August



B-17 formation over Schweinfurt, Germany

The Raid

In the last week of July 1943 the predominantly cloudless skies over Europe enabled 8 AF bombers to mount a series of raids in what became known as "Blitz Week." As a result, 100 of its 330 operational aircraft were destroyed or unusable, while the equivalent of 90 crews were killed, wounded, or missing. The attrition reached its zenith on August 17 – the first anniversary of 8 AF's initial raid of World War II at Rouen. The 8 AF commander, Lt Gen Ira Eaker, decided to celebrate the occasion by sending his bombers on their deepest penetration into the Reich – attacking the Messerschmitt Me 109 plant at Regensburg and the ball-bearing factories at Schweinfurt. This dual raid soon became one of the epic events of the air war in Europe.

Schweinfurt and Regensburg both lay far beyond normal B-17 targets. Regensburg was

only 40 miles from Czechoslovakia and over 500 miles from the English coast, while Schweinfurt was nearly 400 miles away. Such a mission would surely provide the Luftwaffe with ample time to deploy its full defensive strength and cause enormous losses as the bombers made their way home. Thus, USAAF planners decided that the Regensburg's force (4th Bombardment Wing) would fly over the Alps and land in North Africa. Fighter support could extend out only about 40-percent of the way to the Regensburg target and not much farther for the 1st Wing, who would have to return from Schweinfurt to England through a German fighter gauntlet.

Early morning fog on August 17th forced a change in the plan for both wings to fly into Germany together. Instead, the 4th departed at about 0630, while the 1st took off five hours later. German monitoring stations along the Dutch coast quickly picked up the huge formation flying at between 17,000 and 20,000 feet. The first fighter attacks came about 1025 hours over Belgium. Of the 4th Wing's 146 B-17s 122 reached the target and dropped 250 tons of bombs on the gigantic aircraft assembly plant. Four hours later, 184 of the 1st Wing's original 230 bombers dropped 380 tons on Schweinfurt. Ten of the original number were forced to return to base without reaching the target due to mechanical problems. Thus, of the total of 376 B-17s, sixty were lost to enemy fire. Of the 316 which returned to base over 25-percent were damaged beyond repair. Nearly 650 airmen were killed, wounded or captured. The loss rate at Regensburg had been an extremely high 16.4-percent, while Schweinfurt had been only slightly better at 15.7-percent.

As for the targets, nearly half of the machine tools in the Regensburg assembly plant were destroyed and while the plant was back in production in less than four weeks, German estimates put overall fighter production losses at 800 to 1000. Although not known at the time, also destroyed in the attack were new jigs for the fuselage of the Me 262 jet fighter, which German managers later



Schweinfurt, Germany during raid

speculated delayed the production of the aircraft by a critical three or four months. While damage had been great at Schweinfurt and ball bearing production suffered about a 50-percent drop off in one of the three factories over the following ten weeks, overall production actually increased in September.

As it turned out, it was not so much a failure of the strategy of raids but the inability of the 500 and 1000 pound bombs to destroy the most important aspects of these targets; the machining tools. An attempt to renew the assault on Schweinfurt in October cost the Americans 77 of 291 aircraft and nearly 800 men; again with limited success. Worst of all the second raid left 133 planes so badly damaged that it took four months to bring 8 AF back to anything approaching full strength. Average losses over the year ran at over ten

percent and by the end of the year morale was reaching a dangerously low ebb. After the second raid in October bombing operations were temporarily suspended to look for better tactics and technology in order to commence new more effective raids in 1944.



Bombers, after bombing targets in Regensburg, turned south and cross the Alps on the way to North Africa

Even though things looked bleak in late 1943, in retrospect it is clear that these brave airmen had not died in vein. The raids of 1943 not only proved that with better fighter escort the USAAF could play a decisive role in the war, but it also had a much greater effect on the enemy than anyone at the time realized. The raids forced Germany's already thin industrial resources to build defensive fighters and not bombers or attack aircraft which could have made such a difference on the Russian front and later on the Western front. It also took fighters away from close air support of front line troops and caused a dramatic rise in ground force casualties beginning in the fall of 1943 on all fronts. In addition, many of Germany's finest pilots were shot down fighting these raids. Twenty-one went down in the first Schweinfurt attack and thirty-five in the second. By mid-1944, not only were German planes in short supply but so were her pilots. Last but not least, the elaborate use of radar and Anti-Aircraft-Artillery (AAA) redirected these resources in large quantities from other critical uses in the various theaters of the European war.

Supported by the equally large night time raids of RAF *Lancasters* and *Halifaxes*, the USAAF bombers hamstrung Germany in 1944 and by the end of the year using new planes, fighter support (especially the North American Aviation P-51 *Mustang*) and new massive formations totaling over 1,000 planes, American bombers obliterated such sites as Hamburg, Berlin, and Stuttgart. All of this could not have been possible without the courage of the crews at Ploesti, Regensburg, and Schweinfurt in August 1943.

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