

Air and Space this Week

Item of the Week

THE BIG WEEK

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The Allies had been bombing strategic targets in the European Theater all during 1943, to some good effect. A variety of targets were selected, based on their perceived value to the overall Nazi war effort. Notable amongst them were a variety of military aircraft factories, oil refineries, and bottlenecks in war industries such as ball bearings. Allied bombers suffered heavy losses during these attacks; the German war effort was hindered, but not stopped. But momentum was swinging to the Allies with the dawn of 1944. Allied planners had learned how vital air cover was for invasion forces, and with D-Day coming up a few months away, they knew was imperative to get a jump on German air attack capability with a two-pronged approach: cripple the German airplane construction capability and shoot down as many existing planes and their pilots as possible.

A maximum effort was planned, and by mid-February weather improved to the point that large-scale bombing attacks, from England to the north, and from Italy to the south, were possible.

The big push would become known as the “Big Week!”

INTRODUCTION

The Allied leadership at the entry of America into WWII was sharply divided over how to win in the European Theater. Germany had reached its high-water mark by the end of 1942. They had first failed to knock Britain out of the war by invasion, and then turned east. That drive stalled at Moscow and the counter-attack from the East was beginning to take form.

American leadership wanted to attack Germany from the west. Some wanted a 1943 massive Army push through France; others realized that the logistical framework for such a large undertaking (sorry) could not possibly be completed by then, and opted for an approach via North Africa. But all of the Americans agreed that the way to Berlin led through France.

The British wanted to strike at Germany from the “soft underbelly” of southern Europe; they were strongly opposed to a cross-Channel attack in 1943 or any other time. Perhaps they were influenced by Dunkirk, perhaps by a desire to hold on to more of their Empire.

Stalin wanted the other Allies to open a front in the West, which would weaken the German defenses for his drive on Berlin. Russia had suffered massive casualties from the Nazis, both military and civilian, and he was focused on “payback time.”

Sometimes the right answer to a multiple-choice question is “all of the above.”

SITUATION AT JANUARY 1, 1944

The Allies were on a roll at the start of 1944. In the Pacific, U.S. forces were advancing from both east and southeast. U.S. submarines finally had torpedoes that worked, and were capable of increasing interdiction of oil and other resources to Japan’s war industries.

In Europe, the Allies had defeated the Germans in North Africa in the previous May, with ~250,000 German and Italian troops surrendering in Tunisia. Operation Husky, an invasion of Sicily, followed on July 10, 1943. It was a massive amphibious assault, with air cover from bases on Malta. Mussolini was deposed on July 24, and the Allies were in full control of the island five weeks after that. It wasn’t Stalin’s first choice for a second front, but now Germany was under attack from three sides, two of which were getting ready to conduct strategic bombing against the Reich.

The Allies followed up their victory in Sicily with an assault on mainland Italy. Attack forces were landed on the beaches off Salerno starting on September 3. The assault force was built around 16 different convoys, each with a composition of ships that matched their part of the overall mission. Five aircraft carriers were included to provide air cover over the beachhead, along with planes based in Sicily. The landing was a success, but three Allied warships were damaged by new creations from the Nazi weapons designers: radio-controlled rocket gliders and bombs, and rocket-propelled bombs. The Allies lost over 100 ships/craft of all types in the invasion. Troops were also landed at Calabria and Taranto at this time.

There was a line of strong German resistance between Salerno and Rome, in terrain difficult for tanks and anchored by the large [Abbey at Monte Cassino](#). The Allied effort was under Eisenhower’s command, and he had planned to detour around that line with a landing of troops at Anzio, thirty miles south of Rome, starting in October, an assault codenamed “Operation Shingle.” But Ike was pulled out to begin preparation for D-Day, and his British replacement placed more emphasis on the “soft underbelly” approach favored by Churchill than the invasion of France. The Shingle plan for an Anzio invasion was resurrected, and the landings took place beginning in January, 1944.

American forces were building up in the ETO at an extremely rapid pace, and aircraft were coming in for both strategic and tactical operations, from both England and Italy. The Eighth Air Force was based in England. General Ira Eaker had built it into a potent bombing force, and on January 6, 1944, he was sent to Italy to do the same for the Fifteenth Air Force, which would conduct strategic and tactical bombing from Italy. General Doolittle, basking in the afterglow of his [amazing raid on Tokyo](#), replaced Eaker, and continued building up the Eighth. Both would report to General Spaatz, based in London. The Eighth had longer-ranging fighters; the Fifteenth had to make do with an early version of the P-38, an excellent escort fighter, but one that could not cover bombers all the way to southern Germany.

The Ninth Air Force would also be involved in this big effort. They had first been based in Egypt, supporting the Allied drive against Rommel, the campaign in Tunisia, and then the invasions of Sicily and southern Italy. Then they moved to England in October, 1943, to conduct tactical aerial operations on the Continent, which would include flying bomber escort for the Eighth.

The Allies had a number of fighter aircraft and light bombers that excelled at tactical support of ground forces and interdiction of German transport and communications. But the ETO was large enough to prevent the present fighter aircraft from being able to defend bombers deep in Germany, especially in the south. British bomber command learned early-on that their bombers could not survive against defending fighters without escort, and limited their strategic attacks to nighttime missions; safer, but with greatly-reduced bombing accuracy. The American's B-17s were somewhat tougher in their defensive armament, but ... Several large American bombing missions were conducted in 1943, with some success, but at a shocking rate of loss.

The fighter escort problem was well on its way of being solved by the start of 1944. New longer-range models were going into service, especially the P-51B Mustang and improved versions of the P-38 Lightning and the P-47 Thunderbolt. And with the captured territory in southern Italy now available, even shorter-ranged planes could escort effectively. By early 1944, the entire Reich was reachable by escorted bombers.

The Allies were acquiring a LOT of experience in conducting sea-borne invasions (and in the case of Dunkirk, a sea-borne retreat). A lot of factors were involved for success, but one factor was true regardless of the others: control of the air over the invasion site was absolutely necessary! That simple fact was not lost at all by Ike and his planners for D-Day. German tactical air had to be crippled ahead of time, and no effort could be spared to make that happen.

Bombing missions were building up regardless; the real Robert Hogan had been shot down in January, and Chuck Yeager was shot down on March 5. But February 20-25 was to be the big push against German fighter aviation. It would become known as the "Big Week."

OPERATION ARGUMENT

The plan for the elimination of aerial interference at Normandy on D-Day was Operation Argument, a huge series of coordinated attacks on the German aircraft industry, starting sometime in February, 1944, when weather conditions permitted. The goal was two-fold: destroy the planes and destroy the pilots.

Destroy the Planes

Germany was producing about 600 fighter planes per month at the start of 1943. New factories were coming on line, and the Germans expected the monthly output to climb by 50% by mid-year. But the large-scale bombing missions mentioned previously dropped production back to ~600/month and kept it from increasing for the rest of the year. But Germans were very

innovative about their construction process, even moving factories and assembly functions underground, and they were able to keep production going.

German fighters became much more choosy about the targets they would defend and under what circumstances they would defend, so their loss rate went down, putting less pressure on the manufacturing side. Of course, the targets of Allied bombers were more effective with the lighter opposition, but the Luftwaffe was still a force to be reckoned with, and the D-Day planners knew they could not fully protect the invasion beaches by reducing fighter construction and shooting down existing fighter planes alone; the task was too large. Pilots were more difficult to make than aircraft. German fighter pilots were fighting over their home territory. If they survived their shoot down and hit the silk, they could be back with their squadron right away. The pilots had to be taken out, too.

Destroy the Pilots

German fighter pilots had been selective about their defensive missions for some time, and we knew it. They were still capable of putting up ~1000 fighters if need be, but would only defend critical industries. Operation Argument planners knew that the German fighters would have to be present in order to be shot down, so they knew that targets that had to be defended would have to be attacked in order for our fighters to knock down their counterparts. It would be a “bait-and-kill” situation.

Only two industries were sufficiently important to be bait: Oil and Fighter Manufacturing Plants.

Allied intelligence was quite good as to what was being built where across the Reich. We had identified, and previously bombed (or attempted to) a number of factory sites where aircraft components were built and sites where those components were assembled. New factories, and the major aircraft facilities hit in the months previous and now becoming operational again, were just the kinds of targets Argument attackers needed to knock out, and to use as bait for defending fighters. The fighter planes now coming into service for the Allies were capable of escorting bombers to most of the aircraft plants, and would be in position to do just that.

The only thing the Allies needed at this point for Operation Argument was a spell of good flying weather, not a sure thing in January and February. But the forecasters saw that some suitable weather was on the way for the third week of February.

Operation Argument, the “Big Week,” was on!

DAY ONE (SUNDAY, FEBRUARY 20)

Three areas of fighter manufacturing were hit hard on February 20, 1944, by an aggregate total of 1003 bombers dispatched: Leipzig, Rostock, and Brunswick. It was almost exclusively an Eighth AF show, at least for the bombers. The Ninth did help with escorting some of the strikes that day, working with fighters from the Eighth in relays.

The Leipzig mission was particularly successful. The assembly plant at Leipzig drew components from surrounding plants, including one at Heiterblick. Pre- and post-attack reconnaissance photos, published in the April, 1944, IMPACT, show very heavy damage there.

A little deception helped our guys, too. The Eighth had sent a flight of 300 bombers heading for Poland, detected by German radar, flying across the North Sea toward Denmark. It looked like it would be the first bombing attack on Berlin, and the fighter controllers reacted by bringing seventy fighters northward, out of position for the main thrust toward Leipzig through Holland an hour later. The planes sent northward were recalled, but arrived in the Leipzig area skosh fuel. The defense controllers rallied by placing fighters along the route the bombers had followed inbound, but our guys came back on an arching path south of the Ruhr, so most of the defenders missed. This was great news for the bombers, but not so much for the planners, who had hoped more of the defending fighters could have been destroyed. The day was considered a major success, with only 21 of the 1000+ attacking bombers being shot down. We claimed 75 fighters were shot down, probably too high a number. The 384th bombing group commander for this mission was awarded the DFC.

Not everything went our way on the first day of The Big Week. A B-17 from the 351 Group's 510th Squadron was hit by fire from defending fighters. The co-pilot was killed outright, the pilot was wounded severely, and the radio operator was also out of action. The B-17 was badly damaged, especially the cockpit. The navigator, 2Lt. [Walter E. Truemper](#), took the controls, and assisted ably by the engineer-gunner, SSgt. [Archibald Mathies](#), gained control over the crippled bomber and actually made it back to England. Their B-17 was too badly shot up to land without crashing, so Truemper ordered the surviving crew to bail out, which they did. Their squadron commander was in a chase plane, and he confirmed that the B-17 couldn't possibly land safely. He ordered Truemper and Mathies to bail out. They refused, since the pilot was still alive, but in no condition to make a parachute jump. He would certainly die if the two bailed out. Hollywood would have a miraculous landing and happy ending in such a case, but this wasn't Hollywood. They made two unsuccessful approaches, and crashed on the third. There were no survivors. Both men won the Medal of Honor, posthumously. SSgt. Mathis was one of only four enlisted aviators to win the MoH in WWII. ["Snuffy" Smith was one of the four, see [here](#).]

A third MoH was won this day, with a happier ending.

1Lt. William R. Lawley Jr. was a B-17 pilot with the 364th Bomb Squadron. His bomber was attacked by defending fighters just after he heard his bombardier call "bombs away." The fighters shot up Lawley's plane thoroughly. Eight of the ten men aboard were hit, an engine was on fire, and the flight controls were badly damaged. Worse, the co-pilot's lifeless body was draped over the control column, forcing the plane into a steep dive. Lawley was badly wounded, and had to try to level the plane with his left hand while pulling the co-pilot's body away from the controls with his right. He ordered his crew to bail out, but as was the case with Truemper and Mathias, he learned that he had injured crewmen aboard incapable of bailing out. He, too, decided to stick it out and try to make base in order to save their lives. German fighter attacks continued. The bombardier came up to help, and took over when Lawley passed out from a loss of blood. An engine failed as the B-17 crossed the English coast. The

bombardier could not land the plane, especially one this badly damaged, but he was able to revive Lawley, who stayed conscious long enough to crash land the bomber at an advanced fighter base. He would be awarded the MoH for this flight. 1Lt. Lawley would go on to fly a total of 14 combat missions before returning to the U.S. to serve as a public relations officer.

DAY TWO (MONDAY, FEBRUARY 21)

The Eighth AF struck another three areas on Day 2 of the Big Week, sending an aggregate total of 861 bombers, escorted by 679 fighters, against aviation-related targets. Sixteen bombers and five fighters were shot down; thirty German fighters are lost (24 pilots KIA). Bad weather required a third of the attacking force to hit secondary targets. The Ninth AF had been scheduled to strike targets in Belgium this day, but weather canceled those missions.

DAY THREE (TUESDAY, FEBRUARY 22)

Day 3 of The Big Week was a mixed bag for the Eighth AF. Two of their strikes were canceled by weather. One, aimed at the ball bearing plants at Schweinfurt that had been hit in 1943 at such high cost didn't even reach enemy territory. The other, aimed at a variety of aviation targets, was recalled before getting to its target and the planes struck targets of opportunity in Holland.

The third strike the Eighth mounted on Day 3 comprised 289 B-17s aimed at several key aircraft/component factories in Aschersleben, Bamberg, Halberstadt, and other places. They faced stiff fighter opposition, losing a total 41 B-17s and 11 fighters while claiming 32 victories over defending fighters. Unfortunately, some of the bombs went awry and killed ~900 civilians in Holland.

Day 3 belonged to the Fifteenth AF. Their primary target was the Germans' very large Prufening Bf-109 assembly plant outside Regensburg. It had been hard hit on several occasions in 1943, but much of its machinery was OK. A glider factory in nearby Ober Traubling was taken over for Bf-109 production. Between the two, production was restored to ~250 fighters/month. The Fifteenth sent 86 B-17s and 132 B-24s. Thirteen would be lost, but the photos in the June, 1944, IMPACT show heavy damage at both plants.

Supply lines were still being built up for the participants in the Big Week, especially for those units recently activated. Some of the bombing units were going into battle equipped with less-than-modern weapons. A case in point is the 449th Bombardment Group, based out of Grottaglie, Italy. Many of the bombers in the stream ahead of the 449th had high explosive bombs, designed to demolish buildings and make a lot of kindling. The 448th had incendiaries, with the idea of setting the new kindling afire. However, the incendiaries of the latest design had not yet reached Grottaglie, and the 449th had to go with old-style fire bombs, which became live when dropped from their racks. This was the first big mission for the rookies of the 449th, and the big concern was that the bombardiers, in their excitement and inexperience, might drop the bombs with the bomb bay doors closed. High explosive bombs would bash right through the doors, but the lighter old fire bombs would not. They would go off however, and

quickly incinerate the bomber. Exacerbating the fears was the fact that the Fifteenth Air Force escorts were older P-38s, which could take the bombers only as far as the north end of the Adriatic; the bombers would have a long way to/from the target unescorted. It was on this particular mission that the sister squadron of the 449th, the 450th “Cottontails,” made the mistake [related here](#) that caused them to be Target #1 with German fighters.

The Fifteenth also sent a group of B-24s to attack the aircraft industrial complex at Steyr, Austria. Some had to abort along the way, but the others claimed over 30 fighters were shot down.

DAY FOUR (WEDNESDAY, FEBRUARY 23)

The Eighth Air Force took a day off bombing aircraft plants and shooting down defending fighters on this day, opting instead to attack a number of V-1 launching sites. The “buzz bombs” were just starting to make their appearance, and knocking out their launching sites was an objective of increasing importance. The sites were thoroughly-camouflaged and heavily-defended, so bombing from higher altitude was preferable to going after them with ground attack fighters. Even so, seven B-24s were lost. Bombing from altitude was not sufficiently accurate to take out a V-1 site, so most future attacks on them would have to be by fighter-bombers on the deck, and we would lose a lot of planes and pilots in the process.

Small units had been dropping propaganda and support leaflets earlier in the Week, and this day was no exception. Five B-17s dropped 250 bundles of leaflets on Amiens, Rennes, Paris, Rouen, and Le Mans.

DAY FIVE (THURSDAY, FEBRUARY 24)

The final Big Week missions were provided this day by the Eighth AF. Three specific areas were targeted. 268 B-17s attacked aviation industry plants in Augsburg and Stuttgart. The June, 1944, IMPACT has after-attack air photos of the results at Gotha, a plant that fed Ju-88 parts to Augsburg; destruction was near total. 290 B-17s were sent to hit Regensburg again. 196 B-24s hit aviation targets near Furth. An aggregate total of 31 bombers and 3 fighters were lost. Our fighters claim 26 kills.

THE RAF CONTRIBUTION TO THE BIG WEEK

American aircraft were not the only Allies flying during the Big Week. The RAF dispatched bombers to attack at night, part of a “bomb around the clock” effort that inspired Bill Haley a decade later.

Their first Big Week attack was on the night of February 19/20, starting off the Big Week. A total of 921 bombers attacked Leipzig, but their diversionary attacks did not fool the defenders, and a total of 79 bombers were lost (8.6% of the force dispatched).

On the night of February 20/21, the RAF flew 826 bombers against the factories of Stuttgart, with 10 lost.

The following night, 17 Mosquito light bombers attacked V-1 sites near Stuttgart.

On February 22/23, another 21 Mosquitos went to Stuttgart, Duisburg, and Aachen, and another 17 Mosquitos hit Düsseldorf on the night of February 23/24.

The February 24/25 raid comprised 734 bombers; 695 of them reported they had attacked the target, Augsburg. However, the planes that flew ahead and marked the targets in the night were off target, and only 22 bombs hit in the target area.

The RAF delivered the final blow of the Big Week on the night of February 25/26, flying a total of 1070 sorties. 336 sorties involved mine laying, and the other 734 were split between the ball bearing plant at Schweinfurt and the port of Kiel.

SUMMARY

The numbers cited above don't always add up. Pilots and gunner tended to over-claim, and the existing records do not match up well. But the best summary I found for aggregate losses during the Big Week is as follows.

The Eighth AF lost a total of 97 B-17s, 40 B-24s, with an additional 20 returning planes being beyond repair. The Fifteenth AF lost 90 bombers (14.6% of their force at that time). The RAF Bomber Command lost a total of 131 bombers. These were heavy losses, but much lighter than those of the big raids of 1943.

German fighter aircraft construction had been fairly level at 600 planes/month until December, 1943, after which production started to climb again. A number of aircraft component manufacturing facilities and assembly plants were hit, but the overall bombing results were less than hoped for.

U.S. forces claimed over 500 German fighter plane losses, but that number was very much higher than actual losses. German Bf-110 and Me-410 losses were very high; a total of 355 aircraft of all types were actually lost, along with 100 skilled pilots (~14% of those participating).

The June, 1944, IMPACT issue has the following combined USSAFE and RAF summary for the Big Week. 400 bombers were lost out of a total of 8,148 sorties; 39 fighters were lost out of 4,454 sorties; a total of 19,177 tons of bombs were dropped; and 642 enemy fighters were destroyed (aerial combat only, not on ground).

The Big Week did give the Allies confidence that a bombing campaign against targets deep inside Germany was not only possible, but could be decisive. And with more long-range fighter escorts becoming available, our confidence soared. American aircraft would make the first daylight attack on Berlin within a week, a portent of disaster to come.

Bottom Line: German fighter production was slowed and the ranks of German pilots were badly depleted by the Big Week attacks, and the Allies controlled the air over the D-Day invasion, so it is safe to judge the Big Week as a success.

CODA

The Big Week was arguably the largest coordinated bombing effort in the ETO. Until one year later. On February 22-26, 1945, the Eighth and Fifteenth Air Forces engaged in a bombing campaign twice the size of the Big Week, aimed at the remaining German railway system, vital to the support of German strategic and tactical operations. The April, 1945, IMPACT refers to it as the "Rail Smash," and states that "Air power, concentrated against communications, was proving to be one of the most effective factors in the final phases of the war in Europe." Here's a comparison with the Big Week: Effective bomber sorties (target was actually struck), 4,199 for the Big Week vs. 7,682 for the Rail Smash; Tonnage Dropped: 10,040 BW vs. 20,111 RS; Bomber losses: 252 BW vs. 64 RS; and German aircraft claimed: 657 BW vs. 34 air and 58 ground for the RS. The Ninth AF had been making many effective smaller attacks against German lines of communications; that and the Rail Smash really enabled rapid advances against the vestiges of the Reich.

REFERENCES

BOOKS

Anderson, Clarence E. and Joseph Hamelin, *To Fly and to Fight: Memoirs of a Triple Ace*, New York: Bantam Books, ISBN 0-553-29240-4

Caiden, Martin, 1968, *Flying Forts*, New York: Ballentine Books, ISBN 0-345-28308-2

Caiden, Martin, 1971, *Fork-Tailed Devil: The P-38*, New York: Ballentine Books, ISBN 0-345-31292-9

Currier, Donald R., 1992, *50 Mission Crush*, New York: Pocket Books, ISBN 9-671-75975-9

Fortier, Norman, 2003, *An Ace of the Eighth: An American Fighter Pilot's Air War in Europe*, New York: Presidio Press, ISBN 0-89141-806-7

Freeman, Roger R., 1988, *Zemke's Wolfpack*, New York: Pocket Books, ISBN 0-671-72714-1

Grigg, John, 1980, 1943: *The Victory That New Was*, New York: Kensington Publishing, no ISBN, D748.G76

Smith, Dale O., 1990, *Screaming Eagle: Memoirs of a B-17 Group Commander*, New York: Dell Publishing, ISBN 0-440-20847-5

IMPACT: The Army Air Forces' Confidential Picture History of World War II, published in 8 volumes; April 1944 issue (Book 3), June 1944 (Book 4), and April, 1945 (Book 6)

OTHER SOURCES

National Museum of the United States Air Force on The Big Week: [here](#)

Air & Space Magazine: <https://www.smithsonianmag.com/air-space-magazine/big-week-180954072>

Harvey, Arnold D., *The Battle of Britain, in 1940 and "Big Week," in 1944*, Air Power History, vol. 59, no.1 (Spring 2012) pp. 34-45. See: <https://www.jstor.org/stable/26276145?pg-origsite=summon>

The Mighty Eighth: <https://www.mightyeighth.org/bigweek>

MoH: Walter E. Truemper: <https://www.afhistory.af.mil/FAQs/Fact-Sheets/Article/639600/truemper-2nd-lt-walter-e-truemper>

MoH: Archibald Mathies: <https://www.afhistory.af.mil/FAQs/Fact-Sheets/Article/639611/mathies-ssgt-archibald-mathies>

MoH: William R. Lawley: <https://www.afhistory.af.mil/FAQs/Fact-Sheets/Article/639613/lawley-1st-lt-william-r-lawley-jr>

Air & Space Forces Magazine, *Churchill's Southern Strategy*,
<https://www.airandspaceforces.com/article/0113churchill>

National WWII Museum on Operation Husky:
<https://www.nationalww2museum.org/war/articles/operation-husky-allied-invasion-sicily>

USN History on the invasion of Salerno: <https://www.history.navy.mil/browse-by-topic/wars-conflicts-and-operations/world-war-ii/1943/salerno-landings/landings-at-salerno-italy.html>

Army History on the Battle of Anzio: <https://history.army.mil/brochures/anzio/72-19.htm>

Wikipedia: https://en.wikipedia.org/wiki/Big_Week

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