"The views expressed are those of the author and do not reflect the official policy or position of the US Air Force, Department of Defense or the US Government.""

USAFA Harmon Memorial Lecture #40 Battles Not Fought: The Creation of an Independent Air Force Stephen L. McFarland, 1997

When America's armies and navies returned from World War II, they brought with them glory comparable to any in history. Except for technology and scale, the victories of America's warriors were little different from those gained by all the other conquering armies and navies in history. World War II produced images of sinking ships, prisoners of war, liberated cities, raised flags, and destruction that could have come from the Punic Wars two thousand years earlier. This was no revolution in warfare. Airmen brought back photographs of leveled cities- how would the surviving inhabitants view the results any differently than the survivors who watched the Mongols devastate Baghdad a thousand years ago? If there was a revolution in warfare, it came from three battles that never took place. These were at the root of Air Force independence and of a new, revolutionary type of warfare that has influenced world events ever since.

On July 13,1944, the first German V-1 rocket landed on London. The Army Air Forces and the Royal Air Force launched 68,913 bombing sorties and took 1.25 million photographs in an attempt to reduce or delay this German aerial offensive. Seventeen thousand V-1s and V-2s fired on Allied-controlled territory during the war and the nine thousand deaths they caused revealed a battle Allied air forces lost in World War II. Air power had failed to achieve its objective. But when that first V-1 landed on July 13, it exploded with the bang of high explosives, not the hiss of a chemical or biological warhead. That bang, and not a hiss, signified that the Army Air Forces had won one of the greatest battles of the war that was never fought- a battle that, if fought, might have doubled or tripled the war's casualty figures.1

The scale of the victory in this battle that was never fought lies in the numbers. From 1941 to 1945, the United States invested \$2.814 billion (\$27 billion in 1997 dollars) to produce 143,166 tons of World War I-era poison gases. Germany produced 80,000 tons, including 12,000 tons of the revolutionary nerve gas Tabun and 1,100 pounds of the experimental nerve gas Sarin. Japan added nearly 8,000 tons. All also produced various biological agents ranging from anthrax to sclerotium rot.2 These arsenals were in stark contrast to the public proclamations of every major combatant that in some way echoed the conviction of Winston Churchill, "we are ourselves firmly resolved not to use this odious weapon." Why the enormous chemical and biological stockpiles? Because Churchill added, "unless it is used first by the Germans." President Roosevelt declared, "unless they are first used by our enemies." Japan agreed not to use them only if "troops of the United Nations also refrain from using it." Combatant nations prepared for such warfare in case the enemy initiated it and retaliation became necessary.3

Fearful of what German chemical attacks could do to England's congested cities and to the troops and supplies concentrated in southern England for the Normandy invasion, the Allies launched the largest preemptive air offensive of the war. When photographic intelligence showed rocket launching ramps at Peenemunde, it became a target for destruction. When intelligence pointed to "skisites" in France as possible launch sites for these missiles, they too became the targets for bombing. Hitler chortled with glee. His V-1 and V-2 sites in France became the greatest aerial defensive weapons in his arsenal, more effective than all his Messerschmitts, Focke-Wulfs, and 88mm guns. Every bomb dropped on one of these sites, he said, was one less bomb dropped on Germany.4 These were the NOBALL missions, Operation Crossbow, appreciated by thousands of American airmen as "milk runs," so-called because they brought credit for a combat mission, and therefore one step closer to going home, without the danger of deep missions into Germany. These preemptive strikes delayed

the V-1 and V-2 offensives, but only advancing Allied armies in the fall of 1944 would stop them completely. All of this was just a side show, however. The real show was the apparent German intent to use these inaccurate terror weapons to begin a war against the cities, employing chemical agents to turn, as one writer described it, metropolises into "necropolises."5

The Joint Chiefs of Staff assigned the Army Air Forces to prepare for this battle that never took place. While B-17s and B-24s battled their way to Schweinfurt, Regensburg, Gotha, Heiterblick, Leipzig, and Berlin, hundreds of thousands of gas bombs were being stockpiled in England for what many thought was their inevitable use once the V-1s and V-2s began dropping out of the sky with a hiss, not a bang. The Allies would not strike first; Churchill and Roosevelt had already declared this. But if Germany did initiate chemical or biological warfare, the Allies would be ready to raise the ante. The Army Air Forces retaliatory plan, in conjunction with the Royal Air Force, identified Germany's thirty-eight largest cities for destruction with anticipation of killing upwards of twenty million people, making over one-half of Germany's urban area uninhabitable, and reducing industrial production by 60 percent. Ready in time for the Normandy invasion, 4,600 American heavy bombers then in the Eighth and Fifteenth Air Forces would launch a fifteen-day all-out blitz, each carrying a 75 percent mustard gas bomb load mixed with a 25 percent high explosive bomb load to help spread the gas. German civilians did not receive gas masks until late 1944 and then only for Nazi Party officials. Germany had no penicillin to fight the bacterial infections that would accompany the blistering effects of mustard gas. An average gas persistence of thirty days guaranteed a holocaust of unprecedented proportions.6

There would be no such battle, no such slaughter. By 1944 Germany's skies belonged to the Allies and its urban landscape lay bare to Allied bombing. Air superiority was in American hands. The thousands of crewmen who died fighting their way to Frankfurt, Emden, Hamburg, and Cologne had made this so. Eighth and Fifteenth Air Force bombers could go anywhere in the Reich and could not be diverted except by American order. With his cities vulnerable and aware of America's retaliatory policy, Hitler ordered that no gas munitions be taken outside of the prewar Reich lest he lose control over them. He would not allow the Allies any justification for a retaliatory strike. As Allied armies poured into a chaotic, confused, disorganized Germany in 1945, Hitler pulled himself together long enough to sign an order prohibiting the demolition of chemical weapons dumps for fear the action might be misconstrued as the initiation of chemical warfare. The war in Europe was total in many aspects, but it would not be a war of chemical or biological annihilation.7

The vulnerability of Japanese cities to aerial assault, tied to firsthand knowledge in China of what gas could do, likewise deterred Japan from using chemical weapons against American units. Japan ordered its commanders to ignore any small-scale Allied use of chemical weapns to prevent retaliatory strikes against its cities. The Army Air Forces planned to retaliate if Japan did use them first, targeting Japan's ten largest cities with the same 75 percent mustard gas-25 percent high explosive mix. Japan's tropical climate would intensify the effect of the gas while the wooden structure of Japan's cities would increase the persistence of the gas. The Army Air Forces estimated a death count of 14.5 million. Unlike the war in Europe, the United States did not fear Japanese retaliation because Japan lacked a strategic bombing force.8

Germany and Japan never used chemical weapons against American forces, so no retaliatory strikes were necessary nor justified. The Joint Chiefs of Staff seriously considered the unilateral use of chemical weapons to reduce the casualties that would accompany the invasion of Japan. Its chairman, Admiral William Leahy, vetoed the idea because in 1943 President Roosevelt had renounced such a first use.9

Despite the preparations and the plans, the chemical battle did not have to be fought in World War II. All sides had sufficient arsenals to threaten a chemical Armageddon, but only the Allies had the wherewithal, strategic air forces, to wage it. Hitler, the records indicate, was keenly aware of what chemical warfare could accomplish, but also alert to the fact that Allied air forces could transform the most horrific tactical weapons of World War I into the strategic weapons that would cost him his cities

in World War II. The United States Army Air Forces had won the first great battle of World War II that did not have to be fought.

June 6, 1944, witnessed the largest concentration of air, land, and sea forces in the history of the world. On, over, and along roughly 50 miles of the French coast were eight divisions of Allied ground and airborne soldiers, 5,000 ships, and 7,000 aircraft. Never in war had so much been concentrated at one point, at one time. The German Luftwaffe had been designed for just such a contingency- a tactical air force created to support the German army. So concentrated were Allied forces that conceivably any German bullet fired, any bomb dropped, would find a target of some kind. The greatest single threat to the success of Operation OVERLORD, besides the weather, was the Luftwaffe. Already Allied forces faced a formidable array of beach defenses, tank traps, flooded landing zones, and all the other defenses created by the German genius. Hundreds of German aircraft bombing and strafing created the potential for a true disaster of biblical proportions.

The Allies had two plans for dealing with the Luftwaffe's threat to OVERLORD. Air Chief Marshall Trafford Leigh-Mallory was the tactical air commander for the invasion. Major General Lewis Brereton was Leigh-Mallory's lieutenant and commanded America's Ninth Air Force. Together they argued that World War II was no different than World WarI. The way to insure air superiority over the Normandy beaches was to train and prepare for a great air battle to be fought over France on D-Day and for the ground attack and interdiction roles that would follow the invasion. They wanted to keep their forces out of combat for the months preceding OVERLORD to insure adequate preparation. Leigh-Mallory and Brereton envisioned swirling clouds of fighters locked in dogfights similar to the battles fought over Verdun and the Meuse-Argonne in the previous war thousands of Allied aircraft fighting thousands of German aircraft in a titanic struggle for air superiority on D-Day. They argued that trying to weaken the Luftwaffe prior to this battle would be unproductive because the Luftwaffe would simply refuse to fight until it had a critical reason to engage in battle. For over a year their crews had been flying into France and had not been able to get the Luftwaffe to come up and fight. Five thousand ships and eight divisions would attract the Luftwaffe.10

Leigh-Mallory and Brereton were also key supporters for Air Chief Marshal Sir Arthur Tedder's transportation plan, wherein all Allied air forces, including strategic bombers, would concentrate for three months on isolating Normandy, destroying bridges, railroads, and lines of communication in preparing for the invasion. This plan had no provision for winning air superiority other than the great dogfight on D-Day.11

The opposing plan came from Generals Carl Spaatz and Fred Anderson, respectively commander and chief of operations of United States Strategic Air Forces in Europe, and William Kepner, Eighth Air Force fighter commander. This plan countered Tedder's transportation plan by arguing that the most efficient way to prepare for the invasion was to continue bombing Germany's industrial fabric, destroying weapons at the factories rather than trying to interdict the flow of supplies to the front. More importantly here, Spaatz, Anderson, and Kepner argued a different plan to prepare for air superiority over Normandy on D-Day. They agreed with Leigh-Mallory and Brereton that they could not attract the Luftwaffe to defend the skies over France where attrition could wear it down, but insisted that attrition could be achieved by continuing to strike against industrial targets in Germany.12

Their plan was to use B-17s and B-24s as bait. By being over Germany doing damage to critical industries, the bombers would serve as bait to attract German fighters so that American fighters could shoot them down. It was a major gamble because in the fall of 1943 the Luftwaffe had truly bloodied Eighth Air Force. Eighth Air Force lost sixty bombers over Schweinfurt on October 14,1943, and eighty-eight more bombers on three other missions that same week.13

By the spring of 1944 the situation had changed. Dozens of fresh American bomber and fighter groups had arrived from the States. P-47 Thunderbolt and P-51 Mustang long-range fighters with drop tanks could now carry the battle for air superiority into Germany and beyond. Refined tactics placed them where they could wreak an increasing toll on German fighter defenses. A refined strategy made

these German fighter defenses the primary target for destruction. A new leadership, including Spaatz, Anderson, and Kepner, understood the importance of winning air superiority to permit the invasion and a continuation of the bombing offensive against Germany without heavy losses. This new leadership believed that the Luftwaffe could be made to use up all its resources trying to stop the bombers. Attrition of the Luftwaffe over Germany would bring air superiority over Normandy.

Spaatz and Anderson wanted to stop using tricks and feints to get the bombers to their targets. They knew from experience that Eighth Air Force could confuse the Luftwaffe to limit its ability to concentrate intercepting fighters near the bomber streams. Such feints reduced American losses, but also reduced German losses. If the Germans could not find the bombers, they would not be there to be shot down. The American commanders therefore ordered the bomber units to fly to their targets. There would be no feints. Spaatz wanted to make sure the Luftwaffe would know where the bombers would be on a given day so that the Luftwaffe would come up in large numbers to fight and be wounded if not killed.14

Kepner, the fighter commander, realized that even then the Germans would try to limit their losses so that they could live to fight another day. His contribution was what he called "air guerilla warfare." He ordered his fighter pilots to escort American bombers to their targets at 30,000 feet as before, but to return to England on the deck. If the Luftwaffe would not come up and fight, he would go down and get them, strafing the wolf in its lair. When cloud cover kept the bombers in England, he would send his fighters into Germany below the cloud cover, strafing anything that could contribute to the war effort. Strategic bombing had previously meant dropping bombs from high altitude. Kepner wanted to achieve similar results by having fighters shoot bullets from tree-top level. Pilots received kill credits for aircraft destroyed on the ground. They brought "home pieces of trees from Germany as souvenirs." Mission reports told the tale: "I claim three Ju-52s," "I claim three locomotives," and even "I claim 25 cows."15

Spaatz, Anderson, and Kepner sent their aircraft into Germany, day after day, engaging in a battle of attrition, reminiscent of those fought around Petersburg in the Civil War and Verdun in World War I. February 20 through 25,1944, they went after Germany's aircraft production in the Big Week missions. Bombing results were good, but did not stop German production- it continued to rise at an alarming rate. Losses were heavy (Eighth Air Force lost 269 aircraft), but the Luftwaffe also bled (282 aircraft written off). Clearly, however, the Luftwaffe was husbanding its resources. Waves of fighters came up every day, but not enough to expose the entire force to possible destruction. The challenge was to find a target for bombing that would force the Luftwaffe to engage in battle. Some wanted to continue striking at the industrial fabric, which had not proved that effective so far. Spaatz, Anderson, and Kepner, however, decided that the air above the targets was more important at this point in the war, not the targets on the ground. The next target would have to be Berlin. How could the Luftwaffe not launch every aircraft it had to defend its capital from the embarrassment of having two thousand American bombers and fighters appearing over Berlin in broad daylight? The Luftwaffe would have to come up and fight to the death if necessary.16

On March 2,1944, just three months before D-Day, they ordered their strategic forces to attack targets in Berlin. Eighth Air Force found Berlin overcast and diverted the bombers to the clear sky over Frankfurt. Anderson was outraged. He wrote Eighth Air Force commander Jimmy Doolittle that "it doesn't matter if Berlin is overcast. The resulting air battle over Berlin would result in attrition, which makes it more important than any destruction on the ground and going to Frankfurt to find clear skies won't achieve the same result. We've got to stick at this damn thing." Doolittle objected to Anderson's plan to send B-24s to Berlin, arguing their lower ceilings would make them sitting ducks. He complained, "God, they'll just get killed in them." Anderson's response was one word: "Well?"- not a sign of callousness, but rather of Anderson's absolute commitment to winning air superiority for the Normandy invasion.17

Eighth Air Force went to Berlin on March 4, 6, 8, and 9. March 6 cost Eighth Air Force 69 heavy bombers and 11 fighters- from the song's lyrics, "to go down in flame"- the deadliest day in American air power history. The Luftwaffe bled also-136 lost defending Berlin on those four days. It pulled out all the stops, even using its night fighters for day missions. It threw its best pilots into the carnage and lost them to the Spaatz meat grinder: Gunther Rall with 275 kills when he was shot down, Anton Hackl with 192, Hugo Frey with 32, Gerhard Loos with 92, and Rudolf Ehrenberger with 49. 18

On March 9,1944, Spaatz sent every aircraft that could fly and every crew with its nerves intact to Berlin. Hundreds of American aircraft appeared over the German capital, but for the first time in the war, the Luftwaffe refused to rise up and fight. American aircraft over Berlin found "no one at home." The enemy had blinked because he was bleeding to death and needed time to rest and recover. Germany would get that time because General Eisenhower ordered the big bombers to strike against transportation targets in France for most of April and May, but did allow them to go back to Germany on occasion to continue the attrition.19

Spaatz had a new target he knew the Luftwaffe could not avoid defending- oil. Just a few strikes before D-Day caused heavy and continuous attrition of the Luftwaffe as Germany's airmen fought to protect their life blood. Deeper and deeper into Germany American bombers struck. Germany pulled its tactical aircraft farther and farther back to defend against the onslaught. Finally, on May 21, came perhaps the most propitious mission of the entire war. Eighth Air Force bombers that day were hitting transportation targets in France, so the fighters went on low-altitude strafing missions in Germany. Codenamed CHATTANOOGA after a popular song of the time, "Chattanooga Choo Choo," it targeted locomotives all over Germany. Key to the mission, however, was not the tally of locomotives destroyed that day, but the intelligence summary that resulted. Fighter pilots reported that they had not seen a single German aircraft anywhere west of Hamburg, in the air or on the ground. Every German aircraft had been pulled back more than five hundred miles from the Normandy beaches- too far to interfere with the Normandy landings on June 6,1944.20

The day and night before D-Day, a worried invasion commander went out among his troops to seek comfort for himself and to share soldiers' concerns. General Eisenhower did not offer false bravado nor give any pep talks about how victory was guaranteed. He made only one promise. Tomorrow, he told them, "if you see fighting aircraft over you, they will be ours." On June 6,1944, only two German aircraft attacked the landing, both doing no harm. That day every aspect of the Allied invasion plan was in doubt except in the sky over Normandy. There would be no battle for air superiority over the invasion front that day. Eighth Air Force had already won a battle that need not be fought.21

By 1944 the United States had settled on strategies for defeating Japan. The Navy favored a blockade, based on its success with submarines over the previous years. This was a classic Mahanian approach with the Allies cutting off the flow of resources on which Japan was dependent. In 1945 the Navy hoped to pull the noose tighter and tighter, based on possible landings in China and Korea and on the mining of Japan's inland waters, until sometime in 1946 or 1947, hopefully, Japan would be starved into surrender. A component of the Navy plan was a strategic bombing campaign of Japanese economic targets, identified in the prewar Orange planning as necessary to strangle the Japanese economy. Few believed, however, that the Allies could wait that long- public opinion would not allow it and few believed that Allied economies could continue to support the massive armies, navies, and air forces that would have to wait for this slow strangulation to take effect. Considering that the Japanese economy had collapsed in early 1945, there were no guarantees that this strategy would work. At best, many thought, it would produce a negotiated, limited surrender, short of the unconditional surrender demanded by wartime agreements.

The Army Air Forces favored a variation of the Navy plan. Based on prewar doctrine, it believed a B-29 strategic bombing campaign launched from the Marianas could destroy the industrial sources of Japan's war- making capabilities. Japan would surrender because it would have lost the ability to wage war. With this in mind, Twentieth Air Force began the strategic bombing of Japan from Guam, Saipan, and Tinian in November 1944. The distances were too great, the precision bombing too imprecise, and perhaps the greatest challenge of all, Twentieth Air Force was bombing largely empty factories already shut down by the Navy blockade. Airmen hoped air power would bring defeat and surrender, but clearly it would not be enough.

The Army favored a direct, frontal invasion of the Japanese home islands as the quickest means of forcing Japanese unconditional surrender. By April 1, 1945, Japan showed no signs of surrender, encouraging the Joint Chiefs to order the invasion of Okinawa. Three months of ground, sea, and air warfare cost the United States 50,000 casualties and Japan 110,000 dead. The Okinawa experience colored all future plans for defeating Japan. An invasion force against the home islands would confront a Japanese army of possibly five million and many times more civilians receiving rudimentary training in how to oppose any landing. Japan also prepared more than five thousand kamikaze aircraft. The Army's invasion plan called for Operation OLYMPIC, the invasion of Kyushu, to begin November 1,1945, followed by Operation CORONET, the invasion of Honshu (specifically, the plain around Tokyo), to begin sometime in 1946. No one doubted the invasions would be successful. The question was whether the United States could withstand the American casualties that would result and whether it could stomach the millions of Japanese who would be killed in the process.22

Casualty figures were largely the product of the American experience on Saipan and Okinawa. Using the "Saipan ratio," staff officers predicted American casualties could reach 1.7 to 2 million, though by the spring of 1945 this number had declined to 500,000. They knew, however, that the Soviet Red Army had suffered 352,000 casualties attacking Berlin in the closing days of the European war. The Army made plans to recruit and train 720,000 soldiers to replace those injured, killed, or otherwise indisposed in the invasions. It also ordered the production of 400,000 Purple Hearts.23

This is what the United States faced when General Lauris Norstad, chief of staff for Twentieth Air Force, told his chief operational commander, General Curtis LeMay, that "If you don't get results it will mean eventually a mass amphibious invasion of Japan, to cost probably half a million more American lives." Norstad and LeMay knew that Japan had already been defeated- the Navy blockade had assured that. The task was how to get the Japanese to surrender. As early as 1932, Billy Mitchell, sent on a tour of the Far East to get him out of the United States, observed that, though he was opposed to the bombing of civilians, the best way to defeat Japan would be to attack what he called Japan's "congested and highly inflammable cities." He was there just after a fire in Tokyo had killed 100,000.24

General Haywood Hansell began the precision bombing of Japan's industries in November 1944, largely without effect. B-29s had to fly too far to carry meaningful bomb loads, but most importantly, the jet stream discovered high over Japan played havoc with the workings of the Norden bombsights that were to aim Twentieth Air Force bombs. Defeating Japan by destroying its capabilities or industries was not going to work. LeMay replaced Hansell, prompting Norstad to explain to Hansell that "LeMay is an operator, the rest of us are planners." His assignment was to firebomb Japan's paper and wood cities to weaken the ability of the Japanese to resist the impending invasion, but more importantly, to force the Japanese to surrender without an invasion. 25

After the war LeMay explained his intentions: "I'll tell you what war is about. You've got to kill people, and when you've killed enough they stop fighting."26 Tokyo was the first to burn on March 9, followed by Nagoya, Osaka, Kobe, Kawasaki, and Yokohama. Hundreds of thousands were killed or injured, some incinerated and dead, some burned and scarred, some just shocked. Still the Japanese refused to surrender. Atomic bombs came on August 6 and 9 against Hiroshima and Nagasaki, targeted not so much as military weapons at the people of those cities, but as psychological weapons aimed at Japan's military leaders.

In August and September 1945, 650,000 American soldiers were completing the last phases of their training for the invasion of Kyushu. Japan had concentrated its defensive forces near the beaches

of Kyushu, where they would have been exposed to the concentrated firepower of 2,500 ships and 5,000 aircraft. Meanwhile B-29s, now joined by B-17s and B-24s flying from Okinawa, were preparing to burn the remaining Japanese cities. Mercifully, for both sides, the word to quit came in August, with the Japanese surrender following on September 2. The largest amphibious invasion planned in world history never happened.

The legacies of the greatest of all battles in World War II that were never fought became the foundation of an independent air force, based not in victory, but in battles that did not have to be fought. Since D-Day, no American ground army has ever been threatened by attack from the air. And through the most dangerous war in human history, the Cold War, no nuclear, chemical, nor biological exchange took place. The true greatness of a United States Air Force established fifty years ago should be measured not simply in battles won, but more importantly in the many battles that did not have to be fought. With all the bloodshed and horrors of Korea (580,000 Allied casualties and 1.6 million Communist casualties) and Vietnam (423,000 American casualties and several million Vietnamese casualties), we only have to imagine how different the last fifty years would have been without an Air Force to prevent scores of other such wars and battles from happening.

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