

## WWII AIR DOMINANCE THAT ENABLED THE D-DAY INVASIONS

The opening scene of Steven Spielberg's epic war film *Saving Private Ryan* follows an elderly James Francis Ryan leading his wife and children along a garden pathway. The year is 1998, and on this beautiful Spring day, Ryan, an Army Veteran, walks with purposeful determination along the manicured grounds of the Normandy American Cemetery in *Colleville-sur-Mer*—the memorial honoring the American troops who died during the Allied liberation of France in World War II. An American flag waves proudly in the distance as rays of sunlight penetrate the translucent fabric creating warm accents to the red, white, and blue of its stars and stripes.

Stepping off the pathway, Ryan begins his search. He passes countless rows of white-marble headstones--mostly, Latin Crosses, each precisely-positioned and perfectly-aligned, stretching infinitely across the horizon. The occasional Star of David stands silently in tribute to the Fallen of Jewish faith. Upon finding the marker of Captain John Miller among this sea of headstones, Ryan pauses briefly before stumbling, his knees yielding to the weight of memories long-buried—gruesome images of atrocities that stand in stark contrast against the serene peace of these hallowed grounds. Ryan was here on June 6, 1944, fifty-four years earlier—D-Day and the start of Operation Overlord.

D-Day, the largest amphibious invasion in history, required the coordinated efforts of the air, land, and sea forces of twelve Allied militaries. Six Allied naval assault divisions totaling almost 160,000 troops stormed a 50-mile stretch of the Normandy coast along sectors Utah, Omaha, Gold, Juno, and Sword, the names assigned to the five principal landing sites. Shortly after 5:30 a.m., American, British, and Canadian forces launched the land assault against the

Atlantic Wall—a series of German fortifications constructed along the French coast containing artillery batteries, machine-gun emplacements, and soldiers—with the twin goals of securing an Allied military presence in Normandy and pushing the German army out of France. In spite of the staggering assault, the Allies suffered heavy casualties on D-Day: roughly 10,000 Allied soldiers lay dead or wounded in the first 24 hours alone.

Historians often refer to D-Day as “the beginning of the end of World War II.”<sup>1</sup> The D-Day assault led to the success of Operation Overlord that, in turn, laid the groundwork for the liberation of France and, eventually, to an Allied victory on the Western front. The outcome of Overlord, however, was never certain and any advantage created by the operation’s element of surprise could easily have miscarried in favor of a German victory. Prior to launching Overlord, the Combined Chiefs—the supreme staff coordinating military strategy for the Allied forces—recognized that air attacks by the German *Luftwaffe* had to be neutralized *prior* to D-Day to allow a landing force to cross the English Channel with minimal or no resistance. Thus began preparations for the domination of the air over France.

On June 14, 1943, the Combined Chiefs issued a directive to implement Operation Pointblank, the code-name for the plan to incapacitate or destroy the *Luftwaffe*. Pointblank required the use of the B-17 “Flying Fortress” in the months before D-Day to conduct a series of daylight “precision” bombing campaigns against the Germans. The bombers would focus on military targets such as U-boat pens, airfields, and naval docks as well as factories manufacturing airplanes or producing aircraft parts. The Combined Chiefs reasoned that the *Luftwaffe*, forced into defending against these raids, would then use their fighters to counter-attack; thus, drawing them into a battle with the American bombers and their fighter escorts. The hope was that this

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<sup>1</sup>History on the Net. “D-Day: The Beginning of the End of World War II,” <https://www.historyonthenet.com/d-day-the-beginning-of-the-end-of-world-war-ii>.

strategy would result in an attrition of both *Luftwaffe* aircraft and pilots with the simultaneous effect of distracting the Germans from Allied D-Day preparations.

The strategy worked—with qualification. Ongoing bombing campaigns required the Allies to fly deeper into Europe and Germany resulting in longer flight times for the bombers to deliver their payloads. While within the B-17 operational capability, the fighters escorting these bombers could not fly as far. The fighters would run low on fuel necessitating their return to base, thus, leaving the B-17s exposed to *Luftwaffe* attacks. Bombing missions for the B-17s grew increasingly lethal for the Allies. One incident on October 14, 1943--a B-17 raid on a German ball-bearing plant in Schweinfurt, Germany--resulted in such heavy losses that it became known as “Black Thursday.” Without escorts, the B-17s could not survive air battles against the packs of German fighters. The resulting heavy-bomber attrition required an immediate solution.

The answer came with the development of the American-made P-51 Mustang. Often regarded as the finest propeller-driven fighter ever produced, the P-51 was capable of flying at 440 miles per hours and at over 28,000 feet. What made the P-51 truly exception, however, was its long-range capability. Equipped with 85-gallon external fuel tanks, the flying range of the P-51 extended to almost 1,400 miles giving it the capability of escorting the B-17s all the way from England to Germany and back.

Before the P-51, casualty rates for B-17s between 1942 and 1944 ran as high as 77% because they had to fly in enemy territory with little no fighter escorts. The P-51s reversed that trend even as bomber mission specifications necessitated more-frequent and -deeper encroachments into German air space. The *Luftwaffe* soon experienced heavy losses as the P-51s defeated German fighter planes. The P-51s quickly earned a reputation for defending bomber

formations, and their successes boosted the morale of bomber crews who dubbed P-51s as their “Little Friends.” The B-17s finally had a capable fighter escort which could assist them in overwhelming German defenses thus creating the opportunity to assert dominance over the skies of France.

Between April 1 and June 5, 1944, the Allied strategic air forces “deployed 11,000 aircraft, flew 200,000 sorties, and dropped 195,000 tons of bombs on French railroads and roads as well as German airfields, radar installations, military bases, and coastal artillery batteries.”<sup>2</sup> These included bomber sorties outside the invasion area to deceive the Germans into believing that Overlord would take place opposite of Dover, England rather than in Normandy, France. But efforts to maintain air dominance did not end there. The bombers and fighters of the United States Army Air Corps (USAAC), acting as the tip of Overlord’s tactical spear, launched their D-Day offensive hours before the first troops set foot on the Normandy beaches. Air bombardment began immediately after midnight on D-Day involving more than 2,200 Allied bombers against the German defenses.

Immediately following the bombing runs during the opening hours of D-Day, 24,000 Allied airborne assault troops, arms, and supplies were then airlifted and dropped behind the enemy lines. Their objective was to prevent German reinforcements from reaching the Normandy beachheads by capturing or destroying bridges and causeways and to prevent a counter-attack against the Allied landings. This effort coordinated soldiers two American Airborne Divisions, the British Airborne, and infantrymen from both countries flown in by gliders. The Airborne Divisions parachuted over Normandy from Douglas C-47 transports. The 4,000 glider infantry men reached their drop zones on Airspeed AS-51 Horsa gliders. In the end,

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<sup>2</sup> Keegan, J.. "Normandy Invasion." Encyclopedia Britannica, March 5, 2024.  
<https://www.britannica.com/event/Normandy-Invasion>.

Allied forces accomplished their objective of successfully resisting German counterattacks while securing the beachheads.

The collaboration of the B-17 “Flying Fortress,” the P-51 Mustang, and transport gliders and planes empowered the Allies to achieve the air dominance that enabled the D-Day invasions. The B-17 disrupted the German industry through strategic bombing while the P-51 delivered the combat air support needed to reduce the casualty rates of heavy bombers and their crews. Gliders and C-47s transported airborne troops behind enemy lines allowing the Allies to take over bridges and causeways once Overlord began while preventing counterattacks from the Germans.

Each aircraft offered unique military value; however, the invasions of D-Day would not have been successful for the Allies had any of these planes been used exclusively. Planning and preparation involving all three strategies ensured that, by the start of D-Day, the Germans had few fighters or other aircraft available to resist the Allies. The devastating loss of American lives on D-Day would have been incalculably higher had the Allies failed to dominate the skies. By August 1944, Allied forces had liberated all of northern France and, in the Spring of 1945, the Germans had been defeated.

The Allies’ dominance of the air during the D-Day invasion provides lessons useful to us today. Planning and preparation are important for reaching any goal. The Allies understood that an invasion on France would be critical to a victory on the Western Front. When Operation Overlord was first conceived, the Allies lacked the resources and technology to accomplish their goal. By making necessary preparations, the Allies gained the experience needed to launch a successful invasion. This meant, for instance, that, in the months and weeks prior to D-Day, German-controlled bridges and other infrastructure needed to be destroyed and that air

superiority had to be established. These goals required effort and planning to achieve. They also required perseverance. D-Day could easily have been a disaster for the Allies given the staggering number of deaths from the first day of the invasion. Yet, the Allied forces pushed forward and persevered. Finally, this experience demonstrated the importance of forming alliances because Americans could not have won World War II without Great Britain and other allies. Such partnerships are just as important today. Our NATO allies, for instance, are crucial to our national security and to maintaining political stability in the world.

Each headstone at the Normandy American Cemetery represents a person who answered a call of duty and who served honorably as a soldier, sailor, airman, or Marine. The ultimate sacrifice each made in defense of country compels me toward a deeper understanding of “bravery,” “heroism,” and “sacrifice.” Since the founding of this country, Americans from all walks of life have been called upon to join the military to build what President Franklin Roosevelt once referred to as the “Arsenal of Democracy.”<sup>3</sup> Through bravery and sacrifice, Americans have preserved the most-unique system of government ever attempted in the history of the world. Understanding this has made a profound difference in my outlook about life.

Servicemen have always assumed an important role in our history by answering the call to duty. The soldiers buried at the Normandy American Cemetery forever changed the world and, in the process, helped secure the rights, freedoms, and standard of living which I presently enjoy. I now understand how none of this would have been possible without the soldier whose principal contribution has been the preservation and protection of our country’s most-basic and

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<sup>3</sup>Franklin D. Roosevelt, Fireside Chat on the "Great Arsenal of Democracy," December 29, 1940. In Samuel I. Rosenman, ed., *The Public Papers and Addresses of Franklin D. Roosevelt, 1940* (New York: Macmillan, 1941), pp. 633-644.

fundamental values. One day, I too may be called upon to serve my country. Like my father and his father before him, I will answer that call without hesitation.

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