

# THE BATTLE OF BRITAIN



American soldiers examine the wreckage of a British Spitfire in Italy, outside Anzio. (*The National WWII Museum, 2002.337.081*)

World War II started for Great Britain much earlier than it did for the United States. Britain declared war in the fall of 1939, and France surrendered in June of 1940. Only the English Channel separated England from German forces. In a famous speech, the British Prime Minister Winston Churchill said the following to the British House of Commons on June 18, 1940:

“What General Weygand has called The Battle of France is over. The Battle of Britain is about to begin. Upon this battle depends the survival of Christian civilization. Upon it depends our own British life and the long continuity of our institutions and our Empire. The whole fury and might of the enemy must very soon be turned on us. Hitler knows that he will have to break us in this island or lose the war. If we can stand up to him, all Europe may be free and the life of the world may move forward into broad, sunlit uplands. But if we fail, then the whole world, including the United States, including all that we have known and cared for, will sink into the abyss of a new Dark Age made more sinister, and perhaps more protracted, by the lights of a perverted science. Let us therefore brace ourselves to our duties, and so bear ourselves that, if the British Empire and its Commonwealth last for a thousand years, men will still say, ‘This was their finest hour.’”

Churchill was right. From July 10 until the end of October 1940, daily attacks on England came from the *Luftwaffe*, the German Air Force. The Germans had twice as many planes as the British, and they thought that by attacking England, they could either convince the British to surrender or weaken their defenses enough that an invasion would be

easy. In summer of 1940, the Germans began preparations for the invasion of the Soviet Union, moving most of their ground troops eastward keeping the *Luftwaffe* focused on England.

The British had known that war was coming. Political events in Germany had been signaling war for years. To prepare for a hostile Germany, England had developed a radar defense network. Combining radar stations on the coast with an extensive communications network, the British were able to identify incoming targets and send fighters to intercept them.

These stations sent out electromagnetic waves in the radio wave and microwave parts of the spectrum, and then analyzed the reflected waves to look for targets. The results were sent by operators to airbases where commanders could quickly send up aircraft. Results were also sent to ground defenses which could target the incoming planes.

German aircraft were very good, but their radar system was not. On average the British aircraft found 75% of the incoming targets, and some raids found all the targets. This advantage made the British Royal Air Force (RAF) very effective even though it had many fewer planes.

RAF bombers and fighters going over to France to attack German airfields and military bases had an advantage, too. Without effective radar systems, the German pilots could only patrol the airspace and hope they came across enemy planes. This left a much higher percentage of RAF planes going undetected compared to those of the *Luftwaffe*. Eventually

the Germans came to acknowledge that their plan was not working and ended the daily raids.

After October 1940, Germany switched to another strategy. Instead of regular attacks on military targets and defenses, they began daily attacks on the cities of England. The Germans hoped that by destroying cities they would damage the morale of the British and convince them to surrender.

The British were very effective at rallying citizen support around the war effort. Despite the hardships of bombings and rationing and the growing German threat across Europe, the British people stayed strong. Turning back the *Luftwaffe* showed the resilience of the RAF and the wisdom of planning ahead, handing the Germans their first real defeat of World War II. England might not have the strength to defeat the Germans, but they showed they could resist them.

**How was the technology of radar important in the defense of England? What else was used along with the technology to win the Battle of Britain?**



Winston Churchill preparing to give a speech in Italy.  
(*The National WWII Museum*, 2007.048.039)