Reginald Joseph Mitchell

Non - chronological report

Reginald Joesph Mitchell was a brilliant British aircraft designer. He developed several successful seaplanes, but is best known for designing the Spitfire, an aircraft used by the Royal Air Force during WWII.

Key facts

Name: Reginald Joseph Mitchell (R.J. Mitchell)

Date of birth: 20th May 1895

Died: 11th June 1937 (aged 42)

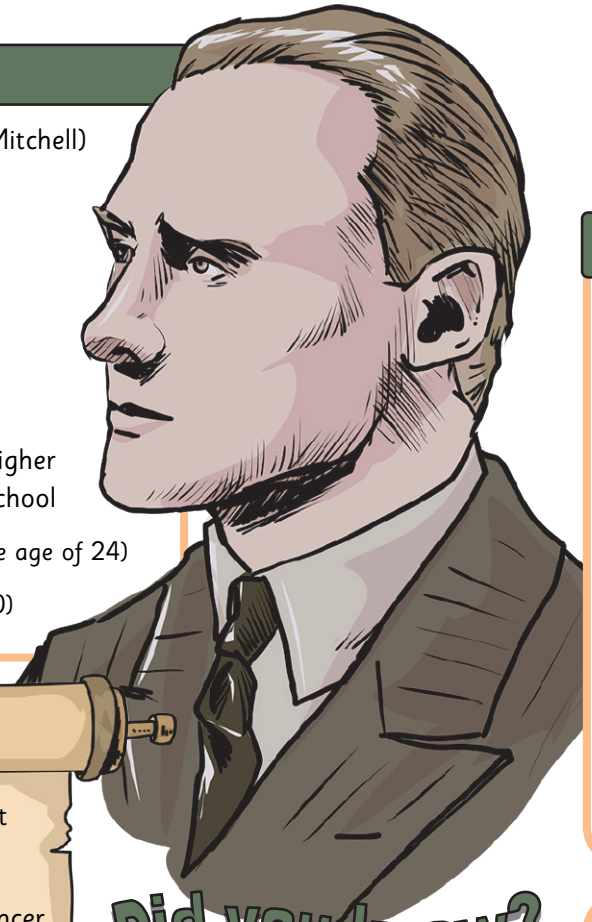
Place of birth: The village of Talke, near Stoke-on-Trent in Staffordshire

Parents: Herbert and Eliza Mitchell

Schools attended: Queensbury Road Higher Elementary School and Hanley High School

Spouse: Florence Dayson (married at the age of 24)

Children: Gordon Mitchell (born in 1920)



Career

After finishing secondary school, R.J. Mitchell started an apprenticeship at Kerr, Stewart and Company, a business that designed and built train engines. While working there, he also studied engineering and mathematics at technical colleges. This gave him the foundations he would need in his later career.

After completing his apprenticeship, Mitchell continued working at Kerr, Stewart and Company in the workshop and drawing office. In 1916, aged 21, he joined the Supermarine Aviation Works in Southampton, where he would spend the rest of his career.

Within two years, Mitchell was promoted to Chief Designer because of his skill and creativity. In the last ten years of his life, he was the company's director.

Death and legacy

In 1937, after returning from a short stay at the American Foundation in Vienna, Reginald Mitchell died of cancer at the age of 42. Despite his illness, he continued working on aircraft design until shortly before his death. His work became his lasting legacy as the Spitfire played an important role in changing the outcome of WWII.

Did you know?

Reginald was interested in engineering and flight from a young age. Whilst he was at Hanley High School, he designed, made and flew model aeroplanes.

Did you know?

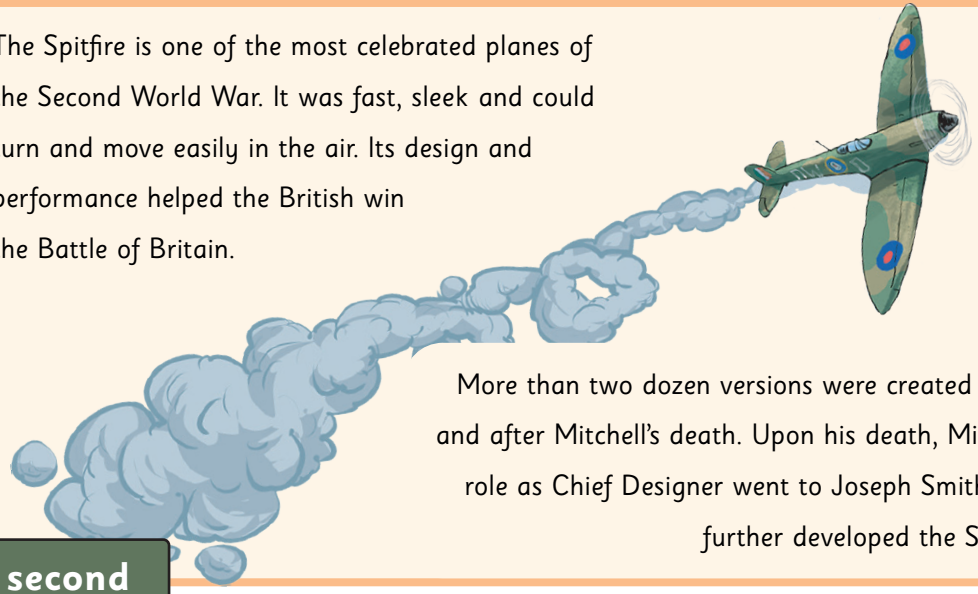
The 1942 film 'The First of the Few' focused on the life and work of Reginald Mitchell, specifically the Spitfire. It was released during the Second World War and aimed to boost morale on the Home Front by highlighting British determination and achievements.



The journey of the Spitfire

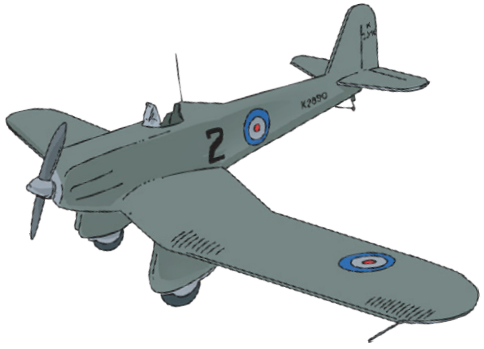
Between 1922 and 1931, Mitchell designed several seaplanes, many of which were built for racing. One of his most famous designs was the Supermarine S6B, which won the Schneider Trophy in 1931. Following this success, the Air Ministry invited Mitchell to design a land-based fighter. They gave him a list of requirements the plane had to meet, such as speed, range and weapons. His company submitted the Type 224 design in February 1932.

The Spitfire is one of the most celebrated planes of the Second World War. It was fast, sleek and could turn and move easily in the air. Its design and performance helped the British win the Battle of Britain.



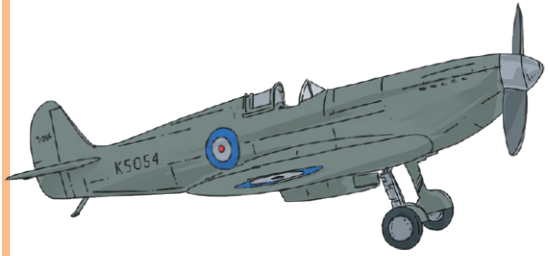
More than two dozen versions were created before and after Mitchell's death. Upon his death, Mitchell's role as Chief Designer went to Joseph Smith, who further developed the Spitfire.

Reginald Mitchell's first prototype, Type 224.



The first flight of Type 224 took place on 19th February 1934. Unfortunately, its performance was unsatisfactory. Type 224 was equipped with a complicated cooling system that did not function properly. As a result, Mitchell began work on the Type 300.

Reginald Mitchell's second prototype, Type 300.



At Eastleigh, on 5th of March 1936, Spitfire K5054 took off for its initial flight with Captain Joseph Summers at the controls. This was more successful than the Model 224's flight, and following its landing, only a few changes were made: a new propeller, engine adjustments and small alterations to improve aerodynamics.

The success of Mitchell's final creation is still recognised today; commemorations can be found at the Solent Sky Museum in Southampton, the Science Museum in London, the Tangmere Aviation Museum in Chichester and The Spitfire Society.

Supermarine Spitfire Mark I

