De Havilland Comet: Modern Aviation [B2]

Il primo aereo commerciale a reazione del mondo, che ha segnato l'industria aeronautica per le sue caratteristiche tecniche e di disegno, celebra quest'anno il 75° anniversario del suo decollo.

In 27 July 1949, a new kind of aeroplane took off from a small airstrip in Hatfield, UK. It was the maiden flight of the de Havilland DH.106 Comet and it changed the future of civil aviation forever. Nicknamed the Comet, it was the world's first commercial jet airliner. Thanks to its pioneering design, passengers could travel large distances in speed and comfort. The age of modern air travel had arrived.

FUTURISTIC DESIGN

The design of the aircraft started during World War Two. The government was considering the air travel requirements of the British Empire after the war ended. Aviation company de Havilland proposed a jet-propelled aircraft with a pressurised cabin to allow higher altitudes, greater speeds and longer distances. The proposal was accepted and the Comet project began. De Havilland started drawing up plans for the new design. "The company had built a tried-and-tested team of engineers and designers during the war and they were at the pinnacle of their abilities with this remarkable aircraft," explains Eddie Walsh, volunteer at the de Havilland Aircraft Museum. "The design was revolutionary. It was the Concorde of its era."

FLYING IN STYLE

The Comet carried thirty-six people in two cabins. First-class passengers were seated around tables. Large windows offered unprecedented views from a cruising height of forty thousand feet. In 1952, it made its first passenger flight, from London to Johannesburg. "It was able to fly higher than its piston-engined competitors, offering a smoother ride, and it was quieter and faster," explains Walsh. The Comet became the crown of the British Overseas Airways Corporation (BOAC), with scheduled flights all over the world. However, its days were numbered,due to some major design flaws. One was the aluminium skin of the fuselage, which was very thin to save weight. Another was the rectangular shape of the windows. Cabin pressure stretched the skin every time it reached cruising altitude. Over thousands of hours of flight, metal fatigue caused the skin to tear,

starting at the corners of the windows. Two fatal crashes occurred in 1954 and the Comet was grounded.

LASTING LEGACY

The Comet's engineers returned to the drawing boardto fix the design flaws. While de Havilland modified the design, the Boeing 707 filled the gap in the market. The Comet continued flying until 1997 but never fully recovered its foothold. Nevertheless, it left an enduring legacy. Jet engines, pressurised cabins, multi-wheel undercarriages and other Comet features are still being used today. Various models of the aircraft itself are on display at museums worldwide. The last surviving original Comet is at the de Havilland Aircraft Museum (at Salisbury Hall, London Colney, just over an hour north of Central London), being lovingly restored by Walsh and his team.

Glossary

- **Nicknamed** = soprannominare
- **jet-propelled** = a reazione
- **to tear** = strappare
- **undercarriages** = telaio
- **foothold** = posizione
- **airstrip** = pista d’atterraggio
- **flaws** = difetti
- **skin** = rivestimento
- **to fix** = risolvere
- **stretched** = stirare
- **drawing board** = tavolo di progettazione
- **filled the gap** = colmare il vuoto
- **enduring** = duratura
- **took off** = decollare
- **maiden flight** = primo volo
- **its days were numbered** = aveva i giorni contat
- **due to** = a causa di
- **features** = caratteristiche
- **cruising height** = altezza di crociera
- **a smoother ride** = un volo più tranquillo
- **was grounded** = lasciare a terra
- **jet airliner** = aereo di linea con motore a reazione
- **drawing up** = disegnare
- **tried-and-tested** = collaudato
- **pinnacle** = apice