

Air Transport Management and Technology :

# 2. The History of Air Transport

Methodological concept to effectively support technical key competencies using foreign languages ATCZ62 – the CLIL as a university teaching strategy



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# Early Beginnings of Flying

- The first person to start dealing with flying from a scientific point of view was Leonardo da Vinci (1452-1519).
- The first serious attempts were made in the 18th century in Europe with hot air balloons - the Montgolfier brothers (1783).
- The first manned airship was built in 1852 by Henri Giffard, but its steam engine did not provide enough power.
- It was only with the invention of the combustion engine that new possibilities arose - the first controllable airship with the Brazilian combustion engine by Albert Santos Dumont took off in 1898.

# The Origins of Fixed-Wing Aircraft

- Various constructions of "gliders" with fixed wings were created by pioneers at the end of the 19th century. - The best-known pioneer in the area of gliders was Otto Lilienthal.
- **The first airplane motor flight** in history was carried out by **Wilbur and Orville Wright** from the United States in 1903.
- In Europe, the pioneer of aviation was particularly **Louise Bleriot**, who crossed the English Channel with his Model XI machine on July 25, 1909.
- In Bohemia, it was Ing. Jan Kašpar, who performed the first flight in Pardubice with Blériot.

# The Origin of Transport Aviation

- The first airlines were established in Europe in 1919. The used technology first included military airplanes and airships followed by the creation of airplanes purely for transport purposes.
- In 1924, several British companies merged into Imperial Airways. Two years later there was a similar merger of German companies into a single one called Deutsche Luft Hansa.
- The first airline in Czechoslovakia was called Czechoslovak State Airlines, founded in 1923.
- The period before World War II can be described as the era of large propeller transport aircraft.

# Post-War Development of Air Transport

- A major breakthrough in commercial air transport was brought by development and use of jet engines developed during World War II.
- The first jet aircraft for civil air transport was the British airplane Comet, which took off in 1949.
- The use of jet engine enabled the acceleration of air transport.
- Air transport, particularly in the 1960s and 1980s, saw a surge in transport volumes following the newly developed aircraft.

# Modern Aviation

- The Concorde was the first supersonic civilian airliner. At present, supersonic air transport has been dropped.
- Large-capacity airplanes are created for both passenger and freight transport.
- The global air transport market shows growth (in terms of the number of passengers transported).
- The largest growth in the air transport market in the following years is expected in the Asia region.
- It is expected that by 2034 the number of passengers in air transport will reach 7.3 billion passengers.

## Development of growth of transported passengers in air transport (in billions of passengers). Source: ICAO

