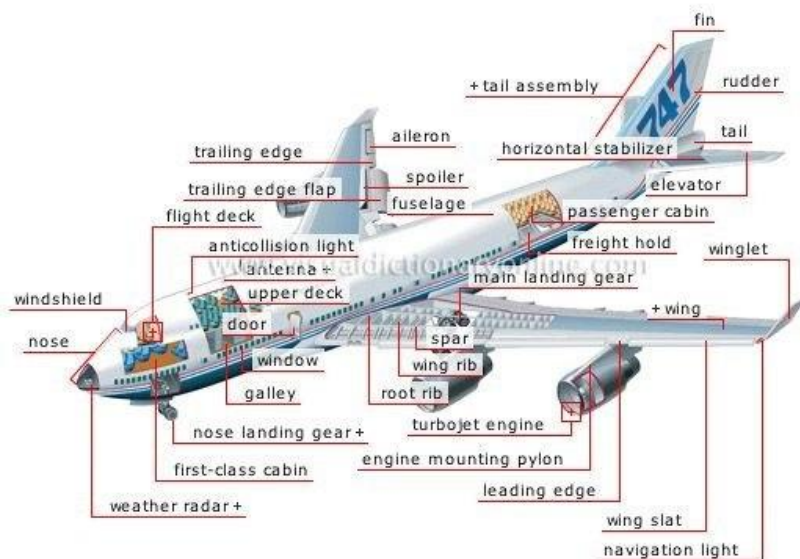
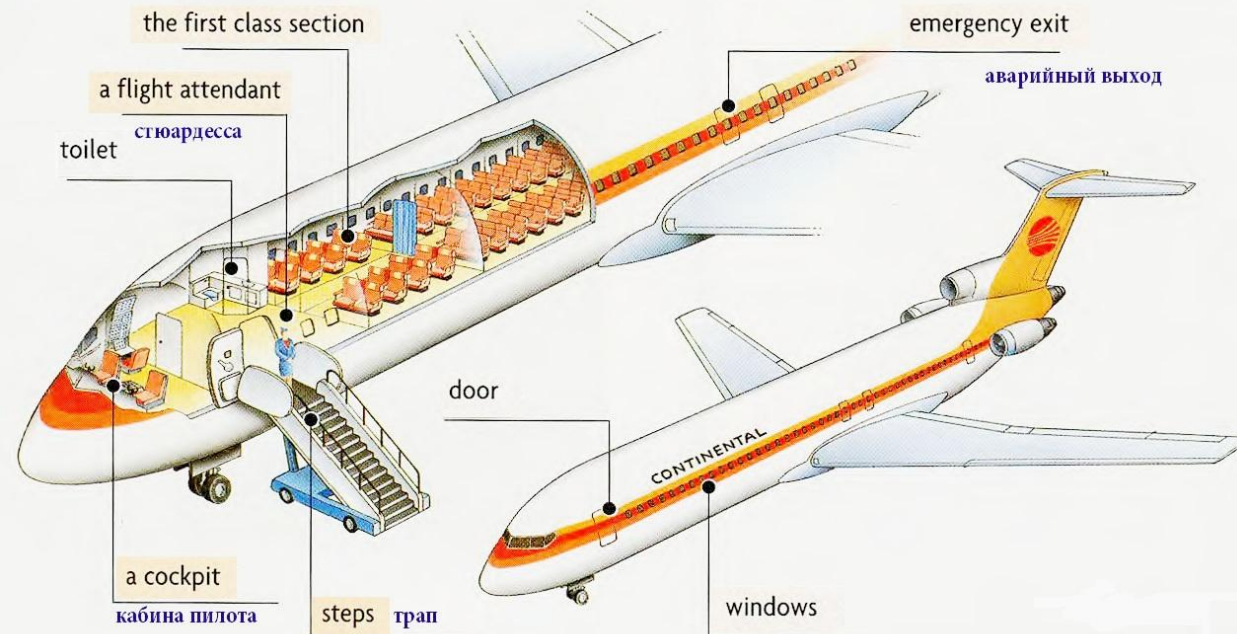


aircraft design

The aeroplane consists of five principal structural units namely, the power plants, the fuselage, the wings, the tail unit, and the landing gear.

The power plant is a source of power. It provides power for flight and propels the aeroplane. Thus, we may say, the function of the power plant is to provide power for flight and to propel the aeroplane.





BOEING STRUCTURE SUPPLIERS

Parts built by the IAM union of Boeing workers

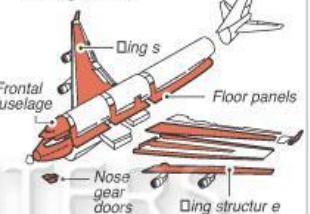
737 Classic

First flight: 1967



747 series

First flight: 1969



787 DREAMLINER

First flight: 2009

Part's name
Company/Country

Wingtips
KAA/Korea

Fixed & movable
leading edge
Spirit/U.S.

Wing
Mitsubishi/Japan

Centre fuselage
Alenia/Italy

Forward fuselage
Kawasaki/Japan

Forward fuselage
Spirit/U.S.

Landing gear structure
Messier-Dowty/U.K.

Movable
trailing edge
Australia

Rear fuselage
Vought/U.S.

Wing-to-
body fairing
Boeing/U.S.

Engine nacelles
Goodrich/U.S.

Engine
Rolls-Royce/U.K.

Horizontal
stabilizer
Alenia/Italy

Passenger
entry doors
Latecoere/France

Fixed trailing edge
Kawasaki/Japan

OTHERS

1 Main landing
gear wheel well
Kawasaki/Japan

Wing/body fairing
Boeing/Canada

Cargo access doors
Saab/Sweden

Note: diagrams not to scale
Sources: International Association of Machinists, Boeing

REUTERS

The fuselage

The fuselage is the central body of the aeroplane. It houses all the passengers, crew, cargo, and equipment. It supports the tail unit and wings. The function of the fuselage, therefore, is to house all the passengers, crew, cargo, and equipment, and to support the tail unit and wings.

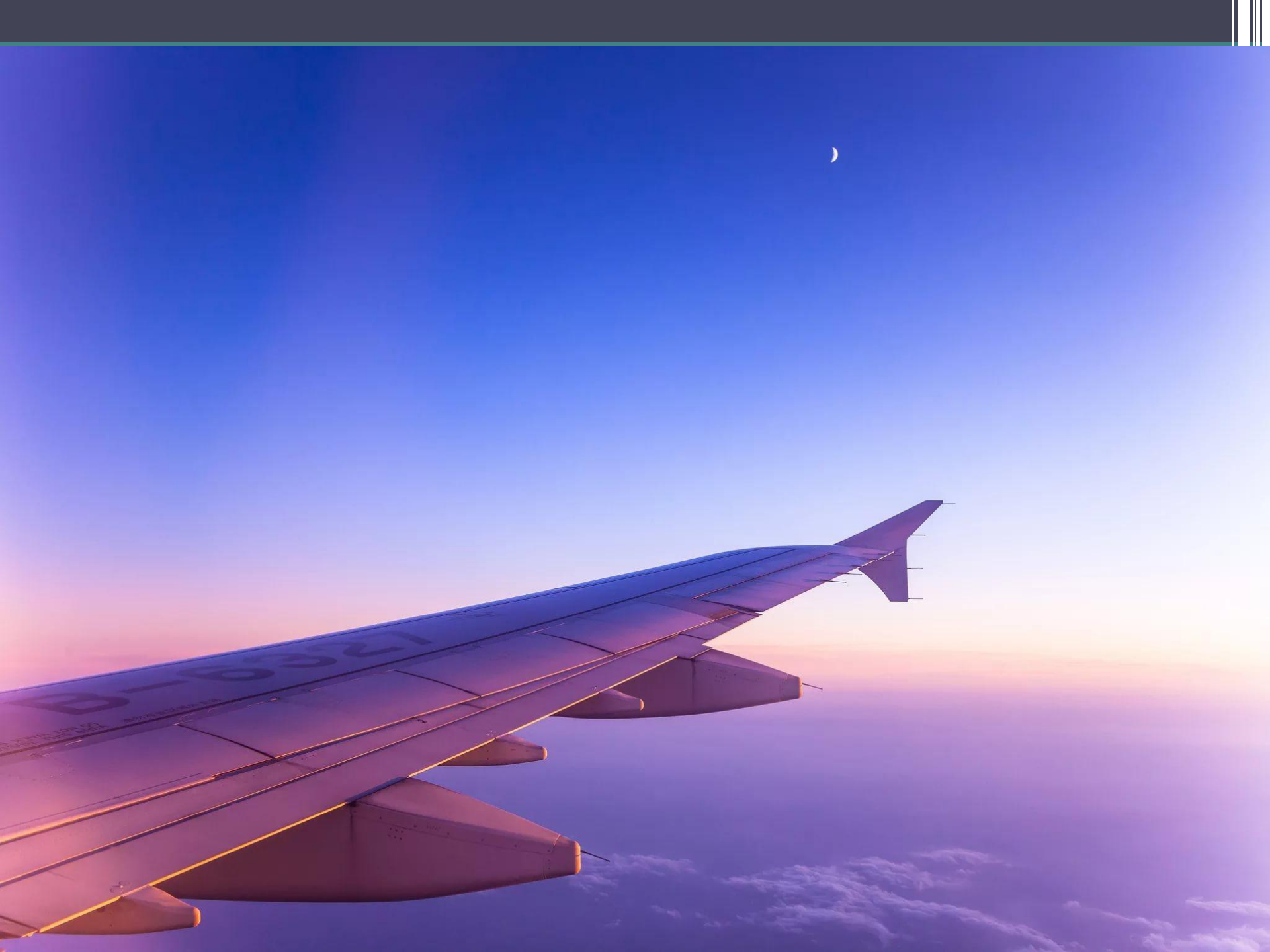




wings



The wings are the supporting and lifting surfaces of the aeroplane. The function of the wings is to support the aeroplane in the air.



TAIL



The tail unit provides stability and control of the aeroplane. Hence its function is to provide stability and control of the aeroplane.





Landing gear

The landing gear is a structure which supports the aeroplane on the ground. Its function is to support the aeroplane on the ground and to reduce shocks of landing.



