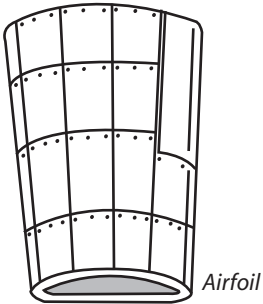




# GLOSSARY OF TERMS

## Aileron

A movable surface hinged to the trailing edge of a plane's wing to control roll.



*Airfoil*

## Airfoil

A shaped surface that causes lift when propelled through the air. A wing, propeller, rotor blade, and tailplane are all airfoils.

## Airspeed Indicator

An instrument that measures the speed of an aircraft in flight.

## Air Traffic Control

The ground-based system that directs the movement of aircraft.

## Altimeter

The instrument that records the height at which an aircraft is flying.

## Autopilot

An electronic device that automatically maintains an aircraft in steady flight.

## Biplane

An airplane with two sets of wings, one fixed above the other.

## Bogie

The wheel assembly on the main landing leg.

## Bulkhead

A solid partition that separates one part of an airplane from another.

## Cantilever

A beam or other structure that is supported at one end only.

## Cockpit

The compartment in an aircraft that houses the pilot and crew.

## Control surface

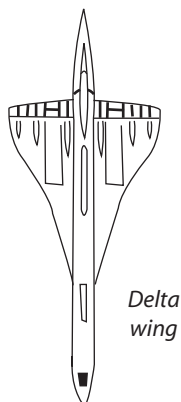
A movable surface that, when moved, changes an aircraft's angle or direction of flight.

## Copilot

The second pilot.

## Delta Wing

A triangular or near-triangular shaped wing, with the trailing edge forming the flat base of the triangle. The Concorde has delta wings.



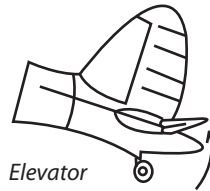
*Delta wing*

## Drag

The resistance of air against moving objects.

## Elevator

A control surface hinged to the back of the tailplane that controls climb and descent.



*Elevator*

## Fin

The fixed vertical surface of a plane's tail unit that controls roll and yaw.

## Flap

A surface hinged to the trailing edge of the wings that can be lowered partially, to increase lift, or fully, to increase drag.

## Flight Deck

The crew compartment in a cabin aircraft.

## Flight Recorder

A crash-proof device that continually notes the speed, height, control-surface position, and other important aspects of an airplane in flight.

## Flying Boat

An airplane that can land on and take off from water due to its boat-shaped hull.

## Fuselage

The body of an aircraft.

## Galley

The compartment where all supplies necessary for food and drinks to be served during the flight are stored.

## Glide Slope

The descent path along which an aircraft comes to land.

## Gyrocompass

A nonmagnetic compass that indicates true north.

## Inertial Navigation System

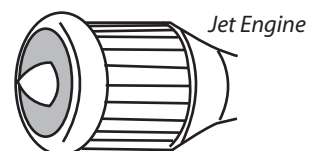
A system that continuously measures changes in an airplane's speed and direction and feeds the information into a computer that determines an aircraft's precise position.

## Instrument Landing System

The system that guides a pilot when landing a plane in poor visibility with two sets of radio beams transmitted from the ground alongside a runway.

## Jet Engine

An engine that draws in air and burns fuel to end a stream of hot gas that creates the thrust that propels an aircraft forward.



*Jet Engine*



# GLOSSARY OF TERMS

*cont'd*

## Leading Edge

An airfoil's front edge.

## Lift

The force generated by an airfoil at a 90-degree angle to the airstream flowing past it.

## Mach 1

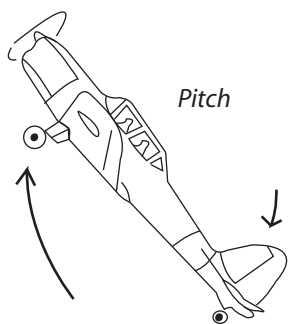
The speed of sound (741 mph; 1193 km/h).

## Magnetic Compass

An instrument that contains a magnet that always settles pointing to the magnetic north.

## Pitch

The movement of an aircraft around an imaginary line extending from wingtip to wingtip, that results in the tail moving up and down. Pitch is controlled by elevators on the tailplane.

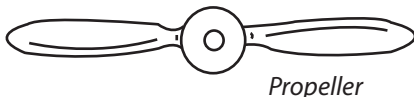


## Power Plant

An aircraft's engine or engines.

## Propeller

The engine-driven rotating blades that create the thrust that pushes an aircraft forward.



## Radar

Radio Detection and Ranging: the navigation system that uses beams of directed radio waves to locate and detect objects.

## Radome

The protective covering that houses radar antenna, made from a material through which radar waves can pass.

## Reverse Pitch

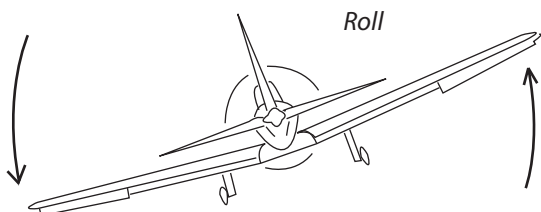
A set of an airplane's propeller blades that exerts a backward thrust to slow an aircraft after landing.

## Reverse Thrust

The effect caused by deflecting jet exhaust forward to produce a rearward thrust that slows an airplane after it lands.

## Roll

The movement of an airplane around the imaginary line that runs down the centre of the aircraft from nose to tail. The tilting, sideways motion is controlled by the ailerons.



## Rudder

The movable control surface hinged to the tail fin that controls yaw.

## Slat

An extra, small aileron fitted to the leading edge of an airfoil to increase lift.

## Slot

The gap between the slat and the main airfoil surface.

## Span

The distance from wingtip to wingtip.

## Spoiler

The control surface of an aircraft's wings that disturbs air flow over the wing and destroys lift. In use, a spoiler increases drag and slows an aircraft.

## Supersonic Aircraft

Planes that fly at speeds greater than Mach 1.

## Tailplane

The horizontal airfoil surface of the tail unit that provides stability along the length of an aircraft. The tailplane may be fixed or adjustable.

## Thrust

The force generated by propellers or jet engine flow that propels a plane through the air.

## Thrust Reversers

The parts of the engine that deflect exhaust gases forward to slow an aircraft when landing.

## Trailing Edge

An airfoil's rear edge.

## Turbofan

A jet engine in which the bulk of the air intake bypasses the turbine and is discharged as a cold jet.

## Turbojet

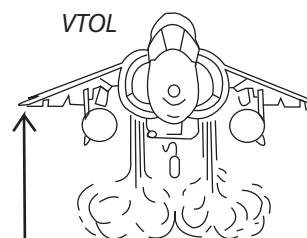
A jet engine in which the entire air intake passes through the combustion chamber and is discharged as a hot jet.

## Turboprop

A gas-turbine engine that drives a propeller.

## VTOL

Vertical Takeoff and Landing



## Wing

The principle supporting surface on both sides of an aircraft.

## Yaw

The swivel movement to right and left that can be controlled by the rudder on the tail fin.

