



INTRODUCTION TO AIRPORT ENGINEERING





NECESSITY OF STUDY OF
AIRPORT ENGINEERING
AVIATION TRANSPORT
SCENRIO IN INDIA



IMPORTANT TERMINOLOGIES RELATED TO AIRPORT ENGINEERING

- AVIATION- The term aviation is used in air navigation system in which machines heavier than air are used to fly in air.
- AEROPLANE- It is a flying machine heavier than air transporting men and material from one place to another. It moves under its own power by engine. It is called air jet or airplane.
- GLIDER- it is also a flying machine heavier than air used for air transport without the use of engines. It is mainly used for short distance air travel by single person. However in some gliders , more than one person can also person can also travel.

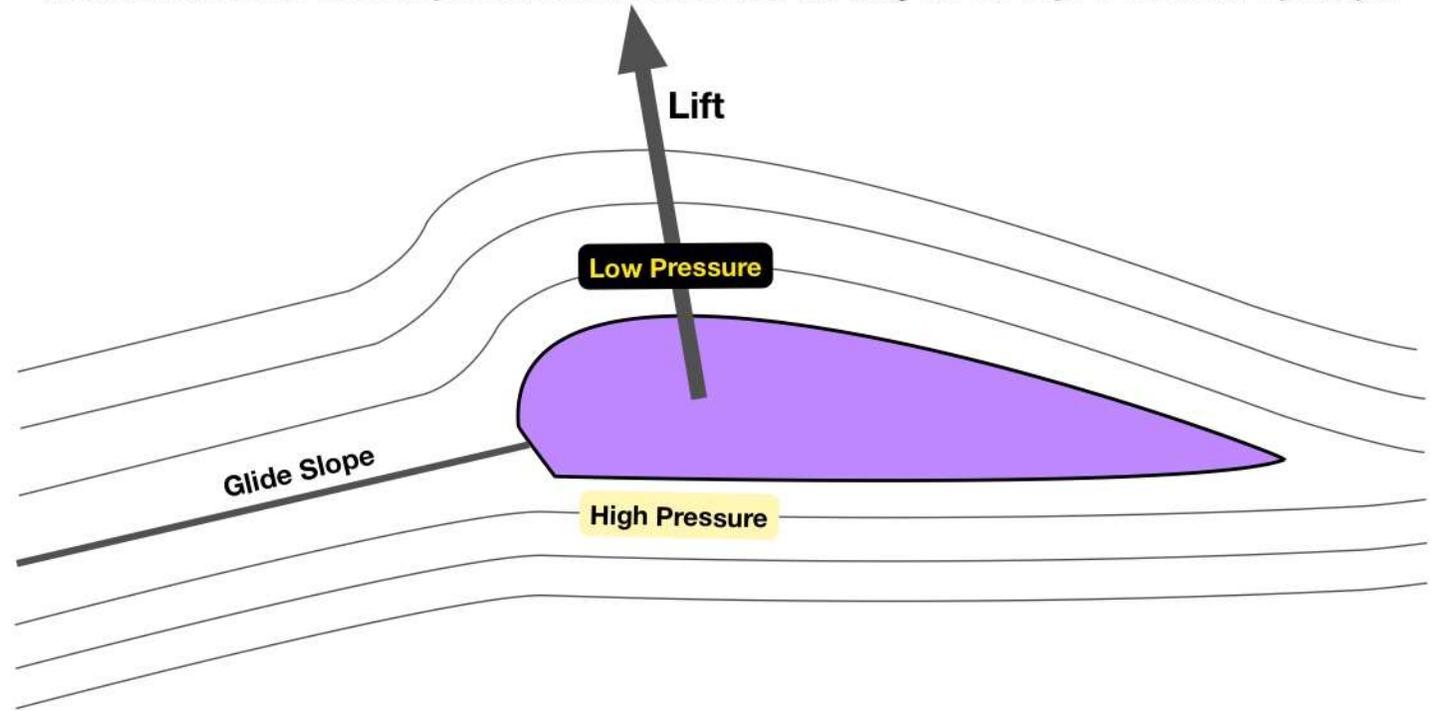
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- ICAO-INTERNATIONAL CIVIL AVIATION ORGANISATION (1947)
 - HELICOPTER
 - AERODROME OR AIRPORT
 - AIRFIELD
 - RUNWAY



HOW PLANES FLY?

Paraglider Airfoil Creating Lift

Relative differences in static pressure above and below the wing are the keys to Bernoulli's principal



FACTOR TO BE CONSIDERED WHILE SELECTING A SITE FOR AN AIRPORT WITH RESPECT TO ZONING LAWS

- REGIONAL PLANNING
- UTILITY
- PROXIMITY TO OTHER AIRPORTS
- ACCESSIBILITY
- PHYSICAL FEATURES
- ECONOMIC FACTORS
- FUTURE EXPANSION
- FACILITY EXPANSION
- GRADINGS DRAINAGE
- NOISE POLLUTION
- SOIL CHARACTERISTICS
- TOPOGRAPHY
- VISIBILITY
- MISCELLANEOUS FACTORS

RUNWAY

- RUNWAY- A RECTANGULAR AREA SELECTED OR PREPARED (GENERALLY PAVED) ON AN AIRFIELD FOR THE LANDING OR TAKE OFF OF AIRCRAFTS ALONG ITS LENGTH.



APRON

- APRON-THE PART OF AN AIRPORT (USUALLY PAVED) LOCATED IN FRONT OF TERMINAL BUILDINGS OR ADJACENT TO HANGERS USED FOR PACKING, LOADING, UNLOADING AND MINOR REPAIRS OF THE AIRCRAFTS IS TERMED AS APRON DEPENDING UPON THE SIZE OF AIRPORT, A SINGLE APRON OR MULTI APRONS (EACH FOR SEPARATE FACILITY) MAY BE PROVIDED.



TAXIWAYS

- TAXIWAYS- IT IS DEFINED AS A PAVED STRIP SELECTED OR PREPARED ON AN AIRPORT USED FOR TAXYING AIRCRAFTS TO AND FROM THE RUNWAY.



