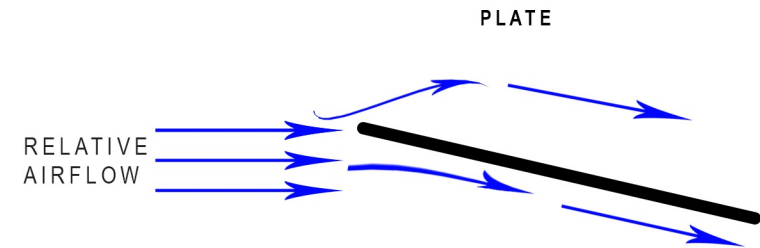
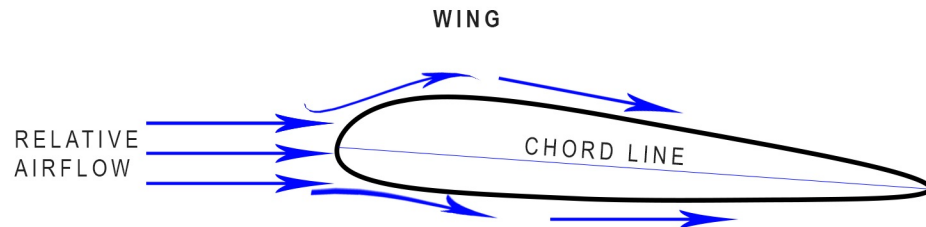


HOW AN AIRCRAFT FLIES

LIFT IS CREATED BY INTRODUCING A SHAPE INTO THE RELATIVE AIRFLOW, WHICH CURVES THE AIRFLOW AT THE TOP OF THE WING AND CAUSES A DROP IN STATIC PRESSURE



LIFT DEPENDS ON:

1. THE SQUARE OF THE VELOCITY
2. THE DENSITY OF THE AIR
3. THE AIR VISCOSITY & COMPRESSIBILITY
4. THE SURFACE AREA OF THE WING
5. THE SHAPE OF THE BODY AND INCLINATION OF FLOW

LIFT EQUATION

$$\text{LIFT} = C_L \frac{1}{2\rho} V^2 S$$

SIMPLIFIED

$$\text{LIFT} = V^2 \times A_oA$$