

Energy management: is the process of using power and pitch to manage an airplane's energy state of altitude and airspeed.

Total mechanical energy: **Total mechanical energy** of an airplane in flight is the sum of its **Potential energy** from altitude, and **kinetic energy** from airspeed.

“Trading altitude for airspeed”: Is a quote used to do just that. Pitch down increases airspeed while lowering the altitude from earth.

Airspeed is **kinetic energy** you can convert to altitude gain.

The difference between thrust and drag is the net change, which determines whether total mechanical energy. Stored as altitude and airspeed. Increases, decreases or remains the same.

