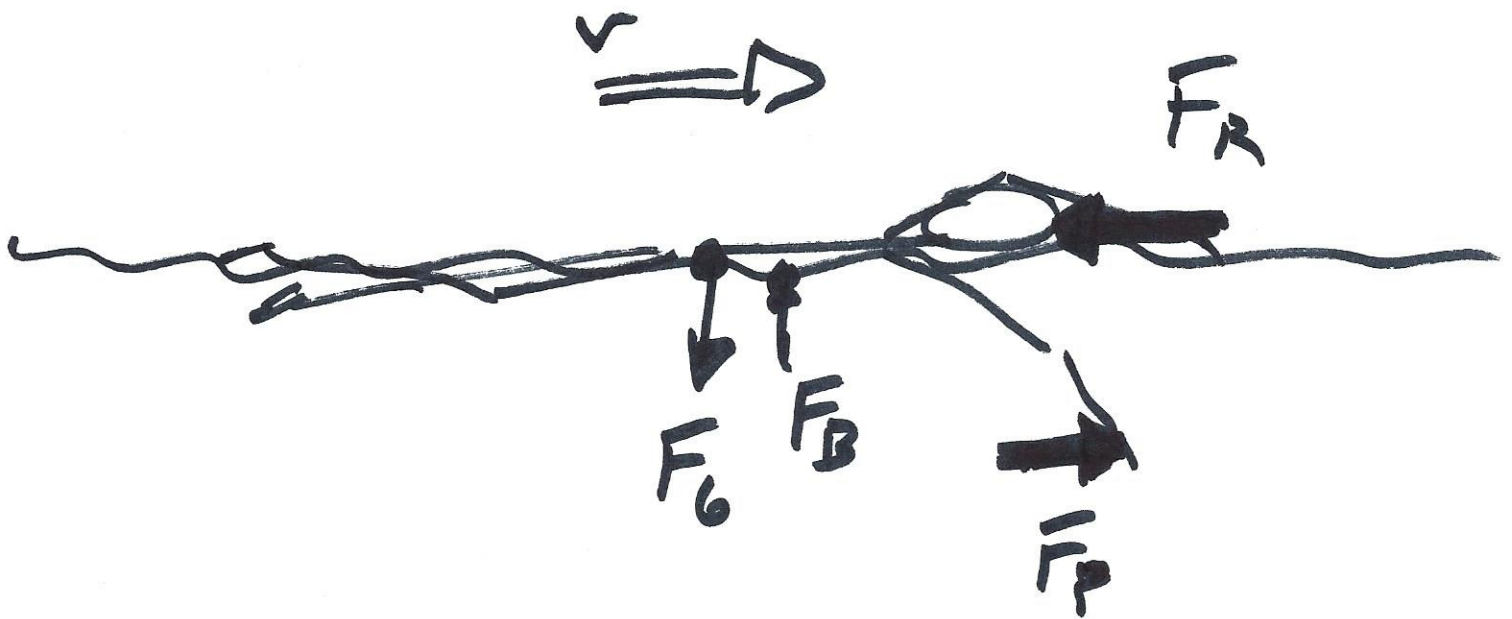


Kinetic Analysis Summary



$$\Sigma F_{\text{on}} = ma_{\text{com}}$$

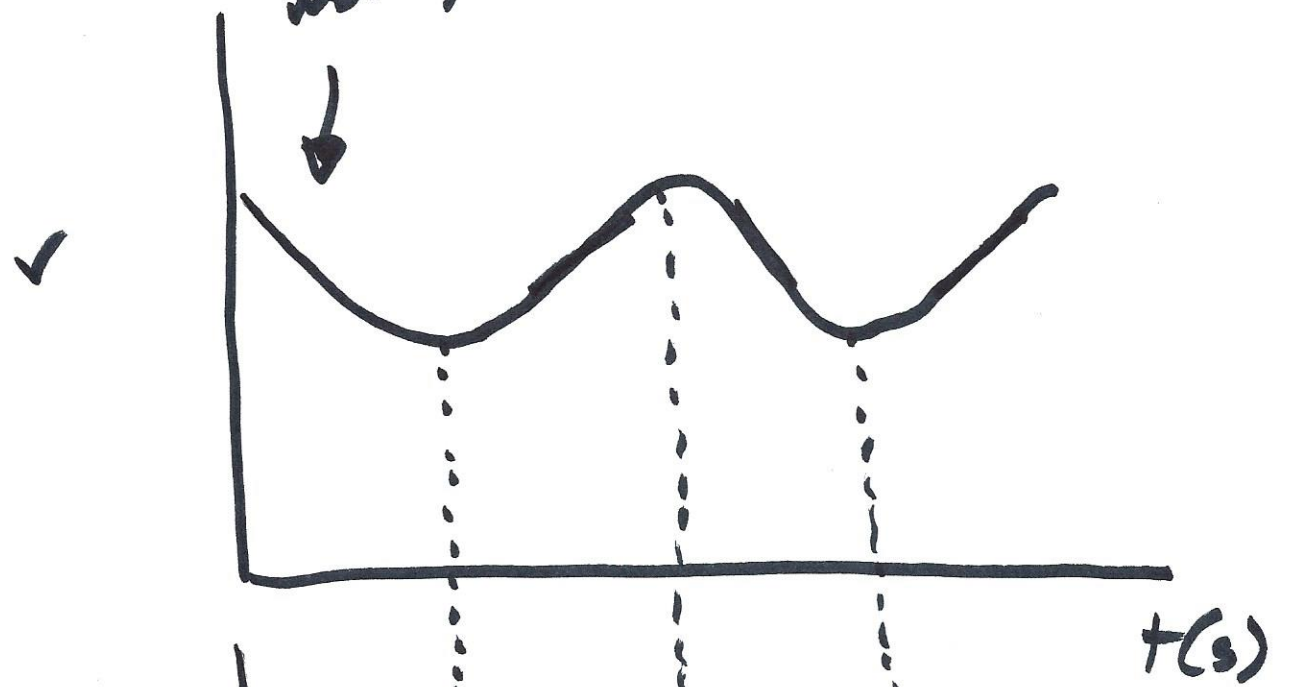
$$F_P + (-F_R) = ma_{\text{com}}$$

Horizontal
A/P

$$F_P - F_R = ma_{\text{com}}$$

(2)

Slowing down
moving forwards



$$F_p - F_R = ma_{com}$$

F_p

Propulsive Force

↳ Drag Force

$$\left[F_p = \frac{1}{2} \rho C_D A v^2 \right]$$

 ρ : density of fluid C_D : Coefficient of drag $C_D A$ A : Frontal Area v : velocity of fluid

$C_D A$

Propulsion

(4)

L hand position in the water

L Hand Paddle

L Gloves

L Forearm ?
+ Hand]

Technique

↳ Coaching

Resistance Force

(5)

$$F_R = \frac{1}{2} \rho C_D A v^2$$

$C_D A$



Horizontal Position



- Technique

- [Buoyancy
- Pull Buoy
- wet suit]

[Swim Skin or Race Suit
aka
Wetsuit]

[Reduce C_D
Smooth fabric
compression]