# Determining capabilities for Cryowing Observer (RC)

* Cruise speed
  + Throttle percentage for optimal cruising
* Stall Speed
  + No flap power off
  + Half flap power off
  + Full flap power off
* MTOW (Max Take-off Weight)
* Max useful load = MTOW – empty weight (ZFW)
* Wing Loading
* Power Loading
* Calculate/approximate minimum battery ampere hours
* Propeller size to use
* CG approx. at carbon fiber rod (carbon fiber wing spar)
  + Added weight forward to keep CG optimal.
  + Mark down the distance from the leading edge.
* Aircraft response to control input
  + 100% at cruise/throttle high/throttle low
  + 75% at cruise/throttle high/throttle low
* Elevator trim needed to keep level
  + With flaps up:
  + With half flaps:
  + With full flaps: