

MAY '24 RAG

Kent County Aero-Modelers

From the Prez

I would like to start off by thanking all of those Club Members who have been unselfishly volunteering and helping get our field up to snuff for the 2024 flying season. If you have not been out to field lately the, runway, the pits, landscaping is at a state which I have never seen.

I am very proud of the work which has been done and hope this level of enthusiasm will continue.

UPCOMING EVENTS;

CLUB BREAKFAST May 18th

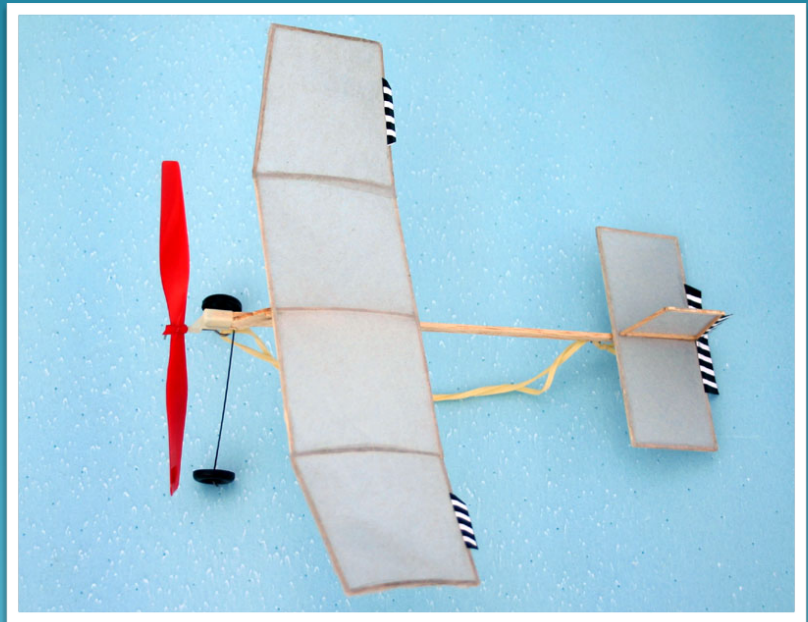
CEN-DEL WCA May 23,24,25

CLUB MEETING Jun 1

CLUB PICNIC Jun 8th, Rain
Date Jun 9th

I would like to mention a few things about the Club Picnic, We will be holding the BEST ARF, BEST BUILT (scratch or kit) as well as the Peck Polymers Build/flight competition. Further details below.

That's all I got, Jose



Peck Polymers R.O.G

For the Club Picnic the Club has bought 15 of these little ROG's. The idea/plan is to have 15 eager club members acquire, build, cover and fly one these.

The kits will arrive in the next few days. If you are interested please email me asap to put you on the list. The price is \$15.00 each. (This includes cost of kit plus shipping).

I am hoping that we will have 15 different participants rather than the usual suspects. There will be 2 categories to be judged, esthetic and flight. Mike Morrow, builder extraordinaire will be judging will be judging the build while best/longest flight will be judged by a couple of us. Know what you're thinking, I don't have time. Well I am 99% sure that the airframe can be built in an evening, maybe 2 hours and covering can be applied in the same. There are tons of instructional videos on how to build this.

So you will need a better excuse than "no time", you don't have a radio, or you don't have an engine.

CLASSIFIED:

NOTHING FOR SALE

NOTHING WANTED.

If you have something to sell or are looking for something please email me prior to the 10th of every month..

SAFETY..

Just a reminder, we do have a Defibrillator in Stu's Clubhouse. If you are not familiar with the AED please have look. Cam Maas can answer any questions you all may have, as well as a few other of us who have been trained in its use.

FIELD REPORT..

Field looks great, Reminder that Grass Cutting is on Wednesdays at 0900 unless weather does not cooperate..

MEANWHILE, **The Kestrel 6000** weather station has been mounted on the "control tower" and we are working on getting it up and running. Hopefully it will be going in the next few days.

I will provide all of you with detailed instructions on how to read weather on your phone and or computer. We will submit for the AMA grant for the station. Any donations will be happily accepted. For those of you who have made donations, thank you.

LIFT or why does it fly?

For those of you that already know about lift or as my Brit friends used to say, if I am teaching you to suck eggs then move on, if not then this may be of some interest.

So let's start with the formula for Lift.

$$L = C_l \times \rho \times v^2 / 2 \times A$$

Where L=Lift

C_l =Coefficient of lift, this is wing shape/airfoil
 $L = C_l \times \frac{\rho \times v^2}{2} \times A$
 ρ = rho which is air density, this decreases as altitude increases. The higher you get the thinner the air is.

v =velocity of the aircraft

A = wing area of the aircraft

Ok so what does this mean? Lets look at what we **cannot** control as the pilot.

Since we fly at about Sea Level and air density varies with temperature and pressure, we again as rc pilots have no control over Air Density. Having said that, If you fly in January and temperatures are say -10c vs 32c you can probably tell the amount of power and thrust your engines put out. This also effects lift. Colder the air more lift is produced and more thrust is produced.

What we can control..

The coefficient of lift changes with a change in the cross section of the wing, also known as the airfoil. This can, to some extent be controlled by using high lift devices, Slats, Flaps which change the airfoil to some extent.

Wing area can be controlled to some extent if say you are flying an F-14 or Tornado. Also there are some sort of flaps which when extended increase wing area, RC models usually use split flaps or plain flaps. (We will talk about flaps later).

Finally velocity, full throttle vs idle, bigger engine all these will increase speed to a certain point.

To be continued...