

SKYWORDS

The Newsletter of :
Burlington Radio Control Modelers Club
P.O.Box 85174 Burlington Ontario L7R 4K4
WWW.BRCM.org

April 2013



From the President – Dave Cummings

We Need Your Vote

To spend up to \$25,000 to repair and extend the Bayview Runway.

If ever there was a time to attend a General Meeting to express your opinion, don't miss the next meeting on Thursday April 25th. This issue will be put to a vote of the membership at this meeting.

Our objectives, among others, are to:

Claim more area/ boundary to solidify our existence..... kill any future proposed ideas for the existing ball diamond area and encourage the City's plan to relocate the dog run up to the North corner.

Center the runway and flying pattern west, towards the chicky.... This keeps our flying away from the commercial residents to the east of us. Safety is a big factor here, along with minimizing complaints from those commercial residents.

Planes are getting bigger and we need more runway..... also, it will help new pilots actually hit the runway!

Attract more new members from other clubs in our region..... We're the only club with a paved runway in the region. Already there are 2-3 new members who have joined us this year from other clubs, because of this asset.

Prove to the city the we have a Substantial Invested Interest!..... This would negate any bureaucrat, perhaps making an uninformed decision, without fully understanding the value our club brings to our community

We don't have a provision within our Club's constitution to facilitate a "Proxy Vote". If any of these points are **important to you** and you want to participate in a decision of our Club's financial resources, **you need to attend this meeting.**

Dave

BRCM Member Cleans up at Toledo!

Peter Howe entered his Grumman Avenger at the Weak Signals R/C Hobby Show in Toledo April 5/7 and won it all!

First in class MILITARY SPORT SCALE and BEST OF SHOW.

- The aircraft attracted a lot of attention on the table and lots of photos were taken—before the judging even happened. We are looking forward to seeing it fly.

CONGRATULATIONS, PETER.

Charlie Chomos entered two models in old timer but inspite of winning prizes the past two years, was shut out this year.



Left: Peter Howe's Grumman Avenger at Toledo Friday April 5th.

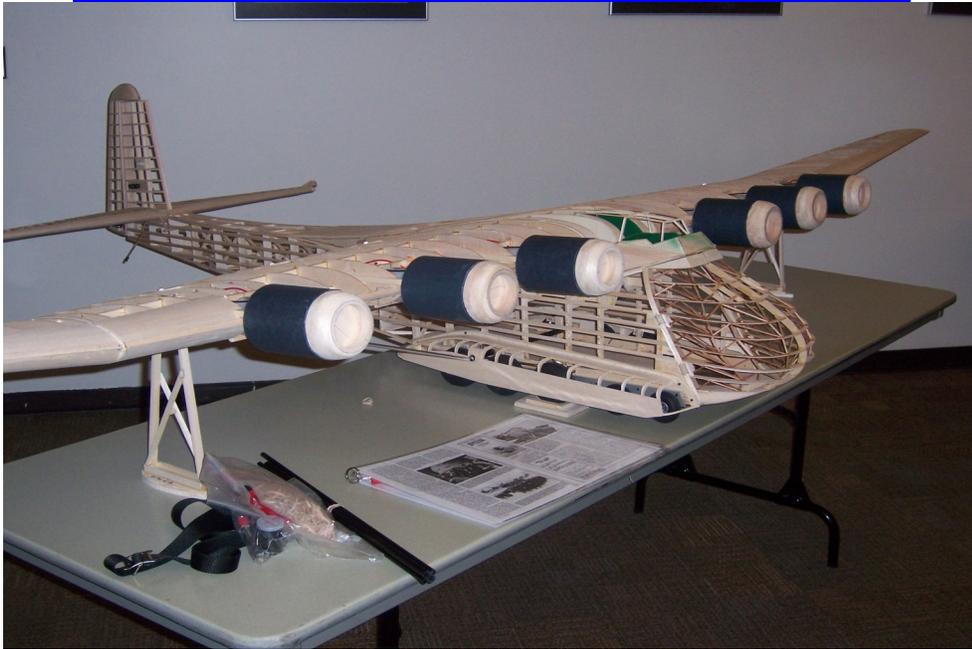
FYI President Dave Cummings celebrated his 60th birthday on April 5th at Toledo. Now he considers himself officially an old fart.

Below: Charlie Chomos' 1/2 A Buzzard at Toledo. Note the single channel transmitters for each of the aircraft.

Below Left: Charlie Chomos Cessna Skylane



SHOW AND TELL—MARCH 28TH MEETING



Ashley Armstong's Messerschmitt 323—will have 6 Saito 62s for power with 17 servos to handle all the controls.

Plans from a 1/72nd model blown up 5 times got to 1/14th scale. For more detail see Ashley's article in February 2013 issue of Skywords.



Neil Marchant brought a foamy Corsair to Show and Tell



Karl Gross and his Cessna Crane at Show and Tell: weight 66 lbs.—1/3 scale—14 Ft wingspan. Power 2x Moki 150's!



Peter Howe brought his Grumman Avenger to show us. Powered with a Moki 150—51 lbs. 108 in wingspan, 1/6 scale. Variable pitch prop! Will be shown at Toledo.

Ian Brown brought a Habu along; regret I did not get a photo, Ian.



Frank Portella tells us all about his model—AA5 Traveller and his solution to safely adjust the needle valve while the engine is running.

A fellow named Tim Arnold in England reported the following scenario to the UK Model Mag RCM&E.

A good warning:

Because of an accident with a Li-Po battery in his workshop, Tim purchased a 2kg powder type fire extinguisher to have handy in case of need.

One day all the lights went out in his house—he checked and found a small fire in his workshop caused by a trickle charger on his golf cart. He grabbed the fire extinguisher and quickly doused the fire, saving his workshop and probably his home.

About a week later he noticed that everything in the workshop made of steel had started to rust. Power drills, band saw, bench vices etc—anything that had been in contact with the fire extinguisher powder. This included circuit boards with corroded terminals, the internals of a Zenoah 45cc engine and other machinery.

Upon checking with his local fire department, he was advised that the chemical in the powder extinguisher absorbs oxygen to kill the fire but afterwards when exposed to normal humidity releases it onto whatever surface it happens to be stuck to. This caused the rusting.

He was advised to only use CO2 extinguishers in or near workshops. He also suggests fire blankets be available and that the rubber flooring we use in workshops be fire-resistant—the one he was using was toxic when burnt. He also now charges and stores his batteries in a ‘separate store’ and stores all fuel outside as well.

A lesson for us all.

Al

Thanks to Carl Finch for this article which has been edited considerably.

- DATES TO REMEMBER**
- April 25—Important vote re runway extension—be there!
 - May 23rd—last meeting before summer
 - June 8 and 9 Float Fly at Christie Conservation Area
 - July 1 Canada Day Fun Fly at Bayview
 - July 27 and 28 War Birds over the Bay at Bayview Park



Returning after a few years absence:
Patrick Toal

WARBIRDS OVER THE BAY



Burlington Radio Control Modelers

July 27th & 28th, 2013
At the BAYVIEW MODEL AIRPORT
1800 King Rd. Burlington ON
CANADA

Event is open to military aircraft of any era, Jet and Helicopters welcome (no camo trainers please) MAAC or AMA required to fly.

No charge overnight camping (no hookups) 110v power available for charging electrics, radios etc. Pre Register for Camping is recommended.

Pre Registration \$10.00 before June 30, 2013..... \$15.00 on the day

Food, Fun, Fellowship, Raffles and Pilot draws.

A \$5.00 per car donation will be requested at the gate for spectators to be donated to a local charity.



This is a MAAC sanctioned event

*For further information and directions please see: www.brcm.org or contact
Ian Brown 905-690-1249 / Co-event Director Paul Chitty 519-491-8186 pchitty@cogeco.ca*

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Here is a post from “The Profile RC Brotherhood” entitled:

HOW TO BUILD AN EPOWER SYSTEM

These postings were done March 14th, 2013. I am not sure I fully understand how one adapts for different sizes/weights of Aircraft however will leave the reader to decide where to use it or not.

Thanks to Eric Palmer for bringing this to my attention. I do not know the name of the author.

“OK here is the way I do it, it is not the only way of calculating an Epower system and probably not the best way just my way and I have done it many times so I know it works and works well.

To have a plane that has a nice, snappy feel to it you need a prop RPM of about 10,000. To get that after efficiency losses (usually around 20%) you are going to need a calculated Rpm of about 12,000. Here are some combinations of batteries and Kv (RPM per Volt) that will get you there:

6S—22.2 volts x 550 Kv = 12210 Rpm

5S—18.5 volts x 650 Kv = 12605 Rpm

4S—14.8 volts x 850 Kv = 12580 Rpm

3S—11.1 volts x 1100 kv = 12210 Rpm

To have a nice flying 3D plane you will need about 200 to 250 Watts per lb. To use a 40 size plane as an example it will weigh about 4 lbs (Electric that is). If we use 225 Watts per lb. as a starting point we will need 4 lbs x 225 = 900 Watts. Here is the AMP draw needed for the available battery sizes:

6S—22.2 volts x 40 Amps = 888 Watts

5S—18.5 volts x 50 Amps = 925 Watts

4S—14.8 volts x 60 Amps = 888 Watts

3S—11.1 volts x 80 Amps = 888 Watts

The maximum you want to draw out of a battery is about 20C, taking more than that out shortens battery life and flight time. 20C/Amp draw x 1000 = battery capacity in Mah. Here are the minimum battery capacity sizes that will give you a 20C draw for the Amps needed:

6S—40 Amps /20C x 1000 = 2000 mah

5S—50 Amps / 20C x 1000 = 2500 mah

4S—60 Amps / 20C x 1000 = 3000 mah

3S—80 Amps / 20C x 1000 = 4000 mah

These are the minimum size batteries that should be used and will give about 6 min. flight time depending on throttle usage.

To pull the needed power (amps) out of the batteries the prop will need to be sized correctly. At a prop RPM of 10000 to get a decent flight speed we will need a pitch of 5 or 6. At this point the only thing to do is hook up a WattsUp meter and try a few different props. For the 40 size example given it should work out somewhere between a 13x5 and 14x6 depending on how closely the motor is wound, how close to size the prop is manufactured and the air density.”

There is more—to follow next month. Al