Our Web site: www.brcm.org



The News Letter of the Burlington Radio Control Modelers Club Box 85174 Brant Plaza, Burlington, Ontario, L7R 4K4

Editorial



As promised, it is my pleasure to present part two of **John West's** profile; this part about his modelling prowess. Apart from that, the sketch at left is fair illustration of your editor's condition - wondering what to write about and whether or not anyone

is interested anyway. This is nothing new. Apparently all newsletter editors suffer from the same problem: a dearth of input from the members not to mention a tendency to desperate thoughts as the deadline for publication inexorably approaches.

I have been looking at some editions that I have prepared since taking on the job of editor in January 1999 and see many interesting articles from club members. Some about trips taken, some about building projects, others about technical subjects such as how to 'age' a model. Which brings me to the point of this preamble: what have you been up to this season and what are you planning to build or do this winter? As I have written earlier: if I don't have input from you, all you're going to get is my stuff.

So, as usual, I am looking for input from you, the members of BRCM. Let me have your pictures, articles, anecdotes, or whatever and send them to me at Binker@Sympatico.ca I'll even take hand written notes and physical pictures. How's that for an offer?

Cheers, Lawrence

Who's this?

Another one of those photographs culled from long forgotten archives. Do you recognize the guy in the middle of this handsome trio of budding aero modelers?

Andy Rooney ...

I've learned.... That life is like a roll of toilet paper. The closer it gets to the end, the faster it goes.

Thursday, November 27th The Great Rubber Race The annual competition between the Hamilton & Burlington clubs

Electric Flight

This information from Carl Finch

Members may be interested in the Electric Model Flyers of Southern Ontario indoor fly meet at the Sheridan College Athletics and Recreation Facility on Trafalgar Road, Oakville on Saturday November 22 from 6:00 to 9:00.

Also, for those of us starting to dabble in electrics and being confused by the vast array of motors, cells, gearing, propellers etc. the EMFSO hold workshops in North York on the first Wednesday of each month. Check details at <u>www.emfso.org</u>

Stripes 'R' Us!

A picture of some of my models hanging from the ceiling in my study. They're all ready to fly - and so am I! Ed.



Profile: John West

This is part 2 of a profile of John West. Part 1, published in the October edition, dealt with his war years. This part will show



some of his models.

John and Art Titmarsh got started in aeromodeling at about the same time (c. 1936). John remembers his father bringing him a beautiful English stick model with beautiful silk covered spruce wings, a wire frame and two strands of rubber geared to drive a single prop'. Subsequently, both John and Art each bought a Brown Junior gasoline engine. In John's case, he had to paint the whole house

to earn it. In Art's case, he

put down \$5.00 and paid \$1.00 a week, earned by washing airplanes and running paper routes, for a total of \$20.00 before he could take it home! John is shown here with one of his DH Moth models.



John with his model of a Lockheed Vega.

Below is wife Jean with a scratch built model of John's own design.

To the left is John's model of the Kinner Fleet – the basic training aircraft in Canada at the outbreak of WWII. "Kinner" is the name of the engine.





English ----- Sheesh

Sometimes I think all the folks who grew up speaking English should be committed to an asylum for the verbally insane.

In what language do people recite at a play and play at a recital? Ship by truck and send cargo by ship? Have noses that run and feet that smell? Drive on the parkway and park on the driveway? Cut a tree down then cut it up? How can a slim chance and a fat chance be the same, while a wise man and a wise guy are opposites?

You have to marvel at the unique lunacy of a language in which your house can burn up as it burns down, in which you fill in a form by filling it out and in which an alarm goes off by going on. Doesn't it seem crazy that you can make amends but not one amend?

If you have a bunch of odds and ends and get rid of all but one of them, What do you call it?

WHAT I DID DURING MY SUMMER VACATION

by Bill Swindells

I guess Lawrence's article last month about his flying season inspired me to put together some of my experiences from this past summer of 2003, just like in school English class when we had to write a story about "What did you do during your summer vacation?"

In all fairness, the flying season really starts about the early part or start of April, with the Toledo Weak Signals Conference. Wayne Gilbank and I attended for two of the three days that event was on. We met other BRCM members and had a good time even going to dinner as a group. Picture was in the April newsletter

The end of April, and four of us went to Top Gun in Florida. George Bartkus had been invited to fly at this event with his 1/5 scale FW-190-A8. We were gone about 11 days in total, driving both directions from Burlington/Hamilton to Orlando and Lakeland and back again. For sights and sounds of real scale flying, this is a must see if in the area around the end of April. See the May newsletter for a report on this event.

May saw my wife and I going on an extended road trip down through the Maritimes and the New England States for 16 days, so flying was out of the question during that time period, other than local flying at our fields.

The beginning of June came and I was forced to have some hand surgery, so there was another delay in getting my flying time in. Later in the month, we were on live television, when I had been contacted by CH Morning Live, channel 11 cable 12, to do a presentation at the Bayview Field starting live at 0600 hrs. Yup,

Right Thrust

This item by Dan Thomas was culled from a newsgroup posting. I thought the item worthy of printing here since most of the assertions are essentially correct.

Right thrust helps counter the left-turning tendency caused by the rotating slipstream off the prop, most noticeable in the takeoff roll

There are four forces that the prop imparts to the airplane, besides the obvious thrust. The first is the rotating slipstream, which, in an airplane that has a clockwise-turning prop (as seen from the cockpit), strikes the fin on the left side and swings the tail right, nose left. The second is the higher angle of attack of the downgoing blade, if the airplane is in slow flight or a climb, or in a tail dragger before the tail comes up on takeoff. This is on the right side, and pulls the nose left. Third, The torque reaction puts more weight on the left wheel on takeoff, creating a bit more friction and pulling nose left, and in flight may cause a left-banking tendency. Fourth, the gyroscopic precession of the prop will swing the nose of a tail dragger left as the tail comes up on takeoff. Note that all reactions are to the left, and if the prop turns the other way, they all pull the nose right.

Right thrust makes the airplane easier to fly. Down thrust makes the airplane easier to fly. [*on a high wing aircraft. Ed.*] An

the sun came up about 0500 hrs that day and, surprise, we had about a dozen fliers present for our demonstration. Thanks again guys for the interest.

July brought the annual Canada Day flying at Bronte, and another trip to Olean, N.Y. STARS Scale Rally. Up to this time I had been flying my Tiger 2 aircraft for sport and a Great Planes F4U Corsair for Stand Off Scale. It was great to see old friends and renew acquaintances again in Olean with some of the people that I had not seen in over three years.

Unfortunately, the STARS rally coincided with the Grand Opening of our Bayview Park Field so I missed Bayview's Grand Opening on a very windy day.

Unfortunately I did not attend some of the other local flying events that I normally attend, such as the Otterville Rally, Hamilton, Simcoe and a few others this summer. August saw us traveling again to Hamburg N.Y. for another Scale Rally, which is well attended by both U.S. and Canadian pilots. Again, meeting old friends and making new acquaintances., followed by the Tri-Club Fun Rally and the Corn Roast. See the pictures when they show up on the web site or ask me for a CD of the flying events that I attended plus candid shots of flying at Bayview, only \$1.00 for the CD to cover my costs

The last two events were in September, the KW Flying Dutchmen Rally and the Oakville Scale Rally. Again both were well attended and a good time was had by all that did attend. I even won a prize at Oakville (but then so did everyone that attended).

That was my summer, what about you, what was interesting and what did you do, nothing?? I bet you had some fun this year too, why not let the rest of us know about it???

experienced pilot doesn't need either of them any more than an experienced cyclist needs training wheels. They create some drag and hurt overall performance. Some full-scale manufacturers use them, and others don't. [not the training wheels! Ed.]

I've included this to counter the notion that 'torque' is the principal villain. Torque, of course, would only induce an axial roll - not a tendency to turn left other than the relatively weak force as mentioned above. Comment(s)? Let me have them. Ed.



WINGTIPS -WHAT GOOD ARE THEY??

This technical article is taken from Clay Ranskill's web site which offers material to harassed newsletter editors. Your editor is most appreciative of the help.

-by Clay Ramskill

There are just about as many types of wingtip treatments as there are plane designs - which is a whole bunch! Why?

There are several lines of reason that can be applied to the tips designers put on their wings. Looks is one; a squared off tip looks a bit rough, like maybe the designer wasn't smart enough to come up with something better! However, that's the cheapest and easiest way to do it, so economics/ease of construction is a factor. Another reason for the wingtips might be efficiency. Just look at the winglets they're putting on some airliners these days; efficiency is what those birds are all about! And there are other areas that the wingtip can affect - like roll rates, stall characteristics, aileron flutter, and so on.

Let's take a look at the wingtip. In flight, a plane is supported by the air flowing over the wing; the airfoil shape is such that we get high pressure on the bottom of the wing, low pressure on the top. The difference between those pressures, spread over the area of the wing, gives us the lift we need. But the air will always want to flow from an area of high pressure to the lower pressure areas - at the wing tip, that's just what happens. (see fig. 1) That flow of air lessens the differential between the high and low pressure in that area, so we have less lift out at the tip. This lessening of the lift out at the wingtip (tip losses) gives us the possibility of increasing the efficiency of that wing by cutting down on those losses.

Tip losses vary considerably with different wing configurations; the losses increase in some proportion to the following: higher angle of attack, lower aspect ratio, higher wing loading, lower airspeed, higher sweep angles, and of course the design of the wingtips.

The first way to cut tip losses is by increasing the Aspect Ratio of the wing; that is, building the wing longer in proportion to its chord, or width. That's why gliders have such long, narrow wings. All other things being equal, the longer wing has the same tip losses - BUT those losses will affect a lesser proportion of the total wing. Figure 1 illustrates this point.

And the point here is that ANY thing that lengthens the wing, even if the extra tip area is not lift producing itself, will help make that wing more efficient at producing lift. (see figure 2) NOTE; we can't get too wild with this concept - because anything we add to the wing will also produce drag!

Also note in figure 2 that not only the distance the air has to go from the bottom of the wing to the top has an effect, but also sharp corners will play a part. The sharper the corner the air must make, the less the flow. So a tip plate may be the most efficient of all, in that there is not only considerable distance "around the tip", but also two sharp corners!



FIGURE 1. The shorter the wing, the larger the proportion that is affected by tip losses.

The wingtips will also affect the planes roll rate, especially if there is a sharp corner out at the end. In general, a rounded tip will allow higher roll rates than will one with a sharp end.

Wing tips are an area where you can easily do (and undo) modifications to your plane, to alter some of its performance characteristics. You may not see much, if any, change to an already efficient wing, like a full span Cub wing. But on a plane with shorter, higher loaded wings, differences from the tips may be quite noticeable.

