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



# Editorial

I am preparing this edition while Tom Gwinnett is vacationing in Fish Hoek, South Africa.

Looking back on some prior editions I see a constant cry for input from the members. Not much has changed in the intervening years but, for this month, I am grateful

for contributions from Ivan Wismayer, Carl Finch and Gary Arthur.

I have really forgotten how to do this but here goes..... Cheers. Lawrence (Binker@Sympatico.ca).

## Presidents message.

Well we are still in a deep freeze but it looks promising for March. We should be flying off grass pretty soon. Bayview has been great for Snow flying as the few brave souls who have flown recently will attest. I for one am really looking forward to my annual pilgrimage to South Carolina for the Joe Nall in May, but I get ahead of myself, we have Toledo the first week end in April to enjoy first.

As many of you already know I am moving to Sarnia next month, now that I am retired I want to be a part of my Grandson's lives, new pilots I hope. I will however see out my term as President and also head up the Warbirds event and attend other events also. I expect to be present at as many meetings as possible but those I can't make I'm sure Dave will run for me.

Lets all pull together this year to make our club events even better than last year and try to pull in some new members, remember the youngsters are the future of our hobby so lets encourage them.

See you on the 24th. Paul Chitty President BRCM

# A Note of Thanks.

*I would like to thank the club for awarding me the Herb Stoneham Memorial Trophy.* 

Many Thanks. Bernie Sudol

Thursday, February 24th. At 19:30

At the Centennial Hall in the Central Library.! We hope to have a speaker from WWII Bring interesting stuff anyway.

## AGM - New Board

At the January meeting, the Treasurer reported the 2009 financial results and presented the proposed budget for 2011 which was subsequently accepted.

The members present were presented with a new slate of directors and, since no other candidates were nominated, the slate was elected by acclamation. We welcome two new board members: Carl Finch and Mike Block and thank departing directors Al Race and Jim Reilly for their years of service.

The Directors:

President – Paul Chitty Vice President – Dave Cummings Treasurer – Lawrence Cragg Secretary – Ashley Armstrong Past President – Tom Gwinnett

Members at Large:

Dennis Smart - SOMA Liaison Mike Block - TBA Nick Moskal – Bayview Field Manager Ivan Wismayer – Bronte Field Manager Carl Finch – Wings Programme Eric Palmer – Competition Paul Gentile – Meeting Programme Dorian Folo – Webmaster

# You wanted to know about Nano Core Technology?

#### This little gem from Carl Finch:

Nano-core technology in lithium ion batteries is the application of nanometer conductive additives which provide the following:

• Formation of ultra strong electron-conducting networks in the electrodes, which increases conductivity.

• Creation of super strong ability for inhibition of the carrier liquid to provide more ion channels, improving the ability of ion transmission and diffusion.

The result of improved electronic conductivity and ion transmission is a reduction of impedance and greatly decreased polarization during high rate discharge.

## So there!

Carl Finch was surprised at how well his twist handled in the snow with only a swivel tail wheel.





# The Elegant Spitfire Elliptical Wing

#### By Ivan J Wismayer.

Many Spitfire enthusiasts claim that the Supermarine Spitfire is the greatest and most beautiful aircraft ever! This is mainly due to its elliptical wing. Did you know that the wing design was by a Canadian, none other than Beverly "Bev" Shenstone? He graduated from U of T with a Masters degree in aeronautical engineering in 1929. He then went to Europe and worked for Junkers Aircraft where learned about cantilever and smooth metal-skinned wings. In 1931 he joined Supermarine Aviation Works and began work with Reginald J Mitchell. "None other than Mitchell's son Gordon, who has written one of the most significant histories of his father life, gives full credit to Shenstone for the Spitfire's wing."



Mitchell, despite other specialists, adopted the Shenstone elliptical wing especially because of his background and understanding of aeronautics, combined with new construction methods and emerging technologies outside the UK. You see the elliptical wing not just looked nice, but served as an excellent platform which allowed room for retractable undercarriage and armament. Actually Shenstone credits the production design to Joe Smith in ironing out the production bugs to allow the wing to be mass produced. However, few Spitfire authors mention the contribution to "Bev" Shenstone's contribution to the Spitfire, a Canadian. He made the Spitfire slick, slippery and smooth.

Pictured is my Dad, about 4 years ago. He just turned 87. I took him to the Airplane Heritage for a wee visit. He was a close friend of Buzz Beurling while stationed in Malta in '42. Buzz at the time was flying Mk V's. The Spitfire I built commemorates Beurling's fighter at that time. He later flew Mk IX's after his return in '43/44. Laddie Lucas, who was his C.O. while in Malta, said they should have give Beurling a Mustang and let him free to roam Germany. He was a natural fighter pilot. All those that flew with him say he was the best. Buzz Beurling died in'48 in an airplane accident in Rome. He was on his way to fly for Israel in their first war.

*Footnote: from an article by Don Hatch - RAA London/St. Thomas newsletter Slipstream* 

#### **Electrics with a Twist**

Carl Finch crashed his Twist (another one!) but the wings and tail survived so he built a new fuselage and converted it to electric. Along the way, he carried out some measurements. Here are some of his findings:

Carl selected the Tournigy SK42-50-650 motor for his revived Twist. Using a 4S 4900 mA-hr battery and an 85A SBEC controller (esc) he then tried different props and measured the results:

Prop	Amps	Watts	Max RPM	
APC 13 x	8E	36	550	8,300
APC 13 x	10	50	800	7,550
APC 14 x	7	42	650	7,850
APC 14 x	8.5	47	720	7,600

Ed Note: The 13 X 10 seems to work best but is it? Bearing in mind that 1HP is equivalent to 746Watts, then 800Watts should get a 40-sized Twist off the ground right handily!

#### Ivan's Stearman

*He's getting ready to cover it. Here are some pictures of the inner beauty!* 

# Carl Finch writes:

For probably 7 years I have been using Deans plugs for my electric power systems - probably because the first NiCad I bought came with one!

Other than the difficulty in separating the two halves, particularly when the fingers are cold, I have never had any problems with these connectors at currents up to 50 Amps.

Until today!

I was connecting my Wattmeter up to get statistical info on my electric Twist when there was a big flash and a nasty burning smell. I pulled the connector apart and found that the spring on the positive prong of the male, instead of entering the hole in the female part, had bent up and touched the negative. 15 Volts from a 4900 mA-hr Lipo, shorted out, releases considerable energy!

Fortunately I only suffered a very sooty thumb and forefinger.

Hobby King have Deans type connectors with slightly larger and ribbed bodies that mate with actual Deans plugs but are easier to pull apart. They are also ridiculously inexpensive.



*Ed Note: Hobby King have declared their intention to standardize XT60 connectors on all of their batteries up to 3000mA-hr* 





## **'Ard Work**

Gary Arthur wrote this to Dave Cummings. I don't know why he didn't send it to me. But, never mind, here is Gary's tale of a typical working day for him. Poor chap!

So here I am in California enjoying the warm sunshine and I have to go to work. My company sends me here and they expect me to work. So off I go to do my two hours' work consisting of looking at machinery and giving an opinion. Two hours pass and I am glad that is done (such hard work).

So now that it is 10:30, I wonder what I can do for the rest of the day. I head to Sepulveda Basin to the Apollo XI RC field where I watch 40+ people flying anything from small electrics to turbines. After two hours I figure enough and head off to Chino airport.

I walk into the airport and head to Steve's hangar. Steve is the guy who owns the L-39 that I flew a couple years back. I chat with him for a while and he tells me how he had sold his L-39. The new owner painted it and did some upgrades. A while passes and the new owner approached Steve to say he could not afford it, so Steve buys it back at a discount. Not a bad deal. So now he has a nice "refreshed" L-39 and some



money in his pocket.

I then take another walk over to Tony's hangar. Tony is an aging guy who has flown in movies and always has many stories to tell of his past. He has owned 32 different aircraft in his lifetime including a few P-51's, T-28, a Folland Gnat (the only one still flying). He knows Chuck Yeager and Bob Hoover personally. Tony tells of a time when Bob had flown Tony's T28 and lost the prop governor, needless to say he blew a few cylinders and had a very hard landing, twisting the fuselage. The prop gear drive hangs on the wall along with a couple cylinders with pistons and broken rods still inside. Tony also points to a picture on the wall of a crater in the dessert where a friend turned one of Tony's P-51's into rubble. His friend died in the crash.

Back in 1979 Tony flew his P-51 from California to Germany. This was the first time a P-51 had returned since the war. On his return home from Germany, he stopped by the battle of Britain air show where he swapped rides in a tiger moth and a spitfire.

Tony also had the opportunity to fly a Mig 29 in Ari-

zona. He mentions how this was the most power he has ever had at his disposal and he and the instructing pilot really enjoyed Tony's flying. (Most people who flew the Mig had a tendency to bore the instructing pilot.) I am sure this is true as there is a picture of Tony and the instructor, both with very big smiles on their face.

During my visit with Tony, he was doing his annual inspection on his Folland Gnat. He had the wheels off and was starting to change the tires but was having some difficulty. I assisted in putting the tires into a press so we could remove the rim lock and tire. Cleaned the rim's and put on a fresh set of tires. Back to the press to re-install the rim lock and safety wire the rim lock in place. What a pain trying to fish the wire into the rim lock. Needless to say, I got it done. Hooked up the nitrogen bottle to put in the required 145 psi tire pressure.

Now this is starting to be a lot like work, only harder (LOL). So we went for lunch at Flo's where I bought him lunch for letting me work on his Jet. Ya I know, kinda backwards but I really enjoyed it.

After lunch I said my goodbye and started my walk to the airport exit. I walked past a hangar that had the door open. Inside was a fellow removing the cylinder heads and coolant tank from a P-51. As I stood outside looking in, he motions for me to come in, saying "don't stand there, come on in". So in I go. We chat for a while as he worked. Found out the P-51 belonged to a Dr. Martin who also flies RC aircraft. He had a <sup>1</sup>/<sub>4</sub> Stearman hanging on the wall right next to a full size Stearman that was about half way complete. Further in the hangar was another T-28 and a NRM biplane (not models, these were real). We chatted for a while until he needed to leave and take the coolant tank over for repair.

Now my walk to the airport exit continues. Yup



you guessed it, I walk past another hangar with what looks like two yak 50's. I make a gesture to the guy saying are these yak's? He goes on to say, no the Yak 50 with serial number 1 was in the back. He showed me the red and white Yak. Sure looked sweet. We walk back to the front of the hangar and are looking over the two CJ's (Chinese copies of Yak's) but these have had the underpowered Chinese engines removed and replaced with the real Russian engines that produce an extra 100 hp. He says they need to tether the tail of the planes to a truck when they do run-ups due to the power generated by the Russian engines and three bladed props. He also explained that when they receive the CJ's, they remove 316 lbs of wiring plus a 50 lb gyro and replace it all with about 56 lbs of new current wiring. They are updated with glass panels including a 7" for the passenger. On the radial engine, they also do a custom instal of MSD ignition on top of the existing magneto's.

As we continue to chat, a corsair starts up across the roadway. There is no mistaking the sound of the Corsair as a good size plume of startup smoke rises into the sky.

Walking around Chino airport is very interesting. People swap stories and do their "hangar flying". I found out that the guy that sold Behr paints to Home Depot for an endless sum of money still has his P-38, two P-51's and has just bought his brand new (not used) P-51 for 2.5 million\$\$\$. It will still take another 300K to assemble it.

As I am just about to step into my rental car and an L-29 takes off. This is a jet that Steve was working on the flap mechanism just prior to my visit. I assume the owner finally arrived to pick up his plane.

So I guess, although They make me work when I come here to California, it does have its perks.

Just like a big kid in a candy store.

Gary Arthur

The problem with being a kid in a candy store is you can't have all you can see. My condolences. Ed.

### A Story:

This story appeared in the March 2006 edition. I don't remember who sent this story to me but I thought it worth repeating. Ed.

The elderly priest, speaking to the younger priest, said, "It was a good idea to replace the first four pews with plush bucket theater seats. It worked like a charm. The front of the church always fills first now." The young priest nodded, and the old priest continued, "And you told me adding a little more beat to the music would bring young people back to church, so I supported you when you brought in that rock'n'roll gospel choir. Now our services are consistently packed to the balcony." "Thank you, Father," answered the young priest. "I am pleased that you are open to the new ideas of youth."

"All of these ideas have been well and good," said the elderly priest, "But I'm afraid you've gone too far with the drive-thru confessional." "But, Father," protested the young priest, "my confessions and the donations have nearly doubled since I began that!" "Yes," replied the elderly priest, "And I do appreciate that. But the flashing neon sign, 'Toot 'n Tell or Go to Hell' cannot stay on the church roof.

#### From "Reflections of a Duster Pilot"

This from Ivan Wismayer which he took from "Reflections of a Duster Pilot"

"We used Parathion which is highly dangerous and is no longer available. I wouldn't put out sulphur which some farmers used. If it ever caught fire it would travel right up the hopper and blow your airplane. One farmer said he wanted arsenic put on his cotton, I didn't want to as I'd have to wear a suit. I'd have to land somewhere else and he'd have to bring a water truck, rinse my hopper, and shower me. He said he'd do it....I said OK., put in writing, sign it and have a witness. If anything happens to your cattle it's your responsibility, not mine. Yeah, sure, sure. He called and said he take care of everything. I put out the arsenic and the wind changed. A little later all his animals died! I produced the letter. I never dusted with arsenic again.

We made money like bandits, because that's what we were. We did our own charging. No meter on the engine. No one knew how much we flew, or how much money we collected. Some dusters were prone to not to report the whole thing... No one knew how much money was taken and in all cases tips were not shared with the company. Living accommodation and food had to come out of the third. Quite often we'd take a bed roll and sleep on the ground under the wing of the planes. We'd take a shower whenever we could. We wanted to eat good, sleep in a room once in a while and raise hell. There were a lot of women who loved to hang around dusters.

Some pilots just carried every nickel they got in a sack inside the cockpit and never bank it. We changed towns twice a day. The pilot was supposed to send the rolls of bills back by Western Union. The pilot might take half. You could end-up with thousands of dollars.

More next month - if you like it. Ed.

This pretty picture of a Swiss aircraft was sent to me by Roland Fuchser. I've cropped it to show the tail. Ed.

