

February, 2004

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Meetings are held in the Cafetorium of the Alexander Mackenzie Senior Public School, 33 Heather Road, Agincourt, *usually* on the first Friday of each month, Oct to May (subject to change – check the Flypaper) Meetings start at 8:00 PM

For the latest club news, photos and other points of interest please check out our web site at:

www.rcfctoronto.ca

Weather Forecast: Ask the groundhog.

The Flypaper

Newsletter of the Radio Control Flying Club of Toronto, est. 1957, inc. 1967



At the January club meeting, a number of airplanes were brought in, and the three shown here are all a pretty good size. That's Ron Chapman's red and white Yak 54, top of picture: Dave Parton's white Travel Air Mystery Ship in the middle; and Arthur Krikorian's Mustang in gray primer at the bottom.

President's Message: Richard Staron

OK, ok... so the prez's last message stated that we had no snow, and people were flying, and it was going to be a great winter....that was Jan 3......boy was I wrong. I hate winter! (you snowbirds have this one figured out a long time ago).

I had a chance to speak with 3 other RC clubs in the area, Humber Valley, Richmond Hill as well as Seaton Valley regarding the Swap meet that we will be hosting at our meeting on March 5. In order to make this a success, its going to be up to us to do the best we can in bringing in stuff to sell and barter. When I looked at our swap board on the web site, I noticed that our members have a lot of equipment that they are willing to get rid off. Can you imagine the stuff that people have to sell that didn't put it on the board? How about bringing in some of those items to our swap meet.....eh? I don't know how I am going to get my HANGER 9 CAP 232 and other stuff into the car to sell....but I will be there with it whether I have to cut it in halfjust kidding....well maybe not!!!

One thing I would like to mention to our members is to use our internet message board that is set up on our web site. More and more clubs are using their boards to promote, motivate and exchange info back and for amongst their members and we should be doing the same as well. I personally think that it's a great mode of communication. For those who don't have internet access, you might want to invest in a PC.....its well worth the money....especially with

all the neat stuff you can find on the web. Problem with the internet is that we spend more time surfing the web than building or flying....hmmm!!!!

Just a bit of a reminder AGAIN.....that the beauty show is coming up in May so start building, bring it in finished or not! I am going to finish my Giles 202 this year if it kills me! I have a couple of others that are in different states of completion....so maybe I should bring those as well.

Well enough of my ramblings.....

See ya on the field

Da Prez

Radio Control Flying Club of Toronto

2003 - 2004 Executive positions

President Richard Staron 416-288-0569 rstaron@eol.ca Arthur Krikorian arthur@tangestudios.com Secretary Treasurer Guv O'Reillv 416-443-1299 joulavert1@aol.com Field Officer Bob Miller 905-839-7868 robert.miller2@rogers.com Membership Officer Paul Battenberg 416-694-4414 paulbat@sympatico.ca

Wings Officer Vacant

Non-Executive elected positions

Editor/Publisher John Riley 416-469-3990 jcmriley@sympatico.ca
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Refreshments Steve Horwat 416-439-7084 s.u.horwat@sympatico.ca
Program Director Vacant

From the Treasurer: Guy O'Reilly

I was looking for a winter project and while searching the web, I came across these plastic planes for combat. No large-scale warbird as a winter project here. Have a look at: http://www.spadtothebone.com. These planes require little time and minimal funds to construct (both were important requirements) when comparing to the cost of balsa and covering and fuel proofing, and sanding, etc. I had the radio, engine and so on... Why not? The model I decided to build is quite different: it is a "pizza-box" style plane with a flat top and bottom, a plastic pipe for the fuse and ½ inch plywood for firewall. Total cost of materials: \$15.00. But then again I have enough plastic pipe for five planes! And by the way, it took all but 20 minutes to cut the wing fuse and vertical tail. Anybody interested in trying something different let me know as I still have a five-foot section of pipe. There are hundreds of plans and different style to choose from. I will let you know how well this thing flies... whenever the weather improves a bit!

Club finance; I have started converting the revenue and expenses to the new accounting software. The transcription of the information takes a bit of time. I should have a report for you at the February meeting.

Meetings and other Events

Feb 6/04 - club meeting

Feb 14/04 – get some roses

Mar 5/ 04 -- Annual Swap Meet - NOW with participation from three neighbouring clubs

Apr 2 / 04 - club meeting

May 7/04 – the world famous RCFCT Beauty Show

Editor's note: John Riley

Since you're reading this, you must have received this issue of the Flypaper OK. Hopefully it's before the February meeting....this issue got off to a bit of a late start, so it was sent out a little later than normal. The idea is that members receive their copy, electronic or paper version, shortly before the club meeting near the beginning of the month. Any comments on the new distribution system, where you get sent the link, rather than the pdf file? Also, members are encouraged, as always, to let me know what they like/don't like about the newsletter, what type of articles might be appealing, etc.

RC Safety Bench

Here's something interesting that was submitted by Paul Battenberg:

Fellow RC flyers

My objective is promoting safety in RC flying.

I am not selling anything.

This is a Field bench called the "Standard Safety Bench".

There is also a larger one called the "1/4 Scale Safety Bench".



It has appeared in construction articles in magazines in USA, Australia, South Africa and England.

The Benches have found tremendous success and are being built all over the world.

Super Safe.

Super convenient. No more crawling around on the ground.

Strong wing restraints.

Great club project.

Just the right height, no bending over.

3 legged design allows you to get right next to the airplane. No reaching out.

Adjust high speed needle valve safely in the back of the spinning prop.

Inexpensive: our club built Safety Benches mainly from materials contributed from local merchants.

Print out this page and propose it to your club.

More information available on my club web site www.meroke.com

Contact me at CMeyer2474@aol.com

Thanks Charlie







From the last meeting...

About 35 members were in attendance at the January meeting, a little fewer than the average low 40s we usually get. The membership agreed to open the swap meet in March to other clubs, as Richard mentioned in his message. Bob Miller reported that the field may need rolling in the Spring. And Hans Paule confirmed



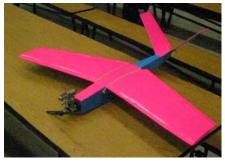
Don McDougal's beautiful Monocoupe 98 shows the quality that ARF models have achieved. Don couldn't resist some customizing – check out that highly detailed instrument panel.

his successful audit of the club books, and everything was A-OK. Former RCFCT Prez Ross Tanha showed us a new engine, a Desert Aircraft 50 cc unit that develops 5 hp, intended for an 80" Edge 540. Ross suggested that for vertical work, a

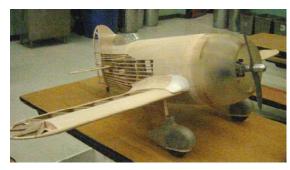
power/weight ratio of 0.4 hp/lb is ideal. Particularly noticeable

at this meeting was the great collection of planes that members brought in, that newsletter photos don't do justice to. Come on out to club meetings if it's something you don't get around to much. The atmosphere is always

relaxed and friendly (verging on rowdy sometimes, with everyone



Richard Staron's latest Combat design, with anhedral, forward swept wing. Don't stare at that colour too long without shades or you might incur retinal damage...



Ken Parton's Gee Bee R1 looks just about ready for covering. Power will be supplied by a YS 110

stoked on donuts and coffee), and there's always something neat to see.

A special offer from Richard Staron....

Combat Stuff and FREE wings offer

As most of you already know, I love to fly and design .15 size combat. A few years ago, Roger Villacourte and myself introduced the concept of "slow combat"....slow....yeah right! Anyway the concept of slow combat has sprung up around the world at around the same time we were doing it, but the new name given to it is called "SSC" short for "Slow Survivable Combat".

It is actually a spin off the wild and violent combat planes we have all seen. 1/12 WWII warbird combat is really taking off everywhere. With the low cost of engines, servos and receivers it is very quick and rewarding to have one of the planes up in the air and dueling it out. Mid airs will occur...its not a question of if....but when! So what am I leading up to? I am offering to cut a CNC foam wing for anyone in our club that wants to build and fly any type of slow or 1/12 WWII plane.....FREE OF CHARGE!!! Why am I doing this?.....cuz I want to!!!! You design the plane or show me a set of plans of a plane that you WILL build and I will cut you a set of wings.....FREE!

The gloves are off!
See you at high noon! R. Staron....aka....da Termite

Maximizing RC airplane visibility with colour

(Sources: Robert Suding ,www.ultimatecharger.com; Paul J. Burke, www.angelfire.com/indie/aerostuff/index)

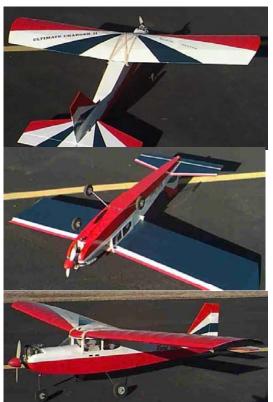
Surely all of us, at some time, have had problems properly seeing our planes in flight, whether because of lighting conditions, wanting to "see how high we could go", etc. It's pretty scary, because you can't control something you can't see. The colour, trim, and markings on a plane can have a big impact on its visibility, and there are ARF-type trainers, as well as pattern planes, where the trim could be changed to improve the visibility. Not a bad project over the winter, to spruce up the covering on a favourite old plane to enhance its visibility and make it look a little niftier too. Most of the comments and suggestions that follow were obtained from the two private web sites listed above; I don't know the authors' backgrounds or qualifications, but they seem to have reasonable ideas worth considering.

Perception: Robert Suding starts with the observation that orientation and distance perception are required to successfully fly an RC aircraft. We judge an aircraft's orientation based on the perceived position of the plane's outer edges, and the relationship between the outer edges and trim (or other discernable markings) on the fuselage or wings. Distance perception relies on a combination of the perception of the airplane's outer edges and the estimated orientation. These skills depend to some extent on visual acuity and contrast perception, abilities that naturally decrease somewhat with age. Not much we can do about the age bit (*I'll be happy to be proven wrong*), but experience and good colour design can compensate.

Solid coloured aircraft: The problem with a single colour is that, given the variety of weather, light, and background conditions, a solid coloured plane can fly into a situation where it blends into the background, and disappears. Suggested examples: a silver Mustang in an overcast sky, and a yellow Cub backlit by the sun *(mind you, these are two popular scale subjects with scale colours...)*. Red Stiks and dark blue planes can have problems in the evening or in dark clouds.

Wing and stab colours: The top of the wing and horizontal stab are usually more brightly lit by sunlight, while the undersides are in shadow, at least in straight and level flight. This relationship can be preserved for different lighting or aircraft attitudes by colouring the top lighter and the bottom darker. Many ARF trainers don't bother with this distinction, which doesn't help students. Suding states that for the average model, colour perception disappears at distances of 500 feet or more, at which point gray-scale vision provides orientation and depth perception. As a result, adjacent colours should be gray-scale opposites. A good example would be bands of red, yellow, blue and white; a bad example would be a series of colour opposites with the same gray-scale shade, like red, green, blue, and black. Overly intricate patterns are ill advised too, as they'll look fuzzy and blended more than 100 feet away. An interesting idea when choosing a set of colours is to test them by videotaping (or a digital photograph) them and playing it back in black and white.

Fuselage: With a solid fuselage colour, it's harder to establish a horizontal reference line than if there are two contrasting colours along the thrust line. A light coloured top half and a dark bottom half is helpful to beginners as well as those who do a lot of inverted maneuvers.



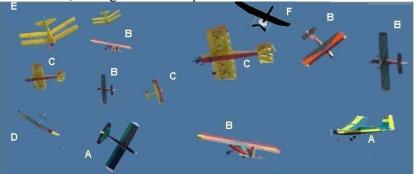
Above: as well as increasing visibility, the colours on this plane look pretty sporty too. The thin white strip on the wing underside assists with establishing a correct attitude during landings



Geometric shapes: Apparently, humans can recognize different geometric shapes about 1/10th second faster than colours. Suding exploits this for things like fast vertical rolls by putting large circles on the underside of his aerobatic planes. Might be a good idea for combat planes, where fast reactions are an asset.

High altitude considerations: Paul Burke's website has a lot of interesting RC stuff, including considerations for maximizing aircraft visibility at altitude. The suggestions are well illustrated with photographs, some of which are

shown here. He appears to be in agreement with Robert Suding on a number of points. Interesting is the suggestion of using patches of transparent covering material on the wing if it's of an open framework design. This allows sunlight to shine through, lighting them up, when the plane is high overhead. Black is suggested as a good colour for seeing the outline of the plane, and the tendency of colours to appear gray at distances increases with the number of colours. He points out that white can be a real problem on cloudy days. For mid-distance and maneuvering, Burke agrees with Suding about having dark colours on the bottom, and light ones on top.

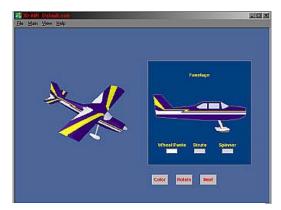


Each letter identifies a particular airplane. For aircraft A, notice the excellent contrast between the top and bottom. Aircraft C, a Big Stik, is more difficult to see.

Test your designs: Thanks to RCFCT member Leslie Mitchell for this tip. For computer users, there is free software (MACD) that will allow you to electronically "paint" your aircraft, and see how it looks at different orientations and distances. The background can be changed to suit various conditions. Not only is it neat for seeing how visible a particular colour scheme will be, it lets you get an idea of just how a particular design would look. Check out the website: http://ourworld.compuserve.com/homepages/wbusto/.



Shown above is the effect of the sun glowing through transparent covering material on open structures. The patches on the Kadet (bottom right) look effective, if a little small.



Here's a screenshot of the MACD software. It lets you select and view the effects of different colour patterns

Incidentally, all the web links mentioned here are found at Alan Tong's collection of RC web links (http://homepages.ihug.co.nz/~atong/). This is a huge collection of links that contains a wealth of information about all sorts of model and RC topics.