



The Flypaper

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

The New Executive:



A little blurry, but they're all smiling. From left: Steve Howat, Secretary; Dave Parton, Field Officer; Roger Villacorte, Wings Officer; Paul Battenberg, Membership Officer; Richard Staron, President; Guy O'Reilly, Treasurer.

DECEMBER 2002

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

**For the latest club news, photos and other points of interest please check out our web site at:
<http://www.rcfctoronto.ca>**

The President's Message

Richard Staron

First, to start I would like to give Ross Tanha and the previous executive a round of applause for doing a great job keeping the club running smoothly through membership, correspondence, treasury, maintaining the field in fantastic shape and providing a fresh crop of new students and pilots to this hobby! The Flypaper kept us up to speed as to what's new and what's old and the refreshments were always a welcome at each club meeting. For all the others who helped out at fun flies, ground instructing, field maintenance, general public communications and anyone else that I may have missed...Great job guys!!! This club could not be run without your dedication and personal sacrifices. Thank you!!

The changes to the exec were Roger Villacorte becoming the Chief Flight Instructor and yours truly is now President. John Riley has taken over the post of Editor for the Fly Paper while Mario Moran-Venegas will be responsible for providing entertainment / speakers / demonstrations for the up and coming club meetings. Lets give these guys the support, ideas, articles, presentation etc all that you can. Every little bit helps!

OK....so what's up for the next year? As you know, some members are searching for a new field within a reasonable distance from ours. This is not to say that we are moving immediately, but we are preparing and getting things ready in the event that we might have to due to all the building going on around us. When this could happen, nobody really knows. At some point in the near future, we will have to decide when to commit to start preparing a new field knowing very well that it takes about 1 to 1 1/2 years to get it ready. We will keep you informed at club meetings and via The Flypaper as well.

Speaking of the Flypaper, please keep in mind that the club is mailing fewer and fewer Flypapers and using the internet as the communication medium instead. It's cheaper and faster using this mode. Please keep your email addresses updated with Paul Battenberg. Paul has also set up an excellent message board on our web site for our club member to use...it's great!! Try to use it as much as you can. Send him any interesting web sites that pertain to our hobby and I know that he will add them to our site.

At our last exec meeting we all agreed that we will continue our tradition of having 2 fun flies, one in June and the other in Sept. Oh yes, let's not forget the infamous Frozen Finger Fun Fly held on Jan 1. Our First Fly and Sell will become part of the norm for these summer fun flies. We will also have our annual club auction or swap meet in Feb or Mar. (anyone want to volunteer as auctioneer? nudge nudge wink wink!!). Remember, you can't sell what you don't bring, so start collecting and be ready to swap and sell.

The winter months are here again which means more building time! Our members would love to see what you are building or experimenting with in your workshop, whether it be planes finished, uncovered, partially built or a new gadget or tool that you built or found. Bring in your creation to the club meeting for all to see and discuss. I will personally be bringing in something for the December meeting.

In closing, I look forward to working and flying with some or all of you in the next season. If I don't get a chance to see you before the festive season is upon us, Seasons Greetings to all!

See ya on the field!

Richard

Radio Control Flying Club of Toronto

2002-2003 Executive positions

| | | | |
|--------------------|------------------|--------------|--|
| President | Richard Staron | 416-288-0569 | rstaron@eol.ca |
| Secretary | Steve Horwat | 416-439-7084 | s.u.horwat@sympatico.ca |
| Treasurer | Guy O'Reilly | 416-443-1299 | joulavert1@aol.com |
| Field Officer | David Parton | 905-430-0913 | dparton@interhop.net |
| Membership Officer | Paul Battenberg | 416-694-4414 | paulbat@sympatico.ca |
| Wings Officer | Roger Villacorte | 416-391-2602 | rckev@hotmail.com |

Non Executive positions

| | | | |
|------------------|------------------------|--------------|--|
| Editor/Publisher | John Riley | 416-469-3990 | jcmriley@sympatico.ca |
| Fun Fly Director | <i>Vacant position</i> | | |
| Refreshments | Romeo Ramos | 416-441-0134 | romepamela@AOL.com |
| Program Director | Mario Moran-Venegas | 416-787-4475 | moran5@primus.ca |

From the Membership Officer:

Paul Battenberg

Club membership dues for the 2003 season will remain the same as last year for all members. MAAC dues, as you are probably now aware, have increased to \$50.00 for Open members. **Please note that there is no more Senior category.** When completing forms, please remember that if you want the club to process your MAAC for you, a MAAC form is still necessary, as well as our club form. Also, if you don't have your wings, you need to fill in the Declaration Form too. We really do prefer a cheque over cash if at all possible.

For those of you with access to a computer, all of the above forms are on our web site at www.rcfctoronto.ca on the FORMS page.

Meetings and other Events

December 6 / 2002

Last club meeting of the year

December 8 / 2002

Second Annual Christmas Dinner.

Don't miss it.

January 1 / 2003

The **famous** Frozen Finger Fun Fly

January 10 / 2003

First club meeting of the new year

February 14 / 2003

Club Meeting.

March 7 / 2003

Club meeting.

April 4 / 2003

Club meeting

May 2 / 2003

Club meeting

From the Treasurer:

Guy O'Reilly

During our last meeting of November 1, 2002, clarification was requested about the classification of income and expenses. Here are the income and expense categories that appear on the club's financial reports I prepared, as well as a brief description for each. Hopefully this will provide the necessary clarification and transparency. Please do not hesitate to contact me if you would like more information about the club finances.

| | |
|---------------------------|---|
| BALANCES | |
| Bank Balance | This is the balance of the funds in the club's bank account as at the date specified. |
| GIC | Investment that the club makes, if any in guaranteed investment certificate(s). The figure is reported from the latest bank statement and shows the accrued interest on the investment. The GIC purchased are cashable at any time to maintain liquidity. |
| Petty Cash | Cash collected from members during the sale of tickets (50/50 draw) or collected from the sale of hot dogs and refreshments at Fun Fly and other club events. The amount of cash is retained is typically less than \$20.00. |
| Liabilities | Un-cashed cheques issued and known and accrued club expenses (such as the payment for club rent for the year or portable toilet rental). |
| RECEIPTS | |
| Club Membership Collected | Membership collected from members excluding MAAC memberships. The primary source of income for the club is membership paid. The figure includes regular, senior and junior membership fees and initiation fees. |
| MAAC Membership Collected | MAAC Member ship fees collected from members and remitted to MAAC. This amount may also include refunds from MAAC. This would also include MAAC contributions to open Fun Fly where the club hosts MAAC sponsored events open to all MAAC members from other clubs. |
| Interest | Interest earned on cash on deposit or on investments. This figure excludes the accrued interest reported as part of the GIC Statement balance. |
| Sale of Hot Dogs | This item is used to record the income on the sale of hotdogs and refreshments at the Fun Fly events. The description could be amended to reflect any registration fee charged and collected for special events such as registration fees for fun fly, MAAC sponsored fun fly, etc. |
| Ticket Sales 50/50 Draws | A source of income for the club is the sale of tickets for the 50/50 draws, sale of ticket at fun fly, registration charges, etc. |
| EXPENSES | |
| Meetings | Costs of rental permit and rent charges paid to the School board or other landlord for the use of premises; the cost of refreshments and food (Donuts!!). Also included are the prizes paid for the 50/50 draw, the membership (i.e. draw for attendance), |
| Fun Fly | All expenses related to Fun Fly event, separated by date of the specific event. Expenses include costs of food and refreshments, condiments, prizes, rental of equipment (such as additional portable toilets). This amount would also include cost of publicity for the event. |
| MAAC | All collected membership collected and paid to MAAC on behalf of club members. This may include expenses for rental of equipment from MAC as well as field registration fees paid. |
| Field Rent | The cost of the rent payments for the field. |
| Field Maintenance | Costs associated with grass cutting, lawn mower maintenance, gas, repairs, fence mending, shed repairs, table construction material and repairs, portable toilet rental. |
| Miscellaneous Expenses | Stamps envelopes for mailing of membership forms to MAAC, bank charges, equipment purchases not directly attributable to any other category, such as club decals, forms printing, . |

Note: Guy advises that members can see the actual financial figures at any club meeting (Ed.).

The Editor's Note:

John Riley

Well hi everyone, I'm your new editor, so allow me to introduce myself. A few of you know me, but probably most of you don't – I'm the chubby 45 yr old guy with glasses and a beard, and presently my main plane is a red 4-star-40. I joined the club in April 2001, and got my wings that year. My main instructors were Dave, Roger, and Curt – different guys with different approaches, but they were all really decent to me, and now I get to thank them publicly. In fact I find the whole club to be friendly and positive...about a dozen years ago, I was living down in the States for a while, and took up RC airplanes for a season. Don't get me wrong, there's undoubtedly loads of excellent RC clubs down there, but I can't say that for the one I joined. Not that everyone was *horrible*, but the atmosphere was crummy and I could scarcely get anyone to lift a finger to help me. After losing two airplanes in one summer, I quit out of overall discouragement. So sure, there will sometimes be occasional problems, but we've got a really good thing going here. My motivation for becoming newsletter editor (aside from becoming wildly famous and winning national journalism awards) is to make a small contribution back to the club, as well as have a little fun.

I think my approach for *the Flypaper* will, at least in the beginning, be along the lines of my immediate predecessors, Ian Johnson and Richard Staron, although there might be the odd twist here and there. The photographs and other images that will appear will of course look best in the electronic format, with superior resolution and colour; hopefully the appearance will be adequate in the printed version. As you've no doubt heard before, contributions, of (almost) any sort, are highly encouraged. From submitting an article, to a "letter to the editor", get your name in lights here. There's always room for For Sale/Items Wanted, as well as hints& tips. Also, I'm open to suggestions/complaints (private or otherwise); feel free to contact me by email, snail mail, or phone (complete with a weird answering machine message during the day).

May all your landings be reasonably decent....

At the December RCFCT Club Meeting....

- Paul Battenberg will bring in a Ryobi 31cc gas engine which he's modified from a weed eater into a very acceptable gas model engine.

- Richard Staron will give a complete demonstration of his new CNC foam cutting machine, cutting wing cores right there and then.

Yes folks, all this, and donuts too!



Don't forget the Second Annual Christmas Dinner at the Mandarin Restaurant on Sunday, December 8th. at 6:00 PM. located on the north west corner of Birchmount and Eglinton. Reservations are under the club name as well as mine. We now have 25 couples (50 people) on the list. I can still take more, but time is running out. Most importantly, if you have already advised me but have to cancel, please let me know. I have to give a final tally on the Saturday before. I had to leave a deposit of \$100 from my own pocket, and I could lose it if a few people didn't turn up. Thanks in advance. See you there.

Paul Battenberg - 416-694-4414 or paulbat@sympatico.ca

Background on Balsa

(sources: Sig Manufacturing, 1979 World Book encyclopedia, various web pages)

Although in recent years, a variety of newer materials, like plastics, polymers, foam and the like have seemed to play a larger role in model airplane construction, balsa wood is still pretty common. Here's some information about balsa, which I at least never hear much about outside the hobbyist context.



Not something you see at your local Home Depot very often.

Its fancy botanical name is *Ochroma lagopus*, and balsa is technically a hardwood. The word balsa is Spanish for raft, so named because it was used a lot for rafts by people in tropical countries, due to its excellent buoyant characteristics. Balsa trees grow in Central and South America, and most modeling grade balsa comes from Ecuador, which is the world's largest producer. Balsa requires a tropical environment to thrive (guess that's why you don't see too many balsa trees around here), and it grows quite fast – six months after germination, it's 1 ½ inches in diameter, 1012 feet tall. It's ready for harvesting in 6-10 years, when it's reached a height of 60-90 feet, with a diameter of 12-45 inches. In the jungle environment, balsa acts as “nurse” trees, providing shade and protection for slower growing species. Rather than large stands or forests, balsa wood trees tend to grow individually or in small groups.

This has made it difficult for large scale production and the trees have to be individually cut down with machetes and dragged to a nearby river, the old fashioned way.

What makes the stuff so light? Basically, the cells that make up the wood's structure are large and thin walled, so when the wood is dried out, it contains a lot of air. In fact, when it's growing, green balsa contains about five times more water by weight than wood material – this pumped up state keeps it rigid and gives it the required strength. Green balsa is slowly kiln dried until the moisture content is about 6%. With a greater strength-to-weight ratio than oak, balsa is the lightest commercially used lumber.



Hey Dave, I think the field needs mowing! Actually, this is a jungle shot from Ecuador, and those are balsa trees on the left.

It seems that the commercial applications for balsa wood are not what they once were – Compton's Online encyclopedia helpfully tells us that balsa is “widely used for the construction of model airplanes and other toys”. Yeah, I was a bit insulted too (wonder what the other “toys” are?). Formerly, it was used in buoyancy devices, other marine applications, and as an insulating material; it's been replaced by styrofoam. Perhaps surprisingly though, only about 10% of balsa is used for models, and most is used to manufacture structural composite materials. A prominent company that does this is an outfit called *Baltek Corporation*, and using an end grain balsa and resin composite, their products are found in the floor panels for Corvettes, and in the engine intake nacelle cowling of Boeing's proposed X32 next generation fighter. Pretty high tech really; I guess we're in good company.



*Left: since 1997, floor panels in Corvettes have been made of a balsa composite.
Right: the Boeing X32 contains balsa, just like model planes do.*



Hints and Tips

- This process can be used when making springy tail wheel assemblies from spring steel.

To make a hole in spring steel, take a piece of copper tube, slightly smaller in diameter than the required hole size. Fix in drill chuck and keep the end charged with carborundum paste, while rotating at slow-medium speed. (valve grinding compound works well.) - *submitted by Richard Staron*

The Acetone Transfer Method of Making "Print Wood" -

Introduction:

One of the more tedious aspects to building from plans is the dreary task of transferring the part templates to balsa or ply sheet so that you can cut them to shape. I really believe this is one of the main reasons you don't see more planes built from plans; once you have the parts cut out, building from plans is just like building from a commercial kit.

The acetone method is the best and fastest method I've found for transferring templates to sheet stock. I say "best" because in my experience, it gives the most consistent results in terms of making it easy to cut an accurate part with the least hassle.

How To Do It:

1. To begin, you need to make photocopies of all the parts templates. Ideally, these copies will be fairly dark, with nice heavy black lines. Do measure the copies to make sure they're 1:1 copies of the plans in both height and width. Cut the templates apart, but don't make any effort to cut close to the lines.

2. Wet the sheet stock with acetone using a paintbrush. Keep brushing back and forth until the wood goes from "wet" to "damp". Experience will show just how damp it needs to be for a perfect image.

3. Lay the photocopied template face-down on the sheet stock (pay attention to grain direction) and then press/rub it in place for a few seconds.

4. When you peel back the template, you should have a perfect mirror image on the sheet stock. Once you transfer all the templates to balsa, you in effect have an old-fashioned "print-wood" kit, ready to be cut out and assembled.

Trouble Shooting:

Image is too light: The three errors that can cause this are:

1. The photocopies aren't dark enough: You should see nice heavy black lines on the copies.
2. The wood is too dry: There has to be enough acetone in the wood fibers to "pull" the toner from the surface of the paper and allow it to adhere to the wood.
3. The template isn't pressed long enough: You may need to press down for up to 10 seconds to get a good transfer.

Image has a washed-out appearance: This happens when the wood is still too "wet" when the template is pressed in place. The wood should be damp; if it's visibly wet, the excess acetone will tend to dilute the toner, rather than transferring it from the paper to the wood. By brushing back and forth for a few more seconds, you force the acetone down into the wood fibers, thereby getting a better transfer without diluting the toner.

Once you've mastered the art of making your own print-wood parts, you'll be a lot more willing to build from all the terrific plans that aren't offered as kits. Good luck! - *found on the web, by Jim Ryan (<http://home.fuse.net/ryan/acetone.html>)*

For Sale:

Saito 180 4 Stroke, in excellent condition, has had only 6 tanks [20 oz] through it since new a year ago, not even run in yet. I'm into gas engines now, \$475.00 Call **Al Horner** at **705-878-5762** or e-mail: al.horner@quicklinks.ca