



# Stetson Flyer

Stetson Flyers Model Airplane Club

May 2002

## Next Meeting DISCOUNT HOBBIES NIGHT!

Members and guests are invited to bring **ONE** old item for Bring'N'Brag

Guest Speaker:

### Peter Zuuring

Avro Alliance

Peter's organization is planning to build a flying replica of the Arrow by 2009!

Richard will also be honouring two Ottawa Valley 'Old Timers' who have been in the R/C hobby for a very long time!

**Tuesday, May 28<sup>th</sup> 7:30 pm**

***Use the back door  
to the museum!***

## Discount Hobbies provides Coffee and Prizes for meetings— Thanks!!

Richard Robichaud of Discount Hobbies has provided coffee with all the fixings for all of our meetings this past year, just as he has done for the past 18 years! Richard has also provided Gift Certificates from his store for prize draws for most of the meetings and club events. Please show your appreciation by stopping by his store and saying thanks.



### Lone Star Café Prizes

The Lone Star Café donated Gift Certificates for last month's Bring'N'Brag session during the Auction meeting April 30.

Thanks to Fabian Mondaca for arranging this with Lone Star Cafe!

Thanks, Lone Star!

## Coming Events...

June 2 <sup>nd</sup>	Ed Rae Memorial Fun Fly
June 9 <sup>th</sup>	Breakfast Fun Fly
Aug 31 <sup>st</sup> /Sept 1 <sup>st</sup>	Pattern Event
Sept. 15 <sup>th</sup> /16 <sup>th</sup>	IMAA Giant Scale Event
Sept. 24 <sup>th</sup>	Regular Meeting

## Club Officials and Contacts

<b>President</b>	Gerry Nadon 824-9100 president@stetsonflyers.com
<b>Vice-President</b>	Peter Barnes 824-5352
<b>Secretary</b>	Erich Zappe 830-7549 secretary@stetsonflyers.com
<b>Treasurer</b>	Dan Murphy 663-5188 treasurer@stetsonflyers.com
<b>Chief Flying Instructor</b>	Rick Ramalho 741-3337 cfi@stetsonflyers.com
<b>Webmaster</b>	John Jackson 445-5726 webmaster@stetsonflyers.com
<b>Newsletter</b>	John Jackson 445-5726 editor@stetsonflyers.com

### **Mailing Address:**

The Stetson Flyers Model Airplane Club  
P.O. Box 456, Orleans, ON, K1C 1S8

### **Web Page:**

<http://www.stetsonflyers.com>

### **Dues:**

\$55.00 per calendar year; \$30.00 for students under 18

### **Meetings**

The Stetson Flyers meet at 7:30 on the last Tuesday of each month, except for December, June, July or August. The meetings are held at the Canadian Aviation Museum in the Bush Theatre.

## Receive this newsletter via email!

Instead of sending a printed newsletter by Canada Post, we can send you an email notice with the web site address where you can download the newsletter each month. The file is an Adobe Acrobat PDF file, which means that you need to use a FREE Acrobat Reader software to view or print the document. There is a link to the Adobe site to get the FREE software on our web site.

The benefits to you are faster delivery, colour pictures, less cost to the club, and environmentally friendly to boot!

To receive the newsletter by email, send **your** email address to [editor@stetsonflyers.com](mailto:editor@stetsonflyers.com)

## Please visit our web site at

<http://www.stetsonflyers.com>

Our web site is hosted as a community service by  
**Magma Communications**  
(613) 228-3565

Would you like a member discount on your internet access? Contact club member Rick Ramalho at [rick@magma.ca](mailto:rick@magma.ca) to receive information on discounts for Stetson Flyers members.

## T-Shirts—2nd Chance!

Any members who missed the run on the Stetson Flyer shirts can contact Doug Tufts as there are a few left in white and "Prairie Dust" colour. The shirts are \$20 each.

You can reach me at 613-745-0041 or e-mail [doug\\_tufts@hotmail.com](mailto:doug_tufts@hotmail.com)

**Reminder**—The gate code to the field was changed April 1st - don't forget your 2002 membership card and MAAC when coming to the field to fly. The new code is on your membership card, but you should have both any time you are flying at our field.

Looking for event dates for other clubs in this area? Check out the calendar on club member Darcy Whyte's web page:

<http://www.calmdays.com/h/cd/calendar.asp>

If there is an event that is not listed, you can add to the calendar at the top of the page.

**For Sale:** If you have something you would like to sell, feel free to send me the details and I will add it to our next newsletter!

## Meeting Minutes March 26, 2002 Aviation Museum

- 1.0 The meeting opened with Gerry thanking all those who braved the snowstorm to attend.
- 1.1 The minutes from the last meeting as printed in the newsletter were accepted with Jim Brown making a motion and Bert Fortier seconding.
- 1.2 Dan reported a bank balance of \$5837.00 with 70 members to date. The rent cheque has also been cashed.
- 1.3 The next newsletter will only be forwarded to paid up members and the gate code will also be changed on the 1<sup>st</sup> of April.
- 1.4 Rick Ramalho has offered to be the Chief Flying Instructor again for this season. He will be offering ground school for new students.
- 1.5 It was decided to host the Ed Rae Memorial Fun-fly on Sunday June 2. Volunteers to help out will be needed. Mike Ingham offered to help with registration. Bert Fortier and Erich will work the canteen. Rick Ramalho will take care of notifying other clubs.
- 1.6 Gerry will talk to Michel Boulerice about a suitable date for the breakfast funfly.
- 1.7 The Giant Rally for this September will have IMAA festival status ensuring support and promotion from local chapter.
- 1.8 Mike Ingham spoke on the IMAA Giant Scale Symposium hosted at the museum the past week Attendance was good with a variety of clinics and a static display. Denis Laforte was the draw winner for radio. Mike thanked Richard Robichaud for his support with helping with the radio purchase and the coffee.
- 1.9 Giant scale events for the local chapter include north of Toronto off Highway 400, Kingston, and our event.
- 2.0 Dan is going to investigate club jackets.
- 2.1 Work party day is planned for mid- May.  
The usual tasks will be needed to be done. Other jobs may be building a larger shelter, sectioning of a part of the pits for reseeding, and enlarging the parking lot.
- 2.2 Next meeting is our annual auction.
- 2.3. Jim Brown was awarded the Pranged Pig for scouting out low cloud cover while attending Jets over Deland this winter.
- 2.4 Fabian Mondaca was thanked for contributing some gift certificates from the Lone Star Café. Thanks to Richard Robichaud for supplying coffee.
- 2.5 a Motion to close the meeting by Jerry Elias seconded by Bert Fortier was accepted.

## Meeting Minutes April 30, 2002 Aviation Museum

- 1.0 Gerry opened the meeting by welcoming all.
- 1.1 Dan reported that current membership stands at 90 members. The current bank balance is \$7234.00.
- 1.2 John Jackson reported that all is going well with the newsletter and thanked all for their contributions.
- 1.3 Rick Ramalho announced that student nights will begin next Tuesday.
- 1.4 Upcoming events were reviewed. The proposed Breakfast FunFly is planned for early June with the exact date to be announced. The Ed Rae FunFly will be on June 2. Later events include the Pattern event and the Giant rally. Some members will be attending the World Scale Championships in Tilsenberg.
- 1.5 The flying of the airship at the 67's hockey games is finished for the season. Thanks to Ed Whynott for taking on the task and those that helped out at the games.
- 1.6 Dan has been looking into club jackets and he reported that there are two styles worth considering. Pricing is affected by quantity ordered. Dan will try to bring samples to the next meeting.
- 1.7 At the field last weekend, Gerry organized a group to seed the east side of the pits.
- 1.8 The Work Party is scheduled for Saturday May 11. Duties will include the rolling the field, painting, gravel for the parking lot and driveway, and tidying up. Ed Whynott has offered to prepare lunch and Richard Robichaud is supplying his generator and preparing coffee.
- 1.9 Gerry will be contacting Walter Hill to plan for further renovations at the field. Projects for this year include brush removal, further ditch cleaning, and fill for the North-South runway.
- 2.0 For safer flying at the field, Gerry offered some ideas and reminders. A new frequency board will soon be installed at the field. Frequency pins are available from Discount Hobbies free of charge. All club members are urged to use them. When flying at the field use the patio stones and we must respect the power lines along Frontier Road. Low flybys should never be done over the runway. Gerry also asked that planes do not turn into the pits after a flight. Breaking in of engines should be done away from the pits and the parking lot. Probably best near the North-South runway.
- 2.1 The next meeting is to be hosted by Richard Robichaud of Discount Hobbies. The theme is all things old.
- 2.2 Rick Ramalho was awarded the Pranged Pig for combat recklessness.
- 2.3 The business portion of the meeting concluded with coffee, Bring'n'Brag, and the annual auction.

## President's message

Here we are again, a new season is just around the corner. I have some catching up to do.

Jan. 1<sup>st</sup> first flight event was won by Darcy White. He got a \$15.00 certificate from Discount Hobbies. We had 6 participants.

At our Jan. meeting, we held an auction for Ed Rae and we collected \$350.00 to be given to the family. Thank you to all participants. Also, Ed Rae's daughter Barb and husband Gerry have offered to take care of the grass cutting, for \$800.00 per season. Thank you.

At the February meeting, Scott Clarke suggested a fun fly be in Ed Rae's recognition to his contribution to the club. Result is, the June fun fly be named "The Ed Rae memorial fun fly".

At our Jan. meeting we had a special guest, Dave French, a good friend, past president, past everything in our club. He also came to the winter fun fly. He sure was nice to see him.

Ken Langille gave a report, as well as a financial report of last year's pattern event. He proposed this year's event for Labour Day weekend.

The club's Giant event will be held Sept. 15, 16.

Our winter fun fly was a grand success. Thanks to Ed and Dan and to those who participated, it was fun. Dave's chili was fantastic. Thanks.

At our meeting we should have made a bigger deal, about the IMAA Symposium March 23<sup>rd</sup> at the aviation museum. There will be commercial booths and a static display, as well as prizes. Please come and bring a model if you can.

Now as of May 1<sup>st</sup>, we are a narrow band field. 99.99999% of members are on narrow band radios. This also means a pin to match. So don't show with the wrong pin and be offended if you are noticed. They are free from Discount Hobbies.

Safety, the campaign is on, join in. This is a subject we have neglected. You will hear more.

Next meeting, we will have short video on safety. Let's not forget "Bring 'N'Brag".

## Coming Events in our Area

### Third Annual Ottawa Electric Fun Fly

Saturday, June 8 2002 (Rain day June 9) 9 am to 5 pm.

A joint Ottawa Regional Electric Organisation (OREO) and the Ottawa Radio Control Club (ORCC) event staged on OREO's huge sod farm field. See <http://www3.sympatico.ca/rwoolley/field1.htm> for directions to the field

Free flying with Speed 400 pylon racing ([http://members.rogers.com/ldionne5531/rc/e\\_racing.htm](http://members.rogers.com/ldionne5531/rc/e_racing.htm)), combat and F5J (<http://www.aei.ca/~ouroboros/f5jrules.html>) events.

### Raffle & Prizes

Contact Mike Anderson ([mikea@magma.ca](mailto:mikea@magma.ca)) (Ph: 613 258 5817) for more info

## IMAA Events

### IMAA Chapter 617 Giant Scale Rally

400 Club Field July 13-14/02

### IMAA Chapter 217 Kingston Giant Scale Fun Fly

**August 17-18/02** LF\$5 (CDN) reg 8:30am fly 9am-Dusk RV SF GR food/bev Saturday Night "Kingston Roast Beef Barbeque Dinner" Located: Kingston Remote Control Club Kingston, Ontario

**Contact:** Mike Ingham 140 Desmond Ave Kanata Ontario, Canada K2L 1G2 (613) 836-6544 Email: [mingham@ca.inter.net](mailto:mingham@ca.inter.net) or Rolly Siemonsen [rollys@kingston.net](mailto:rollys@kingston.net) Website: [http://www.geocities.com/krcm\\_home/index.html](http://www.geocities.com/krcm_home/index.html)



## Auction a Huge Success!

Mike Ingham did the auctioneer's honours at the last meeting helped all that neat stuff move to a new home.

The auction was held inside the workshops of the Canadian Aviation Museum.

## Extend Engine Life

Helpful tips to keep your powerplant happy!  
by the staff of Model Airplane News

**Peter Barnes has suggested that our members may find the following article useful. This article is found at:**

[http://www.modelairplanenews.com/how\\_to/engine\\_life1.asp](http://www.modelairplanenews.com/how_to/engine_life1.asp)

Today's 2-stroke glow engines are technological marvels; they're powerful, lightweight, easy to use and, with proper use and care, will last for many years. Next to the radio system, the engine is one of the most expensive investments we make in RC. Over the years, we've learned a lot about the care and feeding of engines, and we know there aren't any secrets to operating a model airplane engine correctly. From adjusting the fuel mixture and choosing the best glow plug to proper maintenance and using common sense to improve reliability, this article is full of helpful hints and information to help you have a happy relationship with your 2-stroke glow engine.

### Easy Starting

Nothing is more frustrating than owning an engine that's difficult to start. Our frustration often leads to a

flight that ends with a dead-stick landing or a crash. When you start any engine, there are three things to remember. For combustion to occur, your engine needs air, fuel and fire (heat). If your engine won't start, check the carb to make sure that air and fuel are available, and check your glow plug to ensure that it provides enough heat to ignite the air/fuel mixture. Remove the glow plug and attach the glow driver; its element should glow brightly. If it doesn't, replace it; if it does, reinstall it. Close the needle valve and then open it three full turns. Place your thumb over the carb, and flip the prop several times until fuel is drawn through the fuel line and into the carb. If you remove any one of these three elements from the equation, your engine will not start.

### Secure fuel lines

Proper fuel-line installation is very important. If your fuel line is too big, it may leak air or even slip off in flight. Fuel lines come in several sizes, so use the size that best fits the carburetor's fuel fittings. Air bubbles in the fuel line may cause the engine to run lean, and if the line slips off, the engine will die. Be sure that there is adequate slack in the line, and secure it to the fuel fitting with a wire clip or a small length of fuel line slipped over the end of the main line.

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### Tight Seals

If your engine begins to run erratically, and the mixture leans out even after you've adjusted the needle valve, you may have an air leak in the carb. Make sure that the carb is firmly and properly attached to the crankcase. If the intake is sealed with an O-ring, check it for cracks or breaks and make sure that it's seated properly, lies flat and isn't distorted when the carb-attachment screw is tightened. Make sure that all the adjustment screws and the needle-valve assembly are properly sealed and work correctly.

Last, check that the fuel-intake fitting is tightly screwed into place and that it isn't damaged or cracked. The fuel tank and fuel lines must be properly and securely installed. If you have previously nosed the model over or made a hard landing, the fuel pick-up clunk may have shifted forward in the tank; this can pinch off the fuel supply. The clunk and pick-up line should move freely, and you should be able to hear the clunk rattle in the tank.

### Fuel Flow

If your engine always runs rich or floods easily, check the position of the fuel tank. The tank should be installed in the fuselage so its centerline is at or slightly below the carburetor's spray bar. Use scraps of foam to position it securely so it can't move around in the tank compartment. If the tank is too high in the fuselage, fuel will tend to be siphoned out and run freely into the carb. Conversely, if the tank is too low or too far away from the carb, the engine may have difficulty drawing fuel into the carb, and it will run lean. To improve fuel draw, attach a line from the pressure fitting on your muffler to the tank's vent line. If you use a third filler line with your tank close it off to allow the muffler pressure to enhance fuel draw.

### Idle reliability

An engine that idles poorly can be frustrating. The last thing you want is for your engine to quit during a landing. Proper fuel mixture, too much fuel line between the tank and the engine and the type of fuel and glow plug you use can all affect an engine's ability to idle reliably. The most common problem is a too-rich mixture. Adjust the high-speed needle for a slightly rich mixture and then adjust the idle. Start the en-

gine and adjust the throttle for an idle of 2,100 to 3,000rpm. After several seconds, advance the throttle to full open. If the engine sputters and spits raw fuel out of the carb, the idle mixture is too rich. Stop the engine, and turn the idle adjustment clockwise (in) about 1/4 turn to lean the mixture. Repeat this procedure until the engine transitions smoothly from low to high speed. If you have an air-bleed carburetor with a small hole at the front of the carb body and an adjustment screw control idle, turn the idle screw in to richen the mixture.

### Happy glow plugs

The glow plug is a critical part of the engine's overall performance; you can choose from several types, but always refer to your engine's instructions for the recommended plug. Glow plugs come with long and short thread parts, with or without an idle bar and are rated for hot or cold operating temperatures, but they don't last forever. The first sign that a plug is on its way out is a drop in rpm when you remove the glow-plug driver; also, when an engine that normally idles well suddenly doesn't run well at low rpm, you have a problem. If you use a plug that is too hot for your engine, the engine may suffer from detonation and pre-ignition and might overheat and run lean. Using a plug that is too cold will result in lower top-end rpm and poor idling. Small engines (.15 and smaller) should use short-reach plugs; a plug that's too long may hit the top of the piston and damage the engine.

### Staying cool

A cool engine is a happy engine. One of the worst things you can do to an engine is to run it lean. This increases its temperature and can drastically shorten its life. Always use a tachometer to adjust peak rpm and then richen the mixture slightly for a 200 to 300rpm drop from the peak reading. If your engine is inside a cowl (such as in a scale model), make sure you provide adequate ventilation. Ideally, the air-exit area should be



**A reliable idle is very important, especially during landings. A carburetor can have either a low-end needle-valve adjustment (left) or an air-bleed hole in the front of the carb housing (right). Adjust the high-end needle valve be-**

at least twice the size of the air-entry area. Don't block the air outlet with the engine's muffler, or you'll greatly increase the engine's operating temperature.

### **A GOOD MIX**

When you hear someone talking about adjusting an engine, you'll often hear them refer to "the mixture." This is the mixture of air and fuel that is combined in the carburetor. Fuel and air enter the venturi, become atomized and enter the engine through the intake port. The atomized mixture then enters the crankcase and is transferred to the combustion chamber through the bypass ports. The needle-valve assembly brings the air and fuel together and controls the ratio between the two. If there is more air in the mixture than the engine needs, the mixture is "lean." If the mixture has more fuel than is required, it is "rich."

Of the two, a too-rich mixture is preferred, as little (if any) damage will result from running your engine on the rich side. Running your engine too lean, however, will overheat it and, if you do it too frequently, you'll damage the engine.

### **Proper Compression**

Compression is important to a glow engine. As well as affecting the density of the fuel mixture, compression is also necessary for the glow plug to fire. If your engine becomes difficult (or impossible) to start, compression may be low. To fix this, check the glow-plug and engine-head bolts to make sure they are tightly fastened. You should also check the backplate attachment bolts. If the cylinder-head bolts are loose, air can leak into the combustion chamber, and this will affect performance. If you have been running your engine too lean, the piston and sleeve fit can be worn out, and this will prevent your having a tight seal. If this is the case, you'll have to replace the worn components.

### **Keep your engine clean**

If you fly off grass, there's always a chance that your airplane will nose over or overshoot the runway on landing. The odds are pretty good that debris will get onto and inside your engine. Always clean your engine after a mishap, and never turn the prop shaft until you're sure the engine's inside is clean. If they aren't removed, dirt and grit can impede engine cooling; even worse, ingested debris can ruin the interior of the engine. Clean the engine by plugging the muffler's outlet and the carburetor's venturi with small wads of paper towel. Stand the plane on its nose, and spray a mixture of dishwashing liquid and water onto the engine. Scrub the engine with a toothbrush, and use a toothpick to remove debris from between the cooling fins. Wipe the engine clean and let dry.

### **FUEL FILTERS**

There has always been debate about whether or not to use a fuel filter between the model's tank and the engine's needle valve. For years, I've run my engines without an in-line filter, and I have never had a problem with fuel blockage. This is because I filter the fuel three times before it gets to the tank.

First, I use a sintered-bronze filter as the pick-up clunk in my main fuel jug. It prevents any large particles from leaving the jug.

After the fuel exits the fuel pump, it passes through a Sullivan Crap Trap, which removes any fine particles the first filter may have missed. The Sullivan filter has a transparent body and a fine mesh screen at both ends; you can see whether there is anything in the fuel.

The last filter I use is a Du-Bro Final Filter. It has two micromesh screens to remove the tiniest particles from the fuel. I use this filter between the fuel-pump line to the model's filler line. The filters are progressively finer, and this keeps out any contaminants that might be in the fuel.

To minimize the chances of your fuel becoming contaminated, change the pick-up lines in your jug twice a year. The nitromethane in the fuel can degrade the lines, and they are inexpensive to replace.

### **Engine corrosion**

Corrosion is the main enemy of our engines. It forms on the bearings and other ferrous components. The alcohol contained in glow fuel is hygroscopic (it attracts moisture). To prevent corrosion, at the end of the flying day, always run your engine until it is dry of fuel and use after-run oil. When you've finished flying for the day, empty the fuel tank, start the engine and let it run until it quits. This will ensure that there isn't any fuel residue left in the engine. Squirt after-run oil into the carburetor and the glow-plug opening, and turn the prop manually several times to fully coat the inside of the engine with the protective oil. Before storing an engine for an extended period, remove it from your model, oil it well, wrap it in a cloth and place it in a sealable plastic bag for safekeeping.

How much fun we have when we fly our models is directly proportional to how well our engines behave. Taking proper care of them is the best way to keep them happy. It's time well spent and an investment that keeps paying us back.

To see all the original pictures and diagrams, please visit the original article on the web:

[http://www.modelairplanenews.com/how\\_to/engine\\_life1.asp](http://www.modelairplanenews.com/how_to/engine_life1.asp)

# Stetson Work Party Day—May 11, 2002

