



# Stetson Flyer

Stetson Flyers Model Airplane Club

January 2005



## Pete Tessier—First Flight 2005!

Pete Tessier braved the slick ice on New Year's day to compete for bragging rights for the coming year. "It was touch and go for a while—if I had not been the only competitor, it could have been a totally different outcome."

Pete's model is normally an indoor type model, covered in Hilroy blue lined cellulose covering which also provides the structure for the model. Weighing in at a mere 21 grams, Pete hand-launched this beauty into history. Powered by a steady stream of hot air, the model did not want to come down for a while. Eventually Pete stopped talking and without it's hot air to power it, the model slid in for a perfect landing. Great work Pete!



## New Website Feature **SHOW AND TELL** Gone is the Pranged Pig

Have a special project you would like to show off.  
What to share some building techniques tips and tricks  
Just to brag about your new acquisition.

Send us your pictures and a few words and we will  
post it. More info on our website.

[www.stetsonflyers.com](http://www.stetsonflyers.com)

## Next Meeting

Tuesday, January 25<sup>th</sup>  
7:30 pm

*Don't forget your "Bring'n'Brag"!*

## Coming Stetson Events...

January 25 <sup>th</sup>	Regular Meeting
February 22 <sup>nd</sup>	Regular Meeting
March 29 <sup>th</sup>	Regular Meeting
April 26 <sup>th</sup>	Regular Meeting
May 31 <sup>st</sup>	Regular Meeting
June 11/12 <sup>th</sup>	Ed Rae Zone Fun Fly

Our website address: <http://www.stetsonflyers.com>

## Club Officials and Contacts

<b>President</b>	Scott Clarke	613-824-5114
	president@stetsonflyers.com	
<b>Vice-President</b>	Greg Marshall	613-729-9105
	vicepresident@stetsonflyers.com	
<b>Secretary</b>	Pete Tessier	613-443-1472
	secretary@stetsonflyers.com	
<b>Treasurer</b>	Rick Ramalho	613-741-3337
	treasurer@stetsonflyers.com	
<b>Membership</b>	Greg Marshall	613-729-9105
	vicepresident@stetsonflyers.com	
<b>Chief Flying Instructor</b>	Maurice Edkins	613-841-3264
<b>Webmaster</b>	Pete Tessier	613-443-1472
	webmaster@stetsonflyers.com	
<b>Newsletter</b>	John Jackson	613-445-5726
	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:**

\$70.00 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.

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**  
EXCEPTIONAL INTERNET

## Newsletter Questions and Answers

### **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!

### **How do I open the electronic newsletter?**

You *the latest version* of the free Adobe Acrobat Reader software installed on your computer. You can download this from:

<http://www.adobe.com/products/acrobat/readstep2.html>

If you are using a dial-up modem, this may take about 30 to 40 minutes to download.

### **Why do I get errors opening the newsletter?**

Most likely you have an older version of Acrobat – perhaps version 3 or 4. Please the install latest version as described above. It usually fixes all the error messages when printing or opening the newsletter.

### **I used to get emails about club events, but now only get a printed newsletter – what happened?**

Mostly likely your email address changed or failed and we were not given a new one. When this happens we revert to printed newsletters. To get back on to electronic distribution, just send an email to [editor@stetsonflyers.com](mailto:editor@stetsonflyers.com). By default, those with email addresses will be notified when the electronic version is ready for download. You can ask to

## Meeting Minutes-November 29 2004

Meeting was opened by Scott Clarke at 7:57 PM. Motioned by Dave Asquini and seconded by Mike Gratton.

**Secretaries Report-** Pierre Tessier has nothing to report as this is the first time in the chair. Motion was put forward to accept minutes as published in the last newsletter by Ed Whynott (noted that he got his newsletter before the meeting, first time in 7 years) and seconded by Paul Bettez. Motion was passed.

**Newsletter Editors Report-** John Jackson had nothing to add.

**Webmaster's Report-** Pierre Tessier reported that the club web site needs material.

**Special Thanks-** Scott Clarke gave thanks to Gary Baughman for coffee and Timbits.

**Safety** –Last meeting Richard Barlow talked about how the horizon to horizon rule is no longer an issue when coming in for final approach: according to MAAC. A motion was brought forth by Ed Whynott and seconded by Dave Asquini that the Stetson policy regarding the Horizon to Horizon rule stays in effect for our club. Motion was accepted

**Ottawa Astronomers-** Scott Clarke spoke to some of the astronomers who use our site. They mentioned that they have lost one of their viewing sites in the Ottawa Montreal corridor and asked if we would let them give out the gate code to another 10 members. They have used our site and wish to use it more often in the coming year. The Executive have decided to let them do so. John Jackson mentioned that the more people that are friendly to the club after hours the better it is for us.

**Winterizing-** Scott talked about the picnic tables and benches. These were positioned under the shelter to try to protect them from weather damage. Scott also asked if anybody had a tarp available to cover the tables to let the executive know.

**Budget-** Scott presented to the members the 2004 proposed and actual budget. (see attached) There was talk of moving the GIC to a more active account. Problem is that we are locked in for another year but we should look into it before the next term. Motion to accept by Dan and seconded by Jerry Nadon. Motion was passed.

Scott presented to the members the proposed 2004 budget. (see attached) A discussion on keeping the

membership fee at \$70, the new membership fee premium is now eliminated as is the shelter tax. Scott said that we need to focus our concentration on getting new members not more money from each individual. Gerry Nadon put forth a motion to accept the budget as presented, seconded by Mike Gratton. Motion was passed.

Scott encouraged members to pay dues ASAP, in order to get some money into the account, this way we can pay the land lease for the 2005 year. Discount Hobbies will still be handling membership and dues as usual.

**Fund raising-** Maurice Edkins was the fifty-fifty man for the evening. The club raised some 28 dollars and Pierre Tessier was the happy winner of the other 28 dollars. There were also some tickets for the raffle of a framed Labrador print, 5 bucks a piece will be raffled during the February meeting

**Zone Fun Fly-** First planning meeting is on Thursday the 28<sup>th</sup>. Richard Barlow is heading the committee. Scott Clarke and Gary Baughman have volunteered their services to represent the Stetsons. Scott mentioned a few names of reps from all over the zone who have also volunteered, Brian Wattie, Rolly Simonson, John Weeks.

**Zone Fun Fly Date-** It was decided on that the 2<sup>nd</sup> weekend in June would be the date. And also that it will be called the Ed Ray Memorial Fun Fly. The membership has also decided that this would be a 1 day event, the Sunday being the rain date.

**AT6 Build Off** – Scott Clarke did a presentation introducing the first club contest to the members. 20 plans of the AT6 were sold. More details to come on the website.

### New business

Marc Shaw suggested that a mall show would be a great way to get more people interested in the hobby. Ed Whynott was also in agreement. Motion to accept by Gerry Nadon and seconded by Mike Gratton. Gerry wanted to point out that last time Place d'Orleans wanted to see a letter from the City. And that maybe we should do it at St Laurent. Gerry Nadon and Greg Marshall have volunteered to do some research and have a proposal by the February meeting.

It was decided that we would do a December Newsletter and Web Updates. This will be the way to keep information going out to the membership. This due to the fact that there is no December meeting.

**Events-** Jan 1<sup>st</sup> fun fly 9am. Electric flight will have

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its own bragging writes.

**Pink Pig-** It was mentioned that the executive have decided to retire the pink pig. Scott said that he would rather see us coming to the meeting with good stories and to do away with the pig award. He also said that we would decide later what would be a humane way to retire the pig without being disrespectful. Motion was brought forth by Gerry Nadon to accept and seconded by Maurice Edkins. Motion was passed.

Meeting was adjourned by 8:50 PM.

## Workshop Tours

At the last meeting it was suggested that the Workshop Tours series from about two years ago should make a comeback. I need some volunteers to invite me to their workshop with my camera. Please give me a call if you are interested, or if you would like to nominate someone! You can check out Nov. 2002, Jan., Feb. and March 2003 workshop tours on the Stetson Web Site if you missed this at the time. Thanks—John Jackson

## For Sale

Futaba 8UAF transmitter, 8 channel receiver, 4 x s148 servos, switch harness, carrying case and charger.

Roger Moreau  
1666 Sunview Drive  
Orleans, ON  
613-590-2158



## Posted on the OREO Mailing List by Rod Woolley

I happened across a Sanyo Li Po web page:

<http://www.sanyo.com/batteries/lithpol.cfm>

Notice in particular the list of potential applications at the end and notice also this comment "SANYO's newly developed gel-type polymer electrolyte possesses a high ion conductivity even at low temperatures, making discharges at  $-20\frac{3}{4}C$  a walk in the park." I had all but given up on Li Pos for winter flying! It may not mean high current discharges like we use though. Will have to wait and see.

I also found this general explanation of Li Pos which contains some interesting information:

### Advantages:

The original concept of the Li-polymer battery is based on the use of a solid electrolyte. This design offers great potential with respect to fabrication, ruggedness, safety and cost. It also avoids the high flammability of the liquid electrolyte used in the Li-Ion, should hazardous leakage occur through cell container rupture.

When fully developed, the Li-polymer will provide more than 3 times the energy density compared to the NiCd and will have a very low self-discharge. In addition, the use of a polymer electrolyte allows for a very flexible design, including construction of prismatic cells that measure as little as one millimeter in thickness. Batteries that resemble flexible mats which can be rolled or formed to fit tight spaces will also be feasible.

Expected low manufacturing cost.

### Disadvantages:

Limitations in conductivity of the solid polymer have resulted in adding some liquid to the solid electrolyte.

The Load current capability of the Li-polymer is much lower than that of the Li-Ion. The cycle life varies with design and is fairly low, especially if discharged deeply.

## 3D is out for 2005 4D is in for 2005

In an article in Fly RC Magazine they report that 4D flying has been demonstrated.

Scott Foster attached an Ikarus Eco 8 tail rotor mechanism to the electric motor in his Blade 3D. During a demo flight he tried several standard 3D maneuvers and then climbed to the ceiling, pitched over into a nose down attitude, and proceeded to put the plane into a nose-down hover!

The tail rotor mechanism makes a variable pitch prop that can be used to create negative pitch. Read the full story in Fly RC Magazine!



## The Meaning of Some Brushless Motor Designations

Received the following questions from Merle Davies via email:

Hi Ken,

Advertisements for AXI Motors describe the models i.e. "4120/14 External Rotor" Motor (MORE power than a "Gas Glow 40"). What do these Identification terms mean to the Electric Modeler?

*4120/14 means the stator is 41mm by 20mm with 14 turns. External rotor means the can rotates, commonly called an outrunner. More power than a "gas glow 40". Advertising hype. KM*

A like explanation of the AVEOX Motor Model Designations would also be helpful.

*The following is the example given on the Aveox site. KM*

*"Designation; 1409/2Y means 1.4" diameter. 0.9" magnet length, 2 turn in the Y (Wye) wind configuration."*

What do these terms mean to the Electric Modeler? They give a hint to the physical size of the motor and a little hint as to the Kv (RPM/volt). The 14-turn will have a lower Kv than the 2-turn. Is any of this information in the motor nomenclature really useful? Not to me. KM

## Motor Kv Question

From Rick Keiser Ahuligan12

Ken,

Thank you for another newsletter. I am a bit confused about Kv ratings for motors; I think it means rpm per volt of input. How does this relate to motor size and power? Is a higher rating better, more efficient use of power etc? I just got used to 300, 400, size motors and what to expect. I have an MPJ 400 size, a Razor 350 and two .020 Astro brushless motors and am familiar with what they will fly. Please explain in English, as my math is limited, or refer me to an article that I can peruse if you can. Electrics have come a long way in the last ten years and you have always helped me in the past and I am grateful.

Regards,  
Rick Keiser  
Lancaster, Pa

*What you already know is what you need to know. You know that a certain motor/battery/prop combination will fly a given aircraft in a certain manner. That is what you need to know, and you are on the right track*

*Kv isn't good or bad. Kv is the RPM per volt out, or based on the back EMF (eback). It doesn't have a lot to do with volts out of the battery, or even into the motor terminals. Kv is directly related to Kt. Kt is the torque constant. For ALL electric motors  $Kv * Kt = 1355$ . Without getting into the math that means that a lower Kv motor has a higher Kt, and since Kt is the torque constant, the motor has higher torque.*

*Given the same volts and amps, the lower Kv motor, with its higher torque, can swing a larger prop at a lower rpm. It is common to use a gear reducer on a high Kv motor to physically change the Kv to a lower Kv thus raising its Kt and the size prop it can swing at the same volts and amps.*

This thread comes from a newsletter called "The Ampeer" published by Ken Meyers  
<http://members.aol.com/kmyersefo>

## Seen at the Nov 2004 Meeting



## The Great AT-6 Build-Off



What is it? It's a building contest of Nick Zi-rolì's 32 inch AT-6 Harvard/Texan.

When is it? We'll kick it off at the next meeting and wrap it up in February.

Who's it for? It's for all of you. For those of you who've built models from scratch you can add another to the hangar and for those who haven't you can learn something new and have fun doing it.

Why? To have a little fun and some friendly competition.

How? Come out to the next meeting and we'll give you all the details. There'll also be full size rolled plans available for \$5 with the proceeds going to the club.

