



Stetson Flyer

Stetson Flyers Model Airplane Club

April 2005

You missed it!

If you were at the March meeting, you would have been treated to quite a spectacle!

- ◆ Everyone got a chance to make a Tramp for only five bucks!
- ◆ Greg kept the stripper busy on the table...
- ◆ Lots of Rubber...
- ◆ Did you know that lubricating your rubber makes it last longer?
- ◆ Darcy showed us the trick with a Squirrel, but it got all excited and climbed a pole. Gerry had to use a ladder and a flagpole to coax it down.
- ◆ Not to mention a heated discussion if seven inches was better than six!

See all the details with pictures starting on page 4!

April Meeting— Different Location

The April Meeting will be held inside the new National Aviation Museum Hangar. The executive have not worked out with security exactly how we will get in—from which door, etc.

We will send an email out just before the meeting with the access details. If you read this in hard copy call one of the Executive on page 2 for details.

The SWAP SHOP is on—bring your stuff!

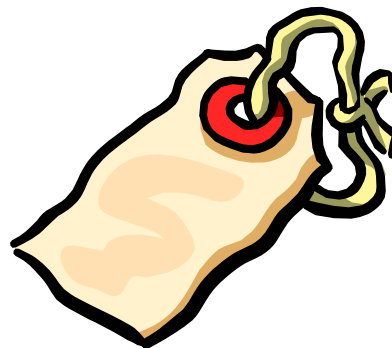
There is room for indoor electric flying—if you have an indoor electric plane bring it along and have some fun!

Next Meeting

Tuesday, April 26th
7:30 pm

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

SWAP SHOP!



April is our Swap Shop Meet. Everyone, members and non members alike are invited to bring their hobby related surplus to the April Meeting.

The club is NOT taking any commission on sales.

Bring some cash too so you can pick up some bargains!

Coming Stetson Events...

April 26 th	Swap Shop Meeting
May 14 th	Field Cleanup Day
May 31 st	Regular Meeting
June 11/12 th	Ed Rae Zone Fun Fly
July 1 st	Canada Day at CAM
August 6/7 th	Flying Display CAM
September 11 th /12 th	Giant Scale Event

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

Club Officials and Contacts

President	Scott Clarke	613-824-5114
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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.

Use the back door to the museum! To get to the back door follow the roads around to the extreme left side of the museum. Pass through the gate in the fence and proceed to the back door.

To receive the newsletter by email, send **your** email address to:
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. By default, those with email addresses will be notified when the electronic version is ready for download. You can ask to

Stetson Meeting March 29 2005

Meeting was opened at 7:50 pm Ed Whynott, seconded by Wayne Smith

Paul Bettez and Dave Asquini accept the minutes of the April meeting as published in the Newsletter

There were 2 guests at the meeting Mat and his dad. Mat is 15 and has been flying for the past 4 years in Egypt, he has signed up to the club. Welcome Mat. His dad said that they were over at the field the previous week and meet Gerry Nadon. There was also mention of Gerry's plane crashing in a birch tree...Way to go Gerry...

Treasurers Report

45 paid members

Rent has been paid 1284.00. Account balance is at 3200 pre money received during this meeting. GIC around 7000.00. We still need to pay some 650 dollars to Walter Hill regarding 2005 field improvements.

Web site

New sections on the Bring and Brag a few club members have already sent pictures and Online Merchandise. It was mentioned that we still have some T-Shirts and hats.

Newsletters report

Thanks for the contributions. Got some good feedback from last month's newsletter.

Membership report

53 paid members to date. Scott mentioned that the gate code is changed and that membership should now be paid. It was also noted that you must be paid up to have your vote count.

Field Maintenance Day

Set to May 14 with rain date of May 15th we are now looking for volunteers to take care of the lunch.

Giant Rally Date Change

Set for the September 10-11 Weekend,

Upper Canada Zone G Fun Fly

There is lots going on, new art work, website on the way, planning committee working on schedules of how the day's events will run. There will be more to come as Scott gets updates from the committee.

AGM for MAAC

Scott talked about the notes and info as the final changes are drafted up. Changes include due increase to 75 bucks due to insurance premiums rising. Also mention of regulations being introduced

regulating flying over public roads and thruways. This was turned down but will be re-introduced next year with certain restrictions and amendments. Scott also mentioned that AGM will be held in Ottawa.

Swap Shop

April is swap shop.

Ground School

Canceled this year due to lack of interest, Maurice will deal with students one on one.

Ed Whynott and Gerry Nadon close meeting at 8:15

FIELD RULES 2005

PILOTS SPECIAL REQUIREMENTS FOR R/C FLYING

1. VALID MAAC MEMBERSHIP
2. VALID CLUB MEMBERSHIP

PIT AREA AND PILOTS:

1. ALL TX in impound stand when not in use.
2. Do not switch on or remove TX from impound unless you have proper frequency pin installed on frequency control board. The definition of a "proper" frequency pin is: A 3 Pin Tag for Wide Band radios is 1 3/4" high by 2 7/8" wide, and a 1 Pin Tag for Narrow Band radios is to be 5/8" high by 2 7/8" wide. The frequency pin must also indicate your name, frequency, and valid MAAC number.
3. No taxiing into or out of pit area.
4. Direct your slipstream away from other models and pilots.
5. Flying over the pits or visitors observation area is not permitted.
6. No flying with fuel burning models before 9:00 AM any day of the week.
7. ONLY FIVE (5) AIRCRAFT in the air at any one time.
8. A maximum of seven (7) frequencies to be occupied at any one time.
9. All MAAC safety regulations are to be followed. Copies available from the Club.
10. All engines must have mufflers.
11. Observe posted take off and landing directions.
12. No alcohol and flying.
13. Children and pets must be properly supervised.
14. ALL GARBAGE MUST BE REMOVED WHEN YOU LEAVE THE FIELD, and THE GATE/CHAIN MUST BE LOCKED BY THE LAST PERSON TO LEAVE.

Building Cloud Tramps—March 29, 2005



Everyone at the March meeting got a chance to make a Cloud Tramp for only \$5.00 for materials.



Greg and Charlie give the stripper a real work out cutting balsa for the whole group.



Darcy's "Squirrel" got away from him and climbed a "tree".



Greg shows of a Tramp Wing by gluing it to his thumb, Don't try this at home kids, this is an expert



Gerry refines a few parts with a sanding block.

Bring'n'Brag—March 29, 2005

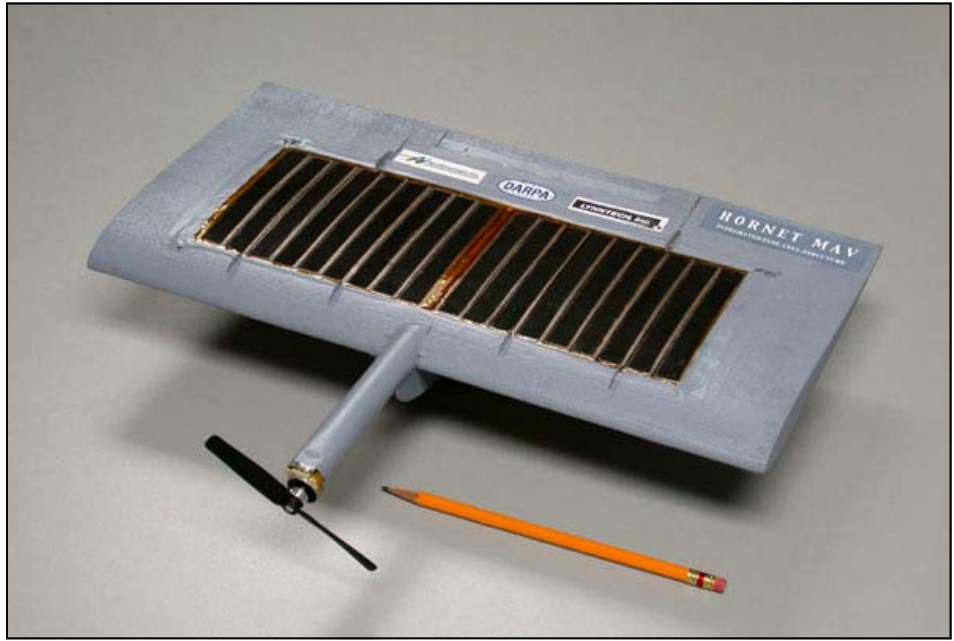


Two entries in the AT-6 build-off were judged at the March meeting. Stu Poulet (left above and right) came in first, while Greg Marshall (above right) came in second.



FIRST FUEL CELL POWERED FLIGHT

On March 21, 2003, AeroVironment Inc. made what is believed to be the World's first successful flight of an Unmanned Aircraft powered entirely by a hydrogen fuel cell. The Hornet Micro Air Vehicle (MAV) conducted a successful maiden flight in Simi Valley, CA, under a DARPA sponsored research contract to develop innovative propulsion and structural concepts for unmanned aircraft of this type.



The Hornet MAV was flown three times, for a total endurance of 15 minutes, and used absolutely no batteries, capacitors, or other sources of energy. The air vehicle's radio channel link, servos, motor, pumps, and other avionic systems were all powered by the fuel cell, which also acts as a structural member for the wing. DARPA contracted Lynntech to develop the fuel cell for the flight, which it believes may offer the potential for very long endurance missions.

AeroVironment Inc., Simi Valley, CA, was sub-contracted to perform the air vehicle's detailed design and fabrication and performed the recent flight tests. Lynntech Inc., College Station, TX, designed, fabricated and tested the fuel cell and hydrogen generator under contract to DARPA. The two contractors worked jointly on the air vehicle's initial, conceptual design to best optimize the integration of the innovative fuel cell and hydrogen source into the vehicle.

The Hornet MAV is a radio-controlled air vehicle with a flying-wing design configuration. The wingspan is 15 inches and the total weight of the fueled vehicle is 6 ounces (170 gm). The vehicle uses a combination of off-the-shelf components and the custom fuel cell system, which produces an energy density higher than all similarly sized battery-based systems. During the flight, the average power output of the fuel cell was over 10 watts.

The fuel cell developed by Lynntech is an energy conversion device in which hydrogen, stored onboard the aircraft, reacts with oxygen collected from the airflow over the wing to produce electricity. The

fuel cell incorporates a stiff metal mesh that also functions as a mechanical structure to strengthen the wing. The hydrogen is supplied from a unique generator system in which hydrogen is stored in a dry, solid, pellet form, and is released when combined with water, which is also carried in the vehicle. The fuel cell plus hydrogen generator has the potential to achieve a system specific energy of 400 Watt hours per kilogram for this application.

The aircraft is stable and simple to fly using manually operated ground control of the aircraft's throttle, rudder, and elevator surface. The ground controller uses an additional radio channel to modulate the rate of hydrogen generated in the vehicle, to vary the energy released. The next generation of Hornet could incorporate a simple autopilot and carry a color video camera payload.

The Hornet is being developed under DARPA's Synthetic Multifunctional Materials program, which is exploring materials that combine the function of structure with another critical system function such as power, repair, or ballistic protection. The combination is expected to optimize system performance and realize improved or new capabilities for military systems. The Hornet is the second in a series of Micro Air Vehicles developed under this program. An earlier design, named the Wasp, set a World endurance record for MAV's in August 2002, and demonstrated the utility of a multifunctional structure/battery material system: (see [our Press Release](#)).

Story Credit: <http://www.aerovironment.com/news/news-archive/hornet62.html>