

# OMFC Fliteline

The Newsletter of the  
Oakville Model Flying  
Club

April 2004

## March 1 OMFC Meeting Highlights

The President called the meeting to order at 7:30PM and welcomed any new members. Access to the North Field is still under construction and will be so for about 2 more weeks. There will still be construction on going around the area but the road should be finished soon. In the meantime, if you want to fly at the North Field, please park at the School if you can.

A reminder to our new members or students, the Wings Program Ground School will be held on May 4th and 11th at the Meeting hall. You must attend one of these nights and please bring your plane, radio and field box.

Bob Zach addressed the members on the Air Show and Mall show coming up in June. The flyers are done and are being handed out. Bob needs a volunteer with room to spare in their vehicle to pick up and drop off the sound system and speakers. If you can help, call Bob. If anyone has a spare computer we can use during the Mall Show to allow the public to fly a simulator, please call Bob.

John Ross needed a couple of volunteers to help out one night in April with the Oakville Cubs. A few of our members volunteered to go out and show these little guys how to build a small balsa glider. Bring some De-bonder if you can!

John McNicol spoke to the membership about an upcoming event on April 17th. The Electric Model Aviation Show is being held at the Toronto Aerospace Museum at 65 Carl Hall Road near Downsview airport from 11:00 AM to 5:00 PM. If you want to more about Electric's or are an avid E-flyer, go out and see this cool event.

The next meeting is the Beauty Contest and we expect a better showing this year. We will also be holding an auction at the May meeting. Anyone who has items of meaningful value are encouraged to bring them out. No junk please. The club will be retaining a 10% fee for any items sold during the auction. The South East zone has a new website:  
[www.aircombat.ca/zoneL](http://www.aircombat.ca/zoneL)

The meeting was handed over to Kevin McLeod and Ed Miedzybrocki of Great Northern Models. GNM is a North American source for Jet and Scale supplies. GNM is currently a Dealer for: BVM Jets, Festo, Iron Bay Model Company, Jet Hangar Hobbies, KJ Scaled Designs, PJP, RealDesigns, Robart, SimJet, Spring Air Products, System Three, Trim Aircraft, Ultra Precision Ltd., WildCat Fuels and Yellow Aircraft.

The primary purpose of their visit was to introduce the club to turbine powered model aircraft. Kevin started out by detailing the history, design and inner workings of a small turbine model engine. The model turbine engine has been around for many years and has been available commercially for about 10 years. While still quite expensive, the prices are starting to come down to a level that is affordable for more and more modellers. Small gas turbines are not scaled down large engines.

The Compressor at the front of the engine compresses the air and provides a high throughput of air to the combustion chamber. The chamber is perforated on the outside to allow the air into it in a controlled position. The chamber burns the fuel which expands considerably and it provides a thrust of burnt gasses that exit via the Nozzle Guide Vanes (NGV's) onto the turbine wheel. The angle of the blades of the turbine wheel deflect the gasses and turn the wheel driving the compressor. The gasses then escape through the gap between the blades and give thrust.

Most small gas turbines use Kerosene as a liquid fuel and a supplementary supply of Propane to heat the engine before starting on liquid fuel. Fuel is delivered to the engine with a metal geared pump similar to the pump used for a car windshield washer system.

Cont. on Page 2

### Inside this issue:

April 5 Meeting	1
April 5 meeting cont. Spring Tune-up	2
Trip to Toledo!	3
2004 OMFC Executive Dates for 2004	4

### Points of Interest

- Tim Deel is still looking for volunteers to help out on Monday night with the Oakville Air Cadets. Contact him if you can help.
- A reminder that you must display your membership card on your flight box anytime you fly at the North or South fields.
- The 2004 Quinte Jet Rally is a go on June 12 and 13. This is a Premium Jet Rally that is well attended by Jet pilots from Canada and the USA. Check out their website for more details  
[www.reach.net/~bqac](http://www.reach.net/~bqac).

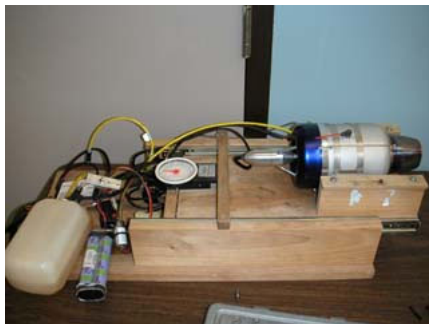
The consumption will vary from engine to engine depending on the speed of the engine. It is reasonable to expect that 1 Litre will last 4-5 minutes and still have reserves to land.

All engines require a large volume of air to start them. The supplementary gas (Propane) and the fan, increases the turbine RPM. The liquid fuel is slowly fed in until the engine speed picks up and the engine self sustains. It can get hot when starting if too much fuel is fed in too quickly.

If you stand close to a gas turbine you will find the noise level greater than a piston engine. Kevin and Ed brought an engine in a test stand and we proceeded to fire up the turbine at the back of our hall. The start sequence is all automatic and is initiated by moving the throttle from idle to full, wait 3 seconds and back to idle. The electric motor starts turning the turbine. At a certain rpm, the fuel is introduced and ignited and the ECU (Electronic Control Unit) takes over the fuel scheduling until the engine is at idle. Seeing this engine running was very cool and at full power you could see the exhaust come start to glow.

If you have questions about small turbine engines or the kits they can be installed in, give Kevin or Ed a call at Great Northern Models. [www.greatnorthernmodels.com](http://www.greatnorthernmodels.com) or (905) 681-5460. OMFC would like to thank Kevin and Ed for coming out and giving us this presentation on turbine models.

Engine in Kit format. You assemble.



Engine in test stand and twin engine model with dual turbines.



### Spring Tune Up (Compliments of Hanger 9)

Spring is coming! Soon, a beautiful spring day will arrive, and you'll want to go out flying. To make sure you have an enjoyable and successful opening day, now is the time to prepare. Here are a few things you should thoroughly check to make sure your plane is ready and safe to fly.

**Batteries:** You should test your batteries under load. You can also use a charger that measures the capacity of your battery pack (number of milliamp hours). If the battery pack is not up to its rated capacity, you should replace it. Be sure to check your transmitter's batteries too.

**Fuel Lines:** Make sure your fuel lines are in good condition. Be sure to inspect the clunk lines and clunk in the fuel tank. This is where most failures occur. While you have the fuel tank out of the plane, check it for worn spots due to vibrations. This is also a good time to flush out any oil that may have accumulated in the fuel lines.

**Engine:** Check all of the engine-mount bolts and the muffler bolts. Be sure the bolts are tight and replace any that are missing. This is also a good time to replace the glow plug. If you fly a gas plane, flush out any oil that may have accumulated in the carburetor. This is done by removing the diaphragm cover and depressing the diaphragm lever, while the fuel tank is under slight pressure.

**Linkages:** Inspect all linkages. Check all the control horns for excessive wear. A worn-out control horn could result in flutter or even cause loss of control in flight. Check all the solder joints, ball links, cables and hinges. All the connections should be tight, and the control surface should move freely.

## Trip to Toledo!

On Saturday April 3, Jim Eichenberg and I embarked on a journey of epic proportions (well I thought so) to visit the 50th annual Weak Signals R/C Model show. We left my house at 5:00AM and our first order of business was to hit the local Tim's for some go juice. Coffee, Tea and food in hand, we roared off into the darkness. 3 hours and 20 minutes later we were in the line to enter US Customs. To our delight, there was a very small line up and we passed through like a breeze. 50 minutes later we entered Toledo. Of course there had to be construction everywhere and we missed the turn off. Lucky for Jim, I never got lost and quickly had us back on track.

We got a great parking spot and were on our way to the big show. The line to purchase tickets took about 5 minutes and the cost was \$7 US. The actual show is held in a very large room of the Seagate Convention Center. Vendors were lined up in 12 rows divided in the middle by the display tables. On these tables were all the airplanes entered in the "Best in Show" contest. Most vendors that are well known were well represented at the show and some had a few surprises. Many had new airplanes to show off and were taking pre-orders for the new kits. One of the advantages of attending with Jim is he knows so many people that I had a chance to meet many new fellow modellers. We visited the MAAC booth and talked to the guys there and ran into many members from OMFC that had also made the trip down.

Jim and I both brought a list of things we were looking for and I'd say we did pretty good. The show prices were good and there was no sales tax.

After 3 hours of cruising the floor, Jim and I decided to check out the Swap Shop held upstairs around the Seagate center. To get a good spot, some vendors arrived to set up before 5:00 AM. There were about 250 different vendors vying for someone to check out there treasures. Try as I did, I did not find any treasure. All in all, the Swap Shop was a zoo and I think I will skip it next time.

We made our way back onto the floor for one more round to see if we missed anything. I took pictures of all the airplanes that were on display that I liked and a few of the show itself. We said our goodbyes to the MAAC booth and a few OMFC members we ran into. Even though there were symposiums on going that covered many areas of our hobby, we did not attend any of them.

At 2:30 PM we headed back to the car. We spent five hours at the Weak Signals show and I feel we saw most of the good stuff. Back on the highway and a date with some BBQ ribs! The drive to Detroit was uneventful with a stop to top up on gas (Thanks Jim!!). Once again we must have been lucky as there was a very small line up at Canada Customs. Our Customs agent was in a good mood and just waived us through after a couple of easy to answer questions. Wheew! We didn't get dinged for taxes even though we declared all of our goodies! Great, now for some good food. Right across the street from the Tunnel exit is the Tunnel BBQ. Jim and I stopped there for some great ribs and ran into Karl Mueller and Tim Pascal. They told a similar story of great service from Customs and not having to pay taxes. It turns out that the Casino in Windsor went on strike the night before and because of that, the border was quieter than normal.

Food in belly and an eagerness to get home and play with my new cool stuff got us back on the road at around 4:30 PM. Three and a half hours later, we were home. 15 hours non-stop and I was pooped. Jim and I had a great time and it was fun to do the trip with a fellow modeller. Sorry for all the jabs Jim...I only did it because I knew you could handle it!





**Radio and Servos:** Check all the wires and connectors for wear. Look for holes or cuts in the insulation due to vibrations. Be sure all connections are secure. Replace any defective wiring, switch assemblies and tie wraps. Tape your crystal into your receiver by wrapping the receiver with electrical tape over the crystal. Check the condition of the foam used to protect your receiver.

Don't forget to check your antenna wire. Antenna wires typically take a lot of abuse and could be damaged. Also, check your servos for smooth, full-range operation. There should be no glitching or erratic movement.

**Landing Gear:** There are many kinds of landing gear, from fixed gear tail draggers to full-scale models with retractable systems and brakes. But they all need to be checked to ensure all nuts and bolts are tight, and all the components are in good condition. Don't forget to add a drop of retract oil to the air tank of your retracts. Also, be sure to apply a small amount of grease to the axles and brakes.

**Note:** Now that your plane is ready to go, you may want to spend a little extra time sprucing it up. Inspect the covering and work out any wrinkles that you find. Clean off the excess oil and touch up the paint. If you feel uncomfortable about performing any of these steps, don't be afraid to ask an experienced pilot at your local flying field or hobby shop for help.

## OMFC Executive 2004

<b>President:</b>	Brian Anderson	<b>North field Manager:</b>	Dan Morgan
<b>Vice-President:</b>	Jim Eichenberg	<b>South Field Manager:</b>	Frank Pilih
<b>Past President:</b>	Tim Deel	<b>Social Director:</b>	Don Wilding
<b>Chief Flying Instructor:</b>	Wayne McKee	<b>Field Acquisition Manager:</b>	Mike McDermott
<b>Assistant CFI:</b>	Brian Anderson		
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## OMFC Dates for the 2004 Season

May 3	<b>OMFC Beauty Contest</b> , Unit 13, 785 Pacific Rd. Oakville. 7:30 PM
May 4 & 11	<b>OMFC Wings Program Groundschool</b> , Unit 13, 785 Pacific Rd. Oakville. 7:30 PM
May 18	<b>OMFC Wings Program (first night)</b> , North Field (Drumquin Park).
May 22	<b>Electric Fun Fly</b> , North Field (Drumquin Park).
June 5 & 6	<b>Oakville Place Mall Display</b> , Centre Court, Oakville Place Shopping Centre
June 13	<b>9th Annual OMFC Airshow</b> , North Field (Drumquin Park)
June 19	<b>Onslaught Over Oakville</b> , Scale Combat, North Field(Drumquin Park), David Fallowfield
July 31/1	<b>National Pattern Contest</b> , North Field(Drumquin Park), Jim Eichenberg
Aug 14&15	<b>Oakville Aerotow</b> , South Field, Frank Pilih
Sept 18	<b>OMFC Scale Fun Fly</b> , South Field, Jody McConnell