

THE FLYER



Middlesex County
R-C Fliers, Inc.

March 2007



Inside this issue:

<i>February Meeting Summary</i>	2
<i>McCall Students say Thank You</i>	2
<i>Thank You Cards</i>	3
<i>Another Website</i>	4
<i>Calendar of Events</i>	5
<i>Club Officers</i>	BC

Concorde Jet at the WRAM Show, Photo by John Parisi

President's Message

In the interest of time (that is, getting this newsletter to John P. in time to get it printed, in the mail, and delivered to you before the next meeting) I'm going to keep this very short and light.

First, I would like to draw your attention to the very nice collage of "thank-you's" that Jim O. has included on page 3 of this issue. I've had the pleasure of reviewing all one-hundred and three of those thank you notes, and I have to say it was a surprisingly moving experience, especially reading the ones that clearly ex-

pressed sincere interest and excitement in aviation.

Jim and Ray went "above and beyond" in providing this opportunity for the kids at the McCall School, and I think I can speak for them when I say that this tremendous response from students and teacher alike makes it all worth while. Thanks to them both for representing the club in such an outstanding fashion!

I'm sure you're all looking forward to some warmer weather and the increased flying opportunities it will bring. Keep an eye out for an announcement about

our spring cleanup day, happening mid-to-late April.

Membership is already at 61, which I'm sure will go higher as the season progresses.

I'm finally making some progress on the Alpha F86 electric ducted fan model that I bought at the WRAM show in 2006 (yes, 2006!) Maybe it will actually fly before the batteries die of old age! I missed this year's WRAM show, but you can read Jim's write-up on page 2.

Well, I told you short and light, so enjoy the rest of

the newsletter, and please join us at the March meeting on the 14th. Bring in whatever you're working on for this year - kit, ARF, repair job, engine, electronics, whatever. It's always interesting to see what folks are up to.

This year promises to be a good one, with the return of the Construction Derby, a Fun Fly, and a Family Day on the agenda! Just pray for better weather than last year!

Fly safe, and have fun!

Jeff

February Meeting Summary

The February 2007 meeting had 10 members and 2 visitors in attendance. Our Treasurer reported that we still have money in the bank.

Okay none of that is true, everyone knows that the February meeting was scheduled for Valentines Day and was cancelled due to the impending snow storm.

So the real February meeting occurred over the weekend of Feb 23 to 25 when several trips were made to the WRAM show in NY.

On Friday, I ran into Dean at Dunkin Donuts as he was getting a quick coffee before heading off to meet

Dave Varrell and make the trip in the Recreation Department van. On Saturday; John, Ray and two others set of for the same destination. The usual routine includes a stop at Friendly's for breakfast and the day at the show starts by 10 AM.

Reports are that this annual convention show was much smaller than in past years, with several big concessions missing from the floor. This may have limited the shopping options for some who usually expect to pick up some common items like servos, glue and fuel.

John reported that the Futaba reps were markedly depressed, and not willing to talk about news



from Spectrum that they have plug-in modules for all of the Futaba and JR modular transmitters that bring the new 2 GHz, Spread Spectrum technology to your current transmitter. Check out the Tower Hobbies, Spectrum and Horizon Websites for more details.

News about lower attendance didn't stop John from picking up a new model; look for photos of his new

Cessna 310, twin engine model in a future issue.

The photo shown above is of a GeeBee on static display at the WRAM show. The photo was taken by John Parisi. We should also thank John for the picture of the Concorde on the front cover.

Ray was particularly impressed by the size of the Concorde and the two, great big turbine engines used to power this ship. Question is; Has it ever been flown?

The McCall Students Say Thank You

On Tuesday, Feb. 20 I received a rather large package in the mail. What I found when I open the package was truly priceless.

Many of you may remember the story in our Dec Newsletter about a field trip to the McCall School in Winchester. The science teacher had asked if we might be able to show her students how airplanes fly

by doing a demonstration on their school grounds.

In the end, I talked to four classes and made four demonstration flights with my small, Mini Ultra electric plane. Ray also made one flight with his helicopter and we gave the students some small balsa gliders.

Well the package that I opened contained 103

personal Thank You cards that individually expressed how much the students appreciated the effort. The small collage on the facing page is a small sample of the thoughts expressed by these students and their teacher.

I'll have the entire stack of originals at the next club meeting, but I wanted everyone to know about the impact

our club made with all of these students.

The notes from these 6th grade students included thoughts about becoming fellow modelers, full scale pilots, aircraft designers, teachers, and future world record setters. Let's wish them the best, and hope that more than a few achieve their life's ambition.



MCCALL FLYERS



Dear Mr. Orsborn,

Thank you so much for taking the time to come to our classroom at McCall Middle School. I learned so much from you showing us the principals of Aviation and how planes fly. The five principals, lift, pull, drag, thrust, and gravity really made sense after listening to you explain the different principals. The thing I liked the most about your visit was the demonstration you did with your plane in the field in the back of the school. That was really helpful because it totally locked in the principals of Aviation in my mind. I really hope you come back soon.



Dear Mr. Orsborn,
 Thank you for coming to my school and show me how airplanes work. At first I didn't really understand much of it but better. The best part of your visit was when you showed us flying one of your r/c model planes. The plane was moving so fast, I had difficulty trying to look for it in the sky! Anyway, I had a blast while you were here and a Happy New Year!!
 From,
 Kevin H.

Dear Jim Osborne,

I thank you extremely much for coming to Mrs. Higgins science class at the McCall Middle School to explain about the four forces of flight, airplanes, etc... It was tremendously generous for you to provide us with your master knowledge of flight.

I also applaud your giving of the magnificent picture of the SR-71, or Black Bird, that you donated to Mrs. Higgins's class. Another wonderful deed you performed was purchasing and distributing wooden, small airplanes to the class.

Since my airplane was broken by the time I took it out of my backpack, which was that weekend, I created my own wooden airplane, without using the instructions. I had to cut it in a few places, and used many pieces of tape, but after about 30 minutes or so, I was finished with my plane. It flew surprisingly well, maybe not as well as it could of, though, and I enjoyed it even more than I would of if it hadn't broken.

Again, I sincerely and completely thank you for your kindness.

Yours truly,
 Mrs. Higgins Science Student, Sean Strelow

Dear Mr. Orsborn,

I am writing to you to tell you how much I enjoyed your visit to my school, The McCall, very much. I really love airplanes and I think they are very cool. When you came in with that huge plane I was so excited and I was not let down. You showed us some very important information like about the Bernoulli effect and about why some planes do not fly upwards completely. You're job is one of my dream jobs that I would love to accomplish.

I was the most excited when you flew your plane. It went so fast and had so many tricks that you would think it is real. After our class went inside after your spectacular performance you gave us the best treats and that was our own airplanes to build and a wonderful picture of a plane that travels three times the speed of sound!

Thank you so much,
 Niko K. Tubo-Romolida

Dear Mr. Orsborn,

Thanks so much for coming in and teaching us about flight. I was very



I've Been Looking At Another Website

Chapter 10 in this on-line book makes reference to the Coanda Effect that reportedly explains how planes fly better than Bernoulli. But several points in the introduction and the first chapter caught my attention.

First; the old saying that "Practice Makes Perfect" is NOT correct for two reasons. *Practice makes permanent*, so know what you're doing is correct before making it a permanent skill! The second point is that practice without understanding does not help you know what to do under different circumstances.

So the Website I'm talking about is called "See How It Flies" and can be found here: <http://www.av8n.com/how/htm/>

Chapter 1 offers some interesting points about Energy Management and Energy Awareness. Theory is that energy can not be created or destroyed. So Figure 1 shows how the four types of energy seen in flight are related to each other. Fuel and drag are two forms of energy that



Figure 1 Four Types of Energy

have one way conversions; but Altitude and Airspeed are two forms of energy that have two way conversions that allow us to trade one for the other. Some basic energy conversions seen in flight are as follows:

Cruise: Fuel is converted to heat with no change in altitude or airspeed.

Climb: More fuel is used and converted to both heat and altitude.

Take-off: Even more fuel is converted to both altitude and airspeed.

Glide: Altitude is gradually lost to drag with no increase in airspeed and no need for fuel.

Aerobatics: The graceful conversion of altitude for airspeed and vice-versa.

Ever heard of the Roller Coaster Conversion factor? Altitude and Airspeed Squared share a conversion factor of 9 feet per knot, per hundred knots.

The Power Curve is another interesting topic covered in this first chap-

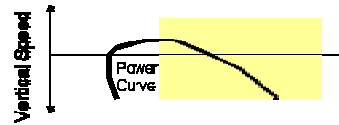


Figure 2 Power Curve

ter of the book. A sample power curve is shown in Figure 2 where the relationship between airspeed (on the horizontal axis) and vertical speed (on the Y axis) is described. This curve is for a set engine speed, and normal flight is in the yellow shaded region called the "Front" side of the power curve.

In this region, there is an airspeed that will result in level flight. A climb is possible only at a lower airspeed, and finally a higher airspeed is only accomplished by losing altitude.

By the way, when you increase the engine RPM, the curve moves up and if you reduce the RPM the curve goes down as shown in Fig 3.

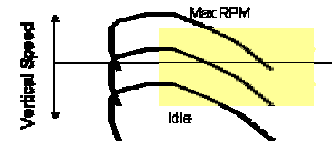


Figure 3

Notice that level flight at a higher RPM is done at a higher airspeed. At idle it may not be possible to climb at any air-

speed, but there is an optimum airspeed where the plane climbs best or loses the least amount of altitude, and this airspeed is the same regardless of the power setting.

This set of curves clearly shows that altitude (and the rate of change in altitude) can be controlled by the throttle and not the elevator control. With the plane set for level flight at the mid range throttle, a slight increase in RPM will add vertical speed (climb) and a small decrease in RPM will result in less vertical speed (descent).

By the way, the portion of the power curve that is not in the yellow area is known as the "back side" and some strange things happen in this region.

The remaining chapters in this on-line book deal with other aspects of full scale flight. Some do not have any significance to us as model airplane pilots, but a couple dealing with angle of attack, spins and flight trim sound like interesting topics that I may cover in future articles.

March 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

March Calendar Notes:

Wed. 3/14: Club Meeting at the Lewis Building on Boston Road.

District 1 Events:

<http://www.amadistrict1.org>

Sun. 3/4: South Shore RC Club Spring Auction, Bridgewater, MA

Sat. 3/17: Lazy Loopers Indoor Electric Fun Fly. Attleboro, MA

Coming Events:

Wed. Apr 4: Annual Scale Model show in Tewksbury

Sun. Apr 29: NH Flying Misfits Auction, Auburn NH

June 10th: 13th Annual Construction Derby at the club field

Membership Renewals:

2006 Frequency Pins are no longer valid. *Everyone should have their new AMA membership card by now. How about your MCRCF membership? Renewal forms are available on the Website.*

MCRCF Calendar of Events

Check out the Club Website for the latest Calendar of Events. Plans are well under way for a series of club activities this year. Plans include a Construction Derby, a Fun Fly and a Family Outing. We will also have the annual Spring Clean-up Day, so please watch for an announcement on the date.

The calendar shows two District 1 Events that are scheduled for this coming month. The Charles River site says that the Loopers have an elec-



tric Fly-In on the 3rd Saturday of every month thru April at the Attleboro YMCA. Has anyone checked it out? Maybe we could get a report.

Photo of the WRAM Show floor from the balcony—Notice the BeeGee and Concord on stage, top right.



Postage

28 Griffen Drive
Wakefield, MA 01880
Phone: 781-944-6056
E-mail: Info@mcrcf.org

We're on the Web!
<http://www.mcrcf.org>

First Class Mail

March 14th, 2007

7:30 PM

Lewis Building

248 Boston Road (Rt. 3A)

Billerica, MA

Official Publication of the Middlesex County R-C Fliers, Inc.

The FLYER is the official publication of the Middlesex County R-C Fliers, Inc., a non-profit organization chartered for the promotion of radio controlled model aircraft building and flying. The club operates a flying field located on Treble Cove Road, Billerica, MA. The club offers free flight instruction to any member provided they have a current membership with the Academy of Model Aeronautics. Contact any club member for details. Meetings are held on the second Wednesday of every month between September and June in the Billerica Recreation Dept building at 248 Boston Road in Billerica, starting at 7:30 PM.

Club Officers:

President

Jeff Ward
4 Eastview Avenue
Billerica, MA 01821
978-663-4493
wardjeff@comcast.net

Vice President

John Parisi
27 Woodcliff Drive
Billerica, MA 01821
978-663-0232
paris822@msn.com

Registrar/Secretary

Raymond Capobianco
28 Griffen Drive
Wakefield, MA 01880
781-944-6056

Treasurer

John Caci
288 Wellman Avenue
N. Chelmsford, MA 01863
978-251-8718
johnjcaci@netscape.net

Director

Charlie Bacon
15 Tanglewood Drive
Chelmsford, MA 01824
978-376-7187
chazbacon@Comcast.net

Director

Daniel Fisher
9 Village View Road
Chelmsford, MA 01824
978-256-3085
danfj@aol.com

Director

Dave Varrell
24 Mathew Road
Billerica, MA 01821
978-667-7012
varrell@netscape.com

Newsletter Editor

Jim Orsborn
43 Charme Road
Billerica, MA 01821
978-667-4510
jto@mitre.org