

THE FLYER



Middlesex County
R-C Fliers, Inc.

Jul/Aug 2007



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Hanger 9 Spitfire Mk.II, on final approach to runway 19.
(Pilot Scot Stewart, Photo by Jim Orsborn)

President's Message - The Golden Rule of R-C

• **Hello all!** I hope you're enjoying your summer so far, and finding some time to get in some flying. Our notorious spring cross-wind seems to be hanging around into summer, but don't let that stop you. It's a great opportunity to get out and practice flying with a little wind.

• **As you can see** from this month's cover photo, the field is in pretty good shape again this year (although there seems to be a lot of runway *behind* that Spitfire)

• **Our (almost) Annual Construction Derby** event was a great success, with beautiful weather, hardworking teams, fabulous food, and lots of help with setup

and breakdown. Many hands make light work, and the event team really appreciated all of the help before, during and after the event.

This was an especially pleasing Derby for me, since (as you can see in the pix on page 3) my team was actually in the money for a change! (I don't suppose that had anything to do with me *not* being the captain this time...?)

• **Many thanks** go out to Ray Capobianco and John Parisi for heading up this fun event!

• **So what's this "golden rule" thing about?** Well, to paraphrase the original, it's about "*doing unto others as you once had done unto you*", that is, helping some-

one else get into the hobby and become a competent, safe flier. Few of us just got up one day and taught ourselves to fly - most of us had an instructor, or at the least, a mentor.

As the club attracts new members, we continue to rely on one or two instructors to carry on that valuable work, and Wednesday's training nights can get pretty busy.

Often there are students who are in the middle part of their training, and just need someone to take them up on the buddy box so that they can get some stick-time and practice what they've already been taught. I personally enjoy filling that role, but it's hard for me to get back to Billerica early enough to be of much help. If you're a safe, compe-

tent pilot who's very comfortable with a high wing trainer, and can spare a couple of hours each week, please consider being an instructor or instruction assistant. Give back a little of what you got, take the load off of our already hard-working instructors, and help someone else transition from "I'll have to wait" to "I can fly!".

• **See you at the July Meeting and Cookout** on the 11th. It should be a good feed, and we'll have a great raffle prize (see the flyer on page 4).

Be safe, and have fun!

Jeff

June Meeting Summary

We hope that you didn't miss the late notice on the June meeting location. Approximately 15 people either saw the late email or the notice posted at the Lewis building.

Our understanding is that the Recreation Dept had a short notice staff meeting and had forgotten about our usual meeting — so we ended up with a conflict. Last minute arrangements were made to hold our meeting in the main auditorium at the Billerica Town Hall.

Jeff led the meeting. John Caci reported that

we are still solvent with approximately \$6000 in the treasury as we head into the summer season. We have three or four major events scheduled this year, plus there are the usual expenses for mowing and the portapotty.

There were three Show n Tell items. Dave Varrall and Jim Orsborn had airplanes to show. Jeff had one of the counter-rotating helicopter systems. Jeff had purchased two models at the same time and got a nice discount, so he was able to offer the second heli as the raffle prize for the night.

Training Update Cont.

Wednesday evening training has been quite busy this year. Several nights we've seen a full flight line with up to five students waiting for assistance. It's exciting to see the number of new students and watch their skills improve.

Our club has designated Wednesday evening as training night, and agreed to give students priority access to the field. This does not apply on other days, but on Wednesday evening, regular members should voluntarily yield to an Instructor/Student team that is ready to fly.

Flight instruction often involves repeated access to the runway, especially when covering take-off and landing skills. Low altitude approaches also need to be covered. Instructors may have their student stand much closer to the runway when initially teaching these maneuvers, so please be careful.

All of the MCRCF flight instructors are trying hard to show these new students how to fly safely and enjoy this sport to the maximum. We trust that regular members will do the same.

Flight Training Update

It's time to take the old lawn mower out and get it ready to cut the grass; so that must mean it is time to startup our Flight Training program again this year. Actually we've already taken a couple of new pilots up for their first (and second) lesson.

If you are interested in receiving flight instruction please contact one of our approved flight instructors and set the time for your lesson. If you call ahead of time, we will be at the field and know what to bring in support of your lesson and no one will be waiting at the field wondering who will show up.

New students are always welcome. If you are new and don't even have a plane, give us a call and we can set up a free demonstration flight. If you have already bought a plane, bring it by the field and let an experienced pilot check your flight setup. (continued)



Please congratulate our newest pilot, Greg Sullivan.

Construction Derby Collage



First Place Team: "Full Throttle"



Second Place Team: "Boston Air Sox"



Third Place Team: "Bouncing Betty"



MCRCF Summer Meeting

Wed. July 11, 2007 - 6:00 p.m.
MCRCF Field, Treble Cove Road

Raffle:

How about a new **U-Can-Do 3D**—**46 ARF**. This Almost Ready to Fly kit can be your next plane if you are holding the winning raffle ticket. The usual ticket sales (1 for \$2 or 3 for \$5) will apply. You must be present to win.

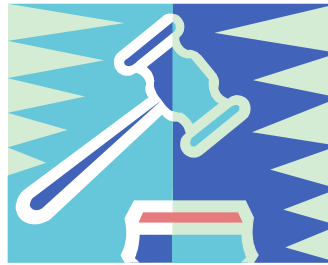


Food:

Okay, if you've been to a previous cookout, you know what to expect. If not, then stop by and get some of the best outdoor Bar-B-Que of the season. Food should be ready by 6 PM. The price is right too (free to members and guests), so plan on stopping by to join us.

Meeting:

A regular meeting will be held after dinner. No special agenda, just up to date news about you club and related activities around the area.



Flying:

The field will be open until the start of the regular meeting. So bring a plane and join others. New members may want to bring a plane and have someone check it out.





Finding the perfect CG — Engine Idle comments

So how do you determine the proper Center of Gravity (CG) for your aircraft? Do you use a calculator, read the instructions, flight test the model — you do check the CG?

All planes have a CG that offers the best flight characteristics. Starting with trainers, we usually use a fairly forward CG because it will offer good stability during the training program. More advanced pilots may shift the CG towards the tail in order to fly popular 3D maneuvers. But how do you check the CG?

One approach is to put the plane on a CG stand such as the one made by Great Planes. High wing designs can go on the stand right side up; while mid- and low wing designs should be inverted and then placed on the stand. In either case, you can measure the CG and determine exactly how far back it is from the leading edge.

Once you have a good starting point for the CG, how about a simple flight test to see if it needs to be adjusted slightly? Try the following sequence and

see what happens. From straight and level flight, pull up into a 45 degree climb and then roll to inverted flight. Release the right stick and “see what happens.”

- 1) Did the nose pitch down — then the plane is still slightly nose heavy.
- 2) Did the nose pitch up — then it is slightly tail heavy.
- 3) With a good CG, the plane will on a straight line.

When adjusting the CG, try moving some of the electronics (like the battery) first before adding weight.

A recent article in Model Airplane News talked about the importance of having an engine with a reliable idle. They said that more planes are damaged as the direct result of an engine that did not have a reliable, low speed idle. The article went on to explain how to go about achieving that reliable idle.

If you are not quite satisfied with the idle on your plane, start by checking the following:

- 1) Fuel system — no air leaks, proper clunk operation, short fuel lines, supply line roughly in line with the carburetor.
- 2) Propeller size — as recommended by the engine mfr.
- 3) Glow Plug — they do wear out, so if things change suddenly, try a new one.
- 4) Missing screws — yes, check for missing or loose screws especially on the carb or back plate as they can result in an air leak.
- 5) Servo linkage — does it move freely and does the travel cover the range of full open to fully closed.

If there are problems with any of these items they should be fixed before even trying to set the idle. Once everything is ready, start the engine and bring it up to full throttle and let it heat up to a normal operating temperature.

Achieving a reliable idle, starts by opening the high speed needle valve to a slightly rich setting that is about 200 to 300 RPM down from

the peak value.

Close the throttle to idle and let it run for 30 to 45 seconds. Advance the throttle to full power and note what happens:

- 1) The engine “sounds wet” and sputters, possibly spitting raw fuel out the muffler. The low speed setting is too rich.
- 2) The engine speeds up but seems starved for fuel or just quits abruptly. The low speed setting is too lean.

Based on the response that you notice, make a small adjustment to the low speed control. Stop the engine before adjusting either the low speed needle valve or the air bleed screw.

If you make anything more than a 1/8th turn adjustment, go back and check the high speed needle valve and then perform another low speed test. It may take several iterative adjustments, but the final result will be a reliable idle with a smooth transition from idle to full throttle.



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Postage

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

First Class Mail

July 11th, 2007

6:00 PM (food)

MCRCF Field, Veteran's Park

Treble Cove Road

Billerica, MA

**Note: No Meeting in
August**

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.

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