

THE FLYER



Middlesex County
R-C Fliers, Inc.

June 2006

Rain, rain, go away...

It just seems like this has been the toughest spring for flying R/C that I can remember. At least our runway doesn't end up under water like some do, but between the rain and all of the makeup soccer games, it's been tough to get much quality time in at the field.

There have been a couple of decent days, and one of them was May 21st, the day of our first Fly-In of the year. It was great to see everyone who showed up, but considering the good weather I was surprised that more of you didn't make it out. Maybe we're out of the habit!

Bill Copp's arrival at the field was pretty exciting (see the photo at right, and visit the web site to see a short video clip). Although I enjoyed socializing and knocking the rust off of my R/C flying during the Fly-In, I must admit that the best part of the day was riding with Bill back to Hanscom in the Robinson R22. Pretty smooth, and what a view!



Niner-seven-charlie-papa cleared for visual approach and landing is assured at Vietnam Veteran's Park!

Our next Fly-In and (this time) BBQ lunch is on June 11th. Please cross your fingers for the weather, and join us!

I was pleased to meet club member Hugh McNeil at the May meeting, his first visit with us at the Lewis Building. Also, congratulations go out to Carlos Rodriguez for getting his solo stamp.

Remember that Wednesday nights are training nights (yes, when it's not raining...) and whenever you're at the field,

President's Message

please greet visitors and encourage them to ask questions!

On a more mundane note, the portable toilet is back for the season. It's substantially cheaper for us this year, as the Recreation Department is letting us take advantage of their "bulk discount" for rentals. Enjoy!

I hope to see you at our June meeting on the 14th. We should have some good video footage to watch and some snacks to enjoy. Bring something interesting for show and tell!

I have had it up to here with all this rain!!!

Oh well - nuthin' we can do about it. The runway sure is green though, isn't it?

Have fun and be safe...

Jeff

Inside this Issue

We're having a Fly-In this weekend. No competition, just time to stop by meet other members, check out the winter projects. Burgers and hot dogs should be available at noon.

Do you know your ABCs? Jim Lowe recently wrote an article for the AMA Insider Newsletter that recommends using a simple checklist as an aid to improved safety. The first in a series of articles will look at each element of this checklist.

Did you attend last month's

Fly-In? If not, check out the article to see who was there and see some photos of the day.

Congratulations to Carlos Rodriguez for completing his solo flight.

Do you know anyone that would be interested in learning how to fly? The AMA has recently extended their Intro Pilot program to include two months coverage, free of charge, to new pilots that are being trained by a designated club instructor.

The E-Flight Brio 10 is an interesting 3D or Pattern style aerobatic plane that is designed to handle three different brushless motors. Might this plane be an option for our field when the soccer kids limit our options for conventional planes.

Interested in aerial photography? Check out Dave's electric platform that is combined with a "Blip" camera.

I hope that you enjoy this issue, Jim Orsborn.

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Special points of interest:

- Start O' Summer Fly-In and cookout — June 11th, 9:30 a.m. 'til whenever...
- June meeting, Wednesday the 14th, 7:30 p.m. — it's video night at the Lewis Building!

Coming Events — Start O' Summer Fly-In, June 11

HOT — HOT — HOT



Bill Copp plane, MCRCF field

The **MCRCF Start O' Summer Fly-In** is scheduled for this Sunday, June 11th.

There is not much time to get the word out, but we hope that as many people as possible will attend this fun event.

The event will be held at the field and is basically a non-competitive fly-in!

The event will start at 9:30a.m. and run until whenever. For those who are so inclined, a cookout is planned at lunchtime. The menu will include hamburgers, hot dogs, etc. Come by if you would like to meet other members, see what everyone's been up to over the winter - fly and talk R/C!

Rumor is that, weather permitting, Bill Copp may return again for this event.

The objective is to bring everyone out for a fun day at the field. This notice in the Newsletter will be the only announcement for those without email, and the event is scheduled before our next general meeting; so **GET THE WORD OUT.**

June 11th Fly-In

Plans include a barbecue lunch!

Bill Copp may even return with his full scale heli.

Feature Pilot — Jim Orsborn

Growing up as an Air Force brat (my father was an Air Force pilot), I saw airplanes all of the time. I remember seeing a Navy Blue Angel demonstration when I was in the 4th grade. A couple years later I met a neighbor that was flying early RC models. He introduced me to free flight models that used little CO2 cartridges for propulsion.

Later, after graduating from college and joining the Air Force myself, I bought my first RC model — a Sig Piper Cub J-3 kit. In those days, I hand launched everything. The .40 and .60 size

engines were too expensive, so most models were under powered and not capable of ROG flight.

The first time I tried to show my father how well I was doing started out fine. The hand launch and initial flight was fine. But every attempt to make a landing resulted in a go around when the plane floated the full length of the runway. Then everything finally came to a dramatic end when the engine bolts vibrated loose and the engine fell out of the plane! Since then I've been careful about trying to

show off in front of others.

My current objectives are two fold. I enjoy helping others learn the basics about this great hobby. As a club instructor, I can help others and learn more myself. My other objective is to learn how to fly either IMAC or Pattern style aerobatic sequences.

I feel that the challenge of precision aerobatics will help me to become a better pilot. I'd love it if we could add aerobatic instructions to our flight training program.



Congratulations to Carlos Rodriguez who recently completed his solo flight on his Kadet LT-40. He will continue to gain experience and confidence by flying the Kadet on his own.

Flight Instruction — AMA's Intro Pilot Program

Several options are available to new pilots interested in learning how to fly RC. For anyone that is not yet a member of AMA, they can contact one of our Intro Pilot Instructors who will sponsor them initially. The AMA has actually changed this program within the last few months so that the Intro Pilot can sponsor new pilots for two months instead of only one month.

Under the AMA Intro Pilot program, anyone that is inter-

ested in learning to fly can receive assistance from the club's Intro Pilot Instructor. As long as the student is under the direct supervision of this instructor, they are covered by the AMA's liability policy. There is no fee for this program, but it does terminate at the end of the 60 day period.

The MCRCF Flight committee has also set up a program where new pilots can fly on a club provided plane. For a one time fee of \$75, new pilots can

use a club provided plane for the first 30 days of their instruction. When combined with the AMA Intro Pilot program, the initial cost for learning to fly can be kept to a absolute minimum.

If you know of someone that is interested in learning to fly RC, have them contact either Ray Capobianco [617-697-4514] or Jim Orsborn [617-893-9668] for more information.

MCRCF Spring Fly-in — May 21, 2006

The MCRCF Spring Fly-In began as a bright, sunny day that would bring perfect flying weather. The early birds started arriving at the field shortly after 8:30 AM. By the end of the day, about 20 members and friends had stopped by to fly or check out the sights.

Some of the attendees included Jerry Crowley shown



here with a new bi-plane. The plane flew well and went home with Jerry to see another mission on another day.

helicopter. This photo shows Bill inside the aircraft shortly after touchdown. Notice the small electric plane in the passenger seat!

Bill was going to donate a ride around the field as a raffle prize, but we didn't have enough folks to make it work. In the end, Jeff Ward took Bill up on his offer to take the return trip to Hanscom - you can expect to see that video at our June meeting! If you are able to come back again Bill, I'm



Bill had of course cleared all of the details ahead of time, so everyone was happy to get a unique picture opportunity.

See the MCRCF Website for a video of Bill's arrival.

The day continued with a number of pilots taking advantage of the good weather. Martin Lindenauer is shown above with his newly repaired airplane. Martin's plane has experienced several hard landings and even been held hostage by a tree or two.

But Martin is not easily discouraged and has been able to restore the plane to flying condi-

tion after a brief stay in the shop. If anyone is interested in learning how to restore a damaged airplane, check with Martin for some tips. It's hard to see any evidence of the damage.

chance to see everyone that showed up for the day. Reports are that it was a safe day without any memorable incidents.

On other occasions over the past month I have seen a couple more pilots make it out to the field for their first flights of the year — Yes it is great that we've finally got some warm weather.

One such pilot is Padgett Spencer, shown here with a portion of his fleet of helicopters. Apparently there are several more at home. Padgett is also flying a couple of airplanes, including a Hobbico trainer that he is using to introduce his son to the sport. Better watch out Padgett, you know they say the young ones learn very fast and pretty soon they can fly better than you.

Seeing Padgett, and several other helicopter pilots, at the field brings to mind our current club restriction on helicopters. In accordance with a decision of the MCRCF Board, only pilots who were members prior to the 2005 flying season are eligible to fly helicopters at our field. **New members who joined in the last two years are not authorized to fly helicopters and are restricted to flying only fixed wing aircraft.** The Flight Safety Committee agreed with this decision and has recommended that the restriction remain in effect until an updated safety plan, flight operation rules, and a basic flight training program is approved for new helicopter pilots.



I was very disappointed that another commitment forced me to leave early. But I was able to stay long enough to see the most unique commuter vehicle.

Yes, Bill Copp literally made it a "Fly-In" event when he arrived, direct from Hanscom Air Field in his own **Robinson R22**

volunteering for the flight!

Bill's arrival did actually cause a bit of a stir in the area. Several cell phones rang within seconds of his initial sighting, and then a pair of guards from the Correctional Facility came over to check out the situation.

As I said earlier, I had to leave early, so I didn't get a



Are Electrics a Viable Alternative? Jim Orsborn

“Technically I made the first take-off and landing myself, but the fun had only just begun.”



Brio 10 Specifications

Wing Span: 41 in (1040mm)
 Overall Length: 40 in (1015mm)
 Wing Area: 325 sq in (21 sq dm)
 Flying Weight: 28-34oz (795-965 g) 31 oz
 Motor Size: Park 480 Outrunner or Power 10 Outrunner
 Prop Size: 11x7 to 12x8
 Speed Control : 35A to 40A
 Brushless
 Recommended Battery: 3-Cell 11.1V 1320mAh to 2100mAh Li-Po
 Radio: 6-Channel or greater
 Servos: 4 Sub-Micros
 Approx. Flying Duration: 10 minutes
 Approx. Assembly Time: 5-6 hours, 1 week

Whenever I decide to make a trip to the field for a flying session it takes at least 5 trips to the basement to collect all of the gear that is needed. Each plane is two trips — I usually do them first so that I can minimize the hanger damage from bumping the wall and stair railings. The other gear is heavy and bulky, so I don't like to load it first; besides the planes fit better if they go in the car first.

Well I was recently on a trip to Oklahoma City and found an opportunity to visit a local Hobby Store. While I was talking with the owner, I asked if he would recommend an electric that I might try. I explained that I wanted to use the electric to practice flying aerobatic maneuvers at our field when the weather was great, but soccer restricted the use of my larger planes.

Mike said that he would recommend the relatively new Brio 10. It is an E-Flight model that has been designed to handle both 3D and Precision Aerobatic flight profiles. Designed by three-time world champion, Quique Somenzini, the plane is an extremely light weight model that is designed to use a couple of different electric motors. Mike even gave me the specific recommendations.

Okay, so on my next trip to RC Buyers I found one on the shelf and decided to try the electric alternative.

I really do have to admit that the parts in the box looked really impressive. Laser cut, perfect covering job, fiberglass cowl, magnetic hatch hold down and an assembly manual in English. The kit actually includes two firewalls, because the instructions cover installation of three different motors.

Assembly was very straightforward, but was time consuming because I tried hard to do

everything correctly and not make any mistakes. I checked the CG, and opted for the tail mounted rudder servo instead of a fuselage mounted pull-pull control. I also left off the wheel pants because of our grass field.

The first trip to the field was a calm Saturday afternoon. Technically I made the first take-off and landing myself, but the fun had only just begun. I made a straight take-off down the runway, followed by a left turn back to a touchdown just across the runway. The problem was, the plane seemed very sensitive, and I wasn't able to set it up for a trim flight. I was relieved when Ray offered to take the controls and perform the trim flight.

After take-off, Ray climbed to altitude and turned left for a trim pass, but the next thing we knew was the canopy popped off and started floating to the ground. Ray immediately started complaining about how out of trim the plane was, and how much it wanted to roll to the right as soon as he let the controls go.

We're still trying to figure out if Ray's problems were caused by the canopy failure or more likely my faulty radio installation — you see I still had the radio set for Flapperon mode even though I had installed a “Y-cable” and connected both aileron servos to a single channel.

Anyway, Ray was able to bring the plane back to the runway; something that I could not have done with the plane requiring almost full left aileron to stay level. Following this flight, I did have to reconstruct the motor mount and firewall; because the motor started with a broken prop and ripped itself from the firewall. The second flight resulted in another broken prop and put me out of service for a couple of days.

On the third attempt, I was

again able to get the plane from take-off to a nearby landing, but was not able to make a trim pass. So Ken Walker, another MCRCF pilot who I respect for his skills, was asked to make the trim flight. Kenny was able to make the flight without incident.

While making this trim flight, Ken was able to demonstrate the vertical climb, axial roll, and some of the low speed stall characteristics of the model. But my concern is that the model just does not have the strength and durability of a larger model.

At this point I know that:

- The thin aluminum landing gear is very marginal for our grass field, having been bent on every landing.
- The 2 mm wheel axles are too light and bend easily.
- The electric props are light weight, but will not survive a tall grass landing.
- If the engine starts with a broken prop, it will rip itself off the firewall.
- I need to check the engine and motor speed control to understand why I occasionally lose power before the battery reaches cutoff.
- The plane needs to be landed while there is still adequate battery voltage for a power on landing to maintain control.
- I should probably reduce the aileron and elevator control throws and add more exponential until I'm able to reliably control the plane.
- Downsizing from a .40 size glow plane to a .10 size electric is not a “piece of cake.”
- On the first flight with any plane, your best friends are airspeed, airspace below your wings, and having the best pilot available at the controls.

Safety — Know Your ABCs

Don Lowe, in his Safety article for the March issue of the AMA Insider suggests that we all learn to follow an ABC checklist.

A (assembly): Check that everything is in its proper place, controls are still intact as installed and securely fastened, and all assembly fasteners are in place.

B (batteries): Must be fully charged—very critical to safe flying.

C (controls): Controls checked for deflection, without evidence of servo malfunction, and operate in the proper direction.



There is a saying that “Safety is no accident.” So beginning this month I’m going to take a closer look at each part of Don’s checklist. This month we’ll focus on **A (assembly)**.

When you took your ARF out of the box, many parts of the plane were already assembled in their “Ready To Fly” condition. But you still had to complete all of the final assembly tasks; including installing the radio and engine. You probably had to attach the tail feathers and join the wing panels.

So when you consider the first, **A (assembly)**, item in the checklist, start by looking over

everything that you did to the model after taking it out of the box.

- **Proper place:** Is there anything inside your fuselage that is loose and subject to movement; battery, receiver. If anything has moved, the CG could be off and cause the plane to fly erratically.
- **Tail feathers:** These surfaces are often glued to the fuselage so check the joints for soundness and good strength. Anything else that you glued during the assembly process should be checked as well.
- **Control surfaces:** Check the hinges and the control horns. Hinges are subject to fatigue and can break. Control horns will also become loose. If a control surface has any slop or flex when the radio is turned on, it will be impossible to trim the plane for hands off flight.
- **Servos:** Even if they came pre-installed, check them before each flight. Screws tight, no missing screws, control horns and clevis locking devices are tight.
- **Wing attachment:** Whether you use rubber bands, nylon bolts, wing tubes or a permanent attachment, always check the wing attachment for proper assembly. Use the recommended number of rubber bands, and replace the ones that show any sign of age. Don Lowe’s original article commented on the total loss of a large Pattern aircraft because the pilot was distracted and forgot to install the set screws that were supposed to hold the wing on the wing tube — Confucius say: “Wing come off, plane fall like rock”
- **Engine:** This is the primary source of all vibration, so it would make sense to check it carefully before each flight. Even if the engine bolts are tight, is the engine mount still firmly attached to the firewall? Yes, these bolts will come loose from vibration.
- **Miscellaneous:** These items would include wheel collars, any add-on items, covering material, cowls, canopy, fuel or battery hatches. Again, anything that you worked on during the assembly process should be checked to see that it is still properly attached and securely fastened.

Next month we’ll take a look at **B (batteries)**.

Confucius say: “Wing come off, plane fall like rock”

Smile, You’re On Candid Camera

Dave Varrell was recently seen at the field with this cute little electric plane. Notice the small digital camera mounted in the fuselage. It is one of the neat, little “Blip” cameras that can be ordered on-line.

The camera is controlled by the “Aux” channel on your radio and can be set to record either continuously or on command. The plane is a very basic, Styro-foam model with a Park 480

motor for power. This little brushless motor provides plenty of pep to carry the camera to altitude.

So Dave, when are we going to see a photo or two of the field and surrounding area?





Postage

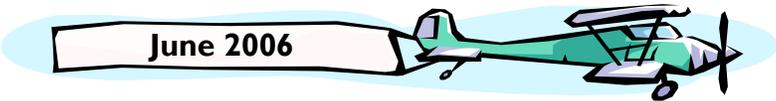
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We're on the Web!
<http://www.mcrcf.org>

First Class Mail

Next Regular Meeting

Wed. June 14, 2006
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.

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