

THE FLYER



Middlesex County
R-C Fliers, Inc.

Aug. / Sept. 2006



President's Message

Jerry Crowley's F4U war bird on final.

Photo by Gerry Carignan

» Well, happy September to you all! Man, how the time does fly...

» Before I get on to other business, I just want to send our collective best wishes out to Dave Heckman, who is recovering from surgery that removed a benign brain tumor. Dave's recovery was going very well until he had a scare with an infection that sent him back to the hospital. I understand that things are going better now, so here's hoping we'll soon see Dave at the field again.

» We resume our regular meeting schedule this month, beginning with Wednesday, September

13th. If all goes well, I'll be demonstrating how a toaster oven, a zip-lok bag, a wooden spoon, a two-by-four, and some nylon ties can help to execute a bearing change in a typical two-stroke. I'm relatively new at this, so it could be a learning experience all around!

» Billerica's Yankee Doodle celebration is fast upon us. This year it will be a Saturday-only affair. Our plan is to provide our usual hands-on flight experience for the young and young-at-heart, and also staff an information booth to spread the word about R/C, MCRCF, and AMA.

We very much need commitments from people to help set up and break down, staff the booth, help with the hands-on (crowd control, "ground school", and at least one more experienced pilot with trainer and buddy-box.) If you can commit to helping (even an hour or two) *please contact me ASAP* or confirm at the meeting.

» A note to those who like to renew their AMA and MCRCF memberships as soon as they can - there may be some changes to our dues structure this year - **please DO NOT**

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Special points of interest:

- Control is the third and final topic in the Know Your ABCs
- Hugh McNeil was the winner of the Mach Racer raffle last month
- Jim Orsborn and Rick Buccieri attended the NSRCA Pattern contest held in Hadley

July Meeting



Hugh McNeil won the .40 size Mach Racer in the raffle at the July meeting.

Well the rains came, so we had to move the cookout to the Lewis Building where there was a little cover and some indoor tables. But thanks to all who helped we had some beef patties, sausage and hot dog entries that were cooked under a tent and served

indoors.

The Billerica Access TV (BATV) program **Cosmo's Journal** recently featured an interview with Jeff Ward and Dave Varrell. A DVD copy of the program was shown as entertainment while everyone ate. Re-runs of the show can be

seen on Billerica Access TV or see Jeff / Dave for a copy of the DVD.

At the end of the meeting, Hugh McNeil won the raffle, a .40 size Mach Racer ARF. Bill Copp and Ernie Hollis offered show and tell presentations.

Flight Instruction



Class of student pilots seen at the field recently

"Wednesday night is reserved for flight instruction."

The MCRCF Flight Instruction program continues to attract new students interested in learning how to fly RC Model Aircraft. The photo on the right shows five new students

that were seen at the field on a recent Wednesday evening, which the club has designated as Flight Instruction night.

On this one evening, several Instructor Pilots try to be at the field to help anyone that is interested in learning to fly. Instructors and their student pilots have priority access to the field and all other members are encouraged to give way unless there are no students ready to fly. MCRCF Field Operating Rules permit up to three

aircraft to be airborne at the same time; however, flight instruction includes teaching both landing and takeoff maneuvers which involve repeated, almost continuous, access to the runway.

In the interest of flight safety, members wishing to fly on Wednesday evening should talk with an Instructor and insure that they will not interfere with the instruction program.

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attempt to renew using a previous year's application - it will be returned. All members will be notified when the 2007 application is available.

» I was sorry to hear that

Bob Forgione's trainer was lost recently due to a "shoot down" incident. I can't remember the last time we had one of these, but I understand that the "shooter" mis-read the channel number on Bob's tag. It's an opportunity to

remind us all not to get complacent about careful frequency control. Hopefully Bob can get back on track soon, so that he can achieve "Pilot" status and fly that flashy yellow number he's holding! ==>>> Be safe, and have fun! JSW

Please congratulate Bob, our latest pilot to solo.



Engine Break-in Tips

On a recent trip to the field I observed Paul Servedio running his engine on a test stand. Interested in what he was doing, I asked a couple of questions. First, notice that the engine is securely mounted on an engine test stand, that is clamped to the bench that surrounds our pit area. The chosen area was well away from any observers, and the operator can stand behind the engine out of the way of the prop. Not shown, but the

operator is also wearing hearing protectors because the engine will be running at a high RPM during most of the test run.

Upon talking with Paul he explained that he was breaking in the engine and trying out a couple of new techniques. First, he was carefully monitoring the head temperature by using the small, remote IR heat sensor. And he was also using an air intake restrictor to insure a rich burn with plenty of fuel for

lubrication.

Other members feel that a new engine can be broken in more easily by actually flying the engine in a plane. The only caution is that a new engine is more prone to stop, so one needs to be ready for a dead stick landing if the engine is in the air.

Your thoughts?



Using a head temperature meter while breaking in an OS .46 FX on an engine stand.

Swap Corner: For Sale — Wanted

For Sale:

Ace R/C Seamaster
85" wingspan 75" long
takes a 120 size engine
and 4 channel radio.
This is a build it yourself kit NOT an ARF.
ARF's may be faster to put together BUT a built up kit is stronger and lasts longer. Not to mention the satisfaction of building something. This is a seaplane that can be flown off land by adding the optional landing gear. The finished plane is IMAA legal. Asking \$100.



(This is half the retail price for this kit IF you could find it.) **If interested contact Rick Buccieri, 978 667 5511.**

Wanted: **Sig Kadet LT-40.**

Sig Kadets are currently out of stock from Sig and not available in area Hobby Stores. If you have one, or know where to find one, please contact Jim.

For Sale:

Hobbico SuperStar Select MKII RTF w/ 4ch Futaba radio.
Will sell for \$100.
Also have a new igniter with meter, 2 extra glow plugs, 2 10x7 Master Airscrew props, a chicken stick and a gallon of 15% Cool Power fuel all set up with a manual gas pump. Will sell everything for \$190.
If interested contact Martin Healy (617) 988-4777

Gerry Carignan, Pilot and Photographer



Gerry with his XCell 46 Heli

Gerry Carignan is a 15 year veteran of the club who enjoys flying his helicopter, an XCell 46 with graphite boom and blades. I recently had the opportunity to

watch Gerry fly and I was quite amazed by the combination of smooth graceful turns at low altitude as well as his ability to transition back and forth to

high speed aerobatic turns.

Those of you that know Gerry already know this, but his second hobby is photography. Check out the fabulous cover photo of Jerry Crowley's F4U war bird on approach to the field. Gerry took the photo with his long, 200mm lens at something like 1/1600 of a second. Gerry also panned the camera to match the flight path of the plane and used some anti-shake features of his Nikon D2H camera to help freeze the motion.



Gerry Carignan, Camera at the ready

At 4 Mega Pixels, the photo has great resolution and the print from his bubble jet, photo quality printer is suitable for framing. Thanks Gerry for sharing your talent with other club members.

Safety is YOUR Responsibility Too

One Wayward Airplane Changes Everything:

A guest who was visiting the club crashed his model on a soccer field during half-time of a game.

The latest issue of our AMA Magazine has a story about the New Fox Valley Aero Club field. The story offers a little background and then

describes the new field and how it all came together, including the creative financing arrangements and liaison with the community.

But did anyone note the detail as to why the club needed a new field in the first place? It all came down to **One Wayward Airplane** — flown by a Guest!

As one member pointed out recently, an

accident never happens because of a single cause — but rather an accumulation of factors.

Every MCRCF Member has been appointed as a club safety officer. So if you see something that might contribute to an accident; Please do your part and encourage safety conscious actions.

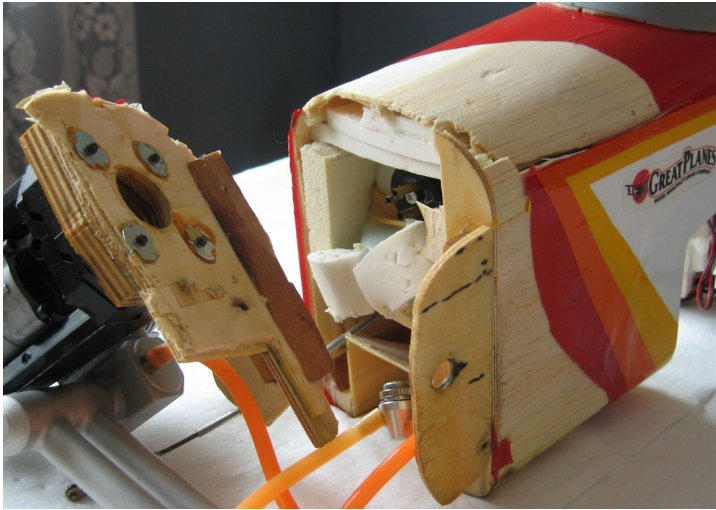
The club Safety and Field Operation rules are guidelines. Take the

time to understand them and then do your part to make sure we don't have an incident at our field.

One final point, there is no indication that the Fox Valley incident caused any personal injury; but the accident demonstrated the obvious potential and that was all that it took to get the field closed.



Repairing the Damage after a Sudden Stop, with Unintended Consequences



Venus 40; with firewall separation

We've all had it happen, that unexpected gust of wind turns a perfect approach into a sudden stop on the runway and you've got some repair work. Okay, in my case it was pure pilot error when the landing speed got too slow and resulted in a cartwheel that caused the damage shown above. I didn't even break the prop, but the firewall, wing mount and horizontal stabilizer glue joint all failed.

The first thing you want to do is a complete walk around and make sure that you pick up ALL of the pieces, even small

pieces of balsa that will be needed to complete the repair.

The photo shows how the firewall split away from the fuselage. The plywood firewall cracked along a line just to the left of the blind nuts for the motor mount. Edge joints on the other three sides failed too.

With some of the cover material removed, I discovered that there were splits along the grain at several points on the top. Under the covering on the right side is also hiding one more joint failure where the floor for the fuel tank fits into the side sheeting.

The plywood split left a very ragged edge that is slightly more difficult to repair than a simple balsa cut. Broken pieces from each layer of the plywood need to be cleaned out until the joint slides together. I could have sanded both edges and used CA to make the joint. But I opted for epoxy, and kept cleaning the joint until the two pieces of plywood fit together.

When the fit was right, I mixed up a batch of 30 minute epoxy and applied a liberal coating on both sides of the plywood joint. The pieces fit together, and then I was able to "Pop" the far side back into alignment with the side and top. With everything in place, I used a beam clamp to squeeze the sides together and let the epoxy cure.

After the epoxy was cured, I used thin CA to

heal all of the splits in the grain on the top. I also pulled the side covering away and used more CA to glue the fuel tank floor to the siding. Thin CA penetrates the wood nicely and sets the outside sheeting and the internal but joint at the same time.

I also opened the joints on the far side and used some Thick CA to secure all of these joints. Thin CA was used all along the top where the sheeting covers the firewall.

Covering the repairs was fairly simple, one piece on each side and a third piece over the top. As you can see, all that's left is to re-mount the engine and install the cowling.



Firewall Repairs Complete

Field Trip Report, Hadley Pattern Contest

At a little past 6:30 AM Rick Buccieri and I met for the drive over to N. Hadley, MA to observe an NSRCA

lots ranging from first time pilots to the current District I NSRCA President and two contenders for the District

flight schedule for the first round was posted.

Beginning with the Sportsman Class, each pilot was given a chance to fly the pattern sequence for their class. The judges filled out their score sheets and turned them in to the scorekeeper who tabulated the results.

One very exciting part of the show was having Rick Wallace, the District I President, stand beside me and call the sequence for the first pilot who was flying the Masters class. Rick was willing to do this even though he was scheduled as the next up in the ready box and the third pilot in the class.

While the Sportsman class is a fairly simple sequence of aerobatic maneuvers (Lines, rolls and loops), the Masters Class includes things like a Pyramid Loop, Vertical Figure 8s, Snap rolls and combinations.

Being able to fly a pattern sequence requires that the pilot take flying to the next level. Almost any plane seen at the MCRCF field would be capable of flying the

Sportsman sequence. In fact most of our pilots have tried all of the maneuvers. The real challenge is trying to fly them in the assigned sequence. If you think you might be interested, here is the sequence:

- Takeoff
- Trim pass
- Straight upwind
- 1/2 Rev Cuban eight
- Straight downwind
- 1/2 Cuban eight
- two loops
- Break
- 2 point roll
- Stall turn
- Cobra
- Emmelman
- Full roll
- Split S
- Double Emmelman (without rolls)
- Landing

At our field, these maneuvers would be done parallel to the runway and out at a distance that would place them approximately over the tree line.

By attending this event I have a better appreciation for how some of these maneuvers should look. Learning to fly any sequence is difficult, but the combinations in the more advanced



Group of flyers, including Rick and Jim, from eastern Massachusetts attended the NSRCA Pattern Contest.

Pattern Contest.

Although there had been a early thought about possibly entering the contest, we decided to make the first trip a simple observation day.

Pilots started arriving at the field around 9 AM and started unpacking and checking out their equipment. The final group of contestants included an amazing variety of pi-

I NSRCA Champion. But the common feature found among everyone was a friendly attitude and an open willingness to answer questions.

There were a couple of pilots that were airborne early, but the real competition began around 11 AM. After a short Pilot's Briefing by the Contest CD, judges were selected from the group and the



Safety — Know Your ABCs (Part 3)

Don Lowe wrote an article in a recent issue of the AMA Insider suggesting an ABC Checklist. In the last two issues we discussed **A (Assembly)**, and **B (Batteries)**.

This month, the topic is **C (Control)**. So we have checked that everything is properly assembled and charged all of the batteries, but without proper control, most RC Planes won't be around for a second chance.

By definition, our RC models use a radio to send control information to the plane. So the point here is to insure that the transmitter is actually sending the information that you, the pilot, think it is sending and that the plane's radio and control system is responding to those inputs properly.

To start with, how many transmitters do you have and are you sure that you are using the transmitter that was set up for this plane? With programmable radios that support multiple models, it is always a good idea to label either the

plane or the transmitter to insure that the two are matched.

Another item to check is the settings on all of the switches on your transmitter: Dual Rates, mixing, programming buttons, kill switches and even extra channels. If you don't use the exact same settings on all of your planes, then how

turns on final!

When checking for right aileron deflection during the pre-flight, it is also a good idea to check the left aileron too. With two servos, the right aileron might be working fine; but if the left is not even connected, would you notice?

Checking for proper control movement

other area that should be checked prior to take-off.

The AMA suggests we do a ground check of the radio. It is also a good idea to do this with the engine running as well as with it off.

Okay, so we've completed the ABC checklist and the plane is ready for take-off. Before actually advancing the throttle and lifting off, please take a moment to review and think about our own club Safety Rules and currently approved Flight Operation Guidelines. This will probably be the topic of a future article, but the rules are posted at the field and every member should make an effort to follow them.



(A) Assembly, (B) Batteries, or (C) Control Failure?

The end result is the same. Could our ABC checklist have helped avoid this result? Maybe.

will you remember that they are different on this plane?

I once thought that reverse aileron with rudder input was neat and really helped me do a stall turn with my trainer. But boy was it fun one day when I was trying to make a landing with some rudder

seems like such a basic item, but everyone has heard stories about planes taking off with either reversed aileron movement or no aileron control all together. If you have two aileron servos and are using two channels or flapperon mode on your TX, that is an-

Every MCRCF Member has been appointed as a Club Safety Officer:

Please take the time to practice safety yourself and speak to anyone that you feel may not be looking out for the safety of others.



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Postage

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

First Class Mail

Next Regular Meeting

September 13th, 2006

7:30 PM

Lewis Building

248 Boston Road (Rt. 3A)

Billerica, MA

Aug. / Sept. 2006



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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