



KNOX COUNTY RADIO CONTROL

MAY 2020 Newsletter

Knoxville TN AMA #594

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www.kcrctn.com

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Throughout the month of April many of us have been flying at KCR C following the coronavirus rules and guidelines implemented on April 2.

We all have been having a lot of fun, but unfortunately there were two planes that crashed into the river (discussed in a separate article).

The Governor's announcement regarding essential activities permitted an exception for certain outdoor activities at parks and recreation areas that include walking, hiking, biking, boating, tennis, golfing, and other sports and recreational activities while maintaining the Health Guidelines. We fall under "other sports and

recreational activities." So long as these essential activity limitations are continued, I expect our field can still remain open.

Whenever the Governor's restrictions are lifted, we will review our coronavirus rules to determine if any of them should be lifted as well. On April 2 we did communicate to Knox County Parks all the restrictive and health procedures we implemented, and will also let them know if we make any changes.

We are maintaining the 6 feet social distance, and keeping an empty flight stand between all flyers. It works best to actually place these stands on end so that nobody inadvertently walks up and tries to use them.

Masks are also encouraged as an additional protective measure, but I have not yet seen anyone out at the field wearing one.

Keeping the gate locked is working out well. Not having visitors removes a lot of risk, especially since visitors wander around a lot and our club members have always had difficulty restricting where they go.

One last reminder: all club events and meetings have been cancelled until further notice. This includes the SPA, Float Fly, Cub Fest, and our Club picnics. We will reassess in the future as appropriate.

So if you are going crazy staying at home, take a break and come out to the field to fly and to socialize. However, please do it safely.

Frank

TO: ALL KCRC MEMBERS
April 2, 2020

FROM: FRANK ALLEMAND AND THE EXECUTIVE COMMITTEE

The following is how we will operate to comply with the guidelines of the CDC (Centers for Disease Control), and Knox County directives. This is similar to what other clubs are doing.

1. ALL club meetings are cancelled until we send out a future notification. Your officers and board members will communicate by email on any urgent issues.
2. ALL club events are temporarily cancelled and placed on Standby, pending further evaluation. Planning activities may continue by Event

CDs to be ready if cleared in the future by the Executive Committee. If and when cleared, an event notification by email will be made to you as timely as possible.

3. The field is still open to flying at this time. If that changes, we will send out an email to let you know.

4. ACT RESPONSIBLY AT THE FIELD.

a. If you go to the field, be sure to bring your own sanitizer and PPE (Personal Protective Equipment) supplies if desired because nothing will be provided.

b. When setting up planes in the pit area, flying, and walking around the flight line, keep at least the minimum required SIX FEET of social distance. Exceptions will not be tolerated. This also means there must be a vacant flight stand between all individuals; members must accordingly limit their use of flight stands so the spacing can be maintained.

c. If you are sick, have a temperature, have a cough or flu symptoms (not an allergy), or are unsure, DO NOT go to the field.

5. Guests are NOT permitted at the field until further notice. Every member should lock the gate behind them upon entering the field. The gate should always remain closed and locked to keep non-members out of our facility.

6. John Basalone will remove all trash cans for the balance of the epidemic. All club members need to pack up and haul away their own trash. In addition, the refrigerator will not be on.

I hope everyone follows these directives voluntarily. KCRC Club officers are responsible to make sure there are no violations at the field. If anyone does not properly comply with the above, they will be given one warning and thereafter asked to leave the field.

RECOMMENDATION TO GIVE

By Randy Phillips

I have been donating blood to a regional blood center for years now. They are constantly needing blood and now in this critical time they are needing donations more than ever. Below is the mission statement from their CEO.

“MEDIC Regional Blood Center is dedicated to providing a safe, adequate and economical supply of blood and blood-related products and services in this region. Our vision and our values strongly support our mission and we are honored to serve East Tennessee.

I think this would be a good time for our members to donate blood for a good cause. They have two locations in Knoxville, one in Farragut and another close to 17th street in the downtown area.

At this time you have call to set up an appointment (**865-524-3074**).

NO MAN LEFT BEHIND:

THE INCREDIBLE RESCUE OF KCRC PLANES AND PILOTS FROM THE RIVER

By Frank Allemand

Every now and then you hear a great story about one of our model planes or its pilot/canopy that has been lost in the river and is saved by a Good Samaritan boater. I always considered our body of water the “River of No Return,” but have been proven wrong on numerous occasions. This is the story of some of KCRC’s river rescues.

CRASH OF GARY SWIGERT’S F-4 PHANTOM

March, 2020. Gary’s Freewing 90mm edf jet successfully flew about 10 times before it didn’t. Normal takeoff is about 150 feet with half flaps, and a slow full throttle climb out (even with a powerful motor it is a heavy jet). On this ill fated flight it instead took off in about 50 feet and climbed steeply like it had oversize double afterburners blazing at max power. After Gary regained partial control with a lot of down trim, the second problem began: a strong and wild left roll. While Gary was able to overcome the climbing issue, he could not overcome the wild left roll. After repeated attempts to recover from each successive series of rolls, the elapsed time was about 3.5 minutes and the battery began to lose power. The F-4 went into the river at about 9:30 am; so far out nobody thought it was worthwhile to go looking for.

Gary left the field about 11:30 am, and I left about 12 noon. John Basalone stayed on to tackle some new fire ant mounds. About 12:30 pm a stranger named Tim pulled in with Gary’s plane and

explained how he recovered it from the river while fishing. It had floated about a mile downstream, and was resting right in the center of the river. Apparently several other boats passed the F-4 and did not pick it up. Tim immediately recognized what it was, and promptly returned it to our field. Tim also indicated this was his second save; he previously returned a crashed plane from the river to our field when nobody was there and just left it at the gate. **MANY THANKS TO TIM AND ALL THE OTHER GREAT BOATERS LIKE HIM.**

Surprisingly the damage was minimal. All of the various components were working perfectly. The motor, edf, esc, servos, and receiver all seemed to function normally. There was no clue in the wreckage as to what went wrong.

Gary glued the fuselage back together, and repaired some small breaks in the wing. The nose cone and the pilot/canopy were missing, so new ones were ordered. Half of the armaments were also missing, but Gary decided to fly without any of them.

Now that the two ordered items have been received, the F-4 is ready to go. It will be an exciting flight, plus a little scary. Shown below is a picture of the returned plane taken by John Basalone.



CRASH OF FRANK'S MIRAGE

May, 2019. Coincidentally, my Freewing 80 mm Mirage that crashed into the river a year ago seemed to have the same problems as Gary's F-4. Each flight the harsh climb and roll tendencies seemed to get worse and worse, and yet there was never any clue as to what was wrong.

On the Mirage's fifth flight I lost control yet again and it went extremely far out, almost beyond sight. Through some miraculous good luck I was able to recover it even though I could hardly see it, and bring it back in by flying at very low power, just enough to stay airborne without a stall, but with less roll and pitch problems. It is amazing that the landing was so beautiful.

Even though I knew another flight was high risk, I decided to go for it anyway because I still could not find anything wrong with the plane. Why delay the inevitable next flight? No surprise of course, it still flew the same. I ended up in the same spot with the same problem, but this time there was no recovery. The Mirage crashed into the river at 10 am.

About 3 pm I received a call from Joe Bryan in Oak Ridge, a boater who had my plane. Around 11am he picked it up from the river a few miles south of the field, and called me as soon as he got home. That evening I went over to his house, had a nice visit, and got my plane back.

The front of the fuselage was missing as well as the pilot/canopy and front nose gear. There were also several breaks in the wing. I tested all the components, and everything worked fine, so still no clue as to what happened.

At this point I decided I never wanted to see the plane again. All good parts were taken out, and it was a pleasure to put the remains in the trash.

I am grateful to Joe for returning the Mirage to me. The motor, edf, servos, and wing gear have already been used elsewhere.

LOSS OF FRANK'S T-28 PILOT/ CANOPY

July, 2019. I purchased a yellow FMS T-28 Version 4 from the factory in China because it is a great flying plane, was on sale, and also because FMS gave me a big credit for some delays in a prior shipment.

The maiden flight went perfectly and I was very pleased. In fact it flew so good that on the second flight I began long inverted

sequences. However, on an inverted turn over the river, the canopy/pilot came loose and fluttered down into the river at about 10 am. The plane seemed to fly well without the canopy, so getting it back was not an issue.

At about 2 pm I sat down at my computer to order another pilot/canopy. Since version 4 was brand new, there were not many parts in the USA and I was being forced to get it from the plant in China. Just as I pulled up the FMS site to order, I noticed a voice mail on my cell phone.

A very nice woman said she and her husband were out on the river south of the field, and had my pilot/canopy. They were heading back home going north to Clinton, and wondered if I could meet them at a dock along their route.

I called back, and we agreed to meet at the Edgeware Road dock in Oak Ridge at 3:30 pm. They asked that I call them at exactly 3:30 pm to confirm I was there before they pulled the boat in.

Promptly to the minute I called as requested. The gentlemen wanted to be sure I was at the right place. He asked, what do you see when you look to the right? My answer: a bridge. What do you see if you turn around 180 degrees? My answer: apartments. He said, OK, I'll be there in five minutes and my wife will be in the front of the boat waving your canopy in the air.

The returned canopy looked perfect, no damage whatsoever.

After putting in a better latching system to replace the magnets, the T-28 was ready to fly. It was amazing that I got it back in such perfect condition, and even better that it turned up before I ordered another one.

A picture of the returned T-28 pilot and canopy is below (shown on a lake on my train table).



LOSS OF A MYSTERY PILOT AND CANOPY

July, 2019. Two days after the T-28 incident I noticed a voicemail about a missing pilot and canopy. It was confusing because I thought I already deleted the T-28 message, and here was a woman telling me she had my pilot and canopy and wanted to return it.

I did not think I lost anything. However, when I called her back, she insisted it was mine because it had my name, phone and AMA number on it. She said the pilot was French. What she apparently found was my Mirage pilot from the crash back in May.

Even more confusing was where she found it: near the steam plant in Oak Ridge. The current would have taken it the other direction. And where had it been for two months?

She was a teacher in Oak Ridge, was very nice, and really wanted to get the pilot ‘back to his home base,’ as she described it. However, she did not like the idea of a stranger coming over to her house.

Her suggestion was to drop the pilot off at the Oak Ridge police department’s lost and found, and said she would call me when he was there. Instead her next call said the Oak Ridge police department did not want anything to do with my pilot.

Her next suggestion was to leave the pilot out on her front porch and I could come get him at my convenience. She said she would probably not be home, and would not answer the door even if she was. She just wanted to make sure I got the pilot back to his base. I thanked her and told her this would help me out a lot, since my policy was no pilot left behind and his fellow pilots really missed him.

The mission to retrieve the Mirage pilot was successful. As expected, she either was not home or did not answer the door. I texted her after I got home and told her the mission was successful, he was back with his friends. She returned my text and told me how happy she was because he was a “brave pilot.”

A picture of the happy returned pilot is below. Since the Mirage was trashed, the French pilot is now flying a RAF Bae Hawk.



CONCLUSIONS:

April, 2020. Right after this article was completed and the ink was not even dry, John Basalone was flying his Fury jet out over the river and his controls stopped working. Straight down it went! It is still unclear what went wrong.

John waited patiently for the next few days for the phone call he hoped would be coming from a nice boater, but none came. Guess this proves the obvious, one is very lucky to get anything back from the river even though it happens a lot.

So two key points to remember: the boating community near our field consists of a lot of really nice people and is providing a great service to us by returning many of our planes and canopies. And second, you will probably not get much back from the river if you

fly without id tags. It sure is worth putting one or more identification tags on your plane, and probably also on any other parts that might detach like canopies, battery covers, etc.

Technical Article – Making Repeatable Ribs **Michael Catlin**

A few weeks ago I was talking to one of our members about scratch building planes. One of his comments struck me as informative, cutting ribs by hand can be difficult to get them all exactly the same. Patiently tracing the rib outline that has been glued down to a rib blank can be tedious and, if the blade decides to follow the grain, frustrating.

Here is the method I came up with to cut out ribs. It's probably not new but I thought I would share anyway. I am using tools that came out of my 3D printer but if you don't have a printer these tools can be duplicated in plywood or other material. Soft aluminum can be worked with wood working tools for instance.

First, prepare the rib blank. If you are working from plans, copy the rib. It's best to change the settings on the printer to print as dark as possible and be sure that the copy is the proper size. My laser printer has a setting for auto scale and I have found that this will change the size of copied documents so beware. Place the copy face down in the template material and press it in place with a heated iron. Be careful not to slide the copy around on the blank material as this will smear the toner. Once the paper has cooled carefully peel the copy back and what is left behind is the toner fused onto the blank material. If the resulting mirror image bothers you check the printer settings and there may be a setting to print a mirror image. Once the image of the rib is transferred to the blank rough cut it to shape. And then sand (or file) to shape. With practice, one can routinely split the line. Take your time as going too far at this point will leave a divot in the ribs. ("It's not a mistake, it's a tubulator".)



Now is the time to add holes for wing jig rods and/or servo wire passages. I slide my ribs onto 3/8 aluminum rods which are supported at the ends with equal width 2x4's. This makes the rods parallel and if the rib holes are inline then the wing will be

straight. Or, if a spacer is slipped under the trailing edge end of the support at the outboard tip washout can be built in. Just be careful to not to get confused and build one panel with wash-in and one with wash-out as that would not be good.

To drill the holes I make a core drill using a piece of K&S tubing (K&S tubing can be obtained from McMaster-Carr) that matches the size of my support rods. To form teeth I make a series of angled cuts with my Dremel tool or with a triangular file.



Now that we have the rib template almost finished it's time to make the drill template. Attach the rib template to the drill template stock. Double sided tape will work or if using aluminum a drop of CA will do. If the drill template is thick enough small wood screws can be used. Now using the core drilled holes in the rib template use the core drill to drill through the drill template. Once the holes are drilled you will now have perfectly matched tooling. Now attach small strips of material to the drill template leaving space outside the rib template. These will provide

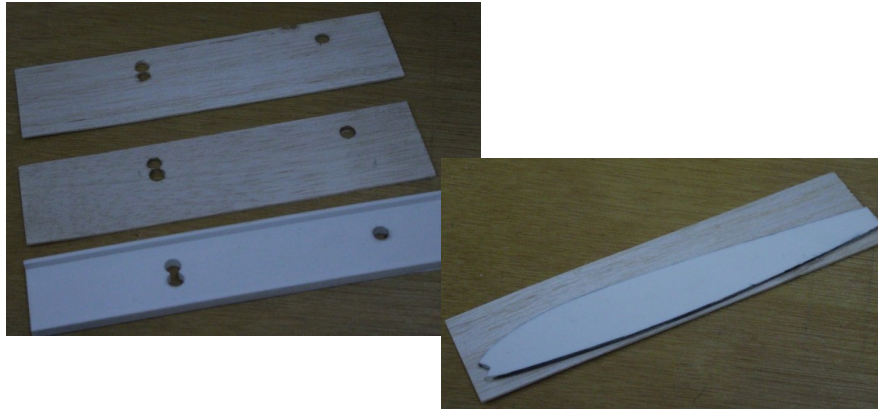


indexing stops for the balsa rib material. If you are using a drill press to drill the rib blanks these stops can be tall enough to drill multiple layers at one time. If hand guiding the drill, only make these strips to accommodate 2 or 3 rib blanks. If you are planning to drill 2 at once and the rib material is 1/16" then a 3/32" high index would be fine. The 1/32" gap allows the balsa to be compressed between the drill template and whatever surface you are drilling on and keeps things from sliding around.

Now take same material you made the core drill from and glue it into the holes in the rib template. These will form indexing "pins" to hold the balsa in position. Try not to have the "pins" protrude more than the rib material thickness as the rib template will tend to rock. If the "pins" are shorter than the rib material thickness the rib will be pressed between the rib template and the cutting mat.



To make ribs, pre-cut rectangular rib blanks, stack them with edges lined up and place them under the drill template. Now use the core drill to drill through the rib blanks. Do not let the blanks shift around when drilling the holes. The result is a set of rib blanks with perfectly positioned holes that will fit the rib template. Place a rib blank on the rib template and pressing down on the rib template cut off the excess balsa. Repeat for as many ribs as are required.



important 2020 club sticker to be placed on the upper left side of your transmitter. If you need more than one sticker simply ask. Since we are now getting Drone members, be on the lookout for Drone stickers which have a drone image on a blue background.

After February there is a \$5 penalty (\$77). I am accepting mail in renewals. Send checks to (no cash please)

KCRC c/o Michael Catlin
6812 Adrian Rd
Knoxville, TN 37918

The gate combination will be emailed to current members only and as of this newsletter only current members will receive email notices and newsletters. Newsletters will still be posted on the clubs website <http://www.kcrctn.com>. However, this may change in the future and only newsletters from previous years will be available to non-members.

Remember, only those with current AMA membership will be allowed to fly at the field and do not tell anyone the gate combination without checking for membership. If there is a question about membership there is a membership roster in the lock box with the applications. Non-members do not receive email notifications about club events or newsletters.

Membership

Current paid 2020 membership is 55 and I have a lot of member packets left to give out. Each packet contains a welcome letter, an information sheet to allow members to update their information, a return address label to send back corrected information sheets and the all



Upcoming Events

(Notice events may be canceled)

~~SPA Event: May 16-17, coordinated by Jimmie Russell~~

~~Float Fly: May 23 at the boat dock by our field, coordinated by John Basalone~~

~~Memorial Day flying and first class lunch : May 25~~

~~Cub Fest and a first class lunch: June 6, coordinated by Ed Dumas~~

~~July 4th flying and first class lunch~~

House Mountain May 16 -17. F5j. Glider contest

Tennessee Eagles War Bird Event Saturday, June 13 Tennessee Eagles R/C Club, Harriman, TN

House Mountain Aug 5-9. Huckfest

Tennessee Eagles Charity Event Saturday September 19 Tennessee Eagles R/C Club, Harriman TN

House Mountain Sept 25 -27. Warbirds

Bradley County Radio Control Model Aircraft Club Warbird fly-in May 23 AMA sanction event

**Volunteer Aeromodelers
Heli Fun Fly - May 2, 2020**

Spring Fun Fly - May 30, 2020

Fall Fun Fly - October 17, 2020

Don't forget to visit KCRC Knox County Radio Control on Facebook!



221 members strong.

Daily 3 day weather predictions

Daily aviation photos

Event advertisement from other area clubs

Items for sale.

Articles, information and aviation related videos.

<https://www.facebook.com/groups/817242841697766/>