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# **September 2021 Newsletter**

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Safety Officer - Phil Cope (PhilipCope@BellSouth.net)

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Exec Committee - Kay Kasemir (Kay.Kasemir@gmail.com)

Exec Committee – Jimmy Russell (JamesLelandRussell@gmail.com)

### **President's Corner**

By Rick Thompson

I know I've said this before, but I continue to be elated at the high participation rate and general direction our club has taken. This is a photo of the flight line (9/12/2021) on a typical weekend day. On days like this, it is not uncommon to have four or more planes in the air simultaneously:



KCRC held its annual Cubfest event on Aug. 28<sup>th</sup>. Jimmy Russell CDed the event, and more than a dozen pilots showed up from area clubs. The weather was hot but the day was filled with fun, flying, and fellowship. Accolades go to Jimmy for organizing and running what turned out to be a great time for all with lunch for everyone who attended and cubs in the air all day.



On Saturday, Sept. 4<sup>th</sup>, the club hosted a Labor Day fun fly complete with free hamburgers and hot dogs funded by the proceeds from Cubfest. More than 30 members, friends, and family members turned out, and a good time was had by all.



Bill Dodge organized a work party on Sept. 10th to apply approximately 90 gallons of asphalt sealing

material to the surface of our runway for the preservation thereof. He concentrated on an area opposite from the flight line that has deteriorated more rapidly than the rest of the runway. Bill has taken it upon himself to oversee preservation of our runway, not for years, but for decades. It's not an exaggeration to say that if it were not for Bill, we wouldn't have a runway. We all owe Bill debt of gratitude. Thanks Bill.

In our September club meeting, the bylaws committee (Jeff Prosise, Karl Gerth, and Phil Spelt) discussed their thinking and direction with the club. Input from club members was very valuable guidance to the committee. The overriding goal is to be 100% transparent and give club members a voice in all important club decisions. Getting the bylaws just right is of ultimate importance to the future of our club and this committee is putting in countless hours to do just that. I hope everyone will be able to attend the October meeting where that will be the main topic of discussion.

See you all at the field.

## **September Meeting**

The club's September meeting was held on Thursday, Sept. 15<sup>th</sup>, at the field. President Rick Thompson introduced two new members and reminded everyone that the field will close at 11:00 a.m. on Sept. 20<sup>th</sup> and 21<sup>st</sup> for a cross-country event. Bill Dodge reported that runway repairs are complete and thanked the members who helped.

Joel Hebert presented the treasurer's report, noting that the bank balance was \$13,619 at the beginning of August and \$13,434 at the end. Expenses included \$160 for mowing, \$252 for fuel, and \$240 for food for the club's July 4th cookout.

Jeff Prosise summarized the work done so far by the bylaws committee to update KCRC's bylaws. He noted that the committee hopes to have a final set of recommendations ready to present at the next club meeting. Among other things, those recommendations will include lowering the amount of money officers are allowed to spend without approval of the membership, filling officer positions that become vacant midyear by special

election rather than by appointment, and making it crystal clear that any club member may attend meetings of the Executive Committee. The goal is to make sure the club is managed with maximum transparency, and to entrust important decisions to the club membership rather than the Executive Committee.

Randy Philipps closed the meeting by describing how he lost two airplanes last month to a faulty iX12 transmitter. The transmitter has since been sent to Horizon Hobby and had its RF module replaced.

## **How-To: Fiberglass Repair**

By Jeff Prosise

When you fly fiberglass aircraft off paved runways, the wingtips sometimes get scuffed. I've done quite a few fiberglass repairs over the years, and I thought I'd document the process in case it's helpful for anyone else. I learned from the late Bob Violett, who is a legend in the RC jet world and was kind enough to share with me his some of his secrets.

Here's a wingtip that I scraped on the runway at a recent jet event:



And here are the tools needed for the repair:



The next photo shows the first step in the repair process. You mix up a batch of 2-part Evercoat 400 polyester finishing putty and cover the damaged area. Wait for it to harden, and then sand it down with successively finer grades of sandpaper until you've matched the original contour. This part requires patience. The final sanding is done with 600-grit sandpaper, and you must be able to close your eyes, run a finger over the repair, and feel nothing. Any tiny imperfection that you can feel will show when the area is painted.



Here's the wingtip after final sanding, and after tiny imperfections are filled in with **Bondo spot putty**. The spot putty is the red that you can see toward the leading edge of the wing.



The next photo shows the wing after painting. I used a **2-part paint** (4 parts paint, 1 part hardener) from the manufacturer thinned down with a 5:1 mix of **urethane reducer**. You airbrush on a thin coat, wait a couple of minutes, and then repeat. Do it too fast and the paint will run. I applied 40 to 50 very thin coats over the course of 90 minutes. It's important to angle the airbrush away from the taped areas to avoid creating an edge with the paint. Once more, patience is a virtue.



The final photo shows the finished result. The crucial part here is wet-sanding the painted area with **2000-grit sandpaper**, and then buffing and polishing with **3M Perfect-It 3000**. You can do the buffing by hand, but it goes much faster if you use a rotary tool. I use a cordless drill with a buffing attachment.



The whole process took me a week of evenings in my shop, but now my jet will look like new the next time I fly it. And hopefully no one will ask about the poor landing that scuffed the wingtip in the first place.

#### **Meet Brandon and Tina**

Each month, we spotlight one of our members. This month it's Brandon Drummer, who along with his wife, Tina Evans, is a fixture at KCRC. He flies planes and EDF jets and helps others with aircraft builds, transmitter programming, and more. Brandon and Tina have been married for 10 years and live in Powell. They're a team, and you rarely see one without the other.



Many of you know Brandon as the person who manages KCRC's <u>Facebook group</u>. What you might not know is that he grew up in Karns and once worked at Best Buy. He's a tech guru who builds PCs, flies airplanes, spends copious amounts of

time helping other people (both in person and virtually), manages his own <u>YouTube channel</u>, and hangs out in the <u>transmitter thread</u> on RC Groups.

Tina is from Atlanta and makes her living as a medical coder. You won't meet a more positive person. Her motto is "you're never guaranteed a tomorrow, so live today like it's your last."

Brandon and Tina love 80s rock 'n roll. Don't be surprised if you walk down to the end of the flight line where they hang out and hear Journey or Van Halen playing in the background. And if you need a hand programming your Spektrum transmitter, help is just a Brandon away.

#### Did You Know?

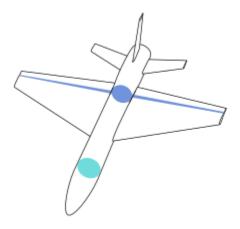
Have you ever noticed that many fighter jets have fuselages shaped like Coke bottles? Fuselages that neck down where the wings join the body, like the F-5 pictured below? There's a reason the fuselage is narrower at the waist. And it has nothing to do with aesthetics.



In the early 1950s, engineers were puzzled about the fact that as an aircraft approached the speed of sound, drag increased dramatically, buffeting the aircraft and making it difficult to push through the sound barrier – especially with the underpowered jet engines of that era.

A young engineer at NASA (then called NACA) named Richard Whitcomb theorized that high-speed drag could be reduced by making the cross-sectional area of the aircraft consistent from tip to tail. This meant reducing the width of the fuselage where the wings join since the wings add to the

cross-sectional area. It also meant narrowing the body at the tail. Mr. Whitcomb tested his theory in a high-speed wind tunnel and proved that his intuition was correct.



Using a constant cross-sectional area to minimize drag at transonic speeds became known as *Whitcomb's Area Rule*. Following Mr. Whitcomb's death in 2009, the Smithsonian declared that "he was the most important aerodynamic contributor in the second half of the century of flight."

Now you know!