



April 2021 Newsletter
 Knoxville TN AMA #594
 Editor..Mike Catlin
www.kcrctn.com
 Webmaster..Jeff Prorise

2021 Elected Officers
 President.....Frank Allemand
 Vice president.....John Basalone
 Secretary.....Richard Love
 TreasurerMike Catlin

Executive Board

Phil Spelt
 Eric Knieper
 Ed Dumas

Safety Officer

Jim Maines

PRES CORNER



Over the last few months the EC has been working with members about SAFETY POLICY. The membership has been positive and supportive, including agreeing that the various situations are dangerous, providing help to make the EC solutions even better, and a 35 to 0 vote to go ahead with the safety implementation immediately. **So that is what we are now in the process of doing.**

The EC wants the club to be safe for our members and for the large number of visitors we hope to be getting with the youth flight training program. As an EC, we cannot conceive of how anyone with basic common sense can be against a few safety rules to eliminate recurring dangerous situations.

- We have been incredibly lucky for the past 25 years that we have not had any serious accidents. What we have had, in abundance, are many near misses that have been very scary. During the past few years alone there have been many situations where individuals could have been seriously injured. There also have been a half dozen where it is a “miracle” that nobody was actually badly hurt or killed. It is naïve to think that such luck will continue.
- Also, EC members could be personally financially liable in the event of an

accident if not doing enough to prevent it. Now that a number of dangerous situations have been specifically identified, not addressing them would make EC members even more liable.

In pressing forward, we now find there are at least two vocal individuals and possibly others who appear to be against the Safety Policy and/or against the EC enforcing it.

- The individuals have not expressed any substantive disagreements with the SAFETY POLICY. However, they appear to be expressing disagreement with the right of the EC to create a SAFETY POLICY, and the right of the EC to enforce it.
- The individuals seem to believe the EC should not be mandating SAFETY POLICY. However, the EC believes it is essential to the future of the club, and the bylaws not only provide that authority, but require the EC to do so as part of their responsibility. In this case, the whole issue is kind of a moot point, since the membership has already overwhelmingly voted to implement it anyway.

- More than anything else, it appears these individuals are against the EC telling them what to do and actually then enforcing it. Similar to the FPV situation with AMA and FAA rules, there is a clear right side and a wrong side to the issue, and the only viable option is to do the right thing for the club. These individuals were generally not supportive of the EC in that decision, and some fought it for months. It also had to be mandated and enforced.
- Having a SAFETY POLICY without enforcement is not viable; some of these individuals would probably be the first to ignore it and the SAFETY POLICY would fail.
- In the past year there have been some disciplinary actions taken against members. The EC has been very slow and deliberate in providing a very minimum discipline to what the EC views as clearly unacceptable conduct. In each case the individual was given the option to keep the discipline private if they preferred, or to go public with it, realizing the EC would then do likewise. That is still the case with all KCRC discipline. We let the individual decide.

The EC is on the right side of this safety issue and we intend to preach the details of our safety program to our visitors, prospective youth camp clients, school officials, Knox County Park officials, and the press. We are ready to tell them exactly what we are doing to have a first class safety program. We want them to know how safety conscious we are. We are also willing to defend the disciplinary position we have to take, if necessary, to get there. I don't think anyone will be surprised or displeased that individuals not willing to follow EC Safety Policy were disciplined; as a matter of fact, I think that approach will be applauded. As an EC, we are unanimous that first class safety is the only way the club can go forward, and will not settle for anything less.

The safety question/answer summary that was sent out to all members is again published in this newsletter. As an EC, we want to be up front and honest about our intentions, and we have done that in the summary.

We need everyone without exception to follow the new KCRC Safety Policies, and to be supportive of them. If not, safety will not be successful. If anyone is not happy with how the EC is proceeding, you are invited to meet privately with the EC to address your concerns.

Another very important topic we want to discuss at the April meeting is the handling of visitors at the field. There are basically three aspects: First, we want to review how we propose to handle unescorted visitors, and the safe areas they will be permitted in. Second, we have some ideas how club members should meet and respond to visitors. And third, when members do agree to take visitors out of the safe areas, we want to make sure everyone understands the responsibilities that go with it. Phil Spelt will be presenting most of these details.

Our next meeting is scheduled for Tuesday, April 13th at the Parkwest Church. It will begin at 6pm. Michael is including the directions later in this newsletter.

See you on April 13th.

Frank

GETTING EC SAFETY POLICY IMPLEMENTED

During the last few months the EC has made very clear its intention to implement a REAL AND EFFECTIVE SAFETY POLICY TO ELIMINATE RECURRING DANGEROUS SITUATIONS AT THE FIELD. This is the most important goal of our club, to keep everyone safe.

An effective safety program is also essential in going forward with the youth flight training

program. The first camp is now scheduled for June 14 to 18.

As you know, the membership voted overwhelmingly to support EC SAFETY POLICY, and to implement it immediately.

SAFETY POLICY details have been distributed by email, published in the newsletter, added to the web site, and are available as a flyer in an info box at the field. Most members have been reading and trying to follow all of the SAFETY POLICY requirements. However, a few have expressed dissatisfaction and given us the impression they may not want to comply.

At last night's EC meeting, it was decided the following question and answer page should be shared with all members. It expresses exactly how the EC intends to proceed with the SAFETY POLICY implementation, and how serious we are about it.

Please read this carefully.

1. **Is the EC SAFETY POLICY mandatory?** YES. If not mandatory, it would be optional. That would be crazy; we would probably never get anyone to consistently follow rules or safety policy.
2. **Are some of the safety policies kind of detailed?** UNFORTUNATELY YES, like the 20 feet max distance between pilots. It is the EC's best solution, and also reflects the inputs of many members.
3. **Do we have too many safety rules and policies?** WE REALLY HAVE NO CHOICE. We have what we need to address recurring dangerous situations.
4. **Are some people going to complain about too many safety rules?** YES. Flying is dangerous. If members do not like it, they should fly at another field or get a new hobby.
5. **Are members going to be watched and policed regarding compliance with SAFETY POLICY?** YES. All club officers and EC Board members have this responsibility.
6. **What does being policed mean?** CLUB OFFICERS WILL POINT OUT SAFETY VIOLATIONS TO YOU, AND EXPECT YOU TO COMPLY. IT ALSO MEANS LOUD, NASTY, AND UNACCEPTABLE BEHAVIOR AT THE FIELD WILL NOT BE PERMITTED.
7. **What happens if I am a slow learner?** OFFICERS WILL REMIND YOU POLITELY, BUT IF YOU ARE NOT BEING REASONABLE, THEY WILL GET TOUGHER.
8. **What does getting tougher mean?** OFFICERS MAY SUSPEND YOUR FLYING PRIVILEGES FOR THE DAY AND MAY ALSO TELL YOU TO LEAVE THE FIELD. Depending on your attitude, the suspension may be extended for a week by the President, the Vice President, or the Safety Officer, or indefinitely by the EC while disciplinary procedures are pending.
9. **What disciplinary procedures?** The clubs basic disciplinary procedure for continuing unacceptable safety behavior is as follows:
 1. First: a warning
 2. Second: a discussion with the President, the VP, or the Safety Officer, or a combination thereof
 3. Third: a verbal or email grievance by the President or Safety Officer
 4. Fourth: Continuing unacceptable safety behavior that jeopardizes the clubs objectives will result in expulsion from the club by majority vote of the EC
10. **Is the club actually planning to seriously discipline those not complying with the Safety Policy?** YES. It is certainly not something the EC wants to do. However, safety is a priority above all else. Regardless of the number of KCRC members affected,

any lack of compliance with the Safety Policy, repetitive dangerous activity, and habitual negligent activity regarding the clubs safety program will not be tolerated. In short, if anyone refuses to comply, the discipline procedure is pretty much automatic and will be quick. Additionally, belligerent, hostile, or unacceptable conduct will also not be tolerated and will make the discipline process even faster.

Signed: KCRC Executive Committee
(unanimously)

F Allemand, J Basalone, M Catlin, E Dumas, E Knieper, R Love, J Maines, and P Spelt

The fence was built for the protection of pilots - Why not require that pilots use it.

For risks limited to an individual pilot, we favor a policy we call "situational awareness." We want each pilot to make their own decisions as to what risks they consider acceptable for themselves. This is intended to be aided by club educational efforts to promote information, knowledge and awareness about all risky situations so pilots have a good basis for their decisions.

Many think the right place to stand is behind the long 5 foot high safety fence for good protection. Others think it is OK to stand in the opening, which is more risky but gets better visibility. Still others think it is best to stand outside of that fence area, but behind the 10 foot high helicopter fence that also protects flyers from planes coming in to land, probably the most frequent risk. Each pilot should decide for himself.

Some people believe it is too risky to fly alone at the field in case of injury. Should we restrict members from being able to fly when alone at the field? Each pilot should decide for himself.

Some people believe it is ridiculously foolish and dangerous to go alone into the woods looking for a plane. Should we ban people from searching alone for their planes? Again, each pilot must decide for himself

Many people think their opinions are better than others, and on occasion may even want to decide things for other pilots. However, the reality is there are many different members with many very different and very strong opinions.

If the club decided to mandate the specific risks that individuals are allowed and are not allowed to accept, the list of rules would be inordinately long, cumbersome, and argumentative. We just cannot do that.

Agreed to and Signed off by the EC

Situational Awareness

Your Actions for Safety in all aspects of Life
Phil Spelt
April, 2021 rev 1

So, everyone knows what Situational Awareness (SA) is, right? It is being aware of your situation. Except that every middle school English teacher will tell you, you don't use the words being defined in the definition. So, SA is knowing about various aspects of the environment around you, right? If you think that adequately defines SA, please think again!

SA is a concept that was originated by Oswald Boelke, a WW I German fighter pilot, with 40 "kills" in The War to End All Wars -- yeah, right! He argued that a successful fighter pilot (or warrior in general) would gain an advantage by having an awareness of the enemy before that enemy gained similar knowledge about him. He devised methods of accomplishing SA that he taught to his fellow Germans.

A more complete definition is presented in various Human Factors (HF) of Flight texts: SA is (1) the

perception of elements (pertinent to the activity) in the environment (2) within a volume of time and space; (3) the comprehension of their meaning; and (4) the projection of their status into the near future. The term is said to have been used by United States Air Force aircrews returning from war in Korea and Vietnam. It was then adopted by scientists as the field of HF grew during the late 1980's into the 1990's. It expand in aviation and spreading into human-computer interaction (HCI), automotive cabin design and Advanced Driver Assistance Systems (ADAS), to name just a few areas. One of the greatest issues for the field of AI these days is how to get an AI (robotic, ADAS) system to be capable of SA. Until that happens, fully autonomous driving vehicles (SAE Level V Autonomy) will be impossible. (But, that's for another story!)

So, are we born with a sense of AI? Not really -- there are a number of writings on how to develop better SA. One author presented the following:

7 Ways to Improve Your SA:

1. Identify Objects Around You. Improving your situational awareness starts with being mindful (knowing and understanding the importance) of your surroundings and the elements therein.
2. Notice Other People. ...
3. Identify Entry and Exit Points (of moving elements--others' models, e.g.). ...
4. Practice Prediction. ...
5. Stay Vigilant. ...
6. Trust Yourself. ...
7. Practice Situational Flying Techniques.

I want to comment on some of these 7 points, especially those that bear on our Safety Rules and Guidelines. #1 -- as you enter the flying spot along the fence or wherever, note other pilots who are flying, who they are (skill level, etc.), where they are flying, the speed of their planes, and so on. This includes #2, clearly, those along the flight line.

Number 3, as part of number 1 and 2, notice particularly the flight paths and areas of the sky of

airborne craft so you can better avoid them while flying. Number 4, as you get ready to fly, notice others also preparing to fly with whom you may need to share runway access, and what planes in the air have been up for a long time and may be almost ready to land. These actions will help avoid conflict when approaching the runway with your plane ready to fly.

Stay Alert (#5) -- not only to your aircraft, which you must do to keep it flying properly, but to other pilots entering and leaving the runway edge (they have to call out "Runway"), and their aircraft. These activities will change the situation in which you are flying. You need to continually update your data, while still being able to concentrate on your craft!

Number 6, Trust Yourself -- your gut "instincts" -- if things don't seem quite right, seriously consider landing as soon as practical. Better to lose some flight time than an airplane! Finally, #7, Practice these Techniques every time you fly. As your SA skills improve, you will find it easier, and you may just save your plane...or someone else's...or your or someone else's skin!!

The following list of 3 simple ways to improve situational awareness may be helpful:

1. Assess risks from all angles. ... This means as you are preparing to walk up to the flight line, staying cognizant of any visitors or other pilots that may be around your plane bench, even as you get to the field, noticing how many people are there to fly rather than kibitz
2. Communicate with others. ... This is detailed in our Safety Guidelines and Courtesy Rules. DO IT!!!
3. Make situational awareness part of your every-time flying and practice it every time you fly @ KCRC. ...

One author of Human Factors in flying asked, "Why is situational awareness important in aviation?" His answer: Situational awareness influences our decision making and allows us to stay ahead of the aircraft (or

situation): It helps us develop a mental picture of the world around us and use that mental picture to anticipate the future, to feed-forward.

How do you do SA and fly your plane without crashing? Practice. Ease into SA, practice flying while noting what other planes in the air are doing; to the best of your ability, pay attention to those others on the flight line, and those who may be joining or leaving it. Experienced R/C pilots already pretty well know how to do this, but anyone can improve their skill...with conscious practice.

Put simply, situational awareness (SA) means appreciating all you need to know about what is going on when the full scope of your task - flying, controlling or maintaining an aircraft - is taken into account. So, SA applies in our hobby 1) in the shop while building, maintaining and repairing a model (anticipating failure points, e.g.) 2) at the field during pit work and preparing the plane to fly; and 3) while standing on the flight line doing what we love to do – flying.

Whatever Night at the Movies

Choosing a motor and prop for your fixed wing model Some hints and tips.

https://www.youtube.com/watch?v=jclh4U3vw3A&ab_channel=Painless360

Epic DIY 3D Printed Planeprint Eagle Build

https://www.youtube.com/watch?v=5zrpbw0_7Oc&ab_channel=TroyMcMillan

How to Balance a Folding Prop

https://www.youtube.com/watch?v=iHYqvcEFmQE&ab_channel=Painless360

[KCRC Me 262 VS He-162 - Which one was better?](#)

https://www.youtube.com/watch?v=BUSGgAXLOqc&ab_channel=MilitaryAviationHistory

Super Sinbad Spoiler

https://www.youtube.com/watch?v=WLNu-XvNvIw&ab_channel=KaterKarlo

The B-17-s Fatal Flaw

https://www.youtube.com/watch?v=bBNBdvYoptY&ab_channel=FlakAlley

Membership

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 (\$89). 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 has been emailed to current members only and 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.

Upcoming Events

KCRC April Meeting NEW Location – NEW Time

The April meeting will be held at:

Park West Church
7635 Middlebrook Pike
6:00 PM – 7:45 PM

3 blocks East of where we used to meet and on the North side of Middlebrook Pike.

Due to church rules we need to be completely out of the church by 8:00 PM.

Since we are getting this space for free for the 2021 meeting schedule we will need to absolutely abide by the church rules.

- You are welcome to change the layout of this room but please return chairs and/or tables to their proper place.
- We do ask that no food is brought into the building.
- We will have the doors at the kid's side open for you by 5:30 pm and they will be locked back typically around 6:30 pm. This is for security purposes since we no longer have anyone manning the doors.
- Do not prop doors open at any time.
- Please do not discard liquid in any trash can.

- Please wipe off whiteboards (if applicable) when you are finished with your class or meeting.

- Please turn off lights and any electronics as you exit the room.

- Please exit the building no later than 8:00 pm. Our cleaning service cannot enter until all guests have left.

- Social distancing is required.

- Masks are also required.

John Basalone will have a box of masks available if anyone shows up without wearing one.

If you show up late and the doors are locked text Scott at 865-360-7838 and he will let you in. My suggestion is to show up early as this is unfamiliar territory.

Maps in the photo section.

Good Times

Michael Catlin

This month, instead of my usual technical article, I thought I would relate my history in the hobby.

It started in the mid-sixties when I got a "Model Airplane News" with an article on the "Spirit of St. Louis". I must have read through that magazine a thousand times. My dad noticed the interest and bought me a Guillows Thomas Morse Scout kit. I built that kit on the dining room table and survived my mom seeing the scratch marks from cutting out the formers. I probably had stringers in the wrong notches and I doubt it was square. I also didn't know to thin the dope and my application of green dope was certainly streaked. The next plane was a Guillows Bf-109 and was constructed with much better skill.

Appetite whetted and money in my pocket from delivering papers nightly, (imagine delivering papers at night during a Chicago winter) I approached my dad to allow me to buy a radio control. And, he said no. But, if I learned to fly control line he might consider it. I bought a Testers P-40 with a Cox .049 engine. Hint, never try to learn fly control line on one of those. The engine survived



and I built a Goldberg Lil Satan to put it on. For the first flight my friend Marc tossed it and it proceeded to loop behind him and he ducked low enough and fast enough to let it continue about half way around the circle in a series of climbs and dives. We spent the summer flying and fixing, flying and fixing that plane. And, we probably wore out 3 engines. It was when an .049 went for \$6.



Along came Thanksgiving, and my family went to my grandfather's farm and I could finally show off my skills. Alas, the clearing was too small for a full circle so I used what I could and flew several times never completing a full circle by simply doing vertical turn arounds.

Christmas had a Min-X radio (27 Mhz) with Rand LR-3 actuator and a Top Flite Schoolgirl under the tree. Spring came and it was off to the



Lisle Illinois sod farm to discover that flying isn't as easy as it looks! I probably had a dozen (short) flights before I needed to build a Carl Goldberg Falcon 56 while my friend Marc built a Skylark. Both those planes were covered with silk and dope! It was while we were flying our planes that Apollo 11 landed on the moon. Soon I graduated from the



Min-X to an Orbit 3 channel (27Mhz) and I went off to college with a Sr. Falcon to hang on my wall and to drip castor oil on my books.

College graduation behind me, I headed off to California with my Orbit radio but no planes. I built another Sr. Falcon on the kitchen counter of my apartment and flew it Saturdays at the Northrop model airplane field. The flying field was soon bought by Hughes and now the runway is under Raytheon Space and Airborne Systems which is only fitting.



Since there were no other good flying fields nearby, I built a glider and headed off to slope soar at Dockweiler beach off the departure end of LAX. My how times have changed! By now I had exchanged the Orbit for a 4 channel Kraft (27 Mhz). The beach being only a mile away allowed me to take a long lunch and get in a short flight.



My longest flight nearly ended in disaster. After about 2 hours flying from a folding chair the glider batteries died and the glider was pointed out to sea!

Lucky for me, the glider left the slope lift and touched down in the sand at the water's edge.

Soon, marriage, moving to a small condo in Long Beach, and working long hours on the B-2 stifled my model building and flying. When I moved to Lancaster Ca. I visited the local flying field East of the landfill and Challenger Way every couple of weeks. I bought a Chipmunk kit and my wife even bought me a radio but I never flew from the Antelope Valley Tailwinds field before moving to Knoxville. The radio was on 72 Mhz and sits in a box, unused for 12 years and the planes were given away before moving.



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

317 members strong. (68 new members in the last month!)

Daily 10 day weather predictions

Daily aviation photos

Event advertisement from other area clubs

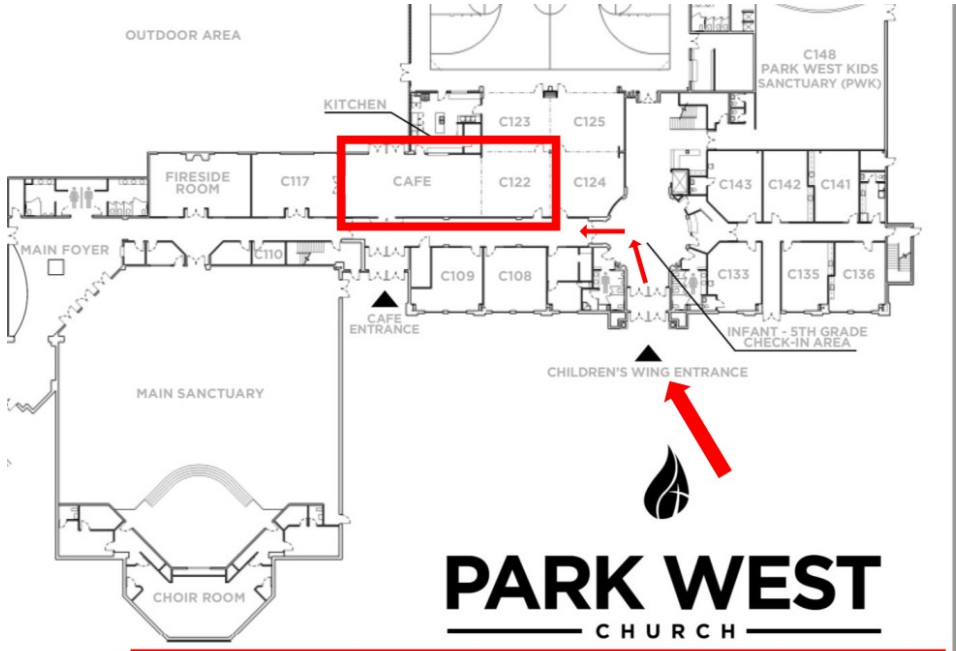
Items for sale. Articles, information and aviation related videos.

[https://www.facebook.com/groups/](https://www.facebook.com/groups/817242841697766/)

[817242841697766/](https://www.facebook.com/groups/817242841697766/)



See following pages for images.



- Meeting is in the Café (shown by red box).
- Enter at the Children's Wing Entrances (shown by red arrows). There is a statue near the front of this entrance.
- Door will be unlocked between 5:30pm – 6:30 pm.
- If you find doors locked, call/text Scott at 865-360-7838.... he'll let you in.

KNOX COUNTY RADIO CONTROL (KCRC)

FLIGHT TRAINING CAMP: JUNE 14-18, 2021

KCRC will sponsor an RC Flight Training Camp the week of June 14-18. Camp activities are designed for rising middle-schoolers (grades 5-8) who want to learn about flying radio-controlled model aircraft. The camp will be limited to 20 students. The half-day camp will be from 9 am-12 pm on Monday, Tuesday and Wednesday, and from 9 am-2 pm on Thursday and Friday. KCRC is an Academy of Model Aeronautics (AMA) chartered club that promotes the art and science of model aeronautics and RC model aircraft through education and learning activities.



Monday morning will be dedicated to “Ground School,” where students will receive an introduction to aviation, aerodynamics and radio-controlled model aircraft systems. On Tuesday and Wednesday, students will practice flying model aircraft on computer flight simulators and will learn flight dynamics by flying rubber band-powered foam and balsa wood airplanes. On Thursday and Friday, the students will fly trainer airplanes at the KCRC field under the tutelage of certified instructors, and they will watch as KCRC members demonstrate advanced R/C flight with various model aircraft. The Flight Camp activities satisfy many of the requirements for the Boy Scout Aviation merit badge.

The camp fee will be \$250 per student to provide printed materials/workbooks, balsa and foam aircraft, flight simulator training, snacks, and lunch on Thursday and Friday. Details for online registration for the camp are forthcoming. If you have any questions or are interested in enrolling right now, please email Barton Smith at:

KCRCFlightTrainingCamp2021@gmail.com



**Old Timers will recognize
this work horse**



Ready to take on some Migs in Mig Alley



Look Ma, I got 2 flights out of this one!