



KNOX COUNTY RADIO CONTROL

October 2020 Newsletter

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The club has achieved a number of good things in 2020. Unfortunately, however, there are some significant issues where individuals have very different opinions that result in friction and division within our membership.



First, let me summarize some of the club’s accomplishments:

- A major simplification of KCRC rules to make the field safer and friendlier
- Uniform enforcement of the simplified KCRC rules: consistency by gentle enforcement. All flying activities are running more smoothly and safely than I have ever seen before.
- Treasury reporting corrections and improvements

- Review and corrections of the membership data (to see the true number we have).
- Addressing the financial shortfall of club revenues by increasing dues next year (from \$72 to \$84) and by eliminating free memberships for officers and emeritus members
- Decision to go with a Youth Flight Training Summer Camp for next summer, both to raise money and to give KCRC widespread positive publicity in Knox County.
- Implementation of a recruiting program, increasing paying members from 55 to 70.

- Training program available with four instructors and four KCRC trainer planes
- Expansion of the newsletter with more information and pictures.
- Opinion votes for KCRC membership to “steer the ship” on all big issues

Now for the bad news. There are basically five areas that have widely divergent views among our members, and it causes anger and dissention. Here are the specific areas:

1. Handicap Issues: During the August meeting a group of twelve individuals joined together to address perceived deficiencies in the club’s approach to handicap access and related paperwork. They wanted to collect registrations for tighter control over handicap paperwork, and some also have on occasion indicated a desire to end all handicap privileges for everyone. Their most recent proposal was voted down twice. There are in fact a number of legal and regulatory aspects that need to be considered, and I don’t think these details are clearly understood.
2. FPV Rules: Some members think KCRC made a mistake in following the FAA and AMA FPV rules, and unfairly alienated one popular and likeable individual. Some thought it would have been better to ignore these FAA and AMA rules in 2020, and also think it is reasonable to ignore these rules in the future. A few have even indicated a willingness to lie about KCRC’s lack of compliance if questioned. The EC believes the club has taken a very fair and realistic approach to implementing these laws and regulations, that they cannot be ignored because of the major liabilities and penalties involved,

and that everything possible was done to make it easier for the individuals affected.

3. Lawn Maintenance: Some members want to purchase a lawn mower and utilize club volunteers as a way to address long term maintenance and to remove John from being the club groundskeeper. Our analysis and discussions with two commercial mowers indicates this in-house lawn proposal has serious problems. Further analysis also indicates that alternative commercial options are not viable because they are too expensive.
4. Unfriendliness at Meetings: In recent meetings some individuals engaged in aggressive name calling and other forms of rude behavior. In several instances there were premeditated attempts to embarrass club officers into resigning from their responsibilities. Unfortunately there seems to be at least a few club members that believe this kind of behavior is acceptable. The EC has taken the position that this is not acceptable behavior, and will not be tolerated.
5. Student and EDF Courtesy Rule: The club’s courtesy rules have been in effect for some time, yet there are a few senior club members not happy to yield the field for students and/or short EDF flights. These individuals do not want restrictions affecting their flying, even if a courtesy was voted on for the good of the club.

So at this point what can be done to deal with the wide differences in opinions?

First, I assume that the majority of our members love the club and want what is best for its future success. I would like to think that everyone feels that way, but I know in some cases it is not true. However, I sincerely hope the majority agree that decisions on

these five issues as well as all other club decisions should be made on a factual basis and be largely based on just one simple overriding criterion: what is right and best for the future of the club?

On that basis I would like to get into detailed and logical discussions on these five areas at the October meeting, and try to reach appropriate solutions and/or compromises that everyone can accept. All members should say how they honestly feel, what decision they think is appropriate, and how their suggestions will help the club. We can then weigh all the pros and cons together.

Unless we put these issues behind us, I guarantee the divergent opinions and the resulting confusion will jeopardize the very important activities needed for strengthening the club's immediate future, two such examples being the youth flight training camp for next summer and the growth of our membership (both recruiting and membership retention). These club strengthening activities are now more important than ever, given all the construction in the area around our field and the competing uses that are likely being considered for our property.

Because most of the five various areas have a degree of complexity, e.g., an extensive history, prior analysis by Club Committees with a lot of data involved, or legal and regulatory issues, we have included a few short articles in this newsletter to help everyone "come up to speed." The article for each subject is essentially a PRIMER intended to simplify a myriad of details to make reaching an opinion easier.

Any discussion to find a solution for each of the five problem areas cannot achieve a meaningful result if participants do not understand the basic facts. Please invest the time to closely read all five articles. If you do not agree with any of the underlying facts presented for a given topic, you should ask for proof or try to explain what you think instead.

I hope each of you will come to the October meeting to share your thoughts, and help to solve these troublesome issues in a way that is best for the future of the club. For each issue you will ultimately be asked, "What specifically do you want to do? And how does it benefit the club?"

The Club needs to make decisions and move forward.

Thanks very much.

Frank

OCTOBER MEETING

Regarding the logistics of the October meeting, normally we move indoors. However, we do not currently have a good indoor site (although we have a few leads to follow up on for future meetings over the winter). Also, most rooms are not big enough for social distancing of 30 to 35 people, and while indoors, the right thing to do is to wear masks the entire time.

If we do the October meeting outdoors at the field for one more month, it should not be too cold and we can social distance without masks, but it gets dark too early. Therefore, we need to change our time to have a daylight meeting.

So we have decided the October KCRC Meeting will be **10 am on Saturday, October 10, at the field.** We hope the weather will cooperate; it should warm up a little by 10am. And we can social distance as done previously. The meeting will be held rain or shine.

Regarding the December meeting and other meetings over the winter, please let me know if you have any good suggestions of places that might work. We are still evaluating options.

Thanks very much.

Frank

PS We will be setting up a nominating committee to find members willing to run for all the 2021 officer positions. If you are interested, you can put your “hat in the ring” at the October meeting or during the month of November. Nominations will be closed out at the end of November, and voting will begin by email in advance of the December meeting and of course in person at the December meeting (assuming we can find a suitable location to have it). More details will be forthcoming.

HANDICAP PARKING DETAILS (Primer for Issue #1)

There are a number of individuals not happy with the way handicap parking is being handled. The issue has been brought up repeatedly since 2017, and now yet again in 2020. Hopefully a review of the regulatory details will assist you in reaching an opinion.

The most recent request in August was for KCRC to monitor and review both placards and registrations to make sure only “valid” handicap placard holders can have access to the handicap loading and unloading area. Placards are displayed on the windshield, and the date of expiration is indicated. Registrations are private documents that are not displayed. The only way to determine whether or not a placard really belongs to a given individual is to see the associated registration with the placard number and the name of the registrant.

In the past KCRC policy has been to only inspect placards and their expiration dates. Randy and the other individuals signing on to his proposal requested the Club to not only collect and monitor placards, but to do the same for registrations.

The EC voted against this proposal prior to the August meeting for two reasons: first, there appeared to be no significant benefit to the club for the extra work. There are only six individuals using the handicap area. The EC thought monitoring was not justified and the approach should be the same as for all other KCRC rules, i.e., gentle enforcement. And second, Michael, Allan, and Phil Spelt have shared their experiences that the registrations are private and may only be requested by a police officer.

On the other hand, Randy told us all the registrations may be requested and viewed by any organization.

Because of the difference of opinion regarding registrations, Michael has done a specific review of the whole issue. His conclusion is that Randy is incorrect, and access to registrations and other motor vehicle information is restricted not only by local statute

(<https://www.tn.gov/revenue/title-and-registration/license-plates/disabled-plates-placards.html>)

but by federal law

(https://en.wikipedia.org/wiki/Driver's_Privacy_Protection_Act) & (<https://www.law.cornell.edu/uscode/text/18/2721>).

A good part of the underlying problem is also the “resentment” by some club members that a handicap placard holder who appears to be “walking normally” or “close to normally” should not be entitled to KCRC handicap privileges. Each placard holder is required to have a medical justification and a doctor’s sign-off before a placard is issued. This medical data is similar to all other medical data in that it is confidential and protected by HIPAA.

The state has an official form for applying for plates, tags, or stickers and section "E" of the form requires a doctor or other listed medical professional to certify as to the nature of the disability.

(<https://www.tn.gov/content/dam/tn/revenue/documents/forms/titlereg/f1310301Fill-in.pdf>)

It is interesting that the biggest area of handicap discrimination law suits involves individuals questioning a placard holder's status when there is no obvious visible deficiency. One club member indicated his doctor told him to get a placard because of heart defects, and yet he showed no obvious symptoms. Here is a red flag: it may be discriminatory when club members tell placard holders they should use regular parking and depend on other members for help carrying their planes if they need it, or that the exercise is good for them. Again, it is a legal question constantly being litigated.

On at least two occasions in the past the angry sentiment against stopping one or two handicap placard users from having their privilege has resulted in actually considering proposals that all KCRC handicap parking rules be terminated, and the area blocked off to prevent any access whatsoever. The justification used both times was to protect the grass, but it is obvious there is a lot more deterioration from other events than the limited handicap usage.

Unfortunately closing the handicap area entirely has a number of negative effects, including making life difficult for handicapped individuals on an ongoing basis and also making life difficult for some club members (especially aging ones) that incur injuries and need temporary access. In fact there are federal guidelines for providing handicapped parking

(<https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/guide-to-the-ada-standards/chapter-5-parking>).

The fact of the matter is that we need to mark out handicapped parking and requiring persons with stickers to unload and then move to a separate lot may actually be in violation of the statutes.

So what are the various options to consider. You may have other better ones, but here are a few that come to mind.

- Leave the KCRC handicap procedures as is, using gentle enforcement to monitor placard expiration's. There are bigger problems to tackle. This is the EC's recommendation.
- Follow Randy's proposal to monitor placards and collect registration documents to make absolutely sure no individual is ever falsely using a placard belonging to someone else. However, a legal opinion would first be needed to see if KCRC can even legally ask for the registrations. All of our research to date indicates this would be illegal, and this option is not viable.
- Ask our current handicap placard users (and any new ones) to voluntarily show their registrations on a one time basis to prove their placard's validity. If asked reasonably, some handicap users might be willing to do this, especially if it was just one time and would make the problem go away permanently. The placards most individuals have are permanent ones (but renewable for a fee), and are based off of a permanent medical justification. If verified once, the issue of justification would not come up again and the only aspect to be monitored would be the renewal.

How would you like to solve these handicap issues? And are you willing to make it a club policy that all negative handicap discrimination comments cease immediately and permanently?

Prepared by Michael and Frank

Agreed to and Signed Off by the KCRC Executive Committee

FAA AND AMA FPV SPOTTER RULES (Primer for Issue #2)

There have been several folks flying First-Person-View aircraft at KCRC for some time now. The atmosphere initially was relaxed and made for fun flying. In the beginning, issues with spotters were not divisive among some members that chose to fly FPV. In recent months, however, things have become contentious. This short article is an attempt to put the new rules into perspective and hopefully diffuse some of the tensions that have surrounded FPV flying at KCRC.

The KCRC EC and its officers have put a lot of thought and hard work into trying to fairly follow the drone FPV rules of both the FAA and the AMA while also trying to minimize the impact to users as much as possible. Following an AMA rule change in December, 2019, requirements for spotters during FPV flight were clarified, as well as the penalties for not following these new rules. The penalties are very stiff for both the officers and for the club involved. For reference, look at the FAA rules for recreational drone flying, [here](#), and the AMA rules for FPV flying, [here](#). The KCRC FPV rules are now in-line with the requirements from both the FAA and the AMA.

The KCRC President has had conversations with other clubs and with the AMA to help achieve a number of major simplifications that drastically reduced the requirements of the rules. As a result, things are now much easier for KCRC's drone FPV flyers. In addition, many members of the EC expressed a willingness to assist drone FPV flyers whenever a spotter was actually needed.

During the first half of 2020 select KCRC officers and the KCRC President initiated conversations with the AMA and with other clubs to come up with ideas how to best follow the rules. These conversations resulted in a number of simplifications that made FPV drone flying on the drone racing course extremely easy, and also made general FPV flying with a spotter a lot less difficult.

The KCRC drone rules, created by a special KCRC drone rulemaking

committee, are now published and available to all members. They are reproduced below, with clarifying remarks in italics:

1. Any and all First Person View Aircraft activity performed outside of the designated KCRC DRONE COURSE but initiated at KCRC property will require a spotter to maintain a Visual Line Of Sight of the Aircraft. ONE AIRCRAFT - ONE SPOTTER. The spotter must be next to the pilot and advise the pilot about losing Visual Line of Sight and warn about the presence of people, cars, and low flying aircraft, especially helicopters. Pilots should call out their intentions just as the Line of Sight pilots do, see recommendation #4 for call outs.

Because first person view drone piloting has a restrictive view of any and all of the outside visual input for the pilot except the field of view provided by the FPV Screen, a person designated as a Spotter has to maintain a Visual Line of Sight of the drone, and be close enough (co-located) and without distractions to the FPV Pilot to advise the Pilot of any adverse or other situations that might arise.

2. First Person View Drone racing on the KCRC Drone Racing Course will require a Safety Officer. The safety officer is one who knows and adheres to the rules of KCRC FPV Drone Racing Rules. The Rules will be printed and available to whoever is chosen to act as KCRC FPV Drone Racing Course Safety Officer. At the same time this person will also be the spotter for all drones participating in the activity at the KCRC Drone Racing Course. ONE DESIGNATED AREA WITH FPV ACTIVITY – ONE SPOTTER/SAFETY OFFICER.

By its very nature, First Person View Drone Racing would require at least a Safety Officer/Spotter present to keep the course and all participants safe and protect KCRC from any liability issues that could arise.

3. Pilots who do not use FPV equipment and fly by Line Of Sight do not need a spotter as the pilot is in compliance with the FAA and

AMA rules regarding maintaining a Visual Line Of Sight of the Small Unmanned Aircraft System. These SUAS should generally not use the runway, but be taken off and landed at the helicopter take off/landing pad and follow the same verbal courtesies as the fixed wing aircraft.

4. Call outs for a Helicopter/Drone/Quad are required just as for aircraft. Call outs are also needed for crossing the runway. Helicopters, Drones, and Quads may only cross the runway when there is no traffic, or cross at 200 feet or higher if there is traffic. Hovering aircraft shall give the right of way to fixed wing aircraft, especially during landing and take-off of a fixed wing aircraft.

Examples of the various call outs are available, but not shown here. They are discussed in detail with drone pilots as needed.

5. Aircraft of any kind are not allowed at any time to fly over people or places that are designated for people to occupy.

In conclusion, going against the FAA and AMA policies does not provide any significant benefit for the club. Violating the FAA laws could result in large liability and penalties. As an AMA affiliated club, violating the AMA policies jeopardizes our membership and insurance coverage. The arguments made to go against these laws and policies would benefit only a few members, while possibly causing large liabilities to our club and officers as well as ending a relationship with our parent organization (the AMA) that has stood us in good stead for decades.

The KCRC EC and its officers have implemented the mandated FAA and AMA drone flying rules in the friendliest way possible. At the January EC meeting even Rick Thompson, the biggest FPV flyer and the most vocal critic of these policies, agreed with the club's path forward. And as part of the Special FPV Committee evaluation done in June, Rick formally recommended (in writing) that both the FAA and AMA rules be followed.

Flying drones with FPV can be fun and safe for everyone that wants to do it, but the rules need to be followed for the sake of the club and all of its

members. The rules are not as onerous as some might think and, with a little practice, they will become second-nature.

Have fun, and fly safe!

Prepared by Ed Dumas

Agreed to and Approved by the KCRC Executive Committee

LAWN MOWING AND FIELD MAINTENANCE (Primer for Issue #3)

After Randy suggested the club consider purchase of a mower and the use of volunteers as a way to "relieve the burden for John," Allan Valeo and John Basalone were appointed to evaluate KCRC's options. Unfortunately those options are not very attractive.

The purpose of this article is to share details of what we have found so that you can use that information to help form your own opinion about what is best for the club.

OPTION 1: COMMERCIAL MOWING

- KCRC could hire a commercial mowing firm to keep our approximate one and a half to two acres groomed and neat.
- In the budget and our financial planning Frank used a cost of \$4000 based on 20 mowings per year at \$200 each. Most people said it could be done for a lot less.
- Two commercial mowers came out and reviewed our field. The reality is that the cost will be higher based on about \$175 to \$200 per mowing, but more like 30 to 35 mowings

per season. This results in a range from \$5250 to \$7000 per year. A figure of about \$6000 per year is a best guess.

- With commercial mowers it is a given that there will be many more interruptions of our flying. Nobody is going to be as considerate as John to avoid weekends and weekday mornings.
- Paying \$6000 per year is steep, and would eventually require yet another dues increase. Even one of the commercial mowers suggested that we should get our own mower and consider in-house options because he thought the price was way too high for a club our size.

OPTION 2: KCRC MOWER AND VOLUNTEERS

- A Mowing Committee could be formed, equipment bought, and volunteers organized to do the work. A formal Mowing Committee would be needed to manage mower issues, insure there are volunteers, and resolve difficulties.
- The cost of the mower would be about \$6000 or higher. The two commercial contractors reviewing our site indicated a 60 inch mower is needed for our terrain and anything smaller will be dangerous. Also, a smaller cheaper mower takes longer to mow, and is prone to serious problems when the grass gets long. John indicated that even his \$10,000 mower can hardly make it through many sections of grass when he is a few days behind on the mowing schedule.
- Costs of a trailer and storage shed would be another \$2000 to \$2500. This makes total cost in the range of \$8000 to \$9000.
- Ongoing mower costs include insurance, gas, maintenance, and service.

- Getting volunteers on an ongoing basis will not be easy. Most clubs do not appear to be successful. KCRC's older club members are not likely to volunteer because it is hard work doing all the mowing and trimming in the heat and humidity. Our younger members are working, and likely too busy. Both older and younger members often have allergies and cannot handle mowing. It seems the clubs that do succeed with a volunteer approach end up just counting on one dedicated individual for everything, not too different from what we have now.

OTHER FIELD MAINTENANCE

In addition to the whole lawn issue, there are many numerous other areas of general field maintenance that John takes care of, and most members have no idea of what they are.

- Normal maintenance includes weeding and spraying for weeds. Normal maintenance also includes treating fire ant mounds and spraying for insects like the bees that are now nesting under the pavilion.
- John replaces broken items on an ongoing basis. He repaired the broken steps and broken boards in the pavilion, built new tables, replaced broken parts of the flight stands, and replaced the worn out ropes that define the parking area.
- The support structure underneath the pavilion is deteriorating. If not taken care of in the near future, the structure or parts of it may collapse.
- Our benches are currently plagued by bird poop. Our sidewalk along the field stands needs power washing. Normally this is not too difficult to handle if there is a

water supply. Given no water at our field, John is one of the few people who has the necessary barrels and pumps to get these kinds of jobs done.

- Prior to coronavirus, John collected and hauled away the trash. In the past some thought it was fine for each member to haul away their own trash. Unfortunately this does not work too well for visitors at our field; they would think this is pretty unusual. When kids and mothers are visiting to check out our site for the flight training camp, how happy will they be if they have to take their own trash home?
- John refills the paper towels in the dispensers, and fixes the dispensing machines when they get stuck. Are paper towels worth bothering with? In addition to the convenience, the paper towels have been used several times as a first aid tool when people were badly bleeding.
- The helipad is currently all broken and needs repair or replacement. John originally purchased the helipad for the club with his own funds.

Even if the lawn maintenance details were solved, there will be a plethora of items for taking care of the field that will require a lot of volunteers on a regular basis.

SOME SUGGESTED THOUGHTS:

- The issue of lawn care at the field breaks down to simple economics. The cost of commercial mowing appears to be too expensive for a club our size.
- Having the club own and operate an internal lawn service requires a big up-front investment, and is way too complicated to keep up with.

- Our current solution is very workable if our volunteer (John) is willing to continue both the mowing and the general field support, and is willing to accept some type of payment.
- In order for John or any other volunteer to remain dedicated enough to continue such a difficult and exhausting job, it is essential that all KCRC members be particularly sensitive to his needs and especially generous with their praise. That is not what has been happening lately. In fact some members have done the opposite and totally demotivated him. They probably do not realize it, but those are very expensive insults they have been hurling at him.
- Here is an interesting example from the Volunteer Aeromodelers face book page that shows the concerns and sensitivities of their individual doing the club mowing:

“First off I mow the field every week. It rarely goes more than 7 days without being mowed and that happens due to weather and usually no one can fly when it’s like that anyway. The grass at the field is growing at a rate that’s ridiculous right now. Both mowers are barely working, plus I’m mowing and 3 days later hearing complaints that it’s too tall. Which leads me to my second point. Everyone here is supposed to be adults. If you have a problem with the field you come to me. I’m the one responsible for it. I’m tired of having to hear complaints from other people. You can easily contact me here and my numbers on the roster so I don’t want to be hearing that complaints are going elsewhere.

I mow for 6 hours a week out here, keep the trash cleaned up and the tables from falling apart. I’ve not been able to come out to fly except once this year. If you still wanna blame someone for every little thing that’s not perfect every day, including nature, then I’ll gladly step down from everything and you can figure it out on your own.”

It will be up to each of you to weigh the pros and cons of hiring a commercial service, going with an in-house lawn plan, or trying to find a way whereby John will continue.

So what would you like to do?

Prepared by Allan, John, and Frank
Agreed to and Approved by the KCRC Executive Committee

FRIENDLINESS AT KCRC (Primer for Issue #4)

Who would have thought there would ever be an article in our newsletter about a lack of friendliness in our club? Well, unfortunately, here it is.

KCRC does not have a good reputation for being a friendly club, and this is something we all should all want to address. As a member of several other clubs, I have heard their members occasionally discuss KCRC and it is often in terms of a less than friendly environment.

One of our recent new members did not like the lack of courtesy and civility of recent meetings, and went down to Blount County to fly with a friend who was also a prospective applicant for KCRC. It was a mission for the two of them to check out the Blount County club versus ours. Both said they were pleased with a great welcome and a lot of friendliness. Also, when the subject of KCRC came up, the Blount County folks gave them an earful of negative comments about KCRC's lack of friendliness. Sure, there is always club rivalry. In this case, however, both our member and the prospective applicant believed the negative comments were probably true.

I could provide additional examples of the lack of KCRC friendliness. And to keep things in perspective, I can also provide many examples of KCRC members going above and beyond the call in welcoming new members and treating existing members in an outstanding way. The positives are great, but there are just too many negatives. Even my wife periodically reminds me of our first visit together to the KCRC field in 2011 when nobody in the large crowd was even willing to talk to us. Luckily one person from outside the crowd finally came over to help.

One past KCRC President tried to take on the friendliness problem by emphasizing courtesy. He was mocked and scorned by many members for his efforts.

The immediate problem and the reason for this short article is the rude behavior, nastiness, and name calling by several individuals in the last few meetings. This is not the occasional slip of the tongue of losing a temper, but rather instances of a planned approach to embarrass individuals, make them feel defensive, and to try to force them to quit or resign from certain activities. In my view and in the EC's opinion, it is unacceptable. This negative behavior has resulted in losing three prospective new members that I was sure would be joining our club, and possibly the loss of several existing new members.

I was shocked the other day at the field when two senior people in the club told me this kind of negative behavior at meetings was actually OK. They said there is no rule in our club against name calling, and our members should be able to say whatever they want in meetings and in memos.

So now you have the question. As a club, do we want meetings where we calmly decide what is best for the club by following a reasonable standard of courtesy and decorum? Or do we want to have a wide open atmosphere where anyone can say whatever they want, however rude and hurtful it might be?

Another new member mentioned that even he can see there is a clique of senior members that stick together like glue, and as a group are sometimes vicious if they do not get their way. This individual says he is worried about even voicing a dissenting opinion because he will be singled out and picked on for some made up bad behavior (his guess was he probably would be scolded for flying too close to the fence). So his conclusion is: "I am here to fly and have fun, why should I put up with this? There are other great friendly places to fly."

Yet another new member has stated he was afraid to even present new ideas at a meeting because of the hostile atmosphere.

The EC wants the club to be a friendly place so we can all enjoy our hobby. Shouldn't we do what we can to make meetings friendly so they can be both fun and productive? And if not, how do you think it will be possible to grow the club with new members?

Do you want to enforce reasonable conduct standards at meetings?

If yes, are you willing to silence members when they engage in rude and unacceptable conduct that they refuse to apologize for?

Prepared by Frank

Agreed to and Approved by the KCRC Executive Committee

STUDENT AND EDF COURTESIES (Primer for Issue #5)

At the February, 2020 meeting the club passed a courtesy rule that was a codification of past rules and practices. The almost unanimous consensus was that it was appropriate to allow exclusive use of the field in a few selective situations, including during week-ends, as long

as it did not have a significant negative impact on overall member access to fly.

The courtesy rule agreed to is as follows:

EDF Jets, Maiden and Test flights, and Student Pilot flights should be given priority single access to airspace as long as sharing time at the field is not abused.

Even though this courtesy approach has been in effect for some time, there are still some senior members complaining about it because they do not want restrictions affecting when they can fly.

Some ongoing comments, for example: "*I want to fly when I want to fly, period. I am not going to share the field with anyone. Students can fly some evening when I am not around. Why should EDF jets get a special advantage?*"

Student Training

- During the February meeting the club reaffirmed its policy toward supporting and enhancing the recruiting and training process, including that students be given sole access to the field for two specific situations:
 - a. their first flight (so it is the most pleasure possible)
 - b. when learning landing during buddy box training until the student gets the rudimentary basics.
- Many of the best flight instructors suggest that older RC fliers forget how nervous flying is to a new student. Building a student's confidence is almost as important as

developing their flying ability. Sole use of the field for students in these two situations is of immense benefit to them.

- Other measures agreed to at KCRC to enhance student training and to make it a more friendly experience include limiting criticism and negative comments to students about their flying, and not interrupting an instructor while he is flying with a student.

Maiden Flights:

- It is usually a good idea if sole use of the field is given for maiden flights because of the higher unpredictability of an unproven airplane. In addition, the extra attention is effective at making everyone more aware of the inherent safety risks involved.
- There was one situation this year when a plane's second flight (a maiden type flight test) was unsuccessful and the plane went out of control and narrowly missed four people. Luckily three of the people were paying attention and took the necessary evasive action to protect everyone.

EDF Flights:

- EDF jets are the biggest growth area of the hobby, and an exciting and very important motivator for prospective new members.
- In May, 2020 Model Airplane News wrote:

Electric ducted fan (EDF) jets have become one of the most popular sectors in our hobby, and the development of these e-powered speed demons has been nothing short of amazing.

- In December, 2019 Model Aviation wrote as follows:

EDF models are becoming extremely popular.

Participation in the online forums and Face book groups dedicated to EDF models show this is a growing segment of a great hobby. Technological advances such as efficient fans, high-amp ESCs, and high energy density LIPO batteries with high C ratings are making EDF jets more mainstream every day, and manufacturers are taking notice and producing more products to meet the demand.

- Even with these technological advances, however, most EDF jets are still only capable of very short flights of 3.5 to 4 minutes. Also, when the battery power runs down, EDF jets are not very good at gliding.
- Given their short flight time, their lack of gliding ability, and the how busy the KCRC field often is, it is very helpful for EDF pilots to be able to complete a short flight knowing they can land when needed.
- The club courtesy to EDF pilots makes EDF flying safer and less strenuous, and helps overall field safety. The courtesy also helps motivate EDF pilots to fly more often, and to motivate non EDF pilots to more seriously consider it.

Flying jets is especially important and beneficial in the recruiting and retention of new members. While turbine jets are more impressive than EDFs, our field is unfortunately not able to accommodate them. So EDF jets serve as the sole way to tap into the jet area for new member excitement and motivation.

Because of the unhappiness by some members, we should have another full discussion of the pros and cons of this courtesy policy, even though it has been voted on several times.

- Do you want to give students sole use of the field in the two limited training situations described in order to enhance their motivation, confidence, and enjoyment?
- Do you want to allow sole use of the field for maiden flights when requested?
- Do you want to allow EDF jet pilots the courtesy of finishing their short flights and landing without stress as a way of enhancing safety, promoting EDFs, and helping recruiting and new member retention?

My hope is that after one more discussion and one more vote, regardless of what is decided, the issue can be put to bed. So what do you think?

The membership also needs to make it clear that complaining and dissension regarding this issue should stop. Are you willing support the courtesy policy by telling complaining members to stop their negative comments?

Everyone needs to move on to other more important club business, or to just fly and have fun.

Prepared by Frank
Agreed to and Approved by the KCRC Executive Committee

Videos Of the Month

Fatal Collision Over the Grand Canyon | America's Worst Disaster | United 718 and TWA 2



<https://www.youtube.com/watch?v=WG7FAwyUHHo>

Guillow's Balsa Cessna 180 Build and Assembly

<https://www.youtube.com/watch?v=GnjVFXH-Nm0>



Tweaking/Practicing Landing Skills

<https://www.youtube.com/watch?v=snDormhb3is>



Technical Article of the Month

Vision

“I lost it!”, can be one of the scariest times when flying a model plane. Whether you can regain sight of the aircraft and determine its orientation might mean loss or recovery of the aircraft. While color and contrast can make life difficult, those can be controlled while building by picking the right colors and markings. (Hint: Think the opposite of camouflage). The size and speed of the aircraft make retaining visual contact easy or difficult. Even though a 747 is flying at 200 mph it seems to lumber through the air while a house fly is hard to visually track at 4.3 mph.

So, what is good eyesight?

The common eye chart in use today is the Snellen charts, with a single, large letter E at the top of the chart. Each line below gets incrementally smaller until the letters are so small that the only

people who have better than 20/20 vision can read them. The size of the letters are precisely calculated to represent perfect adherence to the visual standard of the 20/20 scale.

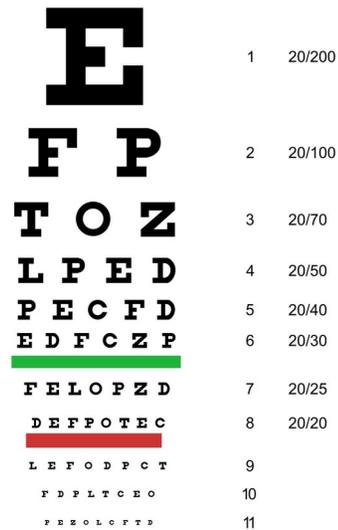
Even the types of letters used are carefully chosen. The next time you are looking at an eye chart, you will notice that it does not contain every letter of the alphabet. The only letters used are C, D, E, F, L, N, O, P, T and Z. The reason for this is that some letters can be identified by the human brain even if they are too blurry to be seen clearly. An example of this would be the letter Q. The brain is able to pick up on the shadow of the tail that comes off that letter and determine what it is, because

there are no other letters like it. If one has difficulty reading letters with horizontal bars (E,F,T, and Z) it might indicate astigmatism. Vertical astigmatism blurs the horizontal elements while horizontal astigmatism blurs the vertical elements. Astigmatism does not have to be only horizontal or vertical but can be in any orientation.

In the case of the traditional Snellen chart, the optotypes (letters) have the appearance of block letters, and are intended to be seen and read as letters. They are not, however, letters from any ordinary typographer's font. They have a particular, simple geometry in which:

- the thickness of the lines equals the thickness of the white spaces between lines and the thickness of the gap in the letter "C"

- the height and width of the optotype (letter) is five times the thickness of the line.



What is 20/20 vision?

20/20 is a term used to define normal visual acuity; the clarity and sharpness of an object at a distance of 20 feet. If you have 20/100 vision it means that at 20 feet you can only see what a normal person can see at 100 feet, so your eyesight would be very poor. 20/10 vision, on the other hand, would mean you have exceptionally good vision, being able to read at 20 feet what a normal person could only read at 10 feet.

Snellen defined “standard vision” as the ability to recognize one of his optotypes when it subtended 5 minutes of arc. Thus the optotype can only be recognized if the person viewing it can discriminate a spatial pattern separated by a visual angle of one minute of arc. The letters are comprised of a 5 x 5 grid with the 20/20 line having the members of the grid width/height equal to 1 minute of arc while the whole letter is 5 minutes of arc wide and tall.

How to take the Snellen test.

Stand at the twenty foot line and cover your left eye, so you can only see out of your right eye. Starting from the top, read each row from left to right for as far down as you can still make out the letters. Note the last line on which you could correctly identify every letter. Have an assistant verify that you are reading the letters correctly.

Repeat the test with your left eye, covering your right eye this time. Note the last row you could read with complete accuracy. The row for each eye will not necessarily be the same.

Take note of the fraction shown to the left of each row: It identifies how your vision rates. For example, if you could read to the fifth line, you have 20/40 vision; if you could read to the seventh line, you have 20/25 vision.

So if your aircraft has a 60” wingspan with a chord of 12” and your vision is 20/20 you would be able to determine orientation of your aircraft at 0.6 miles and totally loose sight at 3 miles. That’s if you see 20/20 and are otherwise not degraded by astigmatism, cataracts or other deficiencies.

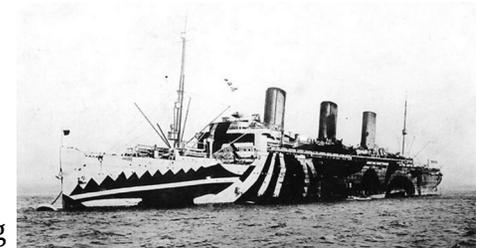
So, what are the standards? For driving it is 20/40 (corrected), for flying (full size) it is 20/40 (corrected). And, yes, it is possible to get corrective lenses made to give better than 20/20 vision and Lasik surgery often corrects vision to 20/15 to accommodate vision degradation in the future.

I lost sight of my aircraft at about 0.16 miles as measured using Google Earth. So what happened? The aircraft was one of my “minimalist designs and it was coming straight at me with the trees to the West as a backdrop. A very poor target to acquire. Had I pulled up into a shallow climb I might have regained sight and orientation.



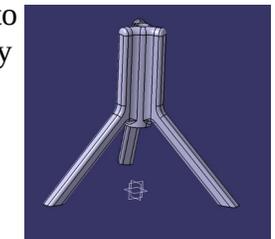
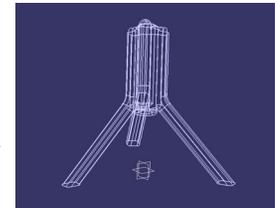
I had Phil Cope fly my Global Hawk and he commented that he found it hard to fly due to it’s color “white” against the high clouds and its unusual configuration. As I mentioned earlier color plays into maintaining visual contact. Every time I see an aircraft in its full size counterpart’s gray color I get worried as this color was specifically chosen to make the aircraft hard to see. The aerospace industry calls this contrast suppression and is good at evading one’s enemy but could cause loss of visual contact or orientation with models.

In World War I, ships were painted in a “dazzle” pattern as camouflage. The pattern was not intended to hide the ships like hunter’s clothing, but to rather disguise the direction the ship is traveling to throw off the attacking submarine’s aim. Some patterns were effective enough to create a 60 deg error in traveling direction and thus spoiling the torpedo’s lead and causing a miss.



So why does painting a stylized pattern on a model plane help with orientation? It’s because the pilot’s brain quickly learns the orientation through watching (and flying) the aircraft. However, the pattern needs to be visible at the distance the aircraft is flown at. If your checker board pattern is too small then at distance all the squares blend together.

Another technique used to maintain orientation is to maneuver. In the early days of CAD, the parts were displayed as a wire frame with all edges displayed. The terminal had a set of dials on the left side which controlled yaw, pitch and roll of the image. My left hand was constantly turning the dials to keep the part shown changing orientation. By doing this my brain was able to interpret the image, what was in front and what was in back. Yet, despite all the constant turning I occasionally needed to reset to a known orientation to get my brain back in sync with the model’s orientation.



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 (\$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 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 (Notice events may be canceled)

The October KCRC Meeting will be 10 am on Saturday, October 10, at the field.

**Volunteer Aeromodelers Fall Fun Fly
Saturday October 17, 2020 from 9am to 5pm**

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



239 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/>