



Next Meeting

Our next meeting will be at 6:30 pm at our WRCF Flying Field on May 8, 2007.

Mow Schedule



April 29 thru May 5

Tom Clark / Joe Sears

May 6 thru May 12

Eric Thatcher / Mark Cole

May 13 thru 19

Bernie Meegan / Matt Holl

May 20 thru 26

Larry Russell / Richard Buxton

May 27 thru June 2

Dave Skinner / John Bremenkamp

If you cannot mow at the above dates please contact a substitute on the mowing schedule or Club Roster and furnish him with enough money to purchase four gallons of gasoline.

If you are not able to participate for any reason, please send an email to jrbkamp@aol.com.

The following mowing guidelines are a repeat from the April newsletter, and will not appear in the following newsletters. If you need to review them, refer to the April newsletter or this one in the future or to the club web site or

documents in Walter Mitty's Hangar at WRCF.

1. Two people will be assigned to mow each week during the growing season and communicate with each other to see that the job gets done.
2. Field mowing days will be Tuesday and Friday when the grass is swiftly growing and needs cut twice a week. One will mow on Tuesday, and the other on Friday.
3. Those scheduled, who cannot mow on their scheduled week must obtain a swap or substitute and arrange for five gallons of gas.
4. You should check the oil level in the mower. Bring five gallons of gas.
5. Mow the field between the striped poles and orange cones at 2 1/2 inches.
6. The perimeter of the field will be mowed with the mowing deck in its highest position.
7. The person mowing has the right of way until finished. Anyone wishing to fly must wait.
8. When finished back the mower into the shed so the engine is above the drip catchers.

Safety Update

As mentioned in the last newsletter, as the beginning of a new flying season approaches, please take the time to thoroughly inspect your models. If you have been flying for a few years, you know what to do that avoids an accident and even a crash. If you are brand new to the hobby, call

President	Bryan Miller
Vice President	Tom Clark
Sec./Treasurer	Mark Reeves
Newsletter Editor	John Bremenkamp
Safety & Rules Committee	Bryan Miller
Maint. & Grounds Committee	John Bremenkamp
Events Committee	TJ Klise
Social & Education Committee	Kayton Heavrin
Site Committee	Paul Cobb

one of the flight instructors or talk to a R/C friend in the area. The flight instructors are:

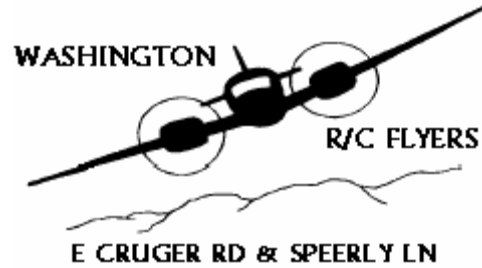
John Bremenkamp @ 444-4851

Bryan Miller @ 886-2001

Wally Walwer @ 444-2692.

April '07 Meeting

The meeting in May was moved up to 6:30 p.m. Tom Clark will talk to our neighbor about airplanes flying too close to his home. A second time guest was Art and Danny Hillengburg. The outstanding bonds should be paid this year in Sept, Oct. and November. Our club has spent the \$10K necessary to receive an AMA grant of \$1K. The safety update covered having trimmed your plane, check for proper center of gravity, correct control surface throws, and proper engine thrust before flying a new or stored airplane. The new lock combination change was mentioned. The president verified that each event this year has a chairperson. David Lee will look



into the renting of a 20x20 foot tent rental for the Peoria Air Show. We will perform a R/C presentation to the Girl Scouts in the fall of 2007.

We currently stand at 47 members. Twenty-two from Washington, eight from E. Peoria, one from Peoria Hts, four from Peoria, seven from Metamora, two from Morton one from Creve Coeur, and one from Chillicothe. We need to encourage our Eureka, Dear Field, Ronanoke, and Spring Bay friends to join us. The newest members are Bill Phelps, Art and Danny Hillengburg, David Lee and Travis Kempf. Lets offer them any help we can with friendly words of encouragement. Here they are. Sorry that I don't have a picture of Art and Danny at this time.



David Lee (above)



Travis Kempf (above)



Bill Phelps and his wife (above)

2007 Flying Schedule

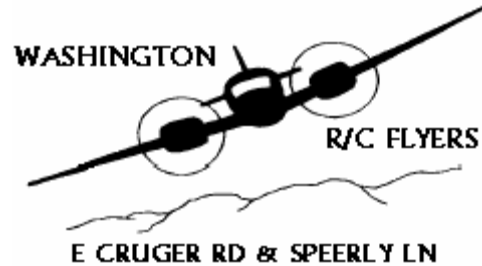
- May 19 - Season Kick Off
- June 10 - Fun Fly
- July 20-22 - Peoria Air Show
- Aug 18 - Club Picnic
- Sept 9 - Open House
- Oct 13 - Wiener Roast

Cherry Festival 2007

The Washington Cherry Festival booth has been reserved for our club. The AMA and Tower Hobbies have sent appropriate flyers and information for distribution. The Club should be represented by members that are interested in sharing their knowledge and enthusiasm with the public. If you are willing to help out on June 1 and 2 for two hours minimum in the afternoon or Saturday evening, please respond with a phone call to me at 444-4851 or an email to jrbkamp@aol.com. Any help during those two days would greatly advance the R/C hobby and our club's presence within the community. I have some props and pictures to display that will help set the mood of our booth. We may be able to display a small electric airplane and heli.

Using old faithful.

WRCF pilots number 47 and very few are going to abandon their 72 Mhz systems for the Spectrum technology. Those of us remaining with our familiar 72Mhz systems can choose to be either of two types of frequencies, PPM or PCM. Here is a little about their characteristics.



PPM or Pulse Position Modulation is standard FM. The next step up is PCM or Pulse Code Modulation which seems to be shrouded in mysticism. In a nutshell, it is not what frequency each is on, but how they use their frequencies.

To demystify PCM somewhat you should understand that there is no range increase with PCM. It is not on some special side band or frequency. It shares the exact same FM frequency everyone else on your channel is using, and is susceptible to the same interference. There is, however, improvement in noise reduction and safe performance while the noise is received.

Noise is the undesirable signals on your frequency. They can be caused by anything from sunspots to another transmitter homing in on your frequency. Today's modem radios operate on a narrow band that eliminates most of the random noise.

Basically, the PCM radio takes your FM signal and "codes" it digitally (the "C" in PCM). Then the PCM receiver "decodes" the signal to utilize it.

Since noise is not a normally recognized code, it is ignored by the PCM receiver, and is not sent as servo instructions. In addition PCM does not transmit position signals for each servo in each transmitter pulse. Rather it transmits movement commands as required, and occasional positions

confirmation commands. Short periods of interference will simply leave the servo at its last known position, and not show such radio interference as glitches or fluttering.

If your PCM receiver continuously receives interference past the preset time, it then switches into "failsafe mode," and obeys some preset commands you programmed in the receiver. For example, you may set failsafe to throttle down and move all other surfaces to the neutral position. This is great if you are in level flight, but disastrous if you are exiting a loop. If set to continue the last command, it will often keep your model in the loop. Unfortunately, failsafe settings will put your model in a precarious situation you didn't want it locked into.

A third level of protection may be obtained by using a pilot assist module in combination with preset positions on the failsafe settings. You can help ensure your model will go to level flight at a slow-but safe-airspeed and hopefully safely ride out the interference.

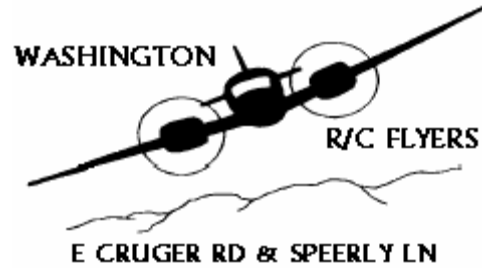
Even though the radio does not glitch, it is not to say the PCM radio was in good contact at all times. If another radio is transmitting on your frequency, it can-and likely will- interfere with your receiver's ability to receive the proper signal from your transmitter. The CB radio enthusiast in the seventies used to call this being "walked on." PCM

will help keep your receiver from acting on a bad signal, but there is nothing it can do if a good signal can not be received over the interference.

The logic of PCM is that it is better to momentarily do nothing than act on a bad signal. PCM benefits are purely in precise transmitter / receiver communication.. With PCM the main purpose is to hide glitches by not transmitting them to a control surface command. As far as the pilot is concerned, there is only an unnoticeable momentary loss of control. If the radio interference is persistent, the pilot will probably be unaware and may lead to total loss of control sending the airplane either into the wild blue yonder or to the ground.

On the other hand, the simple PPM pulses may be corrupted with some information getting through. When things go bad, the choice is between no control (PCM) and some control (PPM). Most RC pilots would prefer having some control even if erratic.

The Washington R/C field has not been the victim of R/C interference on a level that disrupts our flying. We are very fortunate in this regard, to have interference free air space. Thus PPM and PCM are equally effective for us. But if you travel and fly at other sites, then this knowledge about the two can be beneficial.



Pekin R/C friends.

Again, keep your eye on what the Pekin R/C Club is also doing by glancing at their web site once in a while: www.pekinrc.com. Some of their members have come over to fly on our field and share with us. Jeff Carnahan, Gary Lenhardt, Don Nichting, Pete Mart, Marvin Prather, Larry Roberts, and myself.

Jeff Carnahan and a few others went to the annual Toledo R/C Show that is the granddaddy of static exhibits. Electric airplanes and helicopters are coming on strong. If anyone wants to e-mail Jeff for his experiences, here it is: jeffcarn@verizon.net.

In case you have heard, and have not seen, Pekin recently installed a medium size barrier to the pit area to keep visitors away from the parked airplanes and flight line. Here is a picture of it that doesn't show off its fine quality, but you get an idea. Just for your visual curiosity. We at WRCF have a good looking pit area and visitor control too with our configuration that is just right for us.



We have four flight benches that are adequate if used with care. Pekin's "T" style here really looks appropriate for larger airplanes. If anyone in the club has wood working talents and is interested in making one or two of these please be our guest. I have more pictures and can get actual measurements.



Cockpit Heaven

If you are interested in what a pilot uses to fly anything at all, check out all the cockpits at: www.uscockpits.com.

R/C Neighbors worth mentioning again and respecting.

We are pretty remote in our location but we do have one neighbor to the North that we should be aware of when flying in that direction. **Keep the plane closer than you think it is when it is to your immediate left, or directly North. Please do your distance flying South, South/East and East. Let's keep our one**

and only close neighbor friendly to our hobby.



In the April newsletter this photo (larger) was displayed with this question.

Did you know where this crowd is and for what event?

The answer is, that it was the 2006 Peoria Air Show event on Saturday.

