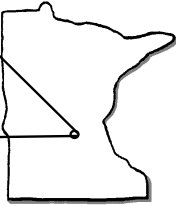


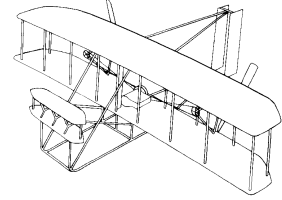


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# The Wright Flyer

WEBSITE: [WWW.JOELD.NET/WFRC](http://WWW.JOELD.NET/WFRC)



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NEWSLETTER OF THE WRIGHT FLYERS R/C CLUB

## Meeting Highlights

On Tuesday August 8th, the Wright Flyers held the monthly membership meeting at the Montissippi Park. This was fourth monthly meeting of the summer season at the flying field.

The business meeting was called to order at 7:01 PM by President Scott Lieferman. There were 14 members present including five club officers. There was a guest, Leo Davids' brother Tony who is the Vice-president of the Charles River RC club in the Boston MA area. The secretary presented the minutes of the July meeting and they were accepted as read. A treasurer's report was given by Perry Dziuk with recent receipts and bills leaving a balance \$4,192.93 in the clubs treasury.

Wayne VanDenBoom received the order of club logo shirts and has distributed all but a few of the order.

Mark Verbrugge reported that he received a thank you letter from the Cub Scouts of St. Michael for putting on the flying demo night for them at our field this past July 13<sup>th</sup>.

Garth Landefeld reported he has not needed to mow the flying field at all in over a month now. Garth will also ensure that the rental toilet is taken back from the field after October 15<sup>th</sup>.

John Kossieck checked out the Maple Lake school's display area for a model R/C display. He found the cases they have are not large enough for any of our model aircraft. The case they have for display are only suitable for photos and literature. So John doesn't think there is a possibility for the club to do any meaningful promotion at the school.

Scott Lieferman got an inquiry from the Monticello Women of Today about providing a children's flying day at our field as part of their annual Kid's

The next meeting is scheduled for **7:00 PM** on Tuesday, September 12th, 2006. It will be held at the **flying field at the Montissippi Park.**

Week this fall. Scott will see if they want to do the buddy box flying demos again and get back to the members who could support this activity.

John Kossieck got a request from a Cub Scout troop in Winsted to do a buddy box flying demo for them. Due to the distance from our field he referred them to the R/C club in Waverly headed by Dean Monteith .

John Kossieck suggested the concept of having a log book at the field so that members can record when they are flying at the field. That may promote group gatherings if members are able to see patterns of fellow member attendance. John will look for some kind of a mail box to store a log book near the frequency board which would be convenient to log your flying session in.

The subject of another club picnic fly was discussed and it was decided that September would be the last chance for the season. A date of Saturday September 23<sup>rd</sup> was settled on. Rich Johnson will coordinate the effort which would be solely a dish-to-pass by attendees for food supply. The flying would not be competitive just the normal fun fly style typical of the unorganized activity we all enjoy.

It was announced that the Litchfield R/C club is

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having a fun fly competition in Hutchinson on Saturday September 16<sup>th</sup> that our club is invited to participate in.

Jeff Nelson offered to reserve our winter meeting room for club meetings at the Monticello Middle School that we have used over the past years. Scott Leiferman asked to see what the availability of the meeting rooms in the Buffalo airports new terminal facility for our meetings. He will report back at the next meeting on his findings. If we have a choice of the two locations, members will have to voice their preference so we get a location that will generate the best turnout.

Chris Johnson from Rockford who has been visiting our club this summer became a member at this meeting. Chris favors the electric powered aircraft and has many nice flying examples in his fleet.

The meeting was adjourned at 7:21 PM

## Upcoming Events

**Maple Lake Fly-in Dinner-** The Maple Lake EAA chapter will be holding their annual fly-in pork chop dinner at the Maple Lake Airport on Sunday September 10<sup>th</sup> from 11 AM until 3 PM. The WFRS Club are welcome to provide static display of R/C aircraft at this event as we have in past years.

**TCRC Fall Float Fly-** The annual fall event is scheduled for Saturday September 16<sup>th</sup> at Bush Lake Park in Bloomington. The flying is set to start at 11 AM. Current AMA membership is required to fly at this event. TCRC supplies a retrieval boat. The only known cost is the parking fee in the city parking lot at this park.

**WFRS Picnic Fly-** The Wright Flyers will hold a fall picnic at the flying field in Monticello Park in Monticello on Saturday September 23<sup>rd</sup>. Rich Johnson will coordinate the only structured part of the event which is a dish-to-pass noon time lunch. Contact Rich to decide what to bring for your food contribution. There will be no formal competition flying or prizes at this event, just plain old fun flying.

**Hobby Warehouse Swapaganza-** The next swap event at the Hobby Warehouse parking lot in Richfield is rumored to be on Sunday September 24<sup>th</sup>. Check with the store at 612-861-5587 to confirm this date and details.

## Which is Better: PPM vs PCM

Aside from all the other choices when selecting an RC radio system, the terms PPM and PCM comes up. 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 horning in on your frequency. Today's modern 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

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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. PCM does, unfortunately, have a serious weakness. Even minimal atmospheric or external noise can foul up those wonderful intricate binary numbers beyond any correction. In that case, the receiver is up a creek without a paddle. Think of it as if trying to communicate a grocery list via cell phone in a “one bar” area—some things are not going to make it in the grocery cart. 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. When a model aircraft is suddenly doing the funky chicken, it is normally a signal to land.

Most radio interferences are normally small glitches and are recoverable, giving the PPM pilot a chance to land and find the cause of the problem.

The bottom line is if you are looking for a bullet-proof radio system to keep your airplane from falling from the sky, it does not exist. A system sporting PCM is an excellent choice for larger acrobatic and 3-D fliers with quick throws, where a small glitch may send it suddenly into the ground. PCM will of course work on smaller, more docile airplanes. These airplanes will benefit less from the added features, and PPM is probably a good bet.

Remember there is no substitute for a good battery charge and a range check. If another radio on your frequency is turned on, there is little any radio can do to keep you from being “shot down.”

*from the River District RC Eagles, Saint Clair MI  
by Ed Olszewski*

# Security Update

Because of questions directed to the Academy of Model Aeronautics from various sources, we are reprinting two previously published advisories regarding dealing with law enforcement agencies and the news media when asked about model-aviation activities and our national security. We feel it is important to remind our members, clubs, and industry partners how to best represent our sport under such circumstances so the following are provided for your review.

## Security Advisory

The most important thing to do is to cooperate. Once the representative(s) have established their identity—and any legitimate officer or investigator will do this—cooperate by answering their questions honestly, politely, and with care. Please take these inquiries seriously and don't forget the impact your answers and attitude could have on your flying privileges not only locally but nationally.

These are the times to give factual information and not the time to brag on your “modeling exploits.” Although you are answering questions to determine the security risk model airplanes may pose, you may also be answering questions asked by people who have never before experienced our sport. You may be teaching them about the activity they are investigating. If that is the case, you want them to be well informed so they can fully appreciate our activity.

Always remember to direct them to the Academy of Model Aeronautics, your national organization, for any additional information they may need. We have a good rapport with the agencies responsible and are glad to assist at any level necessary.

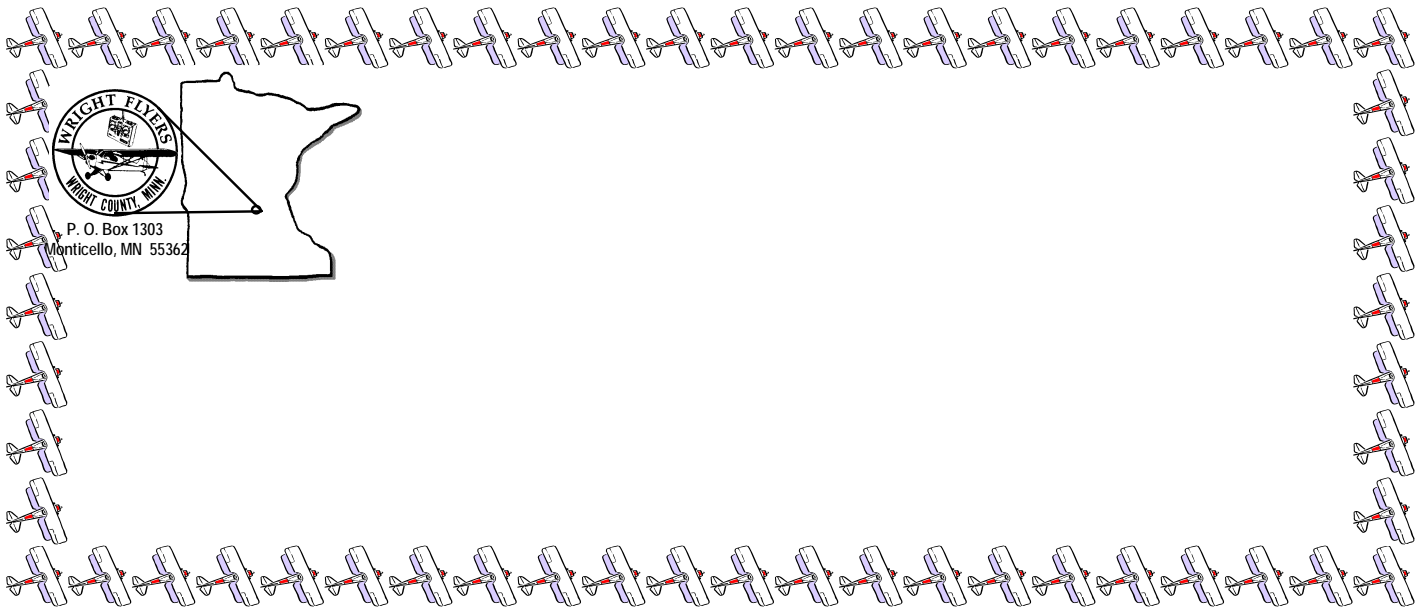
Establishing a good working relationship with such agencies is important not only to our national security but to the efforts put forth to maintain our privilege to continue participating in the sport we all cherish.

A copy of the Media Advisory, which AMA issued in April 2003, suggests how to respond should members of the media approach you. Please keep the points made in mind.

## Media Advisory

This advisory is a result of events involving the news media making contact with AMA chartered clubs or individuals. In today's tense atmosphere of terrorist threats, possible military actions, etc., there appears to be exuberance on the part of news agencies and individual reporters to gather information concerning the use of model aircraft as possible security risks. Often, in an

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effort to take advantage of the opportunity to garner some public exposure for their local flying activities, the members are surprised when the news release does not resemble what they had assumed would be published. This results in negative press for the sport and local participants, and may spread misinformation.

As a service to all AMA chartered clubs, we are suggesting that if you or your club are contacted by TV, radio, newspaper, or Internet reporters for interviews (other than coverage of such activities as fly-ins, mall shows, airport awareness days, etc.) you direct them to the AMA Headquarters for information. If in doubt, please err on the side of caution.

Our main purpose for the "Advisory" was to bring the matter to the attention of our members and remind them of how important it is to be cautious when giving interviews during these times. We are all aware of how

### 2006 Club Officers

Pres ..... Scott Leiferman.....763-682-2707  
VP ..... Wayne Van Den Boom...763-428-2360  
Treasurer .. Perry Dzuik .....763-477-6865  
Secretary ... Leo Davids .....763-263-3577  
Safety Off.. Ron Bredeken.....763-441-3199  
News Ed... Jean Davids.....763-263-3577

If you have news or ideas for articles you would like to see, you can email me at [jedavids@charter.net](mailto:jedavids@charter.net)  
Or call me at 763-263-3577.

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communications can be misunderstood or misinterpreted and how reporters can sometimes inject their own perceptions. All we can ask is that anyone speaking on behalf of our modeling activities be aware of what the consequences of their words might be.

At any time please contact Jay Mealy at AMA Headquarters with questions, comments, or concerns.

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