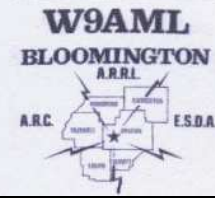


CENTRAL ILLINOIS RADIO CLUB

Short CIRCuits



June 2006

From the President

VE Testing

In May I noted the FCC still has not acted on the proposal to abandon CW for amateur licenses. The June issue of CQ magazine has an excellent article on why it is taking so long to finalize the Morse code proceedings – under their Washington Readout column. The article covers the extremely long formal process we follow to change laws - and Federal regulations are treated like laws. Basically there are multiple formal filings, notices, and opportunities for the public and interested parties to provide input. Bottom line – it looks like it is going to take more time. It might be easier to upgrade by passing the current code test than to wait for the regulations to change.

Again - Please let me know if there is any interest in a General Class class. We might be able to arrange something through Heartland or elsewhere. I would also be willing to do another code class if there is enough interest. I haven't heard anything at this point, so I'll put the idea on the back burner.

Field Day

I am writing this Sunday afternoon – field day ended at noon. Wow – I am drained after staying up way past my normal bed time until 4:00am and you will have to pardon me if this sounds a little “punchy”. I don't have final score at this point, and frankly was too tired to write down our raw numbers when we shut down, but I think we did well overall. One very pleasant surprise was having 6 meters open early Saturday

afternoon. At one point I believe we were running a higher contact rate from the VHF station than from HF. Another pleasant surprise was having 15 meters open well into the night. I believe we even managed a few 10 meter contacts. Who says the higher bands are dead?? Another pleasant surprise was the weather which I thought was just about perfect. We were a little hot Saturday during set-up, but the evening was just about perfect – shirtsleeves and shorts all through the night, with nary a sign of mosquitoes.

Many thanks to all who participated – special thanks to the crew who labored so hard to provide grounding for the event – Gary Huber, AB9M, Norm Huber, N9ZKS, Steve Davis, K0FMK, who provided yeoman duty in the final effort to drive the rods in and to Dan Harms, K9OAT for providing the rods. Thanks to everyone who donated their time and equipment and also to my wife Nettie, who coordinated our evening meal and ensured we had an adequate supply of drinks. Thanks also to everyone who labored during set-up and tear-down and to those who hung with the actual contesting, especially during the long night.

Major equipment provisions that I know of – Rick, WD9HRU, for the CW station rig, Gary Huber, AB9M for the Ten Tec stations in Norms trailer, State Farm Radio Club for the Ten Tec Omni VI, and thanks to everyone for all the shelter, cables, testers, keys, antennas and the vast array of radio stuff that it takes to put on a Field Day. Special thanks to Mike, KC0FWL, for planning and coordination and a really great template for the future.

You guys are great and certainly exemplify the best in Ham Radio – in expertise and in spirit!

June Meeting

We are going to do a critique of our operation, the planning and execution, so that next time will go a little smoother and perhaps we will perform a little better. Those of you who took pictures, please bring them, or disk files, to the meeting so that we can share. See you all at the meeting – Wednesday, June 28 at 700pm, Red Cross building across from the airport fire station on Route 9.

Thanks –

Keith
AC9S



Nets in the Area

Mon thru Sat	9:00 A.M. CT	14.2475 (HF)	Displaced Peorians
Monday	9:00 P.M.	146.730	123.0 PL Open Net
Tuesday	9:00 P.M.	146.255	(103.5 PL) Woodford County
Tuesday	7:15 P.M.	146.910	Tazwell County ESDA Net
Tuesday	8:30 P.M.	28.450	CIRC Open 10 meter Net
Tuesday	9:00 P.M.	146.940	(103.5 PL) CIRC Open Net
Wednesday	9:00 P.M.	147.060	Open Net Has Newslines
Wednesday	9:00 P.M.	442.250	103.5 PL ARES Open Net
Wednesday	Varies	147.100	103.5 PL <i>Sometimes</i> Trader's Net follows ARES Net held on 442.250
Thursday	9:00 P.M.	146.760	Open Net with Newslines
Thursday	9:00 P.M.	146.850	(103.5 PL) Open Net Peoria
Thursday	9:00 P.M.	146.895	North central IL Traders Net
Sunday	08:15 A.M.	1.815	Open 160 meter AM net
Sunday	7:00 P.M.	146.985	Clinton ARC net (NEW)
Sunday	8:30 P.M.	147.075	Open Net with Newslines

Central Illinois Area Repeaters

Freq	Callsign	Location	PL
145.390	N9EZJ	Lincoln	103.5
146.730	K9HGX	Decatur	123.0
146.790	WD9HRU	Bloomington	
146.850	W9UVI	Peoria	
146.940	W9AML	Bloomington	103.5 CTCSS
147.015	NX9M	Normal	88.5 (open*)
147.075	W9UVI	Washington	103.5 CTCSS
147.100	WA9RTI	Decatur	103.5
147.150	WD9FTV	Bloomington	
147.345	K9ZM	Lincoln	103.5
147.390	WB9DUC	Pontiac	127.3
442.250	WA9RTI	Decatur	103.5
442.700	WB9UUS	Normal	107.2 (open**)
444.350	W9EX	Normal	107.2

* Repeater is currently in open mode with pl for those with QRM

** Repeater RX with tight carrier squelch and loose tone squelch (107.2)

(Please help me keep this list correct. I know it may not be up to date at this time. Norm N9ZKS)

LOCAL DX PACKET CLUSTER INFORMATION

"DX spotting network" - N9PE (Memorial Station) 144.91 MHz - 1200 baud - Connect to N9PE - Contact AB9M or KB9LNS for more info.

Circ Meeting Minutes May 24, 2006

President Keith AC9S brought meeting to order at 7:00 pm. Norm N9ZKS, gave treasure's report, report will be attached to minutes. Motion made to accept April's minutes by Gary Huber AB9M, second by Larry Mays KB9NPH, passed Unanimously.

Old business, ARES meeting on April 29, 8 to 10 Circ members attended. Rich is thinking of providing communications for a triathlon at lake Bloomington in July. More info to come.

Question of repeater problem of past, everything seems to be working fine at this time. Gary AB9M cleaned connections and a potentiometer with deoxant. Gary made Motion to buy a can of deoxant from Radio Shack, about \$15. Second by Jim Baker, passed.

Floyd W9EX, reported that Craig Russell was placed in the minutes as Craig Smith.

Red Cross gave us permission to place ground rods for field day, need six rods and hardware. We need to place call to JULIE before driving rods. Dan K9OAT, offered to donate six ground rods and sewer caps for covers. Club is grateful to Dan. Norm will call JULIE tonight so that the rods could be placed by Saturday, need to mark spots tomorrow, 5-25-06. Jim Baker WB9EDL, made motion, Gary seconded.

Repeater control issue. Are we in compliance with FCC about having control operator. Gary AB9M, suggested a positive control. Floyd W9EX, recommended a receiver activated by DTMF to shut off AC power and another tone to turn back on, 440Mhz control. Keith asked for research options, Gary AB9M volunteered to do research, Jim WB9UWA, Mykal KC9FJE, will help. Motion made by Earla, second by Jim Baker.

Program is field day planning. Gary AB9M reported UPS needed on all stations, 350VA or larger for isolation and safety. Norm N9ZKS, has one

to donate, we would like to have one for each station.

Equipment at this time: Tentec OMNI 6 State Farm club, CorsairII AB9M, Keith AC9S Yeasu 100D, club 720 Kenwood.

Stations will be 1 CW, 1 SSB, digital. 80/40 Triband antenna, long wire, vertical, Nevis.

Dan N9NSN, will donate network version logging software.

Norm will leave trailer, Jerry KB9ZDY has push-up tent, Keith AC9S has tent, Gary AB9M has tent. Need tables and chairs.

Check with Rich Ransom or Eric Hodges to bring new ESDA comm. Van.

Need promotion letters, press release and newspaper article.

Need water, soda, food.

Will meet for breakfast at 7:00 am the day of at Uncle Tom's, then at Red Cross at 8:00 am for field day.

Let's have pre field day meeting the Wed before, 6-21-06, at ARC site.

Need to check out interference on 80m at ARC. Meet at ARC May 27 at 10:00 am to check source.

Need to finish tying down repeater feedline, lightning protection. Make this an agenda item for June meeting.

Meeting was adjourned at 8:40pm.

Respectfully submitted, Daniel N9NSN

Bloomington VEC Exam Dates - 2006

7/22 Osborne Room
11/11 Osborne Room

1:00pm

Osborne Room
Bloomington Police Department
434-2290
305 S East St
Bloomington, IL

Keith R Hanson
AC9S

(309) 378-4416
AC9S@mchsi.COM

Morton Testing:

Generally, testing will be held on the third Saturday of the even numbered months.

Testing starts at noon and will end at my discretion.

If you plan on testing be sure to be there by noon.

Testing fee is \$14.

Dates are as follows:

06/17/06
08/19/06
10/21/06
12/16/06

Test location:

Morton Public Library
315 W Pershing St.
Morton, IL

Call (309) 263-2200 for more info

Central Illinois Radio Club

P.O. Box 993
Bloomington, IL 61702-0993

<http://www.qsl.net/w9aml/>

President: Keith Hanson AC9S
(309) 378-4416

Vice President: Dan Beer N9NSN

Secretary: Chuck Kostelc N9RZV
(815)-842-4058

Treasurer: Norm Huber N9ZKS
(309) 378-4674

Newsletter Editor: Norman Huber,
n9zks@earthlink.net
(309)-378-4674

The CIRC is a not-for-profit ARRL special service club whose purpose is to advance the service of Amateur Radio. Located in Central Illinois, CIRC and its members welcome all to use the 146.94 repeater and to attend club meetings.

Submissions for the newsletter must be received by the 10th of the month and may be snail or e-mailed to the editor at:

Norm Huber
19266 US Highway 150
Bloomington, IL 61704-5855

e-mail n9zks@earthlink.net

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Repeater Modifications

We are addressing the problem of remote control for the 34/94 W9AML club repeater. Following the path of least resistance (I.E. parts on hand), we have a 6db gain 460 Mhz omni at the top of the tower that has not been used for years. It is fed with 7/8" hardline and only needs a connector at the bottom to be complete. I suggest using this for the receive antenna in the 440 Mhz range for remote on/off control of the repeater. I have a Kenwood TK862G commercial two-way radio with a bad final that can be pressed in to

receive only service and is readily programmable to any 440 to 450 Mhz frequency and PL tone. I have a touch tone decoder module left over from the 80's. One challenge that remains is that we do NOT have a manual to the MSR2000 repeater. WD9HRU, can you track that down? It should be a fairly simple matter to interface the receiver to the repeater using touchtone to control it. I propose a custom circuit to do that.

As long as there is a good 70cm receiver present, it would be a shame NOT to use it as a link receiver as well. There would be multiple ways to use a link receiver.

First the primary .34 receiver should have priority over the link receiver. If there are signals on both inputs, the local .34 receiver should be the one that is fed to the .94 transmitter. This opens up some possibilities to solve some problems. If practical, the off site echo link transmitter should transmit on this UHF link frequency. That would solve the problem of Echo link signals covering up local traffic. The echo link signal should be not much stronger than needed to be full quieting.

A third use of the link receiver could be for dual band users. When the user transmits on the link frequency he can listen to his own signal on .94 and know how he is making the repeater. Given the large amount of site noise, it is very possible the more quiet 70cm band would give better RX range, especially if the 70cm receiver is outfitted with a gaAsfet or similar pre-amp.

A fourth use of the receiver would be as a hub for one or more cross-band repeaters for use especially for emergency communications. This would allow users at a remote locations to use handheld 2 meter radios. Currently a cross-band repeater would require that all users on site use a UHF hand held and experience additional delays hearing the repeater or use a dual band hand held listening to .94 but TX on some UHF frequency. The link would simplify this and reduce delays.

Multiple sites would be easy and can be controlled using PL.

What is the procedure to acquire a link frequency that would be used for remote control and UHF linking? Is there a need for co-ordinating this frequency or is there simply a list of frequencies to chose from?

The receiver would be at a fixed (high) location, but the transmitters could be anywhere in the service area on a temporary basis.

What are the requirements to avoid conflict with touch tone control of echo link? My initial thoughts are to avoid using * and # and simply use single long (2 second) tones.

The touch tone decoder can be connected to the discriminator output (UHF RX) so it always has RX audio. It can control the repeater without repeating the tone on the .94 transmitter. The user sending touch tone control on UHF would simply NOT transmit a PL tone. That way the touch tone is NOT heard on .94. When a proper PL tone is transmitted on UHF, audio is passed to the .94 transmitter as long as the .34 local receiver is not passing traffic. Audio from the speaker output of the UHF receiver is under PL control and is connected to an external audio gate that is controlled by the repeater * COR to prevent UHF audio from passing when a .34 local single is present. The output of this audio gate feeds an audio input to the .94 transmitter. The COR from the 70cm and the COR from the .34 receiver would be "AND"ed together so COR signal only keys the .94

transmitter when a PL controlled UHF signal is present AND a PL controlled .34 signal is NOT present. This logic circuit could also contain a hang time circuit different from the normal 34/94 repeater hang time so it would be easy to tell if the signal originated on UHF.

< * COR: The COR is a carrier operated relay. It is a logic indicator telling you that a PL controlled (in this case) signal is present. It is the receivers equivalent to a PTT line on the transmitter but is often inverted compared to PTT.>

I would propose that in the spirit of K.I.S.S., that a 2 second ouch tone "0" would dis-able the .94 transmitter and a 2 second ouch tone "1" would enable the .94 transmitter. This would require finding a "disable" line on the transmitter.

In all cases of touch tone control, one or more flip-flops would e used. A touch tone "0" resets all flip-flops to the off state.

Future enhancements are also possible. For instance a touch tone "1" might enable only the local 2M RX and disable the UHF RX from eing repeated. Then a touch tone "2" could be used to enable both local 2M RX AND UHF RX, but carrier squelch. Since the mic hook input is easily controlled, it is easy to control whether the UHF RX is carrier or tone squelch, so a touch tone "3" could be used to fully enable both RX and with PL on UHF. touch tone "4" could select the second channel on the UHF radio. Both channels would

be programmed to the same RF channel, but a different PL tone would be used on channel two. This might be useful if the band is open and the channel one UHF PL tone is active with DX.

At a much greater expense, further improvements are possible based on the use of the 460 Mhz antenna at W9AML. A 4 input voter is readily available that would allow real time summing of the output of up to 4 receivers fast enough that picket fencing is voted out. The end result is that in many cases, the overall signal quality is better than any one receiver by itself. A receiver located in Normal would improve local coverage. One or two additional receivers could be located in other parts of the county to improve handheld coverage of the county on a more permanent basis. At each site, a 146.34 receiver is needed as well as a UHF transmitter. Obviously antennas are needed for each. For each remote receiver, a separate UHF receiver is needed at W9AML on separate frequencies. A pre-amp and signal splitter is an easy matter to distribute signal to each receiver. This option is by far the most effective and convenient to use, but would be very expensive unless mostly surplus equipment is used.

The first option is a very good compromise and can give a lot of bang for the buck.

Earl (Jim) Shaffer, WB9UWA.

RILEY HOLLINGSWORTH TO AMATEUR RADIO COMMUNITY: "LIGHTEN UP!"

FCC Special Counsel for Enforcement Riley Hollingsworth advised those attending the FCC forum at Dayton Hamvention 2006 to try kindness instead of confrontation when problems arise on the bands. Hollingsworth spoke May 20 to a nearly full house at Hara Arena, and for the most part he praised the behavior of the majority of Amateur Radio operators, especially those who volunteered in the aftermath of Hurricane Katrina last year. But, he noted, radio amateurs still could be more courteous and less inclined to fly off the handle at some perceived on-the-air offense.

"You need to lighten up and not embarrass the Amateur Radio Service," Hollingsworth advised. "All of us make mistakes, especially with the new features you have on radios today. It's very easy to make a mistake, to be on the wrong

frequency or be operating split and not know it--there's a hundred ways to make mistakes." Hollingsworth said experience has shown him that at least 75 percent of the interference complained about is absolutely unintentional.

In Hollingsworth's view, radio amateurs all too often are hypersensitive and rude. "We have a radar going to detect offenses at all times, we assume the worst in people, we rarely give people the benefit of the doubt," he said. He joked that if there were three amateurs in a town, there would be two Amateur Radio clubs.

"And there'll be two hamfests with 20 people each, because they wouldn't dare consolidate them," he added.

Hollingsworth acknowledged that "certain problem operators" remain, but the real troublemakers are rarely the newcomers to Amateur Radio. "If there's a downfall in Amateur Radio, it won't be caused by no-code Technicians or codeless anything else," he said. "It'll be caused by the microphone--no doubt in my mind." He advised his audience to ignore the troublesome operators and not give them the attention they crave by engaging them on the air.

"Now, think about it: If what you're hearing annoys you, or angers you or is stupid, use the 'stupid filter,' which is that big knob--that VFO that will take you somewhere else," he quipped. "It's the largest knob on the radio." He recommended moving to another frequency or even another band altogether.

Hollingsworth praised the Volunteer Examiner program as "outstanding" and noted there had not been a single complaint in the past year stemming from an examination session. He also said the Amateur Radio community should have a greater appreciation for what the ARRL is doing on its behalf.

"Most of you have no idea how much work is done in Newington for you and the Amateur Radio Service generally," he said. "I see it every day, but I think you have no idea of the hard work and dedication that comes out of that office up there, and I don't think we would be there if it weren't for [the League]."

"This country's communications infrastructure needs Amateur Radio," Hollingsworth emphasized, praising Amateur Radio's overall performance following Hurricane Katrina. "You have a tremendous amount to be proud of."

He also suggested that radio amateurs have an obligation to stay informed about what's going on in Amateur Radio that might affect their activities. "You have to not only keep up, you have to lead the way, because it's in your charter," he said, pointing to §97.1 of the Amateur Service rules.

Hollingsworth noted at the start of his talk that he could not address any questions dealing with the FCC's long-awaited decision on the Morse code requirement (Element 1), because he works in the Commission's Enforcement Bureau. "We don't meddle in rule making," he explained, but added that he didn't expect CW to decline if the FCC does drop the 5 WPM Morse requirement for all Amateur Radio license classes as it's proposed to do.

The FCC Wireless Telecommunications Bureau (WTB) handles Amateur Radio rule makings, Hollingsworth noted, including the "Morse code" proceeding, WT Docket 05-235, and the so-called "omnibus" proceeding, WT Docket 04-140. The WTB has said it will rule first on the omnibus proceeding, then tackle the Morse code proceeding, but it has not indicated when to expect either Report and Order.

No representative from the WTB was at Dayton Hamvention this year.

God and Lawns

With spring here and summer not far behind, I thought those of you with lawns might find the following conversation between God and St. Francis amusing.

GOD: Frank, you know all about gardens and nature; what in the world is going on down there in the U.S.? What happened to the dandelions, violets, thistles and the stuff I started eons ago? I had a perfect no-

maintenance garden plan. Those plants grow in any type of soil, withstand drought, and multiply with abandon. The nectar from the long-lasting blossoms attracts butterflies, honey bees and flocks of songbirds. I expected to see a vast garden of color by now. All I see are patches of green.

St. Francis: It's the tribes that settled there, Lord. They are called the Suburbanites. They started calling your flowers "weeds" and went to

great lengths to kill them and replace them with grass.

GOD: Grass? But it is so boring, it's not colorful. It doesn't attract butterflies, bees or birds, only grubs and sod worms. It's temperamental with temperatures. Do these Suburbanites really want grass growing there?

St. Francis: Apparently not, Lord. As soon as it has grown a little, they cut it sometimes two times a week.

GOD: They cut it? Do they bale it like hay?

St. Francis: Not exactly, Lord. Most of them rake it up and put it in bags

GOD: They bag it? Why? Is it a cash crop? Do they sell it?

St. Francis: No sir, just the opposite. They pay to throw it away.

GOD: Now let me get this straight; they fertilize it to make it grow and when it does grow, they cut it off and pay to throw it away?

St. Francis: Yes, sir.

GOD: These Suburbanites must be relieved in the summer when we cut back on the rain and turn up the heat. That surely slows the growth and saves them a lot of work.

St. Francis: You aren't going to believe this Lord, but when the grass

stops growing so fast, they drag out hoses and pay more money to water it so they can continue to mow it and pay to get rid of it.

GOD: What nonsense! At least they kept some of the trees. That was a sheer stroke of genius, if I do say so myself. The trees grow leaves in the spring to provide beauty and shade in the summer. In the autumn they fall to the ground and form a natural blanket to keep the moisture in the soil and protect the trees and bushes. Plus, as they rot, the leaves become compost to enhance the soil. It's a natural circle of life.

St. Francis: You'd better sit down, Lord. As soon as the leaves fall, the Suburbanites rake them into great piles and pay to have them hauled away.

GOD: No way! What do they do to protect the shrubs and tree roots in

the winter to keep the soil moist and loose?

St. Francis: After throwing the leaves away, they go out and buy something called mulch. They haul it home and spread it around in place of the leaves

GOD: And where do they get this mulch?

St. Francis: They cut down the trees and grind them up to make mulch.

GOD: Enough! I don't want to think about this anymore. Saint Catherine, you're in charge of the arts. What movie have you scheduled for us tonight?

St. Catherine: "Dumb and Dumber ," Lord. It's a really stupid movie about...

GOD: Never mind I think I just heard the whole story from Saint Francis!



MARBLES

Very interesting story here even though it's fictional. K9NZQ doesn't exist according to the call book but its very worth while reading because its so very true. Life is so short so enjoy it while you can and are able to do so.

Jerry

The older I get, the more I enjoy Saturday mornings. Perhaps it's the quiet solitude that comes with being the first to rise, or maybe it's the unbounded joy of not having to be at work. Either way, the first few hours of a Saturday morning are most enjoyable.

A few weeks ago, I was shuffling toward the garage with a steaming cup of coffee in one hand and the morning paper in the other. What began as a typical Saturday morning turned into one of those lessons that life seems to hand you from time to time. Let me tell you about it:

I turned the dial up into the phone portion of the band on my ham radio in order to listen to a Saturday morning swap net. Along the way, I came across an older sounding chap, with a tremendous signal and a golden voice. You know the kind; he sounded like he should be in the broadcasting business. He was telling whom-ever he was talking with something about "a thousand marbles." I was intrigued and stopped to listen to what he had to say.

Well, Tom, it sure sounds like you're busy with your job. I'm sure they pay you well but it's a shame you have to be away from home and your family so much. Hard to believe a young fellow should have to work sixty or seventy hours a week to make ends meet. It's too bad you missed your daughter's "dance recital" he continued. "Let me tell you something that has helped me keep my own priorities." And that's when he began to explain his theory of a "thousand marbles."

You see, I sat down one day and did a little arithmetic. The average person lives about seventy-five years. I know, some live more and some live less, but on average, folks live about seventy-five years.

Now then, I multiplied 75 times 52 and I came up with 3900, which is the number of Saturdays that the average person has in their entire lifetime. Now, stick with me, Tom, I'm getting to the important part.

It took me until I was fifty-five years old to think about all this in any detail", he went on, "and by that time I had lived through over twenty-eight hundred Saturdays." "I got to thinking that if I lived to be seventy-five, I only had about a thousand of them left to enjoy. So I went to a toy store and bought every single marble they had. I ended up having to visit three toy stores to round up 1000 marbles. I took them home and put them inside a

large, clear plastic container right here in the shack next to my gear."

"Every Saturday since then, I have taken one marble out and thrown it away. I found that by watching the marbles diminish, I focused more on the really important things in life. There is nothing like watching your time here on this earth run out to help get your priorities straight."

"Now let me tell you one last thing before I sign-off with you and take my lovely wife out for breakfast. This morning, I took the very last marble out of the container. I figure that if I make it until next Saturday then I have been given a little extra time. And the one thing we can all use is a little more time."

"It was nice to meet you Tom, I hope you spend more time with your family, and I hope to meet you again here on the band. This is a 75 Year old Man, K9NZQ, clear and going QRT, good morning!"

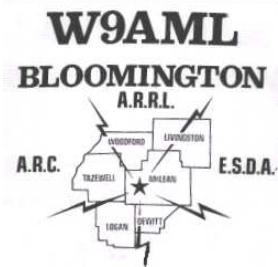
You could have heard a pin drop on the band when this fellow signed off. I guess he gave us all a lot to think about. I had planned to work on the antenna that morning, and then I was going to meet up with a few hams to work on the next club newsletter..

Instead, I went upstairs and woke my wife up with a kiss. C'mon honey, I'm taking you and the kids to breakfast." "What brought this on?" she asked with a smile. "Oh, nothing special, it's just been a long time since we spent a Saturday together with the kids. And hey, can we stop at a toy store while we're out? I need to buy some marbles..."

A friend sent this to me, so I to you, my friends. And so, as one smart bear once said "If you live to be a hundred, I want to live to be a hundred minus one day, so I never have to live without you." - Winnie the Pooh.

Meeting Wednesday June 28

Central Illinois Radio Club June 2006 Newsletter



Central Illinois Radio Club
P. O. Box 993
Bloomington, IL 61702-0993