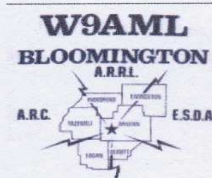


CENTRAL ILLINOIS RADIO CLUB

Short CIRCuits



June 2008

From the President

May Meeting – Wednesday, May 28, 7:00pm at the Red Cross on Route 9 East.

We devoted the meeting to Field Day planning. Mike Sallee brought our lessons learned from last year as well as our planning book. Note that the June meeting is the Wednesday prior to Field Day and we will use that time to complete preparations, including any last minute computer network "stuff". Chuck is planning on meeting with us prior to the meeting to set up the Field Day laptops.

June Meeting – Wednesday, June 25, 700pm at the Red Cross on Route 9 East.

Final prep for Field Day. I'll bring a sign-up sheet for the Saturday evening meal. We will provide meat, buns and Drinks. We will cheerfully accept donations to help defray the cost of the meal.

Emblems

During the meeting we agreed to check with other local suppliers to get quotes on emblems.

Dayton

A couple of items I forgot to mention last month – Emtron, the Australian amplifier manufacturer is joining Alpha in introducing 4CX1000A replacements for their 4CX800A amplifiers. It looks like the market is coming to grips with the disappearance of the old Soviet military tubes. Also - Dishtronix previewed a new full legal limit solid state amp. It was a brute – a very large stack, between the RF deck and the power supply.

Totally different topic – N8LP displayed a pan adapter designed for use with the K3. It utilizes a PC for the display and allows logging programs, control programs to interface with the K3. This is different twist on PC integration, but does require the radio to have an IF output –in the KHZ range I would guess so that a sound card can serve as the interface.

Summertime – Antenna Time

It is summer time and the traditional time for antenna work. Why don't we share our current projects if there is time at the next meeting. Personally, I am completing a rotator swap. Both my HAMIVs have failed multiple times and I picked up the big Yaesu rotator at Dayton as a replacement. The actual swap took only one morning since the Yaesu is physically smaller than the HAMIV and I use a thrust bearing to hold the weight of the mast and antennas. Also, Yaesu recommends pinning the mast and actually provides a bolt and predrilled holes, so hopefully, no more slipping mast. I am looking forward to trouble free rotation in the future!!

Take care everyone. I will see you at 7:00pm at the Red Cross building across from the Route 9 Airport Fire Station.

73's

Keith
AC9S

Don't forget the daily coffee klatch at the Dairy Queen at 1528 E. College, Normal Monday through Friday at 9:00 AM

Central Illinois Radio Club

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

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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:

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Meeting Minutes

May 28, 2008 CIRC meeting

[Mike N9FWL & Chuck N9 RZV]

Keith AC9S opened meeting
Norm N9ZKS listed as of 3/1/08, we

received \$105 in dues,
" 0.57 interest,
paid bill for \$277 insurance
purchased a supply of "Forever"
stamps for mailing.

Leaving:
674.60 checking
644.81 savings

Gary AB9M moved to accept as read,
Dan K9OAT 2nd

No meeting minutes from last month
due to Wind Farm tour.

Old business:
control link for repeater.

4 people passed their General at last
VE test session.

DX spider - nothing new at this time,
Ralph K9ZO working to get back on
the air along with Gary AB9M

Decision not to add 900 MHZ repeater

New business:
July 19

21 members

Sept 6, Rick WD9HRU needs help to
take 35' tower down, sending sign up
sheet around

Keith AC9S received custom emblem
patches for sewing onto shirt. Mark
AB9MP offered to do artwork and
check on costs.

Keith discussed article on HP
development of memristor chip, better
than flash memory (multi-state
device can store much more data /
higher density than bi-state memory)

Keith also discussed Dayton hamfest
a few new radios, SDR - Software
Defined Radios (flex);
amplifiers & antennas. He also felt the
flea market was excellent this year.

Noted Princeton hamfest is this
coming Sunday, June 1st and
Peotone is August 10.

[Chuck N9RZV]

3.630 flex radio Power SDR

3.875 AM

HPSDR - TAPR Software Defined
Radio

Gary AB9M moved to adjourn, Rick
WD9HRU 2nd

Presentation: FIELD DAY PLANNING

- Field Day coordinator Mike N9WFL
- Keith to check on ARC building availability
- Ground system
- Cheat sheet plus manual for each station
- Keith to check with Dan N9NSN for logging software upgrade
- Keith AC9S / Norm N9ZKS / Chuck N9RZV will setup laptops router, offline setup / meeting
- After the event, use ARRL applet on website to upload logs.
- Norm discussed need of GOTA station, requires operator who would be working other stations,
- Class 3F, EOC 3 station.
- CW VOICE DIGITAL
- 3 shelters, have 2, 1 needed.
- Jerry KB9ZDY has some equipment, Earla N9VXY to check for his phone #
- Antennas. Beam, Inverted V
- Power cable extension cord & cord protector. Norm to buy, Keith 2nd, club all ayes
- Jim WB9EDL suggested to get a piece of 10-3 romex attached to breaker panel to feed system and the length of the run.
- Connie KB9IGT suggested if anyone know of a company doing solar power

- Keith to check with Sun rentals scissor lift
- Dan K9OAT to lend TA33 Junior tribander for lift.
- Floyd W9EX offered wire & tuner for 160 longwire
- ARRL Guest desk handouts, \$12.15 includes display rack
- Gary AB9M and Mike W9FWL said N1SF Omni 6 & etc., Keith KC9KAN, Keith AC9S FT100
- Norm N9ZKS has an 857D for digital modes.
- stub/switch downstairs; Keith AC9s has notch filters
- "Planned" start XMIT time: 12 Noon
- station captains:
 - Keith AC9S
 - Gary AB9M digital
 - Mike W9FWL SF station
- Breakfast - Bloomington Bob Evans IAA drive Veterans 7:00 AM thru 9
 - Earla N9VXY to make reservation
- Club to bring meat, buns, soda, etc. Potluck otherwise
- Jim WB9UWA, 1-2 people to schedule band plan, operating who runs which band when...
- Gary AB9M & Keith AC9S, use the NVIS antennas. Mike N9FWL suggested to have someone look at propagation data
- Rick WD9HRU brought up coax, Mark AB9MP has some RG213 as does Keith AC9S, Gary AB9M has some heliax
- Net control on 160M Sun morning, Mark AB9MP or Larry KB9NPHVHF 6M points, Keith KC9KAN had 6M beam available
- Mike N9FWL & Norm N9ZKS to do media, Jim WB9EDL mentioned Pantagraph photographer is ham to invite him as well.

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 Newline
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	(162.2 PL) Open Net with Newline
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 Newline

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

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
146.985	KA9YPK	Clinton	
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)

=== Calendar of Events

Sun	Mon	Tue	Wed	Thu	Fri	Sat

Daily Coffeeklatch Monday thru Friday
.....9:00 a.m. at Dairy Queen College Hills

Weekly 10 Meter Net

Every Tuesday evening at 28.450 mHz- at 8:30 p.m.

Weekly 2 Meter Net

Every Tuesday evening on the 146.940-repeater at 9:00 p.m.

10/10 Breakfast

First Saturday of every month at 8 a.m. in the Baker's Square at Vernon Ave. and Veterans (Just south of College Hills Mall).

CIRC Meeting

Fourth Wednesdays of the month at 7:00 p.m. at the Red Cross building in Bloomington (Just north of the airport).

KC9LYU Echolink Update

The Frequency Is now set to 146.410 Simplex - NO PL
To Connect To Node By Node Number - Dial (DTMF
Commands) its Node number

To Reconnect Last Station Dial *69

To Connect To Random US Repeater Dial 011 - The
011 command takes just a minute to connect.

To Connect To Random Link Or Repeater Dial 01

To Disconnect Dial #



Ham Radio Is A Real Value

(Originally published in AIRWAVES, The newsletter of the Sierra ARC, May 2008.) Taken from the ARRL CLUB NEWS and The American Radio Relay League.

Mike Herr, WA6ARA

As a kid in the '60s I hung around my father, WB6MNX, and his ham buddies. The talk in those days was pretty much similar to now, what features their new rig had. But one thing I now note is that each ham had but one rig, yep, just one rig. It was usually a HF rig, and it was used both in the house and in the car. Before the 2 meter revolution everyone, except for the few brave experimenters in the VHF regions, was on the HF bands. But why did most ops have only one rig? The answer is simple economics; radio equipment was expensive back then.

As a novice I would lust over the Heathkit "perfect" novice station, the DX-60B, HR-10 receiver and HG-10B VFO. Wow! Ninety watts on CW or AM on 80, 40, 20, 15 and 10 meters (In my Novice days we only had privileges on 80, 40 and 15 meter). But with a price tag of \$200 it was way out of reach for a lot of people, especially for a teenager.

Today ham radios are much cheaper and offer much more features than rigs available to Amateurs in the mid 1960's. I cannot comment on every ham's financial situation but when comparing selling prices, average salaries and technological features, Amateur Radio is a bargain today.

Let's take a look at the previously mentioned DX-60B, HR-10 and HG-10B station. In 1965 it cost about \$200, only offered two modes (AM and CW), took up an entire desktop and it generated enough heat to warm half the house. Adjusted for inflation the "perfect" Heathkit novice station would cost \$1,323.00 today! Compared to entry level radios today that offer 100 watts on all Amateur bands, all modes (AM, FM, CW, SSB and digital), dual VFOs, general coverage receive and all sorts of bells and whistles, not to mention outstanding dynamic receivers and clean, stable transmitted signals, when adjusted for inflation, would have cost less than half the price of the 1965 model.

The Heathkit HW-101, an entry level SSB rig for many operators during the '60s and 70s, sold as a kit in 1971 for \$350. In today's dollars that same unit would be \$1,849, which buys a heck of a lot more radio than the old '101.

The biggest bang for the buck is in a piece of equipment that we all use, a 2 meter rig. Back at the time the 2 meter revolution was in full swing FM transceivers were selling for about \$300 to \$500 which translates to thousands of dollars today. There were a few synthesized models but most were crystal controlled which meant purchasing a pair of crystals, one each for transmit and receive for each channel that you wanted to operate and were limited to two to ten channels. They were about the size of a large book and operated at 2 to 5 watts output. Today you can buy a shirt pocket handheld or a 65 watt mobile transceiver, fully synthesized 100 channels, scanning, CTCSS encode/decode, etc for what amounts to about \$28 in 1971 dollars.

Ham radio is CHEAP. In the 60s the typical ham had to work for a month to buy a rig, today it is more like one week. I remember in 1965 when dad bought a SBE-34 and he had to buy it on time because it was just so expensive. Compared to other hobbies and recreation, ham radio is a steal. You can be on the air with the local repeater for about \$150. A complete 100 watt HF station including an antenna is less than \$1000. If you are a builder, parts have never been cheaper or more available. A couple of minutes on the internet and you can order parts and have them at your house in a couple of days. No more waiting for the once a year trip to the Hamfest.

Of course you can spend tens of thousands of dollars creating the ultimate station. There is no limit as to what you can spend on any hobby but there a tremendous value to anyone who is attracted to Amateur Radio. Let's compare Amateur radio to other past times. A decent 4 wheel drive vehicle, with the extras to keep up with others in the local 4 WD club might set you back \$30K. That boat for water skiing or fishing during the summer is about the same. How about the home computer? Again, about the cost of a HF rig and you buy a new one every couple of years or so. Ham radio cost a fraction of what it did in the past and offers twenty times the features. So get out and enjoy ham radio and stop feeling guilty about the money.

Here are some prices taken from advertisements in January 1976 QST and adjusted for inflation using an inflation calculator. < <http://www.westegg.com/inflation/> >

Item	1976 Price	% mean income	1976	2007 Equivalent Price
VHF Gear				
Tempo VHF/ONE 2m synth xcvr-2 chan-10 watts	\$495.00	3.31%		\$1,887.98
Yaesu FT-620B 6m AM/CW/SSB	\$449.00	3.00%		\$1,712.53
Yaesu FT-221 2m AM/FM/CW/SSB	\$679.00	4.54%		\$2,589.77
Midland 13-505 2m FM (plus crystals @ \$6.95 ea)	\$309.95	2.07%		\$1,182.18
Heath HW-2026 (kit) 2m synthesized	\$289.95	1.94%		\$1,105.90
Handheld VHF/UHF				
Wilson 1405 SM 5 watts 6 chan (plus crystals @ \$6.95 ea)	\$279.95	1.87%		\$1,067.76
Heath HW-2021 (kit) (plus crystals @ \$6.95 ea)	\$169.95	1.14%		\$648.21
HF Gear				

Yaesu FT-101E HF xcvr	\$749.00	5.01%	\$2,856.76
FV 101B ext VFO	\$99.00	0.66%	\$377.60
XCVR + VFO	\$848.00	5.67%	\$3,234.36
Collins			
Colins KWM2A xcvr	\$1,760.00	11.77%	\$6,712.82
Drake			
Drake TR4C	\$599.00	4.00%	\$2,284.65
RV4C remote VFO	\$110.00	0.74%	\$419.55
XCVR + VFO	\$709.00	4.74%	\$2,704.20
R4C rcvr	\$549.00	3.67%	\$2,093.94
T4XC xmtr	\$580.00	3.88%	\$2,212.18
RX + TX	\$1,129.00	7.55%	\$4,306.12
Kenwood			
TS-520	\$629.00	4.21%	\$2,399.07
R 599D rcvr	\$459.00	3.07%	\$1,750.67
T 599D xmtr	\$479.00	3.20%	\$1,826.95
RX + TX	\$938.00	6.27%	\$3,577.63
HF Amplifiers			
Henry 2K-4 Legal Limit HF Amplifier	\$995.00	6.65%	\$3,795.03
Yaesu FL-2100B linear 600 watts out	\$359.00	2.40%	\$1,369.26



Here is your newsletter editor hiding his broken leg behind the podium at Dayton. I was describing the mobile installation on my track bike (single speed, no freewheel, single front wheel brake) to the attendees of the Bicycle Mobile Hams of America forum Sunday morning.

