

PRINTED CIRCUIT

July 1997

Volume 7 Issue 7

TRANSMITTER Hunt Scheduled for July 12th

Saturday July 12th the club will sponsor a Rabbit Hunt in Joplin. This will be an entry level event, with subsequent summer "DF" events offering a greater levels of difficulty. We will assemble at 09:30 local time on the parking lot at Smitty's on Maiden Lane north of the resturant. Rules and guidelines will be handed out at that time, some are listed below:

- 1) The rabbit won't be inside a building .
- 2) The rabbit will be plainly visible when viewed from the proper angle.
- 3) The rabbit will be within seven (7) miles of downtown Joplin.
- 4) More than one person may be on a "team", however, they must travel together.
- 5) The rabbit will operate a transmitter on the 2m FM band.
- 6) and more to make it interesting and fun...

At the final destination, the club will have refreshments and awards for those who place First and Second.

Plans are in place to offer another "DF" hunt next month, proi-

vided that we are successful with this event, so that you may practice your skills.



All Hams are invited to participate in what we hope will become an annual club sponsored event.

Morse Code Classes Offered in Webb City

Those interested in improving their skill at receiving and sending code are invited to attend these classes every Thursday at 7pm at the American Legion Hall located on North Webb St. The building is a block west of Webster Elementary School which is on the west side of North Main Street.

These are code only classes.

For more information contact
DAVE HILL KBØWEY at 782-8762

Central States VHF Society Conference Scheduled for July

This year marks the 31st annual midwest conference. The 1997 meeting is scheduled for the weekend of July 24 thru July 26 in Hot Springs, AR, at the Clarion Resort on the Lake. A special hotel rate is available at \$89 per night at the lodge.

There will be technical sessions on: measuring antenna gain, measuring noise figure of preamps, high power amp design, antenna propagation, and much more. There is also a flea market Friday, a banquet Saturday evening, and numerous family programs provided all weekend, including a riverboat ride, and a mountain music jamboree.

The conference fee costs \$22.00 for the weekend and includes a copy of the proceedings, the annual banquet is open to the entire family, and costs \$18.50 per person.

For more information, contact Joel Harrison W5ZN, 528 Miller Rd., Judsonia AR 72801

FYI
Check out the ARRL WEB SITE
<http://www.arrl.org/>

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Should the Weather Nets be Discontinued? Food for Thought...

Editorial

This editor has been the recipient of several directed comments about the weather nets. In particular, people are wondering whether the weather nets should be discontinued altogether. Lest I be accused of leading "Mutiny on the Bounty", let me categorically say that I am in favor of ARES (Amateur Radio Emergency Service) and this is not an attack against personalities or ARES itself. Indeed, I have always supported ARES as being an important part of ham radio. What myself and others are feeling is a real concern about the public image we are projecting in the immediate four-state area. The weather nets have been besieged for quite some time by intentional interference from party or parties unknown. At least part of the malcontents may be expressing their disapproval at the level of apparent non-control of the nets. Many emergency nets in the country have had to go to separate frequencies due to interference from those who disagree with the purpose of the net. This may very well be an option since it appears we cannot keep control of those who participate in the net, formally or informally.

What some are saying is that we have no idea who is out in

the field, and the folks in the field have no idea where the other assigned stations are at. The great majority of the public are active scanner listeners. Just imagine what the general public must think when they listen to some of our activities. First impressions mean a lot, and the impression we leave with people is the impression they must get of the club (and amateur radio) itself. We must be professional; almost akin to a public service dispatcher. We have to be able to be control the people who are calling in with reports as in a directed net. The net controller cannot tolerate "sunshine

Ham Radio transcends being *just a hobby*...

reports" or hams who are being a nuisance. Having a call in from 50 miles away wanting to know if the weather is heading his way is essentially an interruption of the net -as the intent would be to be a weather net for the immediate Joplin area.

Furthermore, several have requested that the club obtain a clarification from the Emergency Management folks as to what exactly our official role, *if any*, is, in the official area emergency plan. This becomes even more important with 911 dispatching just around the corner.

around the corner. Are we really being utilized by the

Emergency Management Agency, or do even *they* consider us as "jokesters"? It is said that the City of Joplin actually has its own separate storm spotters and we are not them. Why is that?

These are some of the questions that are being asked, and they seem to deserve answers. Folks, ham radio transcends being *just a hobby* when it comes to emergency management issues. We are living in tornado alley, in case you haven't heard, and amateur radio clubs in other parts of the state even, seem to play a much more defined role in the local SKYWARN or WX system. Are we doing the job?

We are at a point where some tough decisions may have to be made, and that is the gist of the concerns expressed to me. I guess I am playing the devil's advocate in a way, as I am chosen to put some of the concerns into written word. Exactly where do we fit in to the Jasper County Emergency Management plan? Are we an important link? - or are we merely being "tolerated." If the impression is that we are a bunch of "keystone cops" running around out there, and we cannot be counted on, we may find that we are just being humored, and that is not serving the public interest as ham radio is intended. •

THE WORLD OF VHF/UHF

TWO METERS COMES ALIVE

The evening of June 26 1997 will be remembered a long time for two meter SSB and CW operators. After a slow start the summer, sporadic E season really came to life with MUF up to 150MHz or higher. Six meters had been open fairly regular in June but mostly with very spotty openings. Turning my six meter rig on about 18:45 local time, the band sounded extra hot with very good skip to the eastern states. Some of the ops were talking about possible two meter "E" openings; we had not had one this year. I then checked my FM broadcast tuner which has a 6 element FM yagi on the same mast as my six meter beam. The FM band (88-108 MHz) was loaded with FM signals from all over the east coast all the way to 107.9MHz. I then decided it was time to check two meters. George, NØLIE in Liberty, KS, reported some signals; weak, in and out. I had a short contact with N4KWX in VA, but the signals were weak and lots of QSB. Finally around 19:00 local time it hit. My first QSO was K1WHS in Maine running 20 DB over S9. In the next 45 minutes I worked KB2ZVP in NY, N1BWT in MA, W1COT CT, W1RIL MA, K1ZE RI, also A1MBA, K3EW, WA2FGK, WZ1V CT, WA1T NH, AF1T NH, N1DPM and WA1KNX. I had worked 4 new states and 6 new grids. Local area stations WØPW and KØETC also got in on the action. KØETC said

his rig quit after the 3rd contact and he was very unhappy. NØIGZ found a lawn mower had cut his coax, so he was unable to get on the air.

This was the best E opening on Two meters in two years. I received my copy of the Rocky Mountain VHF report and found the opening also extended west to Colorado. They also had worked many Eastern stations up to 1400 miles.

The band sounded extra hot with very good skip to the eastern states.

The calling frequency of 144.200MHz was loaded with QRM, so in this type of opening it is wise to spread out up and down, which most people did. There was activity from about 144.150MHz to 144.250MHz. I have not received any reports but there were probably some East Coast FM repeaters heard in our area.

More VHF/UHF tropo action the early morning of July 1st. I was about to leave for morning coffee at Hardee's when I received a phone call from Jack, WØBZT. He said two meters was wide open to Amarillo, Texas, a distance of 430 miles. Amarillo was my old home as I lived there for 5 years. I worked W5AL and W5SFW, both in Amarillo, also K5IS and his wife N5IS in Booker, in the Northeast part of the Texas panhandle. Later I worked a new ham KCØAMG, in Leoti, Kansas, only 55 miles from the Colorado State line in a rare grid square- DM98.

The big news is that Don Hilliard, WØPW, worked W5AL in Amarillo, Texas, on 902MHz. Don is northeast of Neosho, and the only active ham in the area on 902MHz except for some ATV activity. 902 is up near the Cellular telephone frequencies. If any of you want to see Don's station he would be glad to give you a tour. We are trying to get Don to present a program for our club. He is retired from the Bureau of Standards located in Colorado and has been a ham since 1949.

That's all the big VHF news this month. Finally some *excitement* in the VHF world!

73, John Tudenham
WØJRP

Buy/Sell/Trade

2 Meter Repeater for Sale

45 watt Motorola Mitrex w/25 amp cont. duty power supply. RC-100 Controller, new WACOM duplexers. Complete system with battery backup for emergency operation mounted in Motorola metal cabinet on wheels. Repeater Frequency setup for 145.390MHz.

John Eubanks NØNFY
Home (417)624-2470
Work (417)623-8000 x402

Wanted J38 Straight Key

Will consider purchase of a key in any condition.

Russ Smith NØQLT
(417)781-5559

A.M. Vacuum Tube Technology

Is there anyone (old timer) in this area that is interested in A.M. (vacuum tube technology)? 3885 kc.

Donald L. Hilliard WØPW
(417)451-5892

QRP FOR THE RADIO AMATEUR

by John Tudenham WØJRP

The QRP news this month is overshadowed by my VHF activity. I did have a six meter CW QSO last night with WA3WUL in Delaware. I reduced power on my Kenwood 670 to 5 watts. Most of the activity on 6 CW is

My best DX during the winter, running QRP, was Spain.

50.090 to 50.100MHz. I also have been working a little 15 meter CW QRP trying to work some close in states during the summer Sporadic E season.

I usually work the Novice band on 21,100-21,200kHz where there is quite a bit of activity. I have worked skip into IL, IA, WI, OH and WVA.

I would advise a lot of you Tech-Plus hams to try this

band, it is a good way to get some code practice and have lots of contacts QRP or otherwise.

My best DX during the winter, running QRP, was Spain. Wait until the sunspot cycle starts up again; maybe next fall.

I have also worked the Russian RS-12 Satellite running QRP. The uplink is 21,210-21,250kHz. You will need at least an Advanced class license to work these frequencies. The downlink is 29,410-29,450kHz. No special antennas are necessary to receive these signals. The maximum range may be up to 4000 miles on certain passes. Most passes only last a maximum of 20 minutes. These are low orbiting Satellites not to be confused with the Oscar HAM Satellites which the US has launched.

Hope to have more QRP news next month. Till then, 73.

*Next Program Meeting
July 22nd*

Explore antennex Online

from "Jack L. Stone"
jacks@antennex.com

antenneX, a magazine all about antennas, experimentation, construction and signal problems, was read by 14,000 in 45 countries. Now antenneX is online at <http://www.antennex.com>. You are invited to this new site to read preview articles, editorials, and about the packed library of new monthly articles, archive articles, programs, etc. Editor-in-chief is K5CNF. (reprinted email received by WBØIYC)

What am I?

- 1) I am long, usually look like metallic or plastic. I am circular, used indoors and outdoors, both above and below ground. I cannot stand to be squashed.
- 2) I am heavy for my size, but I come in all sizes and shapes. Used daily almost by everyone, I can be found in a boat, in a car, on your arm, or on your table, just to mention a few places. Without me, many things are useless.

answers: on page 5

Reserve for Elmer Cartoon

Build a HOME BREW DF ANTENNA

For those of us who are do-it -your-selves, this is a natural. You can produce surprising results with very little investment, get frustrations out with a hammer and saw, and look almost as odd as others while running around with this contraption sticking out of your car.

a construction article by
"Mr. Rabbit"
(It really works!)

This construction article describes a simple loop antenna that will perform well with very little expense, and little time investment. This project has been built and has actually won DF events. It is so cheap you will laugh if you win...

Material List

1 — 8ft 1x2 board
84" of wire (#14 to #20)
8 — nails 1-1/4" long
4-6ft coax with connector on one end

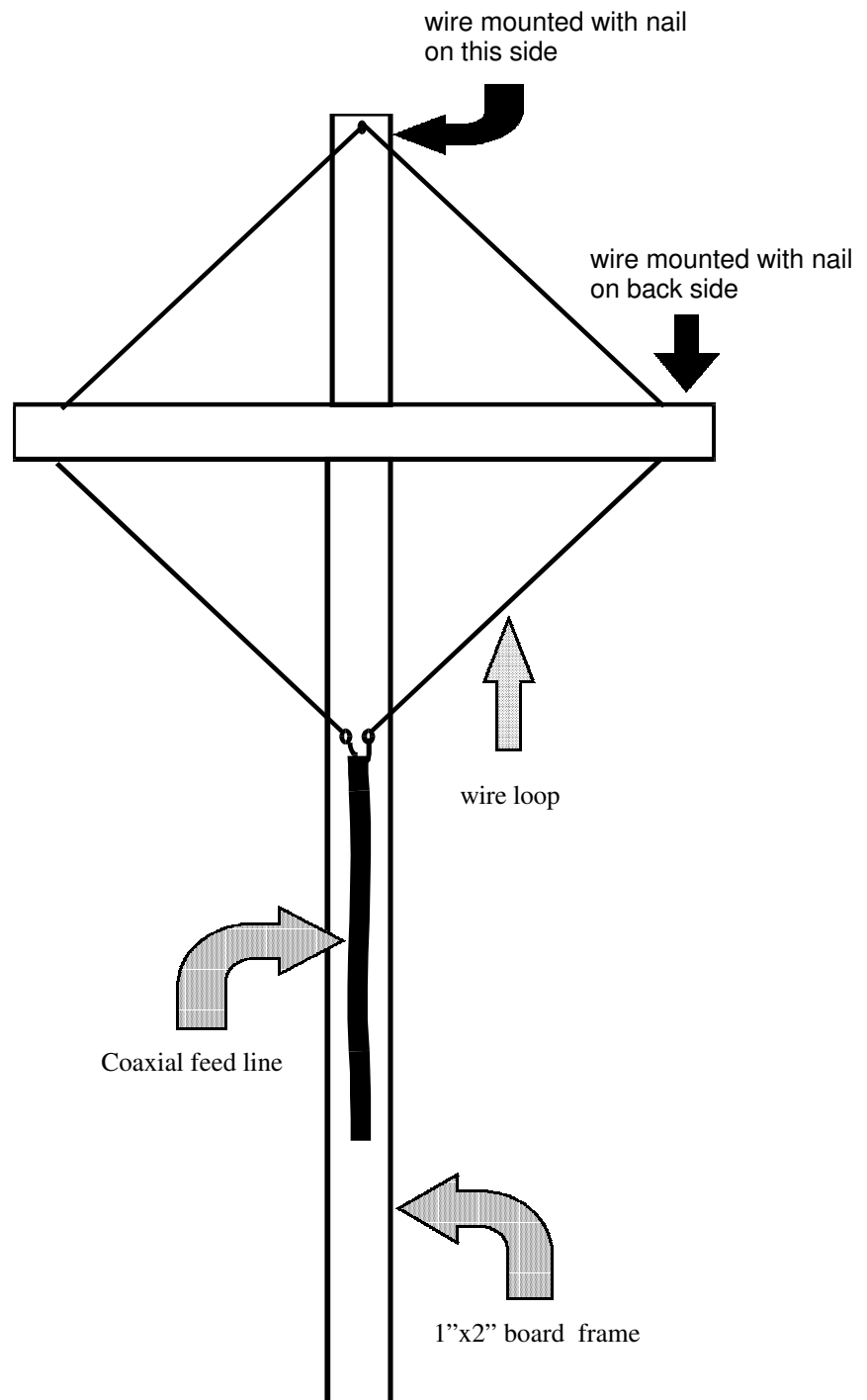
Assembly Instructions

Cut an 84" length of any kind of wire (#14 house wire works nice). Tin 1/4" on each end with solder. Fold the wire double and kink the fold. This locates the top nail. Fold double again and kink. This locates the two side nails.

Cut 32" off of the 1x2. This will be the crossbar. Nail it to the long piece about 16" from the top with three nails. Drive the top nail 15" from the center of the cross bar. Wrap one turn of the center of the wire around the top nail. Locate and drive the crossbar nails, and wrap one turn around each. Put the crossbar nails on the opposite sides of the board from the top nail to keep the wire in a flat plane. They will be about 30" apart.

Locate and drive the two bottom nails about 1/2" apart. Wrap each wire a bottom nail leaving a 1/4" pigtail. Solder the coax or a connector to the bottom pigtails.

Rotate for a sharp null off the sides. •



Answers: 1) coax, 2) battery

calendar this page

Meeting Times, Testing, Events, other Club Information

The **Joplin Amateur Radio Club, Inc.**, a Missouri *not-for-profit* organization, meets on the second and fourth Tuesdays of each month at the Joplin Municipal Building, on the lower level in the Civil Defense dining room, at 7:30 PM. The facility is accessible to the handicapped.

The club supports and promotes annual operating events, assists area agencies with communications when requested, and offers training classes for advancement in amateur radio. It also sponsors the JARC HamFest each year in April, and maintains a wide area coverage OPEN 2m repeater on 147.21 MHz.

Several club members meet every weekday morning for coffee at Hardee's, 804 S. Rangeline in Joplin about 8 AM. Members also meet

for breakfast on Saturday morning around 9AM in the restaurant at Smitty's on South Maiden Lane in Joplin.

1997 CLUB OFFICERS:

President:	Jim	WBØIYC
Vice-President,	Russ	NØQLT
Treasurer,	Jim	NØZSQ
Secretary,	Mark	NØZPD

Testing is offered for Amateur Radio

licensing by volunteer examiners on the 3rd Thursday of each month. The tests are given at the St. Paul's Methodist Church at 2423 West 26th St. in Joplin, with sign up at 6:30 PM and testing at 7 PM.

ABOUT THE NEWSLETTER

Items for the newsletter, including classified ads as well as amateur radio related articles, are solicited. Please send to Wes Thorn, ARS **KGØYH**, at P.O. Box 554, Carl Junction, Missouri 64834-0554.

Deadline for submissions is the 20th of the month preceding the month of publication. Classified ads will be run on a space available basis and will be run more than one month, if desired. Articles do not have to be typewritten, but should be legible.

Refer to previous editions for our editorial policy. The club newsletter is an open forum for the Four-State area amateur radio community, and your contributions are sorely needed and invited. You may also call the editor with late-breaking stories at 629-3244. Thanks!

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Joplin, Missouri 64803-2983