

# PRINTED CIRCUIT

May/June 1998

Newsletter of the Joplin Amateur Radio Club

Vol. 8 Issue No. 5&6

## VANITY CALLS AVAILABLE

### THE CALL LETTER GAME

**T**here seems to be a lot of confusion among many new hams about the call letters being assigned in the zero call area. All new hams of Tech and General class are being assigned Novice call signs. The reason is because the FCC has run out of the 1 x 3 call signs. Mark NØZPD and Jim NØZSQ were lucky to get under the wire before the change was made. Presently, the call signs that are being issued begin with KCØC??, while advanced class holders are issued 2 x 2 call signs such as KJØAA, and extra class holders are also assigned 2 x 2 calls starting with "A" such as ABØEK. The supply of 1 x 2 or 2 x 1 calls has been exhausted for some time. With the new vanity call signs, many Amateurs have been able to get a call of their choice for only \$50.00 with a ten year license. In addition, vanity call signs are now also available for Tech license holders.

Before World War II, there were only nine call areas in the US. Some of the states were divided into two districts. Some examples as follow:

NY 2 and 8; NJ 2 and 3  
PA 8 and 3; MI 8 and 9

Other states were changed in 1946, after the war, these were: VA 3 to 4; KY 9 to 4; AZ,UT,NV 6 to 7, and all of the 9th district west of Mississippi was changed to Ø. Until 1947 all US call signs began with "W". A few "K" calls were issued in the 9th call area in 1947, but it wasn't until 1954 that the "K" calls were issued

in all of the call areas except some Military (Mars) stations, these always have had "K" calls. In 1953, I operated as K5FGI while a MARS operator in the Air Force. Before WWII, there were "K4" calls for Puerto Rico, "K5" Canal Zone, "K6" Hawaii, and "K7" Alaska.

The original call signs before WWI had no prefix. This caused a lot of confusion when hams started working worldwide DX, so international prefixes were established. The original US call signs were 1 x 2 calls such as W1AW, then after "ZZ" was issued, the new calls started with "AAA". Even today, there are still a few old timers living that do not have an extra class license but have the 2 letter calls.

One of our former club members "Tib Hammonds" WØGLZ passed away last year at the age of 93. Tib got started in ham radio as a teenager around WWI with the call 9DB before the prefixes were issued. In fact, he got the nickname TIB because of his call, the "DB" sent by CW was mistaken for TIB (dah-dit dit-dah dit dit dit). Tib let his license expire and later was issued W9GLZ, followed later by WØGLZ. He had a 50 year career with Western Union, starting as a delivery boy, then later a telegraph operator. He once communicated the games by teletype of the Joplin Miners baseball team for WMBH Radio. ¶

## FIRST 1998 FOX HUNT A SUCCESS

**T**he last weekend in May the JARC sponsored its first FOX Hunt for this year. Four teams participated, with two back-to-back hunts scheduled as in the past, followed by refreshments and comments (and complaints) at the end of the hunt.

This event started at the Joplin Smitty's parking lot located at 18th and Maiden Lane next to the restaurant. John Humble KBØQPM served as Huntmaster for this run. The group gathered at 10:00 am. for their instructions, and soon the hunt was underway. Jay Rupar KØETC was the "ever elusive" fox and was successful in hiding from the hunters for almost an hour. Transmitting approximately each minute using about 1 watt on 146.55 MHz, he was first located, surprisingly by John Tudenham WØJRP. The fox had carefully placed himself at the entrance to the garage of a filling station located just south of I-44 on South Main Street Road. Jay claims he was trying to be sneaky and get the guys lost in Wildcat Park.

Apparently, it wasn't to be Ray Brown's day. It seems that KBØSTN got very close to the fox (within 100 ft.) while hunting, then heading off (probably toward the park). Second place went to Andy Gabbert KAØTUD. The club secretary, Mark NØZPD apparently needed some help with his equipment, as he was lost for most of the event. Later he and Ralph NØZHC admitted that they went directly to the second fox's position

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**QRP for the Radio Amateur  
Amateur Radio Frequency Privileges  
Eye Splice Using Aircraft Cable**

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## QRP FOR THE RADIO AMATEUR

**O**n the weekend of May 2nd and 3rd we saw something a little unusual in QRP operation. It was a nationwide communications exercise called "QRP IN THE FIELD". There were QRP stations were set up along state lines all over the country, sometimes as many as three state lines at a time (i.e. MO, KS, and OK). Operation was mostly battery power transmitting CW with five watts or less on the standard QRP frequencies of 3560, 7040, 14060, 21060, and 28,060 kHz. The idea was to contact as many home stations and also QRP stations as possible. I worked a station on the MO, KS, and OK line as well as one located on the MO, AR, and OK line. I had a 20 meter QSO with a station on the CA, AZ and NV line, and one on the PA, MD, and DE line. I was operating my little 20 meter MFJ rig with a battery and running only five watts. This type of

operation could be very useful in an emergency situation (KA0TUD take note).

I would like to see our club have a local two and six meter communications exercise where all stations use some sort of portable power that doesn't use the AC lines. For example, a portable 10 watt station on two meter sideband with a small seven (yes I said 7) element beam located at a height of 10 to 15 feet high should be able to communicate 50 miles or more with a similiar station over average terrain. This would be an interesting test to run just to prove its value. An average car battery has enough capacity to run a 150 watt VHF amp working SSB or CW continuously for about 12 hours without recharging, and considerably longer if the higher output power is not needed. Think about it! ¶

*(Continued from page 1)*  
for refreshments!

The next fox hunt is scheduled for Saturday June 20th, so get into the closet and dust off your DF gear for this one. Please note that the degree of difficulty will increase as the summer progresses.

For the JARC meeting on June 23rd, Jay has offered to provide a program on Fox Hunting Techniques. He will be happy to answer any questions plus offer ideas and suggestions for equipment and its usage.

The club will have a construction session for those persons interested in building their own 2m DF loop antennas. Cost for the materials will be nominal. Tools, equipment, and guidance with assembly and test of the loops will be provided during the session. If you are interested in participating in this event please contact Jim Scott WBØIYC at (417)781-2211. If there is enough interest, a date will be announced. ¶

## FIELD DAY SCHEDULED AT EWERT PARK

This year the Joplin Amateur Radio Club will again be operating their stations from Ewert Park at 7th and Illinois in Joplin. This ARRL event simulates emergency preparedness through contest. Hams often move to the field then assemble and run portable stations **without power** from the AC mains. Our club owns and uses a portable generator that Andy KAØTUD assures us, is ready and waiting.

This is a great opportunity to get some action on the low bands, and you do not have to hold any license to operate at this event. What a better way to practice CW or SSB on HF frequencies.

If you want to participate in this 24 hour overnite event, contact Ralph KBØZHC at 358-7540. We will set up around 10am. and begin operating at 1pm. ¶

## HAMFEST CALENDAR

**JUNE 11-14 HAM-COM**  
ARLINGTON, TX

**JULY 11 PHD-ARA**  
KANSAS CITY, MO  
PHD-ARA ARRL Hamfest, KC Market Center. Contact Bob Roske WAØCLR (816)436-0069, PHD-ARA, P.O. Box 28954, Kansas City, MO 64118  
e--mail: wa0clr@juno.com  
http://www.tfs.net/~caltman/phdara/phdara.htm

**July 11 Altus Area ARA**  
Altus, OK 73521  
Contact Ronald Hughes, KB5UVC  
Rt. 1, Box 192, Altus, OK 73521  
(580)482-7994

**JULY 19 Zero Beaters ARC**  
Washington, MO  
ARRL Hamfest  
Contact Keith Wilson, K0ZH  
1100 North Commercial, PO Box 215,  
St. Clair, MO 63077  
(314)629-2264

**July 25 Amateur Radio Fun & Swap Day** Crane City Park, Crane, MO 65633  
9:00 a.m. Talk-in frequency 145.330 - 600 kc. also 146.52 simplex.  
48 FREE TABLES (tables in shelter)  
FIRST COME FIRST SERVE BASIS.  
E-Mail n0tbo@gte.net  
This is also KAØRM's Bob Myer's annual get together. He provides a Smoked Rib Dinner, Baked Smoked Beans, Potato Salad, and drink. You must sign up & pay before July 11 if you plan to eat Bob's Smoked Rib Dinner  
Send names, and money (@\$7.50 each) to: Harriett Myer NØUDS P.O. box 192 Reeds Spring, MO 65737

**JULY 24-25 Oklahoma State Convention** OKLAHOMA CITY  
Contact Harold Miller, KB1ZQ  
4216 Spiva Dr., Del City, OK 73115-4424  
(405)672-7735 E-mail: n1lpn@swbell.net

**AUGUST 1 ORH 98 - MO State Convention**, Springfield, MO.  
Plaza Trade Center on St.Louis Street

# AMATEUR RADIO FREQUENCY PRIVILEGES

Refer to ARRL's The FCC Rule Book for more detailed information on frequency allocations for the Amateur Radio Service and sharing arrangements with other radio services. Band plans can be found in The FCC Rule Book and The ARRL Operating Manual.

For each band, only those license classes with privileges on that band are listed. Technician licensees have no privileges below 30 MHz.

US Amateur Transmitter Power Limits: At all times, transmitter power must be the minimum necessary to carry out the desired communications. Unless otherwise noted, the maximum power output is 1500 watts PEP. All classes are limited to 200

**160 Meters**            Range: 1800-2000 kHz  
 Novice:    None  
 Tech:      None  
 Tech Plus: None  
 General:   1800-2000 kHz CW,RTTY,data,phone,image  
 Advanced: 1800-2000 kHz CW,RTTY,data,phone,image  
 Extra:     1800-2000 kHz CW,RTTY,data,phone,image  
 Note: Stations must avoid interference with the radiolocation service.

**80 Meters**            Range: 3500-4000 kHz  
 Novice:    3675-7225 kHz CW only  
 Tech:      None  
 Tech Plus: 3675-7225 kHz CW only  
 General:   3525-3750 kHz CW,RTTY,data  
              3850-4000 kHz CW,phone,image  
 Advanced: 3525-3750 kHz CW,RTTY,data  
              3775-4000 kHz CW,phone,image  
 Extra:     3500-3750 kHz CW,RTTY,data  
              3750-4000 kHz CW,phone,image

**40 Meters**            Range: 7000-7300 kHz  
 Novice:    7100-7150 kHz CW only  
 Tech:      None  
 Tech Plus: 7100-7150 kHz CW only  
 General:   7025-7150 kHz CW,RTTY,data  
              7225-7300 kHz CW,phone,image  
 Advanced: 7025-7150 kHz CW,RTTY,data  
              7150-7300 kHz CW,phone,image  
 Extra:     7000-7150 kHz CW,RTTY,data  
              7150-7300 kHz CW,phone,image

**30 Meters**            Range: 10100-10150 kHz  
 Novice:    None  
 Tech:      None  
 Tech Plus: None  
 General:   10100-10150 kHz CW,RTTY,data  
 Advanced: 10100-10150 kHz CW,RTTY,data  
 Extra:     10100-10150 kHz CW,RTTY,data  
 Note: Maximum power, 200 watts PEP. Amateurs must avoid interference to the fixed service outside the US.

**20 Meters**            Range: 14000-14350 kHz  
 Novice:    None  
 Tech:      None  
 Tech Plus: None  
 General:   14025-14150 kHz CW,RTTY,data  
              14225-14350 kHz CW,phone,image  
 Advanced: 14025-14150 kHz CW,RTTY,data  
              14175-14350 kHz CW,phone,image  
 Extra:     14000-14150 kHz CW,RTTY,data  
              14150-14350 kHz CW,phone,image

**17 Meters**            Range: 18068-18168 kHz  
 Novice:    None  
 Tech:      None  
 Tech Plus: None  
 General:   18068-18110 kHz CW,RTTY,data  
              18110-18168 kHz CW,phone,image  
 Advanced: 18068-18110 kHz CW,RTTY,data  
              18110-18168 kHz CW,phone,image  
 Extra:     18068-18110 kHz CW,RTTY,data  
              18110-18168 kHz CW,phone,image

**15 Meters**            Range: 21000-21450 kHz  
 Novice:    21100-21200 kHz CW only  
 Tech:      None  
 Tech Plus: 21100-21200 kHz CW only  
 General:   21025-21200 kHz CW,RTTY,data  
              21300-21450 kHz CW,phone,image  
 Advanced: 21025-21200 kHz CW,RTTY,data  
              21225-21450 kHz CW,phone,image  
 Extra:     21000-21200 kHz CW,RTTY,data  
              21200-21450 kHz CW,phone,image

**12 Meters**            Range: 24890-24990 kHz  
 Novice:    None  
 Tech:      None  
 Tech Plus: None  
 General:   24890-24930 kHz CW,RTTY,data  
              24930-24990 kHz CW,phone,image  
 Advanced: 24890-24930 kHz CW,RTTY,data  
              24930-24990 kHz CW,phone,image  
 Extra:     24890-24930 kHz CW,RTTY,data  
              24930-24990 kHz CW,phone,image

**10 Meters**            Range: 28000-29700 kHz  
 Novice:    28100-28300 kHz CW,RTTY,data  
              28100-28500 kHz CW,SSB  
 Tech:      None  
 Tech Plus: 28100-28300 kHz CW,RTTY,data  
              28100-28500 kHz CW,SSB  
 General:   28000-28300 kHz CW,RTTY,data  
              28300-28700 kHz CW,phone,image  
 Advanced: 28000-28300 kHz CW,RTTY,data  
              28300-28700 kHz CW,phone,image  
 Extra:     28000-28300 kHz CW,RTTY,data  
              28300-28700 kHz CW,phone,image

The following VHF and UHF frequencies are authorized for all licence classes above Novices in the following modes: CW (morse code), RTTY (Teleprinter), data (packet modems and other allowed digital modes), MCW (morse code by modulated audio tone), test (unmodulated carrier), phone (voice modes: single sideband [SSB], amplitude modulation [AM], frequency modulation [FM] ), and image (Slow scan television [SSTV], and ATV [Fast scan or TV] ). EXCEPT WHERE NOTED!!

6 meters:    50.0-50.1 MHz    CW ONLY  
              50.1-54.0 MHz    All modes

2 meters:    144.0-144.1 MHz    CW ONLY  
              144.1-148.0 MHz    All modes

1¼ meters:    222.0-222.1 MHz    CW ONLY  
              222.1-225.0 MHz    All modes (Novice: 222.1-223.91 MHz)

Note: FCC has allocated 219-220 MHz to amateur use on a secondary basis.

70 cm:        420.0-450.0 MHz    All modes

33 cm :       902.0-928.0 MHz    All modes

23 cm :       1240-1300 MHz    All modes (Novice: 1270-1295 MHz)

2300-2310 MHz, 2390-2450 MHz, 3300-3500 MHz, 5650-5925 MHz,  
 10.0-10.5 GHz, 24.0-24.25 GHz, 47.0-47.2 GHz, 75.5-81.0

## EYE SPLICE USING AIRCRAFT CABLE

Guying up antennas, towers, or attaching insulators?  
This could be the very thing you need.

Aircraft cable is made up of six smaller multiple strands wrapped around the core strands. This makes seven groups of strands.

Separate the strands into groups of three, with the core in one side, the length must be three times the diameter desired for the eye.

Cross the two groups together in the natural lay of the cable in opposite directions.

Continue wrapping strands, making sure they lay in the natural position and smooth.

When both ends of the strands come together as shown, use a little force to make the ends lay back in place.

Shows how the splice will look when it is done. At this stage Crosby clamps could be used to hold the tail of the splice. It does need to be held for strength of the eye.

The completed eye splice using copper wire lashed around the rough ends.

This entire eye should be soldered for maximum strength and neatness.

This eye is strong enough, it has been used as an emergency eye in winch cables.

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**CALENDAR ON THIS PAGE**

## Meeting Times, Testing, Events, other Club Information

**T**he 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.

Club members often meet weekday mornings in Joplin for coffee at the Target Store (3151 East 7th St.)

around 8:30 a.m. Members also meet for breakfast on Saturday morning around 8:30 AM in the restaurant at Smitty's (18th and Maiden Lane) in Joplin.

### 1998 CLUB OFFICERS:

|                    |        |
|--------------------|--------|
| President, Larry   | NØMST  |
| Vice-Pres. Jackson | KBØWFE |
| Treasurer, Jim     | NØZSQ  |
| Secretary, Mark    | NØZPD  |

### Amateur Radio VE Testing

License testing by volunteer examiners takes place on the 3rd Thursday of each month (except August) at St. Paul's Methodist Church located at 2423 West 26th St. in Joplin. Sign up at 6:30 PM, testing begins promptly at 7 PM.

### ABOUT THE NEWSLETTER

This club newsletter provides an open forum for the Four-State area amateur radio community, and *your* comments and contributions are always invited. Items for publication, including classified ads and amateur radio related articles, may be sent to the **JARC Printed Circuit**, P.O. Box 2983, Joplin, MO 64803-2983, or send email to: [jimscott@janics.com](mailto:jimscott@janics.com)

Deadline for submissions is the 20th of the month preceding the month of publication. Non-Commercial Classified ads are free and will be run on a space available basis whenever requested. Submissions may be typed, handwritten, ASCII text files attached with email, or on disks formatted for IBM. *All items* are subject to editing for spelling, content, and space limitations as required. '73 and Thanks. **Jim WBØIYC ¶**

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