

# PRINTED CIRCUIT

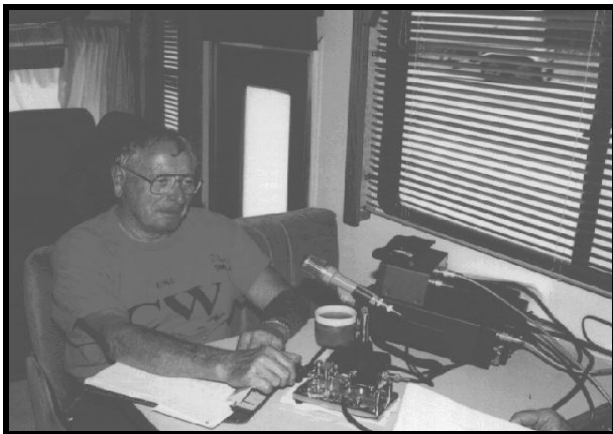
May-July 1999

Newsletter of the Joplin Amateur Radio Club

Vol. 9 No. 5

## Images of FIELD DAY 1999

### SPECIAL ELECTION HELD JULY 13TH



**MAC (W9NLA)  
BURNING UP  
THE ETHER  
WITH HIS  
VINTAGE  
VIBROPLEX.**

### EMERGENCY ELECTION DECLARED

Due to the resignation of Jack Huber, KØCTR (formerly KBØWFE), and in accordance with the Bylaws, an emergency election was declared by JARC president Ray Brown KBØSTN. It was held on July 13th to fill the vacancy for the office of Vice-President.

This was the first order of business at the Tuesday meeting of the Joplin Amateur Radio Club. Nominations were made and a vote taken. John Miller KBØTKL was elected to finish the remaining term as Vice-President.

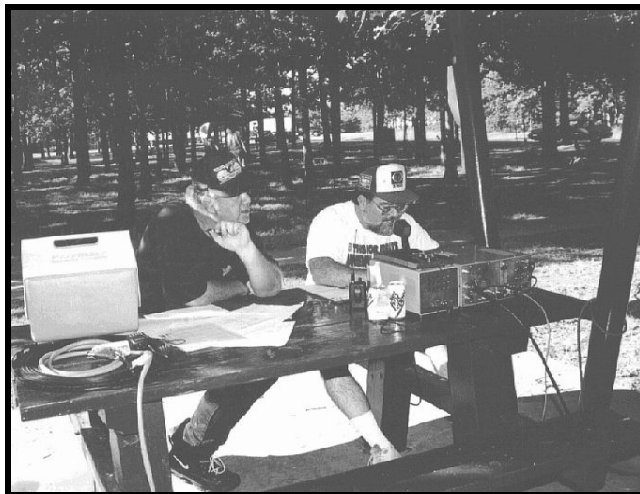
### LATE BREAKING NEWS AFRICA ON SIX METERS

JOHN TUDENHAM WØJRP

At 1205PM CDT on July 7, 1999 WØJRP and KØAUY worked EH8BYR in the CANARY ISLANDS (Grid IL38) off the coast of North Africa on 50.110 MHz. The islands are located a distance of about 4400 miles from here in Joplin. My signal report received was S3 on SSB. This was definitely multihop sporadic-E skip. As I was writing this article, I got a call from Jay KØETC that he just worked a station in PORTUGAL on 6 meters after missing out on working the CANARY ISLANDS. ¶

**MARK (NØZPD)  
AND  
RAY (KBØSTN)**

**SWEATING IT  
OUT ON  
40 METERS.**



**HAL (WBØLJF)  
KEEPS HIS  
AMPLIFIER  
"COOL" BUT  
COOKING ON  
10 METERS.**



**inside...**

**The World of VHF/UHF  
Meet your new Section Manager  
Club Events, Classified Ads, and Hamfest Calendar**

**Page 2  
Page 4  
Page 5**

# THE WORLD OF VHF/UHF

BY JOHN TUDENHAM WØJRP

**I**t's May and that means the start of the Summer sporadic-E season which makes six meters come alive. The evening of May 23 was the best widespread opening of the year so far, with everything from the east coming through and skip as short as north IL. My neighbor Larry KØAUY worked 87 stations before he gave it up. I mostly listened.

There was also activity on 50.4MHz AM and I noticed KØETC was trying AM. On 52.525MHz and other FM simplex frequencies, signals were in from all over the east. I tried DXing on the TV and FM broadcast bands, and copied skip TV stations up to TV ch 6. I also heard FM broadcasts up to 99MHz. I logged a station in Philadelphia PA on 95.7MHz. I didn't try two meters as I didn't receive any skip over 100MHz, indicating the MUF was not that high.

There is a lot of new activity around the country as many new HF transceivers also cover six meters. Many have said they were trying six meters for the first time.

Many hams are concerned about RFI on six on TV sets. I was able to watch skip signals on channel 2 from the east coast when Larry KØAUY was on the air and couldn't even tell he was operating. Larry's transmitter is just 100 feet away from my TV antenna and he is running 100 watts. Working east he did have the ends of his beam on me and likewise my TV antenna was also pointed east. The channel 2 video carrier is at 55.225MHz. and ch. 2 is just above six meters.

My TV is a Zenith with a high pass filter installed with a 52 MHz cutoff (It passes signals above 52 MHz). These little filters can be purchased at Radio shack for under \$10.00 and can be installed in 10 seconds. They require no special tools and are inserted in the cable or antenna line. For regular reception they are not necessary on

*(Continued on page 5)*

# THE 147.21 DILEMMA

BY JIM SCOTT WBØIYC

As chair of the Technical Committee for the past several years, I have been closely involved with the problems facing the 147.21 machine. Recently, the repeater had suffered damage, and I have been in constant touch with Bruce Cummins KFØTD who has been maintaining the transceivers for the repeater during this time.

Basically, the repeater system consists of a controller built by Bruce, a CushCraft 4 element 6 dB gain folded dipole antenna, two lengths of 7/8" (old) Andrew Heliac totaling approximately 620 ft., a 90 ft. length of 1/2" Heliac, a Sinclair Hybrid Ring Duplexer, and two Motorola MiTrec transceivers, one of which is kept as a backup. The equipment is housed all together and connected to a 12V lead acid battery and its charger.

Recently normal operation of this machine ceased, when, within a week after a failure of the first transceiver, the backup also failed. The explanation for what actually happened is yet unclear, however, an RF output circuit board is "toast" and must be replaced. The other rig suffers from a failure of a circuit which throttles the output drive. This may be less costly to fix, but has been a reoccurring problem. However, rig repair costs are affordable as long as the parts are available. In any case, the system is down, and we believe there may be additional problems with the antenna system and/or its feedline.

Presently, there is debate on the future of the repeater, including replacement, relocation, and repair. Certainly, the mention of a repeater with an antenna height of 600+ ft., fed with 7/8" Heliac sounds impressive to any ham, but what of the cost of maintenance for a club our size. The feedline on the tower is no longer produced, and new Heliac costs over \$5/ft., a very expensive proposition if replacement is warranted. To complicate matters, if we want to do maintenance on

# VHF REPORT

SIX AND TWO METERS WILD

BY JOHN TUDENHAM WØJRP

**T**his is the summer sporadic-E season, and for the past two weeks plenty of excitement for VHF DXers.

1. KØETC works Alaska on six multihop E-skip. At 10:45PM on July 2, Jay worked KL7FZ in grid BP51.

2. Larry KØAUY worked ND on Six for new state.

3. KØETC and WØJRP on July 4th worked VP2E/W6JKV, a new country for KØETC

4. Tuesday evening July 6 starting around 6:15PM a great 2 meter E-opening to the east coast with WØVD, KØETC and WØJRP working as many as 40 stations in MA, CT, RI, NY, NJ, MD, DE, and VA. WØJRP and KØETC worked DE for a new state on two meters..

5. W1LP/MM in a ship in the Gulf of Mexico was worked on six meters by KBØSTN, KØAUY, KØETC, and WØJRP.

This is only the beginning the month of July we should have very good conditions on 6, and even 2 meters at times.

73 and see you on VHF

the antenna system at the present site, only insured climbers are allowed on the tower. This precludes us from climbing the tower, and the commercial climbers charge up to \$1/ft.

To truly determine the state of the antenna system at the present site will cost a minimum of \$600, and although we can clean connectors, and replace seals at that time, it may not solve our problem. However, we will learn the condition of the feedline and the antenna, and then we will be able to make a recommendation. ¶

# As I see it...

## ONE MEMBER OFFERS SUGGESTIONS ON HANDLING MEETINGS

Guest Editorial by  
John Miller (KBØTKL)

**S**ome of our members feel that our business meetings are consumed by confusion. Every paid member should have an opportunity to express opinions, during discussions at the business meetings, **WITHOUT INTERRUPTION.** The questions about the clubs business can only be resolved by you, the members, as a body. Individual members or committees can not make **FINAL** decisions, only the membership, **AS A WHOLE**, can do that. We might try the following:

I suggest more controlled discussion periods at the business meetings. You could say we all need an attitude adjustment.

A list of all topics for discussion should be kept current by the secretary and displayed on the white board at every meeting. These could be referred to as "Old Business".

"New Business" Topics can also be added at the beginning of the meeting, before a topic is selected for discussion.

At the beginning of each meeting, after the minutes have been read and the treasurers reports have been given, **ALL PAID MEMBERS PRESENT**, by a show of hands, should select the topic to be discussed, from the list of topics to be discussed.

As very limited time is available at each meeting. (One hour is not much time when there are 20 or more members, each having an opinion to input). The time must be tightly controlled by the chair and all members must cooperate by maintaining silence and giving the speaker their full attention.

Members who think of a serious response to the subject matter, while listening to another member speak, should take notes, for reference, to be more effective when **THEY** are recognized to speak.

When discussions begin on a topic, the chair must recognize each member for his or her comment. All comments must be restricted to the topics under discussion and must be directed **TO THE CHAIR** (even though the chair is inattentive) and loud enough for all members to hear..

The chair can refer to comments as either "Comment", "Brief Response", or "Presentation".

(1) The "Comment", the most common, would be **ONE MINUTE** and **TIMED BY THE CHAIR.** All speakers who are interrupted will have the time restored.

An additional one minute of time can be requested and allocated by the chair, if no member objects.

The member who currently has the floor may request another member or non-member be allowed to utilize the current speakers allotted time.

Without objection from a member, this time will be added to the designated speaker's previously allotted time.

Multiple "Rounds" of comments can be allowed if the chair determines it is required.

(2) A "Brief Response": 10 to 15 seconds, used for a "Qualified YES or NO Response" such as "Yes, IF below a certain price" or "No, because I will be busy at that time".

(3) A "Presentation" (Usually 3 to 5 minutes) could be a scheduled previously prepared statement on a new project or a committee member describing the findings of the committee.

A well prepared statement describing a complaint or recommendation is always welcomed from any member and time can be scheduled for the presentation of it.

The type of responses used will be decided by the chair at the beginning of the discussion.

**ALL RESPONSES** to **ANY** comments will be held until the member is recognized by the chair.

"Points of Order" should **NOT** be in order during a members comment.

Motions from the membership should be entertained by the chair only when the chair feels the pursuit of a motion will not detract from the effectiveness of the business presently being conducted by the membership.

Immediately, at the completion of each round of comments, a show of hands should be called for to decide action on that topic. Those being:

(1) To continue the discussion by conducting another round of comments. (Time Permitting) (Maybe Brief Responses)

(2) To table the it for further discussion in a later business meeting.

(3) To **FINALIZE** that discussion by putting it to a vote.

If time allows, select another topic, by a show of hands. ¶

# An Open Letter from Dale Bagley K0KY The New Section Manager for Missouri

June 1999

Dear ARRL Members and Affiliated Club members:

In April, Charles Boyd, KE0K, resigned as ARRL Section Manager for Missouri effective June 1st, 1999. Lew Gordon, in his capacity as Midwest Division Director, appointed me to complete Charles Boyd's term as SM. My name is Dale Bagley, K0yk, I appreciate the opportunity to serve the Amateur Radio operators in Missouri.

Charles Boyd, KE0K, is an outstanding amateur radio operator and I personally was sorry to lose him as our Section Manager. He always worked hard for the ARRL, and all amateurs in Missouri. I will continue this important work. With Charlie's support and that of other ARRL members throughout Missouri, I will provide the leadership needed at this time. Since Missouri is a large State there are many Missouri Amateur Radio operators that have never heard of me. To introduce myself to those Missouri's Amateurs I have included, on a separate page, a brief summary of my interests in Amateur Radio and some personal notes.

I have many goals as Section Manager, but the most important is to improve communication within the Missouri Section of the ARRL. I would appreciate hearing from individual members, receiving newsletters from all affiliated clubs and feedback from those that have ARRL appointments. I promise my full attention to those interested in improving the Missouri Section of the ARRL. Members with ideas for Contest, Conventions, Traffic Handling, ARES activities, ARRL membership promotion, recognition of amateur radio within Missouri, Elmering, increasing the number of licensed Amateurs and scores of other topics are vital to the betterment of the Missouri Amateur Radio community.

I want to thank you for your past efforts in behalf of the ARRL and the assistance that you have provided your community as traffic handlers, ARES members and other beneficial activities. I hope that you will continue to reach out to young and old alike and bring them into the Amateur Radio Service. We all know that Amateur Radio can be great fun and that its possibilities are unlimited. Let's enjoy the friendship and support that has made Amateur Radio a hobby worthy of our pride.

Hopefully, I will get to visit with many of you at the PHD Hamfest & Midwest Division ARRL Convention on July 10, 1999 at the Kansas City Market Center.

Dale Bagley, K0KY, Missouri ARRL SM  
P.O. Box 13, Macon, MO 63552  
e-mail k0ky@arrl.org

---

Dale Bagley K0KY:

I have been an active amateur radio operator since 1971 the year I passed my Novice License exam. Within the two year period of the Novice License, I upgraded to an Advanced License. When the FCC started the Volunteer Licensing Exam program, I passed my Extra Class license exams so I could assist with VE program. I have been an Volunteer Examiner for about 10 years. I have ARRL appointments as District Emergency Coordinator for Northeast Missouri, and as a Public Information Officer. I began serving as Missouri Section Manager for the ARRL June 1st, 1999. I am currently President of the Macon County ARC. I also belong to the Mobile Amateur Radio Awards Club, the Society of Midwest Contesters, the PHD Amateur Radio Association and the Ten-Ten Net International. I have served the Macon High School Amateur Radio Club as Faculty advisor for over 15 years and currently as the club's sponsor. I am custodian of the Macon Area Repeater Council's 2 meter voice repeater and packet digipeaters. I have taught classes to prospective amateur operators and work with Scouts during the Jamboree On The Air event for several years. I believe that the technical training, communicative skills, operating challenges, emergency service and the excitement of an important radio contact are all essential to keeping Amateur Radio the great hobby it is.

I recently retired from teaching Chemistry and Physics at Macon R-I High School and continue to live in Macon with my wife Patricia. I belong to the Macon Lions Club and serve as secretary for that organization. I teach an adult Sunday School class at the Macon United Methodist Church. In addition to Amateur Radio, my other hobbies include Photography and computers.

## HAMFEST CALENDAR

Note: Listings are updated as information becomes available.  
Courtesy of Lonnie Allen NØTBO

**July 10, 1999** Kansas City, MO  
Midwest Division Convention,  
Kansas City, MO  
PHD ARA Bob Roske, WA0CLR  
PO Box 28954, Kansas City, MO 64118  
Phone 816-436-0069  
email: wa0clr@worldnet.att.net  
<http://members.tripod.com/~PHDARA/>  
\*\*\*

**July 18, 1999** Washington, MO  
Zero Beaters ARC  
Dave Neal, NØPNG  
1917 Powderhorn Pass,  
Wildwood, MO 63011-1717  
314-532-2477 (days)  
or 314-458-3254 (eves)  
email: Dave\_Neal@msn.com  
<http://zbarc.usmo.com/>  
\*\*\*

**July 23-24** Oklahoma City, OK  
Central Oklahoma Radio Amateurs  
Thomas Webb, WA9AFM  
10421 SE 55th St.  
Oklahoma City, OK 73150  
405-732-7110 or 405-737-6716  
E-mail: tmwebb@telepath.net  
<http://www.geocities.com/heartland/7332>  
\*\*\*

August 7 1999 Crane, MO  
The "FREE" FEST 8 AM 3 PM  
At the CITY PARK, CRANE, MO.  
"FREE" admission, table, and ticket.  
GRAND PRIZE: ICOM 2100H  
55 Watt, 113 CH, 2M Mobile  
TICKETS \$1.00 ea. or 6 for \$5.00  
Bring the kids and pets (leashed).  
Lunch will be available by KA0RM  
TALK-IN 145.330- NØTBO REPEATER  
48 sheltered tables-first come basis.  
VE testing by W5YI group @City Hall  
email: n0tbo@gte.net  
LONNIE ALLEN 417-723-5671  
701 AGNES  
CRANE MO 65633  
\*\*\*

**August 22, 1999** Salina, KANSAS  
1999 Kansas State Convention  
8 am. to 4 pm.  
Bicentennial Center in Salina  
Ron WA0PSF - Hamfest Chairman  
\*\*\*

## UPCOMING CLUB EVENTS

### FOX HUNT SCHEDULED IN AUGUST

The Joplin Amateur Radio Club is sponsoring a FOX Hunt on Saturday, August 21. Alternative dates may be discussed and selected at the July 13 meeting. This should be a fun event, with two FOXs (same as before, the first being moderately easy to locate, the second being moderately hard to find) on 2 meters.

### OCTOBER TAIL-GATER PARTY IS BACK

The J.A.R.C. is scheduling its annual Tail-gater Party on Saturday, October 2, at Ewert Park, from 8 am to 12 Noon. Donuts, sodas and coffee will be provided by the club. Bring your stuff, sell it, buy some stuff from someone else, and make everyone happy.

*(Continued from page 2)*  
most sets.

For the newcomers to six, the DX calling frequency for sideband is 50.110 MHz for contacts outside US and Canada, while the domestic calling frequency is 50.125MHz. These were listed incorrect in a frequency chart put out by ICOM. When making contacts, use 50.1-50.125 only for working DX stations. Stay above 50.125MHz, to work stateside stations. Spread out and do not stay on the calling frequency because there is too much QRM. Many FM ops are used to channelized operation. On sideband you don't need to work any special frequency, use any frequency where you find activity, usually up to at least 50.2MHz. You just work where there is activity. If you get QRM, move up or down. Last night signals were heard well above 50.2MHz on sideband. Most CW activity seems to be between 50.090-50.100MHz. The band was also open Saturday evening with triple hop E-skip into Europe from the east coast. Most of this type of activity is

## Buy/Sell Trade

NOTE: ITEMS LISTED IN THIS SECTION WILL BE RUN ON A SPACE AVAILABLE BASIS, AND REMOVED AFTER 6 MONTHS.

### For Sale - Repeater, 2 Meter, Aerotron 100 Watt, w/RC1000 Controller

Make offer.

John Miller, KBØTKL  
(417) 624-4903, email jbm0@janics.com.  
4/99

**For Sale - Numerous Items - FT -107M**  
Complete set, with matching tuner (not automatic), external vfo, Transverter with 2m module, speaker. **Kenwood 2m FM rig**, early 80's model, **MFJ Versa Tuner 2**, also **Keyer** for hf gear.

\$800 or best offer

Brandon Farmer, KCØAJH  
(417) 627-0730 or 626-0382

2/99

**For Sale - MFJ 6m FM-SSB Transceiver**  
\$175

Ralph Orahod, KBØZHC (417) 358-7540  
02/99

**Wanted to Buy - Laptop Computer**

486/66 or better, will consider trade for radio gear. Desire that the laptop have a modem, CDROM, and 16MB RAM.

Brandon Farmer, KCØAJH  
(417) 627-0730 or 626-0382

2/99

**Wanted - Communications Receivers  
and Transmitters** (Esp. Hallicrafters)

Military Gear, AM Transmitters,  
Components and Junk.

Lloyd D. Williams, KAØZCX

1/99

**For Sale - Realistic 202, 2m FM  
Handheld** w/battery and charger  
\$60.

Frank Guodace, NØLEG (417) 781-7933

1/99

CW as the E-skip signals (after several hops) are usually weak.

Well we will see you on six. I hope this is a good skip season like 1996, the last two years have been below normal.

For more info about the magic band call me at (417) 624-8058.

73 John WØJRP.

---

**MEMBERSHIP  
ROSTER  
THIS PAGE**

---

**CALENDAR ON THIS PAGE**

---

**ALSO UNUSED JUNK TO SAVE FOR  
FUTURE ISSUES**

**R**

**S**

## Meeting Times, Testing, and 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. Presently, the club is searching for a new location for the weekend breakfast. Contact Betty Miller for details at (417) 624-4903.

### 1999 CLUB OFFICERS:

President: Ray	KBØSTN
Vice-Pres. John	KBØTKL
Treasurer, Jim	NØZSQ
Secretary, Betty	KBØTKX

### Amateur Radio VE Testing

License testing by volunteer examiners takes place on the 3rd Thursday of each month (except July & 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 offers 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: **jim-scott@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.

Last Page

PRINTED CIRCUIT

Joplin Amateur Radio Club, Inc.  
P.O. Box 2983  
Joplin, Missouri 64803-2983