

JARC REPEATER

October, 1996

Monthly Publication of the Joplin Amateur Radio Club

Volume 6 Issue 10

Don't forget upcoming "Tail-gater" - Oct. 12th

This is a reminder that the Joplin Amateur Radio Club will sponsor a "tail-gate" event on Saturday, October 12, 1996 from 9AM to 5 PM at Ewert Park in Joplin. The park is located at 7th Street and Murphy Boulevard. This is the same park where the club held field day in June. There will also be a cook-out, and club members and others wanting to join us, should bring place settings, **and a covered dish**—something that goes good with grilled hamburgers and hot dogs, etc. The club will furnish the meat—you all bring the side dishes to go with it. Non-club members can "buy in" for only \$2.00. This promises to be fun, so bring yourself, and dare I say—your "junk". You might just get it cleared out and make some spare change to buy some **more junk**...

Also, fall is the time of year when there are a lot of hamfests. We have received information from **NØJBA**, (Mike Guest) of Neosho, that their group will be recommencing their Sunday afternoon trade fests on October 20th, 1996, to begin at 1:00 PM, at the Neosho Recreation Center, located just off of Neosho Boule-



Fall is the time for hamfests. Start out the season with our tail-gater on October 12th! P.S. There will be food.

vard, west of the High School. Tables are available for \$5.00 each, and advance reservations may be made by contacting Mike, **NØJBA** at 451-4044 or

Be sure to bring a covered dish to the "Tail-Gater", as we will be eating pot-luck style. Club furnishes the meat, you bring the sides...

Dave, **WAØIWN** at 776-3972. Admission is free—but donations will be accepted to help offset the cost of renting the facility.

If you have times and dates for other fall hamfests, please get that information to your editor.

Newsletter renaming contest ... instant replay

Several of you have inquired as to what happened to the newsletter renaming contest we announced several months ago. To give you the straight scoop—we were **not** exactly overwhelmed with entries, and it appeared (at the time, anyway) that no one cared one way or the other. We have now decided to try it one more time.

We feel the title of our newsletter should reflect the mission statement of the Joplin Amateur Radio Club, Inc., and be a name that is more inclusive of all facets of the hobby.

Several have stated that our current title, **REPEATER**, is indicative of a club that is a repeater organization only. If you have suggestions for a replacement title and wish to enter this contest, please give your ideas to Jim Scott, **WBØIYC**, Club President, or mail your entry to the editor, **KGØYH**, by October 20th, 1996.

There will be a prize awarded, but the exact prize has to be approved by a vote of the club. Our thoughts were to award a year's individual membership in the club, and we will seek approval on that idea. We appreciate your entries and thank those of you who have already shown an interest.

inside...

PL Tones, Brazing rods
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PL™ Tones, what they are and how they work

Hams have used PL™ tones for many years, though few understand how they work. Yet understanding PL™ can improve a ham's operating proficiency.

PL™ tones are a form of selective signaling. On a shared channel, PL™ can relieve an operator from hearing

PL™ tones are a form of selective signaling which can relieve an operator of hearing other users...

other users while awaiting a message intended for himself. Community repeaters use PL™ tones to separate user groups, or to prevent the repeater from rebroadcasting noise and intermodulation interference. Tone signaling spans a number of technologies, including dual-tone

Brazing rod: cheap, yet useful stuff

By Howard Lewis, KB6VGF

Don't overlook bronze brazing rod; it has many uses in and above the ham shack. Brazing rod comes in 1/16, 3/32, 1/8, 5/32, 3/16 and 1/4 inch diameters—and in 3-foot lengths. Knowing they will come in handy, I keep a small stock on hand in a variety of sizes.

Bronze is nearly impervious to damage by water; it stands up well to weather and even submersion. In many ways, it beats steel or aluminum for a range of antenna uses. Remember: rust never sleeps. (Just avoid unprotected

multiple frequency (DTMF), continuous-tone-coded squelch (CTCSS), digitally coded squelch (DCS), automatic number identification (ANI), selective calling, status reporting, tone remote control, and p a g i n g .

Continuous-tone-coded squelch goes by various trade names. Motorola owns Private Line (PL)™.

To understand how PL™ (CTCSS) works, let's first consider the transmitter. A PL™ transmitter sends a sub-audible tone, which the transmitter sends continuously, can be any of a selection of standard frequencies below 300 hertz. The frequency deviation of the subaudible tone should be plus or minus 750 Mhz when voice modulation is absent.

The CTCSS receiver is more complex, because it must respond to the correct tone, but reject all others. When the receiver detects the proper

tone, it unsquelches the audio path—to “open” the receiver for the incoming signal. A signal with the wrong tone, or with no tone, must not activate the receiver.

A good CTCSS receiver employs a high-pass (filter) after its subaudible tones. Without that filter, the radio's user may be able to hear the tones, which can be annoying.

By its very nature, a CTCSS system cannot be perfect. Though a receiver with PL™ passes audio only for signals with the correct subaudible tone, any RF signal, with or without the tone, can tie up the channel.

Also, with PL™ turned on, the operator hears no traffic even when the channel is in use. That's the PL™ system's purpose. So to avoid interference, an operator must check a channel with (their) own PL™ turned off (or watch the receiver's S meter for a few seconds) before transmitting.

By David Breaux, KC5BLY

from the January '95 *Cajun Electric ARC (New Roads, LA)* “The *CEARC Journal*”—Gary Hollier, KA5HLC, Editor. Used with permission of the *Amateur Radio News Service*, and appeared previously in the *ARNIS Bulletin*, as did other cited articles in this and other issues.

Toll free number for the FCC:

☎ 800-322-1117

from the *ARC of El Cajon (Calif.)* “Counterpoise”—Dave Manescu, W6CCM, Editor. *ARNIS*

Ham Radio's Prospects, another view

In “Amateur Radio in the 21st century,” Ron Levy makes good points. We should be concerned about recruiting new, young members into our fraternity/sorority.

But I think Ron's argument that radio must become passe because it's obsolete technology misses the point. I believe most hams enjoy our hobby not because it offers the most efficient way to communicate, but because it's fun.

Undeniably, the advent of that new technology, the automobile, quickly kicked horses out of the utilitarian mainstream. You probably don't ride a horse to work or take a horse-drawn buggy shopping. But people still ride horses for pleasure or sport. Almost one hundred years after the automobile destroyed the buggywhip business, amateur horsemanship lives on.

We hams like to think of ourselves as communicators, yet the facts belie that notion. Passing the signal report, name, QTH, and weather barely qualifies a QSO as communication. You occasionally do hear real repartee on the air, though, a few hams do take part in traffic nets and emergency exercises. They become expert communicators, who play vital roles in their community when disaster strikes. But most of us are not adept as communicators.

So where's our hobby's glory? I think the fact that our hobby has become so multifaceted underlies its power to capture hearts and minds. Some fellow hams lead us to new things. Others excel at old things—though often by using the latest technology with a twist.

Consider DX contesting. The inveterate contester “must” assemble the best possible station. If that means buying a house on a hilltop, so be it. If it means three or four towers, all over 120 feet, so be it. The contester devotes all available income, time, energy and “mind share” to his hobby. He hones his operating skills—to win, but also in hopes that others will invite him to be a “guest op-

erator”.

He goes on DXpeditions—for the thrill of operating from an exotic location, and to gain esteem in the contesting community. DXpeditions aren't just costly and time consuming, they often subject their operators to severe discomfort. Yet those who go barely get home before they begin planning their next sortie.

If you interview hams in any of the other “splinter groups”, you'll find similar enthusiasm. QRPers enjoy assembling tiny, simple rigs. A QRPer gets the same rush working Connecticut from California with a “peanut whistle” as a DXer does working Bouvet Island. For the QRPer, the watchwords of fun are “keep it simple” and “build it yourself.”

One could name twenty ham sub-hobbies, each of which offers its own brand of fun. Some—satellite work, moon bounce, or computer automation of a station—may “push the envelope” of technology. Others, like restoring antique radios, usually don't. But the latter hobby can never become obsolete!

Morse Fishing

by Robert Mazur, VA3ROM

Wayne, VA3LOG, makes sharpening his Morse code a family affair. Using a computer and a code program, the family plays a version of the game, Go Fish. When it's a player's turn, instead of asking out loud for a card, he or she presses the appropriate key on the keyboard—the K key for a king, the Q for a Queen, and the numbered Keys for numbered cards. The computer then “sends” the selected Morse character—at whatever speed the players have previously set it up to send.

The children enjoy pressing the keys and hearing the sound of the code. And in the process of playing, they

Part of Amateur Radio's recruitment problem may be that we don't “sell” well. Our multifaceted hobby is difficult to explain, when taken as a whole. But generalities don't turn people on; a specific story can. So the next time an opportunity knocks to present our hobby to someone, take a hint from “Advertising 101.” Tell just one thing—something you found exciting. And unless the per-

Most hams enjoy the hobby not because it is the most efficient way to communicate...but because—it's fun.

son is a science student, don't stress the technical. Just tell a story—a story that conveys how much fun you had hamming.

By David Barton, AF6S

from May 1996 ARNS Bulletin, used with permission.

quickly learn to distinguish the dits and dahs, learning Morse along with their father. It's fun, easy, and painless for everyone—the best kind of learning tool.

The program Wayne uses is Super-Morse version 3.5, but any Morse Teaching program should work. (They exist for computers from the new Mac or Windows machines to ancient Commodores—ed.)

from the March 1996 Lakehead ARC “Hi-Q”-(Thunder Bay, Ontario, Canada), with permission of ARNS.

Amateur Radio in the 21st Century

By Ron Levy, K2AIO

No matter how I try to envision our hobby in the 21st Century, I see dramatic change; I see it becoming increasingly difficult to attract newcomers. As a technology, radio has become archaic. Commercial radio stations have begun “broadcasting” on the Internet—eliminating interference, antennas, and even the radio receiver. You

As a technology, radio has become archaic. Amateur Radio will find itself integrated into the computer world...or cease to exist.

can hear CBS “Newsradio-88” on the Internet, provided you have a multimedia computer. It seems just a matter of time before all the world’s broadcast stations will be online—all perfectly readable, independent of radio propagation conditions. Our computers can access an inconceivable amount of information from all over the world. Special

DX Advantage...?

By Don Pearson, W8IDM

I remember the late Orrie Baumgardner, W8BF, for the story he told me a few years ago about his six-element twenty-meter beam.

It seems one of Orrie’s DX competitors wanted to know why DX stations in Asia always seemed to give Orrie a better signal report, despite Orrie’s poorer DX location. When he paid Orrie a surprise visit one summer evening, he found freshly spread **horse manure** in the back yard. And he also noted that the beam, pointed at Asia, also pointed right over that part of the yard.

Face straight, Orrie told him that he

interest groups have “home pages” on the World Wide Web. Our government provides documents, forms, and more. Universities and libraries exchange ideas and research findings—facts and figures on nearly any topic you can imagine.

Physicians are going online. A diabetic can send in blood-sugar test results. The physician adjusts the dose, if necessary, and notifies the patient of the change—all without an office visit.

You can ragchew via the Internet; thousands chat in real time. The Internet transmits their words, and now their voices almost instantly.

Given all that, how can we justify Amateur Radio? How can we stimulate non-amateurs, when all we offer is outdated communications technology? Why would anyone want to become a ham, knowing they would have to spend big bucks on a rig and antenna system, when they can communicate more easily with nothing but a computer and a modem?

had been experimenting with ways to improve ground conductivity, and that the manure had improved his signal reports from Asia.

This apparently impressed the visitor. Although his lawn was in perfect condition, he called in a landscaper the next day to order horse manure. **(Editors Note:** If any of you try this, let us know how it goes!)

from the Feb.-Mar. '96 West Park Radiops “W8VM Log” AF8C, editor. With permission; ARNS.

Computer communicators don’t need to learn about electronics. They don’t need to take an examination and be licensed. They don’t need to learn the Morse Code. They don’t need to worry about the sunspot cycle. And they don’t have to endure complaints about TV interference.

Ham radio has given us a great deal of pleasure. It was fun building our own gear and seeing it work. It thrilled us to work a station in an obscure, faraway country, to work QRP, to communicate on the UHF frequencies, or via slow-scan television, fast-scan TV, RTTY, satellites, or moon bounce. All this and more fascinated Radio Amateurs for 80 years.

We even had our own forms of digital communications—from RTTY to packet radio, with its bulletin boards, mail boxes, DX clusters, and direct communications using computers and keyboards.

But now powerful desktop computers, are available at a cost nearly anyone can afford. And geniuses among us have developed programs and techniques that let those computers communicate. For less than the cost of a Yaesu FT-1000D, today’s personal computer includes everything necessary to communicate, and to do many other things as well.

At best, Amateur Radio will find itself integrated into the computer world; at worst, it will cease to exist. What can we do to ensure our hobby’s survival into the 21st century? I don’t know. But I think the problem warrants a lot of serious thought. We need a workable plan, and we had better implement it soon.

from the March, 1996, North Jersey DX Association “NJDXA Newsletter”—Bob Greenquist, N2GHV, Editor. Used with permission of ARNS. See response from AF6S on page 3.

A Mode called CW

Considering upgrading? Heard the talk about CW being outmoded, and wondering whether it's worth expending the effort to become a Morse operator? Well, it is. Here are some facts to consider:

- CW requires less sophisticated, less expensive equipment than other modes. One result is that many third-world countries support CW as an inexpensive means for beginning electronics students to gain on-the-air experience.
- CW can get through under difficult HF band conditions, when most other modes can't.
- Anyone who only has funds or antenna space for a "little pistol" station can take heart. With limited power and a small antenna, you can still produce a copyable CW signal—even in faraway countries.
- Many DX stations run only CW. If you wish to work those stations, you must speak their language.
- CW overcomes the language barrier. It is accent free. (Well, almost; a few operators, using manual keys or "side winders" have distinctive "fists"). But with a few "Q signals," and standard phrases in English, you can have a conversation with someone who doesn't speak your language.
- CW is fun! It's a pleasure to get on the novice CW bands, and see how far you can reach and whom you can contact. There is a great

feeling of camaraderie in knowing that nearly everyone on the band is a beginner like yourself, that they are going through the same learning process you are. The routine CW contact—exchanging RST, QTH, name, then rig, weather and maybe occupation—frees the newcomer from worrying about what to say. It promotes the sheer enjoyment of radio communications.

- For youngsters, CW removes the intimidation of talking to strange adults. The only way you learn the age of other operators is if he or she tells you.
- CW is spectrum efficient. A CW signal is less than 500 Hz wide, so five CW stations can fit in the 2.5 KHz occupied by one station running SSB, RTTY, packet or AMTOR. Those deni-

grating the value of CW seem to "forget" this essential fact.

- Lastly, because so many hams love CW, it's in no danger of dying out. Instead, jump in and give it a try. You might find yourself with a whole new sub-hobby to enjoy.

CW can get through under difficult conditions, when most other modes can't...it is in no danger of dying out.

(Author not given) from the February '96 Frontier ARS newsletter, Jim Frye, NW7O, editor. via ARNS.

Errata... plus latest FCC Callsign assignments for Ø district

In the September issue, we erroneously noted that Gate 2 was opening for *Advanced* class operators to send their form 610-V's in to the FCC for processing. This is incorrect. Gate 2 is actually for **Amateur Extra Class** operators who which to submit the form for a vanity callsign. Some of the editor-mailed newsletters had this correction noted, but for any that got the wrong information, we apologize. The gate opens on September 23, 1996, so hopefully anyone who might have been affected by this correction will still get the information in time. Advanced class operators will be covered under Gate 3, which comes

at a later date.

It still remains that if you are trying to regain a previous callsign, regardless of your current operating class, then you are eligible to apply under *any* gate.

Also, per the FCC, latest callsign assignments as of August were:

| | |
|------------------------------|---------------|
| Novice, Tech, General | KBØYDQ |
| Advanced Class | KIØDX |
| Extra Class | ABØCL |

Marconi invented Radio 100 years ago

By Ken Wright, W8NOT

In 1894, when Guglielmo Marconi was 20 years old, he read an obituary of Heinrich Hertz, the discoverer of radio waves. Marconi conjectured that these waves might be able to carry telegraph messages through space. So he began developing (inventing) equipment to test the proposition. By the end of 1895 he had already transmitted signals without wires, over a distance of more than a mile.

But when he offered his invention to the Italian government, they rejected it. So, in 1896, he went to England, where he applied for and received a patent—the first ever granted for a practical system of wireless telegraphy. He founded a company that same year, to make wireless telegraphy a commercial enterprise. It would eventually make Marconi wealthy.

One of Marconi's first practical applications of wireless came in 1898. He followed the Kingstown Regatta in a tugboat, and flashed the race results to the offices of a Dublin newspaper.

In 1899, when the East Goodwin Sands Lightship ran around in a fog, the ship was able to summon aid by wireless telegraphy, demonstrating for the first time its value in saving lives at sea.

By 1901, Marconi had achieved a more dazzling success. He transmitted signals across the Atlantic Ocean between Saint Johns, Newfoundland, and Poldhu in southeastern England. Permanent wireless stations were an obvious next step.

But the following years proved frustrating for Marconi and his company's shareholders, because the stations hadn't demonstrated an ability to provide reliable trans-Atlantic service. To remedy this, Marconi built a pair of larger, more powerful sta-

tions. He located one at Marconi Towers, south of Glace Bay, Nova Scotia, and the other at Clifden, on the western tip of Ireland.

Although these stations employed the same spark transmitter principle as the original stations, the simple spark gap had grown to a spinning five-foot "disc discharger", with studs on its rim that produced sparks at a rapid and regular rate. A motor spun the disc at 340 revolutions a minute, to produce a "musical tone" that the receiving operator could more easily distinguish from background noise. Far from QRP, the new transmitters ran 100 to 300 kilowatts. Their rotating spark gaps displayed awesome power, and made a sound the stations' neighbors several miles away could hear on a quiet night.

Huge resonant "tank" circuits tuned the new stations to a radio frequency of about 50 kilohertz—a wavelength

of 6,000 meters. Marconi built separate receiving stations at Louisbourg, Nova Scotia, and Letterfrack, Ireland. Land telegraph lines linked the receiving and transmitting stations.

The Marconi receivers employed crystal detectors. They were insensitive, so they required a large receiver

The first summoning of aid at sea by wireless telegraphy came in 1899, demonstrating that radio could save lives...

ing aerial (antenna). The aerial at Louisbourg was one kilometer long. Six tubular-steel towers more than 300 feet high supported it. But even with that aerial, the signal still needed a boost.

(Continued on page 7)

Club to be involved in Joplin area recycling efforts

Andy Gabbert, **KAØTUD**, reports that at the September 9th meeting, correspondence was read telling about an opportunity for the club to become involved in the local effort to recycle used telephone directories.

This is an effort in cooperation with the local schools and the Chamber of Commerce. Those organizations that assist in the recycling efforts will receive recognition and their organizational logo will be used in releases about the recycling program. About this time in the fall, Missouri Southern State College has some family days where admission to a particular

football game is by donation of a telephone book—so we may have an opportunity to help with this or similar projects in the near future.

After discussion, it was agreed to participate in the project, and also to make a \$25.00 donation to the organizers, toward the event. As a not-for-profit organization, this step is admirable and the club can be proud to help with a cause of such importance to the environment.

Thanks to KAØTUD for information for this story.

JARC helps make MS-150 Biking Event a Success

Along with SMARC (Southwest Missouri Amateur Radio Club) of Springfield, the Joplin Amateur Radio Club has received high praise from the folks involved in the 1996 MS Bike-a-thon event.

As you may know, this is a charitable event benefiting research into a cure for multiple sclerosis and related diseases, often abbreviated MS. The Bike-a-Thon began near Springfield and wound its way southwest toward Neosho, where the bikers paused for overnight rest. The race continued on Sunday, September 8th, through Oklahoma and onward to Pittsburg, Kansas, where the riders were bussed back to the Springfield area.

Ed Griesbaum, **KBØGSV**, reports that they were exceptionally busy with many requests for assistance in coordinating the securing of supplies and personal services. The ham volunteers transported food and also riders in need of a lift. Ed stated they went above and beyond their normal duties, for which the coordinators gave a special thanks.

The Springfield hams who handled the busy 2-day event were thanked, as well as the following members of the **Joplin** club:

Ray, **KBØSTN**; Dave, **NØKMP**; Don, **NØFIL**; Jim, **NØZSQ**; Russ, **NØQLT**; Andy, **KAØTUD**; Mark, **NØZPD** and from Pittsburg—Arch, **WBØMUG**.

The coordinator expressed his

gratitude to the Neosho Radio Club (**Editors Note:** Not sure whom comprises this group—we'd like to know...) for use of the 146.805 repeater on Saturday afternoon, and for the Joplin club's 147.210 repeater on Sunday. **KBØGSV** noted that while the ride may have begun in Springfield, it took all of the Southwest Missouri ham clubs involved to make it "fly". Continuing, he said, "To me, this is real association between club and hams, and (this) is what ham radio is all about. Thanks to all of you for making this the best ever!"

In a letter to Jim Scott, **WBØIYC**, JARC President, Griesbaum said, "The hams listed as you can see ran the MS-150 on Sunday (September 8th), believe me, I am personally most thankful. They did a great job on all

problems that were presented to them...I am attaching an assignment sheet that will give you a picture of just how effective your people were. Jim, also a big thank you to you for your efforts for all the assistance and time you devoted to helping me on MS-150."

"(This) is what ham radio is all about," said event communications coordinator, KBØGSV—in speaking of JARC's participation...

Thanks to WBØIYC for information for this story.

Marconi invented radio...continued from pg 6

For that purpose, Marconi used "Brown relays"—electromechanical amplifiers. A Brown relay contained a dynamic earphone and a carbon microphone that shared a common diaphragm. The Brown relay output signals were strong enough to leave tracks on the wax cylinders of a Dictaphone recorder (based on the original Edison phonograph).

One advantage of recording the signals was that they could be slowed down for copying (typing) by operators. To transmit messages, operators hand punched their code on paper tape, then ran the tape through a machine that keyed the transmitter. Marconi's trans-Atlantic radio service

ran traffic at a respectable eighty words a minute (!).

Marconi received many honors, including a share of the Nobel Prize for physics in 1909. When he died, in Rome, on July 20, 1937, all the world's radio stations accorded him a unique tribute: two minutes of silence.

from the August '95 Northwest Ohio QCWA Chapter 142 "QWCA Newsletter"—W8NOT, Editor. Source: "Marconi Towers Site," University College of Cape Breton, Nova Scotia. Used with permission, ARNS. Appeared in ARNS Bulletin.

Here it is September, and Six meter E skip openings are getting scarce. Most report a good summer skip season, but down slightly from last year. Don't forget, however, that “E” openings can occur any month of the year, and we have a winter skip season peaking around December 21st, although it is not as great as the summer season.

A commonly used term on six meters is “see you all of a sudden.” That describes it exactly. Check ten meters in the early evening and if you hear signals in the 600-1200 mile range, point your six-meter beam in that direction and make some noise. JARC club member **KØETC**, Jay, has his big beam up now.

The big news this month is two meters. A very good tropospheric ducting opening occurred on September 9th and 10th. Many Joplin stations worked a YL named Holly, **NØQJM**, in grid square EN13, near Sioux Falls, South Dakota. Other two meter DX worked by area stations included **KF9B** in Illinois, **WAØBWE**, **NØJCF** and **WØOHU** in Minnesota; **KFØJI** in Iowa; **WD9BGA** and **KA9QFK** in Wisconsin and **WØIZ** and **KØMQS** in Iowa.

Joplin area stations getting in on the DX were **WØPW**; **NØMST**; **KBØWEY**; **KGØVR**; **WØJRP** and **KØETC**. **KØETC** worked **WAØBWE** in Minnesota with his 5 watts. This was the first long-

haul opening for Dave, **KBØWEY**, who just recently turned his beam over to horizontal (polarization). Larry, **NØMST**, had a good chance to try out his new beam and 170 watt amplifier, and had great success. This opening occurred because of a big high pressure dome north of us after a frontal passage. Keep your ears on the speaker, as there should be more this fall, but who knows?—it all depends on the weather. Very little enhancement occurs on six meters in this type of propagation—it's usually two meters and up.

Don, **WØPW**, reports working DX on 902 Mhz. He is the only ham in the area using this band.

By the time this appears in print, the ARRL September VHF contest will be a thing of the past.

World CW Record Holder was from Camp Crowder, Missouri

Submitted by **KGØYH**

Did you know that a soldier stationed at a World War II army base near here, made it into the world record book for his amazing CW skills?

While helping one of my boys with homework, I was delighted to find a couple of facts about Morse Code in the Guinness Book of World Records. I suspect these records still stand to this day, as they seem pretty incredible.

The highest **receiving** rate for CW was **75.2 WPM**, which amounts to 17 symbols per sec-

I will have more details next month. Keep in mind that VHF contests are not just for SSB or CW; FM simplex is allowed, as long as repeater input or output frequencies are not used; as well as not operating on 146.52 Mhz (2 meter calling frequency). The exchange information is your grid

A common term you hear on Six Meters- “See you all of a sudden...” That describes it exactly.

square. Don't let anyone try to tell you they don't have a grid square! If they don't —they are either out in space or on another planet... (Hi-Hi) Until next time,

‘73 de John, **WØJRP**

ond. This was reported in 1939 in Asheville, North Carolina.

And the fastest **Sending** rate (accomplished with a straight **hand key!**) was 175 symbols per minute—set by Harry A. Turner of the U.S. Army Signal Corps, stationed at **Camp Crowder**, Missouri (near Neosho) on November 9, 1942. Maybe some of you QCWA folks knew him?

Source: Guinness Book of World Records, Sterling Publishing, 1982. Not taken verbatim.

The President's "Corner"

by Jim Scott, WBØIYC

NEW ANTENNAS

Stop the presses!! At the last meeting, the club adopted a plan to acquire and install both a cross-band coupler and a 70-cm antenna along with the 2m antenna now at the site.

According to Walt Stemm, who manages the site, the tower maintenance has been rescheduled for the week of October 7th, and our job is included on the list. The antenna items have been ordered and should be in place for installation at that time. In any case, we will have new antennas installed very soon.

In addition, John (KBØTKL) has offered a 70-cm machine for use by the club. It is not on the air, but it is coordinated. For those who have an interest in 6 meters, the issue is not dead. At the meeting, the members of the club determined that the logistics of a split antenna installation, coupled with the total expense of ALL of the equipment and antennas, would be prohibitive at this time. For some simple math...

The 6m radio costs only \$50, and with crystals only \$100.

The support items NOT INCLUDING antenna work is an additional \$600.

Without a set of duplexers, we would have to mount two antennas at DIFFERENT locations on the tower (not yet approved by Walt), and the antenna work costs \$75/hr.

Until a practical solution is found, the six meter issue will lay on the table. Personally, I would like to see the club active on ALL bands, and all of this new activity by the club is encouraging.

POTPOURRI

Start thinking about nominations for next year, and what you are willing to do to help this club be more successful.

We have had a great year. Membership is up, and we have good participation. The meetings are more fun (really), and the programs have been good! Do you have something to share? It doesn't really take a lot of time, and involvement builds fraternity.

Got a special chili recipe that you like, or one in the works? It's that time of year, so go buy your beans. Enough said. (**EDITORS NOTE:** Real chili doesn't have beans... that ought to stir somebody up. Any Texans out there?)

POSITION AVAILABLE

1996 Walk for Hospice needs You!

Submitted by Andy Gabbert, KAØTUD

The Joplin Amateur Radio Club has helped with this long-standing event for the last 4-5 years, and we are again calling for your assistance in providing public service event communications for this year's *Walk for Hospice*, scheduled for Saturday, October 19th, 1996.

This cause is one that hits close to home for many of us, and the communications services that the club has provided in past years has never went unappreciated. The *Walk* raised approximately \$20,000.00 in 1995—and it goes

Still no volunteer for the *new* position of "Club Historian".

Responsibilities include the creation and maintenance of a club SCRAP-BOOK which will contain items of interest significant to ham radio and the JARC membership. The scrapbook will provide the public, potential members, and others, some insight into club events, functions and fraternalism which we ALL enjoy as members. It will consist of news clippings, pictures, and descriptive text, then be displayed at any event where the public is expected to attend.

'73 Until next time,

Jim, WBØIYC

to a very worthy cause, staying right here in the immediate Four-State area. We never know when we or someone in our immediate family might have to use the services of this fine group, and we look forward to being able to provide assistance again this year.

Full details will be available at the first meeting in October, and if you are interested in helping man a post for the Walk-a-Thon, please call Andy, KAØTUD, at (417) 673-8371, after 6PM.

Meeting Times, Events and 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. All members and those interested in this hobby are invited to attend. The meeting site is accessible to the handicapped.

A main activity for the club is the Saturday morning breakfasts. They are now meeting at Granny Shaeffer's Restaurant on North Rangeline Road in Joplin. Many of you know it as the old Chicken Mary's location.

CLUB OFFICERS

President: Jim, **WBØIYC**
Vice-President, Dave **NØKMP**
Treasurer, Jim **NØZSQ**
Secretary, Mark **NØZPD**

ABOUT THE NEWSLETTER

Items for the newsletter, including classified ads, articles, and stories are solicited. Please send to:

A.R.S. **KGØYH**
P.O. Box 554
Carl Junction MO 64834

Deadline for submissions is the 20th of the month preceding the

month of publication. Classified ads are **free** on a space-available basis and can be ran for more than one month, if needed.

Articles do **not** have to be type-written, but do need to be legible. Refer to previous editions for our editorial policy. Guest editorials are also accepted. This newsletter is an open forum for the Four-State amateur radio community, and your contributions are needed and invited. If you have a late-breaking story, you can also call the editor at **629-3244**.

Joplin Amateur Radio Club, Inc.
P.O. Box 2983
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KGØYH, Editor
NØZSQ, Collator/Mailer

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inside . . .

Tail-gater Oct. 12th; PL Tones; DX Advantage?; CW; Regular VHF Column; President's Column; Walk for Hospice.