

# PRINTED CIRCUIT

December 1998

Newsletter of the Joplin Amateur Radio Club

Vol. 8

## FCC REGULATIONS ARE YOU OBSERVING THEM ?

BY JOHN TUDENHAM WØJRP

## ARRL BOARD REAFFIRMS, MODIFIES ITS RESTRUCTURING PLAN

### CROSSBAND CORDLESS PHONE TO SIX METER QSO

Yes it actually happened. I was talking to "Frank N0IGZ on the cordless phone when suddenly I heard single sideband QRM on the phone from my neighbor KC0AUY. He was talking to a ham in Girard KS who wanted a signal report on six. Of course sideband is unreadable on the phone but still QRMs our conversation. Larry KC0AUY next tried calling Frank and myself on the phone to get us on the air but got the busy signal. He then turned on his scanner and heard Frank and I loud and clear on the cordless phone and tried to break in by transmitting on six meters. I could not understand the side band but soon realized he was trying to tell us something. I kept asking for a repeat but sideband without a beat osc and almost completely unreadable. Frank then tuned his receiver to 50.125 and heard Larry say to get on six and give the ham in Girard a Radio check.

Some amateurs may wonder if a cordless phone QSO is legal. There was an article in QST a while back of a ham using a cordless phone for a repeater to transmit from his yard to control his two meter radio in the house. (not using phone lines) This is legal operation as long as an unlicensed person isn't controlling your transceiver. A lot of cordless phones can be used as intercom systems without going through the phone lines.

By the way if you have ham QRM on

your cordless, buy a 900 MHz cordless phone and six meters will not be heard.

John WØJRP

### DOES THE CLUB NEED A HOME?

JIM SCOTT WBØIYC

If you haven't heard, there is considerable debate concerning the purchase and maintenance of a clubhouse to provide a home for the Joplin Amateur Radio Club. Many questions and ideas have arisen regarding both the benefit and problems associated with having and maintaining a clubhouse. Some things are certain however, it will take a commitment from many in the ham community, both JARC members and nonmembers alike, for this project to be realized. My first concern is whether there is enough interest and support to investigate further. Loose estimates indicate that it would require pledges of at least \$120/year from about 100 hams for up to three years. This should provide the funds needed to purchase and renovate a building.

With enough support, a committee needs to be formed to explore the question, its costs, benefits, and the impact for all of us in the ham community.

So can you imagine such a place?

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The ARRL has filed formal comments in response to the FCC's proposed streamlining of the Amateur Radio rules. The League delivered its comments to the FCC December 1, the final day for comments in the FCC's Notice of Proposed Rulemaking in WT Docket 98-143.

The League's filing promotes the ARRL Board of Directors' restructuring positions, adopted last July and fine-tuned at a special meeting in October. It also takes the FCC to task on a few points. The ARRL said the FCC's NPRM failed to contain "a comprehensive license restructuring proposal or even an overall review of license restructuring" and generally "missed the mark."

The League called on the FCC to adopt the ARRL Board's restructuring plans as the centerpiece of its streamlining efforts. Among other things, the League plan calls for eliminating the Novice and Tech Plus licenses to reduce the number of license classes from six to four. The ARRL plan automatically upgrades current Novice and Tech Plus licensees to General. The General license would become the entry-level ticket to HF. Existing Novice and Tech Plus HF CW bands would be "refarmed" to provide additional phone spectrum for General, Advanced, and Extra class licensees.

The FCC also proposed a four-tier license structure, eliminating the Novice ticket and melding existing Technician and Tech Plus licensees into a common database while allowing current Novices and Tech

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## FCC ISSUES UNIVERSAL LICENSING SYSTEM RULES

**T**he FCC has issued its long-awaited Report and Order on the Universal Licensing System, which affects all Wireless Telecommunications Bureau licensees. Among other things, the ULS will result in replacing Amateur Radio's familiar FCC Form 610 series with a new Form 605. The new rules become official 60 days after publication in The Federal Register--sometime around the end of the year. The FCC said it expects to have the ULS fully operational by next April. Using the ULS, applicants and licensees will be able to file, modify, and renew electronically. Access to the ULS is via <http://www.fcc.gov/wtb/uls/>.

The FCC's action consolidates approximately 40 existing forms into four ULS applications, including the new Form 605. Electronic filing in the ULS will not yet be mandatory for individual amateurs. Hams will have the option of filing electronically or on paper. However, electronic filing via the ULS will be required for Volunteer Examiner Coordinators in the Amateur Service.

Under the ULS, amateurs will use Form 605, the Quick-Form Application for Authorization in the Ship, Aircraft, Amateur, Restricted and Commercial Operator, and General Mobile Radio Services for all purposes. Applicants may continue to use the old forms for six months after the new rules go into effect, however.

Responding to comments from the ARRL and the W5YI Group, the FCC said it would include the Physician's Certification of Disability (Physician's Certification) on the new Form 605 in Part 2 of Schedule D.

As part of its Report and Order on the ULS, the FCC also issued amended rules (in WT Docket 96-188) to authorize visiting foreign hams to operate in the US

## NEW JARC OPERATING

**OCT 15, 1998-OCT 14, 1999**

Be sure to send your reports to WØJRP, and I will try to list your standings monthly. Remember, one point for each state or country worked on HF bands. Extra bonus points for CW or QRP. Also, you get bonus points for each band where you make at least one QSO. There is no contest exchange, points are earned on rag chews and random contacts.

On VHF, one point per grid worked per VHF band, extra points for CW or QRP.

If you have any questions call me at (417) 624-8058.

Good luck,  
73 John WØJRP

pursuant to recent international reciprocal operating agreements. "We conclude that all alien amateur radio reciprocal operation should be authorized by rule," the FCC said. This means that foreign hams holding a CEPT radio-amateur license from a CEPT country or an International Amateur Radio Permit issued by a participating CITEL country may operate while visiting the US without having to apply for permission. Additionally, it will be easier for US hams to operate in participating countries in Europe and the Americas.

Against ARRL objections, the FCC eliminated the one-year term for an alien reciprocal permit and will not require an FCC license document. The FCC noted that the new system is similar to the one already in place for US and Canadian hams to operate in each other's countries. The authority would not extend to US citizens claiming second citizenship and an amateur license from another country, however.

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## THE WORLD OF VHF/UHF

BY JOHN TUDENHAM WØJRP

### LARRY KCØAUY RECEIVES HIS VUCC CERTIFICATE

Larry was waiting for the mailman each day and it finally arrived. He received VUCC Certificate #990. This was done during his first year operating on six meters. This certificate indicates he has worked 100 grid locators on six.

The VUCC program which has created a lot of excitement among VHF'ers started on January 1st, 1983. I received #73.

### SOME SIX METER DX

There have been a few scattered E-skip openings in the last month but nothing like June and July. Larry KCØAUY did pick up NH for a new state. With the Solar flux increasing, long haul world wide F-layer skip DX may not be to far away. Ten meters has been very good this fall with stations all over the world coming through on some days. On six meters, the southern latitudes have been getting some fairly good DX. A friend of mine W5SFW in Texas (grid DM95) worked into Brazil and Argentina around October 25th on six in a two hour opening.

### WATCH OUT FOR METEORS

The annual Leonids meteor shower is expected to peak around November 17th. According to information in various publications and also Don Hilliard WØPW, this year is supposed to be one the the best since 1966. Don said he remembers 1966 well, when two meters sounded like 20 meters. It takes a lot of skill and patience to work the meteors due to the short bursts. In a good shower the bursts may be longer and more frequent. And on six and ten meters, the bursts will generally last longer than on two meters.

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Pluses to retain their current operating privileges. The ARRL said the FCC was on "the right track" in proposing to eliminate the Novice ticket. But the League said its "instant upgrade" plan for Novice and Tech Plus operators is a better approach because it permits "refarming" the underutilized Novice HF subbands. The League called refarming "critical to any comprehensive license restructuring proposal."

The FCC's NPRM sought comments on the issue of Morse code testing and requirements but offered no specific proposals. The ARRL called for a reduction in the number of Morse code examination tiers from three to two--5 and 12 WPM--and changes in the written examinations to make them more relevant and with greater emphasis on current operating practices and newer digital technologies. The League also recommended that the number of written exam questions "increase incrementally" for all license classes above Technician.

The League said that Morse code should not be overemphasized in the licensing process, but should be continued as a licensing requirement above the entry level. It has proposed that General class applicants pass a 5 WPM code test, while Advanced and Extra applicants pass the 12 WPM code test. Subsequent to release of its original restructuring plan, the ARRL Board also decided to ask the FCC to permit Technician operators to use Morse code on the General class HF CW segments without passing a specific code examination.

The ARRL said acknowledged abuses of the CW disability exemption process were an enforcement, not a testing, issue. For those claiming a disability waiver for the higher-speed CW test, the League urged testing accommodations as a preferable alternative. The League also urged an end to multiple-choice CW exams and rules specifying that a passing grade for a Morse examination be either 70 percent correct answers to 10 fill-in questions or one minute out of five of solid copy. The League also praised the "new dawn" in amateur enforcement undertaken within the Compliance and Information Bureau by Riley Hollingsworth, K4ZDH. The ARRL suggested that it

## CLUB HAPPENINGS

### Elections scheduled

Plan to attend the JARC meetings in Nov. to show your support and select your 1999 club officers. Nominations followed by elections will take place Tuesday, Nov. 24th. Contact Dave NØKMP if you wish to serve in any capacity the coming year.

### Christmas Dinner Planned

The Christmas banquet will be at the McCoy's Restaurant Tuesday Dec. 8th, at 18:30. Take the new 71 Hwy south from 32nd street to the 2nd exit (old 71). Exit west, it is about 100 yards on the North side of the highway.

### *Spaghetti Dinner Party Planned* February 23, 1999 6:30pm

Here is an excellent opportunity to invite anyone who may be interested in amateur radio. There will be games, a door prize and lots of spaghetti. More info next month! Any questions, contact Betty Miller 624-4903, Mary Ann Phillips 624-3353 or Cherylann Dannelley 781-6739.

would be "reasonable to withhold any further [rulemaking] action on amateur enforcement" for now and let the CIB continue its work.

The ARRL's comments stressed the value of increasing participation in the hobby and making it available to more people. "By ncreased participation, Amateur Radio can provide even more service to the United States than it does currently, with a simpler licensing structure," the League asserted.

A complete copy of the ARRL's comments in WT Docket 98-143 is available on ARRLWeb at <http://www.arrl.org/news/restructuring/> (see "ARRL's Comments to the FCC on WT Docket 98-143"). Reply comments on the FCC's rulemaking proposals are due January 15, 1999. The FCC is not expected to take action on restructuring at least until sometime next spring.

## PHASE 3D SATELLITE BEGINS THERMAL- VACUUM TESTING

**A**mateur Radio's Phase 3D spacecraft entered the test chamber October 21 to see how it will withstand temperature extremes and the vacuum of space. The satellite spent the previous week being readied for the pre-launch test sequence at the Orbital Sciences Corporation test facility in Germantown, Maryland, just outside Washington, DC. The spacecraft was transported to Maryland by truck from the Phase 3D Integration Lab in Orlando, Florida.

OSC Manager of Systems Integration and Test John Cavallo, KB3BWP, says that once a vacuum has been established in the test chamber, the satellite will undergo several testing cycles at both hot and cold temperature extremes. The spacecraft will be subjected to a maximum temperature of 45 C and a minimum of -20 C over five testing cycles. Each test cycle lasts approximately 36 hours.

Phase 3D Integration Lab Manager Lou McFadin, W5DID, says the spacecraft will be powered up during the thermal-vacuum testing and will transmit telemetry just as though it were already in space. "Things are looking very good," McFadin said October 20, as P3D team members completed status checks prior to the testing.

Assuming the spacecraft successfully passes the thermal-vacuum testing, vibration testing likely will be conducted sometime after the first of the year, McFadin said. The vibration testing is designed to simulate the stresses the spacecraft must endure during launch.

"We look forward to getting this running," said McFadin, expressing the hopes of the amateur community.

For more information on Phase 3D, see the Phase 3D Spacecraft Integration Laboratory Web site, <http://www.magicnet.net/~phase3d/>.

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The FCC said it will require the submission of a Taxpayer Identification Number by applicants and licensees using ULS, "consistent with the requirements of the Debt Collection Improvement Act of 1996." Some commenters, particularly amateur operators, argued against the requirement, saying that disclosure of a TIN--typically a Social Security Number--raised privacy concerns and was unnecessary to the Commission's regulatory goals. But, the FCC said its security measures will limit access to TIN data both on-line and to FCC staff. "Once data has been entered into ULS, sensitive data such as TINs will not be accessible to the public," the FCC said. The FCC has not addressed how it plans to handle applicants who do not have a TIN, such as foreign nationals who hold FCC licenses.

The FCC stood by its plan to use certain eligible private-sector entities, on a strictly voluntary basis, to issue club and military recreation station call signs. Both text and formatted versions of the complete Report and Order, WT Dockets 98-20 and 9 6-188, are available on the FCC Web site, <http://www.fcc.gov>.

REPRINTED FROM THE THE ARRL LETTER  
Vol. 17, No. 42

## KFØTD SEZ...

### IF ALL ELSE CHECK THE FUSE HOLDER

Once again a major problem turned out to be a bad connection, this time it was the connection between the fuse and it's holder.

Now my new \$60 50mc dual trace HP oscilloscope works great. I had been putting off working on it because it worked at the hamfest and when I brought it home and turned it ON, the trace didn't come on the screen until I smacked it on the side. Just took the covers off and started poking around with a fiberglass stick.

Look for the easy things first.

## Buy/Sell Trade

**For Sale - ICOM 290-A 2m All Mode Transceiver** fine shape \$275 OBO.

Ralph Orahood KBØZHC  
(417) 358-7540

11/98

**For Sale - Heath HW-24T Handheld VHF/UHF**, Needs charger.

Ask \$200  
Eric Gilbert (417) 623-2584

10/98

**For Sale - 2 CushCraft DX-120 2m collinear beams.** Each array 20 elements. Total 40 elements. Includes phasing harness.

Ask \$100  
Jim Scott WBØIYC (417) 781-2211

10/98

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However, although infrequent, it is possible for a burst to last 60 seconds on two meters during this shower.

I recall one of my first meteor contacts during the Perseids shower in August 1990. I worked VE5LY in Canada on a strong burst, we then said "QSY to 222 MHz" where we heard each other but could not complete the QSO. It is very difficult on 222 compared to two meters, but I did complete a 222 MHz QSO later with WS4F in Georgia. That's one of the many thrills working VHF. Later that fall I again worked WS4F on 222 during a Tropo opening and signals were S9. We had a 15 minute rag chew this time. We joked about this being the "easy way", but still it is not that common to get S9 signals from MO to GA.

For those interested in possible Six meter long haul DX be sure to check WWV at 18 minutes past the hour. 10 MHz during the day, 5 MHz at night, usually produce the best signals. Solar Flux is not the only indicator, the K-index plays an important part in openings to the south.¶

JOHN IS A REGULAR CONTRIBUTOR  
TO THE JARC PRINTED CIRCUIT AND  
MAY BE CONTACTED THRU THE CLUB P.O. BOX.

## HAMFEST CALENDAR

Note: Listings are updated as information becomes available.

**October 31** Kirkwood, MO  
SLARC & GARA, Kirkwood (St. Louis County), MO. Halloween Hamfest 8:00a.m. to 1:30p.m. at the Kirkwood Community Center. For tables call Steve Welton at 314-638-4959. Talk in on the 146.91 repeater. For Info: Dennis McCarthy, AAØA 5022 Lansdowne Ave., St. Louis, 63109. 314-351-3568 or 314-533-0321 (Ext. 12) E-mail: [mccartdj@slu.edu](mailto:mccartdj@slu.edu)

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**November 1** Des Moines, IA  
Tivka Tracers ARC Hamfest

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**January 16, 1999** St. Joseph, MO  
Missouri Valley ARC & Ray-Clay ARC  
Contact John Winkler, WBØVRA  
Route 1, Box 53A, Gower, MO 64454  
816-424-6484 E-mail: [WB0W@IBM.Net](mailto:WB0W@IBM.Net)

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**February 6, 1999** West Memphis, AR  
Dixie AR Group  
Contact Kellye Farris, KB5RCE  
432 Ross Ave., West Memphis, AR 72301  
870-732-8724  
E-mail: [dixiefest@media-two.com](mailto:dixiefest@media-two.com)

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**February 20, 1999** Russellville, AR  
Arkansas River Valley AR Foundation  
Contact Margaret Alexander, KC5MCS  
1511 North Jackson,  
Russellville, AR 72801 501-968-7270  
E-mail: [ealexand@cswnet.com](mailto:ealexand@cswnet.com)

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**March 13, 1999** Kansas City, MO  
Ararat AR Shrine Club  
Steve Dowdy, WJØI  
12411 Olive St., Kansas City, MO 64146  
816-941-3392 E-mail: [sdowdy@qni.com](mailto:sdowdy@qni.com)

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**March 13, 1999** Fort Smith, Arkansas  
Hamfest - Fort Smith Civic Center  
For information: Kelsey Mikel - KK5KU  
8604 Urban View Dr.  
Fort Smith, AR. 72903  
501-651-7003 E-mail: [kk5ku@amsat.org](mailto:kk5ku@amsat.org)

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**April 23-24 1999** Little Rock, AR  
Little Rock Hamfest

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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, Ray	KBØSTN

### Amateur Radio VE Testing

License testing by volunteer examiners takes place on the 3rd Thursday of each month (except July) 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: **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.

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