



**C** **ALL MEMBERS**  
IMPORTANT information for all mem-  
bers is on PAGE 11 of this issue! Your  
attention to this matter is urgent!



Volume 75 Issue 10  
 October 2004

Happy Halloween

# The Podunk Hollow News

EGYPTIAN RADIO CLUB, INC.  
 50 BOX 562  
 GRANITE CITY, IL 62040-0562

## Amateur Radio Operators Shine in Crises

By Glenn Bischoff

From September 3rd MRT Magazine

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It's common—almost startlingly so—to hear about total strangers banding together in times of crisis. For some unclear reason, basic human instincts governing compassion and charity that usually are suppressed by the dog-eat-dog world in which we live are unleashed when disaster strikes, and people who normally wouldn't even acknowledge each other's presence stand shoulder-to-shoulder to help those less fortunate, and often each other.

Such a scenario is playing out as Hurricane Frances bears down on the state of Florida. As you read this, a cadre of amateur radio operators are providing whatever assistance they can to those who might be affected by the storm.

Some are plying their craft at WLO Radio in Mobile, Ala., the nation's sole provider of high-frequency ship-to-shore radiotelephone and data traffic services to ships at sea, which it has been doing since 1948. WLO also makes space available to an amateur radio club consisting of 10 members.

Support also is being provided by the Maritime Mobile Service Network ([www.mmsn.org](http://www.mmsn.org)), which consists of 68 members

scattered about the country who voluntarily monitor the 14.300 MHz frequency in the 20-meter amateur band on a rotating basis from 12 noon to 10 p.m. eastern time. The organization was formed in 1968 by Navy Chaplain A.W. Robertson to handle phone-patch traffic during the Vietnam War and today still handles third-party traffic for military personnel stationed overseas, according to Rene Stiegler, co-owner of WLO.

When an event such as a major hurricane occurs, the MMSN is "deluged with requests for information," Stiegler said. "It's usually ships at sea that are looking for the latest hurricane advisories and long-range forecasts."

Should one of the volunteers pick up a distress call, he or she connects the call via a phone patch to the U. S. Coast Guard; they also provide location information. "That frequency definitely has become a calling frequency for help, especially for vessels at sea," Stiegler said.

The service provided by the MMSN is especially critical for smaller ships (under 300 gross tons), which are not required to have on board the Global Maritime Distress and Safety System.

Those vessels generally place mayday calls over the 2182 kHz frequency monitored by the Coast Guard, but propagation challenges limit the effective range of those signals to 200 miles, Stiegler said. Ships beyond range of a Coast Guard receiving station then revert to the 14.300 MHz frequency, he added.

Stiegler said the MMSN occasionally receives a distress call from larger commercial ships on that frequency, something he's not sure FCC rules allow. In times of trouble, that becomes a moot question, however.

"If you're out on a boat that's sinking, we're not going to turn you away."

E-mail me at [gbischoff@primediabusiness.com](mailto:gbischoff@primediabusiness.com)

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## September Meeting Minutes

### Minutes of Directors Meeting of Egyptian Radio Club for 9/2/04

Meeting called to Order at 18:30 hrs. by President Jesse Johnson KB9OHJ  
 Directors present; Skip Mize AA9ZV, Walter Wise, WA9BRQ, Bill Dusenberry, N9OQK, Kevin Johnson KZ9D, Roy Hurt AA9UX, Marty Schultz, N9PPJ, and Tod West, KB9AIL.  
 Minutes of previous Board Meeting accepted as Published.  
 Treasurers Report accepted as presented.  
 Repeater Committee; Battery Back-up to be same as proven one on .79.  
 CAT 250 Controller wired in to .76.  
 76 should be back in-service Sat 9/4/04., G6 Ant. is defective will be returned to Vendor.  
 Motion to Adjourn at 18:47.  
 Respectfully submitted Tod A. West KB9AIL Acting Scribe.

### Regular Business Meeting of Egyptian Radio Club of 9/02/04

Meeting Called to Order at 19:00 by President Jess Johnson, KB9OHJ.  
 Same Officers and Directors present as at Board Meeting.  
 All Committee Reports covered in Board Meeting.  
 John from Gateway Electronics was there to pitch "Halloween Ham fest"  
 He had Flyers and Tickets.  
 Roy won 50/50 all went to Repeater Fund.  
 Motion to adjourn at 19:20 hrs.  
 Respectfully Submitted Tod West Sr. KB9AIL Acting Scribe

## September Treasurer Report

September Treasurer's Report of the Egyptian Radio Club Inc.  
 Balance as of 8-5-04.....\$4338.98  
 Deposits; Dues & Donatations.....\$ 53.00  
 Checks Written.....\$ NONE  
 Balance as of 9-1-04.....\$4391.98

**Respectfully Submitted *Tod A West Sr* KB9AIL, Treasurer**



# The Autumnal Equinox (Everything you wanted to know *and more...*)

**What is it?** The Autumnal Equinox happens once a year. At this time, because of the motion of the Earth around the Sun and because the Earth is tilted, *the Sun crosses over the Earth's equator on its way south..* This year, the Autumnal Equinox is **September 23** ( to be precise, at 12:30 am CDT). This marks the start of Autumn (or Fall).

**What's so special about it?** As summer wears on, *the nights have been growing longer and the days shorter.* On this date, *the night becomes longer than the day!* That's just for us in the Northern Hemisphere. For our friends in Australia, it's reversed. Spring has just begun for them.

**On this day,** *the Sun will begin to rise at the South Pole* after six months of darkness. It's going to be daytime there for the next six months! And yes, there are scientists who are living and working down there now! They have a party to celebrate. Wouldn't you if it were eighty below zero outside and the Sun was just coming up?

**On this day,** *the Sun rises directly in the East, and sets directly in the West..* At sunrise and sunset, the shadow of the Sun Tower will point exactly in those directions. On this day, the Sun passes straight overhead, at the "zenith" for people on the equator, like in Kenya or Ecuador. When the Sun passes straight overhead, there aren't any shadows! The equinoxes (there are two -- the Vernal Equinox marks the first day of spring) have a rich place in mythology and ancient traditions. Ancients believed the gods guided the Sun across the sky, and so they paid attention to the way that it moved. (of course, we now know that what's really moving is us.)

**A minor point ...** if you look up the rising and setting time of the Sun in the newspaper, it'll look as if the day is still a bit longer than the night. That's mostly because "sunset" and "sunrise" are defined by the top edge of the Sun, not the middle of it, and the middle of the sun sets (rises) a few minutes before (after) the edge does.

(brought to you by "Universe in Motion")

## Birthday List for October



Lloyd Bishop N9CYY  
October 26

Wally Wise WA9BRQ  
October 27

Tom Bingham K9ZYW  
October 31

Roger Forshee N9JGU  
October 15



## Correction to the Membership List

Any incorrect listing in the Egyptian Radio Club membership should be brought to the attention of Wally Wise, WA9BRQ. The email address is [w.l.wise@mindspring.com](mailto:w.l.wise@mindspring.com) (note the two dots after the initials) and the phone number is 618-288-9732.

Gremlins do slip in once in a while and the following error was brought to the attention of the club recently. Tod West, Sr., KB9AIL was incorrectly listed as a General. Tod is an Extra Class license holder and has been for a number of years. Apologies to Tod.

# Out-of-this-World QSL Card

*Been there, done that? Try this. Real Live DX work!*

Extra-Terrestrial QSL Cards. To encourage amateur participation in the growing fields of radio astronomy and SETI, The SETI League, Inc. announces its Extra-Terrestrial QSL Card program. We are offering the special card depicted here to commemorate confirmed reception of a variety of extra-terrestrial signals: man-made, natural, and even (dare we hope?) alien!

## **Background:**

Since early in the last century, amateur radio operators have observed a tradition of exchanging postal cards to commemorate their on-the-air contacts. So-called QSL cards (named for the International Morse Code signal for 'confirmation') are used as proof of successful radio contact with stations in rare and distant locations. Many operators in exotic lands employ the services of a QSL manager to distribute their much sought after cards. As the world's radio hams prepare for the eventual reception of signals from civilizations in space, The SETI League, Inc. has stepped forward as QSL Manager to ET.

## **Eligibility:**

SETI enthusiasts documenting radio reception from beyond Earth of an artificial satellite, manned or unmanned space probe, natural astrophysical phenomenon, Earth transmission bounced off the moon or another planet, or confirmed electromagnetic evidence of another civilization in space, are eligible to apply for a QSL Card from The SETI League, Inc. The program is open to SETI League members and non-members alike, although interested parties are encouraged to join the nonprofit SETI League, Inc.

## **Categories:**

QSL cards will be issued for documented reception of unique sources in any of four specific categories of extra-terrestrial electromagnetic emission, as follows:

**Natural** -- Electromagnetic radiation emanating from a nebula, supernova, pulsar, star, planet, interstellar gas cloud, galaxy, or similar natural astrophysical phenomenon.

**Moonbounce** -- Recovered reflection of an Earth-based transmission deliberately or inadvertently bounced off of a natural astronomical body, including comets, asteroids, the Moon, a neighboring planet, or the moons of a neighboring planet.

**Human** -- Electromagnetic transmissions from any manned or unmanned spacecraft, space probe, communications or navigation satellite, or similar artifact of human technology, if received from beyond the Earth's atmosphere on qualifying equipment (see **Equipment**, below).

**Alien** -- the Holy Grail of SETI; a signal which is independently confirmed and generally acknowledged to be of intelligent origin, from beyond Earth, and having been generated by beings not of this planet.

## **Duplicate Observations:**

Detections from different, uniquely identifiable passive reflectors (i.e, a given moon, planet, specific asteroid, comet, or meteor shower) qualify for separate QSL cards. Only one QSL card will be issued for each source observed, except that repeat observations in different ham radio bands or radio astronomy bands will count as unique detections.

In the case of detections involving multiple examples of the same family of artificial source (e.g., multiple GPS satellites all received on the same frequency), a single QSL card will be issued, although each uniquely identified source still counts as a separate detection for purposes of the ETCC Award.

## **Equipment:**

To qualify for a QSL Card, documented reception must have been accomplished with equipment normally

used for, or capable of being used for, radio astronomy. Reception of navigation signals on a GPS or similar geo-location receiver, placing of a mobile telephone call which has been relayed via satellite, or the reception of satellite TV or similar broadcast signals from an orbiting spacecraft, are specifically excluded from consideration for this award.

**Documentation:**

Reception reports should be accompanied by the following documentation:

- a statement as to the date, time, frequency, and coordinates (celestial or terrestrial) of reception.
- a description of the reception equipment used.
- the observer's best estimate as to the nature and origin of the signal.
- physical evidence of the claimed detection, such as a strip-chart recorder output, computer printout, or digital signal processor file. (Clear photocopies of documentation are entirely acceptable.)

**Address:**

Mail all QSL materials to:

Operating Awards  
The SETI League, Inc.  
PO Box 555  
Little Ferry NJ 07643 USA

**Scrutiny:**

All claimed detections will be reviewed by the Awards Committee of The SETI League, Inc. Claims specifically of detection in the Alien category will be subjected to the utmost scrutiny. QSL cards will be awarded only in those cases where the claimed detection is deemed credible, in the sole discretion of The SETI League, Inc.

**Cost:**

There will be no charge for the issuance of any Extra-Terrestrial QSL. Claimants in the US are asked to provide a stamped, self-addressed #10 business sized envelope, for each QSL Card requested. Claimants outside of the US are asked to provide a self-addressed envelope of similar size, and two International Reply Coupons (IRCs) per QSL Card requested. Participants are welcome to make voluntary contributions to the nonprofit SETI League, Inc., which may be tax deductible to the extent allowed by law.

**False Claims:**

Any evidence of detection which The SETI League, Inc., in its sole discretion, deems to be deliberately false, misleading, or in any way altered, will be disqualified from consideration, and the submitter excluded from participation in SETI League programs. *Hoaxes will not be tolerated.*



Front side of the SETI League QSL Card.

# FCC revising RF radiation rules

By Harry Martin

The FCC expects to issue an order this fall revising some of the radio frequency (RF) radiation rules applicable to broadcast stations. In a proceeding that commenced last summer, the FCC is considering modifications to some of its RF evaluation and measurement procedures, addition of more specific definitions regarding "occupational" exposure, and elimination of inconsistencies in the RF radiation rules. The proposed rule will include revised procedures for determining whether a station is excluded from the requirement to evaluate RF radiation, a revised definition of the people to whom occupational/controlled exposure limits apply, and revised procedures for use of spatial averaging to show compliance with exposure limits.

- **Who will be subject to routine RF evaluation?**

All broadcast stations currently are required to perform routine RF evaluations at certain times. The only proposed change would affect LPFM stations (because they operate at a maximum power of 100W). The FCC is considering excluding from the routine evaluation requirement those LPFM stations that have a separation distance of at least 3 meters between any portion of the radiating structure of the transmitting antenna and any area accessible to the general public or workers not meeting the criteria for the higher occupational/controlled RF exposure limits. For experimental broadcast stations, FM translators and FM boosters, the rules currently require routine RF evaluations if the power is greater than 100W. The FCC has proposed to require, in addition, routine RF evaluations for these stations that operate with 100W or less power if the distance separation is less than 3 meters. In this connection the FCC has asked whether it should adopt different distance separations for different frequencies for these stations.

- **Definition For Occupational/Controlled Exposure Limits**

The RF radiation rules contain two sets of exposure limits. Higher occupational/controlled exposure limits apply to workers who are fully aware of the potential for exposure and can exercise control over their exposure. These higher limits also apply to transient individuals (i.e., those who pass through a controlled area subject to the higher limits) if they are made aware of the potential for exposure.

For individuals meeting the occupational/controlled criteria, the FCC proposes to define "fully aware" as having received written and verbal information concerning the potential for RF exposure and training regarding appropriate work practices for controlling or mitigating exposure. Additionally, the term "exercise control" would be defined as the ability to reduce or avoid exposure by administrative or engineering work practices (as personal protective equipment or time-averaging exposure).

- **Spatial-averaging**

Spatial-averaging is an RF radiation measurement technique used to determine the amount of RF exposure at a particular spot by averaging the electric and magnetic fields (squared) over an area equivalent to the area normally occupied by a standing human body. The FCC believes that there has been confusion about when the use of spatial-averaging is appropriate. It expressed concerns about situations where a localized (spatial peak) field intensity exceeds the exposure limits near an antenna (which is potentially accessible to workers or the public) despite the fact that the spatially averaged measurement over the area indicates compliance with exposure limits. The concern is that localized hot spots could lead to exposure in the body of a nearby person that exceeds the partial-body limits while not exceeding the whole-body limit. The FCC is seeking comments on how to ensure compliance in such situations and, in particular, when reliance on spatial-averaging is appropriate. Comments filed in the rulemaking suggested that spatial peak measurements alone may be sufficient to show compliance with exposure limits. The FCC is also seeking comments on procedures and techniques for whole-body spatial averaging, including the positioning of the observer relative to the antenna.

The Author: *Martin is president of the Federal Communications Bar Association and a member of Fletcher, Heald & Hildreth, Arlington, VA.*

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## Planned ARRL Petition to the FCC to Regulate Subbands by Bandwidth

Later this year, the ARRL plans to file a petition with the FCC seeking the regulation of amateur subbands by bandwidth rather than by mode of emission.

The principle of the petition was adopted by the ARRL Board of Directors in July 2002. The motion adopted at that time (Minute 64) reads: "At the next practical opportunity the ARRL shall petition the FCC to revise Part 97 to regulate subbands by signal bandwidth instead of by mode."

The main objective is to make appropriate provision for digital modes in the HF amateur bands, while preserving amateurs' prerogatives to use the traditional modes.

Before the petition was drafted, expert advice was sought from the amateur HF digital community. An ARRL Ad Hoc HF Digital Committee was formed. The committee submitted its report several months prior to the July 2003 meeting of the ARRL Board. Staff also provided an interim report at that time. A draft petition was reviewed by the Board at its January 2004 meeting. Additional review was conducted by the ARRL Executive Committee at its March 2004 meeting, and a final review by Board members was accomplished by electronic mail in late July.

In March the Executive Committee decided that a synopsis and explanation of the petition should be made available to ARRL members *before* it is filed with the FCC to give members and others who may be interested an opportunity to understand what is being proposed, and why.

Here are some points about the ARRL proposals that may be worth emphasizing:

- Double-sideband AM operation is preserved unchanged, but without opening the phone bands to digital and other modes of the same bandwidth.
- At the present time, RTTY and data emissions are permitted by FCC rule throughout the HF "CW subbands." It is only through compliance with "gentlemen's agreements" that RTTY and data signals are not heard in the parts of the band that are generally used for CW. The proposed rules would limit bandwidth in these "CW subbands" to 200 Hz.
- Bandwidth in the existing "RTTY/data subbands" would be limited by rule to either 500 Hz or 3 kHz. In the following subbands where 3 kHz would be permitted, phone emissions would specifically **not** be permitted: 3650-3725, 7100-7125, 14100-14150, and 21150-21200 kHz. The reason for this is to encourage the development of higher-speed data communications in these subbands by preventing them from becoming *de facto* "expanded phone bands." The prior ARRL proposal to expand some HF phone bands is included in the separate FCC Notice of Proposed Rule Making, WT Docket No. 04-140, and is taken into account in these new proposals.
- Amateurs would not be required to be able to measure the bandwidth of their signals. The proposed bandwidths are more than sufficient for "clean" signals using the traditional HF modes. We have had regulation by bandwidth for certain data operations for many years without fomenting great debate over whether or not a particular signal was legal. Measurement would only arise as a potential problem for those who try to push the edge of the envelope.
- Bandwidth limits would be eliminated in the 222-225 MHz band; the only bandwidth limitation would be that the signal must be confined within the band.

Please read the synopsis of the petition, as well as the exact rule changes that will be proposed. If you have any questions or comments, please direct them to [bandwidth@arrl.org](mailto:bandwidth@arrl.org). ARRL staff will do its best to answer your questions. Comments will be forwarded to your ARRL division director. Members are also welcome, as always, to comment directly to their own director using the email address listed on page 15 of any recent issue of *QST*.

## SYNOPSIS OF THE ARRL BANDWIDTH PETITION

### Introduction

The rule changes proposed in this petition would comprehensively modify the means by which the extremely varied emission modes in the Amateur Radio Service are developed, experimented with, and regularly utilized in the course of normal Amateur Radio communications. In short, the Petition proposes Amateur band segmentation not by emission type, but by maximum bandwidth. This petition seeks for the Amateur Radio Service the flexibility to experiment with new digital transmission methods and types. The changes proposed will also update the Commission's rules, and eliminate much of the currently cumbersome procedures for determining whether a new digital communications technology is or is not permitted under the Part 97 regulations.

### Background

The Amateur Radio Service rules limit emission types that can be deployed in the Amateur Service. The reason for this is largely historical, rather than practical. ARRL suggests a shift in regulatory philosophy to one based on facilitating research, development, experimentation and refinement of Amateur Radio digital communications techniques and advanced technologies. In order to encourage the implementation of new technologies in the Amateur Radio Service, the rules must be modified to more flexibly accommodate use of such technologies. The philosophy espoused herein is to regulate bands by bandwidth rather than specific or defined emission modes. This is to make it easier for new types of emissions to be introduced compatibly among incumbent emission types, while reducing or eliminating the regulatory burden of interpreting rules in the context of an outdated regulatory matrix. This can be done without prohibiting or significantly restricting use of current Amateur Radio technologies and emission modes. Care has been exercised to avoid any reduction of choices of emissions that could be used by existing licensees.

Established amateur practice, current rules, and accepted band plans generally provide for narrow-bandwidth signals at the lower frequency range of each band with wider bandwidth emission types at the top. In order to implement digital technologies, there appears to be a need for an intermediate bandwidth in the middle of certain bands.

This petition seeks to facilitate the use of new digital technologies without the regulatory remnants developed at a time when the principal emissions used in the Amateur Radio Service were Morse telegraphy and single- or double-sideband amplitude-modulated telephony.

The existing rules incorporate both bandwidth and symbol-rate limits. This double regulation undoubtedly has handicapped Amateur digital data communications. It is now clearly necessary to permit higher data rates to accommodate the development of digital multimedia technology.

The existing rules do provide some accommodation for new digital technologies. Specific "designer" digital data modes were accommodated due to a modification of §97.309(a)(4):

An amateur station transmitting a RTTY or data emission using a digital code specified in this paragraph may use any technique whose technical characteristics have been documented publicly, such as CLOVER, G-TOR, or PacTOR, for the purpose of facilitating communications.

Digital voice is also accommodated to a certain extent under the definition of *Phone* in §97.3(c)(5), though the accommodation requires some interpretation, and the matter is not clear to many radio amateurs, leading to burdensome interpretational questions to ARRL and Commission staff. Amateur Radio operators have both scientific curiosity and a healthy self-regulatory attitude. As such, they tend to avoid use of experimental technologies if there is a question about the legality of it under the Part 97 rules.

In addition, given the current expectations for use of digital multimedia, the lines between data, image and voice have blurred. As an example, amateurs are now sending pictures using MFSK 16 in the segments of the bands where data (not image) emission is permitted. A reasonable interpretation of the current Part 97 rules would indicate that this is permitted, but the legality of it is not readily apparent to all who would otherwise experiment with digital multimedia.

In summary, there is a need to permit higher speed digital data communications in the bands between 1.8 and 450 MHz. The simplest means of streamlining the Commission's rules, while at the same time providing maximum flexibility for the incorporation of new digital communications looking forward to the next decade, is to provide for band segmentation by bandwidth rather than by emission mode in the Part 97 Rules.

Regulation of emissions by limiting bandwidth is not the only option. Many countries do not segment their amateur bands by bandwidth or mode in their domestic regulations. Rather, band planning is done either on a regional basis through the International Amateur Radio Union band plans, or through voluntary band plans developed by the national Amateur Radio society in that country. In those cases, the rules simply require that amateur signals be kept within the allocated band. Because there is a strong tradition in the United States of restricting subbands by rule rather than purely through voluntary band plans, complete elimination of regulatory band segments and complete reliance on informal band planning does not appear to be a suitable option in the United States.

Continued on Pg 10

### **Band-by-Band Summary**

The following is a band-by-band summary of the changes proposed in the table at § 97.305(e). For details see "Proposed Rules Changes." The proposed changes are intended and are believed to be consistent with the Commission's proposal for "refarming" the Novice Class subbands proposed in WT Docket No. 04-140, and which is now pending.

? **160 m band:** This petition does not propose segmenting the 160-meter band but would allow bandwidths from 0 to 3 kHz throughout (while permitting DSB-AM and ISB). ARRL's band plan recommends that the band be segmented informally by mode. ARRL does not suggest band segmentation in this band by regulation. However, should the Commission determine at some time in the future that segmentation by regulation is in the public interest, it is recommended that the segmentation be accomplished by bandwidth limits and not by emission mode, in accordance with the recommendations in this Petition.

? **80 m and 75 m bands:** The three tiers of bandwidth are as recommended by ARRL's *ad hoc* HF Digital Committee. Standard (4) ensures that the 3-kHz digital segment does not simply result in a *de facto* expansion of the phone band beyond the 25 kHz expansion proposed in WT Docket No. 04-140.

? **60 m band:** The five channels and the Alaska Emergency calling channel are added here because they have specific bandwidth limitations inherent in the Amateur allocation, which should be specified as are other bands in the table, especially because of the unique maximum bandwidths specified elsewhere in the rules.

? **40 m band:** This is consistent with the recommendation of the ARRL *ad hoc* HF Digital Committee regarding bandwidths but has been modified to take WT Docket No. 04-140 into account.

? **30 m band:** This proposes 200 and 500-Hz bandwidths but does not propose 3 kHz, which would open the band to phone operation or other voice-bandwidth modes. It is ARRL's view that voice-bandwidth emissions should not be permitted in this band because of this relatively narrow secondary international allocation and the need to avoid interference to the primary service in other countries.

? **20 m band:** The limitation in the 14.100-14.150 MHz segment would prohibit telephony but would permit the development of higher-speed data and image techniques using bandwidths of up to 3 kHz.

? **17, 15 and 12 m bands:** These preserve the status quo except to introduce a 3-kHz digital segment in the 15 m band.

? **10 m band:** This would permit a 16-kHz bandwidth in the upper part of the band, 29.0-29.7 MHz, but otherwise preserves the status quo.

? **6 and 2 m bands:** This preserves the lower 300 kHz in each band for narrowband, weak-signal modes reflecting established practice, but opens the rest of these bands for bandwidths up to 100 kHz. This is intended to permit new modes, particularly mu-1 media.

? **1.25 m band(s):** Both of the segments of this band already permit up to 100 kHz bandwidth for data. The ARRL requested in RM-10413 that spread spectrum emissions be authorized in the 222-225 MHz band.

? **70 cm through 1 mm bands:** Present rules permit 100 kHz for data but allow wider bandwidth for TV, generally regarded as up to 6 MHz for vestigial sideband AM in bands below 1240 MHz, noting that FM TV is used in bands above 1240 MHz. In these bands, the rules should minimize regulation of bandwidth to permit maximum flexibility in Amateur operation. The only limitation should be to keep the occupied bandwidth of the emission in the allocated in the band and utilize normal band-sharing protocols.

One new limitation being proposed, as recommended by the Ad Hoc Digital Committee, is to eliminate fully automatic control of HF data communications in the bands below 28.0 MHz. Fully automatic control, where both stations in communication are under automatic control, was initiated in the mid-1980s to provide for the automatic forwarding of messages using the AX.25 packet protocol. Today it is not necessary and complicates efficient sharing of crowded HF spectrum. However, "semi-automatic control," where one station is automatically controlled but all communication must be initiated by a station under operator control, appears to be practicable. Therefore, modifications of § 97.109(e) and §97.221(b) are proposed to eliminate automatic control of HF data operation below 28.0 MHz except where one station in communication is under local control of an operator.

While it would be impractical for an automatically controlled station to tell whether the other station is under automatic or local control, it should suffice to require that stations under automatic control not initiate communications.

The title of § 97.221, "Automatically controlled digital station" is misleading and is proposed to read, "Automatically controlled stations transmitting RTTY or data emissions." The term "digital" is too broad, as CW is a digital emission, also especially since the introduction of digital voice and digital image emissions.

Section 97.119 (b)(1) is proposed to be modified by adding MCW for the purposes of identification in addition to CW, as the former is in common use for repeater identification. Phone emission in the English language is proposed to remain but with the limitation that it be done on frequency segments where there is sufficient bandwidth authorized. Identification in the emission used for communication is also proposed, which will cover new emissions not originally specified. Accordingly, there is no longer a need to specify identification in accordance with § 73.482(a) and it is proposed that § 97.119(b)(4) be deleted.

The current § 97.305(b) mixes the subjects of test transmissions, pulse emissions and spread spectrum. For ease of understanding, it should be amended to deal only with test emissions.

Rather than the current language in § 97.309 concerning RTTY and data emission codes which specify some codes but permit others that are published, the proposal is simply that the digital codes be published.

**More Info:** <http://www.arrl.org/announce/bandwidth.html>

**ATTENTION ALL MEMBERS**  
**PLEASE READ CAREFULLY:**  
**THIS INVOLVES IMPORTANT CLUB BUSINESS!!**

The Board of Directors was approached at the August meeting by concerned members about the possibility of moving the activities of the ERC to a new location. This proposal was prompted by several issues including decreasing hamfest revenues, restrictions on the club in respect to food service at our events, and past difficulties in assuring meeting room reservations, among others. A possible location was identified and the President appointed a four-member committee to visit the site, obtain relevant information, and return to report to the board. The report will be presented to the board at the October meeting. The board will hear pros and cons, and then will present an unbiased and detailed summary to the general membership at the November business meeting. *At the November business meeting the subject will be voted on by the general membership.* If you are not present to vote, you could find the club moving without your opinion or knowledge.

*It is important that you be at the meeting at 7:00 PM on November 4th.*

**YOUR VOTE WILL DETERMINE THE OUTCOME**

The location proposed is the Collinsville American Legion hall on Vandalia in Collinsville (across from the old Collinsville High School). Pictures are below.

*Complete information will be available to the general membership at the meeting in November. Please clear your calendar and plan to be at that meeting if you wish to have your say in this issue. Majority vote will rule.*



Front entrance and partial parking lot view.



The proposed meeting room for the monthly meetings.



The large outdoor pavilion and BBQ and grilling pit.

## October 2004

# WA7BNM Contest Calendar

TARA PSK Rumble Contest 0000Z-2400Z, Oct 2  
Oceania DX Contest, Phone 0800Z, Oct 2 to 0800Z, Oct 3  
EU Autumn Sprint, SSB 1500Z-1859Z, Oct 2  
California QSO Party 1600Z, Oct 2 to 2200Z, Oct 3  
UBA ON Contest, SSB 0600Z-1000Z, Oct 3  
RSGB 21/28 MHz Contest, SSB 0700Z-1900Z, Oct 3  
German Telegraphy Contest 0700Z-0959Z, Oct 3 ARS  
Spartan Sprint 0100Z-0300Z, Oct 5  
YLRL Anniversary Party, CW 1400Z, Oct 6 to 0200Z, Oct 8  
432 MHz Fall Sprint 1900 local -2300 local , Oct 6  
SARL 80m QSO Party 1700Z-2000Z, Oct 7  
Makrothen RTTY Contest 0000Z-0800Z, Oct 9 and 1600Z-2400Z, Oct 9 and 0800Z-1600Z, Oct 10  
Oceania DX Contest, CW 0800Z, Oct 9 to 0800Z, Oct 10  
EU Autumn Sprint, CW 1500Z-1859Z, Oct 9  
Pennsylvania QSO Party 1600Z, Oct 9 to 0500Z, Oct 10 and 1300Z-2200Z, Oct 10  
FISTS Fall Sprint 1700Z-2100Z, Oct 9  
North American Sprint, RTTY 0000Z-0400Z, Oct 10  
10-10 Int. 10-10 Day Sprint 0001Z-2359Z, Oct 10  
UBA ON Contest, CW 0600Z-1000Z, Oct 10  
YLRL Anniversary Party, SSB 1400Z, Oct 13 to 0200Z, Oct 15  
JARTS WW RTTY Contest 0000Z, Oct 16 to 2400Z, Oct 17  
Microwave Fall Sprint 0600 local -1300 local , Oct 16  
Worked All Germany Contest 1500Z, Oct 16 to 1459Z, Oct 17  
Asia-Pacific Fall Sprint, CW 0000Z-0200Z, Oct 17  
UBA ON Contest, 2m 0600Z-1000Z, Oct 17  
RSGB 21/28 MHz Contest, CW 0700Z-1900Z, Oct 17  
W/VE Islands QSO Party 1600Z, Oct 23 to 2359Z, Oct 24 50 MHz  
Fall Sprint 2300Z, Oct 23 to 0300Z, Oct 24  
FISTS Coast to Coast Contest 0000Z-2400Z, Oct 24  
**CQ Worldwide DX Contest, SSB 0000Z, Oct 30 to 2400Z, Oct 31**  
10-10 Int. Fall Contest, CW 0001Z, Oct 30 to 2359Z, Oct 31  
ARCI Fall QSO Party 1200Z, Oct 30 to 2400Z, Oct 31

*Calendar content © Bruce Horn, WA7BNM 1998-2004*

# HAM RADIO WORDSEARCH



The crossword wasn't enough, eh? Well try this word search on for size!

The words are on the next page and the answer will be in the November issue!



# Words for Word Search on Pg 14

AMPS  
ANTENNA  
ARRL  
CAPACITOR  
COLLINS  
CURRENT  
EXTRA CLASS  
GMT  
HAM  
HEATHKIT  
HERTZ  
LINEAR  
MEGACYCLE  
MOBILE  
MORSE CODE  
NEWINGTON  
NICAD  
OHMS  
OSCAR  
QRZ  
RESISTOR  
SINE WAVE  
SSB  
TUBE  
VOLTAGE  
WPM



Wordsearch Courtesy R Sarrio



## THE BELL GAP



Manufactured by the Electric Machine Co. of Indianapolis, Indiana, this rotary spark gap, ca. 1920, has an aluminum housing. *(Larry Chestnut - Ellington, CT)*



## HAMFEST LISTINGS OCTOBER

South-Side ARC  
Grandview MO  
16 Oct 2004  
Donna Quick, KB0YJN  
Phone: 816-537-7464  
Email: kb0yjn@juno.com

Southwest Missouri ARC  
Lance Riffle, KC0KBL  
PO Box 11363  
Springfield, MO 65808  
Phone: 417-827-1274  
Email: kc0kbl@arrl.net  
<http://www.smarc.org/>

Saint Louis ARC  
Ken Craig, WA0IYY  
1216 Summers End Drive  
Fenton, MO 63026  
Phone: 314-397-1893  
Email: WA0IYY@STL-OnLine.Net  
<http://www.halloweenhamfest.org/>

No Illinois Events Listed for October.



## Musings from the Peanut Gallery

### 'Public Service' Begins at Home

Bill Crowell N6AYJ

The best way for hams to provide a public service is to do as follows, and in the following order of importance:

1. Be a good parent to your kids so they won't grow up to be all screwed up and become public charges.
2. Work hard in order to earn a good living so your family can worry about other things, such as pursuing their personal interests and furthering their education, again so they won't become public charges.
3. Pay your taxes. Uncle Sam needs the money to pay all those public charges!
4. Be an "elmer" to a kid who's interested in radio.
5. After you have done all (4) above, then and only then do you have the right to perform any traditional "public service" work and to believe that you are thereby actually helping anybody.

I know, I know, I am going overboard on this. Obviously, the people who provided communications for hurricane Charlie & Ivan, for example, performed a valid public service, even if they didn't do 1 through 4, above. I guess I am speaking mostly rhetorically.

### ***Hoosier Hills Hamfest***

October 3, 2004

Lawrence County 4-H Fairgrounds

Bedford, Indiana

Gates open at 6:00am

International Style Foxhunt at 9:00am

VE Testing at 12:00pm

(please register 10-15 minutes ahead)

Grand Prize awarded at 3:00pm

Door Prizes awarded hourly.

Admission \$8.00

Camping \$15.00 Talk-in 146.730-/CTCSS 107.2

# ARRL Illinois Section (IL)

Section Manager  
Sharon Harlan, N9SH  
5931 Alma Drive  
Rockford, IL 61108  
815-398-2683  
n9sh@arrl.org

## Section News

SM-Sharon Harlan, N9SH, ASM KB9NW, ASM W9FX, ACC KC9AVP, SEC KC6VVT, STM K9CNP, PIC N9EWA, TC WA9IL, OOC KB9FBI, DEC Central N9NP, DEC/SW KB9AIL, DEC/NE K9NYO, DEC/NW KA9IMX, DEC/SD WA9APQ

As I start my second two year term I would like to thank all of you for your support over the last two years. This has been a fun two years for me and I look forward to visiting the different hamfests throughout the section and hopefully a few club meetings as well.---In case you don't know, the Princeton, IL. City Council under the leadership of its City Manager, is seriously considering setting up a BPL system. A small test is planned for November, with system expansion to follow in a few months if there are no economic or technical problems disclosed by the test. This is the first BPL effort in Illinois. Director Isely is planning to attend the Princeton City Council meeting on Monday evening, August 16th and speak on and answer questions on BPL. Director Isely says, "This BPL system may, or may not be in your back yard, but I understand it's the first in Illinois and defeating it will advance our overall effort to get rid of this RF pestilence early on." Dick says he will be far more effective if there were 20 to 30 hams present at this meeting, and hams from the immediate area should make attending this meeting a priority.---N9QZA, Jackson Clodfelter and WB9UDJ, Gary Auerwald traveled by invitation to the National Security Headquarters (NSA) located at Ft. Meade, MD, to attend the dedication of a Navy EA-3B Skywarrior Electronic Spy aircraft into the National Vigilance Park on NSA grounds. Honored at the ceremony was the crew from a EA3B that crashed onto the USS Nimitz in 1987 in which all 7 of the crew perished. The aircraft installed into the park has a BuNo that is only one away from the one that N9QZA spent multiple years of his Army Signal Intelligence career in the "Belly of the Whale." The EA3B aircraft, originally designed as a nuclear bomber, was the largest aircraft designed for routine carrier operation. Its large size got it nicknamed "The Whale" as it challenged even the most experienced pilots in landing on a carrier in good weather. The NSA National Vigilance Park was dedicated in 1997 to honor the 180 men that lost their lives in the Cold War collecting intelligence from the air.---The Northern Illinois Steam Power Amateur Radio Operator's, W9S, will be found from 1300Z Aug 10--2300 Aug 16. This is the 48th annual show commemorating steam power on the farm. Frequencies to be used are: 28.390; 14.245; 7.245; 3,980. For a certificate send a SASE to Bob Yurs, W9ICU, P.O. Box 341, Sycamore, IL. 60178.---Look for another special event atation commemorating KARS 80th year. The Kankakee Area Radio Society will operate under the club call sign W9AZ from 1400Z Aug. 14th to 2000Z Aug 15th. The station will be set up at Korkner Aviation (airport), Rt. 115 W, Kankakee. For more information contact K9BIG at K9big@arrl.net---Be sure to attend the Bolingbrook ARS Hamfest 2004 at the Inwood Rec Center, 3000 W. Jefferson St, (Rt. 52), Joliet, IL. Talk in 147.33+ and 224.54-. See you there. Coming in September, Superfest and the Illinois State Convention, Peoria, September 18-19. Radio Expo, Grays Lake IL. September 18-19.---July traffic: WB9TVD-6; W9HLX-47; KA9IMX-10; KA9MZJ-18; WA9APQ-12; (JUNE TRAFFIC REPORT FOR KA9MZK-20); North Central Phone Net 27 Sessions, QNI-169; QTC-32.

*Responsibility for content of all posted material above rests exclusively with the item author. Your newsletter editor, or the ARRL staff assumes no responsibility for errors, omissions, and accuracy of items appearing on this page. All questions and comments should be directed to the item author. From the ARRL website.*

I am forwarding a recent exchange which should be of interest to every EMCOMM instructor. Expect to see changes in the course material coming from these changes.

**Terry WX7S**

I just got off the phone with Chris Imlay concerning the request from Pat McPherson of SATERN for an FCC waiver of the prohibition on third party communications for emergency in the Bahamas, a country with which the US does not share a third party traffic agreement. As background, late last week, a similar request was made as Hurricane Ivan was causing devastating damage to the Cayman Islands, which does not share A third party agreement with the US. Steve asked DS

who said that the WRC-03 changes in the international Radio Regulations on international emergency third party traffic did not require a formal statement from the FCC. Imlay asked Bill Cross who said that it was not a problem for the Caymans.

This is the Web Crawl that resulted:

Cayman Islands emergency traffic exempt from third-party traffic rules (Sep 15, 2004) -- Because of changes to the international Radio Regulations at World Administrative Conference 2003, the FCC will not enforce third-party traffic rules contained in 97.115 of the FCC Amateur Radio Service rules for the passage of emergency and health and welfare traffic. The FCC continues to evaluate necessary revisions to the wording of Part 97 to

reflect the WRC-03 changes, but Commission staff has assured ARRL that it will not sanction amateurs passing appropriate emergency-related traffic with stations in the Cayman Islands, with which the US has no third-party traffic agreement.

Concerning the Bahamas and Hurricane Jeanne, Chris Imlay said that he has coordinated with Riley Hollingsworth as well as Cross and that there will be no FCC enforcement of the international third party rules where an emergency Exists (not just Bahamas and Cayman Islands), including H&W traffic.

See September QST 2003, pp. 42-43.

Officer	Call	Name	Phone	E-Mail
<b>President</b>	KB9OHJ	Jesse Johnson	618-797-2770	jazz@jazzco.com
<b>Vice President</b>	AA9ZV	Skip Mize	618-346-8655	fiuinc@peaknet.net
<b>Secretary</b>	AA9RT	Lou Cassady	618-656-7052	aa9rt@arrl.net
<b>Treasurer</b>	KB9AIL	Tod West Sr.	618-667-4592	kb9ail@arrl.net
<b>Asst Treasurer</b>	KC9DBY	Charles Lust	618-344-3358	Squirrel-nest@papadocs.com
<b>Trustee (04)</b>	KZ9D	Kevin Johnson	618-931-5405	kz9d@charter.net
<b>Trustee (05)</b>	AA9UX	Roy Hurt	618-877-4113	roy@apci.net
<b>Trustee (05)</b>	WA9BRQ	Walter Wise	618-288-9732	w.l.wise@mindspring.com
<b>Trustee (NA)</b>	N9OQK	Bill Dusenbery	618-398-1456	wdusenb@siue.edu
<b>Trustee (04)</b>	N9PPJ	Marty Schultz	618-692-0584	martysc@charter.net
<b>Corporate Legal Trustee</b>	N9PTO	Bud Hurt	618-656-8544	burt@empowering.com
<b>W9AIU License Trustee</b>	AA9RT	Lou Cassady	618-656-7052	aa9rt@arrl.net

# Egyptian Radio Club, Inc. W9AIU

PO Box 562, Granite City, IL 62040-0562

## Membership Application

This form is for new member applications and for maintaining membership data. Please complete all blanks.

### Personal Data

Name \_\_\_\_\_ Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Address \_\_\_\_\_ Home Phone \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Your Amateur Call Sign \_\_\_\_\_ License Class \_\_\_\_\_  
 License Expiration Date \_\_\_\_\_ email \_\_\_\_\_@\_\_\_\_\_

Class of Membership	Initiation Fee	Annual Dues
~ Voting Membership	\$15.00	\$24.00
~ Non-Voting Membership*	\$5.00	\$12.00
*Non-voting members are those members less than 18 or (optionally) those living more than 50 air miles from the club meeting place.		
~ Age 62 or older	\$5.00	\$12.00
~ Family Members**	\$5.00	\$12.00
**Family members are those members living in the same household as a voting member.		
Initiation fees and one year's dues must be paid at the time of application. Dues will be pro-rated January thru December. <b>A copy of your Amateur Radio License is also requested at the time of application.</b>		

I hereby apply for membership in the Egyptian Radio Club, Inc. and agree to accept and follow its by-laws. I also agree to operate my station in accordance with the Rules and Regulations of the Federal Communications Commission of the United States and/or other regulatory bodies as may apply to my specific location or residence.

I am applying for the following membership Class:

- Voting Membership
- Non-Voting Membership
- Age 62 or Older
- Family Member

**Sign** \_\_\_\_\_ **Date** \_\_\_\_/\_\_\_\_/\_\_\_\_

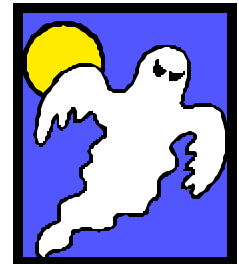
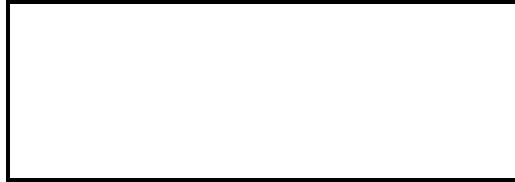
-----Do not write below this line-----

**Sponsor** \_\_\_\_\_ **Sponsor** \_\_\_\_\_  
 The above sponsors attest to the general reputation and desirability of the applicant as a club member.

Directors Meeting \_\_\_\_/\_\_\_\_/\_\_\_\_      Membership Meeting \_\_\_\_/\_\_\_\_/\_\_\_\_

~ **Accepted**    ~ **Rejected**    **Secretary** \_\_\_\_\_

Egyptian Radio Club, Inc.  
 PO Box 562  
 Granite City, IL 62040-0562



Meetings are held at the Granite City Campus of Southwestern Illinois College, IL Rte 203 South & Maryville Rd.  
 Weekly 2 meter Net is on 146.790 (127.3) every Tuesday evening at 7:00 PM. PLEASE CHECK IN !!  
 Weekly 10-10 Net is on 28.420USB every Wednesday at 7:00 PM. PLEASE JOIN US !!  
 License Testing is 2nd Thursday of even-numbered months. Contact Jerry AI9G at 618-656-6523 for info.

# October 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5 2m Net 7:00 PM	6 10-X Net 28.420 USB 7PM	7 Club Meeting 7:00 PM	8	9
10	11	12 2m Net 7:00 PM	13 10-X Net 28.420 USB 7PM	14	15	16
17	18	19 2m Net 7:00 PM	20 10-X Net 28.420 USB 7PM	21	22	23
24	25	26 2m Net 7:00 PM	27 10-X Net 28.420 USB 7PM	28	29	30
31 