

The Smokehouse

Where Country Hams Hang Out

September 2019



President, Larry Brumett, KN4IV

Vice President, Clayton Francis, KC4RGE

Sec/Treas, Herb Hess, KJ4CMG

MCARC Meeting, August 20th, 2019.

This is the meeting for the annual potluck. The members gathered at 6pm and the meal started at 6:30pm. Great food and fellowship was enjoyed by all.

The meeting came to order at 7pm in the basement of the City Hall Building located in Glasgow, KY.

KJ4OR made a motion, seconded by N9FXU, to dispense with the reading of the minutes. Motion passed.

KD4SS gave the financial report. He reported \$xxxx.xx in the checking and \$xxxxx.xx in the savings accounts. KJ4OR made a motion, seconded by KC4RGE, to accept the

treasurer's report. Motion passed.

Committee Reports:

Repeater Committee:
Nothing to report.

Field Day/Special Event
Committee: No report.

Hamfest Committee: No
report.

Webpage Committee: No
report.

Old Business: No
old business.

New Business: KE4AIE
brought in extra copies of
the FEMA National

Interoperability Field
Operations Guide for the
members if they wanted
one.

KF4HNF is scheduled to
have open heart surgery

next month. KJ4GL
recently underwent triple
bypass surgery.

KC4RGE nominated
KN4WMK for
membership. We'll vote on
the next meeting she shows
to.

No further business to come
before the meeting,
KC4RGE made a motion,
seconded by KJ4OR to
adjourn since there was a
break in the severe weather.
Motion passed and the
meeting was adjourned at
7:23pm. There were 40+
members and guests
present for the potluck and
the meeting.

MIA/POW Special Event

Look for special event
station K4MIA/8 to be
active between September

13-22nd. Activity is to honor and support our Veterans.

Operators are Linda N8LRS and Metro W8MET acting as a sister station from Ohio for the 4th year. This event was originated by Mike, K4MIA, from Florida with other sister stations involved.

Details can be found on the ARRL Web site under "ON-THE-AIR" under SPECIAL EVENT under the call-letters of K4MIA. Also, this special event will be in the September QST. Please take part in this special event for our Veterans.

QSLs are available with SASE. They will be operating on 40 meters SSB.

ADDED NOTE: Other sister stations to look for K4MIA/5 and K4MIA/7.

Is Ham Radio a Hobby, a Utility...or Both?

Some think automated radio emails are mucking up the spectrum reserved for amateur radio, while others say these new offerings provide a useful service. Julianne Pepitone writes in the IEEE

Spectrum magazine: Like many amateur radio fans his age, Ron Kolarik [K0IDT], 71, still recalls the "pure magic" of his first ham experience nearly 60 years ago. Lately, though, encrypted messages have begun to infiltrate the amateur bands in ways that he says are antithetical to the spirit of this beloved hobby.

So Kolarik filed a petition, RM-11831 [PDF], to the U.S. Federal Communications Commission (FCC) proposing a rule change to "Reduce Interference and Add Transparency to Digital Data Communications." And as the proposal makes its way through the FCC's process, it has stirred up heated debate that goes straight to the heart of what ham radio is, and ought to be.

The core questions: Should amateur radio—and its precious spectrum—be protected purely as a hobby, or is it a utility that delivers data traffic? Or is it both? And who gets to decide?

Read her article at <https://spectrum.ieee.org/tech-talk/telecom/wireless/isham-radio-a-hobby->

[autilityor-both-a-battleover-spectrum-heats-up](https://ecfsapi.fcc.gov/file/100918881206/PETITION%20FOR%20RULEMAKING.pdf) RM-11831
<https://ecfsapi.fcc.gov/file/100918881206/PETITION%20FOR%20RULEMAKING.pdf>
73,
W4WTN

Ham radio history: 1985 PRB-1 provides modicum of protection from local government regulations regarding outdoor antennas (does not override CC&Rs, though); "reasonable accommodation"

Sporadic E is one of the most interesting forms of propagation - as the name indicates it occurs sporadically and many of the mechanisms behind it are not well understood.

Facts Behind Sporadic E

Sporadic E arises when clouds of intense ionisation occur in the E region of the ionosphere. Initially these will affect the lower frequency bands, and it can produce openings on 10 metres and as the frequency rises, 6 metres, 4 metres and occasionally 2 metres may be affected. When 2 metres is affected, openings are often quite short - an

hour or two is long, but openings of a few minutes only are known.

During the course of an opening the direction of the propagation can change significantly as the ionisation clouds are blown about by the winds in the upper atmosphere.

Find out more about this mysterious form of radio propagation that can be sued to good effect on many of the HF and VHF amateur bands:

https://www.electronicsnot.es.com/articles/antenna_spropagation/ionospheric/sporadic-e-es.php

Foundations of Amateur Radio

Recently there was a discussion on social media about the legality of various types of transmissions. Before I get into the specifics, it's worth looking at some of the rules around this. I will point out that this isn't exhaustive, but it gives you an idea of what I'm talking about.

In Australia, the rules about this are encapsulated in the Radio

Communications License Conditions Determination, referred to as the LCD. It essentially says that you must not operate an amateur station to transmit signals that are encoded for the purpose of obscuring the meaning of the signals, except for amateur satellite and repeater command and control purposes or emergency service operation and training.

In the United States, the rules are covered under the FCC rules, Part 97 Amateur Radio Service. It says that you may transmit using a digital code who's technical characteristics have been documented publicly. It goes on to prevent such transmissions for anyone communicating with a country that doesn't have an agreement with the United States. It also states that using unspecified digital codes must not be transmitted for the purpose of obscuring the meaning of any communication and if it's deemed necessary, you must maintain a record, convertible to the original information, of all digital communications transmitted.

In the United Kingdom, the amateur terms say that the licensee may use codes and

abbreviations for communications as long as they do not obscure or confuse the meaning of the message and messages shall not be encrypted for the purpose of rendering the message unintelligible to other radio spectrum users, except for during emergencies or if used by various emergency or government departments.

Just by looking at three different sets of rules we can already tell that law makers across the globe have different ideas of what's allowed and what isn't. I will point out that the rules in the United States are much more prescriptive than those in Australia or the United Kingdom. I'll leave it to lawyers to determine which of the rules is more effective and what their actual effect is on our global amateur community.

Let's get back to the original question. What's allowed?

The purpose of obscuring the meaning of the message is essentially not allowed. What happens if that's a beneficial sideeffect? Is that allowed?

For example, let's imagine that I have a new mode that is more efficient than any other mode in getting information between point A and point B. It does this by transmitting a single number, which is simply sent and received, it could even be done with Morse code.

Station A knows what the message means and Station B also knows what it means. How they come to a common understanding of the message is something I'll leave to your imagination, but is this kind of transmission in violation of the idea of obscuring the meaning of the message, if all we're doing is making communications faster?

Let's say that we have a public web-site that links those numbers we've exchanged to a more meaningful message. Let's say that Station A uploads an image to this website, and then sends an ID number of that image to Station B, which then goes to the same website and looks up that ID and sees the image. Bingo, transmission complete. Message exchanged. It's all public, there's no intent to obscure the meaning, everyone happy. In case

you're wondering, I've just described how Hybrid EasyPal works.

What happens if I require a password to access the website to see which file was intended for me? Have I just obscured the meaning of the message?

Note that I'm talking about two stations exchanging a unique identifier of some sort, that both stations have agreed on, so they can communicate via a password protected website using amateur radio.

That appears to be in violation of the amateur radio rules for all three countries.

It gets better.

What if I build a gadget that makes squeaky noises and knows how to receive them? Station A plugs their microphone into the gadget and talks into it. The gadget makes squeaky noises and those are transmitted. Station B has the same gadget, which understands squeaky noises and makes it into perfect audio. The purpose is to get information between the two stations, no intent to obscure the message, right?

What if I only make two of these gadgets?

The purpose isn't to obscure, but the outcome is that the messages are actually obscured. At this point we get lawyers involved who argue both sides. Your honour, I wasn't trying to hide my communications, I was just making them more efficient.

Clearly this isn't what our hobby is about. It's about exchanging information, un-obscured information, between stations that want to talk to each other.

If the intent is to make apples, but the outcome is that you're making pears, you're making pears.

73, W4WTN

Ham radio history: 1984
Launch of Volunteer Exam
Coordinator program