



The Feedline

Attention Techs: 10 Meters is Hot!

*From The ARRL Letter,
October 6, 2011*

With solar flux numbers not seen since 2004, the higher HF bands have seen a surge in activity. The solar flux has been at least 100 since August 20. On September 10, it reached 116, rising to 121 the next day. It climbed steadily, reaching a peak of 190 on Saturday, September 24. While higher solar flux is exciting news for all hams, Technicians should definitely take note: The 10 meter band is the only HF band where Techs have phone privileges. “Techs can get use their voice privileges from 28.300-28.500 MHz,” explained W1AW Station Manager Joe Carcia, NJ1Q. “If you don’t have your own HF rig, find someone in your local radio club who does or call your Elmer. Without a doubt, you don’t want to miss this opening. Who knows how long it will last or when it will come back? So get on the air while you can and experience the magic of 10 meters.”

What is solar flux? The radiation from the Sun is measured at several different radio frequencies. One of these, 2800 MHz, or a wavelength of 10.7 cm, is most commonly used. The signal at this frequency is called the **solar flux**, and there is a rough relationship between this value and the num-

ber of sunspots. By measuring the solar flux, we can determine a general idea of the amount of radiation from the Sun that affects the ionosphere. Higher solar flux levels generally indicate that higher frequencies can propagate.

The solar flux hit its peak during the CQ WW RTTY Contest last weekend. “During the contest, both 10 and 15 meters were definitely hopping,” said ARRL News Editor S. Khrystyne Keane, K1SFA. “I’ve only been licensed since 2006, and I’ve all the older hams tell me about how wonderful 10 meters could be, but I never saw it myself until the contest. Wow! It was better than I ever imagined, and I’m told it will only get better. I’ve never seem more than a handful of contacts on 10 meters during a contest, but we had almost 1100 contacts on the band during the 48 hour contest. We worked Senegal, Kenya, New Zealand, South Africa, Europe and Asia, and even Japan on 10 meters. I couldn’t believe how hot the band was!”

QST Editor Steve Ford, WB8IMY, agreed. “I got on the radio for the CQ WW RTTY Contest and tuned to 20 meters out of habit. I was surprised at

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Dates to Remember:

- Oct 10 – NKARC membership meeting
- Nov 14 – NKARC membership meeting

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Repeaters (K4CO): 147.255+ and 444.350+ Edgewood (PL 123.0), 147.375+ Walton, 146.895+ Highland Heights. The 147.255 repeater is a linked Echolink node, accessible via N4IJS-R.

NKARC Net: Tuesdays, 8:30 PM on the 147.255 repeater

VE Testing: Testing sessions are held by appointment only on the 2nd Monday of each month, prior to the NKARC membership meeting. Testing begins at 6:00 pm. To make an appointment, contact Lyle Hamilton at VETesting@k4co.org or tel. 513-315-4032

NKARC Web Site: <http://www.k4co.org>

NKARC Membership Meetings: 2nd Monday of each month at 7:30 pm at the [Hilltop Church of Christ](#), 5300 Taylor Mill Rd (Ky. 16), Taylor Mill, KY. Visitors are always welcome!

The Feedline is published monthly by and for the members of the Northern Kentucky Amateur Radio Club. It is distributed via direct email to current NKARC members. **If you are a member in good standing but are not receiving your copy, please notify the Feedline editor.** Permission is hereby granted to any non-profit amateur radio group to quote or reprint from this publication provided appropriate source credit is given. Submissions, ad-

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Top of the Tower

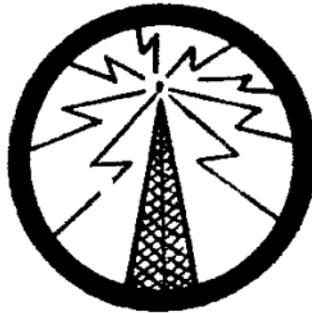
Hello Everyone

Today I would like to write about how I got involved with the club. I didn't know there was a Northern Kentucky Amateur Radio Club until a few weeks before I got my license. When I took my test a few of the club members mentioned that I should check it out.

Several weeks went by, and I was using the local repeaters to talk to other operators in the area. At that time, I thought I would join the club just to help out because I was using the repeaters. Later on I was able to attend a meeting.

Over the next year and half I attended about 5 meetings. After not going to a meeting in several months I attended an October meeting where the business topic was disbanding the club because they could not find officers to hold office. Several people stepped forward to fill the slots.

Over the years I have held various officer posi-



tions. Serving the club each year had its challenges as well as its rewards. Over the next few years I will not be able to serve as an officer. Unfortunately my schedule and lists of projects have become too demanding and I will need to take a step back from a position as an officer in the club. I encourage every member that has not yet had the experience of being an officer to step up and give it a go. I think you will find it very rewarding. It's the opportunity to get your voice heard and really get your ideas out there.

I'm excited to see the changes and fresh ideas that a new group of officers will bring to the club. I've truly enjoyed my run in each position and

hope whoever follows after me enjoys it as much as I have.

73

Dann Fox

September NKARC Net Report

By Robert Kluck, N4IJS

DATE	NCS	CHECKINS	TIME (MINS)	TRAFFIC
September 6	AJ4DK (Don)	9	24	0
September 13	KB4VKS (Mike)	9	25	0
September 20	W4TSA (Greg)	5	13	0
September 27	KJ4VKV (Tyson)	6	10	0
TOTALS:		29	72	0

Bitten by the Bug

By Craig Miller, W8CR

Ahhhhh, just put the kid on the bus, and the wife is on her way to the salt mine. Now, I have 45 minutes to see if I can scare up a quick QSO.

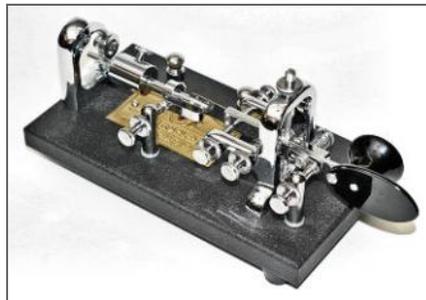
40 meters sounds pretty quiet this morning--no ear splitting static crashes. The usual morning CW junkies must have already headed off to work or out mowing the grass. I spin the dial down to 7.023 to see if any speedsters are still on. Some days, I can even keep up with them at 30-35 wpm. It must be later than I thought, though. Those guys are gone too.

Tuning back up to 7.030, I hear a couple of guys wrapping up a chat at about 20 wpm: "FB FRED MUST QRT TO WALK THE DOG 73 ES CUL..." (translation: "Good copy, Fred, but I really gotta go to the bathroom! Best regards and see you later.").

I spin the dial up to 7.032, and don't hear any beeps or boops. I guess here is where I'll cast my line. "QRL?" (translation: "Anybody out there working that last rare DX station for your DXCC that I can't hear?"). Nuttin' heard. I'll QRL one more time before "CQ CQ CQ DE W8CR W8CR K". Silence. Again "CQ CQ...". Just the hiss out of the speaker. Well maybe this ain't gonna happen today. One more time...

Bam – I got one! He's got a nice strong signal too. But, wait. What

the ...? What is he sending me? "DAAAAHHHHHH DIT DIT DIT DIT DAAAAHHHHHH DAAAAHHHHHH DAAAAHHHH DIT DITDIT-DIT DIT DIT DITDITDIT-DAAAAHHHHHH." NUTS! He's using a bug, a mechanical key dating back to the old railroad days. It's an ingenious mechanism for sending high speed code, but it takes a lot of practice to send clear, copyable code. I can barely make out my callsign let alone his – this isn't gonna be fun.



I have two options:

1. Don't reply and pretend I didn't hear him. He's really strong, though, and most likely I am, too. He knows I can hear him. Plus, that's the coward's way out.

2. Answer him and tough it out.

I answer him. We exchange the usual stuff. My RST is 579, his name is Bill, and he lives in Niassa Fihls, errrrr, Niagara Falls, NY. "Niagara Falls, eh?" We've been wanting to visit there before our kid gets too old to even want to be seen with his parents, let alone ride

in a car for 6 hours to look at water flowing over rocks. Plus, that's where Nikola Tesla built his hydro power station that illuminated Buffalo over a hundred years ago. I'm hooked now – lotsa questions for him.

As our conversation progresses, his dot-to-dash ratio varies all over the map, but I slowly get used his style of CW. It's like listening to British shows on PBS. At first, they're totally unintelligible, but over time, your brain figures it out.

I have to give him credit, he's using something that is a passing skill. I have a bug I bought years ago, but could never master it well enough for me to feel comfortable subjecting others to the noise.

Well, that 45 minutes passed fast. Time to get to work. I promised I would look him up whenever we get to Niagara. I guess it wasn't a total nightmare working him and his bug, after all. Kinda like talking to somebody with a thick accent.

After all, he is a New Yorker.

Craig Miller, W8CR, began his ham career in 1974 as WN8TLC. He lives in Ostrander, Ohio. He enjoys HF CW ragchewing with a little bit of DXing and contesting tossed in. He is an active officer in the Delaware County (Ohio) ARES and a member of the DELARA (www.k8es.org) radio club.

September Meeting Minutes

MINUTES OF THE SEPTEMBER 12, 2011 MEETING OF THE NORTHERN KENTUCKY AMATEUR RADIO CLUB

The September 2011 meeting of the Northern Kentucky Amateur Radio Club was called to order by President Robert Kluck, N4IJS, at 7:35 PM, September 12th, 2011.

Robert led the Pledge of Allegiance and the 14 members and friends present introduced themselves.

Lyle, AB8SH, made a motion to accept the minutes for the August meeting as published in the Feedline. John, KY4JD, seconded the motion. The motion passed unanimously.

Robert, N4IJS, gave a report on the progress on the D-STAR repeater project. He reported that the repeater is operational in a temporary location (his basement) and that the project is on track. It is anticipated that the repeater will be moved to a permanent location at NKU in about a month. Ten new D-STAR users have been added to the network.

John, KY4JD, reported on preparations for moving the 146.895 repeater to the new location at St. Elizabeth Hospital in Edgewood. The antenna is in place and functional. A shelf is being built for the equipment and the move will take place soon.

John said that verbal approval has been received from the Southeastern Repeater Association (SERA) for a frequency pair for the D-STAR repeater. Formal written approval is expected soon. He also pointed out that the K4CO D-STAR repeater will be only the third one to go up in Kentucky.

John expressed gratitude to all who have helped with the repeater project. Dick Arnett, WB4SUV, has been especially helpful at St. Elizabeth Hospital. The folks at Northern Kentucky University have also be very helpful and cooperative with the preparations for the new D-STAR repeater.

Robert, N4IJS, stated that HR Radio in Atlanta has offered a significant discount on the purchase of several models of D-STAR capable transceivers. For more information contact Robert.

Lyle, AB8SH, reported that there were three candidates for the VE testing session prior to the meeting. Of the three candidates, two passed their exam.

Mark, AI4BJ, agreed to give 2012 Field Day Chairman Greg, W4TSA, some pointers on Field Day planning.

The Nominating Committee is looking for a few good candidates for 2012 club officers. Please email suggestions to nominatingcommitte@k4co.

The annual club Christmas meeting will be held at the Golden Coral Restaurant near Lowes in Florence.

The business meeting was adjourned at 8pm by a motion from John, KY4JD, seconded by Lynn, WD8JAW.

The program for the evening was a very interesting overview and demonstration of Weak Signal Propagation Reporter (WSPR) presented by Mark, AI4BJ.

Respectfully submitted by Dave, K8WDA.

Mark's Mutterings

WSPR Follow-up

Those of you who attended the September meeting were treated to my scintillating presentation on [WSPR](#) — Weak Signal Propagation Reporter. For those of you who missed out, a brief recap: WSPR is a program that you run on your PC, which is interfaced to your transceiver via the audio in/out jacks, similar to PSK31. It is used to determine which paths are open to different parts of the world on different HF bands. The transmission format is fixed, consisting of callsign, Tx power, and 4-digit grid locator.

The program alternates between transmitting and receiving, typically transmitting for two minutes out of every ten. Tx power is 5 watts or less. If an internet connection is available, the program will upload reception reports to a central database called [WSPRnet](#). You can instruct WSPRnet to map all contacts involving your callsign. This all

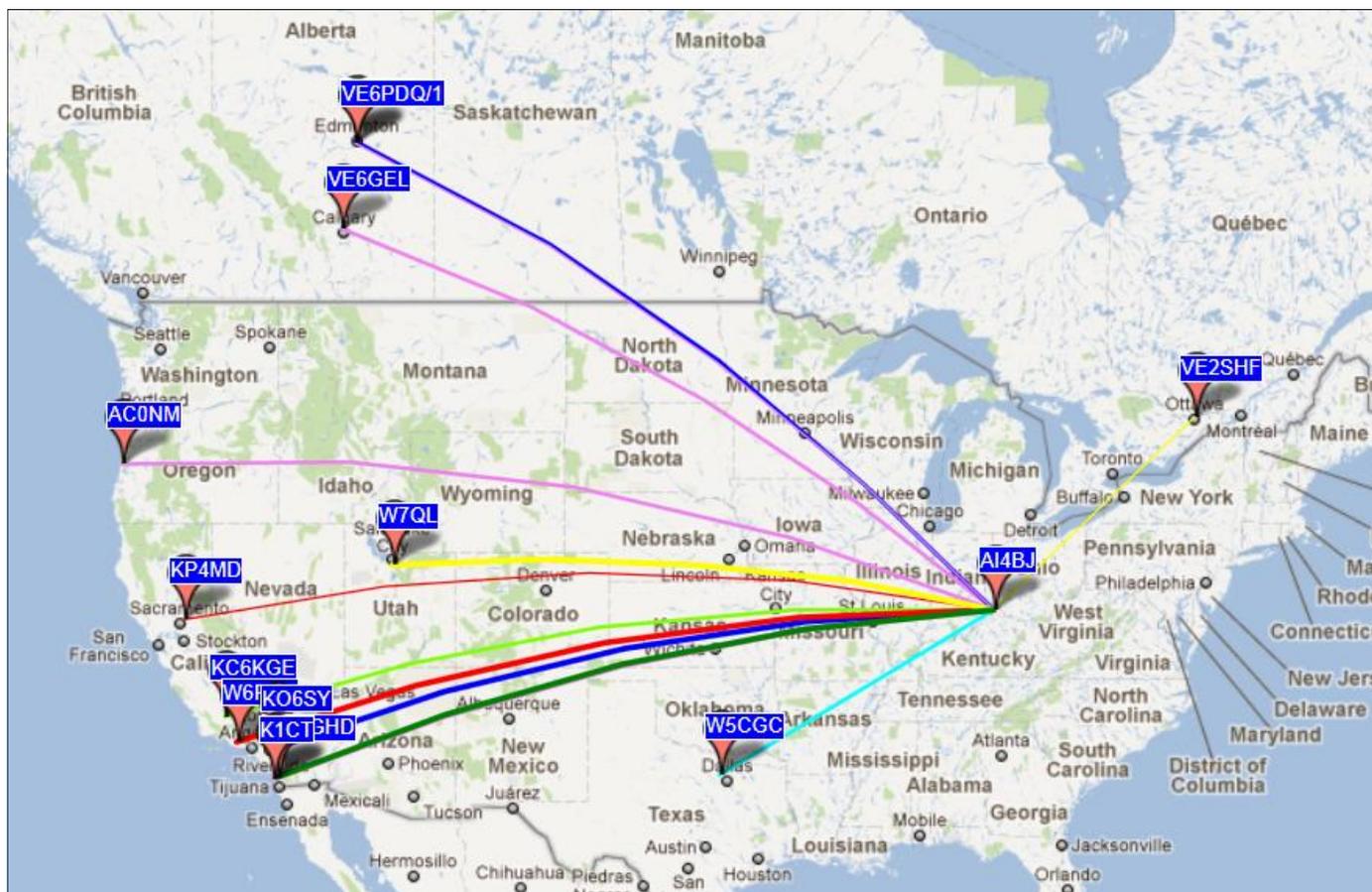
happens in near-real-time.

Since an internet connection was not available during my presentation, I gave attendees some homework: To look up my callsign on WSPRnet when they got home to see which stations had received my 5-watt signal on 20 Meters. If you did your homework, you should have seen a map like the one below. Pretty good considering that the bulk of my 33-ft wire antenna was below ground level!

Julian Moss, G4ILO, has an excellent [blog](#) and provides a great testimonial to the power of WSPR. He has had good success with a dedicated WSPR transceiver he built from a kit purchased on eBay.

73,

Mark Volstad, AI4BJ



It's Back to School Time — for Ham Radio Too!

By Dan Romanchik, KB6NU

As I write this, it's about 85 degrees, and I'm sitting on the patio of a cottage overlooking Elk Lake in northern Michigan. This idyllic spot is about as far away from school as you can get. And yet, in less than a month, kids will be back in school, and if kids are going to be back in school, why not ham radio operators?

The fall is a good time to begin teaching a new group of Technicians. I favor the "Tech in a Day" or "Ham Cram" type of class. This type of class focuses on teaching students the answers to questions on the test rather than the material itself.

There's a lot of controversy about this, and many decry this method of teaching, but I think the best way to learn about ham radio is by actually doing it, and you can't do if you don't have a license. Besides, how much more instruction will students actually get in a more traditional eight-week or ten-week course, maybe 16 hours? Will those 16 hours make that much of a difference?

For the sake of argument, let's say that you've decided to offer a one-day Tech class. Now what? Well, the first thing you have to do is to find a place to teach it. Possible sites include your local public library, a township hall, a community college, perhaps even your church.

Now that you have the place, you need to find some students. Your local emergency-management group would be a good place to start. Also, make sure a notice gets published in your amateur radio club's newsletter. Chances are most of the subscribers already have licenses, but they may have friends or relatives who would be interested. Also, make sure the class gets listed in the upcoming events section of local newspapers or

magazines.

Once people start signing up, you should suggest that they either purchase a study guide or download my free study guide (www.kb6nu.com/tech-manual). Because I use my study guide when teaching the class, I always advise them to get a copy, but if you'll be using other materials, then your advice may differ.

I counsel the students to read through my study guide a few times and take some online practice tests before coming to class. That will make them familiar with the material, especially areas they may be weak in or have questions about. By bringing those questions to class, we can address those areas in a little more depth, which will, hopefully, give them the help they need to pass the test.

The class itself is six hours long, running from 9am to 3pm, at which time we give them the test. This is not a lot of time for the amount of material I have to cover, so I move along at a pretty brisk pace. I concentrate on giving them the answers, but with enough context to that it all makes sense.

OK, let's say your class was wildly successful, and you now have a group of newly-minted Techs. What do you do now?

Well, you might consider offering some short sessions on what ham radio operators do--Ham Radio 101, so to speak. The topics could include how to choose your first radio, the basics of FM repeater and net operation, and building your first antenna (say a 2m ground plane). They'll be more enthusiastic about these classes now that they actually have a license.

Continued on next page

10 Meters is Hot!, cont'd from Cover

the lack of activity on 20, so I tuned up to 15 meters. So that's where everyone was! I couldn't believe the slew of activity on the higher bands."

But it wasn't only East Coast hams who experienced these spectacular conditions. Chip Margelli, K7JA, of Garden Grove, California, told the ARRL that "the high bands were a delight from out here on the West Coast. In the late afternoon and evening, 10 meters brought in loud stations from Asia, the Pacific, the Caribbean and South America. Japan, China, Australia, New Zealand, Guam, Saipan, and other juicy catches kept my rotator working fast. But the real highlight was the massive opening to Europe and Africa that I enjoyed on Sunday, when I had some time to operate. Not only was I able to work into Western Europe, such as Spain, Portugal, France and England, but 'deeper' Europeans were very loud, as

well: Romania, Bulgaria, Hungary, Poland, the Baltics, the Czech Republic and Slovakia were all thundering in. Weaker signals were coming in from European Russia, Ukraine and other places I haven't heard for seven or eight years on 10 meters out here in California. I do not have an amplifier for 10 meters; I use 200 W and a homebrew 5-element Yagi about 60 feet high."

Also on the West Coast, Greg Howe, KI6IUI, of Laguna Hills, California, played around with the openings on 10 meters. "I decided to take full advantage of the conditions by doing some very low power QRP work. After working several European stations at a 1 W, I decided to really go QRP -- 25 mW, the same power-level of most remote-control garage door openers. I established contacts running about 1 kW with the T32C Christmas Island DXpedition station and EA8CEQ in the Canary Islands. With their okay, I then reduced my power-level down to 25 mW. You don't need

lots of power or a fancy antenna when 10 meters really opens up. Exercise a little patience, be persistent and go have some fun!"

"This is just the beginning of the fun and excitement that await us on 10 meters," Margelli said, "but what a beginning it was."

October Program

Dann Fox, KI4AVO, will present a program on electrical safety at the October meeting of the Northern Kentucky Amateur Radio Club.

Join us at 7:30 p.m., Monday, October 10 at the Hilltop Church of Christ in Taylor Mill.

Back to School Time, cont'd from page 7

It might also be a good idea to schedule a General Class license course for sometime shortly after the Tech class. This will encourage them to upgrade while they are enthusiastic about the hobby.

I hope that this has encouraged you to offer some ham radio courses of your own. If you have any questions, feel free to e-mail

me at cwgeek@kb6nu.com or phone me at 734-930-6564. Good luck, and let me know how your classes turn out.

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When not preparing for his next ham radio class, Dan publishes the "No-Nonsense" study guides for the Technician and General Class license exams. Free versions and print version are available from his website at www.kb6nu.com/tech-manual. E-

book versions are available for the Kindle and devices that run the Kindle app on Amazon.Com and for the Nook on BarnesandNoble.Com.

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**NKARC Feedline October 2011
Volume 2011 Issue 10**