



*The*

# *Blurb*



*Newsletter of The Phil-Mont Mobile Radio Club*

*68 Years of Public Service, 1949-2017*

Volume 68 Number 11

[www.phil-mont.org](http://www.phil-mont.org)

November 2017

***Board Meeting on the 1<sup>st</sup>  
General Meeting on the 8<sup>th</sup>***

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## *What's Happening In November?*

***Thanksgiving  
Veteran's Day  
Daylight Saving Time Ends  
And...***

***Barry K3EUI gives us part 2 of his primer on  
FT-8: New Digital Mode***

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### *Some Thanksgiving Trivia (from History.com)*

1. Fact or Fiction: Thanksgiving is held on the final Thursday of November each year.

**Fiction.** *It's the fourth Thursday in November.*

2. Fact or Fiction: One of America's Founding Fathers thought the turkey should be the national bird of the United States.

**Fact.** *Philly's own Ben Franklin!*

3. Fact or Fiction: In 1863, Abraham Lincoln became the first American president to proclaim a national day of thanksgiving.

**Fiction.** *George Washington, John Adams and James Madison all issued proclamations urging Americans to observe days of thanksgiving, both for general good fortune and for particularly momentous events.*

4. Fact or Fiction: Macy's was the first American department store to sponsor a parade in celebration of Thanksgiving.

**Fiction.** *The Philadelphia department store Gimbel's had sponsored a parade in 1920.*

5. Fact or Fiction: Turkeys are slow-moving birds that lack the ability to fly.

**Fiction (kind of)** - *It depends on whether the bird is wild or domesticated.*

<p><i>The Blurb</i> is published monthly by and for the members of The PHIL-MONT MOBILE RADIO CLUB, Inc., whose purpose is to promote Amateur Radio in general, and Mobile Radio in particular. <b>Copying and quoting</b> is permitted with a credit line. We gladly exchange publications with other amateur radio clubs.</p> <p>Requests should be sent to the Editor:  <b>Rick DeVirgiliis ND3B@ARRL.net</b></p> <p><b>Subscriptions</b> are available to non-members for \$12, addressed to the Treasurer.</p> <p><b>Labels and mailing: KB3IV</b></p> <p><b>Submissions deadline:</b> All copy must be in the hands of the Editor by the 20th of the previous month.</p>	<p><b>Directors:</b></p> <p>AJ3DI (18)          WA3DSP (18)          KB2ERL (18)          N3QV (17)          W3RM (17)          K3HWG (17)          W3AOK (A)</p>	<p><b>Contact Phil-Mont: P.O. Box 404 Warminster, PA 18974</b>  <a href="http://www.phil-mont.org">http://www.phil-mont.org</a>          Website: Eric N3QV &amp; Andrew KC2PMW</p> <p><b>For club information:</b> Contact any club officer, or the repeaters listed below. Address or club directory changes and articles for the membership e-mail list should be sent to: KB3IV</p>	
<p><b>Sunday Morning Net Schedules</b></p> <ul style="list-style-type: none"> <li>• <b>2 Meter/ 70cm Net</b>..... at 0930L on W3QV repeater</li> <li>• <b>10-on-10 Net</b> ..... at 1000L 28.393 MHz USB (±QRM)</li> <li>• <b>75 meter Net</b> ..... at 1020L 3.993 MHz LSB</li> <li>• <b>ARES</b> at 2100L on the W3QV repeater</li> </ul>			
<p><b>Committees</b></p> <p>Blurb folding: KB3IV &amp; N3GLU          Directory: KB3IV          Field Day: KC2PMW          Fusion Coord: NC3U</p>	<p>Internet: N3QV &amp; KC2PMW          Membership: K3HWG          Net Control: KB3IV</p>	<p>Program: W3AOK          Publicity: W3RM          Refreshments: W3AOK          Repeater: W3AOK</p>	<p>Scholarship: W3RM          Sunshine: N3GLU          VE Program: NS3K          Welcome: N3UBY          Youth: KC2PMW</p>

**All visitors are welcome!**

The club meets at 7:00 PM on the *second* non-holiday Wednesday each month except July and August at Giant Supermarket, 315 York Rd, Willow Grove, PA  
 Maps and directions are available at [www.phil-mont.org](http://www.phil-mont.org).

**License Examinations** are held on the fourth **non-holiday Thursday** each month at **Community Ambulance Association, 1414 E. Butler Pike, Ambler PA 19002**  
 Registration begins at 7:00 P.M. Applicants should contact Jim McCloskey NS3K at 215-275-2979 or [jmccloskey@msn.com](mailto:jmccloskey@msn.com) for the latest information.

**Club Stations W3QV/R: The Jim Spencer Memorial Repeater System**  
 Ridge & Port Royal Avenues, Philadelphia, PA **Trustee: W3RM**  
**147.03 MHz + PL 91.5 Hz 444.80 MHz + PL 186.2 Hz C4FM Fusion digital**  
 Reach us on EchoLink through W3QV-R  
**W3AA Trustee: WU3I**  
**W3EM: Field Day/special event station Trustee: N3OV**

**The Officers**

**President:** NC3U Sal Marandola [nc3u@verizon.net](mailto:nc3u@verizon.net)  
**Vice President:** WA3GM Greg Malone [wa3gm@yahoo.com](mailto:wa3gm@yahoo.com)  
**Treas:** KB3IV Ed Masarsky [kb3iv@comcast.net](mailto:kb3iv@comcast.net)  
**Secretary:** WU3I Steve Hoch [wu3i@arrl.net](mailto:wu3i@arrl.net)

## *The Prez Sez ...*



Hello Phil-Mont Members,

November is here already! Wow, where did the time go? If you attended last meeting you saw a great presentation by W3EX on the operations of the Montgomery County ARES group. Just to let you know on the 14<sup>th</sup> of November there will be a Limerick Power Generation drill. THANKS Tom I really enjoyed your talk.

This month is Old Timers Night. If you know any old timers that need a ride to the meeting please help them out and pick them up. If you have any old equipment that you would like to show off please feel free to show it off to the group. I will have a Halicrafters SX-110 Shortwave radio from the 50's there. To show my appreciation to Philmont I will give that to the winner of the 50-50 drawing. So bring a few extra dollars to take a chance.

Elections are coming up in December. If you want to run for a board position please tell Greg WA3GM and he can put you on the list. It's very fulfilling to be on the board so think it over.

I would like to thank everyone who helps make Phil-Mont the club that it is, from the officers to the people who update web sites and face book and our all important repeater gurus and system

operators. Everything helps us be the best Radio Club in the area.

Hopefully please listen to the nets and read the emails from the Philmontmobileradio newsgroup

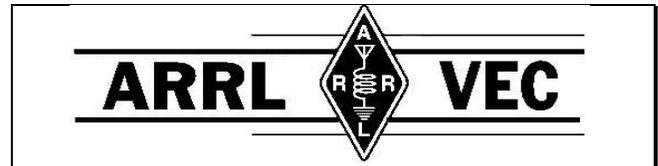
If anyone has an idea please send me an email at NC3U@verizon.net

Don't forget that Phil-Mont has a Yahoo mailing list. This is one of the best ways to get some up to date news on things going on at the club. Look up philmontmobileradioclub in the Yahoo list and you will find us.

I hope to see everyone at a meeting and have the opportunity to shake your hand.

Remember we are not a club without YOU

*73, Sal NC3U*



*Thursday evening session is  
on the 16th this month.*

*As always, many thanks to our VE  
team!*

The following radio amateurs have applied for PMRC membership:

James Smith AC3BJ  
Drexel Hill, Pa.  
Extra

H.L. Perry Pepper KC3JUD  
Gladwyne, Pa.  
General

## ***Phil-Mont Birthdays & Tidbytes***

### NOVEMBER BIRTHDAYS

02 Gage Malone - N3FSC  
 04 Joe Sabach - K3AOB  
 05 Al Tribble - W3STW  
 14 Bill Nichelson - W3KOC  
 15 Edythe Victor (XYL WA2DTW)  
 19 Brad Swanson - N3GLH  
 21 Bob Clearfield - KC3JPI  
 22 Bill Popovic - W3AOK  
 23 Ted Hassell – KB3HAQ  
 24 Delores Policarpo (XYL  
 N3PP)  
 27 Mel Toren - N2MT  
     Ron Wenig - NY3J  
 29 Bob Nicotera - KB2ERL  
     Lyn Crompton (XYL WA3DSP)  
 30 Elinore Kolodnor (XYL WA3GTL)

### MEMBERSHIP STATS

At press time P.M.R.C. has:  
 108 FULL PAID MEMBERS  
 10 FAMILY MEMBERS  
   1 YOUTH MEMBERS  
   1 HONORARY MEMBER  
   2 Pending

## ***From the Secretary***

General Meeting 10/11/2017

NC3U opened the meeting at 6:59 PM  
 18 Members and 5 guests were in attendance  
 per the sign in sheet. Sure looked like a lot  
 more than that were there though.

### Social

Breakfast at Andy's on 10/7. 25 were in  
 attendance. A good time was had by all.

### Repeater

W3AOK reported still need to install  
 siding. There are some wiring issues to address  
 but all is working. Need a VHF Circulator.

### Treasury

KB3IV reported Dues bills will be coming soon  
 (December). Please check the sheet to correct  
 any personal info.

### Net Controls

Need 1 or 2 more for VHF and any help on HF  
 than anyone can spare.

### Nominating committee

Please step up to help PMRC contact WA3GM

### Website

AJ3DI suggests you check it regularly as it is  
 constantly updated.

### VE

Had a session at Foxcom, 20 people attended.  
 Cheers to Jim Smith for going from unlicensed  
 to Extra. New call AC3BJ  
 Next session 10/26.

### Program

Tom Nolan W3EX gave a talk on ARES

Respectfully submitted,

*Steve, WU3I*

## FT-8: New Digital Mode Dominating the HF Bands

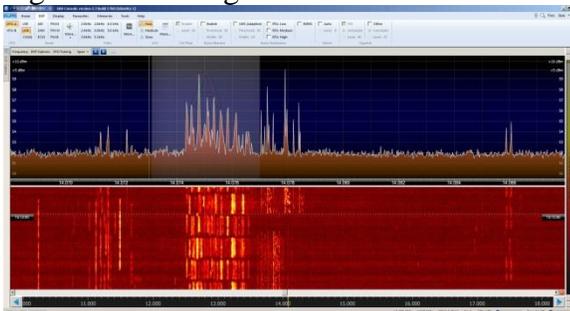
By K3EUI Barry Feierman

### Part 2

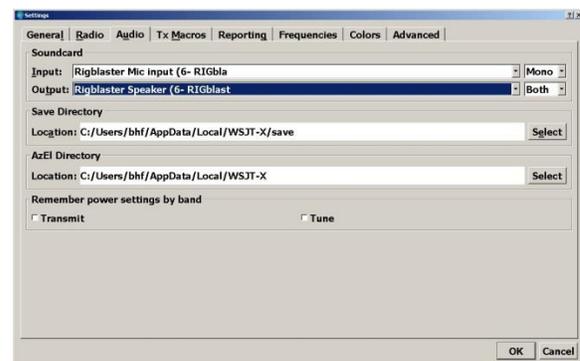
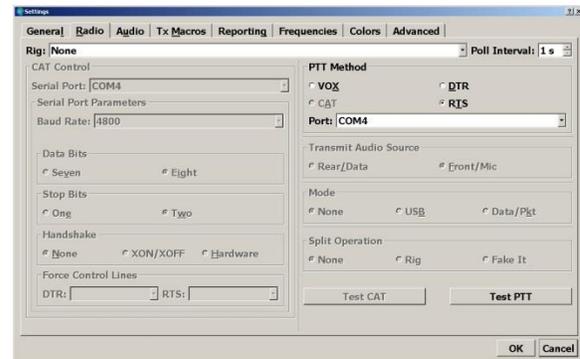
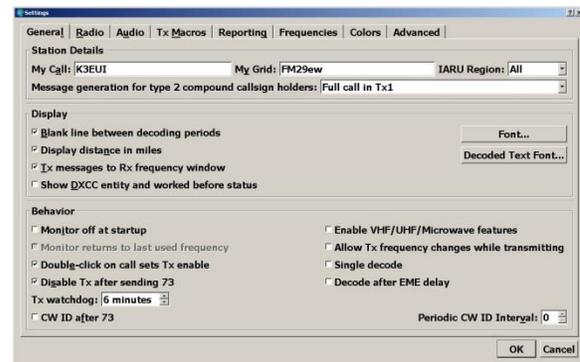
FT8 The new mode on the HF Bands

Let's begin this article on the digi mode FT8 by looking at 20 kHz of the digital portion of the 20 meter spectrum: 14.070 to 14.090 MHz recorded at my QTH in West Chester in the late afternoon, a time when 20 m is usually "open" to the world. You can see in Figure 1 about ten PSK31 signals around 14.071 MHz (solid stripes on waterfall) more than a dozen FT8 signals around 14.075 MHz, and a few JT65 signals near 14.077 MHz. Look carefully and you can also spot one lone RTTY signal at 14.086 MHz, identifiable by the parallel stripes, 170 Hz apart. Both PSK31 and FT8 signals have similar bandwidth (50 Hz) but the FT8 signals are sent in 15 second intervals, as seen by horizontal "gaps" in the waterfall view.

Fig 1 The 20m digi band

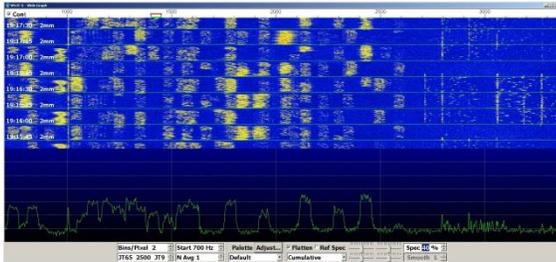


FT8 certainly is the dominant digi mode at this moment on 20 meters. The software for FT8 (and other JT modes) is called WSJT-X (version 1.8) and is available from the K1JT home page <https://physics.princeton.edu/pulsar/k1jt/wsjt-x.html>. The FREE software is available for Windows, Linux, and Mac users. You must enter information in the SETUP menus, including your call, grid, what kind of radio and sound card you have as well as the method you use to transmit (PTT) via a CAT control, a VOX circuit like the Signalink, or a serial port via DTR or RTS pins.

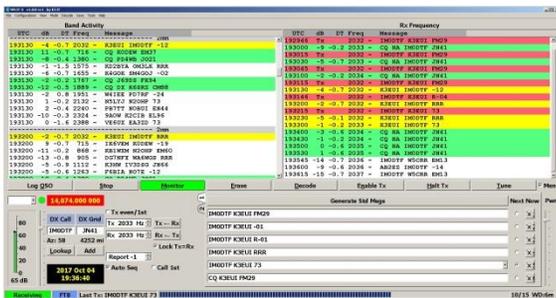


The next step is pick an appropriate frequency where you might find FT8 signals. Two popular frequencies are 7.074 MHz and 14.074 MHz. These are the VFO frequencies, or suppressed carrier frequencies, with your rig in the upper sideband (voice or data) mode. At no time do you "tune" your VFO in search of signals. You use the panadapter (waterfall) software to click on signals you want to work. I recorded a few minutes of the waterfall/spectrum window of WSJT-X while listening to the 20 meter band late afternoon. The next Figure shows the results of over a dozen FT8 QSO's. Remember,

transmissions always occur in 15 second “windows” as shown by the horizontal stripes in the waterfall. The spectrum view shows the relative strength of each of the transmitting stations by their height above the average noise floor. Note some of the signals overlap a bit in frequency.



The next figure shows what these transmissions were actually saying. One station IM0DTF was calling CQ at 193100 UTC (shown in GREEN) and so I decided to answer his CQ by calling him at 193115 UTC. In just a few tries, I was working a station in Sardinia, off the main Italian coast, using just 10 watts and a homemade 20m vertical antenna lashed to a tree in my back yard.

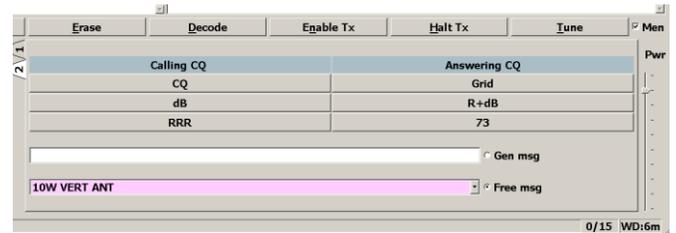


I then proceeded to confirm our QSO with my grid (FM29) then a signal report (R-04) and acknowledging his report and grid with a (RRR) ending our QSO (shown in the right-hand RX window) with a 73. My transmissions are all highlighted in RED. What is fascinating about this mode is that I can also see the reports of all other stations whose audio is captured in my sound card while I am in receive mode. Of course, when I am transmitting, I can't see who else is also transmitting. So to come back to the original question: why is FT8 rapidly displacing PSK31, RTTY, and

other keyboard digital modes? The answer is that this mode allows you to work the world with just a few

watts and a simple antenna. It can copy stations so weak that you don't even hear them and barely see them in the waterfall. Signals as faint as a S/N of

-20 dB can be copied. You can't have a long discourse with your contact. You can exchange information other than your call, grid, and S/N but you are limited to 13 character responses every 15 seconds. In the software, you go to the option of TAB 2 and can type anything in the FREE FORM window, as shown below. So I could send that I am operating at 10 watts into a vertical antenna.



If you would like to try FT8, and other digital modes, please join us on the PMRC DEN on Tuesday evenings 7-9 pm on the Jim Spencer Two Meter FM analog repeater.

Submitted by Barry K3EUI October 4, 2017

With the release last month of formerly classified documents regarding John F. Kennedy's assassination it seemed fitting to recall that on November 22, Dallas and the world were stunned by a sniper in the book repository. I was there a few years ago and went inside where an educational exhibit covers the whole floor. I was surprised to see what a short distance it is from the window where the shots were fired to the X on the street where the president was hit. You know something is terribly wrong when you're sent home from school and the nuns are crying.

## ***Catalogs are about possibilities***

By Dan Romanchik, KB6NU

When I was a kid, I used to regularly get catalogs, such as the Allied Radio and Lafayette Radio catalogs shown below, and pore over them for hours. Even if I couldn't afford to buy the latest Knight-Kit or Lafayette shortwave radio, I could imagine what it would be like. These catalogs were chock full of possibilities.

So, you can imagine how I felt when, last Thursday, I found both the Autumn/Winter 2017 DX Engineering catalog and the 2018-2019 Newark Electronics/element14 catalog in my mailbox.

[DX Engineering](#) has really taken the amateur radio world by storm over the last ten years or so. I probably don't have to tell you about that. If you're an active amateur radio operator, I'm sure that you have heard about—and probably ordered from—DX Engineering.

I think that DX Engineering did a very smart thing by investing the money in a print catalog. There's something about browsing a print catalog that is just more satisfying than browsing online.

DX Engineering has just about everything you need to have fun with amateur radio. The one glaring omission? They still don't carry my study guides!

The [Newark/element14 2018-2019 catalog](#) is a completely different beast. Amateur radio operators are only a small part of Newark/element14's market, but one nonetheless. They have, for example, attended the Dayton Hamvention for many years.

As such, the catalog is not a “ham radio” catalog, but if you build stuff at all you'll find something of interest in its 1,799 pages. It includes nearly any kind of electronic part that you might need.

The section that might you might want to start with is the “makerspace” section. In this section, you'll find Raspberry Pis, BeagleBones, and even micro:bits. They really have everything, though, including passive and active components, connectors, cable, and enclosures.

Like I say, these catalogs are all about possibilities. You can search each company's website and find the parts they carry quickly and easily, but that experience is just not the same as browsing a print catalog and daydreaming about what you might find there.

So, get your own copies—they're free—and page through them. I'd be surprised if you didn't run across something that you didn't know about before, and it gave you some ideas about your next amateur radio project.

***November at Phil-Mont***

- 1 Wed Board Meeting
- 5 Sun KC3DII  
Daylight Saving Time Ends
- 8 Wed General Meeting, Old Timer's Night
- 11 Sat Veteran's Day
- 12 Sun WA3GM
- 16 Thur Evening VE session
- 19 Sun KB3IV
- 23 Thur Thanksgiving
- 26 Sun NC3U

***Don't forget the ARES net on Sunday nights and the Digital net on Tuesday nights.***

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**For Sale**

***1/8" (290#) & 3/16" (380#) Dark Olive Drab Braided Cord · 100% Polyester/Dacron Knit Braided. Nice stuff! Tough and long lasting · UV Resistant and Low Stretch Proudly Made in the U.S.A.! Contact Steve WU3I at wu3i@arrl.net or 215-605-6074***

***DAIWA CS 201 Two position SO239 Coax Switch \$25.00 each. I have 5.  
Bill K3HWG K3HWG@arrl.net***

***First Class Mail***

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