



Sinewaves



STONEWALL JACKSON AMATEUR RADIO ASSOCIATION

Meetings: 3rd Thursday of each month, 1930 hrs at Saint Marks Lutheran Church RT19/98 Clarksburg

SJARA Tuesday Night Net

This net meets each Tuesday evening at 2100 hours utilizing the N8FMD Repeater on 147.210 MHz with PL Tone of 103.5

12/May/2014

Net Control	Date
1. K8WWW.....	April 29, 2014
2. K8TPH.....	May 6, 2014
3. K8WWW.....	May 13, 2014
4. K8TPH.....	May 20, 2014
5. K8WWW.....	May 27, 2014

SJARA Minutes April 17, 2014

The April 17, 2014 meeting of the Stonewall Jackson Amateur Radio Association was called to order by President William Reid, KA5NYN at 7:35PM

Meeting attended by five members.

Minutes of the March 20, 2014 were accepted by unanimous consent as printed in the April Sinewaves.

Treasurers report read by Secretary K8TPH of \$1543.97 with a motion by WD8NSC and seconded by K8TPH.

No old Business.

New Business:

K8TPH presented the new Insurance policy and explained the coverage which also covers club members or guests for injuries and that the St. Mark Lutheran Church is also covered since it is the club meeting location.

K8TPH that there will have to be a new location obtained to store all of SJARA equipment due to personal problems with the present storage area.

Discussion of possibly obtaining a shed or other structure to store the equipment. It was suggested by K8RAS that if there was no objections space in the Boy Scout storage area in the basement of St. Marks Lutheran Church be used. Was tabled discussed and KA5NYN will check if there is room and when to transfer equipment.

K8TPH presented the paper work to be submitted to the US Post Office to authorize all club officers to have access to the PO box.

Discussion covering Field Day.

Up to \$120.. authorized for Porti Poti for Field Day.

Up to \$75.00 authorized for food.

K8TPH is to contact KD8FOH to find out if the BBQ will be available for Field Day

N8YPE or K8TPH directed to contact WMCA to coordinate the use of the grassy area behind the WMCA for Field Day on 28/29 June 2014.

K8TPH announced that Field Day TShirts, hats, etc will have to be paid by May meeting on May 15, 2014 so

they can be ordered for delivery prior to Field Day. Price will be the price listed on ARRL plus \$1.00 for shipping.



Gear up for Field Day 2014

ARRL Field Day is June 28-29, 2014. Show your support for Amateur Radio's largest on-the-air operating event with official merchandise. Shirts, hats, pins, patches and coffee mugs are a great way to acknowledge your involvement in this annual event. This year's design features an antenna and is centered around the theme HAM RADIO — On the Air from Anywhere. Encourage family, friends, and hams to participate in ARRL Field Day with recruitment posters and attractive "Get on the Air" (GOTA)

pins for newcomers. With Field Day just a little more than 2 months away, be sure to get your 2014 merchandise now, while supplies last.

Clubs, order early! Collect orders from members and place a single order — and pay only \$12.50 shipping for orders over \$50 (while supplies last). Field Day supplies can be ordered from the ARRL online store or by calling (888) 277-5289 in the US, Monday through Friday, 8 AM to 5 PM Eastern Time (outside the US, call (860)-594-0355).



A Century of Amateur Radio

By Brogdon W1AB

By 1945, when it became certain that the Allies would win the war, attention turned toward post-war hamming. Articles in QST described modern VFO and transmitter construction, small portable stations, antenna advances, and VHF/UHF equipment and techniques. Everyone was ready to return to "normal," and the League was pushing for that return!

In May 1945, the FCC announced its plan for the Amateur Radio bands when the war was over. Among other things the 2½ and 1¼ meter bands would be shifted to the frequencies they occupy today. In June, the FCC announced that it would delete the 5 meter band and replace it with 6 meters.

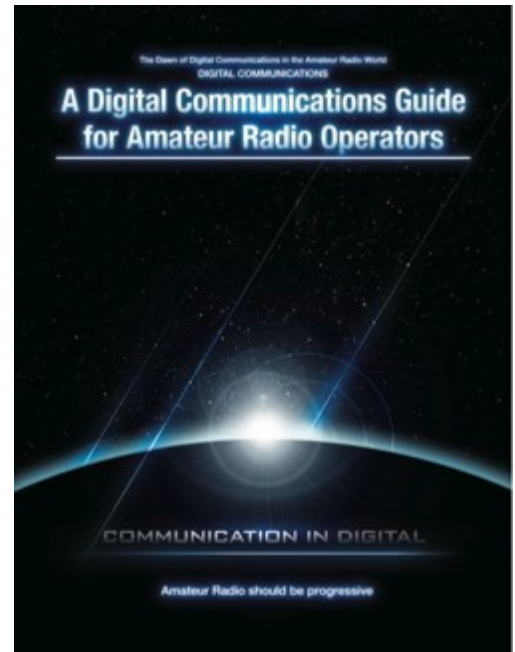
And then, the war was over! The documents were signed on August 14, 1945, to formally end hostilities. On August 15, ARRL asked the FCC to re-open the ham bands. The very next

day, the FCC announced that the 112 MHz (2½ meter) band would be immediately opened for ham use. Slashing through miles of red tape, the band was opened on August 21. We were back on the air, even though it was on only one VHF band that would shortly become another!

Other bands were opened to ham operation as quickly as possible, but military communications first had to be moved away from the amateur bands. Making all those military frequency changes was not an easy task, but it was done as quickly as possible. After military circuits had been moved from a given ham band, the FCC would release it for ham use.

The 160 meter band remained closed to hams. During the war, a then-secret navigation system called LORAN (for "Long-Range Aid to Navigation") had been developed and placed in the 1.8 to 2.0 MHz band. After the war it continued to be widely used for maritime navigation. Hams eventually were allowed back on 160 -- at first with reduced power limits but ultimately, after LORAN went away, with normal power limits.

In another change that came with post-war Amateur Radio, the FCC rezoned the 48 states into 10 call areas, rather than the previous 9. New W0-prefix call signs started showing up on the air. Those were new licensees. Hams who had been living in the new 10th call area before the war could continue to use their W9-prefix call signs until renewal time, at which time their call signs were switched to the W0-prefix. By early 1946, 10 meters had been reopened for amateur use, and the ARRL threw a "Band-Warming Party" in February and March 1946. The Band-Warming Party was a worldwide QSO party, with both CW and phone operation. It was a nice way to celebrate being back on the air!



Yeasu Digital Radio 147.210Mhz Repeater

Yeasu thinks the future of ham radio is digital, and of course, that amateurs should adopt its digital mode (CMF4) over Icom's (D-STAR). At least that's what they say in their latest publication, [*A Digital Communications Guide for Amateur Radio Operators*](#).

This publication claims several advantages for digital communications techniques, including:

- reduced bandwidth,
- digital data transfer,
- better performance,
- immunity to interference, and
- product and system cost reduction.

It talks about some of the theory behind digital communications, explaining in relatively simple terms how the various modulation techniques work. Of course, it slams D-STAR:

One problem I have with this publication is its implicit assumption

that digital is better than analog, and that if we want to be “progressive” amateurs, we should all adopt digital communications techniques. I’m not all that convinced, and to its credit, Yaesu does concede that “analog FM can show an advantage over digital radio in some areas.”

I haven’t compared prices, but if the D-STAR radios are any indication, the prices of Yaesu’s digital radios are bound to be more expensive than the analog radios. I just don’t see that the added functionality is worth the extra cost.

What do you think? Do you think D-STAR or Yaesu’s CMF4 will gain widespread acceptance anytime soon? Do you currently own a digital radio? If not, what would convince you to buy a digital radio?

TDMA

Time Division Multiple Access

Just as FDMA divides the spectrum into narrow bandwidth channels to accommodate many signals. TDMA utilizes time slots, so many signals can share the same frequency permitting multiple communications. This method has a large advantage in Amateur radio operation because it allows multiple groups to use one repeater or the same frequency. Additionally when the spectrum is shared by time division, the actual transmission time will be reduced by one-half or more.

Thus battery life will be longer. The TDMA method offers some big benefits to portable radios and repeater users.

Dividing the time into two times slots is called "2 slot TDMA". The system that uses this method is the DMR (Digital Mobil Radio technology that is used in LMR products. This method was standardized in 2005 by ETSI (European Telecommunications Standards Institute). TDMA has become the standard communication method in the USA and Asian markets. Compared with other digital communication types, the service coverage is wider; the transmitted voice quality is better and cleaner, the security performance is more reliable and the battery life is longer. In addition, a single repeater can repeat two communications on one channel. the cost to install one digital TDMA repeater is significantly less than the installation cost of two current technology analog repeaters. The cost merit is very important and a significant reason we should give this method our attention.

As explained above, TDMA has a lot of merit, but the circuit design is difficult and requires a high level of development ability, when compared with FDMA systems. Presently there are only three companies that have developed and released DMR radios into the market. One is Motorola and another Vertex Standard.

No Joke

My wife has been missing. The police called me and said to prepare for the worst. So I went back to Goodwill and bought all her clothes back.

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GOD is talking to Adam in the Garden of Eden, about the creation of a woman.

GOD: Adam how would you like to have a woman to live with you in the garden?

ADAM: What is a woman?

GOD: A creature like you but much prettier and she'll cook for you, clean for you, keep you healthy, give you children, take care of you and never ever give any problems and please you in ways you could never ever imagine, But It will cost you... A lot

ADAM: How much?

GOD: An Arm and a Leg!

ADAM: taking a moment to think it through and after a long pause, he asks, GOD, WHAT CAN I GET FOR A RIB???

GOD: Well, you get what you pay for.