



# Key Klix



*The Monthly Newsletter of the Meriden ARC      April 2011*

## EMCOMM Backup Plan

There was a short discussion and general consensus at a recent MARC business meeting on the merits of an alternate EMMCOMM communication plan. The following provides such a strategy.

The Wallingford Repeater, 147.36R, has proven to be a well maintained and reliable machine. Always and never are two words that should not be used with electronics; such as "The repeater will always be available" or "The repeater will never fail". Component failures, software bugs, lightning strikes, and power failures are just some of the gremlins that can besiege the repeater. These failures seem to happen at the most inopportune time – an EMMCOMM exercise or event. What to do if this occurs? There is nothing worse than not knowing where to go should the repeater go down during an exercise or real world activation.

A simple solution is for all deployed stations to switch to the repeater output in the simplex mode, 147.36 simplex. In reality you are already monitoring 147.36, so you are halfway there. All that remains is to be able to transmit back on the same frequency: disable the normal repeater offset. Some rigs may have this function imbedded in a button or key, but maybe an easier solution is to just add a new memory channel for 147.36 simplex. Most of us have a spare memory slot on our HT or mobile rig, so just program your backup EMMCOMM frequency in.

Using the repeater output frequency as a backup has some very distinct advantages.

**1. All participants will know where to go.** You are already in the monitor mode on the output frequency. Setting up a simplex channel just adds your ability to transmit to this monitoring. When the repeater returns to normal operation, all participants can be informed immediately and return to a repeater mode with little or no change in procedures.

**2. You are already in the monitor mode on the output frequency.** Setting up a simplex channel just adds your ability to transmit to this monitoring.

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(Repeater)**

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**3. When the repeater returns to normal operation**, all participants can be informed immediately and return to a repeater mode with little or no change in procedures.

**4. If one or more stations have a propagation problem**, relays can be easily set up to accommodate them.

Members of the Amateur Radio Service are a professional group; we need a plan to prepare for contingencies.

Dan - W1DMM

## Contesting is Fun !

As reported in last month's news letter, MARC members had a successful first outing in the recent CQWPX phone contest.

So let's give it a go in CW. Rich - WA1TRY is calling for volunteers to man the station for this year's CQWPX CW contest. The contest will run May 28 - 29, 2011, 0000 GMT Saturday to: 2359 GMT Sunday.

Again we are trying out new contest software, and have already run two SSB contests this year, using N1MM and N3FJP contest logging software.

This time we will be using N1MM again, but in the CW mode. We hope to be able to give many club members a chance to either operate or at least observe how some of the more popular contest logging programs work by operating several different contests this year.

So far the front runners for most popular contest software are N1MM, N3FJP, and the DXLab Suite.

Of course we are always looking for loggers and volunteers to help setup and cheer the club on. Please contact Rich, WA1TRY to set up your choice of operating times. This is a 48

hour contest and we need a lot of help. The CW crew is a small one so we may need to do double duty or run extended operating times. We can do four or six hour shifts. Our goal is to work DXCC in a weekend.

It would be nice to have the station operating for the full 48 hour period, but we will still participate, even with a reduced schedule. WA1TRY is even working on a "keyboard overlay" that will allow the CW ops. to use the same familiar keyboard CW sending style that we have been using for the last 15 years or so.

Contact WA1TRY - WA1TRY@Cox.net, or on the club forum <http://www.w1nrg.com/forum/>

Or catch him on the repeater.

## Station Activities

New additions to the shack include the installation of the N3FJP contest software and wireless keyboard and mouse. Thanks to Chris, WA1VXH who found a few more blank rack mount panels. We've already used the panels that Mike, K1MVM found for us earlier. Now I can continue to mount things into the console.

Our temporary Internet connection is working perfectly. During the last two contests we were able to make use of the contest logging software's own DX-cluster for spotting via the web.

I'm still waiting for a dry dark night to check out the noise problem. I'll report on that at this month's business meeting. The existing noise sniffer has been rebuilt using Lexan and some other enhancements were done to make it less fragile. I now believe the noise is coming from one or more of the out-door lights in the parking lot. It only happens after dark when the weather is dry. If it rains the noise sometimes goes away. It's never a problem during the day, wet or dry which leads me to believe it's one of those parking lot lights.

**73, Rich WA1TRY - SAM**

## April, 2011 Activity Meeting

Ever wondered how our trusty repeater works or, perhaps, how it got the nickname Rosemary's Baby? Want to know the in's and out's of it's features and what it can do?

Come to the April activity meeting on April 28th at 7:30 pm. and find out.

Our own Bill, W1KKF has been the master of the repeater since 1977. He, John - K1VDF and Dan - W1DMM will be doing a slide presentation featuring:

How the Repeater Works  
What it Can Do,  
Operating W1KKF/R.

There will be a technical discussion and the panel will field questions from the audience.

Don't miss it! Hope to see you there.

**de Bob, KB1FYL**

## Have You Paid Your Dues?

Dues for the year 2011 were due January 1, 2011. If you haven't yet paid your dues, this will be the last Key Klix you will receive and you will be dropped from the club roster. The year you are paid up to can be found on upper right corner of the Key Klix mailing label in bold print.

Remember, if you let your membership lapse, you will no longer be able access the "Club Members Only" area of the club forum and you will not be able to access the club newsletter archives or download any future Key Klix. The general area of the forum is open to everyone.

You can pay your dues at any club business meeting or Email to [kb1hcc@yahoo.com](mailto:kb1hcc@yahoo.com) for info.

Checks can also be sent to: **Meriden ARC  
PO Box 583 Meriden, CT 06450**

## Tech-Talk - Part 3

Welcome to Part 3 of our discussion.

As promised, this month I have some rather eye-popping information for you. We're going to see why your SWR meter can lie to you. Or as another fellow says, "SWR meters make you stupid."

The material in this section was prepared using 2 programs from the ARRL Antenna Book CD. Roy Lewallen, W7EL's EZ-NEC antenna modeling program was used to get the basic antenna data. That info was fed into Dean Straw N6BV's Transmission Line for Windows (TLW) analysis program. If you like to play with antennas, both programs are great tools.

Using EZ-NEC, I "built" a 40 meter dipole at about 33 feet high. As expected, the SWR was about 1.6:1 at the center of the band and below 2:1 at the band edges. Then I opened TLW, specified 100' of RG-8X coax as the feedline and added the feedpoint impedance (77 -j13) calculated by EZ-NEC. TLW calculated the total loss in the coax as just under 1 dB. Most of that was the inherent ("matched line") loss in the coax. The slight SWR mismatch added just a 10th of a dB to the total. None of this was surprising; it's basic antenna theory. But read on...

Let's take that 40M dipole and -- through a tuner -- use it on 20M. An SWR meter in the shack will read about 6:1. Not great, but well within the range of most manual or external automatic tuners. So the tuner does its thing, our transmitter sees 50 ohms, and happily pumps 100 Watts out into the coax. But how much of that power actually radiates, and how much is lost in the coax? Would you believe that a mere 6 Watts actually goes out as RF? The remaining 94 Watts are lost -- converted into heat -- in the coax!

Hmmm.... I must need better feedline, eh? So (using the TLW program) I replaced it with some nice, low loss LMR-400.

Much better now. I'm radiating 16 Watts. "Only" 84 Watts lost in the coax. Yikes! Well, I decided to go whole hog and swapped the LMR-400 for some nice 1-1/4" hardline. Which, in the real world, would have set me back about \$500 or more when you include connectors. Only to find out that I'm still losing 1/2 of my power in the feedline!

Maybe the old-timers were right about using ladder line. And sure enough, when I feed that antenna with 100 feet of 450-Ohm ladder line, my loss plummets to almost nothing -- just about 1/2 of a dB. Now almost all of my power is heading out to that rare DX. And of course, now I can actually hear that DX station. Remember that antennas are reciprocal. That 94% loss on transmit is equally a 94% loss on receive.

But how can the losses be so staggering when my SWR meter shows only 6:1?

Here's the first clue... each time I upgraded the coax, my SWR increased. With the hardline, my meter showed nearly 50:1. No, that's not a typo. Fifty to one. But that's not the worst of it. Remember that SWR is, by definition, the degree of mismatch between the impedance of the feedline and that of the antenna. But I didn't change the antenna at all, and each of my feedlines was 50 Ohm. Then how can the SWR increase? And the answer is -- it can't.

But what my meter reads can (and did) change. Why? Because the high loss in the coax absorbed most of the reflected power. The meter was seeing the full 100W forward power, but only a fraction of what was coming back down the line. TLW tells me that the actual SWR at the antenna feedpoint is about 100:1. That's just what we would expect from a full-wave dipole -- an impedance of about 5000 ohms.

And as if all of that wasn't bad enough, keep in mind that I used a lossless tuner, and good quality coax in new condition. Tuners do have loss. And coax used outside does get more

lossy with age.

That's it for this month. We touched briefly on ladder line today. Next time we'll take a closer look.

**73 for now,  
John Bee, N1GNV**



**A New Award** One of the local LIDs was by last week. He beat his way up the hill and pulled up a chair on the veranda. The spring weather was here, and the temperatures were warming up. This particular LID looked like he had a few extra helpings at the dinner table during the cold months, for he was puffing and sweating a bit more than usual. He had the knowing look of someone who had just discovered a secret.

He looked around a bit, and then began in a soft voice "I've got two more" he said quietly, holding up his hand with two fingers raised to emphasize his point, "the two I've been waiting for." He was starting to smile, and he had the look of one who had just found out he'd won something.

We patted him on the back and said, "Congratulations!" Once you get past the 200 mark, new ones are hard to come by. What ones were they? Did you work them in the contest? The LID looked around for a moment and then said, "No, no! Not two new ones. It's two more that don't count. Remember that operation from the Pacific last fall? The DXCC desk is sending back the cards indicating there is no documentation. As it stands now, they don't count for DXCC!" We were confused, for in past years when this LID had cards rejected, he was particularly upset, often threatening to not renew his membership in the ARRL.

."And why is this a good thing?" we asked, "a lot of DXers worked those islands, and if they don't count, everyone will be disappointed."

"That's because they do not know about the new award!" he said quickly, jumping up and then catching himself quickly, and sitting down again. "Shhh!" he whispered, putting his finger over his lips. "We have to be careful or word will get out, and we want to be the first few to get it. Imagine! Being in among the first few serial numbers! A lot of the fellows tear up their QSLs when they find out they don't count. I kept all of mine, and I had almost 100 since I began in 1985. I just needed two more, and these two do it!"

"Huh?" we asked, "what award? If they are not counters, they are no good. No one is going to give you an award for that." "Where did you hear that nonsense?" we asked. "After the Hamfest last week!", he whispered, "I got it directly from one of the fellows who was a field checker for the DXCC program, and he got it from the guy who used to live next door to the guy who was the ARRL section manager until a couple of years ago. And he said that it came directly from NC1L. It doesn't get any better than that!"

We were starting to think that this was a lot more than hearsay -- it was hearsay times three! But we put forth our poker face and said, "Tell us more." He looked around again and said, "OK, but this is just between you and me. Apparently the DXCC desk is trying to drum up a bit more activity, and they are getting ready to announce the new award this month. It's the DCNG award! It stands for *Doesn't Count, No Good*. And like the DXCC, you need 100 bad ones to get a certificate."

"I saved all my no-counters. I have all of the ones Romeo sent out, and all of the ones from those African and Middle East countries that the DXCC rejected. Most DXers only have P5RS7 'cuz that was the most famous one. But I have all the ones from the false starts when Eritrea became a new country. The ones before it became an official entity. I even have a few from those South African Homelands that every

one thought would be good ones! And one from a 5R station who had no license. I have a card from Bougainville. I even have the first KH8SI QSL from 2005. My last ones were the Montenegro QSLs dated before 4 July 2006. I have 7 of those! And these two make an even 100!"

"That's ridiculous!" we replied, not taking the care to keep our voice down, "why do you believe all of this stuff? The ARRL isn't going to give you a certificate for QSLs that are no good." "Don't talk so loud!", he snapped, waving his finger back and forth. "If you don't want to send in for it, fine. If you don't have enough bad cards, that's too bad. I'm sending mine in by registered mail and as soon as the arrival date is logged into the DXCC computer, I'll have a low serial number. Maybe even #1"

"When did you say this became effective?" we asked. "April 1st" was the quick reply. "That's interesting" we said, "and why do you suppose the fellow at the DX Club told you that date?"

The LID stared at us with a knowing look, "Everyone can figure that one out", he said with a condescending smirk, "it's the start of the new fiscal year. All big organizations, even governments, run from the beginning of April one year until the end of March next year. It's the start of the 2011-2012 fiscal year. That's the main reason why I know it's for real!"

And with that he was off down the hill, ready to take his package of useless cards to the post office. We watched him clear the end of the lane and make his way around the turn. Some times it is best to let nature take its course, and this was one of them. We were starting to wonder how Bill would react when he got 100 bad QSLs with the package dated April 1st. Son of a Gun! These are trying times when the flux is at the bottom and the Low Days of DXing are upon us. The LIDs are uneasy, and it doesn't take a lot to get them stirred up. DX IS!

**[Grid\_Dipper@Prodigy.net]. GD**

# Secretary Report & Minutes of Meriden Amateur Radio Club

## March 2011

The business meeting opened at 1930 on March 10, 2011 with approximately 14 people in attendance. A quorum was present. VP Jim N1ZN presided.

### **Announcements -**

Introductions

Activity meeting - Thurs, March 24th at 7:30 PM – Homebrew demonstration by N1GNV

### **Secretary's Report -**

Previous minutes accepted as published in Key Klix.

### **Treasurer's Report -**

Treasurer's report accepted as presented by N1ZN.

All assets as of Mar1st \$xxx.xx (Gen'l Funds xxx.xx, Scholarship xxx.xx) plus WRA funds of \$xxx.xx.

### **Contributions –**

None.

### **Correspondence –**

Sympathy card sent to John N1LEZ and family on the passing of their father.

### **Scholarship – (KE1AY)**

Restart in Spring 2010.

### **Club Station & Facilities - (WA1TRY-SAM)**

See March Key Klix for the SAM report.

Station open and operated well during the ARRL Intl DX Contests – CW and Phone.

Rich WA1TRY will try to open the club station one hour before meetings to allow members an opportunity to operate. We have a great station; all should hone their skills in the chair.

Interference has been noticed intermittently at the station. Possible causes may be a faulty outdoor sodium lamp near the garage or some other industrial source. Further investigation to follow.

### **Club Activities & Program (KB1CIW & KB1FYL-P&E Co-Chair)**

Bob KB1FYL discussed Activity Night plans:

- ? April – N1GNV on home brewing
- ? June – Field Day preparations
- ? May & July – Fox Hunting & Picnic – possible combined.

### **Nets - All nets are doing well. Report in Key Klix & MARC forum.**

HF-SSB 28.375 Tuesdays at 8:00 PM, Primary NC John K1VDF.

VHF-FM 147.36R Tuesdays at 7:00 PM, Primary NC Bob KB1CIW.

VHF-SSB 50.175 Mondays at 8 PM, Primary NC Jim N1ZN.

**Castle Craig - (N1API-CM & CP)**

10/10 QSO parties: SSB Feb 5-6, 2011 & Aug 6-7, 2011; Digital Apr 23-24, 2010 & Nov 12-13, 2011; CW May 7-8, 2011 & Oct 15-16, 2011. FB to N1API and N1ZN for being awarded 1st and 2nd place in area 1 for the February QSO party.

**Membership - (KB1HCC)**

Forty-seven 2011 members more or less.

**Interference and Technical - (WA1TRY)**

See Station Report.

**Instruction - (VE-KE1AY, Instruction Facilitator - Open)**

Additional testing and classes will be announced.

**Candy Store - (N1ZN)**

New style cap (\$10) is available from Jim N1ZN

**Key Klix - (WA1TRY & staff)**

Running back to normal.

Arrears members will no longer receive Key Klix

**EmComm - (WA1VXH)**

There will be an MS walk-a-thon in Cheshire in April 10th. We seem to be the only or one of the very few clubs supporting these activities. Contact Chris WA1VXH to help.

Chris WA1VXH reported the town approved the use of Marcus Cooke Park for Field Day.

**Nutmeg Hamfest (October 9, 2011)**

Planning has started anew.

The Nutmeg Hamfest has been approved as the ARRL CT State Convention site for 2011.

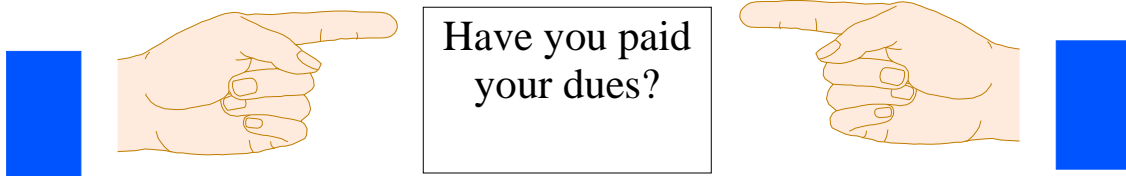
Bill W1KKF President of the Nutmeg Alliance presented MARC with a donation of \$xxx.xx resulting from the 2010 event.

**Miscellaneous**

50/50 – None

Meeting Adjourned about 20:17

*Submitted Dan Murphy, W1DMM, Secretary*



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Southington, CT 06489  
Phone: 860-621-2252**

**Business Meeting  
September 10**

***HAVE YOU PAID  
YOUR DUES ?***

**Activity Meeting  
April 28  
Annual Repeater Meeting**

**Check club forums for  
new information**

**Meriden Amateur Radio Club  
Post Office Box 583  
Meriden, CT 06450**

**First Class**