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# MERIDEN AMATEUR RADIO CLUB



## APRIL 2018



### 1947 -- 2018

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TRES K1WJL DAVE SWEDOCK S.A.M. K1RCT ROB CICHON

ALL MEETINGS ARE AT THE EOC / HOPE HILL FIREHOUSE  
143 HOPE HILL ROAD, WALLINGFORD

**E**

**Y**

**Wallingford Public Works making a path to Field Day  
(In June—Whose taking bets???)**



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**I**

**X**

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## ACTIVITY NIGHTS & EVENTS,

Ed W1YSM

April -	AA6E, Martin Ewing will present SDR Software Defined Radio's	
May -	Digital Modes 101 JT65, FT-8	Rob K1RCT
June -	Antennae and SWR measurements	John K1VDF
July -	Lark in the Park	John N1GNV
August -	Jeopardy for Hams	John K1LYP
September —	EMP & Faraday Cages—Shocking	K1SKL
October —	ECHOLINK & irlp	K1LHO
November—	Cancelled for Turkey Day	
December—	Christmas Party @ Serafino's	

WE ARE TAKING REQUEST & OFFERS FOR 2019

### Business Meeting Thursday April 12, 7:30pm at the Wlfd EOC

We may possibly get a look at the Constitution & Bylaws committees proposed new version.

### Activity Meeting Thursday April 26, 7:30pm at the Wlfd EOC

SDR'S or Software Defined Radio by AA6E Martin Ewing, retired Director of Information Technology for Engineering at Yale, where he was president of the W1YU club. Previously, he was a senior research engineer at Caltech in Radio Astronomy after receiving a PhD at MIT and a BA at Swarthmore College. His ham radio career began in 1957 as K5MXF, but he has also held the calls WA1OCT, WB6YBQ, and VK2ERX. Martin has written numerous articles and reviews for QST, and he volunteers at the ARRL Lab. He is a "casual" HF DXer, often working FT8. His current technical interests are computing and software defined radio.

### Saturday Morning sessions at the EOC..

Huge success as all kinds of activities going on from educational help with the tests, to operating the bands. The VE Session last month was a huge success as we had two new technician class licensee's, 3 upgrades, two to General Kristen KC1ISI and Matt KC1IIL and new member John Pancoast KC1IYC to Extra class. Jeff N1AKN did his first VE Session as a VE. Congratulations to all..

### Membership

At the March business meeting, new member John Pancoast KC1IYC was voted in and welcomed. We had 17 non renewed memberships expired that on March 1. Membership now at 79



# **WA1FFT**

## **RAY IRWIN**



Ray Irwin, MSEE 1977, WA1FFT, born at Lincoln, RI, is an active ham involved with such on-air activities as 3905 Century Club, former net control op and now working toward master rating, OMISS, ECARS, special events, and is also a VE. His first exposure to shortwave radio came at a young age while helping his family in the radio and TV business.

He earned his novice radio operator license (WA1CRJ) at age 13, and built an AM transmitter using parts scrounged from the store's service department. He recalls buying his first commercially built rig, NC -57 receiver, from a local ham, and afterward that hams' home brew transmitter built from an old QST article, paying \$15.00 for each. His current equipment consists of: TS 590S, SB-101, KNWD 480SAT, TMD 710 for 2 and 440 meters, Ameritron 811, an MFJ versa tuner, and a TS 480 tucked away in his grab and go kit. For CW Ray uses a J-38 straight key and a Vibroplex bug. His antennas consist of a horizontal 80 thru 10M loop, 40/80 dipole, and a 20 meter dipole. He is very pleased with Max-Gain telescopic fiberglass poles for antenna supports.

Ray was career military having worked in Military Intelligence, Army Security Agency, and the Signal Corp, having attained the rank of Captain. He has an extensive background in Electronic Warfare Systems, Night Vision & Electronic Sensors, and Radar Countermeasures, to name a few. Recently, he developed a method for defeating IED's (improvised explosive devices) to aid the war effort.

Ray enjoys the camaraderie of MARC, and looks forward to participating in the many activities the club offers. After traveling the world, Ray and his wife Kristina now call North Haven home.

**Editors Note: Ray had submitted this last month and I am inserting it with his WB1GYZ File article...**

Given the warm weather (In Feb), Ray Irwin, WA1FFT, did some antenna work, The picture is of a Max-Gain fiber glass push up pole that is set to about 32 feet. The top has both an 80 and 40 meter dipole tied to a balun at about 30 feet. The second antenna just below is a 20 meter dipole. All the antennas are "Inverted V". The 80/40 is oriented nearly N/S and the 20M is E/W. For inverted "V" it is recommend that the length be 5% shorter. Note the coil of coax on the top 80/40, plus a second coil at the base of the pole. The 20M has an Alpha Delta center connector, that will also get a current balun at the next warm day. The 80/40 antennas are tied to a tree at one end and a tree plus a 20 foot piece of bamboo at the other. Let me know if you want some 20 ft bamboo. I have a lot of it. Ugg. The VSWR on the 80 is centered at the top end as I work a couple of nets between 3.8 and 3.95. The 40 still needs some wire added to the ends. I'm thinking that by connecting both the 80 and 40 to the same balun, it has raised the resonance to the 40 by about 0.2 MHz. For now it has a VSWR of 2.0 where my 40M nets are, and that will get fixed at the next warm weekend. The 20M is below 3.0 across the whole band. So how did it work? Well last night on 40M, I was 55 to 59 for TX, FL, MI, WI, TN and OH. On 80M I worked some AM and SSB into upper NY and PA. Next issue, I'll go into some tricks on one time adjusting the dipole length and a way to mix coax lengths and velocity factors to get that lambda over 2 electrical length to match your dipole to your rig.

## Cheshire MS Walk

On Sunday April 22, 2018 the annual Cheshire MS walk will take place starting at Cheshire High school.

[http://main.nationalmssociety.org/site/T...r\\_id=29743](http://main.nationalmssociety.org/site/T...r_id=29743)

Every year the MARC/ARES provides communications for the non profit charity event, and our services have been requested again for 2018. We need volunteer communicators to staff the water stations, straggler bus, and other points along the route.

Race registration is at 9 AM and the walk starts at 10. Most everyone secures before noon.

Operators are expected to be on scene by 8 AM for assignment and deployment. Please bring a 2 meter HT with a decent antenna and/or a 2 meter mobile. Douglas WA1SFH has volunteered to be net control again from the high school cafeteria.

If you have a yellow reflective ARES vest, please bring it. Tactical call signs will be used (example: Base, this is water station one). Operations will be on the 147.36 club repeater.

This is a fun event with over 2000 participants in the walk in 2017.

If you can help out, see me at the next club meeting, or reply here or to my email: [kb1jl@outlook.com](mailto:kb1jl@outlook.com).

Thanks

Eric KB1JL

**Editors Note:** This event has passed but I was so impressed with their enthusiasm that I re-posted it here for your review, Congrats to the W1YU group..

# 100

**JOIN US TONIGHT...**

as we celebrate the 100<sup>th</sup> consecutive  
**W1YU NET**

**Tonight's net will be a special trivia edition  
featuring W1YU and YARC memories!**

The net begins at 8:00 PM EDT  
on the W1WPD Woodbridge CT 442.5 MHz repeater [073 DCS]  
*[also available via the NEW ENG Conference node on Echolink]*

Tonight's net control station  
is **AB1DQ**, James

*All amateur operators everywhere are invited to join in the fun!*

**NOTE** Because of the special format of tonight's net, NCS will NOT be accepting traffic this week.  
Stations with traffic this week are encouraged to check into the [Vesconn Net](#) or the Nutmeg [VHF Traffic Net](#)



**Steve KC1SA gave a very informative presentation on DMR at the March Meeting**



# Short Wave Listening is still alive

Eric Olsson KB1JL

Many of us got our start in amateur radio by being SWL's, short wave listeners. It was a way to get our feet wet in the radio hobby and it provided additional motivation to pursue that FCC license. I have always maintained an interest in the SWL aspect of the hobby. When I had a teletype machine I enjoyed copying utility stations and was able to print low level embassy communications as well as the usual news agencies and weather reports.

I listened to the coastal marine stations on CW and copied the ships passing traffic to and from the coastals all over the world. Cruise ships would run phone patches on their assigned short wave frequencies, where passengers could call home. Some interesting conversations were heard. I could hear military comms, and frequent copied pilot coms and unclassified phone patches from Air Force One back to Andrews AFB. I also copied the INTERPOL traffic nets on HF CW, mostly in Europe. The net control station was FSB in France. During the heyday of the Miami Vice era, the Coast Guard was active on 5696, and we could listen to the helos following suspicious ship and the USCG boarding parties reporting their finds as to how many drugs they seized, in addition to search and rescue operations. The CIA had several propagation MUF marker stations across the band, using KKN50 call sign. Most of this activity is gone replaced by more sophisticated systems like encrypted ALE and Satcoms.

Most every country had a SW broadcast network of frequencies broadcasting to the world, or to their expatriate communities around the world. One of my favorites was Radio Tahiti on 15170, which came in clear in the afternoons in French with Polynesian music. I once heard a broadcast from an African broadcaster, which was broadcasting a coup live after rebels seized the government SWBC station. Although much is gone, there are still stations to monitor on the HF bands, between the ham bands. Many of the international broadcasters have gone to internet streaming, which is much cheaper to maintain than broadcast antenna farms and complexes.

With fldigi software I can copy NAVTEX, and fax weather maps and charts, and get the latest international pirate activity bulletins weekly on WLO and the daily practice bombing schedules off Norfolk VA on NMN. There are still many SWBC stations on with China and India being the dominant players. BBC is still available, although they no longer broadcast to North America. Many of the broadcasters use relay stations now and other rent transmitter space from commercial broadcast stations. Pirate hobby broadcasters appear in the area of 6925, mostly on weekends. Spy numbers stations also remain active across the bands. Remember, just about every HF rig sold these days is general coverage. Some useful links.

<http://short-wave.info/> Useful in identifying a broadcaster on a particular time and frequency and to search for parallel channels and other scheduled times of broadcast.

<https://swling.com/blog/> Good general all around SW blog with product reviews of SW radios.

Radio not accessible? Try streaming on your computer here with a Software Defined Radio (SDR):

<http://websdr.ewi.utwente.nl:8901/>

The Twente SDR is great for listening to European broadcasters on long wave bands and to see what's open in Europe when the US ham band have closed down.

Other SDRs can be found here: <http://www.websdr.org/>

<https://www.hfunderground.com/board/index.php> HF Underground BBS is useful in identifying pirate activity, and clandestine broadcasts and utility stations and frequencies.

<http://1radionews.com/> Not near a computer? Try this android app for streaming BBC and a host of other SW broadcasters right to your phone. It also has "on demand" newscasts. An Apple app is in the works. The Tune In Radio app also works.

There is a lot of frequency space between the ham bands on your radio. There are also a bunch of short wave portable radios on the market. Amazon is a good source of info and there are many web sites that do on line reviews. My favorite is the Tecsun PL-880 portable and I also have a restored Zenith Transoceanic.

Continued with Pix on next page

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## Secretary Report & Minutes of Meriden Amateur Radio Club (M.A.R.C.)

# MARCH 2018

Meriden Amateur Radio Club meeting called to order March 8, 2018 at 19:30 hours by President W1KKF. Introductions of attendees were made.

### Announcements:

W1KKF announced VE Session at OEM on Saturday 3/24 at 0900 and Nutfest Committee meeting at OEM on Wednesday 3/28 at 1930.

### February Minutes:

In absence of Secretary KC1SA, February minutes were read by KB1JL.

### Correspondences:

No correspondences were received.

### Membership:

New Member John Pancoast KC1IYC was voted in and welcomed.

17 non renewed memberships expired on March 1. Membership now at 79

### Treasurer report:

In absence of Treasurer K1WJL, financial report was read by W1KKF.

### Committee Reports:

#### Programs:

W1YSM announced KC1SA would present DMR 101 for March activity meeting.

AA6E will present SDRs for April activity meeting.

K1RCT will present Digital modes for May Meeting.

K1VDF will present antenna theory and practice for June meeting

Steve Lamoreaux, a physicist from Yale will do a presentation on EMP later in the year, not yet scheduled.

#### Station Activities:

K1RCT gave a report on recent contest activity including CQ160 contest, ARRL DXSSB contest. Rob also reported that 500' spool of 8 conductor wire is missing from the garage area of the OEM, and that electrical panel locks were tampered with and replaced twice. A theft report was filed with Wallingford PD. The passcode to the OEM building was changed and access is now restricted to club officers and OEM members. Rob also stated that the W1NRG forum had been down briefly and was restored by K1PU in short order. Anyone interested in submitting ARRL contest logs as a club member should contact N1API, who will forward list to ARRL.

#### Club Nets:

Reports were given by K1VDF for the 10 meter net on 28.375 and by N1ZN on the 6 meter net on 50-175. Both are active.

#### Castle Craig:

N1API reported that 5 logs were submitted for the recent 10-10 contest and that MARC came in 4th, but first in the low power (200w) Club category nationwide.

#### Scholarship:

KE1AY stated that letters were sent to the two Wallingford high schools.

#### Interference:

WA1TRY is looking for a replacement to chair this committee. No takers.

#### VE:

KE1AY will hold VE session on March 24 at OEM at 0900. KB1JL and K1LYP assisted W1YU Yale ARC in holding a VE session in New Haven on March 3, in which 6 exams were administered and passed.

#### Nutfest:

Committee will meet Wednesday March 28 at 1930 at OEM.

#### Candy Store:

N1ZN says no news.

#### KeyKlix:

K1WJL was not in attendance.

#### EmCom:

KB1JL reported no news or communications from DEC WA1SFH.

### Old Business:

- W1KKF has not yet approached Serafino's regarding the December xmas part, but intends to do so.
- W1KKF presented a flow chart regarding possible access to the club server. This was briefly discussed and then tabled until K1PU could be present. K1RCT stated there were no ongoing issues and that if issues came up, they should be reported to him so that they can be dealt with quickly. If help were needed, Rob would reach out.
- Treasury Audit. N1ZN reported this was not yet done.
- Constitution revision. A committee chaired by KC1SA will meet on March 17<sup>th</sup> at the OEM building and results presented for the April business meeting.
- Scholarship Committee: Changes were discussed and an explanation of eligibility family of club members was explained by KE1AY. A committee was formed to recommend possible changes and KE1AY, K1RCT, W1YSM, KC1ISI and N1ZN volunteered for this.
- SAM K1RCT is looking for town ARES emergency plan. WA1VXH (sk) had started this but there is currently no EC appointed and any drafts are unavailable.

### New Business

- W1KKF announced that Steve WV2LKM is recovering from hip surgery and would like an assistant to cover the club library. K1LYP stated he would assist.
- K1LYP is looking to prioritize based on interest contests that would be operated from the club station as a group effort. Currently Field Day, Winter Field Day, Sweepstakes and US IOTA are popular. A discussion was held on the viability of the repeater controller and factory support issues. This was raised by K1RCT. There is interest in linking the 147.36 repeater to other repeaters for SKYWARN and ARES activities. This will be further investigated and discussed on Saturday and a recommendation will be presented to the club at next business meeting.

Meeting adjourned at 2037 hours.

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### REQUEST FROM TOM K1KI ON THE NEQP

I'd appreciate your help in publicizing the upcoming New England QSO Party on May 5th and 6th. Please mention it at your next club meeting and in your newsletter.

The NEQP is a great time to check out antenna systems and offers a moderately paced opportunity to work new states and countries. You'll find a wide variety of participants, from newcomers to experienced contesters, all interested in making contacts with New England stations.

We're working to make sure that all of the New England counties are active again this year and would appreciate your help. Get on for at least an hour or two and join in on the fun. Please let me know if you can put in any time at all so we can work on activity from the rarest counties. Will you be QRV? Let us know which county you'll be on from with a message to [info@neqp.org](mailto:info@neqp.org)

Oh yes, the NEQP is also lots of fun when mobile. Every time you cross a county line the action starts over again. It's amazing what a 100w radio and mobile whip can do.

The QSO Party is 20 hours long overall, in two sections with a civilized break for sleep Saturday night. It goes from 4pm Saturday until 1am Sunday, then 9am Sunday until 8pm Sunday. Operate on CW, SSB and digital modes on 80-40-20-15-10 meters. For each QSO you'll give your callsign, a signal report and your county/state. Top scorers can earn a plaque and everyone who makes 25 QSOs and sends in a log will get a certificate.

Last year we had logs from 177 New England stations and 460 more from around the country and world.

The full NEQP rules are here -> <http://www.neqp.org/rules.html>

The 2017 results are posted and the results since 2002 are also available -> <http://www.neqp.org/results.html>

It's just about a month until the 2018 NEQP. Please make some QSOs even if you don't want to send in a log.

Thanks!

73 Tom/K1KI

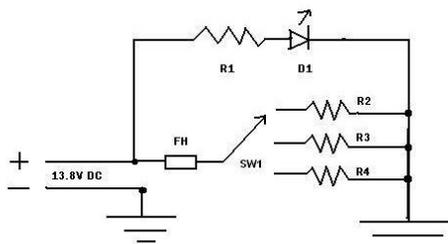
# A Handy Fuse Tester You Can Build

John B N1GNV

Here's a simple piece of test equipment that's easy to build and use. Chances are you have all the necessary parts. If not, your favorite local supplier has them. You'll wonder how you ever got along without it.

My eyes are not what they used to be. I often come across automotive-type fuses that are no longer in their package. Reading the markings on these small fuses is getting tougher and tougher. I'd have to drag out the magnifying glass and bright light to read the value. "There has to be a better way," I thought.

LED Fuse Tester



The schematic above is my solution.

I use a regulated 13.8V power supply. If you wish to use something different, just adjust the value of the resistors according to Ohm's Law. R1 is a 1KΩ resistor. D1 is any common Light Emitting Diode. FH is a fuse holder designed for the fuse you wish to test. Note that you can put more than one holder in parallel, so that you can test different styles of fuses. SW1 is a multiple pole rotary switch. The more poles your switch has, the greater the range of values you can test for. Three are shown for clarity, but you can add as many as you like, using appropriate resistors.

R2 is a 13.8Ω resistor. Although that's not a standard value, you can easily make one using combinations of off the shelf resistors in series and parallel. Since current equals voltage divided by resistance, 1 amp will flow through R2. Similarly, R3 is a 6.9 Ω resistor, giving 2A of current. Note that because R2, R3, etc. are such low values, almost all of the current will flow through them and almost none through the 1KΩ resistor. Thus the LED will not light. For R4, and as many others as you care to add, just do the math and construct the proper value of resistor.

Using the tester is simple. Start with your switch at the lowest current setting, and put the fuse to be tested in the holder. Move the switch to higher settings, one step at a time, pausing after each step. When the LED glows brightly, you'll know what value the fuse was. What could be easier? Parts, or built and tested units, are available on my Web Site. BONUS!! With each order, I'll include a handy, suitable-for-framing chart showing conversion from GMT (Greenwich Mean Time) to UTC (Coordinated Universal Time).

73, John Bee, N1GNV

WB1GYZ PRACTICING CW WITH K1VDF



JEFF N1AKN HELPING EVAN WITH EXAM QUESTIONS



# INFORMATION PAGE

# MERIDEN AMATEUR RADIO CLUB

PRESIDENT.....W1KKF BILL WAWRZENIAK  
 VICE PRES.....N1API AL KAISER  
 SECT.....KC1SA STEVE ALLEN  
 TRES.....K1WJL DAVE SWEDOCK  
 STATION A.M...K1RCT ROB CICHON

MEETINGS: NORMALLY  
 7:30PM ON THE 2ND & 4TH THURSDAYS OF THE MONTH,  
 UNLESS OTHERWISE POSTED,  
 AT THE HOPE HILL ROAD FIREHOUSE / EOC  
 143 HOPE HILL ROAD, WALLINGFORD

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**CLUB NETS**

**6 MTR NET** MONDAYS 8PM  
 50.175MHZ N1ZN JIM

**2 METER NET** TUESDAYS 7:30PM  
 147.36 /RPT K1TDO TODD

**10 METER NET** TUESDAYS 8PM  
 28.375MHZ K1VDF JOHN

**10/10 CASTLE CRAIG CHAPTER**  
 CONCURRENTLY WITH CLUB NET  
 28.375MHZ TUESDAYS 8PM N1API AL

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**CLUB REPEATER W1KKF/R**  
 147.36MHZ +600 OFFSET  
 NO PL TONE (OPEN REPEATER)



AB1DQ James Surprenant 19	KC1SA Stephen Allen 18	WA1FFT Ray Irwin 18
AB1HB Charlie Dudac 18	KD1JG Robert Cartier 18	WA1JKR John Rogus 18
AF1HS Art Fregeau 18	KE1AU Robert Kaczor 18	WA1SFH Douglas Sharafanowich 18
K1IIG Steve Tripp 19	KE1AY Donald Mitchell 18	WA1TRY Rich Aubin L
K1JCF Joe Farrell 18	KE4EYA Ralph Ring 18	WA1ZVY Jim Martin 18
K1LHO Mike Ash 18	N1API Al Kaiser 18	WB1GYZ Bob Biancur 18
K1LYP John Yusza 18	N1AKN Jeff Dwyer 19	WB8IMY Steve Ford 18
K1MMK Mike MacKennedy 18	N1POP Greg Ploski 19	WV2LKM Steve Waldmann 18
K1MVM Mike Macri 18	N1BF Patrick Dionne 18	
K1PU Mark Mokoski 18	N1GNV John Bartscherer 18	
K1RCT Rob Cichon 18	N1GY Geoff Haines 19	
K1SEZ Paul Ciezniak 18	N1HCA Susan South 19	
K1STM Anne West 18	N1JRC John Collin Jr 18	
K1TDO Todd Olsen 18	N1LGH Barbara Stone 19	
K1TG Roger Kuchera 19	N1NAN Helen Spokes 18	
K1TGX Jerry Molaver 18	N1OKF Bob Parisi 18	
K1THP Dave Karpiej 18	N1OKR Frank Ciccone 18	
K1VDF John Blevins 18	N1ZN James Savage 18	
K1WJL Dave Swedock 18	NY2HF Dennis Lane 18	
KA1TMN Steve Hull 18	NZ1J Dave Tipping 18	
KB1EHE Eric Knight 18	W1DJB Dylan Barret 18	
KB1FYL Bob Carruthers 18	W1DUP Sherlock Campbell 18	
KB1GWP Joseph Rish, Sr. 18	W1DQ John Elengo 18	
KB1HCC Jonathan Winslow 20	W1KKF Bill Wawrzeniak L	
KB1IFZ Elsie Mathews 18	W1LV Steve Morley 18	
KB1JL Eric Olsson 18	W1NDT Bob Lombardo 18	
KB1TJD Gaianne Jenkins 18	W1NHS Fred Ring 19	
KB1YFJ Glen Couture 18	W1POP Fred Liedke 18	
KC1HDB Jeff Martin 18	W1RPN Seth Kolasinski 18	
KC1HFO John Stoidis 18	W1UFO Mike Cei 18	
KC1IIK Scott Mowerson 18	W1VCU Nelson Denison L	
KC1IIL Matt Mowerson 18	W1XK Stan Kugler 18	
KC1ISI Kristin Olsson 18	W1YSM Ed Snyder 18	
KC1NS Nancy Tipping 18	W7FUR William Spokes 18	

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