



FEEDBACK

August 2020

Do you have a story, humorous or otherwise, about amateur radio? If so, please contact the newsletter editor (w8kdb@arrl.net) and get it published in **FEEDBACK!**

If you would like to place a classified ad to sell, purchase or swap amateur radio related items, please contact the editor.

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Inside this issue:

Lead article.....	1
Upcoming Radio Contests.....	2
Supplemental article.....	2
Meeting Minutes.....	4
Upcoming Hamfests & Conventions.....	3
Club Repeaters.....	5
Nets & Upcoming Events.....	6

Club News

Cornoavirus (COVID-19) Update

Things are still somewhat on track for getting back to normal. The Church is still allowing us to have our in person meetings and requiring face covers and that we wipe down the place one done. As mentioned, for the BLB Luncheon, SMARS Breakfast, and Board Meetings, limits may be imposed on these events by Coney Island (sometimes restricting the number of people at one table). Please keep this in mind when planning to attend these events.

This month, we are still planning to have Dr. Ed Fong on teleconference. While it was decided to have him do the presentation next month, there was a scheduling conflict that required us to change to this month. Please take a look at the article for Dr. Ed Fong.

This month is also the month that we offer our test for people who wish to get into the hobby or for ones who wish to upgrade. We will hold it in the normal room upstairs, but if more people show up then expected (limiting our ability to do social distancing) then we will move to the downstairs room.

Dr. Ed Fong



Our guest speaker for the August meeting (there was a conflict with September's time) will be Ed Fong WB6IQN. As many of you know, he is the inventor of the DBJ-1 and DBJ-2 antenna that was featured in the February 2003 and March 2007 QST. His latest article in QST was the TBJ-1 - a triband base antenna published in March 2017. The DBJ-2 won the Plaque of the Month Award. There are over 25,000 of these antennas in use today. About half are used by hams and the other half by government and commercial entities. In this month's presentation, Ed will first review how the original DBJ-1 works and then how he managed to convert the original DBJ-1 into a portable antenna. He will have some limited antennas for sale.

Ed Fong was first licensed in 1968 as WN6IQN. He later upgraded to

Upcoming Radio Contests

Looking for a little action on the airwaves? You might want to check out these upcoming contests!

Rookie Roundup

Bands: 80, 60, 40, 20, 15, 10 Meters
Mode: RTTY
Date: 08/16
URL: <http://www.arrl.org/10-ghz-up>

September VHF

Bands: 50 Mhz (6 Meters) and Above
Mode: Phone, Digital, CW
Date: 09/12 - 09/14
URL: <http://www.arrl.org/september-vhf>

10 GHz & Up

Bands: 10 GHz and Above
Mode: Phone, Digital, CW
Date: 08/15 - 08/16
URL: <http://www.arrl.org/10-ghz-up>

EME Contest

Bands: 2.3 Ghz and Above
Mode: Phone, Digital, CW
Date: 08/21 - 08/22
URL: <http://www.arrl.org/eme-contest>

September VHF

Bands: All Authorized Bands above 6 Meters
Mode: Phone, Digital, CW
Date: 9/12 - 9/14
URL: <http://www.arrl.org/september-vhf>

10 GHz & Up

Bands: All Authorized Microwave Bands above 10 Ghz
Mode: Phone, CW
Date: 9/19 - 9/20
URL: <http://www.arrl.org/10-ghz-up>

EME Contest

Bands: All Authorized Bands above 6 Meters
Mode: Phone, Digital, CW
Date: 9/21 - 9/22
URL: <http://www.arrl.org/eme-contest>

**A more thorough listing of upcoming Contests can be found on the ARRL's web page [ContestCalendar](http://www.arrl.org/contest-calendar), <http://www.arrl.org/contest-calendar>*

Extra Class with his present call of WB6IQN. He obtained the BSEE and MSEE degrees from the Univ. of California at Berkeley and his Ph.D. from the Univ. of San Francisco. A Senior Member of the IEEE, he has 12 patents and over 40 published papers and books in the area of communications and integrated circuit design. Presently, he is employed by the University of California, Santa Cruz (previously with Berkeley from 1997-2010) as an instructor teaching graduate classes in RF design and high speed interface. In his 35 year career, he has done work for Stanford University, National Semiconductor, Advanced Micro Devices, and numerous startup companies in the Silicon Valley.

SMARS Officers Nominations for 2020-2021

Elections for club officers (President, Vice President, Secretary, and Treasurer) will be held at the October 15th membership meeting. The requirements for holding office are few: any current SMARS club member may run for office, and no prior experience is necessary!

If you are interested in running for one of the club officer positions, please email Kyle at w8kdb@arrl.net with your name and the office for which you would like to run so that you may be added to the ballot.

Other News

8-meter band?? Who knew?

One of the things that I enjoy about doing the ICQ podcast is that I always seem to learn something new. What I learned today, is that some amateurs in IARU Region 1 have access to the [8-meter band](#).

8 meters?? Apparently, amateurs in Lithuania, Slovenia, Ireland, Denmark, and South Africa now have privileges in the 8-meter amateur radio band, which spans 40.66–40.7 MHz. [EI7GL has blogged](#) fairly extensively about operations in the 8-meter band, including:

- [First contact on 40 MHz between Ireland & Slovenia – 15th June 2020](#)
- [First contact on 40 MHz between Lithuania & Slovenia – 13th June 2020](#)
- [40 MHz activity report – 18th May 2020](#)
- [Reception reports of the EI1KNH 40 MHz beacon – 17th May 2020](#)

One of the questions I had was what equipment is available for 8 meters. The answer is that EI4GNB is using a modified Icom IC-7100 and a 2-element quad antenna.

I wonder if anyone here in the U.S. has tried to hear these stations. I would think that when 6 meters is open to Europe, some of the beacons, at least, would be audible.

Article courtesy of <https://www.kb6nu.com/8-meter-band-who-knew/>

Upcoming Hamfests & Conventions

NOTE - All ARRL Hamfest in September and October have been Cancelled. There is a possibility that future Hamfest listed here might also be cancelled. Please remember to make sure to verify that the Hamfest hasn't been cancelled before traveling to a Hamfest.

11/14/2020 - 11/15/2020

Fort Wayne Hamfest & Computer Expo, ARRL Central Division Convention

Location: Fort Wayne, IN

Sponsor: Allen County Amateur Radio Technical Society

<http://www.fortwaynehamfest.com/>

12/05/2020

Winterfest 2020

Location: Delta, OH

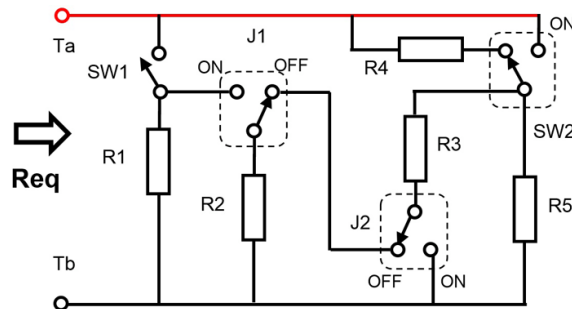
Sponsor: Fulton County Amateur Radio Club

<http://k8bxq.org/hamfest>

Build your own resistor load bank

I've written many blog posts about power supplies and electronic loads for [AMETEK Programmable Power](#). This has been interesting to do, and I've learned a fair amount about power supplies and electronic loads. So much so, I'd really like to get an electronic load of my own. The only problem is that they're still a bit out of my price range.

A couple of days ago, though, I ran across the article, [Versatile Multistep Resistor Load Bank is Simple and Modular](#) in [electronic design](#). It's a relatively simple design that consists of a number of resistors and switches, as shown in the figure below.



R1 – R5 are all the same value, and in this configuration, you can realize 12 different values, from R/4 to 2R. Here's how you would set the switches to get these resistance values:

SW1	J1	J2	SW2	Alt	Equations	Alt Equation	Factor	Req Ω
OFF	ON	OFF	OFF		$R_4 + R_5$		R/0.5	2000.0
OFF	OFF	OFF	OFF		$R_4 + \{(R_2+R_3) \parallel R_5\}$		R/0.6	1666.7
OFF	OFF	ON	OFF	0 1 1 0	$R_4 + \{R_3 \parallel R_5\}$	$R_4 + \{R_3 \parallel R_5\}$	R x 1.5	1500.0
OFF	ON	OFF	ON		R_5		R/1	1000.0
OFF	OFF	OFF	ON		$R_5 \parallel (R_2+R_3)$		R/1.5	666.7
ON	OFF	OFF	OFF		$R_1 \parallel (R_4 + (R_5 \parallel (R_2+R_3)))$		R/1.6	625.0
ON	OFF	ON	OFF		$R_1 \parallel (R_4 + (R_3 \parallel R_5))$		R x 0.6	600.0
OFF	OFF	ON	ON	0 1 1 1	$R_3 \parallel R_5$	$R_3 \parallel R_5$	R/2	500.0
ON	ON	OFF	OFF	1 0 0 1	$(R_1 \parallel R_2) \parallel (R_4 + R_5)$	$R_1 \parallel R_5 \parallel (R_2 + R_3)$	R/2.5	400.0
ON	ON	ON	OFF		$(R_1 \parallel R_2) \parallel \{R_4 + (R_3 \parallel R_5)\}$		R x 0.375	375.0
ON	ON	OFF	ON	1 0 1 1	$R_1 \parallel R_2 \parallel R_5$	$R_1 \parallel R_3 \parallel R_5$	R/3	333.3
ON	ON	ON	ON		$R_1 \parallel R_2 \parallel R_3 \parallel R_5$		R/4	250.0

The right-most column on this chart shows the values you'd realize when R = 1000 Ω.

As the author notes, you can cascade load banks to get even more values. You could also build more than one load bank with different resistance values. If you used 100 Ω resistors, the lowest resistance value would be 25 Ω, and with 10 Ω resistors, the lowest value would be 2.5 Ω.

This looks like it could be a very useful project to build, and the opportunities to be creative with the packaging are endless.

Article courtesy of <https://www.kb6nu.com/build-your-own-resistor-load-bank/>

Meeting Minutes 07/16/2020

Called to Order: 7:00 PM

Officers Present: Kyle W8KDB John W8JRD Smokey N5MKY Ivan W8IDR Tom W. KE8GDN

Pledge of Allegiance

Introductions

Greetings to new members: none this month

Secretary's Report as published in Feedback: Motion Don W8RVT Second Rick W8RCF Approved

Treasurer's Report as distributed at the meeting: Motion Dave W8RDX Second Rick W8RCF Approved

Committee Reports:

- Hamfest: no report this month
- Skywarn: Next meeting is July 21. No severe weather this month
- FieldDay: Was a success with good food and a good location, although the golash popped the breakers. 10 meter was good until 1030. Digital made many contacts. There was some interference between digital and voice on 20 meters. CW points from the Georges added in. The combined groups donated \$150 to the post. Kyle has submitted paperwork online. Still have some trailer work and also a repair of the rotor in VHF3 to do.
- VE: Session on June 25 had 16 candidates with 13 being successful. All the new calls have been posted.
- Repeaters: 220 not transmitting due to a faulty power amp. Don will need a new spare PA. Echolink is now available on the 2m repeater. The buzz on the 2m was traced to an over-voltage in the power supply. The repeater is now using Don's PS and will need a replacement.

Old Business:

- Tom W. is planning a fox hunt prep session with Dave W8RDX and Bret KD8RHB for antenna plans, etc. There hasn't been a response from Coldwater yet. Dr. Ed Fong's talk is scheduled for August or September. Jim W8JMZ suggests just picking a date for the fox hunt and go for it.

New Business:

- Nothing this month.

Adjourned: 7:55 PM

Respectfully Submitted,

John Davidson W8JRD
SMARS Secretary

Board Meeting Minutes 08/4/2020

Called to order: 5:45 PM

Officers Present: Kyle W8KDB Ivan W8IDR Tom W. KE8GDN

Others: None

Topics:

- Tom to check with Ed about date. Aug 20th 7:30pm.
- Ivan updating records for members and accounts for the next Treasurer.
- Bounced around ideas about updating membership information. Requesting updated emails, phone numbers, and addresses for better communications.
- Got an email about apparel for the club. They would like to use our logos on apparel and made available to the club members (possibly non club members as well).
- Fox hunting has stalled a little. Tom is still working on getting a fox hunt going with different groups as well as presentation.
- Talked about locations for Fox hunt.

Adjourned: 6:30 PM

Respectfully Submitted,

Kyle Brown W8KDB
SMARS President

SOUTHERN MICHIGAN AMATEUR RADIO SOCIETY FEEDBACK

S.M.A.R.S. W8DF Club Repeaters

2m Repeater 146.66MHz, -600KHz offset, CTCSS 94.8Hz

2m DStar 146.79 MHz, -600 KHz offset

*1.25m Repeater 224.240 MHz, -1.6 MHz offset

APRS Digipeater/Igate, 144.39 MHz

*70cm Repeater 443.950 MHz, +5 MHz offset, CTCSS 94.8 Hz

70cm DStar Repeater 442.7625 MHz, +5 MHz offset

***Note:** 70cm & 1.25 meter repeaters are linked, and also available via Echolink.

Other Repeaters

2m Repeater 147.120 MHz, +600 KHz offset, CTCSS 186.2 Hz

70cm Repeater 442.350 MHz, +5 MHz offset, CTCSS 186.2 Hz

<p>Club Meeting 3rd Thursday of every month Maple United Methodist Church 342 Capital Avenue NE Battle Creek, MI 49017</p>	<p>SKYWARN Coffee 1st Saturday of every month Immediately after Siren Test Coney Island, N.E. Capital Battle Creek, MI</p>	<p>BLB Luncheon 1st Thursday of every month Coney Island, 962 Capital Ave NE, Battle Creek, MI</p>	<p>SMARS Breakfast 2nd Saturday of every month Coney Island, 962 Capital Ave NE, Battle Creek, MI</p>
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<p>SMARS Nets: Monday—Friday 11:30 AM, 146.66 MHz Sunday Evening 8:00 PM, 146.66 MHz Monday 8:00 PM, 224.24 / 443.95 MHz Wednesday 7:00 PM, 224.24 /443.95 MHz Wednesday 8:00 PM, 28.365 MHz Saturday 8:00 PM, 224.24 / 443.95 MHz</p> <p>Other Nets: Skywarn Net: Tuesday 7:00 PM, 147.12 MHz</p> <p><i>Please see previous page for offsets and CTCSS tones</i></p>	<p>Upcoming Events:</p> <p>Club Meeting: August 20th @ 7:00pm BLB Luncheon: September 3rd @ 11:30am Board Meeting: September 1st @ 5:30pm Club Breakfast: September 12th @ 8:30am VE Session: August 27th @ 7:00pm</p>
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