

# QRM

The Newsletter of The Grand Rapids Amateur Radio Association  
Summer 2018 No.5

Our Systems: Packet 145.07 : Repeaters 52.760 146.760 147.260 224.640 440,400

## **The Red Cross Disaster relief efforts.**

Jim Leys, K8CAN, our Red Cross Liaison, has provided us with the relief statistics for Hurricane Maria after just 6 months.

12.8 million Meals and snacks served.

More than 5.2 million relief items distributed and

More than 40,800 health and mental health contacts made.

The Red Cross is developing recovery plans to assist with the most urgent needs of hurricane survivors, with a focus on four key pillars—access to power, access to clean water, livelihoods restoration and community health. Due to the difficulties in restoring communications following the storm, many families also have had a hard time connecting with friends and relatives on the island or stateside. The Red Cross has provided satellite technology, portable generators, laptops and power strips on reunification trucks that traveled around the island, giving residents the opportunity to charge phones and communicate with loved ones. This assistance

makes a real difference in the daily lives of hurricane survivors.

(The Red Cross contributed to this article)

## **2018 GRARA Officers**

Below are the current Officers of GRARA.

**President - Tom Hansen, N8DGD**

**Vice-President - John Streyle - W8QZ**

**Secretary - Richard Ranta - K8JX**

**Treasurer - Hank Greeb - N8XX**

**On Air Director - Greg Stoike -  
KN4CK**

**Off Air Director - Dustin Olsen -  
KD8PVZ**

**Website Administrator - Thom Durfee  
- KI8W**

**Red Cross Liaison - Jim Leys -  
K8CAN**

**Member at Large - Bob Moe -  
AC8ZX**

**Technical Director - Steve Provost -  
AC8QE**

**Grara Historian - Frank D  
Thompson  
KD8QXC**

## "2<sup>ND</sup>Hand Ham Shop"

Since the merging of AES into HRO, we hams have seen our selection of where to go to get our equipment repaired diminished. Then along comes two hams we've known for a long time, Dave Smith KC8PCL and Tom Wilson KD8DEG. They got together and put together, "2<sup>nd</sup> Hand Ham Shop"!

The primary purpose of this shop is to fill a big hole in the area. Access, locally, to parts, and equipment related to the ham, computer, DIY, enthusiast.

Along with providing a place for all to gather/hang out, to brag about their shack, equipment, projects, offer your expertise to help in resolving problems, and suggestions for projects for others, or just chatting, all over a cup of coffee, and donuts.

We are currently only open on Saturday's, 8 AM to 2 PM. "You can call us on the off days", and we can meet you at the shop, if you need that special item to complete or fix your project, and you just cannot wait until Saturday.

We have a large selection of, new, new old stock, along with used parts, resistor, capacitors, transistor, IC's, tubes, etc., some things that

are so old, we do not know what they are. This is where the experienced old timers can help out in identifying them.

We stock new, used coax, hard line cable, connectors, adaptors, plus we can make up cables with the ends of your choice, also a stock of used tower sections, and tower accessories.

We are currently carrying "KC8YOE's" "J" pole antennas, along with his "Y" beams, made upon request. We carry "W8AMZ's" dipole antennas, covering 160 thru 6 meters, and "ZS6BKW's", Famous Optimized G5RV, and the G5RV Lites.

There is a working drugstore tube tester for testing those old tubes for your vintage equipment, along with a large selection of tubes.

There is a "FREE", no charge, consignment area for all your used radio's, test equipment, accessories, etc., to sell, and or swap.

We offer full service, testing, and repairing of your equipment, maned by Dave, "KC8PCL".

Let's support our fellow Hams!

## Ron's update on the FUSION Repeater.

### AD8DT

When Ron went down to Hamvention, he spent a lot of time listening into the Fusion Buzz going around. This is what he came away with:

Sometime in July/August range we will see new firmware updates from Yaesu for the FT2, FTM-100 & FTM-400 and a new Wires-X Software for Windows OS. The mobile setups (FTM-100 & FTM-400) will require just the SCU-20 cable. With the FT2D HT you will need a SCU-19 and a CT-44 to interface the microphone and speaker to a laptop, PC or tablet as in the attached photo. All this without port forwarding!

Drawbacks/Questions yet to be answered:

- Does not support a "ROOM". Will it support text messaging, voice messaging or photos?
- The transceiver (with new FW) will have a "HRI MODE" as described in the plagiarized material below, so does that mean you will **NOT** need to have a HRI-200 on the air & registered to gain access to the portable function of the software?

- If you need an HRI-200 registered and on the air can you use it as the same time if the HRI-200 is in use?
- If the HRI-200 is needed as above I would assume that there would be some security there (like using the radio's unique DP-ID so that a random ham does not grab your node number and use it for their use. Like for instance you can hi-jack a DMR number and put it into a radio and assume the identity of another ham.

As far as the FT-2 node I plan on using this in lieu of my Open Spot when I travel. That way it is direct access into the Wires-X server and not needing a bridge via a FRS or YSF Reflector. Then when mobile an option to use an HT in lieu of two mobiles (one as a node and one to get into the node). Also when in the wife's vehicle where she does not want any radios or antennas. Yea she is a ham (KC8NVY) but go figure... Got to keep mama happy ;)

In my mobile I plan utilize a FTM-100 as the node going to the same RCA Cameo Win 10 Tablet getting Wi-Fi from my Verizon Jetpack Hotspot while using a FTM-400 to get into it. Should be able to stay direct connected to Wires-X without the need of a bridge (as long as there is cell overage) Now just waiting for the release date of the Firmware & Software.....

## **Carl A Thompson WA8AAT S.K.**



Carl A Thompson, WA8AAT, has been a solid fixture in the Grand Rapids area Since he became a Ham in 1965. Public service was where he excelled! He was Responsible for introducing Ham Radio to the Old Kent River Bank run. Before Ham Radio, CB-11meters was used. He also had a hand in operating packet to Keep track of the runners. Since 1965, he volunteered with the Kent County Civil Defense and the Civil Air Patrol: Red Robin, for 22 years.

He also volunteered with the American Red Cross and the RSVP program: Retired and Senior Volunteer Program. In 2000, Carl and his wife Evelyn, were acknowledge for their significant Contributions to the community and Ham Radio by being awarded "West Michigan Ham of the year".

Being ill in his later years didn't stop him from helping others deal with the loss of a loved one. He never said no, to anyone. He had a big heart and many people felt that.

Thank you Carl. You have added so much to our lives.

R.I.P.

## **Club Elections**

Grara starts their process of finding people to run for the Grara board in October. While being elected is an honor in itself, it's also a lot of work. That's why your clubs' Secretary, Rich K8JX, is providing copies of both the Constitution and By-Laws at each monthly meeting. Thinking of running for an office? Why don't you look over what is required to fulfill the duties of the office first. Just a heads up.

## **Coax Data sheet**

While placing an order for Coax from "The Wire Man", I learned that Pres Jones, N8UG, had passed away. He helped create many unique transmission lines for Hams. I had been using one, and since I'm back on VHF, I decided to replace both the antenna and hard line. (Actually, Pres called it Poor man's hard line). It was great to work with! I thought, what with all the new hams we have coming into our club, maybe it would be helpful if they had a data sheet showing the differences between the coax's. "The Wire Man's personal gave me permission to reprint their data sheet.

Thanks guys and R.I P. Pres.

Cable type	P/N	Mfr or Brand	Imp Ω	VF	Center conductor inch	Dielec -tric	Cap. (pf/ ft)	Shield	Jacket	OD in	Power Kw @ 10 MHz*	Power Kw @ 150 MHz*	lb per K ft
RG8	102	CQ Flexi 4XL	50	0.84	19/23 bc	sspe	24	AL/tc	TPE	.405	4.3	1.0	98
RG8	103A	DRF "Bury-Flex"™	50	0.82	19/23 bc	mcfpe	24.6	AL/tc	IIIA	.405	4.0	1.0	88
RG8	106	CQ "Super 8"	50	0.82	19/23 bc	mcfpe	24.6	AL/tc	TPE	.405	4.0	1.0	88
RG8	1000	CQ original	50	0.85	.109 bccAl	ccfpe	23.9	AL/tc	IIIA	.405	4.0	1.0	88
RG8	9913F7	Belden	50	0.83	7/19 bc	hdfpe	24.6	AL/tc	Belflex	.405	4.0	1.0	94
RG174	100A	TM	50	0.66	.018 bccs	pe	30.8	AL/tc	PVC	.110	.5	.10	9.2
RG58	195	TM	50	0.80	.037 bc	fpe	25.4	AL/tc	PE	.195	.9	.39	21
RG58	200	TM	50	0.83	.044 bc	fpe	24.5	AL/tc	PE	.195	1.2	.45	22
RG58	200db	TM	50	0.83	.044 bc	fpe	24.5	AL/tc	PE	.195	1.5	.45	22
8X	240	TM	50	0.84	.056 bc	fpe	24.2	AL/tc	PE	.240	1.8	.66	34
8X	240db	TM	50	0.84	.056 bc	fpe	24.2	AL/tc	PE	.240	1.8	.66	34
8X	240uf	TM	50	0.84	7str .056 bc	fpe	24.2	AL/tc	TPE	.240	1.5	.55	34
RG8	400	TM	50	0.85	.108 bcAl	fpe	23.9	AL/tc	PE	.405	4	1.47	88
RG8	400db	TM	50	0.85	108 bccAl	fpe	23.9	AL/tc	PE	.405	4	1.47	88
RG8	400uf	TM	50	0.85	7str bc	fpe	23.9	AL/tc	TPE	.405	4	1.22	88
LMR	500	TM	50	0.86	.142 bccAl	fpe	23.6	AL/tc	PE	.500	5.5	1.931	97
LMR	600	TM	50	0.87	.176 bccAl	fpe	23.4	AL/tc	PE	.590	7	2.41	131
LMR	600db	TM	50	0.87	.176 bccAl	fpe	23.4	AL/tc	PE	.590	7	2.41	131
LMR	600uf	TM	50	0.87	7str .176 bc	fpe	23.4	AL/tc	TPE	.590	6	2.00	165
LMR	900db	TM	50	0.87	.262 bc tube	fpe	23.4	AL/tc	PE	.870	10	3.89	266
LMR	1200db	TM	50	0.88	.349 bc tube	fpe	23.1	AL/tc	PE	1.200	20	5.54	448
LMR	1700db	TM	50	0.89	.527 bc tube	fpe	22.8	AL/tc	PE	1.670	40	8.75	736
8X	115	CQ MINI-8	50	0.78	19/29 bc	mcfpe	28	bc	PVC	.242	1.8	.66	41
8X	116	CQ MINI-8 IIA	50	0.78	19/29 bc	mcfpe	28	bc	TPE	.242	1.8	.66	41
8X	117	CQ MINI-8 Marine/Mobile	50	0.72	19/29 bc	dfpp	29.1	tc	PVC IIA	.242	1.9	.72	45
8X	118	CQ MINI-8 Lo-Loss	50	0.84	19/29 bc	mcfpe	24.5	AL/tc	TPE	.242	1.5	.66	42
RG11A/U	121	Mil Spec	75	0.66	7/26 bc	pe	20.6	bc	PVC IIA	.405	2.8	1.1	92
58	124	CQ "Bazooka"	50	0.66	.032 bccs	pe	28.8	tc	IIIA	.195	1.5	.450	29
RG58/U	125	Mil Spec	53.5	0.66	.032 bc	pe	28.8	tc	PVC	.195	1.1	.450	28
RG58A	126	Mil Spec	52	0.66	19/32 bc	pe	29.6	tc	PVC	.195	1.1	..450	29
RG58C	127	Mil Spec	50	0.66	19/32 bc	pe	30.8	tc	IIA	195	1.2	..450	29
58	129FF	CQ 58 Lo-Loss	52	0.78	19/32 bc	mcfpe	24.6	AL/tc	TPE	.195	1.2	.700	29
RG59B/U	135	Mil Spec	75	0.66	.023 bccs	pe	26.5	bc	PVC IIA	.242	1.4	..400	34
RG62A/U	141	Mil Spec	93	0.84	.0253 bccs	sspe	13.5	bc	PVC IIA	0.242	1.4	.500	38
RG83/U	165	Mil Spec	35	0.66	.102 bc	pe	44	bc	PVC IIA	0.405	4	1.8	122
RG142B/U	153	Mil Spec	50	0.695	.037 sccs	ptfe	29	sc/sc	IX	0.195	9	3.6	36
RG174A/U	139	Mil Spec	50	0.66	7/.0063 ccs	pe	30.8	tc	IIA	0.100	.180	.080	8
RG174/U	140	Mil Spec	50	0.66	7/.0063 ccs	pe	30.8	tc	I	0.100	.180	.080	8
RG178B/U	157	Mil Spec	50	0.695	7/.004 sccs	ptfe	29	sc	IX	0.072	.75	.400	6
RG188/U	159	Mil Spec	50	0.695	7/.0067sccs	ptfe	29	sc	IX	0.105	1.3	.650	17
RG213/U	113	Mil Spec	50	0.66	7/.0296 bc	pe	30.8	bc	IIA	0.405	3.7	.800	100

Cable type	P/N	Mfr or Brand	Imp $\Omega$	VF	Center conductor inch	Dielec -tric	Cap. (pf/ ft)	Shield	Jacket	OD in	Power Kw @ 10 MHz*	Power Kw @ 150 MHz*	lb per K ft
RG213/U	113C	Commercial	50	0.66	7/.0296 bc	pe	30.8	bc	I	0.405	3.7	.800	100
RG213/U	CQ 113 PE	CQ Rugged, Direct bury	50	0.66	7/.0296 bc	pe	30.8	bc	IIIA	0.405	4	.800.	100
RG214/U	111	Mil Spec	50	0.66	7/.0296 sc	pe	30.8	sc/sc	IIA	0.425	3.7	.800	125
RG214/U	112	Commercial	50	0.66	7/.0296 tc	pe	30.8	tc/tc	I	0.425	3.7	.800	125
RG217/U	142	Mil Spec	50	0.66	.106 bc	pe	30.8	bc/bc	IIA	0.545	6	1.1	202
Flex 217	142A	CQ HD Flex 217	50	0.66	7/.038 bc	pe	30.8	bc/bc	IIA	0.545	6	1.1	202
RG223/U	143	Mil Spec	50	0.66	.035 sc	pe	29.4	sc/sc	IIA	0.211	.8	.210	36
RG303/U	154	Mil Spec	50	0.695	.039 sccs	ptfe	29.4	sc	IX	0.170	2	2	30
RG316/U	160	Mil Spec	50	0.695	7/.0067sccs	ptfe	29.4	sc	IX	0.102	1.25	350	12
RG393/U	150	Mil Spec	50	0.695	7/.0312sc	ptfe	29.4	sc/sc	IX	0.390	25	6	165
RG400/U	149	Mil Spec	50	0.695	19/0077 bc	ptfe	29.4	sc/sc	IX	0.195	9	2	50

\*Recommended Peak Power@1:1 SWR

**Legend:** bc= bare copper; tc= tinned copper; sc= silvered copper; css= copper-clad steel; ccAL= copper-clad aluminum; sspe= semi-solid polyethylene; mcf= microcell foam; ccf= closed cell foam; hdfpe= high density foam polyethylene; dfpp=dense foam polypropylene;ptfe=teflon type; PVC=polyvinylchloride; I=Class 1;IIA=Class 2PVC (non-contaminating); IIIA= Class 3; TPE= thermoplastic elastomer; TPR= thermoplastic rubber; IX= Class 9 teflon type (ptfe)



# GRAHamfest 2018

Grand Rapids Area Hamfest

Saturday, September 8<sup>th</sup>

an ARRL Approved Hamfest

**The Home School Building  
5625 Burlingame, SW  
Wyoming, MI 49509-9702**

Annual Electronics, Ham Radio, Shortwave  
CB and Computer Equipment, Trains, Airplanes  
or just about anything with an electron in it!  
Swap Meet / Flea Market

**Opens at 8 AM**

Ends at 1:00 PM

**Seller Setup: Friday 7- 9PM, & Saturday 7AM**

(Vendors only prior to 8AM)

Indoor and Outdoor Sales

**Laurel VE Session - 10AM**

DX Card on-site checking

Concessions provided on-site

**Admission: \$5 at the door**

**K-12 students free admission**

**with student ID**

**See: [www.w8dc.org](http://www.w8dc.org)**

for updates and  
additional information.

**Main Prize is a Kenwood TH-D74A!!**

Must be present to win this prize.

Drawing for other prizes during the swap meet!

General questions:

KC8NKA 616-531-6218

Table reservations:

Bob Moe 616-648-6087

AC8ZX@arrl.net

Deadline for advance paid  
reservations: August 25th

Make checks payable to:

G.R.A.R.A.

Tables unclaimed after 8 AM are  
available first-come basis!

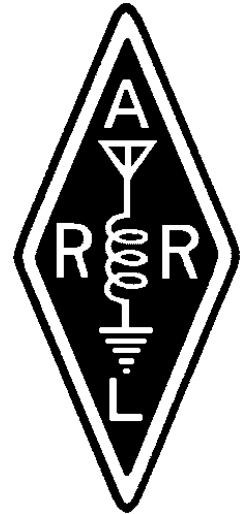
No refunds on unclaimed tables!

Reservation form and payment to:

Bob Moe AC8ZX

2235 Valentine Blvd NE

Grand Rapids, MI 49525



**Talk-In:** W8DC on 147.26+ (94.8HZ PL)

## Table Reservation Form

Description	Qty.	Ext. amount
6' table along wall* ( <i>check for availability—limited quantity</i> ) @ \$12		
6' table (middle of the gym) @ \$10		
Total	—	

\* Only wall tables have access to electricity. Table rental does *not* include admission to the swap. No charge for tailgate spaces, except a hamfest admission ticket is required for each person.

Name / Callsign

Phone (optional)

Email (req'd for table confirmation)

Address (optional)

City, State, Zip (optional)


See other side for map & directions

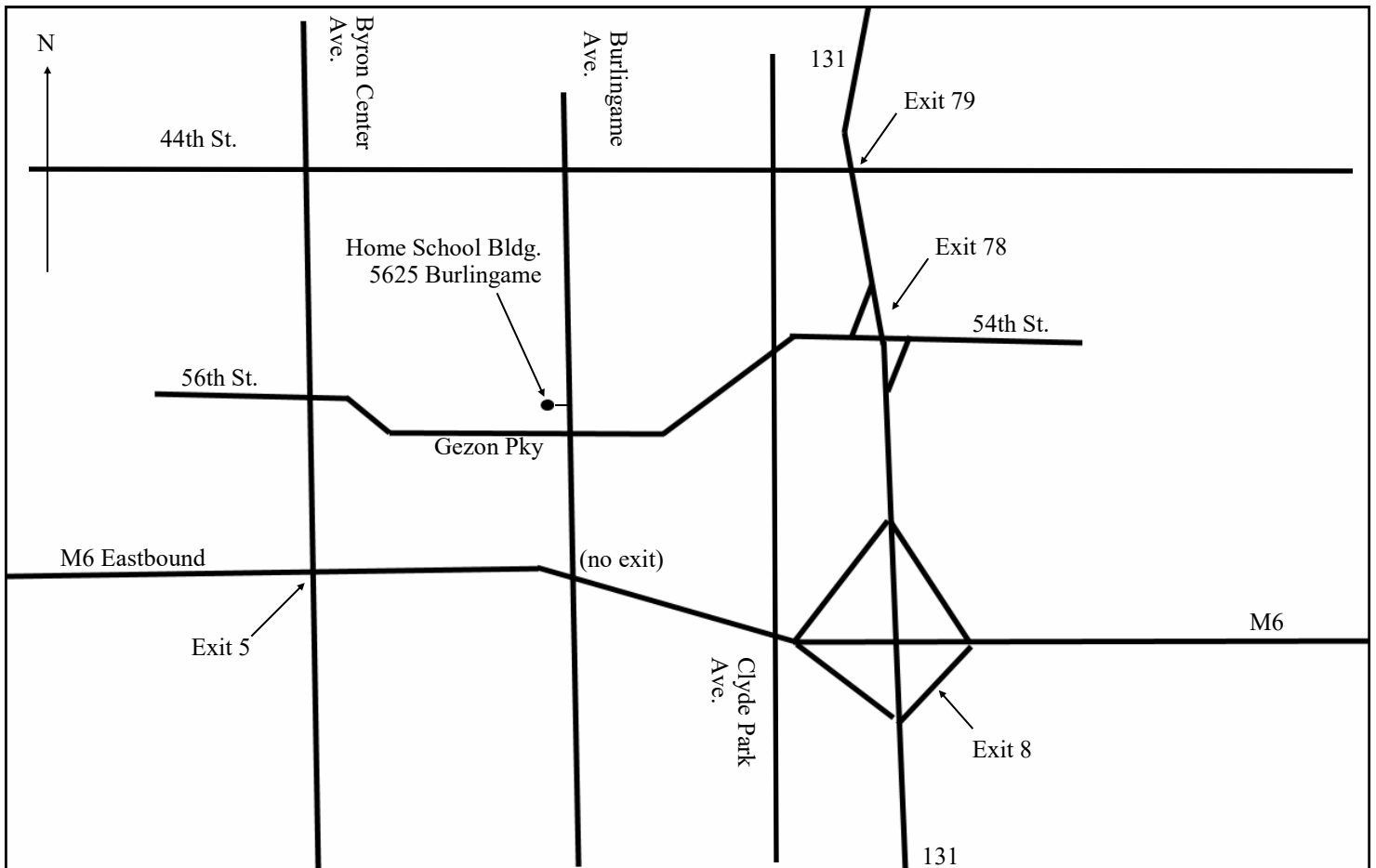
# GRAHamfest directions

## From the West:

Take M6 East / Lansing to exit 5 / Byron Center Ave. Turn left onto Byron Center Ave., drive 0.8 mi. Turn right onto Gezon Parkway, Drive 1.0 mi. Turn left onto Burlingame Ave. Turn left into the Home School Building.

## From the North:

Take 131 South, to exit 78 / 54th St. Turn right onto 54th St. (turns into Gezon Pkwy) Drive 1.1 mi. Turn right onto Burlingame Ave. Turn left into the Home School Building.



## From the East:

Take M6 West / Holland to exit 8, 131 North. Drive 1.3 mi. to exit 78 / 54th St. Turn left onto 54th St. (turns into Gezon Pkwy) Drive 1.1 mi. Turn right onto Burlingame Ave. Turn left into the Home School Building.

## From the South:

Take 131 North to exit 78 / 54th St. Turn left onto 54th St. (turns into Gezon Pkwy) Drive 1.1 mi. Turn right onto Burlingame Ave. Turn left into the Home School Building.



# Grand Rapids Amateur Radio Association Inc.

## Membership Application

Please fill in the required information and send the form with your payment to

Grand Rapids Amateur Radio Association Inc.

P.O. Box 3282

Grand Rapids, MI 49501-3282

Or simply bring it to our Wednesday night Open Radio Room or our General Meeting

Name:

Call:

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Address:

City:

State:

\_Zip:

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Membership Type:

Memberships run January to December of each year

Full (\$25)

Spouse/Family (free) Call of Full Member:

New Ham (free for 1 year) Month joined:

Youth (free under 18)

Associate (\$25) Non-voting/officer membership non-ham

Over 70 (\$15) Reduced rate for our senior members

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ARRL Member:  Yes  No Type: Regular Life

would you like a [callsign@w8dc.org](mailto:callsign@w8dc.org) email alias:  Yes  No

Email address: \_

Signature: \_

Date: