

# August 2023 Newsletter

## K.A.R.C. Monthly Meeting

Topic: Fox Hunting equipment show and tell with Chuck Agosti (WD8AXA)

Thursday August 17th at 7:00 PM

Kalamazoo Red Cross Chapter House 5640 Venture Ct. Kalamazoo, MI 49009

The meeting will also be live on Zoom, if you're unable to join us in person and would still like to listen in and participate please join us via Zoom: <u>https://us02web.zoom.us/j/88633801958?</u> <u>pwd=MjJIQjB5M1INaWINTm42bUg1SHFYZz09</u>



Bike Friendly Kalamazoo is hosting their Fall Bike Celebration again this year on September 17th. The base of the event is at the Vicksburg Historic Village, with bike routes covering the Southwest Michigan area all the way down to Shipshewana! They've asked the local amateur radio community to participate and provide communications again this year and we're in need of volunteers on the 17th of September.

Due to the nature of the event and the areas being covered, operators working the event should have a vehicle outfitted with mobile radio and an external antenna, an HT will not suffice for this event.

We had a great time and experience last year with the bike community and are looking forward to it again this September.

Sign up sheets will be posted at upcoming meetings or you can send an email to <u>secretary@w8vy.org</u> to be added to the list.

## Kalamazoo Hamfest Presenters and Volunteers needed

Come and share your knowledge!

The Kalamazoo Hamfest is looking for presenters and forum moderators. Please email us at info@KalamazooHamfest.com or message us on Facebook with your presentation or forum topic and preferred time slot.

The hamfest is also looking for volunteers to cover hours during setup and teardown on Friday afternoon/evening and Saturday. If you are interested in helping please contact Mac at <a href="https://www.kesrrg@gmail.com">kesrrg@gmail.com</a>





# **Upcoming Hamfests**

<u>Grand Rapids Area Hamfest</u> September 9th 8am—12pm \$8 Admission Location: The Home School Building 5625 Burlingame SW Wyoming, MI 49509 https://w8dc.org/grand-rapids-area-hamfest/

### Adrian Hamfest

September 17 8am—1pm \$5 Admission Location: Lenawee County Airport 2651 W Cadmus Rd Adrian, MI 49221 http://w8tqe.com/



# <u>Birthdays</u>

The following club members celebrate a birthday in July. If you see them or hear them on the radio be sure to say happy birthday this month!

> Don —WE8UPJ Mark —KE8KZU Gary—KD8OXP Nelson—KE8MRM



# VE Testing And Fall Technician Class

By John Tucker WB8ZVV

For those thinking of upgrading (or getting their first license), there are two upcoming opportunities. As the local ARRL sponsored testing occurs on the odd numbered months, testing will next be offered on September 16th.

Need a little more time to study? Testing will also be offered at the Kalamazoo Hamfest (www.kalamazoohamfest.org) on October 7th.

There will also be a Technician Class offered this fall on Tuesday nights for anyone interested. For more information on licensing test sessions or to sign up for our Technician's class, contact John Tucker (wb8zvv@gmail.com).

## Feedback and Submissions

We'd love to hear your feedback. If you have any comments, suggestions, or if you have any upcoming news, events, stories or technical knowledge to share with the community, please drop us a line at <u>secretary@w8vy.org</u>



# My First Tower

By Gerardo "Mac" Rincon KE8RRG

The installation consisted of a 5 band Hex Beam directional antenna on a 30 foot Universal Towers Tower (Tilt base tower). The tower was 3 sections. Yaesu G-800DXA Medium Heavy-Duty Rotator Systems G-800DXA. DX Engineering Yaesu Rotator Cable Assemblies DXE-YRC-150PE and 150 foot DBF 400 Double Shielded, low loss cable (bought at the 2022 KARC Hamfest).

The tower has a tilt base. The tower was assembled in a horizontal position and erected (hoisted) with a hand-winch pulling from the top of the 2nd section of the tower. The winch and a pulley were installed on a concrete base 4X6X10 treated wood post installed behind the Tower.

The Antenna was pre-assembled prior to the tower installation. I calibrated the rotor (N, S E, W) prior to this project.

<u>Costs and parts:</u> The cost of the Tower, EXCLUDING the cost of the Antenna, Rotor, Rotor control cable and RF cable was

approximately \$2,800. In addition, I paid for a "handy-man" for 4

days (20 hours approx.) to help me with the project.

The person that helped me is Mike Menck. His cell is: (269) 615-7361. He is available for projects. He is excellent and does many types of projects.

Tower		_	
	Tower - DX Engineering (*) Universal 30 foot - Self Supported	\$	1,741.00
	Pulley and hand winch hardware Amazon	\$	83.00
Misc Ma	terials:		
	4X6X10 for mounting Winch		
	Three 2X4X8s		
	Lag screws		
	Deck screws		
	Four 3 " screws with Lock nuts		
	Six 24" rebars		
	Rebar ties		
	Tools to work Concrete		
	One 6 foot Tube		
	3 Hokey Pucks		
	Approx Sub-total Misc:	\$	400.00
	Concrete Delivered	\$	540.00
	Total materials	\$	2,764.00
	(*) Does not include Rotor System or Antenna of	or cab	les

Since 1932



## Schedule:

The tower was erected in one week including 5 days waiting for cement to cure

## <u>Day 1</u>

Open tower box, installed rotor plate top tower section, installed thrust bearing on top section, inserted 6-foot antenna mast. And tried to install rotor on rotor plate.

MISTAKE #1 and solution: I realized that the Rotor was too big and would not fit inside the columns of the tower top section. I then decided to move the rotor plate to the second section of the tower which was a wider section.

MISTAKE #2 and solution: Then, I realized the rotor mounting plate was to small (narrow) for the second tower section. The second section is wider than the top section. I needed to fabricate corner supports so the corners of the rotor mounting plate had compression against the tower columns. After a trial and error, I fabricated three hard rubber corner pieces using hockey pucks and cutting them to fit. I had to purchase longer "U" bolts to support the mounting plate as well.





### Since 1932





I now needed a tube extension to be able to connect the 6-foot mast to the rotor now installed in the second section. I purchased from Lowe's an 8-foot steel fence post which I used as a center shaft extension. I inserted the 6-foot mast inside the fence post and drove two screws in a "cross" pattern to hold them together.



Since the rotor is now in the second section (middle section), I proceeded to assemble the top tower section with second tower section together to have them ready for installation day.

#### <u>Day 2</u>

Per tower instructions, this tower required a concrete base 3' x 3' x 4' deep. We dug hole, attached the three "tilting base" legs to the low-

er section of the tower legs. Positioned section 1 in hole and using 2x4s framed concrete base and held first section straight and leveled ready for the concrete pour. We tied six rebar pieces to give the tower additional strength once the concrete was poured. We also dug a hole to position vertically a 4 X 6 X 10 behind the tower to hold winch.







### Since 1932



#### <u>Day 3</u>

Poured concrete. Scheduled Peterman Concrete to deliver a load of concrete. With the dimensions of the hole Peterman Concrete estimated the amount of concrete needed.







### <u>Day 4</u>

While concrete was being cured, we hung cables (RF cable and Rotor Control cable) from the tower location to the radio shack. The Radio shack is in the basement on the west side of the house. The tower is on the east side of the house. I purchased 150 feet of RF cable and a 150 feet rotor control cable.



### Day 5 (5 days after pour)

Final installation: This was the easier part of the project. Brought everything together. With the lower tower section tilted, Installed the top two sections, Installed the antenna and ran the RF and rotor control cables. Made sure the rotor was facing north to ensure calibration of the rotor with rotor control.

Attached the winch wire to second section and raised the tower with antenna.







# **Upcoming Events**

## <u>August</u>

- 14th 6:30-7:30pm Board Meeting
- 17th 6pm-6:45pm Kalamazoo Hamfest Planning Meeting
- 17th 7–8pm July Club Meeting

<u>September</u>

- 12th 6:30-7:30pm Board Meeting
- 17th Fall Bike Celebration Operating Opportunity
- 21st 6pm-6:45pm Kalamazoo Hamfest Planning Meeting
- 21st 7–8pm July Club Meeting

<u>October</u>

7th 9am-4pm Kalamazoo Hamfest

9th 6:30-7:30pm Board Meeting

19th 7–8pm July Club Meeting

Analog Repeaters						
Location/Info	Freq	Offset	Mode	Tone		
W8VY Portage Main	147.000	+0.6	FM	94.8		
W8VY Downtown In	147.000	-0.6	FM	127.3		
W8VY Richland In	147.000	+0.6	FM	127.3		
W8VY Oshtemo	224.300	-1.6	FM	none		
W8VY Portage	444.650	+5.0	FM	94.8		
K8KZO 2m	147.040	+0.6	FM	94.8		
K8KZO 6m	51.720	-0.5	FM	94.8		
W8IRA Kzoo Input	145.470	-0.6	FM	94.8		

Kalamazoo Amateur

Digital Repeaters					
Location/Info	Freq	Offset	Mode	Tone/ CC	
W8VY Paw Paw	145.340	-0.6	D-Star	-	
W8VY Paw Paw	444.075	+5.0	D-Star	-	
NK8X KazoBorgess	444.500	+5.0	D-Star	-	
W8VY Paw Paw	444.075	+5.0	D-Star	-	
K8KZO	444.875	+5.0	C4FM/YSF	94.8	
KM8CC	443.400	+5.0	DMR	CC1 *	

Local Nets & Useful Frequencies				
Net	Day	Time	Freq	Mode
ARPSC	Wed	7:30 pm	147.000	FM
RACES	weu	7.50 pm	147.000	1.161
D-Star	Wed	8:15 pm	444.500	D-Star
SMART	Tue	7:30 pm	147.040	FM
6m SSB	Tue	8:30 pm	50.140	SSB
6m AM	Sun	8:00 pm	50.400	AM
10m Net	Wed	9:00 pm	28.485	SSB
MI	Mon	8:30 pm	443.400	DMR
Statewide			Michigan TG*	
DMR			10"	
220 Mhz	Sun	9:00 pm	224.300	FM
Nat'l Simplex: 52.525, 146.52, 223.5, 446., 1294.5 APRS: 144.39 Local Skywarn: 147.00				

\*KM8CC TG info: <u>https://groups.io/g/km8cc/wiki</u>