

ELGEN WALT W0RND
121 N. SPRUCE ST.
TRAVERSE CITY, MI 49684

A QUICKIE FUNTENNA FOR 2-METERS

If you ever need a quickie antenna for emergency use or to use while camping that will get you into the repeater better, here is how to make one that's not only fun to build, but it's fun to install and use.

All you need is a SO239 coax connector, about 8 1/2 feet of some #14 plastic insulated solid copper wire (housewire), RG58 or RG8X coax (as long as you require with a PL259 coax connector on one end and a connector for your radio on the other end), a ruler to measure 19 inches, longnose pliers, wire cutters, some solder and a heavy duty soldering iron.

Take a piece of #14 plastic insulated solid copper housewire (that's over 20 inches long) and strip the insulation 1 inch from one end. Bend the stripped wire around on itself to make a small loop or "eye" and solder it to secure it. This eye loop can be used to hang the antenna up in a tree with a piece of string.

Now measure 19 inches from the end of the eye loop and cut the wire. Strip 1/2 inch insulation from the 19 inch piece of wire at the opposite end from the eye loop. Solder this end of the wire into the center pin on the SO239 connector such that from the end of the eye loop to the flat flange of the SO239 is 19 inches. You may have to snip a little off the 1/2 inch end.

Now measure and cut 4 more pieces of #14 wire 19 inches long. Strip 1/4 inch of insulation from one end only of each of the 4 wires. Each of these wires get soldered into the 4 holes in the SO239. You can choose to install the wires from either direction, that is up from the bottom or down from the top. The choice has some advantages for storing or carrying the antenna.

To use the antenna, bend the 4 radials at a 45 degree down angle and straighten the center wire vertical. You can pull the antenna up into a tree with fishline or mount it to a limb or pipe with plastic tape or a nylon tie-wrap. BE CAREFUL OF POWER LINES WHEN PUTTING ANTENNAS UP OR TAKING THEM DOWN..

CLASSIFIED ADS

Would the person who had the MFJ indoor antenna for sale at the IRA Hamfestival on June 1 please contact Bill, N8FOX at (616) 842-5274.

FOR SALE: Ham equipment. ICOM Micro 4AT HT, \$175; Kenwood TS430S, \$500; Kenwood TR7950, \$200; Kenwood TM221, \$275; Kenwood TM421, \$275; ICOM 02AT HT, \$200; Yaesu FT209R, \$175; 65' Rohn BX tower (still up), \$250; Butternut HF6V antenna, \$75; 100' 3/4" hardline, \$75; GLB packet interface, \$90; Johnson antenna tuner, \$30; DAIWA SWR meter, \$55; 12 VDC, 25A pwr supply, \$325; 2 on-glass antennas (used) \$10 ea.; Bencher paddle, \$65; HAM Keyer, \$65; Antenna rotor, \$25; 15 el (13 DB) 2-meter beam, \$75 and nylon climbing belt, \$45. Call Greg, N8GIV, at (616) 457-7308 evenings 8 to 11 P.M.

FREE: Teletype equipment and word processing equipment. Teletypes Model 32 and Model 4300 with distortion scope monitor. Burroughs word processor (complete monitor, keyboard, printer, etc.) Tubes and parts free. You can haul it away. Call Kevin Peterson, W8GQ, at (616) 942-5606 after 5 P.M.

WANTED: Does anyone have a fair sized garden tractor with lawn mower they would like to donate to the IRA that'll mow the weeds at the hill? Also, the IRA could use a small load of gravel on the access road to the repeater site. It's washing out. Anyone HELP? Contact Abe, W8HVG at 455-3915.

H/R Electronics, 722 Evanston Ave., in Muskegon is your amateur radio headquarters for West Michigan. Stop by and see Russ or Sue Lyn or call (616) 722-2246.

Check out DAD's ELECTRONICS at 4447 Eastern Ave. S.E. in Kentwood Michigan (South Grand Rapids) for your amateur radio needs. They have antennas, scanners, radios, detectors, repeaters and what have you. They are open 7 days a week. Call (616) 531-9229. Check out their classified ad in the Grand Rapids Press. It's worth 10% off in the store.

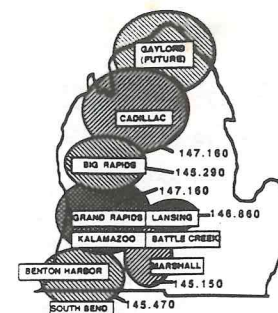
THE PURPLE CRYSTAL

No. 30

SEPTEMBER 1991

A BULLETIN OF THE INDEPENDENT REPEATER ASSOCIATION, INC.

562 92nd St., S.E. -- Byron Center, MI 49315



NEW LINK REPEATER ON THE W8HVG LINKED REPEATER SYSTEM

The Independent Repeater Association is very pleased and proud to welcome the 145.470 NN8T repeater near Benton Harbor, Michigan as a link repeater on the W8HVG linked repeater system. The repeater is managed by the Twin Cities Amateur Radio Group and is located in Royalton Township just south of I-94 at exit 27. The T-CAR 145.470 repeater coverage extends from Benton Harbor to South Bend Indiana and all over southwestern Michigan. It provides very complementary coverage to the W8HVG linked repeater system which provides 2-meter coverage in western Michigan from the Indiana border to the northern part of Michigan's lower peninsula.

T-CAR is comprised of John Helsley, NN8T, Trustee; Dan Malburg, KA8WOW; Al Rea, W8LRM and Jack Kessler, W8KBQ with support from Mark Williams, G6JEL; Larry Schrader, NQ8A; Hobie McGlaughlin, KK8G; Dennis Kettlehut, KA8BND and Allen Haughey, WA8WNX. All T-CAR members have unanimously consented to the "Gentlemen's Agreement" linking arrangement. GREAT HAMS COOPERATING!

On Saturday, August 10, 1991, Dan KA8WOW, Mark G6JEL, John WB8VOJ and Abe W8HVG installed the equipment and antennas. Linking is accomplished via 220 MHz and the 2-meter repeater is GE Masterpro equipment. The system is performing very well after some further "tweaking" and new contacts and friends are being made everyday on the W8HVG linked repeater system. Listen-in and join the fun.

WHAT'S THE INDEPENDENT REPEATER ASSOCIATION?

The Independent Repeater Association, Inc. is a tax exempt non-profit corporation registered in the state of Michigan and is responsible for managing the technical and financial aspects of its repeater systems. It is not a club and there are no dues. Fund raising is via the yearly sponsored Grand Rapids Hamfest and donations.

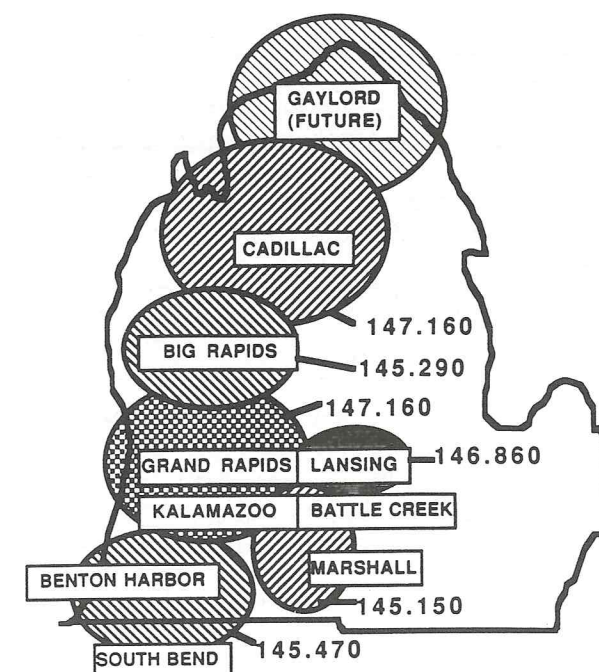
The Association maintains a network of 2-meter repeaters covering western Michigan from the Indiana border to the northern part of the lower peninsula. Everyone is welcome to use and enjoy the system.

"WHERE IS THIS REPEATER?"

It is amusing to hear someone on the W8HVG linked repeater system ask, "Where is this repeater?" Generally, they are probably new to the repeater or have just discovered they could hear it by scanning around. Equally amusing is the answer that is usually provided (by someone on the Grand Rapids repeater) that the repeater is on top 92nd street link just east of 131. To someone on the Cadillac link repeater operating from northern Michigan, 92nd street is meaningless.

With 6 repeaters continuously linked together, a person operating on any one repeater is heard on all the others. So when someone asks, "Where is this repeater?", you might have to ask him where he is at and what frequency is he operating in order to answer the question.

The coverage map below shows the general areas each repeater covers in the system. If you operate mobile with 10 to 25 watts and a 5/8th wave antenna, you should be able to work "the system" on the frequency shown relative to the coverage area circle. You may want to copy this map and keep it in your car for reference while traveling. We hear so many people ask, What's the link frequency in Lansing or what's the link repeater in Cadillac? You have no excuse now.



THE VIEW FROM THE HILL..... ...GREAT SUPPORT....THANKS!

I would suppose that, looking out the window on this beautiful summer day, you would think that things are pretty quiet and lazy up here on the hill. After all, the hamfestival is over for another year, the thunderstorm season is over, our controller has been repaired and back on-line with lightning protection improvements better than ever, another repeater is linked into the system.....things never really slow down up here.

You probably noticed that the repeater went down the day before our hamfest (June 1). Talk about Murphy working overtime! Through the dedicated efforts of the technical committee, it was back on-line (after a fashion) in time for the Hamfest and repairs continued throughout the week. The thunderstorm left us with a lightning damaged RC-850 controller, main power supply and preamp., and it was only through the talents of Abe, W8HVG, and John, WB8VOJ, that it was kept running by sharing the 224.44 repeater controller. Both the 147.160 repeater system and the 224.44 repeater were tied together and it worked very well.

And then there was the swap. How could we ever do it without all your help? Once again we had a record attendance. Once again, the food was great! Did you try one of those barbeques? Once again, my voice gave out about 12:00. There are just so many people to thank for unselfishly donating their time to make sure that the annaul IRA Hamfestival was successful. They are unsung heroes, unsung because I can never remember everybody. On behalf of the Independent Repeater Association Board of Directors and the Hamfestival Committee and all the satisfied Ham-festers that attended, we thank you for your help.

Thanks also goes to Abe W8HVG, Tom KA8YSM and Jeff N8NII, for installing the Polyphaser lightning protection and single-point grounding system at the main repeater site. Two inch flat copper ribbon for low-impedance RF grounds was provided by W8AKI in the form of a welding transformer which was stripped for the copper and cleaned. A two foot square copper sheet provides the mounting surface for all the Polyphaser isolators used in the coax, telephone lines, audio/control lines and power lines to the repeater equipment. Looks real nice!

Well, that's about all for now. There's the lawn to cut, tower repairs to do, the roof leaks, the building needs painting and all the other innumerable tasks that need doing when you run a repeater, I'd better go help. See you next time. Keep those cards and letters coming in.

73 de John, KC8KK
IRA President

IRA HAMFESTIVAL '91.....BEST ONE EVER

The IRA Hamfestival held June 1, 1991 at the Wyoming National Guard Armory was still the best one ever. There was a record attendance and a record number of would be hams taking exams or upgrades (39). Our very special thanks to Bob Becker K8OK, and his VE team which consisted of John Strely N0JS, Paul Gardner WD8IZB, Pat Locke W18M, Frank Barrett NE8E and Lee Burgess WC8O.

Also, our special thanks to the following dealers for donating prizes at the Hamfestival:

SF Electronics, Grand Rapids
Warren Radio, Grand Rapids
Star Datacom, Grand Rapids
T&W Electronics, Grand Rapids
Dads Electronics, Grand Rapids
H&R Electronics, Muskegon
Communications Data Corp., St Joseph

The main prize winners at the Hamfest, of prizes supplied by the Independent Repeater Association, Inc., were:

Diamond Antenna, Dan Miner (no call),
Hudsonville, MI.

MFJ SWR Analyzer, Ron Houtman, KC8UX,
Grand Rapids, MI.

ICE Low Pass Filter, Ray Ritchey, W8JLJ,
Grand Rapids, MI.

Set of Callbooks, Roy Vrba, WB8WMP,
Grand Rapids, MI.

CONGRATULATIONS TO ALL!

WATCH WHAT YOU SAY IF YOU ARE SITTING ON YOUR MICROPHONE!

There have been several instances of "stuck mikes" holding the repeater keyed (timed out) for several hours this summer. In most cases the culprit was tracked down and then embarrassingly apologized for their rig transmitting unbeknown to them.

One case in April, held the repeater ON because newspapers and brochures were laying on the microphone which was just laying on the front seat. The papers held touchtone #7 button pressed which kept the rig transmitting holding the repeater ON for 4 hours until it was found.

Another case during the summer was an HT laying in the crack of the front seat held ON while the driver was talking to his wife. Some of the conversation was heard around western Michigan.....continued on next page

WATCH WHAT YOU SAY ...continued

Still, another incident occurred on another Grand Rapids repeater in late April. It seems that a girl was dropping her girl friend off near a small town in the country southeast of Grand Rapids with a stuck mike on her 2-meter mobile rig. There was alot of hard rock music on the radio, alot of conversation!?!? about their boyfriends and alot of swearing at the other drivers either passing or pulling out in front of her. If they only knew that Grand Rapids was listening. It was the weekend of the Dayton Hamvention.

If you happen to hear a repeater with what seems like a stuck mike holding it ON, don't try to transmit back through the repeater because the guy with the stuck mike can't hear you. His radio is transmitting! The best thing to do is immediately listen on the input to see if the offender is near you. Your observations can help the control operators locate the offender so let someone know if you hear the input signal.

Here are some suggestions to avoid an embarrassing situation from occurring:

1) Install your mobile radio so it turns OFF with the ignition key. TURN YOUR RADIO OFF IF YOU LEAVE YOUR CAR.

2) Use a microphone hanger. DON'T LAY YOUR MIKE ON THE SEAT. Most mikes have many buttons on them and if any button gets pressed with a newspaper, books or just caught in the seat crack, it'll key your transmitter.

3) Do you know what the indication is when your radio transmits? Is there a TX light? Check it once in awhile when driving.

4) If you haven't heard any conversation for awhile, open (check) your receiver squelch to make sure your transmitter isn't transmitting for some reason.

Above all, use common sense when you operate a mobile rig or use an HT in the vehicle. WATCH WHERE AND HOW YOU LAY YOUR MIKE OR HT DOWN. Nobody does it intentionally, but stuck mikes happen, and if for some reason of Murphy it should happen to you (Godforbid) , don't feel offended when someone finds you and says, "SMILE, YOU'RE BEING LISTENED TO ALL OVER WESTERN MICHIGAN, CHECK YOUR STUCK MIKE."

HELP PREVENT STUCK MIKES!

And when there is a "problem" on the repeater, listen on the the input and help find where it is coming from.

"GO AHEAD JOE".....TURN IT OVER TO SOMEBODY

Many times on the repeater a conversation occurs with more than three stations participating and the party talking doesn't turn it over to anyone or just comes in and says "I'll throw it up for whoever gets it". This causes delays and confusion. A better method of operation is to just say "Go ahead (name of who you are talking to)". You don't even have to say his and your callsign when you turn it over. Just say, "Go ahead (name)" or "Take it (name)".

If you haven't got everyones names in the QSO, maybe you broke in too soon to contribute to the conversation. Take the time to listen a little and take the time to turn it over to someone. AVOID DELAYS AND CONFUSION WHEN JOINING A QSO ON REPEATERS, TURN IT OVER TO SOMEONE.

PRESENTATION ON REPEATERS.....WOULD YOUR CLUB LIKE TO HEAR IT?

Abe, W8HVG, can provide a very interesting 20 to 30 minute view-foil presentation on repeaters and their purpose, how they operate, problems with repeaters and a very interesting description of the IRA W8HVG linked repeater system.

Presentations have been made this summer to amateur radio clubs in Battle Creek and Kalamazoo. If your club would like to hear it, just contact Abe, W8HVG, at (616) 455-3915 and make the necessary arrangements. You will need to provide an overhead view-foil projector and screen to see the presentation.

WHERE ARE ALL THE OTHER HAM NEWSLETTERS?

The Independent Repeater Association would gladly add your club's address to our mail list for the Purple Crystal. Just send your request to the address on the letterhead. If your club publishes a newsletter, please ask at your next meeting if they send a complimentary exchange copy to the Independent Repeater Association because we would like to hear what's going on with your group.....THANKS.

MICHIGAN-FLORIDA HAMS MEET AT GUN LAKE.....GREAT!

The Michigan-Florida group (a group of hams that maintain contact between Florida and Michigan) met for a wonderful picnic at Gun Lake in July hosted by WB8SCJ, Andy and his wife Betty and assisted by Jan, N8HNW and Ray, KA5DIE. Everyone enjoyed the food, eyeball QSO's and boatrides. THANKS Andy.