

RADIO WATCH



HANK

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WB4QNK

• MIDGARS •

MAY '74

Midwest Amateur Radio Service

PRESIDENT

Edward Brown W0WYJ
3672 Tesson St.
St. Louis, MO 63125

VICE-PRESIDENT

Saunders Jones W8MZS
20243 Yacama Rd.
Detroit, MI 48203

SEC. - TREAS.

Jim Ray WB0GNL
5223 N. Flora
Kansas City, MO. 64118

EDITOR - RADIO WATCH

Vaughn Lewis, Jr. W8UPV
3927 Hunt Rd.
Lapeer, MI 48446

DIRECTORS

Kirby Strickland WA9CMY
265 Dogwood St.
Park Forest, IL 60466

Bud Robinson W9CCB
604 N. New St.
Champaign, IL 61820

MIDCAR COORDINATORS

Ken Jankovich	WB9AUK	Milwaukee Wi
John Johnston	WB4VIK	Guston Ky
Glen Cook	K9MKM	Terre Haute In
Betty Cook	WB9GJJ	Terre Haute In
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Q R M

FROM THE PRESIDENT



To the members of MID-CARS, I want to thank you for electing me to my second term as President of the service. I will keep my column short, but with points of interest to the service.

To reacquaint the old members, and to inform the new members, Paul W9JLL or better known as SUNSHINE, for about the past four years starts MID-CARS every morning without fail. At times, Paul will check in one to one hundred stations depending on band conditions.

A short story as to why Paul performs the above duties -----
About four years ago, a few W8- Mobiles requested that we open MID-CARS around 8AM EST, which is 7AM here in the MIDWEST, so Paul asked me, as I was President at the time, if it was agreeable with the service to allow him to fulfill the duties.

History was made, and Paul has been in there every morning with the exception of a few days when Paul had a bad night at the bowling alley or a hangover from (COFFEE).

A big thanks to Paul for the job he is doing, although at times it may sound like the COUNTRY COUSINS NET, Paul has one thing a lot of us could use, It is called - DEDICATION.

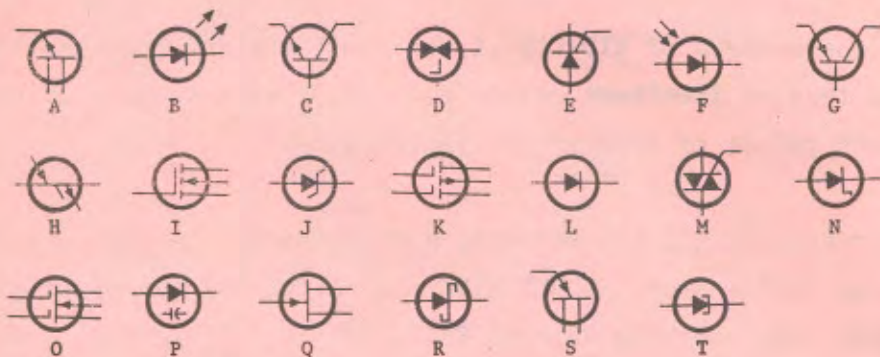
Thanks again for a VERY EXTRAORDINARY EFFORT.

Ed Brown

WØWYJ

SEMICONDUCTOR SYNDROME

IN THE LAST 10 YEARS, OUR TECHNOLOGY HAS FLOODED US WITH NEW SEMICONDUCTOR DEVICES. SEE HOW MANY YOU RECOGNIZE AND CAN MATCH-UP:



- | | |
|----------------------------------|-----------------------------------|
| 1. Ordinary diode | 11. Varactor diode |
| 2. Snap diode | 12. Four-layer or Shockley diode |
| 3. P-channel IG FET, enhancement | 13. N-channel IG FET, depletion |
| 4. SCR thyristor | 14. N-channel IG FET, enhancement |
| 5. Light-emitting diode | 15. Zener or Esaki diode |
| 6. PNP bipolar transistor | 16. NPN bipolar transistor |
| 7. Bidirectional breakdown diode | 17. Tunnel diode |
| 8. N-base unijunction transistor | 18. Hot-carrier or Schottky diode |
| 9. N-channel junction FET | 19. P-base unijunction transistor |
| 10. Triac thyristor | 20. Photo diode |



* 1=1 8=S 8=R 6=0 11=d 11=0
2=N 0=L=M 1=L 3=K 5=J 14=I 15=K 10=M 2=N
19=A 8=B 5=C 16=D 7=E 4=F 20=G 6=A

Answers to Semiconductor Syndrome:

W5ZLU WB4BAT WA8SFZ W9HOT WONNH

You're the big winners this month. Send the editor anything you wish about yourself.

Article, picture, QSL - anything I can publish about you.

This, of course, does not mean that other members can't submit an article or picture. Everyone is encouraged to send material for the Watch.



SOME NOTES ON FCC REGULATIONS AS THEY APPLY TO MIDCARS CHECK-IN AND CHECK-OUT

In the recent past a number of Midcars members (including myself) have received FCC Official Notice of Violation for failure to properly identify as required in Section 97.87 (a). I was cited for failure to give the call sign of the Service Control station on my final transmission, but merely announced that I was QRU and gave only my own call sign.

In answering the notice, I asked FCC to clarify a part of the regulation which states, "at the end of an exchange of transmissions between amateur stations, the call sign (or the generally accepted network identifier) shall be given for the station, or for at least one of the group of stations with which communications was established." In the reply, FCC said, "The rule states that 'the network identifier' may be used for the station or stations with which communication was established."

I interpret this to mean that on those occasions when it is difficult, especially for mobiles, to ascertain with certainty the call sign of Service Control, it is legal, upon making a final transmission to sign by saying, "Midcars, this is---(your call sign)." It is obviously preferable to use the call sign of Service Control if you are reading him Q5. The point is, we must, when acknowledged by Service Control, upon completion of our transmission, sign his call, or the word Midcars, plus our own call sign.

In summary, the so-called "tail-ending" rule was declared acceptable by FCC several years ago. This means that when calling a DX station, or when checking into a net, your call sign only can be given. When making the final exchange of transmissions the call sign of the station with whom you are communicating (or the generally accepted network identifier) must be given in addition to your own call sign.

If we carefully follow regulations pertaining to amateur radio, we can save FCC unnecessary paperwork. Let's all make an all-out effort to abide by all regulations and continue to operate in an efficient but courteous manner, thus continuing to build the excellent reputation which Midcars enjoys.

William G. Blankenship, Jr., K4DLA

Forty Meter Land

I had nothing to do so
sitting here on friday nite
I called CQ on two

I want to tell you all
that is nothing new

The squelch didn't open
not even a reply
It seems I would waste away
cause 2 had surely died

So let this be a lesson
when getting on the bands
that 2 sure aint active
like forty meter land

Jerry-WB9KUZ

HAM-ADS

Heathkit SB-102, matching ac
power supply and speaker in
cabinete. A blower and phone
patch in matching cabinete,
lots of extras thrown in for
a quick sale.

CONTACT: WAØCAE, Bruce,
Mount Ayr, Iowa 50854
Phone 515-464-3627 HURRY!!

NATIONAL NC-300 Rcvr.
Heath HA-10 1KW Linear
Heath DX-40 TX
Heath VF-1 VFO
ALL MINT COND.
CONTACT: W8UPV, VON
3927 Hunt Rd. Lapeer
Mich. 48446

CALL IN FREQ. MAY

146.94

SUNDAY

26

1974

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Prizes	Refreshments	

For Further Information contact
TICKET CHAIRMAN
EARL NICHOLS, W4PII
601 ROSEMONT AVE.
COVINGTON, KY. 41011



EGYPTIAN RADIO CLUB
ANNUAL HAMFEST- Sunday June 9 1974
CLUB GROUNDS - Granite City, Ill.
GAMES--FOOD--PRIZES--SWAPS--

Technical Correspondence



It had been noted through the years, when contacting fellow hams using the NCX-3 and similar circuitry rigs, there were common characteristics- rough audio and periods of FMing under heavy voice peaks.

Preliminary circuit analysis and instrument checks disclosed an abundance of mike gain and far too much sideband injection to the transmitter mixer vs VFO injection. MODIFICATION PROCEDURE

* MIKE PRE-AMP (V-7A) -reducing gain

pin 7 of V-7A (cathode) lift cathode from ground and insert an un-bypassed 2-K $\frac{1}{2}$ watt resistor. Connect a 220-K resistor from pin 3 to ground. To prevent RF from getting to the mike circuit, lift the lead to the mike jack coming from the PTT switch and insert a small RF choke at the mike jack, bypass the end of the choke going to the PTT switch with a .001 discap.

* 1st IF STAGE (V-10) 12BA6 -reducing SSB output to mixer

Locate IF transformer T-3 and C-68 coming from the plate of V-10 and top of T-3 (100 pf) replace with a 10 to 20 pf. Replace C-8 with a 120 pf and 510 pf silver dip capacitors in series, with the 120 pf connected to the plate end of T-3; the lead formerly going to C-68 will now go to the junction of the 120 and 510 pf capacitors. Re-adjust T-3, TOP SLUG for maximum meter reading on a steady received signal.

* MISCEL. MODS. (suggested by National)

Change R-10 8.2K to 4.7K 1 watt
Change R-107 2.5K 5 watt to 3900 10 watt
Remove RED lead from pin 1 of VR tube, reconnect it to pin 6 and add a 2.5 mh choke between pin 6 and pin 1. Add a .01 disc cap from pin 6 to ground.

Good Luck and 73s **WØQAY**
H.C. "Hank" Schleper

SECRETARY-TREASURER

WBOGNL

CASH ON HAND	2/1/74	\$111.18	
<u>DONATIONS:</u>			
RENEWALS			
REINSTATEMENTS			
NEW MEMBERS		\$215.00	
<u>CONTRIBUTIONS:</u>			
DECALS		\$5.00	
FLOWERS FOR W9GET/8		\$2.00	
<u>PRINTING COST:</u>			
JAN. RADIO WATCH			
BULK MAILING PERMIT AND MAILING			\$109.15
<u>OPERATING SUPPLIES:</u>			
MAILING COST OF SEC.-TREAS.			\$54.08
TOTAL CASH AVAILABLE		\$333.18	
TOTAL OPERATING EXPENSE			\$211.96
CASH ON HAND	2/28/74	\$121.22	

QUIPS FROM SECRETARY-TREASURER

WB8QCD "GREAT" Please accept my dues and send me the next RADIO WATCH.

WB8QJF -Ive been checking in for four months and I think its a excellent service.

WA9EVF-Keep up the good work

WA6AYA-The WATCH is FB

WBUNB-VERY GOOD

WELCOME TO THE NEW MEMBERS

WB8QCD Rick A. Norman
 WB8QJF Steve Gold
 WB9HSJ Carroll Stotts
 WB0DAI John Wilhelm

HEY MEMBERS TAKE NOTICE!

It may be that there is some misunderstanding regarding the effective date of the recently-enacted Midcars dues increase. It was assumed that the announcement in the October Watch that the proposed By-Law change had passed would constitute sufficient notice. Our Secretary has received numerous \$3 remittances in the recent past, despite the October Watch announcement. To eliminate the necessity for additional correspondence, we have accepted dues at the \$3 rate, in the absence of a published specific deadline. However, to avoid any further confusion, November 1, 1973 is the effective date. Any new or renewal memberships after that date will be at the \$5 annual rate.



DEAR EDITOR:

I got a copy of the watch. It was great. I sure miss 40 but sold out so I could put the money in the house.

XX

WB9KUZ

Frank, W8LRO, and John, WB4VIK, with help from others are trying to keep MIDCARS going on 75 meters but they are need of more Service Controllers. Whenever possible, lets get on 3903 in the evening and lend ahand.

XX

Have you seen the new MIDCARS decal? It is great and would look nice on your automobile. 50 cents sent to the secretary will assure delivery.

XX

The odd ball net is still meeting down around '50' and John, WB4VIK trys to keep everyone in line but with K9MKM WB9ETE, WBØGNL, WB8GFJ, WA9ELV, WB8GEG on frequency, John takes one more Alka-Seltzer and tells everyone to relax.

Strays

SUPPOSE THEY HAD MIDCARS THEN

Brutus looked down at Ceaser who lay dying on the steps of the inn at the MIDCARS picnic at Bloomington

"How manyof those pizzas did you eat last night, Julius?" He asked. "ET TU, Brute," was the response.

W8ZKL

FLASH!

NEXT ISSUE:
EXCLUSIVE PICTURES
OF THE DAYTON
HAMVENTION

Send \$5.00 Due to Jim, WBØGNL

looking ahead

"The old timer says,
"It works GREAT on 40 meters"



DOUBLE BAZOOKA MATCHED DIPOLE ANTENNA

By Ted Taylor, W9KHK

For peak power of 1 kw or less, the feedline and coupling section may be made of RG-58A or AU. For higher power, RG-5 or RG-8 should be used.

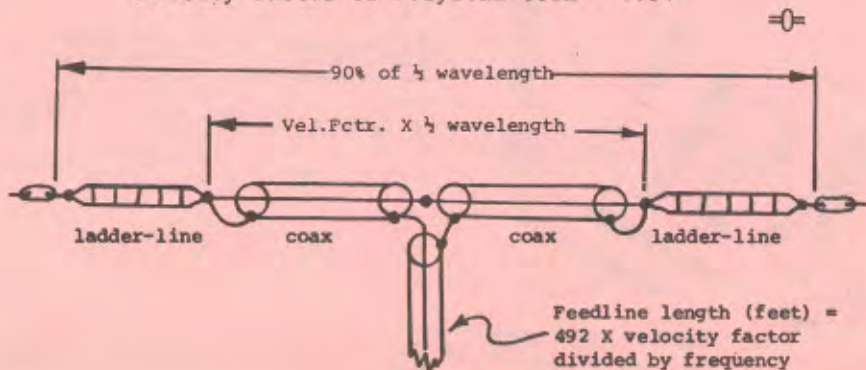
For the double bazooka, figure an electrical half-wave for the center of the desired band. Extend the coax with TV ladder line or twin-lead to give a large effective diameter, lowering the Q and giving additional broadbanding without sacrificing radiation efficiency.

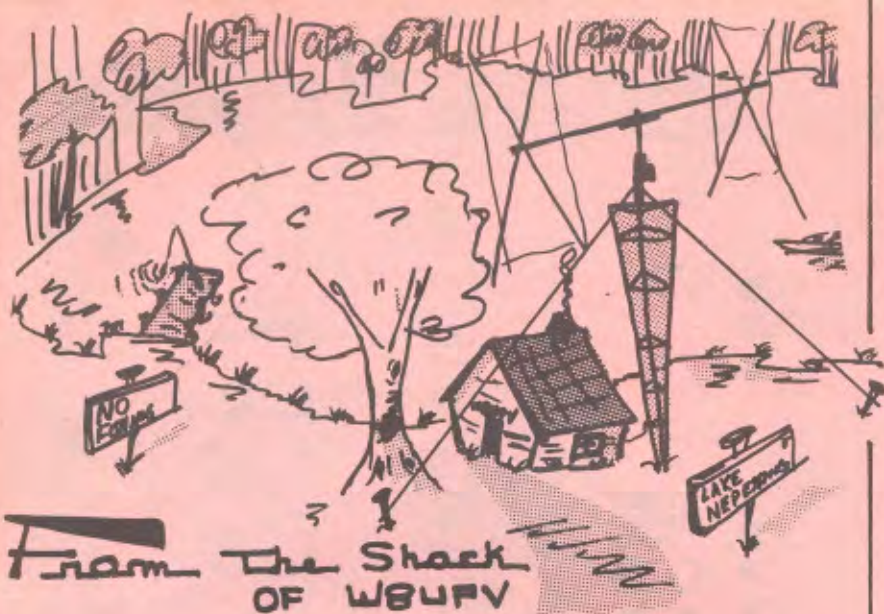
CONSTRUCTION: Strip off the black vinyl for 1 inch. Cut the braid in the center, being careful not to injure the polyethylene insulation. DO NOT CUT THE CENTER CONDUCTOR. Fray back the braid each way and form a short pigtail. Connect the feeder braid to one pigtail and the feeder center conductor to the other pigtail. Dope with several coats of Glyptal or Corona Dope. Short circuit the center conductor to the braid at each end. Connect sufficient twin-lead to each end to bring the total length to 90% of a half-wave. Keep in mind that due to the large effective diameter, that this antenna will be 5% to 10% shorter than one made from wire.

Due to the fact that the functions of coupling and radiating are quite independent of each other, this antenna will operate well at any convenient height. An SWR of less than 2:1 is readily available for 300 kc each side of design center. This type of coupling results in a balanced load in spite of being fed with an unbalanced line. It has been found to work quite well at four times the design frequency. If this antenna is properly constructed, it will work quite well on 20 meters. Attempts to feed more than one dipole with a single line have not been successful. However, a 7 mc dipole hung 3 feet under a 3.9 mc dipole with separate feed lines has been very successful.

Velocity factor of RG-8U or RG-58U = .66.

Velocity factor of Polyfoam coax = .75.





AN EDITORIAL

You can see that we have changed the RADIO WATCH. The Larger format will make it a little easier for the OLD TIMERS to read. With the larger paper we will be able to print more material in each issue.

I am in need of articles to put into the WATCH, so keep the mail coming.

MIDGARS has handled a lot of Emergency Traffic this past month and the service came thru again.

73 Von W8UPV

YES!

IT'S YOUR MAGAZINE—LET US KNOW WHICH SUBJECTS YOU WANT TO READ ABOUT AND WE'LL DO OUR BEST TO FULFILL YOUR REQUESTS... the editors.

U.S. AMATEUR FREQUENCY ALLOCATIONS

	CW Only	Phone & CW
Extra Class	3.500-3.775	3.775-4.000
	7.000-7.150	7.150-7.300
	14.000-14.200	14.200-14.350
	21.000-21.250	21.250-21.450
	28.000-28.500	28.500-29.700
	50.000-50.100	50.100-54.000
Advanced Class	3.525-3.775	3.800-4.000
	7.025-7.150	7.150-7.300
	14.025-14.200	14.200-14.350
	21.025-21.250	21.270-21.450
	28.000-28.500	28.500-29.700
	50.000-50.100	50.100-54.000
General Class	3.525-3.775	3.890-4.000
	7.025-7.150	7.225-7.300
	14.025-14.200	14.275-14.350
	21.025-21.250	21.350-21.450
	28.000-28.500	28.500-29.700
		50.100-54.000
Novice Class	3.700-3.750	
	7.100-7.150	
	21.100-21.200	
	28.100-28.200	

SSTV Frequencies

	Suggested
3.775-3.890	3.845
7.150-7.225	7.220
14.200-14.275	14.230
21.250-21.350	21.340
28.500-29.700	28.680
50.100-54.000	

LICENSE FEES

Initial License\$ 9
Renewal\$ 9
New Class\$ 9
Modification\$ 4
Special Call Sign\$25

Use FCC Form 610 and mail with appropriate fee to:

Federal Communications Commission
Gettysburg PA 17325



SWITCH TO SAFETY!

7.258

where the action is

James C. Ray
Sec.

WBOGNL
TRES.

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MIDWEST AMATEUR RADIO SERVICE INC.
"MIDCARS"
RADIO WATCH OF THE MIDWEST

This certifies that: _____
is an affiliated member station of the service dedicated
to serve his country and community with communications
whenever the need requires. Membership is valid for one
year from this date: _____ 19_____

Member's Signature _____

Authorized Signature _____

Secretary M.W.A.R.S
MIDWEST AMATEUR RADIO SERVICE INC.