

The Zero Beat

The Official Publication of the Hazel Park Amateur Radio Club

2/97

FEBRUARY QRM

This month's program is being presented by Dave Smith, W8YZ, who will talk to us about antennas and feed lines. Also, our treasurer Steve, N8ZLK and the Board will present the 1997 budget that they put together for the club, and at first glance, we need to tighten our belt. The Oakland County EOC has asked HPARC to sponsor an advanced Skywarn training class which will be held the first part of April. The Board is trying to get space for the class, and the date and time will be announced when the space is available.

The main door prize (pink ticket) for the February meeting is a 2-meter mobile transceiver from Radio Shack. Phil, AA8KR, informed me that the income from the door prizes has been good, which makes the main door prizes possible.

The DART 440 repeater is down while repairs are being made. The 2-meter repeater will soon have a new transmitter and receiver. This should increase power and make the receiver more sensitive. Thanks go out to Mike, N8EQD, Chris, N8MLM, Pete, N8NYQ and Rich, KC5DUO. This is the gang that keep the repeaters on the air. If you see or hear them, please be sure to thank them for their efforts.

See you all at the February meeting on February 12, 7:30 P.M. at the Hoover Elementary School, Hazel Park.

MINUTES OF THE 1/8/97 MEETING

Meeting started 7:35 P.M.
Treasurer's report. Motion to accept by KC5DUO; seconded by N8CWB. Motion passed.
1997 budget to be presented at the February membership meeting.
Jim, K8JV, will be banquet chairman. Discussion on club web site.
Arlan, K8OW, will bring information on Ten Tec kits to the February meeting.
Fliers on classes have been mailed to numerous places, and Jerry, N8UUF, is already getting responses.
Discussion of a family style get-together a couple of times a year so family members can become acquainted.
Announcement of and invitation to

February 3 Board meeting.
Broke for refreshments.
Presentation by Don, KB8MVS on amateur radio in Thailand.
Adjourned 9:15 P.M.

THE LADDER LINE

by George A. Dickel

Every entry received for last month's quiz was correct. All the statements are true. Another fun antenna quiz can be found on p.62 of the February QST. I'll bet Bruce does well on that one, too.

This month we will meet another friend, gain. Yes! the more gain the better; everybody knows that! Anybody with a pair of wire cutters and a post office box can take out an ad proclaiming "Buy the Skywarmer 2000 -- 26 db gain -- now only \$149.95 plus s+h." But not in QST. They don't take ads from anyone that mention figures for gain.

Before we decide how much gain we need in that new antenna, let's look at what gain means. The theoretical or "ideal" antenna radiates RF energy (power) equally in all directions, and is said to have no gain. A real antenna tends to radiate more energy in some directions than others, and is said to have gain in that/those direction(s). An antenna that radiates twice as much power to, say, the north as it does in other directions has a gain of 3 dbi in that direction. The "i" in dbi means as compared to our ideal antenna. Keep in mind that there is no free lunch (ask Barry). You don't get more power out than you put in, but our signal will be loudest to stations listening from up north, in this case.

Now for my money, I would rather not have a high gain antenna for my 2-meter mobile. I would prefer to reach my favorite repeater equally well regardless of which way my vehicle was travelling. Why, then, does a 5/8 wave with some increased gain seem to work better on 2 meters for most hams than a 1/4 wave does? I think it's because the 5/8 wave is taller and gets the signal up over the car roof from its trunk mount. If I had a nice truck with a 1/4 wave on the roof I would likely do just as well. What do you think? Next month

we'll take a closer look at our friend gain and see how to put it to work.

George continues to remain anonymous so he can start up the Miracle Wire Antenna and Depilatory Co. under his real name.

THE K8JV BEVERAGE CAN 2-METER VERTICAL DIPOLE

Last month I described a 2-meter aluminum foil vertical dipole which is easy and fun to make and which works. Now I want to talk about a beverage can dipole. When you're retired, you see, you have the time to think about and make antennas from stuff lying about the house.

A standard 12 ounce beer or pop can is 4.75 inches tall. Four of them, affixed end to end, are 19" long, a good length for one leg of a 2-meter dipole. Working with cans to attach four of them together to keep a continuous connection requires three hands, but most of us have to make do with two. Because most cans nest, regardless of contents, the task is not too difficult, just tedious. Since you will eventually want to return the cans to Farmer Jack, you will not want to Super Glue them together. I suggest "spot taping" them. Place one can on top of another and tape bottom to top on opposite sides of the can, and repeat this with the third and fourth cans. Now you can lay the 4 cans on their side and wrap a piece of tape around the entire length. Do this twice, keeping your wraps at a right angle.

Okay, you finally have both legs of your dipole put together, and you have checked to make sure you have a continuous connection. Now find the coax I described last month and tape the braid to the bottom of one leg and the center conductor the the bottom of the other. You may want to solder instead; it's easy enough to de-solder.

Now loop a string through the ring tab of the top leg, tie it to your support structure, let the bottom leg hang free, plug your coax into your H-T, and you are ready to transmit! This antenna works, is broad-banded, looks great and really impresses the ladies, but is not recommended for

bands below two meters. An 80-meter dipole would require 329 cans, or roughly a weekend consumption for KF8KS.

MORE FROM MISTER MANNERS

In my last installment, I covered the irritating habits that some of us have and bring to bear on the air. In this month's installment I wish to address the use of the term "SEVEN THREE."

Many people get bent out of shape at the mere utterance of such things as: "Seventy-thirds... Seventy-threes... Seventy-three..." Why would they do such an ungodly thing you say? Well, a little history may explain. The article below is taken from the ARRL Handbook, "The Origin of '73'"

The traditional expression "73" goes right back to the beginning of the landline telegraph days. It is found in some of the earliest editions of the numerical codes, each with a different definition, but each with the same idea in mind - it indicated that the end, or signature, was coming up. But there are no data to prove that any of these were used.

The first authentic use of 73 is in the publication "The National Telegraph Review and Operators' Guide" first published in April 1857. At that time, 73 meant "My love to you." Succeeding issues of this publication continued to use this definition of the term. Curiously enough, some of the other numerals used then had the same definition as they have now, but within a short time, the use of 73 began to change. In the National Telegraph Convention, the numeral was changed from the Valentine-type sentiment to a vague sign of fraternalism. Here, 73 was a greeting, a friendly "word" between operators, and it was so used on all wires.

In 1859, The Western Union Company set up the standard "92 Code." A list of numerals from 1 to 92 was compiled to indicate a series of prepared phrases for use by operators on the wires. Here, in the 92 Code, 73 changes from a fraternal sign to a very flowery "accept my compliments" which was in keeping with the florid language of the era.

Over the years from 1859 to 1900, the many manuals of telegraphy show variations of this meaning. Dodge's "The Telegraph Instructor" shows it merely as "compliments." "The Twentieth Century Manual of Railway and Commercial Telegraphy" defines it two ways, one listing as "my compliments to you" but in the glossary of abbreviations it is merely "compliments." Theodore A. Edison's "Telegraphy Self-Taught" shows a return to "accept my compliments." By 1908, however, a later edition of the Dodge Manual gives us today's definition of "best regards" with a backward look at the older meaning in another part of the work where it also lists it as "compliments."

" 'Best regards' has remained ever since as the 'put -it-down-in-black-and-white' meaning of 73 but it has acquired overtones of much warmer meaning. Today amateurs use it more in the manner that James Reid had intended that it be used - a 'friendly word between operators.' - Louise Ramsey Moreau, W3WRE."

So you see that the use of the plural in the term Seven Three can cause a bit of a stink. It is looked at as a bastardizing of the true meaning of the term, i.e.: Best Regards's. Please, for the sake of harmony on the bands, think before you talk. The reason I say this is that in some countries the terms we use as terms of affection/endearment are also used in those countries as derogatory statements.

Until next month, Best 73 (Best Best Regards). Mister Manners.

SUNDAY NIGHT 2-METER NET CONTROL STATIONS

2/9	#1469	N8MG
2/16	#1470	KC8AQJ
2/23	#1471	AA8JN
3/2	#1472	N8TMQ
3/9	#1473	K8OW
3/16	#1474	N8WIQ

EDITORIAL

The editor thanks George Dickel and Mister Manners for their educational and instructional contributions. In our hobby there is always something to learn or improve upon be it

technical or operational, and Zerobeat welcomes all such contributions from any member who wishes to submit an

article.

HAPPY VALENTINE'S DAY!

Up Comming events

February 12- HPARC membership meeting

February 23- Livonia Swap-n-Shop
Haprc Ve Team to Test

March 3 Dart Membership meeting
7:00

March 3 HPARC Board 8:30

March 11 HPARC membership meeting

March 15 HPARC PIZZA PARTY

March 30 HPARC Board

April 8 Membership Meeting

April 12 HPARC sponsors advance skywarn training class HP comm. center

JUNE 28, 29TH FIELD DAY

President	WD8S	Mike Van Buren	399-7970
1st Vice President	AA8KR	Phil Ode	641-9723
2nd Vice President	N8MG	Marty Mendelson	754-9016
Treasurer	N8ZLK	Steve Lund	643-4635
Secretary	KC8AQJ	Barb Parrott	656-3728
Parliamentarian	K8OW	Arlan Levitan	399-6963
Director	WD7G	Tony Brent	399-7411
Swap-n-Shop	N8TMQ	Tom Austin	293-7398
Newsletter Editor	K8JV	Jim Bunting	645-2704
Classes	N8UUF	Jerry Ciesielski	521-2370(313)
	WB8YRV	Frank Banar	575-9135
	KA8NDY	Dan Learned	756-5341
Ve Testing	N8SWQ	Bill Sopha	533-5962(313)



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