



# The Zero Beat

Volume 30 Issue 1

September 1994

## HPARC DOES IT AGAIN!

### Field Day '94 A Success!

W8JXU operated on Field Day, 1994 from the Hazel - Wood property, just south of Grand Blanc, Michigan. The club used four stations and generator power to rack up the following QSOs:

	CW		SSB
80m	36	80m	125
40	245	40	128
20	242	20	164
15	---	15	216
10	---	10	54
6	3	6	57
2	---	2	24
QRP	10		

Total CW QSOs =  $419 \times 2 = 838$

Total SSB QSOs =  $768 \times 1 = 768$

SubTotal 1606

Generator power multiplier x 2

Claimed Score 3212

HPARC also claimed a number of bonuses to be added to our final score by ARRL. Bonus points claimed include:

100% Emergency Power

Location & Information in Public Place

Natural Power (QRP Solar Power)

Packet Radio

VHF Station (2 & 6 meter SSB & CW)

## NOVICE CLASSES STARTING UP!

### HPARC Continues Tradition of Free Radio Instruction!

Whether you're new to Amateur Radio, looking to add code privileges to your ticket, or simply curious, you're welcome at the Hazel Park Amateur Radio Club's free Novice classes! The course begins September 22, 1994 at the Hoover Elementary School in Hazel Park (big surprise). There is no age limit; get the kids into Amateur Radio before their hormones kick into gear! For further information or to register for the class contact Jerry (313) 521-2370, Dan (810) 542-0383, or Frank (810) 575-9135. There is no obligation to complete the entire course...bring a friend to the first session and the decide if you want to continue or not (we bet you will!).

### HPARC General Membership Meetings Resume

After the usual summer hiatus, the HPARC General Membership Meetings will resume on Wednesday, September 14, 1994 at the Hoover Elementary School. Besides the usual comraderie, prize raffles, donuts and other festivities, Greg Ozimek - WB8FNQ ARRL Public Information Coordinator for the Michigan Area will be the featured speaker.

### HPARC On the Air!

The HPARC 2 meter net convenes every Sunday evening at 9:00 pm on the DART Repeater (146.640 Mhz). Check in, pop open a can of your favorite beverage, lean back, and catch up on club events and what your buddies and pals have been doing for the past week.

You'll find most of the club officers who ducked out of the Sunday night 2 meter net on the HPARC CW Net on Monday nights. Tune in 7.120 Mhz or below at 8:00 pm and keep your keys warmed up. Everyone from Novice to Extra are welcome to check in and join in the fun.

## The Swap Hound

SAT SEPT 17TH HUDSONVILLE, MI Grand Rapids  
ARA Hamfest

SUN SEPT 18TH MT CLEMENS, MICH L 'Anse  
Creuse ARC Swap 'N Shop, L 'Anse High School, I-94  
exit 236 SET-UP 6AM OPEN 8AM-2PM ADM \$5.00  
Adv \$4.00 TABLES \$10.00 TRUNK SPACE \$4.00 on  
arrival - New & used Ham radio equipment electronics  
computers & software - Food on site Free parking VE  
exams 11am--Call Don, WA8IZW (810) 294-1567 -  
INFO: (810) 465-2797/(810) 949-2508 Talk-in  
147.08+/146.52 Simplex

SAT OCT 1ST SAULT STE MARIE, ONT Ontonagon  
RC Hamfest/Flea Market INFO: Frank, VE3FOG (705)  
949-0054

SUN OCT 2ND WARREN, MICH Utica-Shelby  
ECA SwapnShop Macomb Comm College T.I.147.18  
Info: Virginia, N8NLS (810) 268-0691

SUN OCT 9TH LANSING, MICH Central Mich ARC  
Hamfair Gardener Middle School T.I.146.94 Info:  
Rowena, (517) 482-9650

SUN OCT 9TH LIMA, OH Northwest Ohio ARC  
Lima Hamfest, Allen County Fairgrounds, one mile east  
on 309 off I-75, Exit 125/126

SUN OCT 16TH KALAMAZOO, MI Kalamazoo ARC  
& SW Mi AR Team Hamfest

SUN NOV 6TH SOUTHFIELD, MI Oak Park ARC  
SwapnShop - Southfield Civic Center Pavillion - For  
info call (810) 559-2442. Admission \$5.00. - Talk in  
146.640 (DART)

SUN DEC 4TH HAZEL PARK, MI - Hazel Park  
ARC 29th Annual SwapnShop .Watch this space for  
further details!!!

## Food for Radio Thought!

One and all are welcome at the weekly breakfast  
gathering of HPARC cognescenti at the Ram's Horn, just  
north of 13 Mile on the west side of Woodward Avenue.  
Chow begins at 7:00am on Friday mornings. Bring your  
appetite, or just join the crew for coffee.

## Silent Keys

It is with great sadness that HPARC acknowledges the  
passing of Norman Benham, N4TAJ, father of Dave  
Benham, K8TRF on May 28, 1994.

## Heavy Traffic

Traffic handling is an easy way to get involved in public  
service without leaving the comfort of your shack. You  
can check into the Southeastern Michigan Traffic net  
any night of the week at 10:15pm on the Edison repeater  
at 145.330. For more information corner Don Stockton ,  
AA8EG at any general membership meeting.

## Want To See Your Name and Call in Print? Contribute!

Your letters, articles , ideas, and random ramblings are  
welcome here. The Zero Beat, the official newsletter of  
HPARC pays the absolutely lowest rates in the business  
(i.e. Zero) for original reviews, radio-related stories,  
project plans or amusing coffee stains. Contact Arlan  
Levitan - KB8QLV , on the DART or leave your name,  
number and threatening messages at (810) 358-4440  
during weekday business hours.

## STANDARD C108A

### Mini 2M Transceiver:

Review by Dave Burr, KK9L

1) This rig is small - with a capital "S". It's about the  
smallest radio of ANY kind, let alone in the amateur  
transceiver market. Its size brings with it almost endless  
possibilities. It's truly the first radio that will fit  
comfortably in your shirt pocket. (Many will still have to  
take some of the hundreds of pens and pencils out of  
their pocket protectors first.)

2) There is no BNC connector for the antenna. Instead, it  
screws onto a post similar to a mini-UHF connector. The  
problem is that the threads coming out of the radio are  
male, so you'd be unlikely to find an adapter. Unless you  
fabricate something or assemble a foot-long string of  
adapters, you're likely stuck with the antenna which  
comes with it. Maybe that's okay, because this rig is not  
meant to be loud - just portable.

**STANDARD C108A (continued)**

3) Since it's not meant to be loud, Standard gives you a standard 230mW output. That's enough to get into up to perhaps a 3-4 repeaters in a metro area (if you don't mind being a little scratchy), but perhaps zero in others. Although there is no "correct" power level for UHF/VHF HTs (antenna positioning is more important), this may pose a problem for some.

4) Of course, in a metro area, you're going to need PL capability. Unfortunately, although there is a PL encoder built in, it only has about half of the standard frequencies. Granted, most of the most popular ones are there, but you would be advised to check the list first to make sure that this rig will get you into your favorite repeater.

5) Standard, Icom, and others have reinforced the old adage that there is no such thing as a free lunch. Very small rigs do not have lots of external controls because hardware takes up space. Instead, rigs like the C108A and Icom 2iA use the power of microprocessors. That means getting into a "SET" mode to program and to control most functions. This makes programming a chore, but over the long haul, you don't do a lot of programming in comparison to other operating tasks. There are 20 memories on the C108A, and they store all the usual info - offset, CTCSS tone, etc.

6) The rig has extended receive, from aircraft band through the VHF high range. Given the above, getting to frequencies throughout that range is tough. You have to get into Set mode, put the rig into the largest tuning step - 50kHz - and then grind through with a knob on the top. Not fast. And not fun.

7) The push-to-talk switch seems to be a membrane type. While it seems initially to be of good quality, its "feel" is not good (In fact, let's just knock that down to "really bad". This area needs work). I also have to wonder about its longevity.

8) A couple of notes about the functions:

a) There are only two scan modes in terms of resume - you either stop while a signal is present or resume after a few sec. regardless.

b) The display lamp can be programmed to remain on until turned off - a big plus, in my opinion, although the other buttons are not lit.

c) You can program scan limits for scanning between two points.

d) It also has all the locking and power management functions that the big boys have.

e) The squelch is microprocessor controlled and has two levels. The "monitor" function can simply open the squelch on the receive frequency or listen to the input frequency. You need that flexibility if there is no analog control as most rigs have. The lack of an analog squelch control will be bothersome to some, but the squelch seems to work very well and has a good threshold in the "low" setting.

9) Since this rig is built for portability, it uses standard "AA" batteries. There is a NiCad battery pack available for incredibly cheap hams who can't afford batteries. Its use of standard, off-the-shelf batteries is a HUGE advantage and is in keeping with the rig's mission, which is to go anywhere at any time without being encumbered by a bunch of little boxes and a big ball of wire. You throw the rig in your suitcase, briefcase, or pocket, and go. As long as there are batteries available, you're in business. And where in the U.S. will you not have access to a couple of "AA" batteries? Battery life is good, because with 200mw, you're not going to be doing much talking anyway. Of course you can use this to access your cross-band repeat setup, which would be a perfect use. There is a 70cm version available too.

10) Aside from the PTT switch question, the construction is very good. The only design problem for some will be the very small and fairly-deeply recessed buttons on the front. And with this rig, there's a lot of button pushing to be done (you'll find yourself pushing the "Set" button constantly). Hams with fat or clumsy fingers need not apply, as they'd spend a half an hour just getting the thing turned on. The aforementioned Icom rig has it all over the Standard in this area. Its buttons are bigger and not sunk into holes.

11) The operating manual is adequate, but is sorely lacking in comparison to those put out by "the Big Three". For example, there are instructions for using many functions, but no complete explanations as to what they do. Many new hams or those who are not used to these functions in other rigs will be left in the dark. Also, the manual's translation to English is not particularly well done. The manual will need some completion and polish for many to be comfortable with it.

Overall, the Standard rig fulfills its mission well. Most (but not all!!) of the annoyances are necessities if a rig is to be very tiny. The C108A will undoubtedly get a lot of attention because of its uniqueness. If we listen hard (open our squelches), we're going to hear quite a few of them on the air.

## Tip: Local 10 Meter Hams Getting Together On/Off Air

If you're a new Novice or Tech Plus looking for a place to fine tune your HF phone skills in a friendly environment, consider tuning to 28.45 Mhz in the early evenings. You'll more often than not find an informal local rag-chew you're welcome to check into. The group also meets for breakfast at Denny's on Woodward and 12 Mile, Saturday Mornings at 10:00am.

## Detroit Area Hams Make Amateur Satellite History!

Kudos to N8QGC (John) and KB8SLD (Rick), who became the first hams to make an Aeronautical Mobile Satellite Contact at high noon on September 4, 1994. The airborne duo used AMRAD OSCAR 27 to make satellite history by working N8QYN (Dennis) and a handful of other local and out-of-region contacts. KB8SLD's 1974 Cessna Cardinal carried a Kenwood TM-731A dual bander and homebrew 1/4 wave for the 2 meter uplink while the steady hands of co-pilot N8QGC kept a 6 element KLM 440 Yagi on the bird. Nice going guys, and congratulations from everyone at HPARC!

## Correspondence:

To the members of the Hazel Park Amateur Radio Club;

Your charitable donation in memory of Lawrence (Phil) Oulette is gratefully acknowledged by the Family and Angel Hospice. Thank you for your kindness.

Sister M. Giovanni  
President

## Unclassifieds:

Looking for used 2 meter rig in good condition. Contact N8WYO (Al Hardenberg) at 588-3860. (Editors note: If you can't reach Al via phone, just throw out a CQ on the 40 meter CW band in the evening. More often than not, that's where you'll find him!)

## The Zero Beat

### Signal Report (RST) REFERENCE Clip & Save

#### READABILITY

- 1 - Unreadable
- 2 - Barely Readable, occasional words distinguishable
- 3 - Readable with considerable difficulty
- 4 - Readable with practically no difficulty
- 5 - Perfectly readable

#### SIGNAL STRENGTH

- 1 - Faint Signals, barely perceptible
- 2 - Very weak signals
- 3 - Weak signals
- 4 - Fair signals
- 5 - Fairly good signals
- 6 - Good signals
- 7 - Moderately strong signals
- 8 - Strong signals
- 9 - Extremely strong signals

#### TONE (CW Only)

- 1 - Sixty-cycle ac or less, very rough and broad
- 2 - Very rough ac, very harsh and broad
- 3 - Rough AC tone, rectified but not filtered
- 4 - Rough note, some trace of filtering
- 5 - Filtered rectified ac but strongly ripple-modulated
- 6 - Filtered tone, definite trace of ripple modulation
- 7 - Near pure tone, trace of ripple modulation
- 8 - Near perfect tone, slight trace of modulation
- 9 - Perfect tone, no trace of ripple or modulation of any kind

## 10-10 International Still Alive and Kicking!

10 Meter propagation may still be in the dumper, but 10-10 International Net is still active, running many contests and printing its fine quarterly newsletter. For complete information on joining 10-10 send a buck, two first class stamps, and an address label to Mike Elliot, KF0ZQ, 10-10 Information Manager, 9832 W. Gurdon Court, Boise, Idaho 83704. You'll get an information packet and the latest copy of the 10-10 International News.