

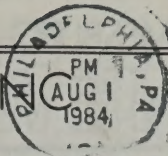
remove with care

HOLMESBURG AMATEUR RADIO CLUB, INC.

(a non-profit corporation)

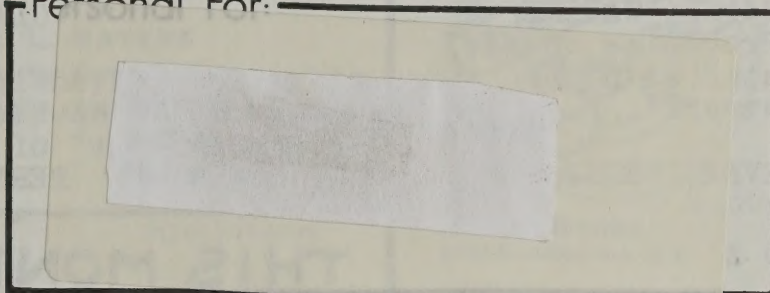
P.O. BOX 6253 ~ PHILADELPHIA, PA. 19136

(Affiliated with the West Link Radio Network, Inc.)



FIRST CLASS MAIL

Personal For:



NEWSLETTER

JULY

1984

Come to our August Swim Meeting! See Last Page!

The Newsletter is a publication of the Holmesburg Amateur Radio Club, Inc. Anything that is printed in this paper may be reprinted providing the proper credit is given.

Deadline for Articles: Delivered to the P.O.Box 6253 address by the 15th of each month.

Editor reserves the right to edit, reject, reduce, etc. all items to be published.

SUBSCRIPTION RATE: \$3.00 per year "BUY/SELL/TRADE/Etc.": FREE

1984 CLUB OFFICERS AND TRUSTEES

PRESIDENT:	KR1M-Steve Sosson	1 Year TRUSTEE:	WA3IFY-Jay Kuperman
VICE-PRES:	WA3AOP-Richard Sambenedetto	2 Year TRUSTEE:	WA3OQR-Charles Zeager
		3 Year TRUSTEE:	W3QXT-Bill Soble
TREASURER:	KA3DNJ-Claire Kuperman	CLUB HISTORIAN:	Edith Rosner-W3AAU
SECRETARY:	NONE		645 Artwood Drive Phila., PA 19115

remove with care

NEWSLETTER

AFFILIATION WITH WEST LINK

EDITORIAL - MARK KC3JV

Thanks to the efforts of our "Golden throat" of the Wednesday night H.A.R.C. net Bernie WA2BAK we are as our Banner Proclaims on the front page "Affiliated with the "West Link Radio Network".

TUNE IN WEST LINK EVERY WEDNESDAY NIGHT AT:

8:00 P.M. - 0000 Z
ON:

Our repeater WA3AOP
146.685 -600

The West Link Report is news that HAM's can use: DX minute, Legislation ,phone band changes and much more !

Code Practice

Thoes needing CW practice can obtain it almost every Wednesday Night at:

7:30 p.m. - 2330 Z
On the repeater.

These sessions are given by:

JAY - WA3IFY

Anyone with a scanner can listen.

The 2nd Edition of "The Emergency Telephone Police & Fire & Repeater Directory "

Has been prepared by Charlie WA3OQR and will be given out at the first fall meeting.

THANKS for the effort Charlie!

COME TO THE SWIM MEETING: SAT. AUG 25th SEE LAST PAGE FOR DETAILS

HARC NEWSLETTER STAFF

Editor-in-Chief, Pressboy and General Nag to Late Reporters -

MARK ROTHSTEIN, KC3JV

Layout, Typing & Circulation...etc.
CLAIRE KUPERMAN, KA3DN

Official "Philadelphia" Lawyer for the H.A.R.C. Newsletter and the "Golden Throat" of the Wednesday Night Net - BERNIE HEINZE, WA2BAK

THIS MONTH:

Everything you wanted to know about Autopatch but were afraid to ask!

----Bob KB3SM

Field Day-1984 "In Style"

---Dave KM3T

Son of "TVI Free At Last"

---Bernie WA2BAK

TECHNICAL COMMITTEE REPORT

Since the last newsletter a few modifications were made to the repeater. First, the Hammonton input is now functioning after the replacement of a final in the transmitter and the "Gas afet" in the receiver. We are still making modifications on all inputs and adjustments of the main site in order to enable the system to properly select a signal. It is very hard for the Technical Committee to do any modifications, measurements or adjustments in the field because we lack the proper test equipment. A Bird Wattmeter should be used after every site visit to insure proper output and is very helpful repairing an input.

We are going to add an additional function to the repeater shortly which will enable us to remotely control each input. Until next month..

73 for now,

Ron Cardullo, WB3BDC

NEWSLETTER

SUPPORT OUR ADVERTISERS. TELL THEM YOU SAW IT IN THE HARC NEWSLETTER.

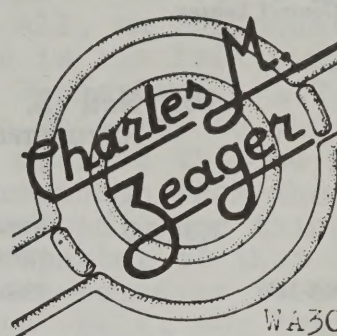
W3DIP



FIELDING O. L. WATERS
Specializing In Pest Control
BENSALEM, PA.

PA. STATE CERTIFIED

(215) 757-5743



WA30QR
Pressure-Sensitive Labels
Rubber Stamps
Tags & Decals
Fast Service

(215) 698-1060
9908 Bustleton Ave. (B-9)

Post Office Box 14568
Philadelphia PA 19115

NE 7-8329

W3HK

GEORGE S. VAN DYKE, JR., P.E.
CONSULTING ENGINEER

4607 CONVENT LANE
PHILA. PA 19114

Wm. "Bill" Pinkenson

WB2IOY

Pants Plus Inc.

302 Market Street • Philadelphia, PA 19106 • (215) 592-0257

NOW USE BOTH SIDES
OF YOUR DISKETTE!

DISKETTE HOLE PUNCH



NO GUESSWORK
WITH HOLE GUIDE

and EDGE GUIDE

PUNCH OUT IS ALWAYS IN THE RIGHT POSITION
Available for IMMEDIATE Shipment

only **\$9.50** add \$1.50 shipping
For C.O.D. add \$2.00



N.P.S. Inc.
1138 BOXWOOD RD. JENKINTOWN PA 19046



(215) 884-6010

A 24 HR
ANSWER 'G' MACHINE

AZDEN

2-6-10 MTR & 440 MHZ AND PCS-300 2M TALKIE

We'll Beat Any Price in This Issue

10 AMP Regulated Supply 10 AMP Continuous \$54.

Service Manuals

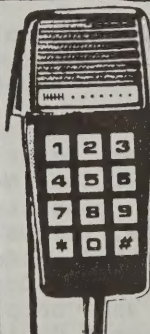
PCS 4000

300-3000

\$9⁰⁰

\$5⁰⁰ EACH

Order 24 hours a day (215) 884-6010
FREE UPS - N.P.S. Inc. WA3IFQ
1138 BOXWOOD RD. JENKINTOWN, PA. 19046



MODEL
PCS-4000
NAME
AZDEN

FEATURE # 1
Touchtone
in a mike

FEATURE # 2
OPTIONAL BACK LIGHTED KEY PAD ADD \$10.00

KEY PAD MIKE
\$68⁰⁰ *

AUTO DIALER MIKE
\$98⁰⁰ *

WITH LED LIGHTED KEY PAD ADD \$10.00

* Add \$2.00 packing shipping & insurance.
Check/Money Order - C.O.D. Add \$2.00.

** With AZDEN Mike Plug attached, \$2.00
- Also available for other 2 meter rigs.



N.P.S. Inc.



(215) 884-6010

A 24 HR
ANSWER 'G' MACHINE

1138 BOXWOOD RD. JENKINTOWN PA 19046

SUPPORT OUR ADVERTISERS. TELL THEM YOU SAW IT IN THE HARC NEWSLETTER.

NEWSLETTER

SUPPORT OUR ADVERTISERS. TELL THEM YOU SAW IT IN THE HARC NEWSLETTER.

Eye Exams
Contact Lenses

Complete Eye
Care Facilities

Dr. Neil S. Halpern
OPTOMETRIST

K3OAO

Deputy Opticians
12039 Bustleton Ave.
Phila., Pa. 19116

673-1267

Everything you wanted to know about
Autopatch but were afraid to ask!

Everthing you should know about
operating on repeaters but were afraid to
ask! This is the first in a series of
articles (and I hope not the last) to
inform the users of WA3AOP/R of the ins
and outs of this system.

This months tidbit, Autopatch!

Since this is a user function of the
system it is up to the USERS to make it
work! Here are some of the problems heard
most often:

- 1) Why can't I bring the patch up?
- 2) Why do I get wrong numbers so often?
- 3) How come patches on other repeaters
seem to work better?

Let's start with a brief description
of the part of our repeater that handles
autopatches. The circuit consists of
Touchtone decoders, timers, relays, AGC,
compression amps, and other assorted
goodies. The AGC (Audio Gain Control)
circuit balances the input and output to
the phone line. The timers define our
security timing sequence, (you know, like
the letter B - one longer tone and three
shorter ones, all within about three
seconds) and the time-out time (about two
minutes and forty-five seconds). A relay
connects the phone line to the repeater
and brings up the dialtone when you send
the correct security code.

So, why can't you bring up the patch?
Perhaps your signal is too weak into the
repeater, or the security code took more
than three seconds, or you used the wrong
code!

Once you have dialtone, it is up to
the phone company to decode the tones.

Now we get a little technical. The
following are some of the telephone
company standards that we must meet in
order for the central office to register
the proper digits.

First, nominal signal levels must be
down -4 to -6 dbm (max +2 dbm). Second,
audio levels must be suppressed at least
45 db while dialing. There's much more to
the standards. You can find many of the
specs in the Radio Amateur's Handbook.
The standards note that it takes only 90
milliseconds (about 1/10 of a second) to
decode a digit!

So remember, we get you the dialtone
and balanced audio lines from the repeater
to the phone. You've got to take it from
there. If you don't meet the
requirements, it won't work. You can't
have excess background noise, mobile
flutter while dialing, or tones too loud
or too soft.

Why do you often get wrong numbers?
Mobile flutter is usually the reason. If
you hold a tone for one half second, that
tone could be seen by Ma Bell more than
once. To eliminate mobile flutter, stop
the car. Dialing from the side of the
road is much safer as well.

Why do patches on other repeaters
seem to work better than ours? Many other
systems decode your touch tones and
convert them to pulses before sending them
out onto the phone network. Pulse
dialing, while not as fast, is more
reliable because the repeater's tone
decoders are not as fussy as Ma Bell's.

Well I hope this takes some of the
??? out of autopatching (for now
anyway!).

Til next issue? 73
Bob, KB3SM

NEWSLETTER

FIELD DAY 1984 - IN STYLE

By Dave Pascoe KM3T

Some of you may remember the UPARC/HARC 1982 Field Day effort - only two rigs, some wire antennas and most of all, an inadequate supply of operators. Well, I thought that since this is the last summer during which I would have access to the University of Pennsylvania A.R.C. equipment arsenal (I graduate in May 1985), and since this may be the last summer I'll spend in Philadelphia for a few years, I decided that we would try to do FD the right way this year. Surprisingly, response from the H.A.R.C. was almost overwhelming. At least I was impressed! One thing I've learned over the past four years of operation on the repeater is that it's like pulling teeth to get volunteers for any type of non-repeater related activity, and sometimes for repeater-related activities! Well, now that we had enough people interested, enough equipment procured, and plenty of enthusiasm, we had to find a choice FD site.

My first thought was to use the old (1982) site which is located on the Lyberry State Hospital grounds at Roosevelt Blvd. & Southampton Rd. At the time, that site really seemed like a prime location - lots of space, a monster tower to spring antennas from, and close enough to most of us so that we wouldn't have to drive very far with the equipment. Then I got this crazy idea that it would be really neat to go to a hilltop or mountaintop location - just think of the signals we would be able to radiate on 75 meters! The first spot that came to mind was the University of Pennsylvania's Valley Forge Research Center (VFRS), a former Nike missile test site which is located atop Valley Forge Mountain (900' elev.). It's University-owned property, just make a couple of phone calls and we're in. Right? Wrong. It turned out that another group has been using the site for a few years and had already gotten their hands on the goodies for this year's FD. But then I figured, hey, why not make it an even bigger bash by combining efforts with the other group, PENNARC. It turned out to be the best move we ever made because, looking back on the whole weekend, there's no way we could've done what we did without their efforts. More on that later. It was my original conception that we would run 6 transmitters simultaneously just because of the sheer number of people involved. It didn't work out that way, but we did some amazing things regardless!

I contacted Sam Seeleman of the VFRS and he put me in touch with Ralph Alexander (WA3FOF). From then on Ralph, myself and several members of the H.A.R.C. spent about four weeks planning and trying to get firm commitments from operators and other helpers. The most frustrating thing was not knowing until about a week before the FD weekend who would be there. Who was to know if someone's wife was suddenly going to want to take the kids out on one of the most important weekends of the year! Also, I spent quite a bit of time making a detailed list of equipment and supplies so that we were sure to have everything (but a FD or contest team NEVER has EVERYTHING, there's always something missing, usually time, I knew that all too well!).

Bernie (WA2BAK) and I publicized the event quite a bit on .085/.635, both on the weekly net and in casual QSO's with members of the H.A.R.C. and other clubs. You know, not EVERY club goes out on FD EVERY year, so we wanted to get as many people as possible involved. You can never have too many operators during Field Day, especially when you take into account the fact that Murphy is always lurking out there! Well, the weekend was there before we knew it and everybody was really psyched up for having a great time. Bernie, Tom (K3AI and a J, hi! hi!) and I started our usual underhanded wisecracking

(cont'd)

NEWSLETTER

and joking around on the repeater, as usual. Tom, whatever happened to the "Moonbag"? Bernie, do you have any idea? It was going to be one of those weekends!

Friday 2100Z..I left work and broke all of the N.J. speeding records trying to get home in time. After a quick shower, shave and change of clothes, I grabbed all of the junk I could find that I thought we would need. From there I headed out to N3KZ (University of Pennsylvania A.R.C. Club Station) to meet Darryl Schick (WB3HOD, UPARC Sec'y/Treasurer) and Steve Phillips (KI3Q, University alumnus and former UPARC President) and load the 'KZ equipment into the station wagon.

Friday 2357Z...We're still loading equipment into the station wagon and Steve is installing a new fan belt in his Volkswagon (it broke on his way into Philly). Things looked pretty desperate for a while, but we were shortly on the road and heading west.....not to fear, though, things got worse....

We started out with a three-car caravan (KM3T, WB3HOD and KI3Q) and tried to pick up Bernie on the Schuylkill Expressway but I, the astute driver that I am, managed to take a wrong turn and land all of us on Lincoln Drive up in Chestnut Hill! After numerous other mishaps on Route 202 we finally made it to the mountain access roads. To tell you the truth, that's where all the fun began! Well, my excuse is that it was incredibly dark on that road..... I mean, how am I supposed to see a parabolic dish (even if it is 64 ft. in diameter) when it's pitch dark outside?? We were the last group to arrive..... the official UPARC check-in time was 0325Z (11:25 P.M. for you guys too lazy to convert). After trying to explain to Ralph, Tom, Bernie and the rest of the crew why we were SO late, we set up camp, chowed down (tks KZ2N for that expression) and proceeded to get a good night's sleep.

Rob (KT3M) and I woke up just after sunrise on Saturday morning and proceeded to commence my favorite part of the whole weekend - transferring all of the antennas from the ground to the air. It's in the antenna dept. that the PENNARC crew really came through for the team. After a description, I think you'll have to admit that we put up some pretty serious antennas this time around. Here's the run-down:

- 75 meters.....0.5λ slopers (top at 60 ft.)
- 80 meters.....0.5λ dipole at 30 ft.
- 40m SSB.....2 el. yagi (yep) at 30 ft.
- CW.....0.5λ sloper at 30 ft. (top)
- 20-10m.....3 el. triband yagi at 30 ft.
- 2m FM/SSB.....Ringo Ranger/13 el. yagi at 30'

Special thanks go out to Ralph Alexander and the PENNARC group for supplying the "hardware" (the term used by us contesters to refer to antennas). Practically all of the antennas went up without a hitch, at least once the help arrived back at the site from their good night's rest! The antenna-raising "party" was a sight to behold, let me tell you! The rotatable antennas were installed, complete with rotators, atop the 30 foot tilt-up poles in a relatively short period of time. The bulk of our time was spent repairing the loading section of the 40m beam and trying to find out what the lengths of the element tips should be for the phone section of the band. Al (KC3N), Mike (N3DJM), Rob (KT3M) and Bruce (WA3YUE) took care of installing the wire antennas for 75, 80 and 40 meters. All in all, it took a good five hours to get everything in the air and operational. Not too bad, but compared to the 45 minutes it took to get everything down I guess you might say it was a poor performance. Practice makes perfect, as they say. Maybe the rain helped speed up the take-down process, though!

The first antenna tested was the Ringo Ranger 2m FM antenna at 30 feet. I turned the knob to .52 simplex, put out a quick call and N4RA (I think that

NEWSLETTER

was his call) in Virginia came back and told us that we sounded like a local! Other signal reports received over the course of the weekend were equally ego-boosting. Believe me, there's a lot to be said for that 900' elevation! Except for the 40m skip being a little bit too long, conditions were fairly decent throughout the FD operating period. Some of you may be wondering which transceivers were used during the weekend, so let me give you a quick run-down:

- (2) Kenwood TS-820S HF rigs (courtesy N3KZ and WA3YUE)
- (1) Kenwood TS-930S HF rig (courtesy WA2BAK, a brave soul)
(just out of the box!)
- (1) Yaesu FT-757GX (courtesy Leo Kluger, WB2TRN, of the ARRL who, by the way, is a Univ. alumnus & former UPARC President)
- (1) Kenwood TS-700A (all-mode 2m) w/ 100W amplifier

1800Z Saturday.....Everything is functioning, and the operating positions are manned by very eager operators, but they're wondering what class we're supposed to be sending! I knew then that I forgot to tell them something! Anyway, N3KZ/3 was on the air signing "4A EPA" to signify that we were running four transmitters simultaneously from the Eastern Pennsylvania ARRL section. It was a good thing that we didn't run five or six because, with the support needed to keep each transmitter on the air, we had enough trouble keeping four of them running efficiently.

On 2 meters we worked stations from Virginia to Massachusetts and out into the far reaches of western Pennsylvania. Our biggest signal, however, seemed to be on 75 meters, where we received some very gratifying signal reports. I remember one old-timer asking me if I was sure that we didn't have a KW amplifier in line! Speaking of 75 meters, Ralph (WA3FOF) devised an interesting addition to the sloping dipole. He suggested attaching a fluorescent bulb to the low end of the sloper, which was about three feet off the ground, so that everybody could see the antenna when darkness fell upon us. Hey, it worked! What a great way to keep tabs on the 75m op. to ensure that he wasn't falling asleep at the mike! (A bad habit of mine during contests, see Joe Pearlstein's (WA3IJZ) article in the June 1984 H.A.R.C. newsletter) Bernie and Tom seemed to be having a good time on 20 and 15m SSB and, after my review of the FD logs, I discovered that they worked a station that one wouldn't expect an East Coast station to work during FD - KHØAC Saipan, Marianna Islands, Pacific Ocean! Special thanks go to Tom and Bernie for the neatly kept logs on 20 and 15, as well as the fine operating practice exhibited throughout the weekend. Practically everybody involved put in some operating time on one band or another, which made me extremely pleased. When they weren't operating, they were either providing technical or moral support to the operators. At the end of the battle, the Valley Forge Mountain Field Day Group (N3KZ/3) had amassed some 2000 QSO's with four transmitters. Not all that shabby!

There's not much more to be said, except to say that everybody had a great time and that a true first-class effort was put forth in every aspect of the operation by each participant. I would like to thank the following individuals for participating in this exciting event and I hope to work all of you fellas during the 1985 FD, from wherever I end up living!

73's es tn timer for all
the help,

(See next page for list of participants)

Dave KM3T

NEWSLETTER

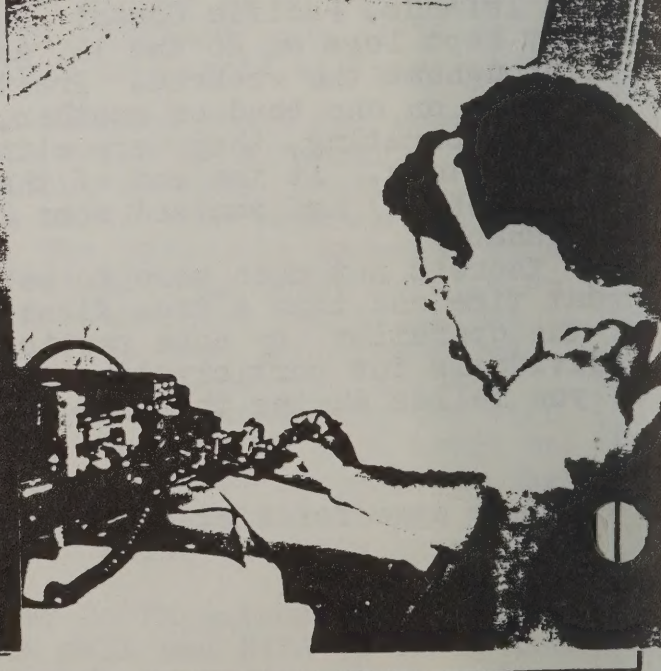
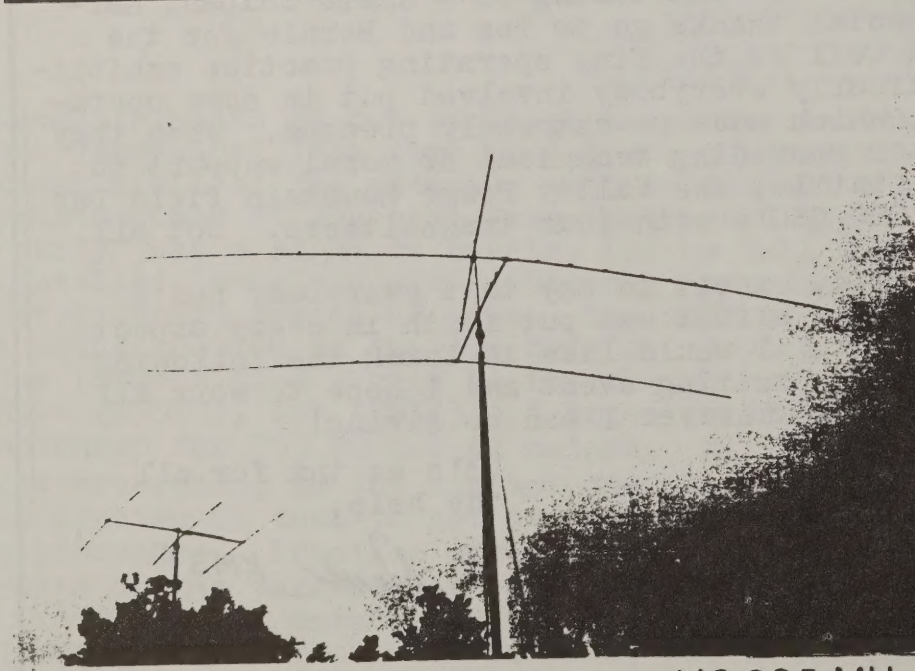
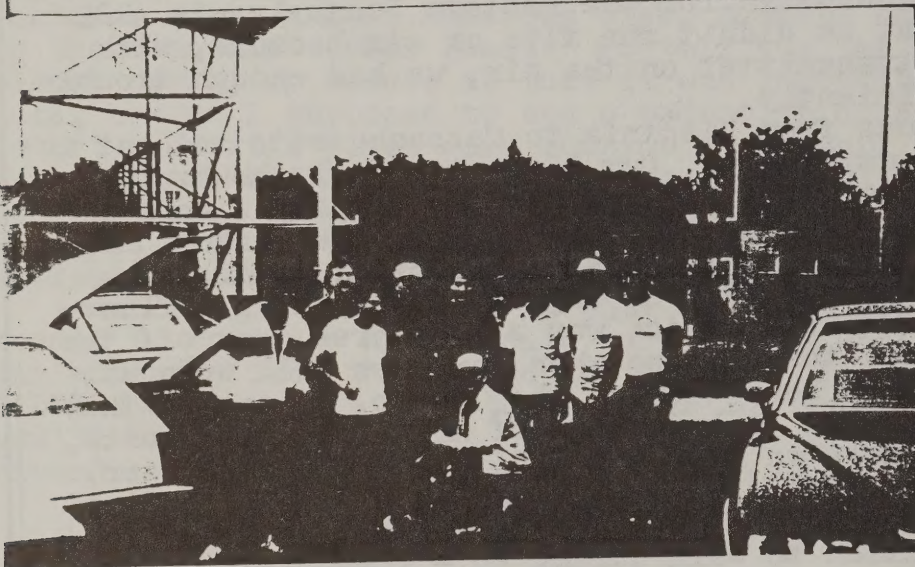
Thanks go out to all of the following, in no particular order:

Darryl (WB3HCL)
Bernie (WA2BAK)
Tom (K3AIJ)
Mike (N3DJM), esp. for all the tools!
Steve (KI3Q)
Ralph (WA3FOF) & XYL who was in charge
of all the cooking - special tnx for a
FI job on the food!
Carl (K3DLS)
Bruce (WA3YUE) & XYL
Rob (KT3M)
Leo (WB2TRN) & special tnx to the ARRL

Al (KC3N)
Rob (WB3BSN)
Ron (N3Z0)
Dick (W3BMA)
Bob (KB3SM)
Paul (K3RBO)
Steve (KR1M)
Ed (KF3R)
Joe (WA3IJZ)
Sam (W3BNQ)

Outstanding job, guys, good luck
next year!

Special thanks must also go out to Mr. Sam Seelaman of the University of
Pennsylvania's Valley Forge Research Center for the use of the facilities.



NEWSLETTER

**SON OF "TVI FREE AT LAST":
 HOW TO TELL SPURIOUS NEIGHBORS
 WHY THEY SHOULD FEEL PRIVILEGED TO
 HAVE A HAM IN THE NEIGHBORHOOD!**

By: Bernie Heinze -WA2BAK

It's been a long and hard week at the office. You've come home to enjoy some rest and relaxation and as luck would have it, the finals of the 1984 summer olympic basketball championships are on T.V. And there you sit with a tall glass of Hawaiian Punch (Hawaiian Punch?) and a plate of double stuff Oreos in your favorite chair. The crowd is chanting "USA-USA-USA" as the fourth period is coming to a close. Excitement fills the air, you're caught up in the energy of it all; when all of a sudden from out of no where your picture tube exhibits the scene from the winter olympics in Sarajevo. Can this be? A blizzard, squiggly lines and total distortion? Then there's a blue...the chants of the crowd in the Los Angeles Colliseum are taken over by the relentless chant "CQ, CQ longpath...this is K 3 A I and a J."

Yes, for those unfortunate souls who are not amateur radio operators, the above scenario can understandably lead to immense frustration, and no matter how you try to explain that a low pass filter is being used, or that you have been able to reduce your harmonics below 60 db down, it will not appease your neighbors. Really, you must realize that trying to explain the rationale behind a harmonic that is below 60 db down makes about as much sense to a person whose greatest feat of intelligence has been to memorize the second string of the Philadelphia Stars team, as trying to tell them who K3AI and a J is.

Nevertheless, all too many times we fail to remember that our radio licenses carry with them not only a privilege to operate, but most importantly, a responsibility in the way we operate and conduct ourselves. It is for this reason that this article must emphasize the underlying necessity of being "preventative" in setting up

your station and embarking on cw or whatever mode you choose, as opposed to being placed in that position where you are forced to be responsive due to a complaint filed against you.

The dockets are filled with cases of neighbors who have sued because your tomato plant stretches onto their property. The nuisance of seeing and hearing someone calling "CQ" while an obliterated mother who finally has put her kids to bed is trying to see what Remington Steele is up to, will perhaps also give her cause to institute some kind of action to have that "interference" abated.

Last month's edition of the newsletter carried an excellent article by Mark Rothstein-KC3JV, on how to make your station "TVI free." However, even the best low pass filter or "TVI free" station can still emit spurious radiations throughout the neighborhood. And you might very well find yourself defending a law suit or other action brought by a tomato plant lover who likes Remington Steele.

If such an action is brought into a legal proceeding, it will in all likelihood be brought in "equity", which merely means that a judge will consider the "equities", and balance the various rights or interests at issue. Since no tangible damage has been done, work lost, or injuries inflicted, an equity court could either abate the nuisance entirely (take you off the air), or require certain limited hours of operating so as to not interfere with the Merv Griffin Show.

In your defense however, there is a strength. It may take an outlay of monetary resources to insure an adequate low pass filter or other action to assert your rights, and to make a judge appreciate that the current state of the art has been met or exceeded by your station. In last month's issue, it was stated that "if you generate any interference to a receiver of 'good-design' then it must be cleaned up."

NEWSLETTER

This statement is still true... but it does not mean that if your station emanates spurious radiations that you must "cease and desist."

In one of the upcoming issues, KC3JV will publish a letter he wrote to a complaining neighbor detailing the various sections of the Communications Act of 1934, rules and regulations of the federal communications commission, and various other affirmative actions he took in order to do all he could to comply with the goal of making his station TVI free, and to keep peace in the neighborhood. Each of us should keep those sections and requirements close at hand, and use them as guidelines with which to assure our own actions. While we do have an obligation to be as "clean" with our signals as possible, we have as much right to check in on East CARS as Mrs. Murphy has to watch "All My Children." However, we must be sure to have done our very best in eliminating TVI.

In this regard, solace can be taken from the FCC. A most pleasant lady named Mrs. Gertrud Anderson will be happy to send you a pamphlet detailing with pictures and words the various types of TVI around (be it from commercial broadcast stations; CB'ers; or Mr. Murphy testing his transmission in the garage). With this, the neighbors can check to see whether you are the cause or not.

The next step is to have a field test performed by an FCC engineer who will come to your home (for free) and analyze your system. This latter step should be a last resort, since if we would all request this, Mrs. Anderson would certainly emit some spurious radiations of her own.

Nevertheless, you must approach an annoyed neighbor with diplomacy and a conviction to assist him or her achieve normalcy in their tv and radio enjoyment. Adversity never has solved anything. But preparation in advance to ward off a possible confrontation has.

By the way, Mrs. Anderson's telephone number is (215) 752-1331.

If the neighbors still complain, it would be best to keep a log or journal marking down the dates and times on which interference was "allegedly" noted, and check this first with your own operating log. Keep track of all the complaints and then write a very diplomatic letter detailing the fact that you have installed an FCC approved low pass filter, grounded all equipment adequately, and (if necessary) had the FCC conduct a field test. Operating in accord with all the rules and regulations should also be related. You cannot just put a kilowatt on the air aiming your cubical quad at the back end of Mrs. Murphy's Zenith.

Then, if the problem persists, ask them for the name and manufacturer of their set, and write for a suitable filter. Taking the initiative and control of these matters will always give you an upperhand...unless of course you wake one morning to find Mr. Murphy in your backyard with a chainsaw poised at the base of your tower! If this happens, call the authorities. You might be unintentionally causing interference, but someones physical presence on your property is a trespass not tolerated in our legal system.

It seems most unfair that many of the things we enjoy most in life have residual repercussions. However, cooperation and understanding on our parts, as opposed to uninterested ignorance, will lead to resolution of the situation. Keeping a diary of all your activities, the "alleged complaints" and your responses (keeping file copies of everything) will also be the best evidence of your efforts to resolve the problem amicably. Just remember...start to prepare now by doing what you must to become "TVI Free." Do not wait for someone to complain, for they too have an obligation to you. Good luck, and "good DX."

NEWSLETTER

H.A.R.C. SWIM MEETING Saturday August 25th

Come by Auto ,come by air, come by horseback but come !

SATURDAY AUGUST 25th - General Meeting at 10 o'clock
AT THE FLYING W AIRPORT SWIM CLUB AND LOUNGE
TALK IN: 146.685 and 146.520(simplex)



AT THE AIRPORT...

Here is how to get there:

FILL OUT THE REGISTRATION
AND MAIL IT NOW!!!



- \$5 per person covers swimming all day and a room to change in!
- Luncheon after general meeting \$8.50 (includes beverage, and dessert, tax and tip)
- Hot dogs and Hambergers may be purchased. (bring the kids!)
- Dancing in the evening, Horseback riding \$10/HR. sightseeing flights.
- Swim in Airplane shaped pool.

NAME* _____ ADDRESS _____ PHONE () _____

CALL SIGN _____

We will attend the H.A.R.C. Swim Meeting

Number of people(including the kids) **** x\$5= _____

Number of Lunchons: fish __x\$8.50***** = _____

roast beef __x\$8.50***** = _____

TOTAL cost _____

Make check payable to H.A.R.C and return immediatly
in attached envelope! DON'T FORGET THE STAMP!!!!

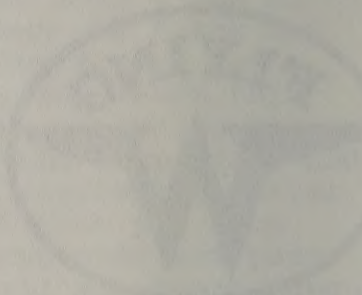
146.685 MHz

NEWSLETTER

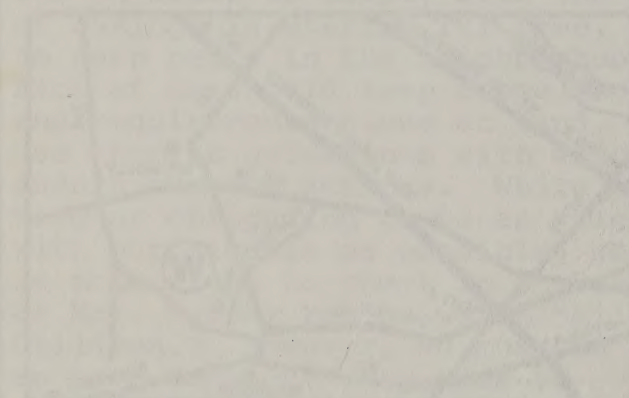
Volume 1, Number 1, Spring 1974

Dear Members,

It is a pleasure to present to you the first issue of our newsletter. We hope you will find it interesting and informative. We will continue to provide you with news, articles, and information about our club and the world of amateur radio.



AT THE AIRPORT



The airport is a busy place, and it is often difficult to find a quiet spot to enjoy a cup of coffee or a cigarette. However, there are several places where you can find a quiet spot to relax and enjoy the view.

One of the best places to go is the airport lounge. The lounge is a quiet place where you can sit and enjoy a cup of coffee or a cigarette. There are also several places where you can find a quiet spot to relax and enjoy the view.

Another place to go is the airport terminal. The terminal is a busy place, but there are several places where you can find a quiet spot to relax and enjoy the view.

One of the best places to go is the airport lounge. The lounge is a quiet place where you can sit and enjoy a cup of coffee or a cigarette. There are also several places where you can find a quiet spot to relax and enjoy the view.