

OLMESBURG AMATEUR RADIO CLUB, INC.-

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AMATEUR RADIO LICENSING COURSE

#### EDITORIAL

PLEASE HELP me fill the HARC Newsletter! If we, and I do mean we, are to make this newsletter a worthwhile publication I need articles every month. Recently Rich ,K3HIN has volenteered to write COMPUTER CORNER and Lou ,W2FVJ gets us the latest ARRL info.

Right now we could really use someone with an artistic bent to do sketches and layout every month.

If you have experimented with some aspect of HAM Radio or Computers let us now about it send the articles to:

> MARK ROTHSTEIN, KC3JV 585 Kismet Rd. Phila., PA

TNX Mark ,KC3JV

# WHAT'S MISSINC

Call Jay, WAJIFY if you know someone who would place an ad in the HARC Newsletter.

We need the \$\$

-146.685 MHz

## - HOLMESBURG AMATEUR RADIO CLUB, INC.-

NEWSLETTER

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## THE PREZ SEZ THE PREZ SEZ THE PREZ SEZ

WELL GANG, I GUESS THIS IS MY LAST COLUMN UNDER THE BANNER OF THE PREZ SEZ. LET ME START OFF BY WISHING EVERYONE A SUPER HOLIDAY SEASON.

THE LAST TWO YEARS HAVE BEEN INTERESTING. WE'VE PATICIPATED IN SOME PUBLIC SERVICE EVENTS, BECOME AFFILIATED WITH WESTLINK, AND STARTED THE HARC LINE. THE CLUB IS GROWING, AND I THINK THE SCOPE OF IT'S ACT IVITIES ARE STARTING TO GROW ALSO.

I'D LIKE TO THANK EVERYONE FOR THE SUPPORT THEY'VE GIVEN ME AS PRES-IDENT OF THE HOLMESBURG AMATEUR RADIO CLUB, INC. DURING THE LAST TWC YEARS, AND ASK THAT YOU CONTINUE TO GIVE YOUR SUPPORT TO THE NEW OFFICERS AND BOARD MEMBERS. <u>THE NAME OF THE GAME IS STILL PARTICIPAT</u>. ION! THE TECH COMMITTEE CAN ALWAYS USE SOME GOOD PEOPLE. HOW ABOUT HELPING OUT WITH FIELD DAY, OR THE MARCH OF DIMES WALK-A-THON?

MARC, KC3JV, HAS DONE A SUPER JOB AS EDITOR OF THE NEWSLETTER, BUT WE NEED CONIRIBUIORS. HOW ABOUT DOING A COLUMN ON COMPUTERS (INCIDENTALLY THIS WAS COMPOSED ON A PCjr USING DisplayWrite1)? OR MAYBE ON AVIATION, FISHING, SAILING, AND PHOTOGRAPHY, TO NAME A FEW POSSIBLE TOPICS.

I DON'T REALLY HAVE TOO MUCH MORE TO ADD HERE. PLEASE BE SURE TO VOTE FOR YOUR CLUB'S NEW OFFICERS! SEE YOU AT THE JANUARY MEETING AND DON' FORGET THE BANQUET COMING UP IN MARCH. (HAVE YOU SOLD YOUR TICKETS YET?)

UNTIL THEN, CATCH YOU ON .685!

## KRIM

As of Sunday, December 9, 1984, WASIJZ is on the air with a TH3MK3, and a 4BTV trap vertical. Participating in the antenna party on the 9th were were Joe, Mike (N3DJM), and Steve (KR1M). The weather was perfect for the day's activities and the work proceeded apace.

The successful results were confirmed that evening on 20 meters in a QSO involving WA3IJZ, KR1M/2, K3GA, and K3A, I, and a J.

Rot anyone interested in upgrading, the Gloucester County (NJ) Amateu Rad; o Club will be giving exams on Saturday, January 26, 1985 at Glassboro State College in Glassboro, NJ. For more info, contact Stev (KRIM) or Alvin (KZ2N) on 146.685, or John Fisher (K2JF) on the 147.10 repeater. The 146.895 repeater (sponsored by Time - Creater parks) has moved to a new location and the coverage area has been greatly improved. Give it a try.

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### Computer Corner By Rich K3HIN

Several weeks ago your editor asked me why I don't write a computer column , so here it is.

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The problem is, that I am really in to TI (Texas Inst.) and there are so many other computers that are being used by our fellow members, Ihope I can get some of them to come out of the wood work to chip in.

I am using the TI version of Word Processor to write this, and at this time I have about 344 programs on Software.

I don't want anyone to think that I am boasting about my software, but to have a good system you must have Programs.

I can play games, write letters, play music, mailing lists, etc., etc..

In future issues I will try to keep it common place as I can. I will try to print some programs for other computers.

One of the things I would like to go in to is the names of the hardware and software.

Software consists of the following : disks, tape and program modules on which programs are placed on them Hardware consists of the following :disk drives, cassette players, memory expansion, printers, modems, speech synthesizer, etc.

The reason I am putting them in the column so that the folks out there know what I am talkig about.

There also other types of Languages such as Basic, Extended Basic, Pascal, Forth Assembly and many more.

We are going to use Basic, because each computer has its Basic but, no two are the same. It's like speaking Chinese but,different Dialects. So as you see I am going to need help.

In closing, I hope to see a lot of different members putting in input and not keeping quiet. I would also like to see a question and answer portion in here.

Looking forward to writing a bigger and better column.

73s RICH K3HIN.

## SUPPORT OUR ADVERTISERS.

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## THE HALF WAVE LOOP ANTENNA

Mark Rothstein, KC3JV

No room for low band antennas?

Here is an answer from the past. In 1937 the famous John L. Reinartz, W1QP published his article on Half-Wave Loop Antennas in that year's QST.

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Basically, all you have to do is calculate the length of a half wave antenna from the formula: l = 468 where l = length of wire in feet and fmHz is the frequency in megahertz. fmHz

Cut the wire to length and arrange the wire as shown in Figure 1.

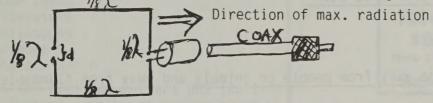


Figure 1 - The Half Wave Loop

Suspend each corner with fishing line or nylon rope with the antenna in parallel to the ground or attic floor.

This antenna is directional (4 to 6 db) and is supposed to have forward gain (but doesn/t). A hairpin match has proved useful in matching a 2 meter version of this antenna and should be place across the balun as shown in Figure 2.

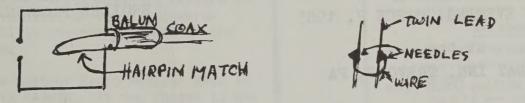


Figure 2 - Hairpin Match

The match could be made from a piece of twin lead about 5.8/ mHz feet long. A pair of sewing needles with a piece of wire soldered to each end can be used as a shorting bar for the twin lead. The "shorting bar" is placed at the end of the twin lead and moved toward the balun until the lowest SWR is obtained. Then a wire is soldered permenently in that position.

Like any half wave antenna this antenna should be 1/2 wave in the air, but some people have had luck with this antenna in their attic.

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The following table should help you make up one of these antennas:

(continued on next page)

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HOLMESBURG AMATEUR RADIO CLUB, INC. NEWSLETTER 4 THE HALF WAVE LOOP ANTENNA (continued)

Freq. Mhz Total length of Each side, "d" inches Hairpin twin wire (feet) (feet) lead match (feet) 14.175 (20M Center) 33 8'4" 4" 4'3" 7.225 (40M Phone) 64' 9" 16' 2 3/8" 7"7/8" 8'2" 66' 1 3/4" 7.075 (40M CW) 16' 61/2" 8" 8'4" 3.625 (80M CW) 129' 11/4" 32' 3 3/8" 15 3/4" 16'3" 3.875 (80M Phone) 120'9'/" 30' 2 3/8" 14 3/4" 15'3"

TABLE FOR HALF WAVE LOOP

WARNING!!!

Remember to mount the antenna away from people or animals and away from flammable materials.

QST QST QST HOLMESBURG AMATEUR RADIO CLUB, INC. Proudly Announces Its

THE FUN STARTS AT 7:00 PM

STUFFED BREAST OF CAPON

THE MENU CHOICES ARE AS FOLLOWS:

LONDON BROIL

BROILED FLOUNDER

Fourth Annual

BANQUET

SATURDAY EVENING, MARCH 2, 1985

at the

HOLIDAY INN, TREVOSE, PA

• • • • • • • • • • • • • • • • • • • •			
HOLMESBURG AMATEUR RADIO CLUB, INC. 4th ANNUAL BANQUET AND SHIN-DIG PUT ME DOWN FOR ALL THE FUN!!	\$39.00 PER COUPLE.		
NAMECALL	MENU CHOICE		
Spouse/GuestCALL			
**We must have first and last names for placecards.			
I AM ENCLOSING \$ for	people.		
SEE YOU AT THE BANQUET !!	73's		

- HOLMESBURG AMATEUR RADIO CLUB, INC.-

A 24 hour BBS ARTS and LETTERS 215-425-5206

Hello to all members of H.A.R.C.!

Those readers who have a personal computer with a telephone interface and would like to view an online text presentation of the HARCLINE or read bulletins from among five message bases (capacity of 20 each)

- Ø Open Topic
- 1 Literature
- 2 Philosophy
- 3 Science
- 4 Amateur Radio

then - call The Arts and Letters BBS (Bulletin Board System) anytime of day or night at 425-5206. No charge if you are in the Philadelphia area.

The operation is automated. Keep in mind the fact that this service can be as inbrmative, entertaining or useful as YOU make it turn out.

You're invited to write messages related to the respective bases or leave passwordguarded E-mail to any one you find on the Users Listing.

Access to the Amateur Radio Message Base is easy: QSL via KA3HTM. If you choose to use a codename you will gain admission to #4 after your ID is verified here. Naturally, as Joe Incognito, you should notify those people from whom you expect or wish to receive letters.

Call soon and often... comments and all suggestions greatly appreciated.

73, Mike (N3DZR)

PS: rem 300 baud ascii, full duplex, parity 0, 1 stop bit, word len 8



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NEWSLET

Silent Key, Al Guiliano, K3QJO

It was 1966 when I got to know him.

We were introduced through a mutual friend and I learned that he was an Amateur Radio Operator. Since I was always interested in this hobby, I realized that this was the time to become one myself.

We became very good friends in no time and with his help I received my Novice license in 1967. He was an expert at building equipment. When he was part of Navy Mars he became Director of this district. It was the time of the Vietnamese War and many messages were received by RTTY.

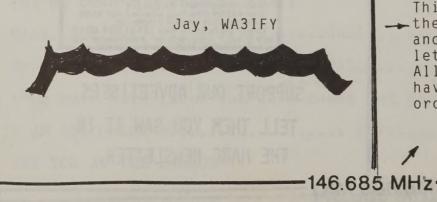
Broken RTTY machines were sent to him for repair from as far as the Midwest. He could repair anything. He was a multi-talented person; from building radio equipment to building a house to playing the organ.

When we were both studying for the Advanced ticket, I would be going to his house every Thursday for many weeks to study together... and we passed the test together. He would take my advice on many things and I his, whether it be personal or what equipment to buy. When my tower had to be put up, he was there and several times after that would he climb the tower to do repairs on the antenna

That was my friend Al, K3QJO

It was a very sad time for me when he passed away recently, after suffering very much. He will be missed by his devoted family and my myself.

I lost a very good friend.



CAPTAIN JULIAN KAU, N3CMD

The Holmesburg Amateur Radio Club, Inc. want to extend a warm welcome to Captain Julian M.F.Kau, USN of the U.S. Naval Shipyard back to the Philadelphia area.

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Captain Kau is a past member of HARC and expects to spend the next two years as the Commander of the Northern Division, Naval Facilities Engineering Command, Naval Base in Philadelphia.

Captain Kau, CEC, USN is a native of Hawaii. He graduated from the U.S. Naval Academy in 1959 where he earned a Bachelor of Science degree and commission as Ensign, United States Navy.

The Captain has served in the Atlantic and Pacific fleets, the Vietnam War and many other places too numerous to mention.

Julian, we congratulate you on your new responsibility and promotion. We hope that you can make some of the upcoming HARC meetings.

Best regards,

H.A.R.C.

(sent in by Tony Musero, K3UKW)

REMINDER ON DUES

Please don't forget to send in your 1985 dues as soon as possible.

This will enable you to receive the new access code in January and to receive the H.A.R.C.Newsletter on a continuous basis. All candidates for Office must have paid their 1985 dues in order to be eligible.

> Jay Kuperman, WA3IFY Membership

# HOLMESBURG AMATEUR RADIO CLUB, INC.-NEWSLETTER

### NORTHEAST INPUT ANTENNA PARTY

DE K3JJZ

For quite some time now, the Technical Committee has been considering modification of the antenna system at the Northeast site. The objective is to increase our signal capture ability in some specific problem areas. KB3SM BOB had acquired a four-way splitter which allowed the connection of four antennas into a single line. Using this splitter and three (3) beam antennas, an antenna crew consisting of myself, KB3SM BOB, KA3IJZ JOHN, who also graciously volunteered the use of his truck, and N3DDO BURNELL who came via honda, K3BRO PAUL and WA3IJZ JOE, met at the Northeast site. At approximately 8:15 we set about transporting all of the equipment to the roof of the nine-story building which houses the Northeast site. Mr. Joe Campbell who is the Superintendent of the building, was gracious enough to lend us a 24-foot extension ladder. Once we had transported ourselves and the equipment topside, we set about spraying all the bolts on the existing antenna. The gameplan was to remove the pole on which the ground plane antenna was mounted and install in its place a 30-foot telescoping pole which would be used for the ground plane as well as the beam antennas and supporting the coupler. It is not quite as simple as I make it sound. Attached to the same pole that supports the ground plane is a side-arm bracket which supports a 450 ground plane for a separate 450 repeater and a 450 antenna used to convey the link signal down to the main site. For the most part, things went according to plan. We aimed the beam antennas individually at known repeaters keying up the repeater with an HT and reading the received signal on a receiver with an S meter and attenuator in line. This allowed relatively accurate pointing of each of the individual antennas. What remains to be done at this point is to accurately measure the received pattern at the Northeast site and determine how effective this new installation has been.

Any of you who have had any experience in the past month in which it is easier or more difficult to make it into the Northeast site, please let someone on the Technical Committee know.

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## AMATEUR RADIO LICENSING COURSE

Registration is now open for the popular licensing course given annually at the Jewish Community Center of Southern New Jersey. This year's course consisting of electronic theory, practice, and telegraphy sufficient to prepare the student to take the Federal Communications Commission examinations leading to General and Advanced Amateur Licensure will start Thursday evening January 10, 1985.

The course will be eighteen weeks 7:30-9:30 P.M., Thursday evenings. Minimum prerequisite for the course is the Novice amateur license. Basic text books required for all students are the ARRL License Manual and ARRL Handbook for Radio Amateurs. It will be the responsibility of the student to acquire these texts and other optional study material. Fee for the course will be \$10.00 for members and \$18.00 for non-members.

The course is sponsored by the Chaverim of Delaware Valley, the Amateur Radio Association which co-sponsors with the Community Center, the Abraham Z. Cutler Memorial Amateur Radio Station located at the Center. The instructors will be Frank Widmann, WA2VYA, Steve Sosson, KR1M, Harry Wolf, ND2P, and Edward Ludin K2UK, all certified as instructors by the American Radio Relay League. Register by writing or going to the JCC, 2395 W. Marlton Pike (Route 70) Cherry Hill, N.J. 08002, or calling the Center at 609-662-8800.