



MT. AIRY V.H.F. RADIO CLUB, INC., PHILA., PA. (50.2, 145.2, 221.4, 432.3 & 1296.3 Mc.)

CLUB CALL: W3CCX

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

MEMBER CLUB: DELAWARE VALLEY COUNCIL OF AMATEUR RADIO CLUBS

MEETING NOTICES: LAST PAGE

VOLUME XI

JANUARY 1968

NUMBER 1

Seems that I have mentioned for the last three months that winter is just around the corner and every week gets warmer. Warm weather really suits me better anyway. However, in the winter time, just when you need it, it won't be here. Just let

your antenna system act up a bit and then see what the weather turns into:

Heard some rumblings about a big antenna party down at Doc's this past month and understand the operation was a great success. Glad you got it in, Doc. Also, I have been around looking at a few surplus antenna towers that are for sale and I am truly amazed at the bargains which are available. Anyone who is considering a new antenna set-up should look around a bit and ask his buddies. Lots of real nice buys around in excellent shape. In looking over the ones I found with the help of a ferret from the North-land, one fact was very evident. A good hot-dip galvo jousure makes a big difference when it comes to standing the elements. One tower I looked at must have been out in the air for more than twenty years and I could find little rust. Conclusion: stay away from those primed and painted jobs.

Another good point, if you are considering a new tower job, is that a tower and antenna system is not going to last forever. Periodic maintenance is needed, and from time to time elements break or a wind blown cable will part. This requires either the services of a trained ape or a crew to lower the mess for a repair job unless - you arrange now when you put the beast up for a set-up that can be raised and lowered by one or at the most two men. Don't say your job is different and that it can't be done. Every QTH may need a slightly different approach; in fact, I have never seen two exactly alike, but with a little brain power and the help of a friend or two, your problem can be solved. Take a look around at the methods used by a few members' shacks, and you will never be sorry you spent the time and affort.

Snap to for the contest, gang. Just around the bend lies our Number Eight Gavel. All it takes is the usual bunch of snapping and snarling Pack-Rats. Let's go get 'em!!!

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PACK RATS' CHEESE BITS is a publication of the Mt. Airy V.H.F. Radio Club, Inc., Philadelphia, Pa., and is published monthly.

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We operate on an exchange basis with other publications and anything that is printed in CHEESE SITS may be reprinted, unless so stated, as long as the proper cullit is given.

# PEADLINE FOR ARTICLES IS THE 20TH OF THE MONTH.

ALL INFORMATION SHOULD BE SENT TO: ELLIOTT T. WEISMAN, K3JJZ 8533 ALGON AVENUE PHILADELPHIA, PA. 19152 215 - PI 2-3525

## TRUSTEE OF CLUB CALL: W3CCX

W3SAO, FRANCIS BRICK 821 W. LINDLEY AVENUE PHILADELPHIA, PA. 19141 225 - DA 4-7524

# PARTHTER AND SUBSCRIPTION MANAGER:

MIGAS, DOC CUTLER 7815 NEW SECOND STREET PHILADELPHIA, PA. 19117 215 - ME 5-1078

# AWARD CHAIRMAN:

WZEIF, JOSEPH KILGORE 75 SUNNYBROOK COURT STRATFORD, N.J. 08084

DIRECTORS: MEETINGS ARE HELD ON THE SECOND WEDNESDAY OF EACH MONTH AT DESIGNATED LOCATIONS.

# COME PRACTICE:

7.00 to 7:30 P.M. MONDAY THROUGH PRIDAY, 50.2 MG. BY W3CL, HARRY STEIN.

# MONDAY NIGHT NETS:

145.2 -- 7:30 P.M. 50.2 -- 8:30 P?M. 221.4 -- 9:30 P.M. 432.3 -- 10:30 P.M.

OFFICERS -- 1967-1968: PRECIDENT: W3LHF. W3LHF, DAVID ZIMMERMAN VICE-FRESIDENT: W3HSS, CHARLES LUSTICK CORRES. SEC'Y .: W3SAO, FRANCIS BRICK RECP SECTY: K3ZPN, LLOYD SCHOENIG TREASURER: W3MVF, DAVID BLOCH

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(Ex-Officio)

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PRHLADELPHIA COUNTY ARPSC: E.S.: W3PST, WOODY HALDEMAN

1732 LONEY STREET PHILADELPHIA, PA. 19111 215 - RA 5-1106

MEETINGS: FOURTH WEDNESDAY OF EACH MONTH AT 8:00 PaM.

\* FROM ARRL BROADCAST: Effective 15 January, FCC has directed that it will no longer be necessary to give geographical position when operating PORTABLE or MOBILE. Only the Call District will be required, such as "W8UX, MOBILE 8." The definitions for Portable and Mobile still stand, i.e, a portable station is one that is moved from one location to another BUT IS NOT CAPABLE OF OPERATING WHILE IN MOTION. A MOBILE station is cas that is installed in a manner so that it can be moved from place to place and operated WHILE IN MCTION. Hence, a Portable station will always be operated from a stationary and "permanent" location. A Mobile station is always just that even when the vehicle is parked somewhere, Next time you hear someone operating "Fixed Portable" ask him how come it was "broke".

# A BULLETINS

NR 141, November 2, 1967: The ARRL Tatruder Watch has completed almost three years of operation with more intruders having been removed from the amateur bands as a result. However, much additional work and constant vigilance are necessary. The Intruder Watch welcomes additional volunteers with two or three years amateur experience and good receiving equipment who can spend at least two hours a week logging the calls of non-amateur staticas in the amateur bands. RTTY operators especially those with access to sorhistica cated gear, are still urgently maded. Volunteers please write Intruder water ARAL, Newington, Connecticut 0611) AR

NR 142, November 9, 1967: In late January, during the ARRL Simulated Emergency Test, the opportunity presents itself whereby all radio amateurs can take part in a nationwide demonstration of amateur radio public service facilities. The SET will take place January 27 and 28 and will include all Amateur Radio Public Service Corps amateurs, in AREC NTS and RACES. There will be local exercises and nationwide traffic handling activities involving traffic for the Red Cross, ARRL, civil defense and other agencies. Your local Emergency Coordinator will be mailed full information in December and you're urged to contact him now while there still remains time for you to be worked into the SET plans AR

# DID YOU KNOW

That W3BVR, Ted Leaf, is in Delaware County Hospital, Room number unknown, Lansdowne & Keystone Avenues, Drexel-Hill, Pennsylvania. That W3MVF, Dave Bloch, can supply you

with 50¢ discount forms for renewal of QST subscriptions.

That W3MVF, Dave Bloch, has mailed bills for dues for the year 1968. Up with the loot, you guys.

That W3KKN, Ernie Kenas, will organize an indoor, blindfolded, transmitter hunt.

## TWO METER ACTIVITY

# W3LHF, Dave Zimmerman

Wish I could report lots of rare DX on my favorite band, but the truth of the matter 15 that I have had just too many other irons in the fire, and as is usually the case, none of them got hot.

I'm still having lots of troubles with the new and exotic VFO I built, not so much from the standpoint of the VFO itself, for six months work took care of the stability groblem in that, but I am having a much more fashionable problem ... I am having a much more fashionable problem ... I am having a much more fashionable problem ... I am having a much more fashionable problem ... I am having a much more fashionable problem ... I am having a much more fashionable problem ... I am having a much more stable is a much for six much the modulation gets slightly moldy sounding. Almost firms for me to call in our Storm Troopers, the technical committee, to see what the trouble is.

keep the list of DX stations in front of you during the Contest. Most of the ones listed for Two meters will be on both fone and cw, but your best chance to work the more distant ones will be on cw. Check the low end of the band once in the willow DX stations do call CQ frequently. Most are very persistent follows. Remember, in New England they don't have the mass of stations to work that we have the our metropolis area so that they will be pleased to work a whole string of Ratistations if you stick with it. It it means a new section, you can afford to spend a little time to get him! Not hours tho ....

These of you who do not operate two meters much should keep in mind that this is not six ... you must tune ... you must say where you are tuning ... and you must call where the fella sex he is tuning to make contacts. If you get discouraged and quit, you will make NO contacts. Two Meters is the band that makes or breaks a good score. Learn to operate this band, and you can sleep ACL night and still make(N),000 points. Learn to operate this band and work the whole thirty-four hours of the contest, and you will be among the top ten.

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THE POLLOWING LETTER WAS RECEIVED BY TREVOSE ELECTRONICS, TREVOSE, PA.

Genelemen:

We are proud to announce HAM RADIO, the finest amateur magazine.

Under separate cover we are forwarding a copy of our first cover and several flyers describing our magazine. It would be appreciated if they could be placed out where your amateur customers would have an opportunity to pick up a copy of the flyer.

Our magazine is taking shape very rapidly and our first assue is scheduled to be got in late January. It will offer a distinctly new look and we are sure you will like it.

We also plan to forward a number of complimentary copies of the first issue for free distribution to your customers. If you have any idea of how many copies you could use please let us hear from you.

Your assistance in helping us get started is sincerely appreciated.

Yours very truly,
HAM RADIO MAGAZINE

T. H. Tenny, Jr. Publisher

Ed. Note: There are now four ham radio magazines.

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# FROM WHERE? WASBIV, Carl Barrish

I guess most of you reading this wonder why you never saw this in the newspaper. Well, you did, and then again you really didn't. Before I straighten you out, I must confuse you with the whole story.

#### FROM WHERE? continued

You may have noticed during a recent 6 meter net that Harry sounded a little strange, even the code practice before the net was not quite right. It all started that Monday morning. There was a U.F.O. sighting in Glenside about 5 A.M. The milkman said the small saucer-like object disappeared over Harry's house. That was its first mistake. It has been discovered that the U.F.O. was from a planet similar to earth caller Terma Terra, but in another solar system. Abourd the ship was Herri Stayn, who on Ferma Terra lives in the town of Lengside, near Hadelphapia. Herri is the chief communications engineer abourd this spaceship. Their five year mission is to observe the communication techniques and types of equipment was on inferent civilized worlds. Herri had chosen the shack of W3CL to help find this information.

The biggest mistake Herri made was to assume that Harry and his station was representative example of the latest and most developed equipment and procedure on exetly Liftle did he know.

While in full flight, the spaceship is undetectable to eye and radar. The same is true when at rest, but while at reduced speed, the ship is visible to the human eye. This is why it was seen. Herri and his crew were aware of this fact, but never knew that the milkman was there, so they went ahead with preparations. During the day they borrowed some of Harry's equipment, one piece at a time and evaluated it. The evaluation was completed by seven PM and they watched while Harry started the code practice session. Herri was amazed because the transmitters needed no tuning. Harry just flipped switches. After a couple of minutes of broadcasting a whiff of smoke appeared behind the transmitter. Harry looked at the plate meter. "Who's been playing around in here, the ?"\*&¢!! rat." It seems that Herri didn't reset the dials back to their original position when he was finished and things were slightly out of tune. Harry's actions confused Herri, but Herri is a patient man, so be waited. He waited during the two meter net and thought that the procedure was not good, security wise, but he assumed all the messages were coded. Time for the

"CQ, CQ, CQ to the Pack Rats and their friends." "Well," Herri thought, "It sounds partty, but I guess it works."

That's the way the night went ... nutty. Herri expected security and he got Harty!

Tuesday evening was more of the same, only no nets. At 10 P.M., Herri listened to Harry and Jack on 220. After their QSO was done and Harry went to sleep, Herri Checked out all of the gear again. Nope, he found no secret coding or decoding devices in the shack. "What nuts," Herri thought.

Wednesday evening was the Board of Directors' Meeting at Jack's house in Trenton.
The spaceship followed Carl's car (WASBIV) for he drove. Because the spaceship was at reduced speed, it was visible and Herri was concerned because Harry kept mentioning to Carl and Mario (from Ivyland) about the airplane following the car. Herri decided that this was a top level meeting and that they would prepare their report after the meeting and leave for the next civilized world.

It seems that Herri didn't wait for the end of the mecting, for the unorthodox summer meeting was the last straw. They went back to Harry's house for one more check, but this time they were seem and had to leave. Herri waited to see if anyone reported seeing his ship and his fears were justified for he had the headlines of the newscast. As a last resort to keep their secrecy, Herri activated the mind blanker built by Fres Spunk and blotted out the happenings of the past few days from those that knew and substituted some normal happenings, so the newspaper atticles were read and the newscasts heard, but not remembered, and Herri and his crew left earth. I had to stay to make sure the mind blanker worked because it is only experimental. I am revealing this story because from what I have seen Earth will never amount to anything against a sensible and orderly people like us.

"XYW 4 AXXE from XYW 4 XAXE"

"XYW 4 XAXE from XYW 4 AXXE, your QS"

"Good evening, Herri Stayn, I am preparing to join you."

"OK, Jyndon B. Lohnson, we are awaiting you."

132 East Colonial Street Philadelphia, Pa. 19120 December 15, 1967

Dear El:

Since I was elected 3rd District Chairman for YLAL for 1968, I am naturally anxious to do my part in recruting new members which I hope I can reach through CHEESE BITS.

Young Ladies Radio League, organized in 1939, is the only organization of international scope for women amatuer radio operators. Our aim is to promote good fellow-thip and to share our mutual interests in amateur radio. It is a non-profit fraternal organization comprised of women desirous of furthering comperation among women radio amateurs developing proficiency in radio operation and furthering the interests of Amateur Radio.

HARMONICS - YL Harmonics is the official publication for the members of the League.
All members receive Harmonics as part of their membership.

ACTIVITIES - YERL sponsors the following contests: YE Anniversary Party (YEAF), where points are scored for contacts between YEs only; YE-OM for contacts between YEs and the gentlemen hams; Howdy Days, a get-acquainted period at the beginning of the fall season; and Ladies Day (not really a contest, but just one day each month when we all try to be available for chats).

CENTIFICATES - YEAR sponsors many certificates. Rules and other information can be obtained from Certificate Custodians.

Mikk would welcome any YLs that see your publication and would be interested in joining us.

I can be reached at the QTH or telephone LI 8-4885.

Best wishes for a Healthy and Happy New Year.

Mollie Silverstein, K3FYS

# BRITISH EMPIRE SHRINKS OFF GREENWICH MEAN TIME Evening Bulletin, 12/18/67

London-(UPI)-Time was when the sun never set on the British Empire and Britons could not have cared less what the rest of Europe did at what hour.

Those days are long gone, but one thing had stayed the same - Britian's clocks were set to Greenwich Mean Time (GMT).

Now even that is to be lost as well.

On Fab. 18, the country will cease to run on GMT and put its clocks forward one howr to Central European Time, the same time as Europe. All year round, London will get up at the same time as Paris, eat lunch at the same time as Rome, go to sleep at the same time as Frankfurt.

The change will simplify timetables, get schoolchildren home in daylight, help businessmen who often call the Continent and find their counterparts out to lunch.

Previous System

Until now, Britian has run on GMT in the winter and British Summer Time in the summer, onehour ahead, like Daylight Saving Time in the U.S.

GMT takes its name from the former village of Greenwich on the Thames five miles below London Bridge. Greenwich is on the line of the zero meridian of longitude. When the sun is on that line at noon, the land to the east is in the afternoon and the west in the morning.

This meridian will continue to be used universally by pilots, only the British are dropping GMT.

The actual line that passes through a building that used to be Greenwich Royal Observatory, established in 1675 for the advancement of navigation. However, the observatory moved 15 miles off the meridian in the 1950's to transfer to Hurstmonceux in southern England because of growing pollution of the London atmosphere.

# BRITISH EMPIRE SHRINKS OFF GREENWICH MEAN TIME continued

# Plaque Marks Spot

A plaque on the wall of the old observatory building, now part of the Greenwich Maritime Museum, marks the exact meridian line. A clock there keeps the exact time.

GMT has existed since 1880, when an act of Parliament laid down that the word "time" when it occurred in any legal document in Britain, meant GMT as opposed to time determined by the sun.

# MILLIMETER COM LINK TESTED SUCCESSFULLY IN LIGHT RAIN Electronic News, October 30, 1967

# Submitted by W3HKZ, Ed Kushner

Washington--A millimeter communication link between 28 and 40 gigahertz - has been operating successfully in medium to good weather here to test the feasibility of millimeter links.

The Defense Communications Agency has been testing the millimeter link between its offices in suburban Arlington and MASA headquarters in downtown Washington. First results show that communications is good up through light rain conditions, a DCA official reported. Propagation through adverse weather was a prime test.

The Central Intelligence Agency and National Security Administration are behind the scenes monitors of the millimeter tests, reliable sources indicated. If millimeter data links check out, the security agencies are vitally interested in ætting up possible millimeter links themselves.

The extremely wide bandwidths possible in millimeter frequencies could carry billions of buts of data. Spy satellite and airborne and ground electronic eavesdropping comeup with vast quantities of data. For instance, radio signals over most of the spectrum are picked up and must be preserved for later decoding operations and analysis.

Present narrow band radio links will not handle most of this data in its received from It must be taped on wideband tape recorders for transporting back to intelligence centers - causing some delay. Some quick-look processing can be done 37 receiver sites for real-time transmission back to centers - but the amount of tata is limited.

Millimeter links with gigahertz bandwidths could handle virtually all received intelligence data.

The millimeter beam is extremely directional - making enemy interception or jamming very difficult. Also millimeter state of art is very advanced - with the enemy hapefully having few millimeter systems to interfere with United States millimeter data links.

One possible millimeter relay link under study is via satellite. NASA is preparing initial millimeter communication relay experiments for later application technology Satellites, but the military, CIA and NASA are interested in their own secure willimeter satellites.

The 28 to 40 MHz frequencies under test in Washington now cover an atmospheric window where millimeter absorption and attenuation is minimum. Researchers hope that systems can be developed to use this window for operating millimeter links.

Another millimeter window exists about 95 GHz through components for active systems at these frequencies are still in the lab stage.

# WARNING - RADIOACTIVE TUBES

In the May issue of Sparc Gap precentionary advice given in an Army bulletin was passed along regarding OA2 and OA3 regulator tubes where the identification is followed by the letters "W" or "WA" as containing radioactive material. The envelope should not be broken. We have received information the same care should be given when handling 5962, 5979, or 5980 tubes. WE REPEAT: If you handle any of these tubes when broken, you can come in contact with the internal structure which is radioactive. If you do, seek medical aid immediately.

· For Sale:

1 - 17" Philco T.V.

1 - EICO TV Sweep Generator \$15 1 - Drake Q-Multiplier, 455 KC,

\$15 I.F. 1 - Audio Amplifier, push-pull

6V6\*s \$ 5

\$ 5 1 - 6 EL two meter beam

1 - 16 EL cushcraft colinear for 432 Mc. \$ 7.50 Contact: K3JJZ, Elliott Weisman 8533 Algon Avenue

Philadelphia, Pa. 19152 215 - PI 2-3525

\$20

# NOTICE TO ALL SUBSCRIBERS, EXCHANGE PAPERS AND OTHER INTERESTED PARTIES:

to CHEESE BITS, all exchange papers, and letters to the Editor should be sent to:

> K3JJZ, Elliott Weisman 8533 Algon Avenue Philadelphia, Pa. 19152

2. All correspondence relating to subscriptions, change of address, and renewals should be sent to: K3GAS, Doc Cutler 7815 New Second Street Philadelphia, Pa. 19117

3. Information about membership may be obtained from:

V3CL, Harry Stein 2087 Parkdale Avenue Glenside, Pa. 19038

# MEETINGS

January 10: The Directors' Meeting will be held at the QTH of W3ISV, Syl Ernhorn, 208 Gribbel Road, Wyncote,

January 17: The next regular meeting will be at the West Oak Lane Jewish Community Center, Sedgewick and Thouron Streets, Philadelphia, at 8:00 p.m. Program: Crying Towel - all will tell how come they didn't do better in the contest.

# From PETE'S "HAM SHACK", in the BAY PINES NEVS

by K4RKY, "Pete"

On Friday afternoon, April 7, 1967, the Amateur Radio Station here at Bay Pines, Station K4RKY, entered into a very interesting experiment with the Amateur Radio Station at Duke University Medical Center at Durham, N.C. (WB43LK). K4RKY and WB4BLK were in contact by Amateur Radio and the University's EKG Department decided to experiment and see if an EKG impulse could be sent over "Ham" radio without too much trouble. Also to see just what kind of a tape recording

could be received.

The technician at Duke called this station at Bay Pines hy land line (telephone) and sent an EKG impulse over the phone which Bay Pines K4RFT then put on the "Phone Patch" and re-transmitted it back to Duke, where it was recorded on tape. This was done three times and the report from Duke indicated that the tapes came out perfect? .

This was, as far as I can find out, the first time this has ever been done by Amateur Radio, and proves that an EKG impulse can be sent to Duke by radio and evaluated there by experts with the results and diagnosis being sent back to the requesting station. I might add, those experiments are being carried out with the permission of the Federal Communication Commission.

The FCC has added nine new questions to the study material for the Novice examination. Here are the new ones, as released by the Commission:

(frm Adaheim SQUELCH)

- When is Ond way communication permissible?
- What is a Hertz? KiloHertz? Mega-43. Hertz?
- What are some correct ways to call and answer other amateur stations via telegraphy?
- 45. What do QRZ, QEM, QRS, QRT mean when transmitted as questions in telegraphy?
- 46. What important functions do diodes perform?
- 47. What units are used to measure caracitance?
- 48. How are transistors made, used and diagrammed? What are some common transistor parameters?
- 49. Why is impedance matching necessary?
- 50. What is chirp and how can it be remedied in a C.W. transmitter?

Remember, these are Novice questions. How many can you answer?

# HERE AND THERE

Never in the history of fashion has so little material been raised so high to reveal so much that needs to be covered so badly.

\*\*\*\*\*

# NEWMEMBERS

W3DIL, Hitner Frank Smith (Frank) 37 Palfrey Lame Willingboro, New Jersey 08046 609 - 877-9654

WA3GNV, John P. Ellmore, Jr. 933 Lawnton Terrace Glenolden, Pa. 19036 215 - MA 6-8282

WA3IMT, Richard G. Marehall (Dick) 3254 Susquehanna Road Dresher, Pa. 19025 215 - TU 7-2644

PACK RATS CHEESE BITS 8533 ALGON AVE PHILA. PA. 19152



W3KKN, Ernest Kenas 2823 Old Welsh Rd. Willow Grove, Pa. 19090

MEETING NOTICE