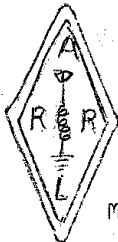


PACK RATS' CHEESE BITS



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

EDITOR: HELEN BRICK, XYL, W3SAO
MEMBER: AMATEUR RADIO NEWS SERVICE

MEMBER CLUB: DELAWARE VALLEY COUNCIL of AMATEUR RADIO CLUBS

MEETING NOTICES: LAST PAGE



VOLUME X

JULY 1967

NUMBER 5

(Follow-up on "THE OLD GODS HAVE RETURNED"..... in last month's issue)

MALLARD HATCHES SIX EGGS WITH AID FROM PHILCO-FORD

From The evening Bulletin, By Joseph J. McMahon

A female mallard duck flew into the courtyard of the Philco-Ford Corp, building in Willow Grove (Pa.) more than a month ago.

She built a nest in tall grass under a birch tree and laid six eggs.

The eggs hatched a week ago.

The courtyard, about 125 feet square, is surrounded by the modern two-story buildings of the company's computer division at 3900 Walsh Road. Rows of windows look down into the courtyard.

WINDOWS LINED

During coffee breaks, the lunch hour, at odd moments during the day, the windows are lined with employees watching the new family's activities.

The only way into the courtyard is through glass doors in the building walls.

These doors have been locked ever since the mother duck started laying eggs.

The grass in the courtyard is uncut in the vicinity of the nest.

Water has been added to the courtyard pool.

TEACHER ASKS AID

These protective measures were taken by the company at the request of Jay C. Jacobson, a biology teacher at John Bartram High School.

Jacobson and three other Philadelphia biology teachers are on temporary assignment at the Philco-Ford plant, where they are preparing a computerized Biology course for the Philadelphia school system.

Their office looks out on the courtyard. They were the first to observe the arrival of the mother mallard and, later, the eggs and then the baby ducks. Jacobson wrote a memo to company officials asking that the doors be locked, the grass uncut and water added to the pool while motherhood flourished in the courtyard.

"You supply the water and we'll supply the food," he wrote.

SUPPLIES FOOD

The company complied. Jacobson took up a collection and bought chick mash for the ducklings and a plastic bag full of goldfish for the mother duck.

(Cont'd on page 3)

"PACK RATS' CHEESE BITS" IS A PUBLICATION OF THE MT. AIRY V.H.F. RADIO CLUB, INC., PHILADELPHIA, PA. AND IS PUBLISHED MONTHLY.

10¢ a copy \$1.00 a year

WE OPERATE ON AN EXCHANGE BASIS WITH OTHER PUBLICATIONS AND ANYTHING THAT IS PRINTED IN "CHEESE BITS" MAY BE REPRINTED, UNLESS SO STATED, AS LONG AS PROPER CREDIT IS GIVEN.

DEADLINE FOR ARTICLES IS THE 20th OF EACH MONTH.

ALL INFORMATION SHOULD BE SENT TO THE EDITOR: HELEN BRICK, XYL, W3SAD
821 W. Lindley Avenue,
Phila., PA 19141
215- DA. 4-7524

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W2EIF, JOSEPH KILGORE
#5 Sunnybrook Court
Stratford, NJ 08084

DIRECTORS' MEETINGS are held on the second Wednesday of each month at designated locations.

CODE PRACTICE:
7:00 to 7:30 P.M. MONDAY
thru FRIDAY, 50.2 Mc. 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 - 10:00 P.M.

OFFICERS: 1967-68
PRESIDENT: W3LHF, DAVID ZIMMERMAN
VICE-PRES: K3HSS, CHARLES LUSTICK
COR. SEC.: W3SAD, FRANCIS BRICK
REC. SEC.: K3ZPN, LLOYD SCHOENIG
TREASURER: W3MVF, DAVID BLOCH

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W3KKN, ERNEST KENAS
K3UJD, MARIO FONTANA
K3CIV, RALPH HERSH
(EX-OFFICIO)

PHILA COUNTY ARPSC

E.C.: W3PST, WOODY HALDEMAN
1732 Loney Street,
Phila., PA 19111
215- RA. 5-1106

MEETINGS: FOURTH WEDNESDAY OF EACH MONTH AT 8:00 P.M.

PACK RATS' TRIP TO ARRL HQ.

Date changed from SEPT. 9 TO SEPT. 16

Please note the change. More info as we receive it and on the nets.

ELECTION RESULTS

PRESIDENT: W3LHF, DAVID ZIMMERMAN
VICE-PRES: K3HSS, CHARLES LUSTICK
COR. SEC.: W3SAD, FRANCIS BRICK
REC. SEC.: K3ZPN, LLOYD SCHOENIG
TREASURER: W3MVF, DAVID BLOCH
DIRECTORS: W3KKN, ERNEST KENAS
K3UJD, MARIO FONTANA

ARRL BULLETINS

NR 116 JUNE 8, 1967

The United States has concluded reciprocal operating agreements with Norway Honduras and Switzerland. These countries, with Trinidad, are in addition to the list appearing on page 86 of June QST. AR

NR 117, JUNE 8, 1967

FCC has added another nine questions to its study material for the Novice license. The questions with answers prepared by the ARRL headquarters staff will appear in future copies of the License Manual and in the July issue of QST. In addition, reprints are available and will be sent by ARRL upon receipts of a self-addressed stamped envelope. AR

NR 118, JUNE 15, 1967

Two amateur stations will be operated at the World Scout Jamboree in Farragut State Park, Idaho, August 1 to 9, 1967. The call K7WSJ will be used for general contacts and K7BS for traffic. The weekend of August 5-6 will feature the tenth Jamboree on the Air in which Scouts visit amateur radio stations and talk to other Scouts. Amateurs wishing to help may offer their services to the nearest office of the Boy Scouts of America. Full details appear on page 10 of July QST. AR

We extend our sincere sympathy to South Jersey Radio Association on the passing of W2U, Roger Barrington, a charter member and also very well known to all the Pack Rats and others. We also send along condolences to his family.

DID YOU KNOW

That the Jr. Op. of W2EIF, Jo, was married on Saturday June 17? Congratulations to Jo, Jr. and his new bride.

That W2TIL, Tel Cooper, is in the Cherry Hill Hospital, suffering from a heart attack? At least he was, may be at home now. Speedy recovery, Tel.

That K3CCR, Sam Brooks, is also in the hospital? Room 371, Misericordia Hospital, 54th St. & Cedar, Phila.

That the Silent Auction, at the last meeting, went over so well it may be tried again?

MALLARD DUCK (Cont'd)

He put the goldfish in the pool.

And yet there were crises.

The whole plant worried when the female left the nest before the eggs were hatched. Then, after they hatched, there were anxious moments when she led them into the water for the first time.

Tragedy struck over the weekend. Early arriving employees counted only five ducklings. Jacobson thinks a hawk made off with the sixth one.

"And today I noticed the goldfish are all gone," he said. "I'll have to go out at lunchtime and get some more."

AIR FORCE CURVES SIGNALS PAST EARTH

From the Phila. Inquirer, June 12, 1967

The Air Force reported Saturday that its scientists have succeeded in sending strong signals from one artificial satellite directly to another, even when the two are on opposite sides of the earth.

The Air Force Systems Command said the direct radio communications between satellites proves a theory that the ionospheres, a high altitude, electrically charged layer of the atmosphere, can channel radio signals around a curve and over long distances, with little loss of energy.

MOBILE OPERATING TIPS

From LIMARC LOG, Feb. 1966

By WA2TAQ, Al Smith

Did you ever stop to think that in addition to being concerned with the theft of your mobile rig, that it is your responsibility to be certain that an unauthorized person does not have access to it?

There are many times when others have your mobile in their possession such as loaning it to a friend or relative, leaving it in a parking lot or leaving it for repairs in a garage. It is usually not very convenient to pull the rig out each time someone other than yourself uses your car. It would be prudent to either have a locking device or some other way of disabling the transmitter portion such as removing a fuse or the power in some way. This writer recently had experience with an apparent bootlegger. This character overloaded my receiver on twenty as I passed an ocean front parking lot in Far Rockaway. About a mile down the road, I heard him give a familiar call, which belonged to a friend of mine, who is a licensed technician. This call had no place on twenty meters. I gave this pirate a shout, and darned if he didn't claim to be my friend and even used his QTH which is about five miles from his apparent location. Needless to say, he left the air after I challenged him. A phone call to my friend found him to be at school at the time of my QSO with the bootlegger. So fellows, be careful in whose care you leave your mobile and your rig.

VE2XPD AT EXPO-67

Planning to visit Expo-67? If so, ham station VE2XPD is located in the Youth Pavilion at La Ronde. The Telrex Tri-Band beam is visible from the Expo Express stop at La Ronde, and also at the termination of the guided tour train. Equipment presently on the air is a Swan 350, but just waiting to clear customs are: A Swan 500, a TR-4 with VFD, and SB101, an NC200. Also, a new Motorola VHF transceiver base station will soon be installed on the repeater (2M WBFM) frequencies. Other equipment will be installed at VE2XPD following the ARRL National Convention. VE2XPD is on 80-10 and 2M, WBFM and the station manager is Don Forbes, VE2DAZ. The station was made possible through the efforts of RAQI which is also the station sponsor. A QSL card display is planned--all visiting hams are being asked to leave a card to join the ranks of those so far collected. Also, anyone wishing to operate must show his license. And I may remind you that as Canada has no Novice class, reciprocal operating privileges are extended to Generals (or higher class) licensees. So, I am sure this would extend to VE2XPD operators.

The address for your Canadian operating privilege is: Department of Transport, Regional Director, Air Service, 25 St. Clair Ave., E., Toronto 7, Ontario, Canada.

Remember--if you have mobile gear and do not have a permit, the man at the border will put a seal on the rig and it better be there when you leave the country. If you have a permit...they treat you like a long lost friend.

The above is from ARNS Bulletin, RF Carrier & Buckeye Burr.

From Florida Skip, March 1967, by Jack Wainwright, W4IEH

Peak Envelope Power (P.E.P.) is a method for rating linear amplifier power capability. Amateur SSB transmitters are rated by the manufacturers in P.E.P. input for reason of F.C.C. requirements. Commercial SSB transmitters are normally rated in P.E.P. output as determined by the two tone test method. The methods used by manufacturers to arrive at P.E.P. input figures for amateur transmitters are seldom mentioned.

P.E.P. input is defined as the D.C. input at the modulation envelopes peak, and may be 1.4 to 2 or more times the P.E.P. output power. Factors contributing to the P.E.P. output figure are: Plate Efficiency Distortion, Plate Dissipation of tube type, loading and power supply capability. Distortion is the prime limiting factor. To measure precisely the P.E.P. input to a given amplifier at a given moment is a very difficult thing to accomplish. As a result, various methods of approximation have been devised. The assumed method used by manufacturers to establish amplifier capability is the two tone test, which measures the peak envelope current without distortion, (flat topping) with unlimited driving power, times the plate voltage.

A method of P.E.P. input approximation and linear amplifier tune up procedure without a scope, which is fairly accurate, has been suggested in a past QST article by H. F. Wright, Jr. (W1PN8). It states, as an example, if your linear amplifier is rated at a plate voltage of 800 and a maximum signal current of 400 MA, (NOTE: Manufacturers ratings are for single steady signal, not speech) the procedure for tune up without a scope and P.E.P. approximation is as follows:

1. Insert a small amount of carrier from the exciter and tune the grid and plate circuits to resonance as indicated on an output indicator in the antenna feed line.
2. Adjust the coupling to the antenna feed line (usually a pi-net output loading capacitor) for maximum output for a given plate current at resonance, in this case 400 MA. If the D.C. current is less than 400 MA, the linear drive is insufficient or the antenna not matched as will be indicated by a SWR bridge.
3. Vary the amount of carrier insertion and observe output indicator, note the point at which increasing the carrier no longer results in rapid increase in output. This should be close to 400 MA. Use this figure to multiply by the plate voltage. This will result in the maximum signal linear power available of P.E.P. input. In this case, 320 watts.
4. Remove the carrier, adjust speech gain for a maximum speech peak of 200 MA on the Plate MA Meter. This will result in a speech P.E.P. input of 320 watts as above and allows for meter lag.
5. The above method should be used with caution, making readings rapidly and not extending time of heavy carrier insertion, dissipation of tubes. A scope should be used if available.

It is hoped that this will clear up some of the confusion on P.E.P. ratings and eliminate many misconceptions as to its meaning and applications. (From BARC Bulletin)

The above is submitted by W2AXU, Jack Power

CRITICISM

From Florida Skip, March 1967.

Most of us respect ourselves more than does anyone else. In fact, we respect ourselves so much we can't see any need for a change. What we probably need most of all are a few rough treatments which will show us what duds we really are.

Generally, criticism hurts and angers. Whether it is constructive or not, some people feel it isn't necessary; it is not fair and they are confident they can do just as well without it. But how wrong they are. They need criticism; we all need criticism. Even when it is unearned, it is a privilege and an opportunity. Otherwise, how could we know ourselves or correct our faults. (Working With People)

(Ed Note: It all depends on the tone of your voice whether or not criticism will hurt or anger. A gentle voice will result in respectful listening. An accusing voice will result in anger and argument.)

DON'T FORGET

The PACK RATS' Picnic and Family Day on Sunday, August 13 (Rain Date August 20) at Fort Washington State Park, Flourtown, Pa. \$2.00 per family. Contact W3SAD for further information (See page 2 for address)

NEW EQUIPMENT

E. T. CLEGG ASSOCIATES, INC., BOX 376, MORRIS PLAINS, NEW JERSEY, takes pleasure in announcing preliminary details of two high quality VHF SSB Transmitters, the CONSTELLATION 6 and the CONSTELLATION 2. Production is scheduled for midsummer.

Both units will employ solid-state circuitry in all low level stages. Output stages will employ VHF vacuum tubes in a highly linear and efficient amplifier configuration. Priced at \$300.00, with a power rating of 300 watts PEP, these units are expected to establish new performance standards for VHF SSB.

Principal features of the CONSTELLATION Transmitters are:

1. 300 watt power rating
2. Extremely stable VFO system
 - a. Less than 500 cycles warm up drift
 - b. Less than 50 cycles/hour operating drift
3. Digital readout VFO-- readable and resettable to 500 cycles or less
4. Carrier suppressed more than 55 db--stable with time and temperature.
5. Unwanted sideband down by more than 45 db
6. Distortion products down 30 db
7. Full Band Coverage
 - CONSTELLATION 2 - 143-149 Mc
 - CONSTELLATION 6 - 49 to 54 Mc
8. Built in VOX and Compression
9. Attractive C-LINE compact low profile package.
10. High reliability components and construction

DELAWARE HAMFEST

SUNDAY, AUGUST 27 (RAIN DATE SEPTEMBER 3) AT BANNING PARK, near Wilmington.

Gate opens at 10:00 A.M., Activities start at 11:00 A.M. with Swap Shop, Contests and Games.

Talk-in on 6 and 75 Meters as soon as set up at the site. 3905 Kcs and 50.4 Mcs.

Plenty of parking, picnic tables, shade and barbeques available. Sodas and eats will be for sale at the site, or bring your own picnic basket.

There is a playground with rides, swings and slides for the children other than games.

Donations for tickets are: \$1.50 (in advance) or \$2.00 (At the gate) per family. For advance reservations contact:

WILLIAM D. ROBINSON, K3UHU, SECRETARY
DELAWARE HAMFEST COMMITTEE
204 W. Delaware Avenue,
Wilmington, DE 19809

or;

FRANK J. MURPHY, K3NVV, CHAIRMAN
DELAWARE HAMFEST COMMITTEE
112 Grant Street,
Harrington, DE 19952

Make checks payable to: DELAWARE HAMFEST COMMITTEE.

For further information listen in on 3905 Kcs, Saturdays at 6:00 P.M. and Sundays at 1:00 P.M., The Delaware Net Frequency.

.**

Sorry that we have no report from the President or a report on the June QSO Party.

We can say that all who took part in the QSO Party never had it so good what with air conditioning and food at their elbows. The XYL's and kids had a good time when they visited the site on Sunday.

Who will win the best "Cheese Bits Article Award"?

PACK RATS' ARRL TRIP

Due to the CQ Magazine VHF Contest being held on the weekend of September 9-10 the trip has been changed to September 16. The trip is open to all hams and friends who are interested in joining us. We hope to have all of the details available for the next issue of "Cheese Bits".

Please make a note of the new date, September 16, and plan to come along.

SWAP & SHOPPE

Conducted by: W3ZRR, Ray Whitehead
4534 N. Smedley Street,
Phila., PA 19140
215- DA.4-5910

FOR SALE: Zenith TV 19" Portable
VHF \$30.00
Bud Cabinet with coax
switch-power supply and
converters for 6-2-220
Offer over \$50.00
Wilcox-Gay taperecorder
plays stereo \$25.00

CONTACT: K3GAS, DOC CUTLER
7815 New Second Street,
Phila., PA 19117
215- ME. 5-1078

FOR SALE: Ameco TX 62 \$75.00
Ameco 6M nuvistor converter
with power supply \$25.00
417A 2M converter with
power supply \$15.00
Ameco unfinished converter
kit for 220 \$20.00
SX28A all band receiver to
30 Mc. \$50.00
Cushcraft 5 Element beam
for 6 M

CONTACT: K3GAS, DOC CUTLER
7815 New Second Street,
Phila., PA 19117
215- ME. 5-1078

WANTED: For 220- Xmtr and/or antenna
Will buy or swap.

CONTACT: K3WEU, PAUL R. BEHRMANN
5101 Wynnefield Ave.,
Phila., PA 19131
or
W3ELI, George Van Dyke, Jr.
4607 Convent Lane,
Phila., PA 19114
215- NE. 4-8329

MEETING DATESDIRECTORS'

JULY 12
AUG. 9
SEPT. 13

GENERAL

July 19
AUG. 16
SEPT. 20

GENERAL MEETINGS are held on the third
Wednesday of each month, when possible,
at the WEST OAK LANE JEWISH COMMUNITY
CENTER, SEDGWICK & THOURON STREETS,
MT. AIRY, PHILA., PA. at 7:45 P.M.
Sharp.

MEETING NOTICES

JULY 12 DIRECTORS' MEETING will be
held at the QTH of W3OZP,
Bill Miller, 7639 Loretta
Avenue at 8:00 P.M.

JULY 19 GENERAL MEETING will be held
at the QTH of ~~W3ZRR~~
~~W3OZP~~ ~~W3OZP~~ ~~W3OZP~~
~~W3OZP~~ ~~W3OZP~~ ~~W3OZP~~ at
8:00 P.M. SEE BELOW
"WHITE ELEPHANT SALE"

JULY 26 PHILA. COUNTY ARPSC Meeting
8:00 P.M. Telephone alert
system for location.

NEW MEMBERS

W82SZK, RANDALL BYNUM (S)
21 W. Temple Avenue,
Stratford, NJ 08084
1-609-783-8145

W3ANW, BRUCE STERNSTEIN
8125 W. Chester Avenue,
Upper Darby, PA
215- SU. 9-5907

K3ZKO, RONALD B. COHEN, XYL, PATRICIA
6629 N. 5th Street,
Phila., PA 19126
215- CA. 4-3036

JUNE QSO PART RESULTS

Bands worked: 50 mc, 144 mc, 220 mc, 432 mc, 1296 mc
A TOTAL of 620 contacts for 707 points with a multiplier of 61 for
43,127 points total. Further details in next issue.

JUNE 24 TRANSMITTER HUNT

6 and 2 meter transmitters were hidden by W3MFY, W3CL and W3OZP at
Bill Worthington's Farm near Penns Park. Even though well hidden
among poison ivy, K3UJD and W3CAG came in at the same time at 1:45
to be declared the winners. Those who followed were, K3MXM, K3DUC, K3JJZ,
W3ZPS, W3FPS, W3SDG, and last, as usual, K3GAS with K3HSS, K3DLS and
Loretta, XYL of K3GAS. The next hunt will be July 23 with K3UJD the
hider. Come out and enjoy the fun.

CHANGE

CHANGE

CHANGE

CHANGE

CHANGE

THE NEXT MEETING WILL BE HELD AT THE QTH OF W3LHF instead of W3JSD.
This will be a White Elephant Sale proceeds to go to the club.

PACK RATS CHEESE BITS
821 W. Lindley Ave.
Phila., Pa. 19141



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

~~MT~~
MEETING NOTICE