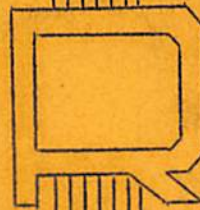
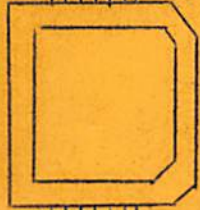
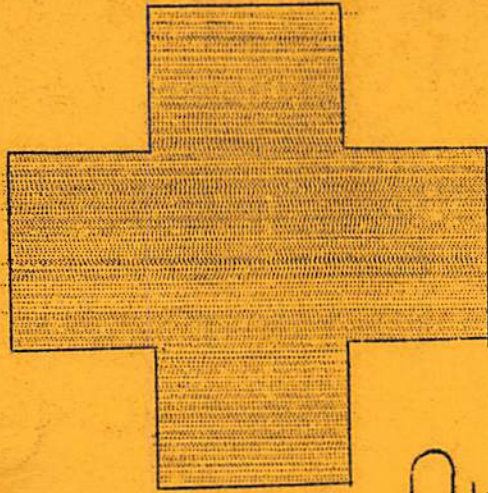


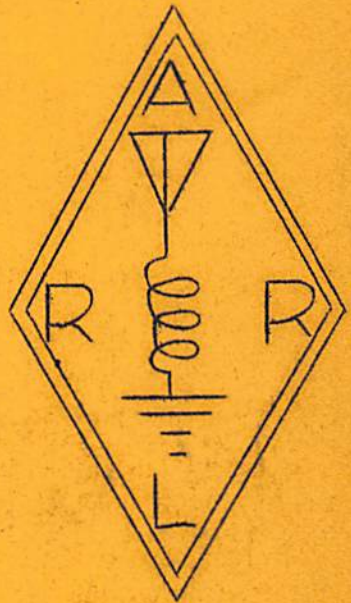
100%



The RED CROSS



And



APRIL 1941

AMATEUR RADIO

NEWS

VOL,
VI
NO,
2

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC.

W.A. Blumelo

ABCD EFGH IJKL
M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

ABCD EFGH IJKL
M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

ABCD EFGH IJKL
M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

ABCD EFGH IJKL
M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

ABCD EFGH IJKL
M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

D.V.R.A. OFFICERS

Lester H Allen.....President.....W3CCO
 Leslie R Yoder.....Vice Pres.....W3EED
 William Petty.....Secretary.....W3HAZ
 W.R.Tomlinson.....Asst.Secy.....W3GCU
 William Hannah.....Treasurer.....W3EUIH
 Charles Moore.....Sgt.at Arms....W3???

DIRECTORS

Leslie R Yoder..Director of Activities
 William Petty..Director of Publicity
 William Hannah..Director of Finance
 Wm.A.Burroughs..Director of Publication
 Theo. Torretti..Dir. of Special Features
 Dave Nabotovsky..Dir. of Communications
 Lester H Allen..Chairman of the Board

D.V.R.A. NEWS STAFF

Wm.A.Burroughs.....Editor In Chief
 W.R. Tomlinson.....Associate Editor
 Wm. A. Blumel.....Art Editor
 Theo. Torretti.....Business Manager
 Leslie R.Yoder.....Printer

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R.Tomlinson 623 East Brown St., Trenton, N.J. This amount covers the cost of mailing for a period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month just advise Mr. Tomlinson, remitting the above amount and we will see that it is mailed as published.

W 3 A Q

All members, or other operators, who wish to operate the club station MUST show their license, also display same in the operating room while operating the transmitter. It is also mandatory that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and presence of the Director of Communications during operation, and he will sign the station over and on As required by F.C.C.

From the hand of Henry Kies, of New York City, and gleaned from the December 14/40 issue of "Liberty" magazine, comes this excellent Creed entitled --

I BELIEVE
 IN AMERICA

I BELIEVE IN AMERICA - It's Institutions - It's way of living.

I BELIEVE IN AMERICA - In It's Freedom - It's desire for Peace - It's desire for the Right.

I BELIEVE IN AMERICA - because It believes in God - and the things which are clean and good and Honest in this World.

I BELIEVE IN AMERICA because It is the Home of Free Men.

I BELIEVE IN AMERICA - because it has given me the Right to Live under Fair skies - with the Blessings of Freedom and Love for my Fellow Men.

THEREFORE -- I pledge myself to defend my Country and my Flag - with every resource at my command.

- . . . *

WANTED!!

ONE POWER TRANSFORMER - 2500 volts each side of center tap and rated at 1000 mils (contact W3AQ)

STRAYS

FLASH!!! Chick Anderson takes a DAILY PEEP in his mail box in HCPBS that he may find that long awaited ticket that will allow him to push out a new W3 call --- very discouraging so far.

Congratulations are in order for George Owens of American Radio on the new establishment. We understand a bigger line of merchandise is to be installed in the future.

And while we are under the heading of new establishments, don't forget that our other friend, NIDISCO, is soon to move to their new location at 147 North Warren St near Perry St around May 22nd., where they too will handle a bigger stock.

Ed Raser, W3ZI, is still quite busy out of town but finds time to get his station on through the week ends. Hello Ed, good Luck.

When you have finished reading this little paper, keep in mind the thought that the advertisements which appear elsewhere in the paper makes possible the continuance of the NEWS; so, when you need anything that our advertisers handle, don't forget to patronize the people who patronize us.

While eavesdropping on our own W3AQ recently, we heard this one -- It seems that W3EED was talking to a W8, who was also the vice president of a radio club, and Les was really stringing the guy along; so when he signed off with the W8, Les sez, "Hope to hook up with you again sometime when the interference is better!" Tsk! Tsk!

And here is another for yuh! -- W3GLG was testing on 20 meter fono a short time ago and was putting a swell harmonic over at W3CCO's shack; so Les gave Willis a call on 16 phone. Surprisingly enough, Willis answered the call as he was listening on 20. Whereas -- and to wit: W3CCO worked W3GLG on his harmonic and 3GLG worked Les on an image! If you have a better one than this -- or can figger it out -- let's hear from you.

The war is taking its toll of Trenton's hamdom. The latest to rally to the call was W3CCC-Eddie, when the NCR reached out and snatched him from his job as wet nurse to a power panel at PSE and set him down in one of their stations at Amagansett, L.I. Long Island has had a lot of stations along its coast, and has still, but none finer and none more active than Trenton's transplanted W3CCC.

With the departure of W3CCC no one else in the Services remains to be mobilized. Bets are in order now as to WHO will be drafted first. Who sed L. Hurley???

W3AID is breaking in a new serviceman for the outside work over at Hurley-Tobin's. The new fellow is Ted Apostolos formerly with a telephone maintenance crew in the CCC, and he takes the place of Frank Ippolito, who left to go into business with his brother.

Electrical Immunity

Three University of California Scientists - Prof. Chas F Dalziel of Engineering faculty, Dr John B Lagen, School of Medicine, and Joe L Thurston, Senior Student in electrical engineering - reported to the American Inst, of Electrical Engineers last week that after having been shocked by electricity again and again, a certain degree of immunity to more shocks is acquired. This does not mean that it is possible, by a course of electrical training, to outwit the men who preside over electrocutions. Subjects become very uncomfortable when the current strength is higher than 6 - 8 thousandth of an ampere. The measurements were made to discover at what point electrodes could be voluntarily released by the hand. The mean values turned out to be about four-hundredths of an ampere and from twenty to seventy-five volts.

(From N.Y. Times Feb 2/41)

OUTING and HAMFEST SUNDAY AUGUST 10

Preparations are under way for our annual outing which is to be held Sunday, August tenth. Some new ideas are planned for this event. We expect this year's affair to be the biggest and best of any held.

Watch this paper for future announcements.

A.E.C. NOTES

SPECIAL FIELD DAY TEST!

On Sunday April 27th a special field day test will be held on the campus of the New Jersey State Teacher College to further educate, and demonstrate to the public, the facilities of the Amateur Emergency Corps. Messages will be handled to all parts of the United States to demonstrate the operating procedure of our local AEC unit.

Operating crews and kitchen crews will be on hand to attend the various duties assigned them. Various Institutions such as the Red Cross, State and City Police, and Trenton City Officials will be mailed invitations to witness this special demonstration of amateur facilities for emergency communication.

While we are on the subject of field day don't forget that our national field day is not so far off so we want to remind the boys to keep up preparations and get emergency equipment in shape for this event. Be sure to report your equipment, especially new equipment, to our Emergency Coordinator, Ted Torretti, W3BAQ, as soon as possible.

Advance News: Frank Kelly, W3CKY, is to be appointed as Assistant Emergency Coordinator for D.V.R.A. Frank is connected with the New Jersey State Police and is making fine progress in the interest of A.E.C. We hope he gets that 500 watt AC gas driven generator.

W3EBC, the new president of the Tri-County Radio Association, has been appointed Emergency Coordinator for Somerville NJ.

SPECIAL NOTES

We present herewith, for those who may not have seen, or read it, the inscription on the Communications Building at the New York Worlds' Fair: "Modern means of Communication span Continents, bridge Oceans, Annihilate Time and Space. Servants of freedom of thought and action, they offer to all men the wisdom of the ages to free them from tyrannies and establish cooperation among the Peoples of the Earth!"

The D.V.R.A. NEWS is now under entirely reorganized management and hopes to car-

ry on the same good work of the past management; although we expect to present some new ideas from time to time and have high hopes of publishing a bigger and better paper, we take this space to thank the past staff for their efforts and time in bringing the News to what it is today.

We also wish to express our sincere thanks to the past official administration for their fine and conscientious work; and at the same time pass along our hearty congratulations to the new, and re-appointed officers and extend our greetings for a highly successful and greater D.V.R.A.

The News staff had a very successful re-organization meeting on Wednesday evening, April 2nd. Refreshments were served after this meeting by W3GCU, at whose home the meeting was held.

SAY! what ever happened to that club banner that was to be made up?????????

Let's pause in our ramblings here to extend a very hearty welcome to our friends of the York Road Radio Club of Philadelphia, who, we understand, are to be our guests at the next meeting. Don't forget fellows, we want as many present at this meeting as possible, as the Quiz contest, conducted by the Director of Activities, Les Yoder, W3EED, will be held. There will also be motion pictures and plenty of refreshments.

It is assumed that everyone now knows that every amateur will receive a questionnaire from the Army in the near future and we hope everyone will fill out this questionnaire in full and return it as soon as possible after receipt of same. This does NOT place you under any obligation. Have you filled out the A.R.R.L. questionnaire which was presented in QST a short time back? If not, it might be a good idea to cooperate with A.R.R.L. and mail this questionnaire in as soon as possible.

Ed Raser, W3ZI, attended an NYA conference of Radio Supervisors in Maine a short time ago. We have no details at this writing.

How about some of our members getting

busy and working NAA and WAR! W3HAZ has worked both of em and W3GCU reports having worked NAA. This is probably the ONE AND ONLY chance you will have to contact the Net Control stations of both the Army and Navy. All you need is a little patience and a rig that works on eighty or forty meters. QST carries complete schedules for amateur contacts.

 W3HAZ worked a K6 on 7mc during the recent A.R.R.L. member party.

 After having wound up his personal affairs in town in preparation to a long stay with Uncle Sam, Captain Kale departed for duty at Fort Bragg, North Carolina. Cap't. Kale maintains regular schedules with Bill Potty, W3HAZ, through whom much traffic is handled. Sam seems to be very well equipped for the venture. At the Christmas party he was presented with a complete sending and receiving set by the membership as a parting gift. The receiver was the latest in the crystal variety containing a small chunk of the finest galena obtainable contacted by a cat-whisker from a royal Persian pussy. The inductance was of the single slider type wound with real wire. Along with the super-dooper detector mentioned, this was tastefully mounted with headphone posts and other accessories -- on a sloping panel of genuine wood for ease of tuning and the entire unit was housed in a small metal container to better shield it from QRM caused by blinking fireflies. Lacking in the set-up was the 80 ohm telephone headset, and the vital piece of cheese cloth and bottle of alcohol to clean the galena. And, too, no means was provided for determining the most sensitive spot on the crystal. But all in all the compact little set, using neither batteries nor unadulterated AC, represents an advance -- either forward or backward -- in receiving and our technical staff thinks Sam will find its twenty mile range on the 200 to 400 meter band adequate to any situation. The sending instrument was an ideal companion piece. Formerly known as the Buzzerphone and even more formerly used by the Army, its rugged sparking contacts and double-jointed key symbolized power in the raw. One had, on viewing it for the first time, a feeling that anything was possible if it had an aerial connected to it. Best wishes, Sam! W3AID.

 For copies of the pictures made at our Christmas party see Matt Becker at the

Yacht Club.

 Some of the boys seem to be under the impression that under recent F.C.C. ruling regarding renewal of licenses it is not necessary to file the usual renewal application. THIS APPLICATION MUST BE FILED as before the ruling. The only thing which is not now required is the three station "proof of contact" AFTER you have filed your application (together with proof of citizenship data, if not previously submitted), you may continue to operate until September 30 1941 BUT - the application for renewal MUST be sent in as usual.

----- A.R.R.L. OFFICIAL MESSAGES

Nr 926 - The F.C.C. on March 10 issued order number 76A which automatically extends the terms of all amateur radio station and operator licenses that have expired or will expire during the period July one 1940 to September 30 1941, to expire on the latter date, provided that application for renewal of such licenses and the citizenship proofs under order nr 75 have been properly filed with the Commission. This extension order does not include any licenses subject to special revocation suspension or hearing orders that may apply.

 Nr 927 - The F.C.C. on March 11 adopted order number 73D authorizing full portable and portable mobile operation by duly licensed radio amateurs during the period of the A.R.R.L. field day tests, 4PM EST June 7 1941 to 6PM EST June 8 1941.

 Nr 929 - All amateurs are again cautioned to avoid any possible violations of F.C.C. order Nr 72 in daily operating. Late March reports indicate that HK1AK on 28 Mc, XE1AM, CMSFL on 7 Mc and others have been attempting to work US amateurs. D4CVK 14300 kc is reported to have disguised his call as K4CVK to draw reply from W amateurs later disclosing QTH as Bremen which has been reported to F.C.C. Avoid any trouble by avoiding any work under any pretense with such stations.

 The SCM needs your report every month so that he can make up his monthly column in QST for our Section. Your report must reach him by the 15th of each month.

GRIFFITH ELECTRIC
SUPPLY COMPANY.

479 So. Broad Street
TRENTON - N. J.

Phone: 9191



WHOLESALE & RETAIL
ELECTRIC
JOBBER'S

Established: 1912

SPIEZLE'S

145 So. Broad St., TRENTON, N. J.

QUALITY AND
STYLE without
EXTRAVAGANCE
MEN'S AND BOYS'
CLOTHING!

Second Door from
Factory St. on Broad



PAY TO

ADVERTISE!



Through the medium of:

The

D. V. R. A.

NEWS.

It is the ONLY HAM PAPER
in TRENTON.

And it

CIRCULATES!

The News Staff.

Telephone: 2-9183

American Radio Co

25 E. HANOVER ST., TRENTON, N. J.

AMATEUR SUPPLIES

Hallicrafters
receivers!

TRENTON'S OLDEST
RADIO
SUPPLIES STORE

Telephone: 4536

NIDISCO

New Jersey's Largest

RADIO PARTS
DISTRIBUTORS

STORES IN:

TRENTON PASSAIC
CLIFFSIDE JERSEY CITY
All in New Jersey!

Phone: WORTH 2-6276

HARRISON HAS IT

EVERYTHING for the AMATEUR

Your Mail or Phone Orders
shipped within 30 MINUTES

Free delivery of orders of \$5.00 or more



ORDER NOW:
from any AD or CATALOG

harrison has it:

HARRISON RADIO CO.

12 W. BROADWAY, NEW YORK

Largest Amateur Store in the EAST.

RADIO
SERVICE
SHOP

1101 1/2 HAMILTON AVE.

Trenton, New Jersey

We specialize in servicing
and aligning Amateur
communication receivers.



"See DAVE and ANDY
When you have trouble
In the shanty!"

100%

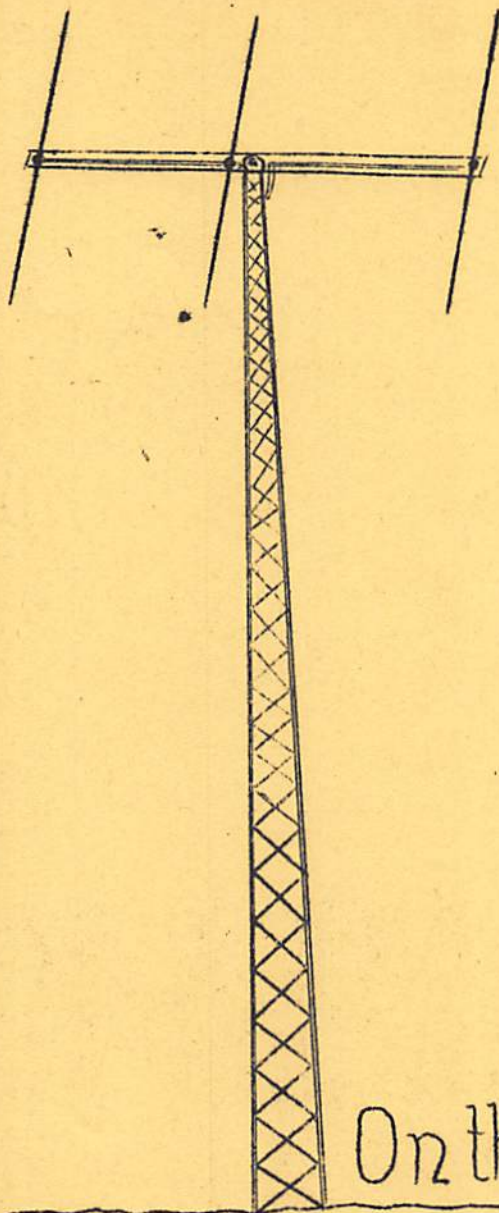


D

V

R

A



MAY-1941

On the Ultra-Highs

NEWS

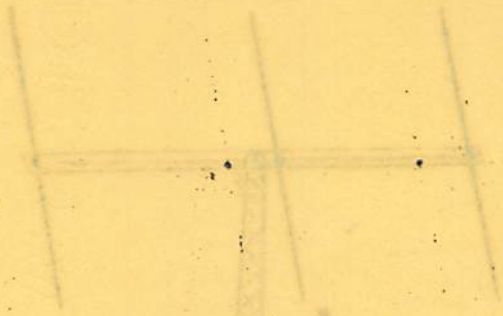
VOL,
VI
NO,
3

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC.

27456 m/s

MAY 1901

1901



On the other side of the page

NEWSPAPER

OFFICE OF THE PUBLISHER

D.V.R.A. OFFICERS

Lester H Allen.....President.....W3CCO
 Leslie R Yoder.....Vice Pres.....W3EED
 William Petty.....Secretary.....W3HAZ
 W.R. Tomlinson.....Asst Secy.....W3GCU
 William Hannah.....Treasurer.....W3EUH
 Charles Moore.....Sgt at Arms.....W3???

DIRECTORS

Director of Activities...Leslie R Yoder
 Director of Publicity...William Petty
 Director of Finance.....William Hannah
 Director of Publication..W.R. Tomlinson
 Dir. of Spec. Features...Theo. Torretti
 Director of Communications.D.Nabotovski
 Chairman of the Board...Lester H Allen

D.V.R.A. NEWS STAFF

Editor in Chief.....W.R. Tomlinson
 Associate Editor.....Wm. A. Burroughs
 Art Editor.....Wm. A. Blumel
 Business Manager.....Theo. Torretti
 Circulation Mgr.....W.R. Tomlinson
 Printer.....Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 623 East Brown St., Trenton, N. J. This amount covers the cost of mailing for a period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, remitting the necessary amount and he will see that it is mailed to you as it is published.

W 3 A Q

All members, or other operators, who wish to operate the club station MUST show their license; also display same in the operating room while operating the transmitter. It is also MANDATORY that you sign the station log for each transmission. If you do not have your license with you, request the permission and presence of the Director of Communications during operation, and he will sign the station over and on as required by the Federal Communications Commission.

- . . . -

EDITORIAL

Each year there is set aside, by the American Radio Relay League, one week end, known as A.R.R.L. Field Day; a special occasion designated and devoted entirely to the testing and operation of portable and portable mobile equipment for use during any emergency which may arise.

Our National Field Day is soon to roll around again, to test equipment old and new, that we may always be ready for emergency. There have been emergencies in the past, serious emergencies, floods, hurricanes, tornados; and the amateur has, in every instance arisen to the task before him, and presented his communication services in a very gratifying manner.

We believe that we are soon to be faced to face with another emergency, a very serious emergency, an emergency of the type in which the Radio Amateur has never had opportunity of giving his service as a communication medium. We have no reason to doubt that in this emergency, as in every other, if given our chance, amateur radio will come out with flying colors. We MUST be prepared, make very special effort to participate in the coming national field day - upon our EFFICIENCY and PERFORMANCE, if allowed to prove our worth, may depend the future status of Amateur Radio. (W3GCU)

We reprint here, for those who have requested same, and for those who may have missed it in the last month's issue, the excellent creed entitled -

I BELIEVE IN AMERICA

I BELIEVE IN AMERICA - It's Institutions
It's way of living.

I BELIEVE IN AMERICA - In It's Freedom -
It's desire for Peace - It's desire for
the right.

I BELIEVE IN AMERICA - because It believes
in God - and the Things which are
clean and good and honest in this World.

I BELIEVE IN AMERICA - because it is the
Home of Free Men.

I BELIEVE IN AMERICA - because It has
given me the right to live under fair
skies - with the Blessings of Freedom
and Love for my Fellow Man.

THEREFORE -- I pledge myself to defend
my Country and My Flag - with every re-
source at my Command.

.. (By Henry Kies-NYC)

OBITUARY!

ARTHUR A HERBERT
W 1 E S
1873 ----- 1941

The passing of Mr Arthur A Herbert, WLES, on April 3rd will come as a shock to his multitude of friends in the Amateur Fraternity. A.R.R.L. Treasurer Herbert suffered a heart attack about a year ago and has not been in good health since, and, in this, his 68th year, joined the ranks of Silent Keys.

An active amateur since 1908, a League officer since 1917, for the last 18 yrs a member of the headquarters staff, he has accomplished much for the advancement of A.R.R.L. and amateur radio.

Mr Herbert was one of the first members of the League in 1914, one of the few Life Members, a classification discontinued some years past. In 1916 when Trunklines were formed he became manager of Trunklines C and D. In 1917 was League vice-president and general manager. A director in 1923, he was a member of that famous board which voted itself out of office that the League might have a more representative form of government. He was elected Treasurer in 1920, which post he held until his death. He joined the headquarters staff in middle 1923, becoming Fieldman for the Board of Directors and serving as Treasurer besides. As Fieldman he covered over 157,000 miles, speaking before 35,438 people at 288 conventions and meetings! Retired as Fieldman in 1936, and as Credit Manager in 1940, he was ORS - A-1 Operator, ROWH and RCC member and N.C.R. officer. His warm handclasp, ever cheery greeting and distinctive signal and fist will live on in our memories - A SALUTE TO "AH".

Upon glancing through our calendar of events, we note that just a year ago, early in the morning of May 2, there passed from the ranks into the realm of silent keys, one of our own foremost and beloved amateurs. We again bow our heads in a moment of Silent Prayer for our friend and brother, Frank Cantwell, W3FNN. Although another of our ranks has since passed, let us pray there will be a long, very long interval ere there passes another.

"ULTRA-HIGH FOR THE FUTURE"
(April 1941 "Popular Aviation")

The whole aeronautical radio picture in the United States is due for a radical change within the next five years, unless the war puts a brake on plans that already are maturing in the C.A.B. These are for a coordinated and properly engineered system of airways and a weather and "homing" grid to cover the entire nation under a scheme that takes into consideration national requirements of aviation as it is now and as it probably will be in the immediate future.

The ragged system of airways that exists, the loose weather networks now operating, the poor choice in radio wave lengths or frequencies that are used today all will be changed. Ultra high frequency will replace the long wave radio beam stations now used, the number of frequencies necessary will be reduced from 150 to 20 or 30. Instead of getting weather from radio beam stations, all weather will be handled by long wave transmitters of enormous power that will blanket the nation in a gridiron of clear channel stations able to blast through all static.

These same weather-grid stations will be available for "homing" use by private, commercial, military or governmental aircraft. Approximately 25 will cover the entire country from north to south and east to west at intervals of about 500 miles.

Specific ally the programs ultimate realization may depend upon findings made during the latter months of this calendar year 1941. The testing ground will be the ultra-high frequency radio airway between Chicago and New York that is almost finished and ready for operation. Sights for eight ultra high frequency transmitters have been bought and buildings erected thereon.

Most of the stations will have their new radio equipment installed by the time you see this and airplanes of the big three -- United, American and TWA -- will be using it, receiving the ultra-high frequency signals through new type radio receivers that are now being installed in their aircraft.

Why, you may ask, change a system that already is working and seemingly working pretty well? Why spend the money to build a new system of airways radio aids, why cause a discarding of all the expensive radio equipment that already

is installed in the Army, Navy, Commercial and many private airplanes and a purchasing of newer and equally expensive equipment to receive the high frequency signals?

There are many good reasons. The existing system of airways and radio beam stations, like Topsy of Uncle Tom's Cabin, "just grew." The airway doesn't always follow the shortest line, there are many crooks and turns that are not present because of terrain or natural obstacles but are due to the political influence of a senator or congressman who had a say about appropriations for the airways and who wanted a favorite town to be "on the air route." And, above all, there are excellent technical reasons for changing over to ultra high frequency. Let us look at the present radio equipment and its characteristics and we can compare these with the equipment considered for the new program.

At this time there are more than 330 different radio range beacon transmitting stations -- these are the stations that send out the radio beams which form aerial highways. Today there are more than 30,000 miles of this Federal airway network, the stations being roughly 100 miles apart. These stations send out signals on frequencies in the 200-400 kilocycle band which is just below the standard broadcast band. Most of the stations are sending with relatively low power -- from 100 to 400 watts; most of them are 150 watts.

Now, with only 100 different frequencies available between 200 and 400 kilocycles, it is obvious that there must be many duplications of frequency assignments to the radio beam stations. These duplications are multiplied because of the fact that a one kilocycle separation in frequency is not possible at this time. Actually a three to four kilocycle separation is the maximum possible. This means that many stations share their frequencies with others. Attempts to minimize possible confusion to airplane pilots have been confined chiefly to making the geographical separation between such stations as wide as possible.

Furthermore, a large amount of natural electrical discharges send out radio waves in the 200-400 kilocycle band. Lightning, we all know, causes frying, crashing noises in the broadcast band and is equally bad in the 200-400 kilocycle band. Static electrical discharges picked up by airplanes flying in rain, dust or snow and subsequently leaking

off the craft fill that band and interfere, in fact at times drown out, reception on this band entirely. These discharges have a peculiar crackling and frying sound of their own.

Then there is the skip-distance characteristic of the 200-400 kilocycle signals. This, according to accepted theory, is due to the bouncing of these relatively long-waves between the ground and the Heavyside layer, or ionized envelope that is believed to encircle the earth. This envelope is invisible and is rather like a thick cloud-layer in its supposed form, having varying heights and depths in its surface - or perhaps its varying intensities in its electrical strength. At any rate the long waves of the 200-400 kilocycle band shoot out from the transmitting stations, strike this Heavyside layer and rebound. Sometimes they rebound close to the station of origin - always there is some skywave close by - and sometimes they rebound at immense distances, thousands of miles away. For instance a radio range station in Utah and one in Pennsylvania have identical frequencies. It is possible that pilots tuned to the Pennsylvania station and flying close to it can find the Utah station's signals booming in, almost drowning out the closer signal.

All this leads to confusion, which is dangerous in an airplane. Furthermore the Heavyside layer itself is subject to strange disturbances at dawn and sunset; this causes wide variance in the beam signals at times. For a period of a half hour or more at these times the 200-400 kilocycle band signals fluctuate, vary, change their intensity and generally behave strangely.

This should be enough to give you an idea of why pilots and radio engineers have cudged their brains for years to find a better way of sending out the beam signals, changing the frequency or doing something to better these flying aids.

The solution as now presented is to move out of the range of these natural electrical phenomena into frequencies that are ultra-high where there is no interference. That is the solution as now decided upon. The new radio range stations will be in the band from 119 to 126 megacycles. These frequencies have been set aside for aeronautical navigational purposes by the Federal Communications Commission. The stations on the New York -- Chicago ultra-high radio beam airway will send out their signals on four different frequencies within the relatively

narrow limits of this band.

The development section of the CAA and various commercial airlines have been experimenting with ultra-high frequency radio beams for three years on the Pittsburgh-New York section of TWA's route, in Indianapolis and in Los Angeles. Reception has been unbelievably good, even in the midst of the worst thunderstorms and rain squalls, at periods when electrical storms on the sun were kicking up trouble for all other Radio. Signals have come through to airplanes so clearly that pilots say they resemble the virtually perfect fidelity of frequency modulation radio. Pilots flying in the most difficult weather say that the ultra-high signals come through so well that they can hear the breathing of men on the ground to whom they talked, can hear the crackling of paper as airway attendants read weather reports into the microphone. All the little sounds hitherto lost entirely come through on the ultra-high frequency. At the same time, when the pilots switched back to their 200-400 kilocycle receivers, they were unable to hear anything except the roar, crunching and crackling of static.

Another factor about ultra high frequency waves: they apparently penetrate the Heavyside layer and shoot on out into space, or they penetrate it deeply enough so their rebound is at an angle that does not permit them to return to the earth. The result is that skip-distance is eliminated entirely. The range of an ultra high frequency station is pretty well limited to about 100 miles at the amounts of power now used for the longer wave stations. This made an ideal approach possible.

Instead of using up to 120 different radio frequencies for the radio beam stations, engineers now propose to use about 20 different frequencies over the country. Inasmuch as range is limited and there is no return of these signals to the earth, it will be possible to place as many as 500 radio beam stations in the United States by using repeats of the 20 basic frequencies chosen.

A glance at plans for the new New York-Chicago ultra high frequency airway show how this will work in practice. Eight stations have been chosen but only four frequencies will be used. The first station will have frequency No 1. The second will have No 2 and the series will continue through stations No 3 and 4. The fifth station, however, will revert to frequency No 1 again, and the three remaining stations will also repeat with No 2,

3 and 4 frequencies.

Instead of a radio receiver that has infinite tuning possibilities within the band the new ultra high receivers will have 20 or 30 push buttons for tuning fundamental range stations. Instead of grinding away on the "coffee mill," pilots will merely punch station number 1 as they pass along an airway from the zone of No 4 frequency into the beginning of the ever-repeating cycle.

At present, radio beam stations all have four "on course" legs. These are formed by the overlap from signals sent out by two antenna systems. Usually only two of the legs are used for an "On airway" station. For instance on an east-west airway only the east-west legs are used in most instances. The north-south legs of a station are wasted except as progress markers. On the new airways there will be only two-leg stations; where airways cross and where the north-south legs would be part of a crossing north-south - east west airway, there will be two separate stations.

This will simplify orientation because, instead of quadrants, there will be only hemispheres where signals will be different. Each of the 500 odd stations that will be set up eventually with the ultra-high frequencies will have, of course, its own identifying signals as at present. A station at Chicago on, let us say, the number one frequency - still would have its identifying signal of CG. Joliet will have its JO on the number two frequency, Indianapolis its ID on number 3 frequency, Cleveland its CY on number four frequency.

Now about the weather and homing grid. This would consist of stations having great power - up to 50,000 watts - and operating in the long-wave band. Each station would have a clear channel; there will be no duplication of frequencies here. Each station would blanket an area with a radius of 400 to 500 miles around it with its carrier wave. From these stations would come continuous airways weather reports in voice.

Geographic location of these grid stations is not definitely made, but they probably will be laid out in rows of six from coast to coast, with the width of the country, from Canada to Mexico or the Gulf, covered four rows deep. Thus each station would be expected to cover an area of about five hundred miles around it. This would allow plenty of overlap between stations so that signals should blast through almost any kind of

weather.

The longer-wave frequencies would be used for these stations in order to get distance that is impossible with the short-wave stations.

These high powered long-wave grid stations would not necessarily be on a Federal airway. Each would be a weather reporting station and would be a local assembly point for weather information collected in its area. Meteorologists stationed at each of these points would make detailed analyses of their own area weather and would pass on to the adjoining stations complete but less detailed reports. In turn they would receive fairly detailed reports from adjoining grid stations and sketchy reports from once-removed neighbors. All this information would be broadcast to airmen, and would improve the weather reporting service considerably.

For off-airway flights the grid stations would form ideal homing units. Laid out in a grid, it would be possible for pilots to take bearings on several stations simultaneously from almost any point in the United States. These bearings would place him fairly accurately (within a matter of three or four miles) at almost any time. It is not possible today to get such bearings at all points in the country.

The airways themselves would be laid out on the principle that now governs through highways. They would lead pilots as directly across country as possible. The east-west "mid-continent" air route that now extends from New York to San Francisco would not pass through Chicago directly, for example. It would pass south of Chicago. Planes going to Chicago would turn off northward on a Chicago "lead-in" beam, also in the ultra-high frequency band.

Use of ultra-high frequencies ties in directly with the true "instrument-landing" systems that are about to be installed at principal airports. In the same ultra-high frequency receiver used for the beam system radio, one of the push-buttons will be for the universal instrument-landing frequency. Once a pilot has reached his field "on instruments" he will punch the proper radio button to pick up the landing signals and will follow these right down to the ground until his wheels are rolling on the airport runway.

Don't think that the picture outlined herewith is Jules Verne-ish or that it is in the distant future. It's NOT. It will be here tomorrow. But do not think

either that it will come suddenly. The New-York-Chicago airway is the first step. Extensions will be made along the main air routes and both the old and new beam systems will be operated simultaneously for years yet to come -- perhaps as many as ten years, although the writer believes that it will be no more than 5 years before ultra-high frequency is the only one in general use. When it comes, flying will be safer, easier and therefore more likely to be of real utility to the nation at large.

(Written by DeWitte Wendell)

A.E.C. NOTES

On May 27th there was a special field day test held on the campus of the New Jersey State Teachers College at Trenton New Jersey, for the purpose of demonstrating the procedure and operation of our portable A.E.C. unit.

Mr. R.L. West, President of the university was present and a great deal of interest was manifested by both the teacher faculty and student body in endeavoring to follow the technical points and explanation of the equipment on the field, which consisted of the 80 meter CW truck unit belonging to W3BAQ, Regional Emergency Co Ordinator, the 20 meter equipment of W3CKY, Assistant E.C. affiliated with the New Jersey State Police; the 160/75 meter phone equipment of W3JDV, and the two and one half meter DK2 units which were used as pickup stations in outlying locations, relaying traffic back to the central station units for transmission.

All equipment was on the field and in full operation by 11:30 AM, and at 2:30 in the afternoon, the traffic submitted for transmission by the president, the teacher faculty, and the student body had mounted to a total of 450 messages; and by the time operation ceased, the traffic total had risen to upwards of six hundred messages.

Arrangements for conducting this event on the college campus were completed through the long standing acquaintance and friendship between the director of radio for the university, Mr. Robert MacDoughall, and Coordinator Ted Torretti, W3BAQ. From the viewpoint of both Mr. MacDoughall and Mr. Torretti the event was an outstanding success, and they look forward with great enthusiasm to another such event at the college.

W3BAQ now has what he terms a "Crystal-

ECO" -- Ted now has crystals for every fifty kilocycles in the 80 meter band!

HOBBY SHOW

A Hobby show is now in progress (May 13-14-15) in the roof garden of the Stacy-Trent hotel, Trenton, at which many points of interest are being placed before the public. Two complete amateur radio stations, in full operation, are being exhibited by the Delaware Valley Radio Ass'n., where a limited number of personal messages are to be handled during the show.

A short lecture, the script of which was composed by William A. Burroughs, W3AID, has been recorded and is being used in demonstrating automatic play-back equipment supplied by Edwin Beemish, which automatically plays this lecture periodically while the show is in progress. We expect the D.V.R.A. exhibit, under the full direction and care of Ted Torretti, W3BAQ, and his able assistant, Frank Kelly, W3CKY, to steal the show.

Captain Murnane, Communications Officer, New Jersey State Police, Trenton N.J. has received a letter from Managing Secretary, K.B. Warner, of the American Radio Relay League, acknowledging receipt of Captain Murnane's message sent during the field day test at the N.J. State Teachers College on May 27th.

Mr. Warner highly praises our A.E.C. unit, saying, "I appreciate particularly your expression concerning the worth while and commendable nature of the project. We are quite proud of our emergency organization, and in particular of such comprehensive units as that which you have seen in operation. We are certain they will do an excellent job for you if occasion ever arises".

Every amateur should have SOME emergency power supply lined up -- so in event of commercial power failure, he can have SOMETHING on the air. Can you meet this requirement?

W3BAQ IS READY for field day, or emergency, from antennae to headphone - ARE YOU?

F.C.C. order number 73D permits portable and portable-mobile operation of amateur stations participating in the A.R.R.L. field day tests 4 PM EST June 7th to 6 PM EST June 8th, 1941. Arrange your plans to be present during the field day this year.

So We ALL had a good Laff

During a meeting of the NEWS staff, up in our second floor front room, just prior to the regular club meeting, the local QRM from other members crashing in - and out - was so heavy that Business Manager Torretti decided it was high time to bar the door, so he tried to place a small chair under the doorknob, but, 'twas too low, and he groped about the room for something to do the job, found another chair, but, that one was too high. He proceeded to look around the room for some gadget to lock the door but there was not a thing around. So - after looking the place over, someone suggested he try using the daad lock on the door, that it might work better for the purpose - and, by the great horned spoon, Ted found that it DID work, and the problem was solved - THE MEANS BEING FOUND RIGHT ON THE DOOR IT-SELF - Boy! was Ted's face red!

The D.V.R.A. Outing and Hamfest is definitely scheduled for Sunday, August 10th. Committees have been formed to attend to various duties and others are still to be appointed. The usual annual baseball game between the second and third districts will be one of the events of interest. The bar will be in full swing, as well as other refreshment centers. This affair is being planned for the biggest and best event in the east of the season.

There is soon to be another AUCTION SALE - so bring up your stuff -- and money -- make this one an outstanding affair - one which will be remembered!

The Delaware Valley Radio Association now enjoys 100 percent affiliation in the American Radio Relay League -- We are now trying to obtain that Honor Certificate for 100 percent holders of the Code Proficiency Certificate. Lets get going boys, and see how soon we can have our club listed on that Honor Roll, and our certificate hanging on our shack wall!

Here are some of the dates on WLAW qualifying runs --

June 1st.....Daylite.....1:30 PM EST
June 17th.....Evening.....9:45 PM EST

Qualifying run copy starts 15 minutes AFTER the times listed above. We hope every member working for advanced proficiency -- and ALL not yet having certificates will take advantage of these qualifying runs.

S.C.M. CORNER

Summer skeds are, at the present time, being arranged by our various ORS/OPS traffic networks, and when completed, will be the first time in the Section history that year-around traffic has been handled by our organized groups.

Two new nets, a five meter phone net, and a forty meter CW net are in the organization stage, and when completed Ole South Jersey will be "top-notch" in traffic handling with all practical bands for traffic being covered.

The 25th Anniversary Banquet of the South Jersey Radio Association, which is scheduled for June 21st 1941, at the Hotel Walt Whitman in Camden N.J. gives everyone an opportunity of meeting the gang from our section, and certainly is an affair worth while attending.

The most outstanding CW traffic man of our section for the past two years has been W3BZX, HITTING BPL once in 1940 and twice in 1941, without competition.

Our Section Emergency Coordinator, W3BAQ, holds the only other section honor of making BPL, but is ineligible for A-1 Ops' rating.

At least one ORS contest each has been won by W3ZI - W3HAZ and W3CCC, these boys having placed high score in each of the mentioned contests, while our club station placed second in the recent A.R.R.L. 160 meter W.A.S. contest, which, all in all, gives our Section at least four high scoring stations in past competitive events, to say nothing of the excellent performance of W3AQ in net control position of the Southern New Jersey Official Fone net.

It is expected that a National hook-up of amateur stations will soon organize a Conscription Net in which our section will have representation, so if any of you fellows contact, or have any schedules with Fort Dix, please advise me so that a tie-in for traffic for SNJ Section.

A very successful get-together meeting of our Official Phone group was held at the club house recently with all but two of the members of that group attending. The meeting was held to give the boys of this group in our section an opportunity to meet and get acquainted with one another.

ORS and OPS members of the section have their reports with me on the 15th of the month. We need reports from as many members of our section as we can get so as to place our monthly activity report column in QST among the biggest - let's try to make ours the BEST - Send in your reports. 73 till next issue. W3CCO SCM.

SUN SPOTS

When Old Sol goes on a rampage, as of Easter week in 1940, complete confusion prevails on earth. Telegraph and telephone lines roar with static, long-distance radio fails, wire-photo machines draw black lines instead of pictures, and teletype machines write meaningless chatter.

Continents lose contact with each other, sometimes for hours at a time. Even cities a thousand miles apart are very apt to be isolated.

The Sun is not the stately, dependable body that one might assume. "Cold", cyclonic storms called "sun spots", some large enough to engulf the earth, spread and die on it. Tremendous clouds of flaming gas hover over its glowing surface. Eruptions of incandescent hydrogen burst forth. Occasionally tongues of flame spurt 100,000 miles or so beyond its atmosphere.

The sun-spots shoot out streams of electrified particles and when the earth is in the path of one of these streams the earth's magnetic field is unbalanced. Brilliant auroral displays and general confusion in all kinds of long-distance communication systems follow. Earth currents up to several hundred volts surge over the lines, fusing delicate relay instruments.

During the last decade such solar disturbances have been more troublesome than previously, not because storms on the sun have increased in intensity, but because our use of electrical circuits that are affected by solar activity has increased.

The chromospheric eruptions of hydrogen on the sun likewise affect communication. Apparently great quantities of ultra-violet light are radiated during an eruption and these rays influence the ionosphere surrounding the earth, preventing the reflection of high-frequency radio signals and making long-distance radio communication impossible. Often these eruptions are associated with sun-spots. The magnetic storms caused by sun-spots affect all parts of the earth; while the fading radio signals that are caused by the eruptions occur only over the lighted portion of the globe.

More knowledge of the gaseous envelope surrounding the sun may help explain more fully electrical disturbances produced on the earth.

Direct examination of the atmosphere and corona of the sun can be studied best during total eclipse, and it is hoped, photos made by various expeditions during the total eclipse occurring around

October first 1940 will help determine more accurately, the state of the elements in the solar atmosphere and how they behave in the tremendous heat and electromagnetic field of the sun. A study was made last year of the effects of the partial black-out on radio signals. A joint expedition comprising several groups of scientists transmitted short wave radio signals upward to the earth's ionosphere and measured the time-lag in the reflected signals to determine the shifts that took place in the reflecting layer during the eclipse and after it.

ITEMS OF INTEREST

Those of our members who wish to learn code, and others who want to get some extra practice will appreciate the free code class conducted at club headquarters under the direction of instructor Wm Petty, W3HAZ, each Monday evening at eight PM. Each participant is asked to bring along his own headphones as there is a shortage of these at the clubhouse. Among the boys already taking advantage of this opportunity are:

Mr Powell, Mr Peters, Mr Schaff, and Mr C. Moore.

There is plenty of room for more, every one is welcome. Just contact Bill Petty.

At our last meeting, emergency coordinator W3BAQ, Ted Torretti, worked some DX on $2\frac{1}{2}$ meters, working W3HWO and W3IDY with a DK-2 transceiver using about a half-watt carrier over a distance of about four miles with very good results. Later in the evening, with W3HAZ at the transceiver in club headquarters, and Ted at the mike of the portable-mobile set in W3IOU's car, a mobile QSO was conducted successfully over a two mile run from headquarters. It was raining at the time and there were some dead spots along the run, but, a nice contact was maintained overall which shows $2\frac{1}{2}$ meters very valuable for local communication and "tie-in" work during emergencies.

Speaking of $2\frac{1}{2}$ meters, it seems a lot of the fellows are getting on that band now as there have been a dozen or more stations heard down there lately. Keep up the good work fellas, ole $2\frac{1}{2}$ needs plenty of boosting - as well as occupancy.

Hey! Dave Nab is working - landed a job as stock clerk at Hudson County Tobacco Company!

QSL CARDS!!

W3CCO advises us that he has at his shack QSL cards for these fellows:

W3ITS - W3JAG - W3IOW - W3EDP - W3DCQ -
W3HTP - W3HTS - W3HTJ - W3ITH - W3HWO -

A personal visit, or a stamped envelope will be sufficient to claim them.

While on the subject of QSL cards, let us advise you the the Delaware Valley Radio association will make a present of 100 QSL cards to the first SWL member, who, taking his examination AFTER May 14th, obtains an amateur operator/station license Class B.

14 Mc LOCALLY!

Conditions in general have been none too good on this band in the past, but seem to be improving quite some. Reliable contact may be had during the daylight hours. In the early hours of morning the territory is quite dead, while around noon there are usually a few signals coming through which build up and multiply during the afternoon. By dinner time the band is quite lively and the West coast can be contacted with ease. Also at this time, signals begin to pull through from the islands in the Gulf stream. Not much legitimate DX can be heard, but there are a great many South American stations on in the evening. Late in the evening the K6s can always be contacted.

Conditions in this territory change very rapidly at this time of the year. For instance, on one occasion the writer was in contact with a W6 in California and experienced R9 QRM from a W2 in New York. At times, these locals can be worked, but with very poor signal reports.

As things seem locally, in this portion or our frequency spectrum, we 14 mc hounds are looking forward to running up a good high score in the coming National Field Day tests.

7 Mc

Although no concise advice has been received at this writing, other sources have advised us that this territory has not been "up to snuff" lately, with signals fading and generally of low signal strength.

80 meters-Huh!

This allocation has, in the past few weeks been generally what one would tag as very poor. Besides the interference from QRN, skip has taken place, and, with the exception of very local work, signals from the

West-South and far Northwest are heard in the late evening and early morning; if you can endure the crashing and snapping of the atmospheric disturbances, you might be able to work some of these providing that receiving conditions are favorable at the location from which the signals heard.

From what we can gather from the chatter among the 160 meter boys, conditions are not so favorable in this band either lately. Main reasons are very high QRN, fading signals, and low signal strength.

As for the Ten meter section, we have no report, therefore, cannot tell anything in regards to Ten.

Quite a bit of activity has made it's appearance in the five and the two & one half meter spectrum, with at least half a dozen or more stations on two & one half.

"LINE NOISE!"

On Sunday, April 27th, 1941, Les Yoder, W3EED was in contact, on 14 mc, with W6SDJ in Beverly Hills, California. Beverly Hills being very close to Los Angeles, Les had W6SDJ call Paul Binder, W6SPK, on land line. Contact was easily made with Paul and an excellent three way rag-chew was enjoyed. Paul was an active member of D.V.R.A. back in 1933-4-5. He may be heard now on 7130 and 14260 Kcs.

Frank Kelly, W3CKY, has his gas-driven AC generator in operation, and, with the exception of a few little finishing touches the outfit is perking in fine style. You will get a chance to look it over during coming field day tests.

Seems as though the little old NEWS has at last stirred up some action on that club banner -- looks like we are going to get a REAL AMERICAN FLAG too - HOT DAWGS! we'll soon be holding our meetings in style - Old Glory on one side, our own Blue and Gold on the other.

In a letter from Tony Sivo, W3HWT, located at the U.S. Naval Reserve Radio School in Noroton Hts., Conn., he says: "As for hearing W3AQ up here, I don't know how I can miss. Every time I listen on 160 meters I hear Dave gabbing away and coming thru in fine style; and, the only other stations from back home that I hear on 160 are W3EUH & W3GAF. I'm always listening for em here."

CHATTER!!

Well! Well! the Army has at last claimed our friend Tony, W3IOW, who is temporarily located at Fort Slocum, N.Y. Tony is availing himself of the special radio course, and, we understand, he is soon to be transferred to the Canal Zone. Better send him his QSL you have c/o Ft. Slocum les!

And the same army has also grabbed off Bob Lanzoni, W3FBC. Bob is located now at Fort Dix, N.J., but expects to be transferred to the signal Corps soon.

ALSO, Dick, W3IEQ, has joined the NAVY for a six year period, also taking up radio, and is at the U.S. Naval Radio School. -- (Not the Naval Reserve School)

Joe Clinton, former member of D.V.R.A., has moved back into town and may be heard around 1980 Kcs operating W3LT/3. How about it, Joe, why not come back in with the gang??

Several of the boys are trying for the code proficiency certificate, while some of the others are trying for endorsement for faster copy. Good luck, boys!

A "thunder-screen", with an amazing repertoire of sound effects for theatrical stages has been produced by the use of a piece of ordinary window screen connected to a loud speaker and an electrical control console. Distant thunder is produced by striking the screen and controlling the amplified vibrations of the screen. Machine-gun fire is produced by drawing a stylus slowly across the screen in proper tempo. The "rip" of a sail or airplane wing is brought forth by a quick movement of the stylus across the screen. Cannon-fire is produced by the tap of a covered mallet, sound being cut off after the first contact. Practice in the use of the elaborate controls at the electrical console enables the operator to produce faithfully a large variety of effects.

Congratulations are now in order for a very FB store, the new home of Nidisco. Drop in fellows, and pay Bill a visit and give the new house the once-over -- A larger stock of merchandise will also be viewed.

Being on the subject of merchandise, let us remind you that our advertisers are helping to make this paper possible, so, be sure and pay OUR advertisers a visit when in the market for goods which are merchandised by them.

We have been advised by our Radio Supply dealers that it is becoming increasingly difficult to obtain delivery on merchandise, so if you fellows need anything, better get your order in, as it may take a while to get it.

So 'too bad we are not permitted to contact some of them foreign islands. One of our devout traffic hounds has been obliged to refuse traffic for the United States Marine Base in Trinidad, British West Indies!

Much interesting news and current information may be obtained by listening for W3AQ Official Broadcasts on 1980 Kcs daily at 7:45 PM EST.

Chick Anderson still makes that daily trek out to his mail box. He has not received anything from the Federal Communications Commission in the form of an amateur license yet, but he is hoping, and we are all hoping with him. We all know how you feel, Chick, we felt that way ourselves, and it HAS been a long time!

A.R.R.L. asks for pictures for that "Family Album" that comes out with the ORS/OPS bulletin quarterly. We have in W3AQ a station of which to be proud. It is OPS, has a swell appearance, and photographs well. Why not submit a photo for the album?

(An operator in the station makes a more desirable photo than just the equipment alone, and, we have a Director of Communications in charge of our station - why not?)

W3HWT also tells us that up there in the Naval Reserve school a rig of any kind is taboo, they are permitted to use the receiver, but no transmitter at all in the barracks. Tony uses a Hallicrafter "Sky Traveler", and says it is tops for that company.

BUCKY says, "Do you think you will ever get that other code proficiency certificate, WP???????"
Bye now - 73

WILBUR

STORAGE BATTERY CO.
1205 E. STATE ST.

Baldwin Battery
SALES AND SERVICE

MODEL AIRPLANES
AND SUPPLIES

Phone: 2-5633

RADIO SERVICE SHOP

1101½ HAMILTON AVENUE,
Trenton, N.J.

We specialize in servicing
And aligning AMATEUR
Communication receivers



See Dave
and Andy
if you have
trouble in
Your shanty

ANNOUNCING!
The
FIFTH ANNUAL OUTING AND
The Most Popular and Outstanding **EASTERN**

HAMFEST

SUNDAY, AUGUST 10, 1941 - 10⁰⁰AM TO?
(under cover if rain)

HELD AT THE TRENTON STATE FAIR GROUNDS
Trenton, N. J.

LOOK FOR FURTHER DETAILS IN SUBSEQUENT ISSUES OF D.V.R.A. NEWS.

WILBUR

STORAGE BATTERY CO

208 E STATE ST

Baldwin Battery

SALES AND SERVICE

MODEL AIRPLANES
AND SUPPLIES

Phone - 2333

BRADDO

SEEDVILLE

2100

1011 HAMILTON AVENUE

Trenton, N.J.

Specialties in electrical
and lighting materials
Communication receivers



See Don
and Andy
if you have
any
Your specialty

ANNOUNCING

THE 1941 ANNUAL CATALOG

The Most Popular and Outstanding Catalog

HAMMER

SUNDAY AUGUST 10, 1941 - 10:30 AM

(under cover of rain)

HELD AT THE TRENTON STATE FAIR GROUND
Trenton, N.J.

Specialties in electrical and lighting materials

WHOLESALE REPRESENTATIVE

EMERSON RADIOS
EMERSON RADIO TUBES
R.C.A. RADIO TUBES
EVEREADY BATTERIES
DEXTER WASHERS & IRONERS
WESTINGHOUSE MAZDA LAMPS
WHEELER FLUORESCENT LIGHTING
ROBBINS & MYER ELECTRIC FANS
HAMILTON BEACH APPLIANCES
TOASTWELL APPLIANCES
FITZGERALD APPLIANCES
STEAM-ELECTRIC IRONS
REMINGTON-RAND ELEC. SHAVERS
CORY COFFEE BREWERS
WESTON ELECTRICAL INSTRUMENTS
EDWARDS CHIMES
MUELLER ELECTRICAL SPECIALTIES
EMERALITE LAMPS
EAGLE ELECTRICAL SPECIALTIES
MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All!

Call or write:

LESTER H. ALLEN, W3CCO

704 QUINTON AVE.,
TRENTON, N. J. Phone: 8919

PARKER

Printing and Stationery Co.

214 So. BROAD ST., Trenton, N. J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, Etc.

Phone: 3-2784

Established 1912

SPIEZZLE'S

MEN'S AND BOYS' CLOTHING

145 S. BROAD ST., TRENTON, N. J.

(Second Door from Factory St.)

QUALITY AND
STYLE without
EXTRAVAGANCE

open nites till 8:00

PHONE: 3-5234

AMERICAN RADIO Co.

TRENTON'S LEADING RADIO STORE

25 EAST HANOVER ST.
TRENTON, NEW JERSEY

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

hallicrafters receivers STANCOOR Transformers
BLID RADIO PARTS • Meissner RADIO PARTS
RCA TUBES • • • • Philco & Emerson Radios
Taylor Tubes • • • • Portable Batteries • • •

Complete REPAIR & SERVICE Dep't.

OPEN NIGHTS

PHONE: 2-9183

RADIO **NIDISCO** PARTS

"RADIO FROM THE GROUND-UP"

147 North Warren Street, Trenton, N.J. - Phone: 4536

DISTRIBUTORS of:

RADIO PARTS..... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

Other Stores At:

658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

NEW JERSEY'S LARGEST

100%



D

V

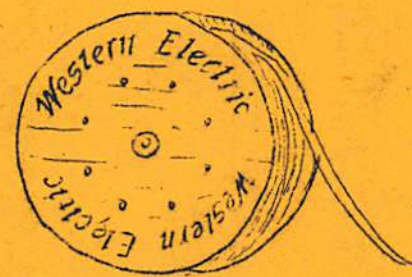
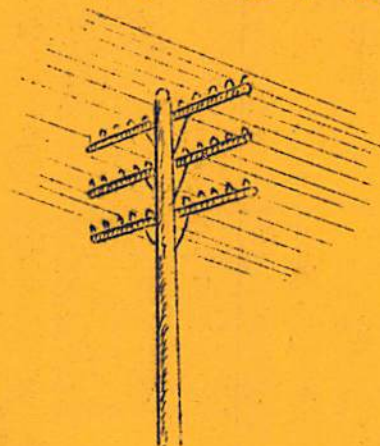
R

A

JUNE 1941

THE STORY OF

Western Electric



SERVICE OF SUPPLY
FOR THE
BELL SYSTEM

NEWS

VOL,
VI
NO,
4

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC.

W.A. Blumels

S.C.M. CORNER

Section Notes

The twenty-fifth anniversary banquet of the South Jersey Radio Association, to be held at the Hotel Walt-Whitman, Camden, New Jersey, on Saturday evening, June 21st offers an excellent opportunity for the boys to meet the members of our section, as well as having the time of your life.

Tickets may be purchased from Mr. John Terrell, W3FDF, 320 Belmont Ave., Haddonfield, N.J. as well as at the door.

We are sure you will have a good time at this shindig, our fellows always do!

Mentioned in last issue of the News were the traffic totals of some of our local boys, and this month adds another of our boys to the ranks of BPL, merited by the total of 112 deliveries by Bill Petty, W3HAZ -- FB Bill! To date, there have been three members of the D.V.R.A. who have achieved the BPL rating, W3BAQ - W3ZI - and W3HAZ; and, according to the latest release from headquarters, our club station, W3AQ, is slated to receive the Public Service Award.

At the present time, to my knowledge, there are only FIVE amateurs in Trenton who have achieved the W.A.S. award; W3AXU on ten meter phone, W3CCO on phone, W3EDP, W3HAZ on CW, and W3ZI on 80 meter CW. We know that this award is quite hard to obtain, but let's all get together and brush up on the states we need and make that W.A.S. award in some form or other. We do know that some of the fellows need only one or two states to fill the necessary quota. Also, it would be great if more of the fellows would get behind the other League activities such as those ORS/OPS parties, and the Sweepstakes contest and 160 meter W.A.S. party, as well as the A.R.R.L. QSO party; so let's put forth all our combined effort and help put our section on top in these activities.

The various traffic nets in Southern New Jersey section will take up their summer skeds starting June first. The 80 meter ORS net, on 3700 kcs, will meet twice weekly on Tuesday and Saturday evenings at 8:00 PM -- The forty meter ORS net will meet on 7280 kcs each Wednesday and Friday evening, and the OPS net will meet every Thursday evening on 1980 kcs at 7 PM. This will be the first time in the history of the Southern New Jersey section that these skeds have been in operation and we hope all the boys will get together and put these summer skeds to excellent use and make em a success.

Very nice progress has been reported by W3ABS and W3ACC in getting the five meter OPS net into operation, and W3CFB reports favorable on the 40 meter ORS net. From the way things seem to be shaping up on these two nets, it looks like both projects will very soon be a permanent activity in this section. Our thanks and appreciation to these fellows who are in charge of these projects for the enthusiastic effort they have put forth in the organizing of these nets.

Reports from the ORS/OPS members of the section must reach the office of the SCM by the 15th of each month in order that he can get the information into A.R.R.L. headquarters in time to get it into QST for publication. Your reports are requested whether or not you are ORS or OPS, as we must know what is going on in the section in order to maintain our column. Mail your reports to Lester H Allen, SCM, 704 Quinton Ave., Trenton, N.J., and 'till next month - 73 ----- W3CCO-SCM

ITEMS OF INTEREST

Those of our members, and others who want to get a little more code practice, may still avail themselves of the free class conducted at club headquarters on Monday evenings at 8:00 PM under the direction of instructor William Petty, W3HAZ. If you are interested in becoming a member of this class, just contact Bill, and he will place you. It is only necessary for you to furnish your own headset as there is now a shortage of headphones at the club.

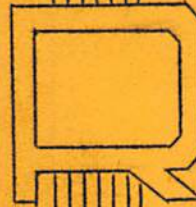
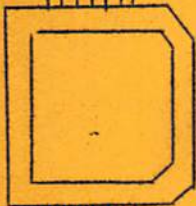
Several of the members are trying for their code proficiency certificate, and others are practicing for endorsement for faster copy -- That code class will help you greatly in attaining this goal.

And don't forget, the code class will also help some one to win those 100 QSL cards to be awarded by the club to the first SWL member who obtains his or her amateur operator/station license class B taking the examination AFTER MAY 14th.

Brother Kelly, W3CKY now has a brand new Onan 350 watt AC gasoline-generator, which, we understand, will make it's bow at field day operations -- or we should have said "Made it's bow at field day operations!"

W3JMX is a brand new call located in Washington D.C. - Lt. Hoyt S. Scott.

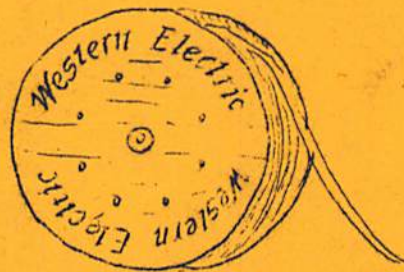
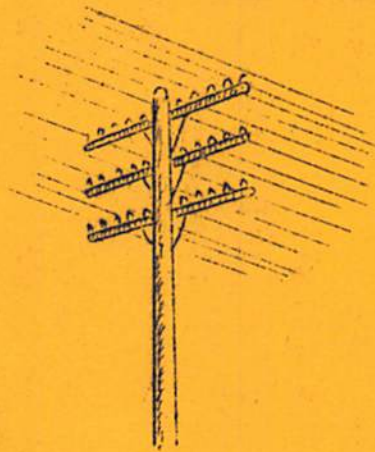
100%



JUNE 1941

THE STORY OF

Western Electric



SERVICE OF SUPPLY
FOR THE
BELL SYSTEM

NEWS

VOL,
VI
NO,
4

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC.

W.A. Blumels

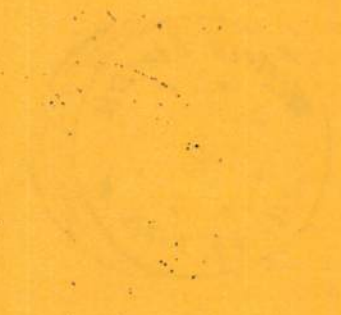
BY ENC 3000

THE STORY OF

WATERWAYS

1910-1915

WATERWAYS
SYSTEM



NEW

D.V.R.A. OFFICERS

Lester H Allen	President	W3CCO
Leslie R Yoder	Vice Pres	W3EED
William Petty	Secretary	W3HAZ
W.R. Tomlinson	Asst Secy	W3GCU
William Hannah	Treasurer	W3EUH
Charles Moore	Sgt at Arms	W3???

DIRECTORS

Chairman of the Board	Lester H Allen
Director of Activities	Leslie R Yoder
Director Spec Features	Theo. Torretti
Director of Publicity	William Petty
Director of Publication	W.R. Tomlinson
Director of Finance	William Hannah
Dir. Communications	Dave Nabotovski

D.V.R.A. NEWS STAFF

Editor in Chief	W.R. Tomlinson
Associate Editor	Wm. A. Burroughs
Editor of Art	Wm. A. Blumell
Business Manager	Theo. Torretti
Circulation Mgr	W.R. Tomlinson
Printing by	Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 623 East Brown St., Trenton, N.J. This amount covers the cost of mailing for the period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, sending the necessary amount and he will mail your copy as it is published.

W 3 A Q

All members, or other operators who wish to operate the club station MUST show their license, also display same in the operating room while operating the transmitter. It is also MANDATORY that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and presence of the Director of Communications during operation and he will sign the station over and on as required by the F.C.C. regulations.

EDITORIAL

Only a few days ago our National ARRL Field Day was held, and observed by many of the Fraternity; Organized Amateur clubs Individual Amateur groups, and individual Amateurs themselves. With the several types of portable-self-powered emergency equipment which were in evidence on the many fields participating, it is quite hard to foretell just how the final outcome will total up, but, judging by the enthusiastic activity hereabouts, it may well add up to a tidy sum total to our way of deduction.

Regardless of what that total may tally to, the whole sum and substance of the test points to one thing; that the Amateur Fraternity has availed itself of another great opportunity of proving themselves better prepared for delivering the Communications service which will be required of them should any emergency, national or local arise, wherever or Whenever it may occur.

We hold no hesitancy in saying that amateur radio can and will deliver the goods if and when it may be called upon to do so during periods of dire need.

We stand ready to render our assistance where and when it may be needed.

W3GCU

From discussions overheard, it appears that there is still some misunderstanding in some minds as to the meaning of F.C.C. order number 76A. We reprint herewith the interpretation given by A.R.R.L. Headquarters:

"TO ALL RADIO AMATEURS: The League today secured the passage of special order number 76A* by the Federal Communications Commission, extending for an additional six months, or to September 30, 1941, the length of time an amateur may continue to operate his station even though his license has "expired". This is with the provision that the expiration of the amateur's license occurred on or after July 1, 1940, and that the amateur has made application for renewal in the proper form and has complied with Order Number 75 with respect to citizenship and fingerprint data

IN OTHER WORDS:

If the date of expiration of your amateur operator and/or station license is July 1, 1940, or later, and

If you filed, or do file, renewal application forms with the Commission prior to expiration, in the proper manner, and

If you returned the questionnaire form, proof-of-citizenship data and fingerprint card to the Commission,

THEN, even though the expiration date of your license has been reached, you may still continue to operate, on the authority of this extension secured by A.R.R.L., until you hear further from the Commission, but in no event beyond September 30, 1941.

By that time you almost certainly will have received word from the Commission concerning your licenses. If you have not heard from them by the last week in September, write us immediately so that we can take the matter up for you at Washington.

The Commission's licensing section is extremely busy, but hopes to be caught up shortly. New licenses and modifications are being handled ahead of renewals."

This data dated March 4, 1941, at Headquarters in West Hartford, Conn, and bears the Signature of K.B. Warner, Mngng. Sec'y.

* See April QST for complete text.

PERSONALS

Steve Csorga just recently went to the Altar and changed his YL to XYL. Congrats Marge and Steve, may all your troubles be small ones!

Incidentally fellas, Marge is giving Steve a race for first honors on learning code, and, we wonder which one will be the first to make real use of the NC-200

that Steve bought just before!

And -- our Director of Activities is now the proud papa of a brand new Jr. Op. Congrats to you Mr, and Mrs. Leslie R. Yoder,

D.V.R.A. OUTING and HAMFEST

All arrangements are about completed for the annual outing and hamfest of the Delaware Valley Radio Association, which will be held again this year at the State Fair Grounds at Trenton, on Sunday August 10th. This is an outdoor affair and there will be plenty to eat and drink as usual. Ofcourse there will be the usual baseball game between the second and third districts, as well as the morning game between the ORS/OPS; this game will be only seven innings.

There has been a brand new dance floor erected at the grounds, which, together with the excellent orchestra that will be on hand, should prove to provide plenty of enjoyment for those who wish to dance on this new open-air floor.

Special committees will take over the various activities of the day, and under the direction of General Chairman, Charles Kayser, W3IOK, this affair is expected to be the biggest event of it's type for the season in the East.

Tickets are only ONE BUCK FIFTY each, and everything is included in this one admission. The tickets may be obtained from William Hanna, W3EJH, 904 Edegwood Ave., Trenton, N.J. -

PHOTOS TRANSMITTED BY FM!

Transmission of photographs by the Armstrong frequency modulation system has been accomplished, with almost perfect fidelity of reproduction. A 25 watt mobile transmitter has been built to enable reporters to phone stories, and photographers to transmit pictures by FM within a range of approximately twelve miles at ground level and about 45 miles if the transmitter or receiver is elevated five hundred feet. This method has cut the time of shooting, developing, transmitting, receiving and engraving of a photo to approximately forty minutes, or about one-third the time required originally. The test transmission took place over a distance of ninety one miles, eighty seven miles of which were covered by frequency modulated signals.

We present herewith, the first chapter of a story to be presented in this paper. A story dealing with the Service of Supply for the Bell System:

CHAPTER ONE

THE STORY OF WESTERN ELECTRIC

When you pick up your telephone, an unseen organization comes to your service; the men, women, and facilities of your telephone company, whose single purpose it is to put through your call. Back of that organization is another which furnishes its equipment. That organization is -- Western Electric Company, one of the family of Bell System companies and the system's "Service of Supply."

Half of the telephones in the world are in the United States. To Americans, telephoning has become second nature. Every twenty four hours the hold eighty-five million conversations by wire. In matters large and small, routine or emergency, they have come to take for granted that they will get the best possible service.

The quality of that service is based on the quality of the equipment, and this is the responsibility of Western Electric to the Bell System and through it to the nation.

Your telephone and the millions like it represent only about five per cent of the equipment utilized in giving service. Beyond it stretches a vast network capable of joining it to any one of all the others, a network of wire and cable interlaced through city and countryside, underground and overhead, traversing the nation from coast to coast and employing every resource known to science for transmitting the spoken word clearly and safeguarding it against interruption.

At work operating this equipment and watching over it are the trained forces of the telephone companies: thousands of operators wearing headset and handling cord and plug; linemen with climbing spur and safety belt, accompanied by truckloads of supplies ranging from reels of wire to the splicer's wax-pot; engineers with slide-rule and meter, desk workers with typewriter, pen, ink and paper; and many others, each using the particular implements of his calling.

To bring forth all this apparatus, all these tools and materials whether from its own factories or from others, is one

duty of the Service of Supply. To deliver them when they are needed, and in any quantity they are needed, and where they are needed, is another. To install and make ready for operation the intricate central office equipment is a third.

That one organization should be charged with such an undertaking for a nationwide industry is a striking circumstance. It has come about by a process of evolution in which other methods were tried and this one found the best.

The first telephones were made by Alexander Graham Bell and his assistant, Thomas A. Watson, in Boston, where in 1876 the inventor had transmitted the first words ever uttered intelligibly by wire. The "novel toy" which has since altered mankind's way of life the world over came into use slowly.

Fifteen months after Bell had been granted his original patent the whole country had only two hundred thirty four telephones. They were connected one with another by direct wire, ten or fifteen miles long at the most, and it was possible to talk only with the one at the other end of that wire.

Here and there more instruments were added until as many as twenty were on a single line. Then the first switchboards built and a telephone could be connected with any one of its group as, on a worldwide scale, you can today be linked with any one of more than thirty six million.

In the next installment, which will appear in next month's issue of D.V.R.A. NEWS, this story deals with the problems of "Adequate Supply" and "Standardization of equipment." This story becomes more interesting as it progresses - insure your receiving your copy by subscription, see page one for this information.

WINNER!

PALEY AMATEUR RADIO AWARD!

The Columbia Broadcasting System has announced the winner of the Paley Amateur Radio award as Mr. Marshall H. Ensor, W9BSP, of Olathe, Kansas, for his outstanding work in teaching code by radio over the past ten years.

Presentation of the award trophy, and a testimonial luncheon were tendered Mr. Ensor on June second at the Waldorf-Astoria hotel, New York City.

CONGRATS! BROTHER ENSOR, W9BSP!!!

S.C.M. CORNER
Section Notes

The twenty-fifth anniversary banquet of the South Jersey Radio Association, to be held at the Hotel Walt-Whitman, Camden, New Jersey, on Saturday evening, June 21st offers an excellent opportunity for the boys to meet the members of our section, as well as having the time of your life. Tickets may be purchased from Mr. John Terrell, W3FDF, 320 Belmont Ave., Haddonfield, N.J. as well as at the door.

We are sure you will have a good time at this shindig, our fellows always do!

Mentioned in last issue of the News were the traffic totals of some of our local boys, and this month adds another of our boys to the ranks of BPL, merited by the total of 112 deliveries by Bill Petty, W3HAZ -- FB Bill! To date, there have been three members of the D.V.R.A. who have achieved the BPL rating, W3BAQ - W3ZI - and W3HAZ; and, according to the latest release from headquarters, our club station, W3AQ, is slated to receive the Public Service Award.

At the present time, to my knowledge, there are only FIVE amateurs in Trenton who have achieved the W.A.S. award; W3AXU on ten meter phone, W3CCO on phone, W3EDP, W3HAZ on CW, and W3ZI on 80 meter CW. We know that this award is quite hard to obtain, but let's all get together and brush up on the states we need and make that W.A.S. award in some form or other. We do know that some of the fellows need only one or two states to fill the necessary quota. Also, it would be great if more of the fellows would get behind the other League activities such as those ORS/OPS parties, and the Sweepstakes contest and 160 meter W.A.S. party, as well as the A.R.R.L. QSO party; so let's put forth all our combined effort and help put our section on top in these activities.

The various traffic nets in Southern New Jersey section will take up their summer skeds starting June first. The 80 meter ORS net, on 3700 kcs, will meet twice weekly on Tuesday and Saturday evenings at 8:00 PM -- The forty meter ORS net will meet on 7280 kcs each Wednesday and Friday evening, and the OPS net will meet every Thursday evening on 1980 kcs at 7 PM. This will be the first time in the history of the Southern New Jersey section that these skeds have been in operation and we hope all the boys will get together and put these summer skeds to excellent use and make em a success.

Very nice progress has been reported by W3ABS and W3ACC in getting the five meter OPS net into operation, and W3CFB reports favorable on the 40 meter ORS net. From the way things seem to be shaping up on these two nets, it looks like both projects will very soon be a permanent activity in this section. Our thanks and appreciation to these fellows who are in charge of these projects for the enthusiastic effort they have put forth in the organizing of these nets.

Reports from the ORS/OPS members of the section must reach the office of the SCM by the 15th of each month in order that he can get the information into A.R.R.L. headquarters in time to get it into QST for publication. Your reports are requested whether or not you are ORS or OPS, as we must know what is going on in the section in order to maintain our column. Mail your reports to Lester H Allen, SCM, 704 Quinton Ave., Trenton, N.J., and 'till next month - 73 ----- W3CCO-SCM

ITEMS OF INTEREST

Those of our members, and others who want to get a little more code practice, may still avail themselves of the free class conducted at club headquarters on Monday evenings at 8:00 PM under the direction of instructor William Petty, W3HAZ. If you are interested in becoming a member of this class, just contact Bill, and he will place you. It is only necessary for you to furnish your own headset as there is now a shortage of headphones at the club.

Several of the members are trying for their code proficiency certificate, and others are practicing for endorsement for faster copy -- That code class will help you greatly in attaining this goal.

And don't forget, the code class will also help some one to win those 100 QSL cards to be awarded by the club to the first SWL member who obtains his or her amateur operator/station license class B taking the examination AFTER MAY 14th.

Brother Kelly, W3CKY now has a brand new Onan 350 watt AC gasoline-generator, which, we understand, will make it's bow at field day operations -- or we should have said "Made it's bow at field day operations!"

W3JMX is a brand new call located in Washington D.C. - Lt. Hoyt S. Scott.

NEW JERSEY'S LARGEST

658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

Other Stores At:

RADIO PARTS... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

DISTRIBUTORS of:

147 North Warren Street, Trenton, N.J. - Phone: 4536

"RADIO FROM THE GROUND-UP"

RADIO NIDISCO PARTS

OPEN NIGHTS

PHONE: 2-9183

Complete REPAIR & SERVICE Dept.

hollow rechargers
BJD RADIO PARTS
RCATUBES
Jaylor Tubes
STANCOOR Transformers
Messmer RADIO PARTS
Philco & Emerson Radios
Portable Batteries

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

25 EAST HANOVER ST
TRENTON, NEW JERSEY

TRENTONS LEADING RADIO STORE

AMERICAN RADIO Co.

WHOLESALE REPRESENTATIVE

EMERSON RADIOS

EMERSON RADIO TUBES

R.C.A. RADIO TUBES

EVEREADY BATTERIES

DEXTER WASHERS & IRONERS

WESTINGHOUSE MAZDA LAMPS

WHEELER FLUORESCENT LIGHTING

ROBBINS & MYERS ELECTRIC FANS

HAMILTON BEACH APPLIANCES

TOASTWELL APPLIANCES

FITZGERALD APPLIANCES

STEAM-ELECTRIC IRONS

REMINGTON-RAND ELEC. SHAVERS

CORY COFFEE BREWERS

WESTON ELECTRICAL INSTRUMENTS

EDWARDS CHIMES

MUELLER ELECTRICAL SPECIALTIES

EMERALITE LAMPS

EAGLE ELECTRICAL SPECIALTIES

MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All

Call or write:

LESTER H. ALLEN, WESCO

704 QUINTON AVE.,

TRENTON, N.J. Phone: 8919

DARKER

Printing and Stationery Co.
214 So. BROAD ST., Trenton, N.J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, etc.

Phone: 3-2784

Established 1912

SPIZZLE'S

MEN'S AND BOYS CLOTHING

145 S. BROAD ST., TRENTON, N.J.

(Second Door from Factory St.)

**QUALITY AND
STYLE** without
EXTRA CHARGE

open nites till 8:00

PHONE: 3-5234

SUNDAY, AUGUST 10, 1941 - 10:00 AM to 2
(under cover if rain)
HELD AT THE TRENTON STATE FAIR GROUNDS
Trenton, N. J.

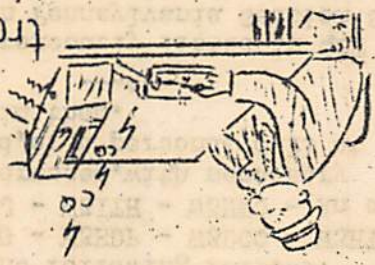
HAMFEST

The Most Popular and Outstanding EASTERN
FIFTH ANNUAL OUTING AND
ANNOUNCING!

RADIO SERVICE SHOP

1101 1/2 HAMILTON AVENUE,
Trenton, N.J.

We specialize in servicing
And aligning AMATEUR
Communication receivers



See Dave and Andy if you have trouble in Your shanty

WILBUR STORAGE BATTERY CO

1205 E. STATE ST.
Baldwin Battery
SALES AND SERVICE
MODEL AIRPLANES
AND SUPPLIES
Phone: 2-5633

STRAYS (cont)

Which interesting and valuable information may be obtained by listening to the various A.R.R.L. Official Broadcasting stations: For your information, here are some of the stations and their schedules:

W1AW - ARRL Headquarters - Skeds in QST.
 W3AQ - D.V.R.A. Club station skeds every evening at 7:45 EST 1980 Kcs.
 W3GCU - Each Tuesday, Thursday and Saturday MORNING at ONE AM EDT on 3700 Kcs.

There are still some QSL cards unclaimed at W3GCO for the following fellows:

W3ITL - W3JLD - W3BFD - W3DQ - W3HTP
 W3HTS - W3HTJ - W3ITH - W3HWO - An envelope, self addressed, with necessary postage affixed, or a personal call at W3GCO will claim them.

W3HPE was erroneously listed in QST under the Eastern Pennsylvania Section SS scores. Bill was actually the high scorer for Southern New Jersey Section, and should have been listed as such. This matter has been taken up with headquarters by our SCM, and we believe, will be corrected in a later issue of QST.

Has anyone heard Joe Clinton, who was a former member of D.V.R.A.? Joe is back in Trenton, operating W3LTL/3 around 1980 Kcs.

SUGGESTION

In our club station, we have both equipment and station of which to be proud -- A.R.R.L. has requested pictures of various stations for publication in QST; why not submit photos of W3AQ??? What say? WP?

As you have been advised by your editor it requires approximately 10,000 words to make up a presentable sized issue of this paper every month; to do this, we must have more contributions from our members, it is almost impossible for one or two members to DIG UP this much material each month, 10,000 words is a lot of material in any man's language. What say, fellas, pass the dope along for your paper.

The Trenton Radio Society held a meeting on Thursday evening June 5th. We extend our sincere wishes for every success.

WANTED or FOR SALE

Breting "9" Good Condition \$25.00
 Contact W3JX Ham. Sq., N.J.
 Bug Excellent Shape \$2.50
 Contact W3HAZ Trenton, N.J.

Speech Amplifier & 20 Watt modulator complete with power supply & double button mike
 Contact W3CHO Princeton N.J.

100 watt beam power amplifier-modulator 70 watts self-bias, 100 watts fixed bias, complete with power supply. VI-3 output-mod. transformer.
 Contact W3CHO Princeton N.J.

WANTED:
 POWER TRANSFORMER, 2500 Volts (DC after filter) at 1000 mls
 Contact W3AQ Trenton N.J.

POWER TRANSFORMER: 1500 Volts (DC after filter) at 500 mls.
 Contact W3GCU Trenton N.J.

"LINE NOISE"

A short time past, we have been told, a member of the club decided to pay a visit to Brother Bill Hannah; so, he betook himself to the car and drove out to the residence of Mr. Hannah, and upon arrival decided to try and oreep up on Bill and see just what he was doing at the moment so he did, and, boy, oh boy, he peeped into the back door, and BILL WAS WIPING THE DINNER DISHES!!!

INDUSTRIAL ODDITIES

Brazilian scientists have developed a plastic called "cafelite" from surplus coffee and it has such "great strength" & excellent physical qualities "that it could be used for airplane components if not for the manufacture of complete airplanes, Lord Forbes said. Lord Forbes, chairman of the Nat'l General Export Merchants Group, was a member of the recent British economic mission to S. America, headed by Lord Willingdon. A factory for the manufacture of cafelite articles is near completion, Lord Forbes said.

(RCA Radio Service News)
 BUCKY SAYS: "It pays to advertise, but not via BCI" Bye now!

AARS HAMEST
 By E.G. RASER
 W3ZI -- WINE
 N.J. STATE
 RADIO AIDE.
 From Second Corps Area Radio Amateur
 Bulletin

The third annual N.J. State hamfest and get-together was held in Trenton again this year, on Sunday April 20th. Altho the attendance was not as great as last year's event, the interest and general good fellowship was in high order. Some 26 members attended from all over the state, including our distinguished XI, W2MIX/WLNG SRA of ENY, who reported on activities in that net. Representation from SNY-40 was excellent. One member, W2MKN, from Maplewood represented the N.J. 160 net. Ed Raser, W3ZI/WINE opened the meeting and acted as master of ceremonies. Vic Braidwood, State NGS, gave an excellent talk on "procedure" with added comments on N.J. RO activity, which is running high this year. Other speakers included W3GCO, SCM for SNT Section ARRL; W3EFM, W2MAX, NCS N.J. AO; and W3HKO, ex member of the Byrd Antarctic Expedition II. A fine turkey dinner was served at 5 PM. W2MLW and W2NGY presented the SRA, W3ZI, with a swell cartoon plaque depicting humorous events, entitled "Round the Net". This was very much appreciated by your SRA, who has been daubed "The Daddy of our Net".

We get it from good authority that WAVE/4, our own Sammy Kale, blew one of his filter condensers out, and that his sked with W3ATF has been temporarily disrupted. Tough luck, Sam!

W3GCO, Ed Kerr, has been transferred to the U.S. Naval Radio station at Manasquan N.J. as of May 1st, and is now pushing out (and we mean PUSHING OUT) RF from that point.

Get your dough together, boys, there is soon to be another auction sale held at club headquarters!

The Delaware Valley Radio Association enjoys 100 percent affiliation with the American Radio Relay League -- We want that A.R.R.L. Honor Certificate for 100% Code Proficiency Certificate holders. Let's get going fellows, don't forget there is an A.R.R.L. qualifying run on June 17th at 9:30 PM EST. Even if you have a CRR,

Why not try this run and see if you can get your endorsement for faster copy?

Our Director of Communications has received the QSL card from K4EIL, P.I., confirming contact with that station and W3AQ.

Congrats are in order for Ed Raser, W3ZI, on his 25 year membership in ARRL.

Tony Constantini, W3IOW has been transferred to Panama, May 17th, as operator in Field Service.

And Bob, W3RBC, is now located at Fort Jackson, South Carolina.

By a turn of good luck, Ed, W3ZI, was able to attend our club meeting on May 14

Oh yes! Ed has changed his position, he is now working for the War Department, Signal Corps Labs., Fort Monmouth, N.J. Ed sends in a copy of "S6RAB", from which some news will be gleaned for our next issue. Thanks Ed.

It is becoming extremely difficult to obtain radio parts and material from the supply houses due to our National Defense program, so -- if you need anything, better order it now!

and don't forget, some of our advertisers handle merchandise other than radio merchandise, so when you need any of this material, pay our advertisers a visit and they will see that you are satisfied.

Bill Latham, W3HPF, now has his Commercial 2nd Class Radiotelephone Operators' Ticket. Bill works at A.T. & T.

W3JL, who, we have been advised, has a very broad signal, has been causing quite a bit of QRM on the AARS net, due to long "test" periods, according to some of the AARS operators. - Careful!, the FCC is doing quite a bit of monitoring lately!

Chick Anderson, who, for thirteen weeks paid daily tribute to his mail box, looking for a "yes or no" from the FCC, is now the happiest fellow in these parts; he did his "peep" the other day, and, Lo! and Be-hold!, an envelope marked "Federal Communications Commission" -- so, with shaking jaws he ripped open the missive -- Chick is now known in these parts, and on the air as W3JX. Give him a buzz, hes on 80 CW.

the headquarters for all research and original development work by the Company and for its complete range of patent and licensing activities.

The new organization, now in the blueprint stage, is being set up with a three-fold purpose:

- 1 - To promote the growth of radio as an art and as an industry.
- 2 - To meet the expanding demands of National defense.
- 3 - To facilitate the creation and development of radio products and services which will provide new business and new spheres of employment for the post-war period of tapering industrial defense production.

Under the "impetus" of emergencies such as the all-out defense construction program, according to an announcement by the large radio firm, intensive research in industry leads to the creation of new products, processes, and instrumentalities; but further research and development are required to render them adaptable to peacetime needs of the public.

The building is scheduled to be completed before the end of the year. RCA executives said the aim of the firm was to equip its research staff with the best and most modern facilities and equipment available.

More than 150 manufacturers in radio and other fields are now licensed under the patents of RCA. The new laboratories will continue to make inventions available to competitors and others, and to cooperate with them in the maximum development of the radio art.

Otto S. Schairer, former vice president in charge of the patent department, will be vice president in charge of RCA Labs, which will include the patent department. Ralph R. Beal, research director, will have general direction of all research and original development. Dr. C. B. Joliffe, who has been in charge of the RCA frequency bureau, will direct and coordinate the broad engineering policies.

Other scientists who will be based at the laboratories include E. W. Engstrom, Dr. V. K. Zworykin, B. J. Thompson, Dr. Harold H. Beverage, Arthur Van Dyck, and the chief engineers of the RCA affiliated companies.

General supervision over the research activities will also be exercised by an executive board consisting of Messrs. Sarnoff, chairman; Schairer, Beal and Joliffe, and the executive heads of the RCA companies; G. K. Throckmorton, RCA Mfg. Co. Inc.; Niles Trammell, Nat'l. Broadcast- ing Co.; W. A. Winterbottom, RCA Com's. Inc. & C. J. Pannill, Radio Marine Corp. of America.

ITEMS OF INTEREST

(continued)

While visiting at Mt. Penn, near Reading Pa., W310U, working portable on 2 1/2 meters, worked Bob Elmer, W3BZJ, in Glenside, Pa., a distance of forty-five miles on Sunday May 11th. Contact both ways was very RB.

W3HAZ also heard W3BZJ, in Glenside on a DK-2 at club headquarters about 11 PM on Wednesday evening May 14th, at which time the two and one-half meter band seemed to be very good.

There is usually a 2 1/2 meter gso between W3HAZ at club headquarters, and portable mobile W310U as IOU leaves for the homeward journey after the meeting. So far this gso has been successful over quite a long distance.

We are very sorry that we do not have anything from our Regional Emergency Co-ordinator, W3BAQ, but Ted has been so busy getting ready, and collecting material and equipment for field day that he was unable to find time enough to get the dope together in time for this issue, but promises to have some reading matter for you in the next issue.

W3GCU has started work on a brand new idea in this section for inaugurating a message center to collect traffic from the boys in camp, also the families of these boys, as well as anyone else who wishes to send a message to relative or friend. As soon as this idea gets to working full tilt, it will be described in detail in an article in QST.

WANTED SERVICEMAN WANTED

Young man wanted for radio service work, salary and steady position. Apply Mr. Kulp, c/o Hurley-Tobin Co., Trenton, New Jersey.

NEW RCA LABORATORIES TO BE BUILT AT PRINCETON N. J.

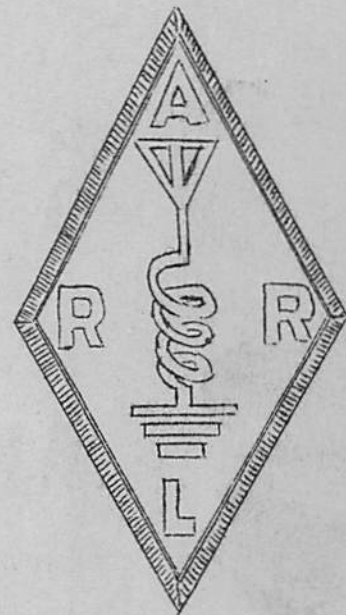
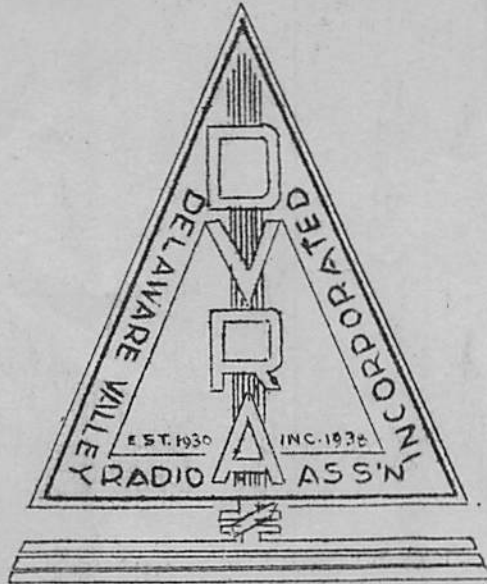
Will promote Radio as both an Art and an Industry with Special Attention to the Needs of National Defense.

Production for peace as well as defense is the program of the new radio research laboratories - the world's largest - which the Radio Corporation of America will build at Princeton this year.

RCA president, David Sarnoff has announced that "RCA Laboratories" will become

100%

JULY 1941



EMBLEMS OF PUBLIC SERVICE

NEWS

VOL,
VI
NO,
5

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC.

W.A. Blumelo

1891 Y 256



LIBRARY OF THE UNIVERSITY OF TORONTO

NEWSPAPER

PRINTED AND PUBLISHED BY THE UNIVERSITY OF TORONTO PRESS

D.V.R.A. OFFICERS

Lester H Allen	President	W3CCO
Leslie R Yoder	Vice Pres	W3EED
William Petty	Secretary	W3HAZ
W.R. Tomlinson	Asst Secy	W3GCU
William Hannah	Treasurer	W3EUH
Charles Moore	Sgt at Arms	W3???

DIRECTORS

Chairman of the Board	Lester H Allen
Director of Activities	Leslie R Yoder
Director Spec Features	Theo. Torretti
Director of Publicity	William Petty
Director of Publication	W.R. Tomlinson
Director of Finance	William Hannah
Dir. Communications	Dave Nabotovski

D.V.R.A. NEWS STAFF

Editor in Chief	W.R. Tomlinson
Associate Editor	Wm. A. Burroughs
Editor of Art	Wm. A. Blumell
Business Manager	Theo. Torretti
Circulation Mgr.	W.R. Tomlinson
Printing by	Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 623 East Brown St., Trenton, N.J. This amount covers the cost of mailing for the period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, sending the necessary amount and he will mail your copy as it is published.

W 3 A Q

All members, or other operators who wish to operate the club station MUST show their license, also display same in the operating room while operating the transmitter. It is also MANDATORY that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and presence of the Director of Communications during operation and he will sign the station over and on as required by F.C.C. regulations.

EDITORIAL

With field day over and gone we now turn our thoughts to other diversions; diversions that might make us useful as amateur radio operators. What could be more useful at this time than to be as proficient in code copying as we can possibly make ourselves. There may come the time when we will be called upon to demonstrate our worth to our country. To demonstrate that worth proficiently we must be proficient operators, capable of copying a message with perfect copy in a minimum of time.

We have been availed of the opportunity to gain useful copying speeds in more ways than one. The A.R.R.L. practice periods and proficiency runs, club study classes, commercial copy, all afford us the opportunity of bringing our copy-speed to the stage, where, if we are asked to participate in national defense assignments we could do so without slightest fear of any complaint with our work.

That time may not be as far distant as some believe, so, let's get going, boys, bring your copy-speed to the stage where we can make ourselves USEFUL when called upon.

W3GCU

"AMATEUR RADIO PREPARES FOR EMERGENCY"

"Your transmitter has been completely wrecked by a falling chimney. How long will it take you to build another transmitter from an old broadcast receiver parts?" This is just a sample of the questions that are being asked of radio amateurs.

Aware of the grave possibility that it may be called upon to help defend our country, the amateur fraternity is preparing itself for action. Several different radio organizations are drilling over the air.

"Simulate destruction of your main rig. Set up your emergency equipment and report back on the air as soon as you can," was the command that went out to members of one group. Recently when a club of amateurs assisted in night-time army maneuvers, one operator was asked how much time he would need to get his portable station into operation in the field, without even a match to help him see. "Six minutes is the average time," he replied. The officers were skeptical but in less than that time he had opened up his suitcase set, hooked up a six-volt storage battery, stuck a ground stake in the ground, slung an antenna to a tree, and was sending a call to the control station fifteen miles away.

The Army Amateur Radio System that is affiliated with the Army Signal Corps, the Amateur Emergency Corps of the American Radio Relay League are networks of amateur preparedness.

In time of war thousands of trained members of these nets would be taken in by the military services for active duty and many others would be detailed to guard various frequencies to detect enemy and spy messages. Restrictions governing amateur radio are being tightened and today all owners of amateur transmitting stations must be fingerprinted and show proof of citizenship. Communication with stations outside the United States and its possessions is no longer allowed.

On several recent occasions zealous amateurs copied code messages that didn't seem to make sense and forwarded them to the Federal Bureau of Investigation. These messages, however, turned out to be secret code practice messages of the Army Amateur net, which sometimes uses an obsolete cipher for training. Army amateurs use Z signals instead of Q abbreviations and they are trained to handle messages using army procedure. Upwards of 2000 amateurs

are members of the system, which is controlled by an officer in the signal Corps message center in Washington D.C. The national army network is divided into 9 corps area networks each under the corps area signal officer, and these in turn are made up of state nets. Each state net consists of a number of local networks that are comprised of groups of amateur stations.

The Army Amateur network is not a part of the military service. To join it one must have a reliable transmitter, be capable of copying at least fifteen words per minute and conduct oneself and his or her set properly. There is no physical examination or age limit. A number of radio phone operators are members of the net but code predominates and is preferred because code operators are of more value to the military service and the code carries farther and is easier to copy through interference. Several practice drills are held over the air each week. The army amateur group is fifteen years old and has long been recognized and utilized by the American Red Cross. It is still the official communication system for that organization. In time of emergency any member station in the net has authority to handle emergency radio traffic on an army frequency authorized for army use only. During several major emergencies members of army networks have performed very important duties.

Like the A.R.R.L., the army nets handle and relay messages free of charge upon request, although the messages cannot be of a commercial nature. Their over-seas relay stations are often busy with traffic for Hawaii, Guam, and the Philippines.

One type of cipher sometimes used by the army radio amateurs involves the use of a key word or phrase, from which is derived a numerical key. If we assume the "Litteral" key to be "PUBLICITY" (nine letters) these letters are numbered from 1 to 9 accordance with their alphabetical sequence. The first letter of the alphabet which appears in the key word, is numbered 1, the next 2, etc. In case two or more like letters appear in the key word, they are given consecutive numbers, thus:

P U B L I C I T Y
6 8 1 5 3 2 4 7 9

The plain text is written underneath the numerical key, in lines extending the whole length of the key, as follows:

P U B L I C I T Y
6 8 1 5 3 2 4 7 9

PUBLICITY
681532479
NOTIFY YOU
NET CONTROL
STATION
BY RADIO EXACT
ACT HOUR AND
MINUTE WHEN
THIS MESSAGE
WAS COMPLETELY
DECIPHERED
BY YOU

The columns are now transcribed, from top to bottom, in numerical order; column 1 first, then column 2, etc., and at the same time the cipher text is divided into groups of five letters, thus:

TESRT ITGLI YYOTI UTSAE
EFCAD OUIWT HUYN I OREMS
LRITT AHNHE EPONR OBADE
SMEBO TOEAW ECYEO NLYCM
NAPCY URNKN HSODD

The cipher message is now ready for transmission.

To decipher the cryptogram, the receiving operator divides the total number of letters in the cryptogram (95) by the number of letters in the key word (9). The result is 10, with 5 as a remainder. On cross section paper, he writes the key word, using one square for each letter, deriving the numerical key as explained above. Underneath, he outlines a figure containing 9 columns. 9 columns of ten squares each gives only 90 squares, so he must add 1 square to the bottom of the first 5 columns, in order to have one square for each letter of the cryptogram. He inscribes the first 11 letters of the cryptogram in column 1, from top to bottom; the next 10 in column 2, and so on until the entire cipher text has been inscribed. This will completely fill the figure, and the message needs only to be re-written according to word lengths. It reads: NOTIFY YOUR NET CONTROL STATION BY RADIO EXACT HOUR AND MINUTE WHEN THIS MESSAGE WAS COMPLETELY DECIPHERED BY YOU.

The American Radio Relay League is the oldest of all amateur groups and in more than 100 emergencies since 1914, including storms, earthquakes, and floods, member-stations have rapidly transmitted and delivered important messages. During the Los Angeles flood of 1938, amateur operators handled traffic for seventy two hours for police, the telegraph companies, and for other agencies. Newspapers were served with news via the amateur network

and the first pictures of the flood to reach eastern newspapers were transmitted by radio from an amateur station. The A.R.R.L. has a number of transcontinental trunk lines for handling traffic and these are served by feeder lines that reach all parts of the country. In the last several years a number of local amateur emergency corps have been organized inside the membership. Beside main transmitting equipment, many emergency corps members have portable equipment, operated by storage batteries or small gasoline-driven generators, that can be transported by car or on foot to difficult locations. One emergency group in Southern California has 300 members who are building a master control station for handling traffic between the small portable sets.

In Los Angeles, the Major Disaster Emergency Council, which is a behind-the-scenes organization that would take over the handling of relief and public safety in event of major disaster, has enlisted sixty amateur operators who with their portable equipment are ready to handle emergency communication in time of need. The system consists of twenty-one portable transmitters and receivers and a powerful central station that is ready for instant operation. The amateur operators wear a special uniform and each has special instructions concerning his duties. If the Los Angeles area were ever threatened by invasion or air raids the disaster council would swing into action at once. Of course, the volunteer radio section would be depended upon to provide emergency communications facilities.

In all parts of the country, amateurs are preparing themselves against a possible "M" day. In fact, they have already started to participate in national defense because a number of them have answered the call of the Federal Communications Commission for trained, intelligent men who are needed to man the new long-range surveillance and direction-finding radio interceptor stations that are being built as part of the national defense program. These stations, some of them mobile, will keep a twenty-four-hour watch on all communication channels to locate and track down all unauthorized or suspicious radio transmitters.

(From March 1941 Pop. Mechan)

Note: All transmissions via amateur radio must be in plain language--only the Army amateur system may use "coded" work drill

EIGHTY METERS

This summer marks the first official all-summer operation of our 80 meter traffic nets. The A.A.R.S. are operating all summer,utilizing six nights a week for official drills,splitting the State nets into separate units in order to provide sufficient time for the drills. This is the first time in sixteen years that the Army Amateur Radio System has operated with official all-summer drills.

Conditions on 80 have been very bad at times due to local nightly showers and quite severe electrical storms in the vicinity of the receiving operators.

TWENTY METERS

The month of June marked a very active period for the 14 mc band,on which conditions were normal for this period of the year. Those who find QRN too heavy on the lower frequency bands might give old 20 a twirl,where the West Coast stations and the K6s are common,and may be worked consistently,with little fear of interference from local electrical storms which have little effect on this portion of our high frequency allotment.

One thing that seems to be lacking on 20 are good traffic nets. This is good territory for "long-haul" work,and it seems a shame to pass it up in favor of placing traffic on lower frequency bands for relay when the same distance could be covered on 20 in one hop. To the knowledge of the writer,there no traffic nets on 20 of any type. Anyone who is interested establishing a net on 20 will please get in touch with Leslie R. Yoder 326 Bergen St.,Trenton,New Jersey,W3EED.

Those fellows who promised to send in information and dope on the 160 - 40 - 10 - 5 and $2\frac{1}{2}$ meter bands have failed us again this month,so we have nothing that we can tell about these bands locally.

Bill Petty,W3HAZ,ace AARS and traffic man in town has just received his 35 WPM endorsement sticker for his code proficiency certificate,copy for which was submitted quite some time ago. CONGRATS TO YOU BILL!!

At a recent publicity meeting of the committee,Mr. Torretti had with him his collection of "Pet" QSL cards,in which was one from Bill Petty,SWL,now W3HAZ;on which Bill handed Ted a nice signal re-

port,and,in addition,heaped upon Ted the usual "bouquet" handed out by SWLs,and it certainly did have all the ear-marks of a 100% "Lid". It is really gratifying to know that Bill HAS PROGRESSED since he wrote that card which was dated 1936.

And then,there was also Charlie Moore, who was present,bemoaning the fact that his electric fan would not attain sufficient speed to be effective in cooling his perspiring brow. After approximately three hours of inspection and the usual "tinkering",it was discovered that Chas. had very unconscientiously inserted an AC-DC RESISTANCE CORD in replacement of the old worn cord ---- My gosh! was Charlie's face red!

While we are speaking about Charlie, let us "tattle" a little: Charlie again failed to make the grade on his Class B examination on Wednesday July 2nd.Tough luck Chas,we all know how you feel,

Please Charlie,no offense to you,but, with a brain like that,why not try for a CLASS "C" ticket?

Al Buchanann,W3EFF,one of our old members is back on the air on 160 phone and putting out a swell signal -- wassamatta wid 20 Al???

W3AQ,with 1000 watts on all amateur bands,has been awfully quiet of late, howsamatta with our Communications Manager,Let's go,Dave.

Les Yoder says he is going to push out 750 watts on 80 meters and QRM ye editor who lives just across the way ::: Go to it meboy,you just KNOW that worries me hugely Ha!-I'll fix ya,I'll put high-pwr on20 and wash you up with my PP 56s-see?

It has been announced by A.R.R.L. Headquarters that the War Department will use the call W3USA instead of W3CXL for all work with amateurs. Similarly the Navy Department is now licensed for work with radio amateurs under the call W3USN.

The AARS received a "boost" in the Philadelphia Record during the past week, picture and everything. For those who did not get to see or read it,a copy,cut from the Record will be available to read at club headquarters.

THE STORY OF WESTERN ELECTRIC

CHAPTER TWO

"The Era of Expansion"

In the eighties the telephone was on the march from the United States, its birthplace, to foreign lands, and Western Electric was instrumental in carrying it there. In 1882 it built a factory in Belgium to supply the telephone companies then springing up in Europe. As one country after another took up the telephone, patterning its equipment after American standards, other factories were established in England, Germany, France and Japan, with branches in many of the principal cities of the world; and thus were developed an extensive foreign business.

At home, the electric light and power industry, founded upon the inventions of Edison and others, had begun to grow. Western Electric built up a large business in this field, manufacturing arc lamps, electric fans, motors, and generators. At the same time it expanded its jobbing business, handling an extensive line of electrical supplies made by others, such as wire, conduit, wiring devices, pole line material and the like. In this field the Company became the country's largest jobber.

Supplies of this kind were being purchased in increasing quantities by the Bell Companies. A nation-wide telephone system was in the making and into it were going more and more poles, crossarms, insulators, pole-line hardware and wire. These things were bought in part from Western Electric, in part from other suppliers, each telephone company doing its own buying.

And now occurred a third development, important in shaping the structure of the Service of Supply as it is today. It became apparent to the Bell Companies that, although they were not competing with each other in providing telephone service they WERE in effect competing in buying their supplies. For years Western Electric had been buying on a large scale. It had an organization trained in quantity purchasing. It had an organization also experienced in distribution on a large scale.

In 1901, one of the Bell companies decided to avail itself of these facilities. It arranged for Western Electric to act as its agent in securing whatever mater-

ials it might require in addition to those which the Company was already making for it. The agent was both to do purchasing and to maintain a convenient warehouse.

Operation under this arrangement definitely demonstrated that Western could supply these materials cheaper than the telephone companies could buy for themselves. Other Bell companies, after satisfying themselves of the advantages of the plan, adopted it and within a few yrs Western Electric was buying substantially everything for the Bell System under these so-called "Supply Contracts."

Thus, to the making of the telephone equipment was added purchasing and store-keeping for the Bell System. The Service of Supply had been rounded out until it was complete, and the telephone industry had found a solution to its three major problems of materials -- an adequate amount; uniform quality; and an economical and efficient means of delivery.

Follow this interesting story in the next issue of the D.V.R.A. NEWS as it tells of Concentrating on Service to the System and Spurring Progress by Science



A Western Electric switchboard of the early '80s.

EMERGENCY ANTENNA KINK

Some good dope for those who are interested in emergency work -- a bamboo fishing pole wrapped with about 60 feet of #18 enameled, space wound from the top down for 14 feet, then close wound for 3 feet, then secured with a bolt or otherwise leaving a tag end to be connected to a lead to the antenna tuning unit at the transmitter and worked against ground makes an effective radiator. This is a swell scheme for a portable antenna and it really works; is light and easily installed under almost any weather conditions or in any emergency set-up. The bot-

tom end of the pole that is left without any wire is the part that can be lashed to a tree limb, lamp post, fence post, stuck into the ground or mounted in numerous methods. As is well known a bamboo pole has very low wind resistance, and is easily guyed against a 60 mph wind. One station in Southern California worked an east-coast station using only 40 watts input to a plate modulated 75 meter fone rig; the qso was on phone, and was heard both ways by --

Vernon C. Edgar, W6CRF-ex SCM

SUPER-POWER-"GRAND COULEE"!!

The worlds largest single power generating unit, one of three identical units capable of producing 108,000 KW each will be placed in service this summer at the new Grand Coulee station. This generator, now nearing completion is designed, as are the other units to be installed, to produce 30% more power than any other waterwheel generator ever built in this country.

The force of water rushing through huge pipe-lines from the forty-six story dam will spin the mammoth waterwheels, driving the thirty-foot rotors 120 revolutions per minute to produce the combined electrical output of 435,000 HP., part of which will be used to operate six motor-driven pumps of 65,000 HP. each. These pumps, each capable of lifting 12,000 Gal of water per second, will supply the necessary water to irrigate 1,200,000 acres of potentially fertile but arid farm land in the Columbia Basin of Central Washington.

ITEMS OF INTEREST

NEW!!! - In a new, low cost, quiet, and light-weight refrigerating unit just developed, the current to the electromagnetic pump consisting of two opposed compression chambers and a central double-headed piston, is controlled by radio tubes.

Utilizing the characteristics of alternating current, each chamber is alternately polarized, driving the piston back and forth between the chambers. This pump is capable of 3600 strokes per minute and freezing speeds may be varied at will.

(June '41 Pop. Mech.)

Tests made by manufacturer show that a patented shoe, now available for protect

ion against explosion where tiny sparks created by static electricity in the Human body may ignite highly inflammable gases, carries off the charge before it can produce a spark.

The tests show these shoes to be 2/3 more efficient than necessary to establish electrical ground. They will be worn by hospital attendants handling anesthetics and in chemical plants and arsenals.

SOUTHERN NEW JERSEY OPS MEETING

(This report was received too late for publication in last month's issue)

On Sunday afternoon, May 4th, a meeting of the Southern New Jersey Section Official Phone Station appointees was held at club headquarters of the Delaware Valley Radio Ass'n.

Details regarding placing the net operations of the SNJ OPS net on spot frequency, 1980 Kcs were discussed. All the member stations of this net are not at present operating on that frequency.

The concensus of opinion of those present favored the presentation of some sort of trophy award to the net member whose performance for the year presented somewhat of an outstanding nature. Under the present plans this trophy would be paid for by all members making an equal donation toward the cost.

W3ZI delivered a very complete address covering the proper use of "Q" signals, & Bill Hammah, W3EUH, offered some excellent advice on Phone net procedure and operation. SCM, W3CCO, gave a fine talk on the development of phone operation in the Southern New Jersey Section.

All those present promised to try to be present at the D.V.R.A. outing-hamfest on August tenth to insure the presence of enough phone men to make up a team for the ORS/OPS BASEBALL fracas for the honors of the section.

This meeting, under the capable chairmanship of OPS Dave Nabotovski, W3ITU, presented an excellent opportunity for members of SNJ section to meet his fellow OPS from other parts of the section and "Bat thé Fat" between themselves.

A general good time was enjoyed by all present and plans are now in the making to hold such a get-together about 4 times yearly. GOOD LUCK, FELLOWS!

Admiral Byrd and his party received a tremendous welcome as the expedition ship

"North Star" docked recently at Boston, Massachusetts, terminating the long voyage from Little America.

MULTIPLEX SYSTEM FOR "FM" SOUND AND FACSIMILE SIGNALS

Performs two Services on one Ultra-Short Wave band.

RCA Radio Service News

Utilizing a single frequency modulated ultra-short wave channel to perform two services simultaneously, facsimile and high fidelity sound, The RCA Laboratories have developed a new method of radio multiplexing.

Microphones in an NBC studio in the RCA building feed sound over a wire to the "FM" transmitter in the Empire State building, while the facsimile machine operates in a laboratory at Radio City. A wire line also links the facsimile scanner with the transmitter. The electrical currents, one carrying sound, the other printed matter or pictures, are combined at the transmitter to modulate a one kilowatt "FM" station operating on 45.1 megacycles.

In the demonstration the sound and print signals are detected by a receiver at Radio City. The duty of the receiver is to "unscramble" the sound from facsimile, and reproduce both to correspond with the original transmission. Electrical filters do the trick. Then the sound is fed into a high fidelity loud speaker. The facsimile signals actuate a carbon paper recorder capable of reproducing printed matter, drawings, maps, pictures, etc. The machine, performing this double duty, is about the same size as a standard radio-phonograph console.

The FM channel is 200 kilocycles wide. For the high fidelity sound (30 to 15000 cycles) 150 kilocycles are used. The Facsimile impulses approximately 30 kilocycles of the channel are employed. The remaining 20 kilocycles are utilized as guard bands to keep the sound and facsimile apart.

The facsimile instrument prints on a strip of paper eight inches wide. Printing speed is one and one-quarter inches per minute, making it possible to reproduce a message the size of a business letterhead or an 8 x 10 inch picture in less than ten minutes.

Many forms of radio interference occur,

each arising from particular causes or circumstances, and each producing typical effects upon reception. Disturbances such as man-made and natural static are rather complex in nature, and are not subject to simple analysis or cure. Other interference phenomena, however, which are associated with signals having definite wave character, frequency disposition, and which bear a relation to receiver characteristics, may be examined conclusively. The more commonly experienced troubles of the latter type are treated in an article written by Mr. W.J. Zaun, of the RCA Mfg. Co. Service Division, which will appear in serial form in this paper starting with the August 1941 issue.

SPECIAL ATTENTION
SOUTHERN NEW JERSEY STATIONS!!

W3CFB, who is in charge of the organization and activities and operation of the Southern New Jersey forty meter ORS net, advises us that he will appreciate applications from interested stations in the section for membership in this new net. The official frequency of this net is 7280 Kcs, on which it is now operating, & W3CFB may be contacted on that frequency on Monday, Wednesday or Friday. The net meets at 7:30 PM EDST on those days. Give Harry a call and he will give you full particulars regarding this new project.

SERVICEMAN -- NOW HAM!

One of the latest calls in Trenton, W3JNO, is now being pushed out on the air from the home of the holder, J. Aaron Sloin, 613 Princeton Avenue, Trenton, N. J., by a pair of T-40s with about 75 watts input, modulated by 6L6s, and the FB signal may be heard on about 1842.5 Kcs. in our 160 meter band.

Brother Sloin is also very well known in the musical world as "Clayton Leigh," and his orchestra may be heard at Leghorn Farms, where he and his boys push out the "audio" for dancing.

You will, no doubt, recall that Clayton Leigh and his boys furnished the music for the dancing at our 1940 D.V.R.A. Hamfest and will, through arrangements completed by Les Wood, W3BWF, who is also a member of the band, play the terpsicorian ramble at this year's shindig on August tenth.

J.A. is also very well known in radio, conducting his own service business from the home QTH. CONGRATS, Aaron, from all

the gang, and personal congrats from the editor -- we hope we can meet you very soon as a member of the Delaware Valley Radio Association. We are very proud of our swell bunch of fellows and we know you will enjoy membership in an "up and coming" organization such as this club.

THE VERY LATEST!

The very latest call to be issued here in town was that of W3JOL, now frequently heard on 160 phone with only 18 watts input and a swell signal, with the melodious voice of the holder, Bill Blumel, of 55 Annabelle Avenue, Trenton, N.J. -- CONGRATS to you too Bill. -- Was it a secret?? (Ed)

HIGH WIND

Les Yoder, W3EED, will be signing "portable 3" until the Federal Communications Commission approves his ticket for the new qth, 326 Bergen St., Trenton, N.J.

Well Well, our friend and brother, Bill Blumel, being the first SWL member to have taken and passed his Amateur class "B" license examination since May 14, '41, is the proud winner of those 100 QSL cards offered by the club for this event. CONGRATS AGAIN BILL!

W3HPE is thinking about getting himself an ORS appointment -- great stuff, Bill, best of luck.

Our code class under the direction of Bill Petty, W3HAZ, will be a great help in attaining the necessary code speed for that license exam., just contact Bill and he will place you. Don't forget the time 8:00 PM EDST Monday evenings; the place, D.V.R.A. club headquarters.

We told you in our June issue that Bro. Frank Kelly, W3CKY, had a new Onan 350 watt gas-driven generator. Well, he had it ordered, as was also a new Stancor rig but he received word from both concerns that shipment could not be made, nor could the concern make any promises as to shipment -- sooooo -- it did NOT make its bow at Field Day

there you are boys, just an example of what some of the boys who are in the midst of rebuilding are up against if they don't have the necessary components on hand

but--

most of our adver-

tisers DO have the advertised material on hand, so, when you need anything they merchandise, see OUR ADVERTISERS FIRST!

All the best information and news about the D.V.R.A. outing and hamfest to be held Sunday August 10th will be found on a special folder which is being mailed out, and may also be obtained at club headquarters. Yep! there will be the usual fountain of beer, also soft drinks, eats, and a lot of very FB entertainment. Tickets one buck fifty -- one admission for a big day's doings. Oh yea, at the State Fair grounds, Trenton, N.J.

Much interesting and valuable information may be obtained by listening to the various A.R.R.L. Official Broadcasting stations: Here are a few of them and their schedules:

W1AW - ARRL Headquarters - Skeds in QST;
W3AQ - D.V.R.A. Club station - DAILY at 7:45 PM EST on 1980 Kcs.
W3GCU - Tuesday-Thursday-Saturday MORNING at ONE AM EDST on 3700 Kcs.

Hey! you guys, we can't print a paper if we don't get any news to print, and this month we received just TWO contributions; the rest we had to SCRAPE UP -- so what do YOU think?? (Ed)

QSLs still unclaimed at W3CCO --
W3ITS JAG EDP DCQ HTP HTS
HWO HTJ ITR

Better get em fellows before we come to "house-cleaning" time again: A stamped envelope or personal call will claim em.

W3GCU entertained two distinguished visitors recently in the personages of W3JOL and W3EED, who came upon Ray just as he was busily engaged in EDGING THE GRASS! It was too hot to repair to the shack, the temperature in there was only about 110 as the windows had been CLOSED ALL DAY, HL

W3VE/4 had promised us some dope from down North Carolina way, but, guess Sam was tied up with his duties, as nothing came forth from "portable four".

Our thanks to Mr. Griffith, of the New Jersey Bell Telephone business office, for the nice material which will appear in later issues of the D.V.R.A. NEWS.

Field Day activities of the Trenton Radio society were conducted near the QTH of W3AXU using a very FB layout: and best

of all was the close proximity to the kitchen, where almost anything in the line of eats could be procured at short notice, and then there was also ICE WATER when it was needed - oh boy-!

"BB" Wentzel, W3HW, is erecting a new antenna, an 80 foot vertical of COPPER PIPE.

Pete Loser, W3ITR, is sporting a new rotary beam for twenty too.

Johnny, W3AXU, blew his filters recently which placed him very quietly in the listening position for a short time. John also expects to dismantle his eight meter antenna and use the mast for a five meter vertical.

So - It is expected that W3JJK will be heard on 160 phone, as Chick recently borrowed the 2015 crystal not in use at W3AQ ** Good Luck Chick.

"Doc" Wilbur was heard to say recently that he would do his best to "sell" that North Jersey gang on our coming hamfest: Go to it Doc, if you sell the greatest number of tickets we will crown you "SIR DOC" KNIGHT OF THE BAR and CHAIRMAN OF THE GOATSMILK DEPARTMENT!

Russ Snedaker, W3EEQ, availed himself of the opportunity afforded him recently to visit Washington D.C.

Ed Raser, W3ZI, has been very busy of late attending to the numerous AARS applications.

OUR SINCERE THANKS to the DONORS of food and other merchandise which was available to those attending D.V.R.A. FD activities.

Coffee by HEROYS, North Broad St.,
Buns and Bread by Townsends Bakery.
Rolls and Bread from Mack's Bakery.
Sugar by Stackhouse Grocery.
Sugar-cured hams from Cases pork prod'ct

While W3HKO was busily engaged copying a message for A.R.R.L. Hdqtrs. the AC generator went sour on forty meters FD. night.

W3GCU is contemplating building himself a new high-power final amplifier, as well as a new mast and antenna.

FOR SALE	WANTED	SWAP
Breting "9"	or	W3JJK
Good condition		
Bug	Excellent shape	W3HAZ
Speech Amplifier & 20 watt modulator complete with power supply and double button mike		W3CHO
100 watt beam-power amplifier-modulator-70 watts self-bias - 100 watts fixed bias complete with power supply. VM-3 output-modulation transformer.		W3CHO

WANTED!!!

POWER TRANSFORMER: 2500 volts (DC after filter at 1000 mils) W3AQ

POWER TRANSFORMER: 1500 volts (DC after filter at 500 mils) W3GCU

LINE NOISE!

Everyone has thier own individual troubles: During a recent electrical storm, Bill Hannah's transmitter and power supplies could not "take" the RF dished out by the storm, so, the only thing Bill needs now is a new 807 and ALL NEW TRANSFORMERS ---while over at Les Yoder's, Les has discovered that the new Jr Op CAN be a CONTINUAL SOURCE of LOCAL QRM!

Oh yea, Bill Blumel has received TWO tickets recently, one from the F.C.C. and one from the T.P.D. (Trenton Police Dep't) for parking in a NO PARKING zone on Livingston St. - Bill had no use for the latter ticket.

The Delaware Valley Radio Association still needs that Honor Certificate for 100 % Code Proficiency Certificate holders. Let's get going fellows, and get our C.P.C. so the club can the big one.

Radiograms may now be filed with the managements of the Gaiety theatre and the RKO State theatre for transmission by amateur radio: tell your friends they may avail themselves of this service FREE as they either leave or enter these theatres.

BUCKY SAYS "The big-wigs of the power companies are doing their utmost to find some way of measuring HOW MUCH line noise is absorbed by the listening radio public. Line-noise is FREE - so far - Bye now 73.

Announcing!

FIFTH ANNUAL OUTING &
THE MOST POPULAR & OUTSTANDING EASTERN:

HAMFEST

SUNDAY, AUGUST 10, 1941 - 10AM TILL ?
(IN-DOORS IN CASE OF RAIN)

TRENTON STATE FAIR GROUNDS
TRENTON, N.J. (Look for Direction Arrows in City)

featuring NEWLY RENOVATED GROUNDS!
NEW OUTDOOR DANCEFLOOR.
AMPLE FREE AUTO PARKING.
ALL KINDS OF GAMES FOR ALL.
"LOTS OF FUN FOR EVERYONE"

SPORTS: BASEBALL, QUILTS, HANDBALL, etc.

PRIZES & GIFTS: For OM's, YM's, YL's, XYL's, SWL's -
NOVELTIES & GAMES FOR JR.OM's & YL's.

EATS & DRINKS: ROASTED DOGS, SANDWICHES,
CORN-ON-THE-COB, FRUIT, CAKE etc. BEER & SODA.

"ALL YOU CAN EAT & DRINK"

ONE ADMISSION;
NOTHING ELSE TO BUY!

ADULTS: \$ 1.50
CHILDREN: .75
NO TAX!

The *Sponsored by:*
DELAWARE VALLEY RADIO ASS'N, INC.
— TRENTON, N. J. —

General Chairman: Chas. Kayser, W31OK
73 BROOK LANE, City.

TICKETS AVAILABLE AT THE VARIOUS RADIO STORES IN
THE METROPOLITAN AREA. W3EUH, 904 EDGEWOOD AVE, TRENTON.
W3CCO-704 QUINTON AVE, TRENTON. AND W31OK.
GET YOUR RESERVATIONS NOW.

BRING YOUR YL, or XYL, TO SHARE THE FUN!



WHOLESALE REPRESENTATIVE

EMERSON RADIOS
EMERSON RADIO TUBES
R.C.A. RADIO TUBES
EVEREADY BATTERIES
DEXTER WASHERS & IRONERS
WESTINGHOUSE MAZDA LAMPS
WHEELER FLUORESCENT LIGHTING
ROBBINS & MYER ELECTRIC FANS
HAMILTON BEACH APPLIANCES
TOASTWELL APPLIANCES
FITZGERALD APPLIANCES
STEAM-ELECTRIC IRONS
REMINGTON RANDELEC. SHAVERS
CORY COFFEE BREWERS
WESTON ELECTRICAL INSTRUMENTS
EDWARDS CHIMES
MUELLER ELECTRICAL SPECIALTIES
EMERALITE LAMPS
EAGLE ELECTRICAL SPECIALTIES
MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All!

Call or write:

LESTER H. ALLEN, W3CCO

704 QUINTON AVE.,
TRENTON, N. J. Phone: 8919

PARKER

Printing and Stationery Co.

214 So. BROAD ST., Trenton, N. J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, Etc.

Phone: 3-2784

Established 1912

SPIEZZLE'S

MEN'S AND BOYS' CLOTHING

145 S. BROAD ST., TRENTON, N. J.

(Second Door from Factory St.)

QUALITY AND
STYLE without
EXTRAVAGANCE

open nites till 8⁰⁰

PHONE: 3-5234

AMERICAN RADIO Co.

TRENTON'S LEADING RADIO STORE

25 EAST HANOVER ST
TRENTON, NEW JERSEY

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

hallicrafters receivers STANCOOR Transformers
BJD RADIO PARTS • Meissner RADIO PARTS
RCA TUBES • • • • Philco & Emerson Radios
Taylor Tubes • • • • Portable Batteries • • •

Complete REPAIR & SERVICE Dep't.

OPEN NIGHTS

PHONE: 2-9183

RADIO **NIDISCO** PARTS

"RADIO FROM THE GROUND-UP"

147 North Warren Street, Trenton, N.J. - Phone: 4536

DISTRIBUTORS of:

RADIO PARTS..... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

Other Stores At:

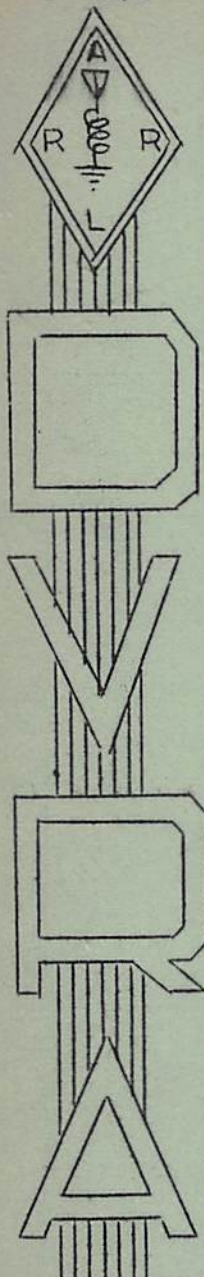
658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

NEW JERSEY'S LARGEST

100%



AUGUST 1941



To the 5th ANNUAL

OUTING
AND

HAMFEST

NEWS VOL. VI NO. 6

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC.

W.A. Blumels

1912 2009

METCOMER

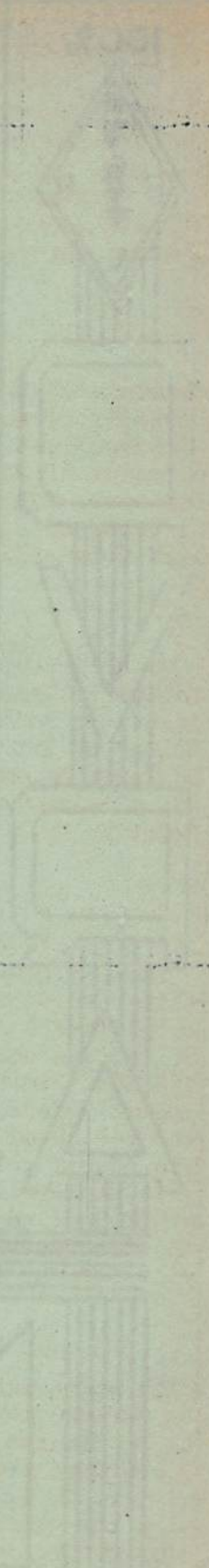
JANUARY 1912

1912

1912

NEW

THE NEW YORK PUBLIC LIBRARY ASTOR LENOX TILDEN FOUNDATION



D.V.R.A. OFFICERS

Lester H Allen	President	W3CCO
Leslie R Yoder	Vice Pres	W3EED
William Petty	Secretary	W3HAZ
W.R. Tomlinson	Asst Secy	W3GCU
William Hannah	Treasurer	W3EUH
Charles Moore	Sgt at Arms	W3???

DIRECTORS

Chairman of the Board	Lester H Allen
Director of Activities	Leslie R Yoder
Director Spec Features	Theo. Torretti
Director of Publicity	William Petty
Director Publication	W.R. Tomlinson
Director of Finance	William Hannah
Dir. Communications	Dave Nabutovsky

D.V.R.A. NEWS STAFF

Editor in Chief	W.R. Tomlinson
Associate Editor	Wm. A. Burroughs
Editor of Art	Wm. A. Blumell
Business Manager	Theo. Torretti
Circulation Mgr.	W.R. Tomlinson
Printing by	Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 625 East Brown St., Trenton, N.J. This amount covers the cost of mailing for the period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, sending the necessary amount and he will mail you your copy as it is available.

W 3 A Q

All members, or other operators who wish to operate the club transmitter MUST show their license, also display same in the operating room while operating the transmitter. It is also MANDATORY that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and presence of the Director of Communications during operation and he will sign the station over and on, as required by F.C.C. regulations.

EDITORIAL

The past few weeks have noted radical regulation changes, and FCC has served advance notice of its intention, over the coming months, to restrict amateur operation in certain portions of our spectrum, rearrange operation in another, assign new phone allocation, and avail every amateur licensee the privileges of all amateur frequencies by temporarily abandoning the special privileges of the Class "A" operator license for the duration of this national emergency. This action has been deemed necessary thru the urgent need of additional frequencies for the vitally important Military Aircraft Pilot Training program, wherein a clear channel may mean life or death for the student Pilot.

The amateur fraternity have always rendered their full cooperation in every national emergency and we are confident that with the exception of a few "grumblers," amateur radio will, in this, our greatest national emergency, give that same cooperation, accept these emergency allocations, and make the necessary preparations to adapt their equipment to comply with the plan without undue delay; that the channels in question will be READY when the necessity arises to utilize them for our national defense.

W3GCU

OFFICIAL DOPE

Nr 945 - On July 9th at the request of ARRL the FCC amended its rules governing amateur stations to open all but the first 100 Kc of the ten meter band to phone operation and to make available the frequencies 29250 to 30000 Kc to frequency modulation. It also amended section 12.83 to provide that an amateur station shall transmit BOTH the call letters of the station called or worked as well as the sending stations own call at the beginning and end of each transmission and at least once during every transmission, and adopted language which makes special authorization necessary before remote control may be used. Watch QST for details of above regulations.

Nr 946 - July 22/41 - FCC today gave notice to amateur licensees of its intention over the next few months to restrict amateur operation between 3650 and 3950 Kcs to make those frequencies available for the extremely important Military Aircraft Pilot Training program, for the duration of the emergency. Working in close cooperation with ARRL representatives, the following plan has been worked out: it is expected the frequencies 3800-3900 Kc will first be released for defense uses sometime around September first, followed during the next eight or nine months by transfer of the remaining 200 Kcs, as needed. To provide maximum facilities for the various types of amateur work, certain other amateur allocations will be rearranged as follows: 1800-1900 Kc, will be assigned exclusively for CW. 1750-1900 and 3500-3650 Kc will thus be available for organized CW activities. 1900-2050 and 3950-4000 Kc will remain available for phone, but the change in the 75 meter phone band is not likely until the first of next year. To compensate for loss of 1800-1900 and 3900-3950 Kc for phone a new 7Mc phone assignment will soon be made from 7250-7300 Kc. The special privileges held by class "A" operator licensees will be temporarily abandoned and all amateur phone frequencies will be available to all amateur licensees. The first actual order to accomplish these changes has not yet been issued but is expected within a few weeks. In the meantime amateurs are urged to make necessary preparations so that the plan may be placed in effect by future commission orders. They are also requested to cooperate by not engaging in correspondence with Washington intended to effect changes in the plan, the details of which have been care-

fully worked out by the FCC working with representatives of ARRL. The Commission believes amateurs will adjust themselves to new emergency allocations in a manner that will maintain their ability to render emergency communication service to their communities and to carry on self-training work.

To section 12.63 of the regulations should be added the following:

"Authority to operate remote control will be granted only upon the filing of a proper application, and supported by a showing of the applicant's legal control of the control point, the means employed to control emissions, the equipment and methods for monitoring, and the precautions adopted to prevent access to the premises by unauthorized persons." This in effect means that no operation of a station by remote control is permitted unless special authorization is obtained from the Commission.

Section 12.83 is amended to read: "An operator of an amateur station shall transmit the call letters of the station called or being worked and the call letters assigned to the station which he is operating at the beginning and end of each transmission and at least once every TEN MINUTES during every transmission of more than 10 minutes duration. In the case of stations conducting an exchange of several transmissions in sequence, each transmission of which is of less than 3 minutes duration, the call letters of the communicating station need be transmitted only once every 10 minutes of operation in addition to transmitting the call letters, as above, at the beginning and at the termination of the correspondence".

 CLUB PATRIOTISM!

The Erie Amateur Radio Club at its June 10th meeting voted to purchase ten U.S. Defense Bonds with funds from the club treasury, each bond having \$25 maturity value.

 NEW EDITION "OPERATING AN AMATEUR RADIO STATION"

The new edition of this booklet is now available to ARRL members from headquarters. This edition contains a lot of good dope on organizing new nets, as well as interesting data on the procedure of a net control station, and the procedure of net member stations also.

THE STORY OF WESTERN ELECTRIC

CHAPTER THREE

In the ensuing years the function of serving the Bell System became to Western Electric the dominant function and, to better focus upon it, the Company divested itself of its other activities. It disposed of its power apparatus business. It sold its foreign business, including five factories, to the International Telephone and Telegraph Company. It sold its jobbing business to the employees in it, who organized a new corporation called Graybar Electric Company in tribute to the founders, Gray and Barton.

Although in the course of this unique evolution the Company has shed one enterprise after another in order to achieve singleness of purpose, nevertheless its expansion has continued and it maintains its place as the world's largest, as well as the oldest manufacturer of equipment for the transmission of sound.

Before there was a telephone there was, indeed, a laboratory -- Bell's attic in Boston. The idea conceived here founded a whole new empire of science - telephony, and the electrical transmission of sound. That science has girdled the globe. It has been able to do so because in the footsteps of the founder there followed a host of painstaking investigators who, imbued with the same spirit of inquiry, pressed forward beyond the old frontiers.

Few industries look so much to the laboratory for progress as does the telephone industry. Two telephones, one in New York and one in San Francisco, would be useless to each other if research had not conquered the distance between them.

As with Bell's invention, so it has been with every advance in the service: first the idea and its embodiment in a workable model, then the multiplication of the model by manufacture, finally the employment of the product in service. For Bell's idea there existed no easy or established path. To create an organization through which the idea could travel in a direct line to utility has been the work of years. The sequence now is from laboratory to factory to telephone company.

But that too, meant an evolution. For a long time manufacturer and telephone company conducted their own research independently. Then, as the service of supply drew closer to the telephone service, the making of better equipment was seen to be inseparably a part of the ultimate &

greater endeavor - providing better telephone service.

Follow this tale of a great industry in the next issue of the NEWS when it tells of other Products of Telephone Research and the method of Scientific Purchasing!

Due to the outing being so close, our club station has been pushing out lots of advertising on 160 and 75 meter fone: It sure IS GRATIFYING to know that them 1000 watts of ours CAN be used on more than one band: BUT STILL NO CW! --and while we are on the subject of advertising, let us remind you that there are local establishments who are using our pages to advertise their goods, so, please give these firms first choice when you need anything in the line of goods that they have for sale.

Hamfesters Radio Club will sponsor a Jamboree at the Hotel Knickerbocker, one of Chicago's finest, on Saturday and Sunday, August 30 and 31. There will be meetings and discussions of all types, xmtr hunt, dancing on Saturday evening. Tickets only \$2.50 per person and all profits to be donated to the United Service Organizations. Reservation will be granted on program for any club or amateur who wishes to speak on any subject pertaining to amateur radio. The Hamfesters club offers a complete public address system with crystal mike, turn-table, twin speakers, tubes etc., to the A.R.R.L. affiliated club that sells the most tickets by Aug. 19th.

FLASH!

To meet the needs for more and cheaper MESSAGE BLANKS the League now has on at the new low price of twenty cents for a pad of 100 A.R.R.L. blanks, and they're just the thing for third party deliveries. It gives dignity and secrecy to the delivery. The Message Delivery Cards will still be cheapest for "greetings by radio" radiograms that have less need to be kept from prying eyes.

The Southern New Jersey Official Phone group, as assembled at the OPS meeting which was held at D.V.R.A. club headquarters on Sunday May 4th, are pictured in the current issue of the A.R.R.L. family album, which will be found posted on the bulletin at American Radio. Take a look at the official mugs! (Ed)

ITEMS OF INTEREST

There is much speculation concerning two steel towers which overlook West Orange, It is rumored they were used for Navy radio operations during the last war and until last year they stood, antennaeless, silent monuments of an era of spark signals and secret government messages.

It is of interest to know that our local radio headquarters has installed a radio service department: Under the capable supervision of one of our well known local Hams, Russ Snedaker, W3EEQ, BCL sets are repaired and serviced, and equipment is available for servicing and aligning our communication receivers.

At a recent meeting of the Freehold Amateur Radio Club, the following officers were elected: Theodore Morris-trustee and honorary president; Walter Hampton-Pres; Boris Zukowsky-Vice Pres; Edward Spuler-Sec'y; and Edward Mohr-treasurer. Members of the club are building a transmitter & expect to have it completed very soon.

W2GC, who is a camera columnist, has a radio program on WPAT every Friday at 5:45 PM.

Eye-filling and extremely efficient-looking describes the antenna system at W2MO. No drive through the country is complete unless one sees his commercial-appearing towers.

Three new 50 foot masts are set up for proposed all-band operation by the Livingston Radio Club.

W1BDU and W1EXC are raring to get going with some long-haul traffic skeds on 20 meters (cw). These fellows' idea is to transfer traffic received into the local Eastern Massachussettes networks. Any ORS who can work 20 cw and who lives near a training post should contact the above stations, especially for Mass. Tfc.

WLHIL says, "Have found it a good idea to check all antennae around house for BCL sets for RF. Found two other antennae here absorbing power. Grounded em and my final mils dropped and output up 20%"

Our SCM, Les Allen, W3CCO, who has just finished his first two-year term in that office was re-elected to the office by acclamation, and has his new "stiff-tick et" for display.

"OLE ZI'S KORNER

By Ed G. Raser, W3ZI

After having been out of town for the past ten months it seems good to be back with the ole' D.V.R.A., and able to contribute to the club paper. With this issue I hope to continue each month with news items of all the boys whom we know so well, but hear so little about their doings'. I promise something for ZI's corner from this issue on:::

Bill Roberts, ex-W3BOI, and former member of D.V.R.A. is now connected with the Sperry Gyroscope Co., Brooklyn N.Y. as electronic specialist. Bill says he sure likes his job and is doin just fine.

Norman Bottorff, W3HTL, another ex-member of D.V.R.A. has completed his schooling at Fort Monmouth, N.J. with the 1st Signal Intelligence Co. Upon graduation Norm was transferred to one of Uncle Sam's outposts at Trinidad, British West Indies, to install and put into operation a point to point Army station on that Island. Norman is now on the radio operating staff at this station and from reports received he is well and happy, and likes his new assignment very much --- Best O' luck fella!

Ole' Moe "Fritz" Gutke, W3ISY, of 160 meter fame is now aboard a ship "somewhere in the Atlantic", as commercial radio op. Of all the people to go in for commercial brass-poundin'. You sure surprised us "Moe", yezzer!

Eddie (Bilge) Kerr, W3CCC is now radioman 1st Class and when last heard from, was operating the Navy's Radio Compass station "NFK" at Manasquan Beach, N.J. Eddie claims his biggest thrill was when he was called by our newest, and largest US liner ever built in U.S.A., the S.S. - AMERICA, AND GAVE THEM a bearing into NY harbor. Ed is now located at Naval Radio "NAH", Brooklyn Navy Yard upon being transferred from "NFK"

Frank Kelly, W3CKY has been quite busy with the field tests being conducted the N.J. State Police. Several different types of "FM" equipment are being tried out to see which does the best job as to distance, reliable coverage etc. So far 30 miles has been about the maximum communication range between cars; which is 'nt at all bad.

Roger Rose, W3SW, has been called to act

ive duty with the USNR, and is now a Lt. (jg) stationed at Brooklyn Navy Yard.

Ed Raser, W3ZI, just returned from a "blitz" thru the Southern States, stopping at Fort Benning, Ga; Fort Bragg, N.C.; and Fort Monroe, Va. While at Fort Bragg Ed surprised ole' Sammy Kale, W3VE, our former vice president, with a visit. Many old former buddies were met and a general "ragfest" ensued, as Ed was one of the original members of Headquarters Battery, 112th Field Artillery. It all ended up with a dinner invitation where lots of tales of the days gone by were swapped.

And ole' "ZI" himself brings us the news from Fort Bragg, that ole' Sammy Kale (now Captain Kale to you) has received a brand new W4 call and is now known on the air as W4HOE -- Boy! what a call for an Artilleryman! It would seem that this might be the proper assignment for one of the local farmers or sumpin!

Charlie Kayser, W3IOK, will soon move to New York City, as he has been transferred from the Trenton office of the "CCC" to a new desk in Brooklyn. Seems we are loosing quite a number of the gang to "Brooklyn"!

Little Tony Rura, W3ARN, our star telegrapher, is now working for Western Electric Co., on the Sandy Hook contract. Tony reports wonderful things going on but ALL secret stuff; but, some day we will hear the story!

And, still another ex-member of D.V.R.A. is now roaming the high seas. Paul Solomon, W3GRW, is doing a swell job of "professional radio operating", being assigned to the S.S. Seminole, plying non-stop New York to Miami. Paul tells us the rig on ship is "the berries" and operates on 500 Kc - 468 Kc - 405 KC - and 375 Kc, with 15 amps in that ole' sky wire, and he can work WSL, Long Island, N.Y. from Miami on LONG WAVE at night. For daylight communication he uses short wave - 18 - 24 - 36 - 54 meters. Paul says he is off on Friday for a while - his ship sails on Saturday. Hope you will be able to make the shindig on August 10th, Paul.

Anyone who wishes to write to Tony, W3IOW, can reach him by addressing the mail to

SIGNAL CO. AIRCRAFT-WARNING P.
FORT CLAYTON CANAL ZONE.

Tony will be glad to hear from any of the New Jersey boys especially our Trenton

group.

"CURIO!"

In the July issue of the NEWS, we told you about Ted Torretti showing us some of his pet QSLs, and about one which he received from Bill Petty, then but an SWL now W3HAZ. We were lucky enough to "phen-agle" the exact wording of that card, & will henceforth pass it along to you so you, too, can enjoy the progress Bill has made: here it is:

W3BAQ: "I heard your conversation Sunday with W3AFH and it came in very good. It was raining but that didn't interfere a bit. I know you are getting a new filing system but as soon as possible will you please send me your card."

Bill Petty
26 No. Anderson St.,
Trenton, N. J.

(Congrats to you on your progress, Bill)

FOR SALE BARGAIN FOR SALE

COMPLETE 500 WATT 'PHONE TRANSMITTER
Consisting of

RF exciter: 6L6 xtal-6L6 dblr-PP 210s
Final Amplifier: PP Eimac 100TLs
25 Watt Spch Amp: 57-57-PP56s-PP2A3s to multi-tapped output
Class B modulator: PP2A3s with UTC and Thordarson heavy duty variable impedance transformers.
Final Pwr Supply: 1500 V. - 600 mils. with heavy choke input-well filtered with W.E. condensers. Uses 4-866s. Will deliver 2000V condenser input.
Exciter Pwr Supply: 600V at 300 mils. & uses one 83.
Mod. Pwr Supply: 1000V at 450 mils. uses 4-83s.
Spch Pwr Supply: 300 volts to speech use one 80.
Crystal Mike - complete coils for 10 & 20 meters. Also crystals included for operation on several frequencies within these bands. Also five millimeters included. Rig is built rack and panel, completely enclosed and panels finished in black crackle.

Price \$125.00

RME 69 Rcvr with 12" high fidelity Rola G-12 dynamic speaker, air tuned IFs and xtal filter \$ 75.00

Anyone interested in the above may see it by writing Edward Usher W3CRG, 153 Westervelt Ave., No. Plainfield, N. J. or telephone Plainfield 6-9423.

We present herewith an article which was promised for this issue. This article due to it's lengthiness, must necessarily be presented in "serial" form. This is a long article, and very interesting, so, to insure your receiving every chapter we would advise your subscription, at least for the duration:

"INTERFERENCE ANALYSIS AND ITS RADIO RECEPTION EFFECTS"

Disturbances are classified according to cause and effect for easy identification and Remedy

By W. J. ZAUN
Service Division,
RCA Manufacturing Co., Inc.

**CHAPTER ONE
"IMAGE RESPONSE"**

On the basis of present practice in superhetrodyne design, when a receiver is tuned to a given signal, the local oscillator is at a frequency the amount of the I-F above the signal frequency. The difference in the oscillator and station frequencies is the nominal IF and signals of this frequency are amplified and transmitted to the second detector of the receiver for demodulation. Should a second incoming signal be present, whose frequency is above the frequency of the local oscillator by the amount of the same IF, it will likewise tend to combine with the oscillator and produce a difference beat which will appear in the IF system, and finally at the second detector stage. The interference is heard as a "whistle" or as a mixture of modulations of both signals. In this case, considering the oscillator at a particular frequency, there is a signal below it, by the amount of the IF, and there is a signal above it, by the amount of the IF. The undesired second signal, when attenuated, or when not allowed to mix with the oscillator, causes no interference. However, if it is possible for this signal to reach the first detector stage, it will also beat with the local oscillator signal when tuning to the desired station. This condition is referred to as "Image Response". It is a function of the degree of selectivity ahead of the input to the IF system.

Effects of interference from this cause may be reduced by suppressing the strengths of the undesired local stations which are producing the images. This can be done by reducing the receiving antenna efficiency, or by using wave traps tuned to the "image" station. It must be noted, that harmonics of local broadcast stations,

harmonics of the local oscillator, and stations operating outside the limits of the standard broadcast band, often-times are sources of "image" interference. Particular attention must be given to the 1700 Kc Police band, the 2000 Kc Amateur Band, and the 2500 Kc Police Band, in cities where image interference exists. Variation of the IF is another means of correcting the condition.

Keep up with this interesting article as it progresses: Each issue will carry a further portion until the final installment, upon receipt of which, if all installments are kept, you will have a complete technical article.

**FIELD DAY RESULTS W3AQ/3
(Operators by Bands)**

160-75 Meter Phone	contacts
W3EUH & W3JOL	62
W3CCO	15
W3ITU	12
W3BAQ	8
W3IOU	6
W3CKY	1
Phone-Total	104
80 CW	
W3HAZ	90
W3BAQ	53
W3ZI	16
W3IOK	15
W3JJX	1
80 CW Total	175
40 CW	
W3HKO	79
W3ZI	16
W3HAZ	8
W3ISZ	3
W3IOK	2
40 CW Total	108
20 CW	
W3BAQ	19
W3EED	10
W3HAZ	8
W3CKY	4
W3JJX	2
20 CW Total	43

Total number Field Day Contacts W3AQ/3
all bands - all operators 430

Station W3AQ/3, the club station of the Delaware Valley Radio Association, which was located at the State Fair grounds, Trenton, N.J., for the 1941 Field Day tests placed SEVENTH NATIONALLY in this year's event, at this counting, with 6075 Points.

A. DREAM REALIZED

Some years ago, in Baltimore, Maryland, a small, but very enthusiastic group of amateurs gathered, and organized a club known to-day as the "Baltimore Amateur Radio Association". During long years that followed, this group, still small, but ever growing, met in quarters very much unsuited to their needs and discussed plans which would, some day, make them the proud possessors of their own club-owned headquarters, with complete club-owned amateur station equipment, as well as other facilities pertaining to a well-organized and conducted Amateur radio club.

Now, through complete cooperation and loyalty, the Baltimore Amateur Radio Association membership have achieved that day; the efforts of that small band of enthusiasts have been rewarded, and a dream of years has become realization. Today the Baltimore Amateur Radio Association members are the justly proud possessors of one of the most elegant and outstanding club-owned headquarters in the amateur radio Fraternity.

The B.A.R.A. is proudly happy to extend their invitation to ALL AMATEURS to pay them a visit at their new club-house located at 425 N. Eutaw St., Baltimore, Md, and afford them the opportunity of demonstrating the good-fellowship that exists among that membership, show you the varied diversions enjoyed by them, and to exhibit the facilities of their club-house, which houses: A complete club station, W3JOL, an ideal antenna installation which may well boast with flat-top 120 feet in the air, a completely outfitted workshop, a dance floor second to none, of it's size, with a seating capacity of upwards of two hundred together with complete facilities for conducting hamfests, and other activities.

The B.A.R.A. is headed for the top, and would like to have you attain that goal with them; and to that end, invites you to become one of them by becoming a member of this unique organization while the charter is still open. The yearly dues are only \$10.00 (less than 20 cents per week), for full privileges of the club and use of the complete facilities of club headquarters.

Come on to the B.A.R.A., meet the gang, see what's going on down here, and enjoy yourselves, fellows! 'till we meet again, 73 from all the B.A.R.A. gang.

C.A.R. Secretary.

The Membership of the Delaware Valley Radio Association of Trenton, N.J., extends their hearty congratulations to the Baltimore Amateur Radio Association on the achievement of their goal, in the establishment of the elegant club-house and the complete facilities embraced therein, of which they may be justly proud.

HIGH WIND

Uncle Sam has been very good to a lot of our boys lately; he has been handing out presents quite permiscuously, in fact he has just presented our president, Les Allen, W3CCO, with a brand new 3A classification.

W3HTP has just recently signed up with Uncle Sam's Navy as Radio Op.

Tony, W3IOW, now in Fort Clayton, Canal Zone, says he avails himself of the chance to operate K5AG once in a while. K5AG may be found on 20 meter CW mostly every evening between 7:30 and 11:00 PM: Give a buzz if you hear it boys, it may be Tony pounding that brass, and he sure will enjoy a chat with some of the boys at home.

The receiver down there at K5AG is an HQ-120-X.

"BB", W3HW was the holder of the lucky number that won the Kenyon power transformer 2500 each side at 300 mils down at the South Jersey Radio Association banquet 'tother night - Lucky stiff!

But, not so lucky was "BB" when, due to insufficient manpower to man the guywires on his 80 foot vertical copper pipe antenna during erection of same, the antenna buckled badly, and necessitated dismantling same.

Well Well! at last, Russ Snedaker, W3EEQ tells us that he has that Stancoor 110-CW transmitter on the air on 80 meters - - Been looking for you Russ - no sope yet!
(Ed)

Les Yoder, W3EED, contacted W3DNH for the first time in six years, from W3AQ on JUL 16th, and made sure that the 'Ole Bear' would be present at the hamfest on Aug. 10.

Quiet Boys! Frank, W3HTJ, is constructing himself a two and one-half meter rig - Frank expects to be vibratin pretty fast soon!

Results for the April ORS Party in the Southern New Jersey Section again place two of our D.V.R.A. lads on top, William Petty, W3HAZ, first with 16152; and Ray Tomlinson, W3GCU, second with 6270 points. Walt Filson, our former SCM, W3BEI, placed third in our section.

The Delaware Valley Radio Association is well on the way for that Code Proficiency Honor award for 100% holders of Code proficiency certificates, so come on there, you "Laggers", lets get going; there is going to be a Code Proficiency Party, and to take part in this activity you must be the holder of a C.P.C. for one speed or other. This Party will take place on Sept. 12-13-14 and 19-20-21, so the time is short to get yours. There are practice runs DAILY-EXCEPT-FRIDAY from headquarters station WLAW, at from 15 to 35 wpm. There will be official CP qualifying run from WLAW on Monday, Aug 18th at 10:45 PM EDST. WLAW operates on 1762 - 3825 - 7150 - 14253 - 28510 - and 58970 Kcs. O'mon fellows lets get that certificate, especially you guys that just got your tickets, before you forget about it and your copying speed drops off too far. It is not so much the speed that counts, but the PARTICIPATION!

Officials, Judges and Spectators were kept up to all the thrills of the moment during the 14th annual Motor Boat Races through the cooperation of the Albany Amateur Radio Association, with the help of amateurs at Poughkeepsie, Peekskill and NYC, and 26 amateurs had a glorious and very busy day. In N.Y. W2HZJ on 80 cw was at the yacht club finish line. W2MIY on 2½ m. in Albany on a hill overlooking the city worked W2IYH/2 and W2MOZ/2 for N.Y. contact. On 75 m. W2JBQ and W2LLK (Albany) worked W2KMQ (Peekskill) (2½), wire connections keeping W2JBQ and W2MIY in touch. The Peekskill Communication Club covered the races from a 35 ft. motor cruiser, relaying the numbers of the 51 craft still in the race at that point (via 2½ m.) as each boat passed the cruiser. At the finish line in N.Y. W2MIY stood by on 7 Mc cw in case anything should go wrong with the W2HZJ 3.5 Mc cw circuit to Albany. It was a situation taking elaborate coverage and thanks to fine ham work it was a splendid success! FB all!

Cigars were the order of the day (or should we say, "Night") last Sunday (July

27th), when Bill Blumell became the daddy of a brand new Jr Op., 5½ lbs. Mother and Son doing nicely. The only thing about it is the fact that Bill didn't get ALL THE WAY AROUND WITH THEM ROBT. BURNS SEEGARS ----Ye editor aint seen, nor even SMELLED any yet, huh! (Ye Ed has a vy young YL, mebbe that's it)

The D.V.R.A. wishes to extend their thanks to the following stations, and all others whose untiring work in the QSTing of this hamfest, has, we feel, been a very large contributing factor in the success of the event:

W3CJI - W3HMO - W3IZT - W3IOU - W3BWF
W2CTI - W2NPV - W3GCU

also the various operators who utilized their time in broadcasting from our club station W3AQ.

Again our sincere thanks to all who took part in this work.

The D.V.R.A. extends a very cordial welcome to everyone attending this event. Our Committees have arranged a program which, we trust, enjoyment and plenty of fun for all. If we can be of further service to you please do not hesitate in calling upon any of the committee members, whom you will find identified by the yellow tag,

IT IS VERY IMPORTANT THAT EVERYONE DISPLAY THEIR OWN IDENTIFICATION TAG in a prominent place so that there will be no delay in obtaining refreshments etc on the grounds.

We wish it to be clearly understood by all that NO D.V.R.A. MEMBER is eligible in any way to receive any prize.

Frank Kelly, a few years ago, struck up quite a friendship with a 20 meter fone contact in Iowa, who insisted that Frank and Alma drop in and pay him a visit on their vacation tour; so, in spite of all objections from Alma, the visit was fulfilled. The trip itself was FB, but Alma describes the residence of said "Corn State" ham as "Tobacco Road", and, to top it off, on the very first, (and ONLY) nite of their stay, the BED FOLDED UP and left them both reclining on the planks. Now Alma says, "Never again, unless the visit can be made via television" -- And we do believe Alma MEANS IT!

No 20 meter report this month - W3EED just moved (again) and his rig is still PACKED UP - INACTIVITY!

**THE FCC MEANS BUSINESS * WILL TOLERATE
NO VIOLATIONS OF ORDER NR 72!!**

15 Amateur Licenses Suspended!

Thirteen additional amateurs had licenses suspended in June for engaging in international communication in direct violation of F.C.C. order prohibiting communication with stations other than those in U.S. or U.S.A. Possessions. The Commission's publicity release states very frankly that this should be a warning that international work at this stage of the international situation simply will NOT BE TOLERATED. On July 1st two more suspension orders of F.C.C. were effective against F.A. Caulkins (at W8XYP) and B. H. Hall (operating K6THB). No evidence of subversive activity in the cases, but, unmistakably, FCC MEANS BUSINESS. The F.C.C. cracked down on three more users of unlicensed radio equipment used by interlopers in our amateur bands also. It is again emphasized that all licensed amateurs owe it to themselves to assist FCC in the speedy elimination of EVERY RADIO BOOTLEGGER, and to be eternally vigilant in policing our own activities to prevent any violations of Order 72 or other regulation!

Amateurs are well advised not to answer any station that leaves a CLEAR IDENTIFICATION PREFIX off the call or that sends a W call with BK and no identification as a certain 4QET (D4QET) is alleged to be doing. W's are also warned about 4CVK and 4ARR both Germans and very active on 14 Mc c.w. 4ARR usually gives the prefix D while 4 CVK always OMITTS IT! The "thirteen" lost their privileges for calling and working HK3CL, CM-CO's, XE's, PY's, D's, etc, --- and NO EXCUSES were acceptable to F.C.C.! F.C.C. will continue to revoke amateur licenses as may seem necessary as in the case of W9LMY (June QST) and the others for violation of Order 72. We're being hurt at Washington by any continued work contravening this order. Please hop on any stations who directly or by subterfuge engage in work with foreign points! Help keep amateur radio SAFE! Continue to report all violations of orders direct to A.R.R.L.

EIGHTY METERS

Everything on 80 seems to be slow, including traffic. Most of the traffic is Trainee traffic, to and from men in our armed forces. The usual portion of static is present on the band due to severe local electrical storms, which makes it very bad for the networks as one section

may have good reception, and fifty miles away nothing can be heard.

2½ METERS

There seems to be quite a bit of 2½ m activity locally in recent weeks.

W3IDY has worked Brooklyn, Long Island, Plainfield (W2KP), and Hightstown N.J. (W3FTU) during the past two weeks. W3FTU in Hightstown has also worked the above locations with his MRT-3 transceiver input of about 10 watts. W3IDY is also using about the same input. Also, on July 17, W3HW worked W2KP, Plainfield, N.J. from QTH of W3IDY with FTU's MRT-3 while testing same. The antenna at W3IDY is a half wave matched impedance about 50 ft up in the air. IDY's transmitter consists of parallel rod oscillator with 6F6G.

There are quite a few of the local boys "getting down" to 2½ now. W3JOL, W3FTU, W3BAQ are all using the Abbott MRT-3 job, and Ted, W3BAQ can tell quite some interesting dope on his use of an Abbott DK-2 with only about 2 watts input, working mobile as well as fixed location.

FIVE METERS

Five meters hereabouts seems to be quite active too; although there are only one or two stations on that band just at present. During the week of July 27, John Power, W3AXU, worked ten stations, none of them duplicate contacts, which netted him 6 districts. These contacts took place on Tuesday July 29, between 6:50 and 8:45 PM EDST. This band seems to be opening up: W2BYM, Lakehurst, N.J. reports having worked 14 stations during the same period.

LINE NOISE!

With the coming of the summer months, some of the boys got together and decided that the antenna at station W3AQ, our club station, should have the proper protection from lightning, and therefore proceeded to place a "ground" on same, running a wire down to the water pipe in the small closet alongside the rig from the feeders in the rear of the transmitter. The feeders rise from the transmitter and run into this closet wherein they connect to an ANTENNA CHANGEOVER RELAY, as the same antenna is used for both receiving and transmitting. So, after having placed the "ground wire" around the feeders from the transmitter and neatly connecting it to the water pipe, they sat back, safe in the thought that the antenna was effectively "grounded", so when comes the lightning - "Let-er Rip" we're

safe: BUT ARE WE?? Think HARD boys, that relay is IN BETWEEN the antenna and the "ground", and the antenna is normally connected to the RECEIVER, and is only connected to the transmitter when the transmitter HIGH VOLTAGE is on for transmitting -- So at least our FEEDERS are "grounded", behind the transmitter.

Chick Anderson, W3JJK, and Andy Jamieson are now working for the -- (We know not) Amusement Company as maintenance men, servicing and repairing them "Quickie" movie thriller-diller-cranker-outers. -- Huh! we were wondering what ailed some of them machines!

 THE LADIES' AUXILIARY
 REPORTS!

TO ALL YL'S AND XYL'S!

The Ladies' Auxiliary of the Delaware Valley Radio Association extends greetings and a very cordial welcome to all the ladies attending this event. Our Special Committees have arranged a program which we hope will provide maximum entertainment for all those present. We have tried to give you as interesting a day's outing as can be arranged, and hope you will have enjoyed yourselves to the utmost when comes the close of this affair. We sincerely thank you and hope to meet you, each and everyone at future events.

 Helen Allen recently took leave of absence from her position with the U.C.C. Helen now snoozes until the "doublehours" of the morning, while Lester Hurly slaves at W.B. Co.

 Edith Jamieson is now Key Punch operator with U.C.C. -- Seems like this position is sticking within the realm of the L.A.D.V.R.A.!

 Alma Kelly, after consistent persuasion joined the Ladies' Auxiliary at their last meeting.

 Ruth Hirsch has recently received her promotion to Secretary to Ass't. Purchasing Agent at The John A. Roeblings Sons Co. - Congratulations Ruth!

 Natalie Hannah is "gunning" for the guy who reported that article in an earlier issue of the NEWS wherein Bill was caught wiping the dishes -- because -- now Bill refuses to do any kitchen duty.

Sorry we cannot divulge our source of info, Natalie, 'twould'nt be fair ya know!
 (Ed)

 The August Meeting of the Ladies' Auxiliary will be held on Wednesday, August 13th, at the home of Mrs. Charlotte Yoder. This meeting will mark the Fifth Anniversary of the Ladies' Auxiliary - Congrats Ladies - Keep up the good work! (Ed)

 LADIES' AUXILIARY
 OUTING COMMITTEE

Marie Whyno	President
Helen Allen	Vice Pres
Charlotte Yoder	Secretary
Verona Kise	Treasurer
Pauline Raser	W3HVO

Natalie Hannah

Patricia Profy

Edith Jamieson

Erma Blumell

Ruth Hirsch

Alma Kelly

 Radiograms may now be filed for transmission with the managements of the RKO theatres and Hunt's Gaiety theatre. Tell your friends they may avail themselves of this service FREE while either entering or leaving these theatres.

 There are still some unclaimed QSLs at the QTH of W3CCO, 104 South Quinton Ave.

 Much interesting and valuable information may be obtained by copying the broad casts from the various A.R.R.L. Official Broadcasting stations: A few of em:

W1AW - ARRL Headquarters - Skeds in QST.
 W3AQ - D.V.R.A. Club station - DAILY at 7:45 PM EST on 1980 Kcs.
 W3GCU - Tuesday-Thursday-Saturday MORNINGS at ONE AM EDST on 3700 Kcs - (On and after Tue. morning, Sept. 9th these skeds will take place on 3558 Kcs in compliance with request of Official ARRL Message Nr 946.)

D.V.R.A. OUTING COMMITTEES

TICKETS

William Hannah	Chairman	W3EUH
Lester H Allen		W3CCO
Ed. G. Raser		W3ZI
William Petty		W3HAZ
James Hassal		W3???
William Burroughs		W3AID

SPORTS

Frank Profy	Chairman	W3CHL
Harold Carr		W3JFI

RECEPTION

William (Doc) Wilbur	Chrman	W3GNU
Richard Brown		W3CJI

REFRESHMENTS

Dave Nabutovsky	Chairman	W3ITU
Harold Carr		W3JFI
Elwood Pullen		W3ISZ
Charles Anderson		W3JJK
Anthony S Rura		W3ARN
Ray Tomlinson		W3GCU

William Bryce		
Edward Peters		
Charles Moore		
Victor Kromko		
Henry Schaff		
Erwin Powell		

BAR

Leslie Yoder	Chairman	W3EED
Frank Kelly		W3CKY
Victor K Yates		W3IOU
Frank Profy		W3CHL
Ed. B. Kerr		W3CCC
William Blumel		W3JOL
Theo. Torretti		W3BAQ

ENTERTAINMENT

Lester Wood	Chairman	W3BWF
Aaron J Sloin		W3JNO

PRIZES

Andy Jamieson	Chairman	-----
---------------	----------	-------

SIGNS BY

William Blumel		W3JOL
----------------	--	-------

CUSTODIAN OF GROUNDS

Charles Moore		-----
---------------	--	-------

The D.V.R.A. sincerely thanks you for your patronage, and hopes to meet you all again soon both on the air and at future events.

BEST OF LUCK TO ALL!

TO-DAY'S PROGRAM

D.V.R.A. FIFTH ANNUAL OUTING AND HAMFEST

10:00 AM to 12 Noon:
Registration, getting acquainted and Posting QSLs on Bulletin Board, etc.

12:00 Noon: Refreshment Stands Open.

12:15: Quoit Contest Opens.

12:30: BASEBALL GAME-ORS/OPS - 7 Innings.
LADIES' BINGO OPENS.

1:00 : Bar Opens. (Come & Get It)

2:00 : DANCING: with Les Wood & his NBC Broadcasting Orchestra
JITTERBUG CONTEST

2:45 : VAUDEVILLE (On the Dance Floor)

3:45 : 2nd/3rd district Ball Game
(7 Innings)

4:30 : HOT CORN ROAST

6:00 : PRIZE DRAWING

7:00 : BAR CLOSSES

LUCKY NUMBER DRAWING

KEEP THIS COPY OF D.V.R.A. NEWS - IT MAY BE THE LUCKY NUMBER WHICH WILL TAKE A PRIZE IN A LUCKY NUMBER PRIZE DRAWING!

THIS IS NUMBER --

BUCKY SAYS! "Knowingly allowing a BOOT-LEGGER to use your call on the air is like passing out BLANK CHECKS with your signature affixed -- THE HEADACHES ARE ALL YOURS!"

We sincerely hope you have enjoyed yourselves, each and every one of you; We have endeavored to make your visit with us as interesting as possible, and look forward to many more events together in the future. Take this copy of D.V.R.A. NEWS with you; all our members will be looking forward to contacts on the air.

And, until we meet again:

73 and 88

Delaware Valley Radio Association.

HAM-O-GRAPHS

"OR WHAT HE CALLED YOU AT THE D.V.R.A. HAMFEST."

WJAL	Chairman	Ed. S. Baker
WJAL	Chairman	William Kelly
WJAL	Chairman	James Hessel
WJAL	Chairman	William Burroughs
WJAL	Chairman	SPORTS
WJAL	Chairman	Frank Brady
WJAL	Chairman	Harold Carr
WJAL	Chairman	RECEPTION
WJAL	Chairman	Willie (Doc) Miller
WJAL	Chairman	Richard Brown
WJAL	Chairman	REPRESENTATIVES
WJAL	Chairman	Dave Koberly
WJAL	Chairman	Harold Carr
WJAL	Chairman	Wood Palmer
WJAL	Chairman	Charles Anderson
WJAL	Chairman	Anthony S. Kern
WJAL	Chairman	Ray Tomlinson
WJAL	Chairman	William Byers
WJAL	Chairman	Edward Peters
WJAL	Chairman	Charles Moore
WJAL	Chairman	Victor Krohn
WJAL	Chairman	Henry Schell
WJAL	Chairman	Irvin Powell
WJAL	Chairman	HAR
WJAL	Chairman	Lois Yoder
WJAL	Chairman	Frank Kelly
WJAL	Chairman	Victor K. Baker
WJAL	Chairman	Frank Kelly
WJAL	Chairman	Ed. S. Baker
WJAL	Chairman	William Hessel
WJAL	Chairman	Thos. Torrey
WJAL	Chairman	ENTERTAINMENT
WJAL	Chairman	Leaver Wood
WJAL	Chairman	James J. Stein
WJAL	Chairman	PRIZES
WJAL	Chairman	Andy Jackson
WJAL	Chairman	STOCK BY
WJAL	Chairman	William Hessel
WJAL	Chairman	CUSTOMER OF GROUND
WJAL	Chairman	Charles Moore

THE D.V.R.A. SINCERELY THANKS YOU FOR YOUR PARTICIPATION AND HOPES TO MEET YOU ALL AGAIN SOON BOTH ON THE AIR AND AT FUTURE EVENTS.

12:00 Noon: Refreshments & Social
 12:15: Golf Contest
 12:30: BASKETBALL GYM-GYM - 1/2 hour
 LADIES' BINGO OPENING
 1:00: Bar Open (Open 1-2-3-4)
 2:00: DANCING with Les Wood & his
 Presiding Organist
 2:15: FASHION (On the dance floor)
 2:45: 1st & 2nd district Ball Game
 (3 packages)
 4:30: HOT CORN ROAST
 7:00: PRIZE DRAWING
 7:00: BAR CLOSING

LUCKY NUMBER DRAWING
 KEEP THIS COPY OF D.V.R.A. NEWS -
 MAY BE THE LUCKY NUMBER WHICH WILL WIN
 A PRIZE IN A LUCKY NUMBER PRIZE DRAWING
 THIS IS NUMBER --

WHY SAY "NO" TO A LUCKY NUMBER PRIZE DRAWING?
 TO GET YOUR COPY OF D.V.R.A. NEWS, CALL ON THE AIR
 THE PRIZES AND BINGO CHECKS WITH YOUR
 SIGNATURE ATTACHED -- THE PRIZES ARE
 ALL YOURS!

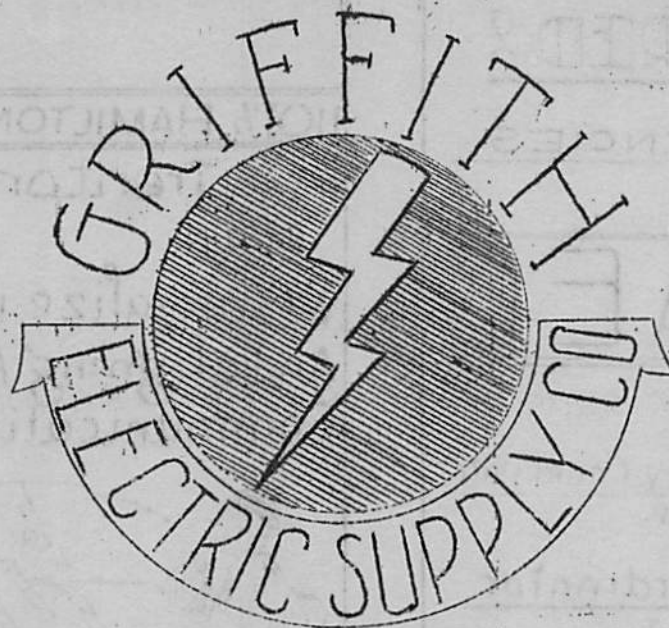
We sincerely hope you have enjoyed
 yourselves, each and every one of you
 have answered to make your visit
 as an interesting as possible, and
 forward to many more events together
 the future. Take this copy of D.V.R.A.
 NEWS with you, all our members will be
 looking forward to contacts on the air.

And until we meet again:
 75 and 88
 Holman Valley Radio Association

HOT UP LUCK TO ALL!

GRIFFITH ELECTRIC SUPPLY CO,

*Electric
Wholesale
Jobbers*



*Consult us on
Your Engineering
Problems*

479 S, BROAD ST, TRENTON, N, J,

118-120
N. BROAD ST.

MURLEY-TOBIN CO

110-112
E. HANOVER ST.

TRENTON'S LARGEST RADIO DEALER,

VISIT OUR "MUSIC HALL" AND SEE
OUR COMPLETE STOCK OF PHILCO,
R.C.A.-VICTOR, EMERSON & DEWALD RADIOS
Portables, Compacts, Consoles, etc.
RADIO-PHONOGRAPHS - AUTO RADIOS
SOLD ON EASY TERMS

VICTOR - COLUMBIA - DECCA
OKEH AND BLUEBIRD RECORDS

BE

PREPARED!

for all EMERGENCIES

JOIN THE A.E.C.

See your Emergency Coordinator
for all Details.

The Emergency Coordinator
for Southern New Jersey

Ted Torretti,

W3BAQ

RADIO
SERVICE

SHOP

1101 1/2 HAMILTON AVENUE

Trenton 11J

We specialize in servicing
And aligning AMATEUR
Communication receivers



See Dave
and Andy
If you have
Trouble in
Your Shanty

QSL CARDS

By "Brownie", W3CJI

SATISFACTION GUARANTEED

ORDER NOW:

"Remember, you will be judged many times by your QSL."

RICHARD E. BROWN, 1725 Frankentield Ave., Allentown, Penna.

WHOLESALE REPRESENTATIVE

EMERSON RADIOS
EMERSON RADIO TUBES
R.C.A. RADIO TUBES
EVEREADY BATTERIES
DEXTER WASHERS & IRONERS
WESTINGHOUSE MAZDA LAMPS
WHEELER FLUORESCENT LIGHTING
ROBBINS & MYER ELECTRIC FANS
HAMILTON BEACH APPLIANCES
TOASTWELL APPLIANCES
FITZGERALD APPLIANCES
STEAM-ELECTRIC IRONS
REMINGTON-RAND ELEC. SHAVERS
CORY COFFEE BREWERS
WESTON ELECTRICAL INSTRUMENTS
EDWARDS CHIMES
MUELLER ELECTRICAL SPECIALTIES
EMERALITE LAMPS
EAGLE ELECTRICAL SPECIALTIES
MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All!

Call or write:

LESTER H. ALLEN, W3CCO

704 QUINTON AVE.,
TRENTON, N. J. Phone: 8919

PARKER

Printing and Stationery Co.

214 So. BROAD ST., Trenton, N. J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, Etc.

Phone 3-2784

Established 1912

SPIEZLE'S

MEN'S AND BOYS CLOTHING

145 S. BROAD ST., TRENTON, N. J.
(Second Door from Factory St.)

QUALITY AND
STYLE without
EXTRAVAGANCE

open nites till 8⁰⁰

PHONE 3-5234

AMERICAN RADIO Co.

TRENTON'S LEADING RADIO STORE

25 EAST HANOVER ST
TRENTON, NEW JERSEY

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

hallicrafters receivers STANCOR Transformers
BLD RADIO PARTS • Meissner RADIO PARTS
RCA TUBES • • • • Philco & Emerson Radios
Taylor Tubes • • • • Portable Batteries • • • •

Complete REPAIR & SERVICE Dep't.

OPEN NIGHTS

PHONE: 2-9183

RADIO **NIDISCO** PARTS

"RADIO FROM THE GROUND-UP"

147 North Warren Street, Trenton, N.J. - Phone: 4536

DISTRIBUTORS of:

RADIO PARTS..... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

Other Stores At:

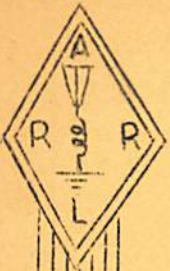
658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

NEW JERSEY'S LARGEST

100%



D

V

R

A

September 1941

Don't let this happen to YOU!



" BUT DEAR, ... IT WASN'T THE SET,
A NEW AMATEUR JUST MOVED IN NEXT DOOR "

NEWS

VOL.
VI
NO.
7

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC. Trenton, N.J.

Edm. A. Blum (W3JOL)

D.V.R.A. OFFICERS

Lester H Allen	President	W3CCO
Leslie R Yoder	Vice Pres	W3EED
William Petty	Secretary	W3HAZ
Ed. G. Raser	Asst Secy	W3ZI
William Hannah	Treasurer	W3EUH
Charles Moore	Sgt at Arms	SWL

BOARD OF DIRECTORS

Chairman	Lester H Allen
Activities	Leslie R Yoder
Special Features	Theo. Torretti
Publicity	William Petty
Publication	W.R. Tomlinson
Finance	William Hannah
Radio Communicat'ns	Dave Nabutovski

D.V.R.A. NEWS STAFF

Editor In Chief	W.R. Tomlinson
Associate Editor	Victor K. Yates
Editor of Art	Wm. A. Blumel
Business Manager	Theo. Torretti
Circulation Mgr.	W.R. Tomlinson
Printing By	Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 623 East Brown St., Trenton, N.J. This amount covers the cost of mailing for the period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, sending the necessary amount and he will mail your copy as it is published.

W 3 A Q

All members, or other operators who wish to operate the club station MUST show their license, also display same in the operating room while operating the transmitter. It is also MANDATORY that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and presence of the Director of Radio Communications during operation and he will sign the station over and off as required by Federal Communications Commission regulations.

EDITORIAL

As the time draws nearer for those expected band changes the greater number of our Fraternity realize that we, as PATRIOTIC RADIO AMATEURS, have been requested to COOPERATE, and adapt ourselves and our equipment to a smaller portion of the radio spectrum in order that the program for national defense may proceed.

Since notice to this effect was issued we have witnessed the "grumblings" of not only a few, but thousands who seem to have forgotten that our 80 meter band is, and has always been, a SHARED BAND. Yes, shared by us with the COOPERATION of the ARMY and NAVY, who are now asking COOPERATION of us that they can have uninterrupted, for the duration of national emergency, the portion of THEIR OWN BAND they so sorely need for uses from which we will ALL ultimately derive huge benefits.

From these thousands, also from others, come the "gripes" of the "brotherly" hams who would restrict the use of the radio spectrum to their own purposes; again putting aside the wishes of all others but those in "their class", believing that the best part of the band is exclusively THEIRS.

BET THEY'LL WANT THE 40 METER FONE TOO!

W3GCU

OBITUARY

The Amateur Radio Fraternity joins in sympathy in the Death of Harry B. Taylor who passed away suddenly due to injuries sustained in an automobile accident. He was driving alone at the time of the accident, and, known to be a very careful driver, we are all at sea as to just how it all happened.

Harry was manager of the Radio department of Fineburg's, local Philco distributors, and although his interest was more in the broadcast field, always had an encouraging word for the amateur. Harry will be greatly missed by many who looked forward to his friendly greeting.

OFFICIAL DOPE

For the benefit of the many amateurs who seem to be "in a fog" regarding the changes in the ten meter band - here is the A.R.R.L. Official notice reprinted:

Nr 945 - On July ninth at request of A.R.R.L. the F.C.C. amended its rules governing amateur stations to open all but the first 100 kilocycles of the ten meter band to phone operation and to make available the frequencies 29250 kc to 30000 kc to frequency modulation. It also amended section 12.83 to provide that an amateur station shall transmit both the call letters of the station called or worked as well as the sending station's own call at the beginning and end of each transmission and at least once during every transmission, and adopted language which makes special authorization necessary before remote control may be used. Watch QST for details of above regulations AR (Thus phone may now be used in all but the lowest 100 kc of the band.)

Nr 950 - The changes in amateur regulations expected September first have been deferred to December twenty unless sooned advanced upon thirty days notice. Amending previous expectations a Class A license will be necessary for 4 mc. & 14 mc phone operation but the new 7 mc phone assignment will become open to all amateurs in Continental United States on December 20. No vacating of 80 meter CW or 160 meter phone frequencies is necessary until then. The War Department begins partial shared use of 3800-3900 kilocycles about October 1st with some inevitable interference but gives us as long as possible before actual vacating AR (Thus--on December 20, the exodus to 7 mc phone will be in the order of the day.) "Lets Go - 40 Ho"

Nr 952 - More openings for operators to receive training are still available. A ten months' course of radio instruction with pay is afforded by the Maritime Service Resident school at Gallups Island, Boston, Mass. Citizens between 18 and 23 years of age with High school education including a year of physics and two of math including algebra who can present an F.C.C. license or demonstrate ability to copy 13 wpm are eligible to be enrolled if they pass a physical examination. The school qualifies for commercial radiotelegraph operator license providing uniforms, board texts, and material without military enlistment. Transportation is provided to the school for those accepted. See June QST for article describing Gallups Island school. Write today for further details from Chief US Maritime Service US Coast Guard Headquarters, Washington, D.C. AR

We have received several requests for info regarding renewal of licenses from some of the boys in the Service: so, from page 29 August QST we reprint F.C.C. order number 81 by which:

It is ordered that, until further order of the Commission, amateur radio operator and station licensees, serving with the armed forces of the Nation, who desire to renew outstanding licenses may submit to the Commission, by letter, an informal application for renewal in lieu of formal application required by the Commission's rules; provided, however, that such informal application for renewal by letter must set forth that fact that the applicant is serving with the armed forces of the Nation and must be accompanied by a signed statement of the applicant's immediate commanding officer, verifying that fact.

PRESIDENT BAILEY SAYS!

Keep pounding brass! Keep the dust off the mike! Don't let up! Don't pay any attention to rumors you hear on the air ---or off! THE LEAGUE WILL KEEP YOU POSTED - Listen to WLAW. What we want is ACTIVITY. Living here in Washington, I know how great is the need for radio men, both in the armed forces and right at home. KEEP ACTIVE!

A world of good dope on net operation may be gained from the article entitled "A WORD TO NETWORK LEADERS" on page 35 August QST. It is worth five minutes of everybody's time to read - and digest - every word of this article-learn sumpin

THE STORY OF WESTERN ELECTRIC

CHAPTER FOUR

In 1925 the engineering department of Western Electric was incorporated as Bell Telephone Laboratories -- a single research organization, jointly owned by Western Electric and the American Telephone and Telegraph Company. It is the direct descendant of the attic workshop, and to the original invention has contributed 17,000 others for making the service better, cheaper, and more extensive. Among these are many which have helped to bring about such conquests as talking overseas, to ships at sea, and to airships in the skies.

Among these inventions, too, have been some that held great possibilities for use outside of the telephone industry. To adapt inventions of this kind to such purposes and to put them to use, Western Electric in 1926 created a subsidiary, Electrical Research Products Inc.

The most important invention laid on its doorstep was the successful application of sound to motion pictures, employing principles derived from those of telephony. The talking motion picture revolutionized that industry. Adopted by the principal producers and installed in their studios and in 10,000 theatres throughout the world, it has become familiar to millions under the name of its maker, Western Electric Sound system.

With the use of sound in the Motion Picture Industry now well established, Western Electric continues to manufacture sound recording equipment, but other companies have been licensed to make reproducing equipment for use in theatres in the United States. Electrical research products carries on the further development of both recording and reproducing equipment in its laboratories at New York and Hollywood, and continues the distribution abroad of such apparatus.

Likewise Western Electric continues the manufacture of radio broadcasting equipment including that used in the police and aviation fields, public address and other forms of amplifying apparatus, and audio phones for those with impaired hearing. These means of transmitting the human voice are marketed chiefly through the Graybar Electric Co, which likewise sells to the general trade Western Electric cable and telephone equipment.

"OLE ZI's KORNER"

By Ed G. Raser W3ZI

Wal fellers its sure a small world, yezzer! A few days ago a new employee at the Signal Corps Labs sez to me, "Bye the way do you know a feller by the name of Ed Raser?" Wal I sez, sure I auta know im pretty well cause you're a-lookin right at im! "Put it there, pal" he sez, I'm old W2BSO who use to work you nightly on short wave from the S.S. Colombia, remember me?" "Shore do pard" I answers, "and to think we meet at last".

(By way of explanation, the steamer Colombia, WKEG, and the S.S. Haiti, WKEJ, were sister ships plying the West Indies banana trade. We were both ops aboard these ships, working each other daily, but never happened to cross paths until 1941) I STILL say "its a small world"-- in ham radio anyway.

Not much news of the local boys this month, as all was reported in the August issue. However, we find that Tony, W3HWT, and Johnnie, W3BMM, are now in the Navy and just recently graduated from the Naval Radio school at Noroton Heights, Conn. Congrats to ya both fellers, and we sure are pleased to know that you received your Petty Officers ratings, 3rd Class.

W2OEC is the brand new ham station now located at Fort Monmouth, N.J. and operated by the 3rd Signal training Battalion Signal Corps replacement Center. Had the pleasure of looking over the outfit last week and its sure a commercial layout to all appearances.

During a conversation at our hamfest on August 10th with our distinguished Atlantic Division Director, Bradley Martin W3QV, Brad advised us that he is now Ass't to the Communications Officer at Lakehurst Naval Air Station -- Congrats on the promotion, Brad.

Ole W3HKO, Bud Waite is now down there at Fort Benning, Ga. with the "Jeep Fleet" on a test run. Bud has served many years at sea and is quite an old salt; but he never did believe he would become Commander of a safari on wheels. He has been daubed 'skipper of the jeeps'.

It is reported that Bill Petty, W3HAZ, was handin em over the bar to "ZI" one right after another until Frank, W2MLW, caught an action shot of Ed, which is entitled "Caught with the evidence"

(Still with Ole ZI)

While "gabbing", ye editor mistakingly forgot to finish the item second above this-un which should have finished --

"If ya don't know what a "jeep car" is, wal its one of them contraptions used by the Army for all sorts of reconnaissance work --One of em even climbed the city hall steps over in Newark 'tother day for a publicity stunt".

According to the latest poll of amateur calls among the employees of the Signal Corps Labs at Fort Monmouth, N. J. by W2MWW, there are 75 ham calls represented on the roster; and a mimeographed "Ham Directory" is being compiled for local distribution by W3ZI and W2MWW.

Ole Joe Clinton, W3LT, who is now back in Trenton, keeps 160 covered for us in this locality. Joe handles AARS deliveries for Trenton via the AARS 160 meter net. Howsabout joining the outfit, Joe, & become a member of "Unk Sam's" famous communication boys??

Incidentally, Ted, W3BAQ, now has a rival in these parts; ole Sgt. Al Foster, K7BAQ of Juneau, Alaska, who resides at 289 Broad St., Eatontown, N. J.

In case any of his old friends should care to drop him a line or two, Al will be more than pleased to hear from any or all of ya. His new call is now W2OCX.

Bill Blumel is going to take a crack at 160 GW for a change, using W3ZI's lil portable rig, which seems to be travelin 'round the city quite a bit, as well as meanderin around the county. Its last resting place was over at W3AID's shack.

"CURIO"

(From -- Trenton High School Paper 1933)

"Hello, W3AXU calling CQ". These are the words John Power, a junior, talks to his friends. His method of parlance is over the ether waves.

John owns an amateur radio station and has talked to people as far away as Oregon. Hanging on the wall over his desk are more than one hundred cards which have been sent to him by listeners. These cards tell where the listeners are, the kind of reception, and give friendly criticizms.

W3AXU was given him to use as a station call when he passed the test which allowed him to operate his station. Incidentally, it took him a year and a half

to study for the examination. He has held his license for a year and has talked with 500 amateurs since then.

Before he secured his license a receiving set was the only radio instrument that he was allowed to operate. While tinkering with it, he heard some radio messages from the Byrd expedition at the South Pole.

John is a member of the American Radio Relay League which is an organization for relaying messages to distant places. The radio club recently formed at this school, claims him as an active member.

(This li'l item carried the heading -- "John Power Gains Permission To Operate Radio Station W3AXU After Rigid Examination")

FOR SALE SWAP FOR SALE

SALE: 1 Breting 14-AX - Perfectly aligned - 14 new tubes. Can be used to modulate 100 watt carrier. Perfect satisfaction guaranteed. Only reason for selling - NEED CASH.
Contact W3ITU

SALE: 1 Hallicrafter 8 tube communication receiver - Perfect condition.
Contact W3CCO

SALE or SWAP: Will trade 1 Astatic D-2 crystal mike with desk stand, all brand new for 3 #327A Triplet square milliameters - 2 0-100 ma, DC - 1 0-200 ma DC. OR WILL SELL for \$12.50 CASH.

Contact W3JNO

"INTERFERENCE ANALYSIS AND ITS RADIO RECEPTION EFFECTS"

By W. J. ZAUN
Service Division
RCA Manufacturing Co., Inc.

CHAPTER TWO
"HARMONIC OF I-F"

When a signal is being received whose frequency is twice that of the nominal I-F; or within a range of plus/minus 10 kc. of twice the I-F, there will appear in the output of the mixer stage a second order effect, or the difference between twice the signal frequency and the oscillator frequency. Whenever the signal frequency is twice the I-F, the normal I*F will be produced in addition to the spurious I-F which is due to the beat between the second harmonic of the signal and the heterodyne oscillator.

"Interference Analysis"- Cont.

Since the standard I-F and the extra I-F vary at different rates as the receiver is tuned, a whistle will be heard. Selectivity cannot discriminate against this type of whistle as only a single signal is involved.

Since the number of cities having stations which operate on the second harmonic of I-F frequencies used at the present time, is limited, this interference does not become of general concern, but applies only to the particular locality where the station is situated. Re-alignment of the I-F stages of any receiver effected, is the usual cure for trouble of this sort. It should be carefully noted and checked as to whether the signal operating at the second harmonic of the I-F is being picked up on the under-chassis wiring of the receiver, in addition to the antenna.

In this case the whistle produced will be aggravated. In extreme cases, it is possible to eliminate the whistle by providing a wave trap, tuned to the second harmonic of the signal, and placed in the circuit feeding the mixer stage.

This interesting story appears each month in the NEWS. The story will run for a long while yet, and if you want to follow it - just read this paper.

RADIO TO GET PARTS PRIORITY!

Priorities to assure a steady flow of maintenance and repair parts to the broadcasting and communications industries will be provided as soon as the requirements of more pressing industries are cared for it was assured by the Office of Production Management in Washington, D.C.

Announcing that preference ratings were being extended to manufacturers in nine industry classifications, E.R. Stettinius, Jr., director of priorities, said that nine other groups, including broadcasting, would be included as soon as possible.

We wish to take this opportunity to thank our visitors at the D.V.R.A. Outing and Hamfest for their attendance at that affair on August tenth. We hope you enjoyed yourselves thoroughly, each and everyone of you, and sincerely hope that we may have the pleasure of entertaining you all again on future events which are being sponsored by this fast-growing organization. Again - Our sincere thanks

SECOND DISTRICT TRANSIENTS

By W2GPG

It is surprising to note the tremendous interest that the two-one half meter band has created in a few short months. Old-time, ultra high frequency enthusiasts liken $2\frac{1}{2}$ meters to five meters just before crystal control regulations set in. They are of the opinion that $2\frac{1}{2}$ will some day attain unusual DX possibilities now being achieved on "five". Old timers point out 5 meter DX was once considered impossible. It wasn't until sensitive receivers and high power transmitters were used that coast to coast QSOs became a reality. If the same applies to $2\frac{1}{2}$ meters, it won't be long before the 112 mc DX record of 225 miles will be shattered.

Speaking of $2\frac{1}{2}$ meters and mobile trans missions, George Alfano W2NHZ and his brother Tony W2NIW, returning from a trip to the shore, having transceivers in the car, maintained contact between them. George led a line of heavy traffic, Tony followed half a mile behind. While chatting back and forth, Tony remarked that there was something wrong with his car. Sure enough he had to pull out of line to fix a flat and George immediately turned back and before you could call a CQ, both boys had the damage repaired and were once again headed for home

Metuchen hams are readying themselves for emergency defense work building trans-receptors for future net purposes. These trans-receptors will operate mobile $2\frac{1}{2}$ meters and will tie in with a home station to be operated on a spot frequency on the 160 meter band. It is reported that cooperation is plentiful and that already five hams in the community have constructed these units.

Eddie Witowski, W1HRM, who recently moved to Newark from Connecticut is a former ship operator, having handled the key on many South American-bound tankers. He is connected with a local radio firm as transmitter inspector.

The Ham Fraternity is saddened by the loss of an old friend, Bob Conn, W1KZR, of Southbury, Conn. Bob was extremely popular among the 160 meter boys.

Inability of obtaining aluminum panels keeps W2FWE from completing his new 160 meter rig.

2nd Dist. Transients Cont.

W2MND may attend a Southern College upon the opening of the fall Session.

Uncle Sam's invitation to visit the army at the expense of the Government was accepted by W2IQG, who will spend a year doing so.

Ex-W2KIF is at Fort Benning operating with the call W4HCF.

W2JBY-W2IMX and W2ISW are at the Naval Reserve Radio School at Noroton, Conn; while W2HHY, W2IDH and W2IMQ are learning radio at Fort Moomouth.

W2JKH is acting NCS on the NNJ AARS phone net during the absence of W2KXD.

The Setonia Radio Club, W2NCU, South Orange, operates the 600 watt transmitter on 20 - 40 - 160 CW; a modulator will be constructed which will enable the boys to place their rig on phone. The club consists of 11 members, who expect to do some experimenting with a television transmitter this winter. One of their former members, James Graham, W2LNL, is a plebe at the U.S. Naval Academy, Annapolis Md.

An article on Amateur Radio, "Unbending the Ginks," by James Whitaker, W2BFB, Verona, tells an interesting story concerning a BCL's experience with Ham interference:

"Many freak conditions are encountered in interference problems, but probably the most unusual to occur left a housewife speechless. In the midst of her preparation of Sunday dinner, a gas oven suddenly began to call CQ". That housewife probably thought the roast had suddenly come to life; that the steer's ghost had come to haunt her.

This particular case was caused by resonance in the gas pipe between the earth and the stove, and by accident of the location of the transmitting antenna with respect to the stove. A bit of careful bonding and grounding eliminated the "Voice from the Oven"

Meetings of the Garfield-Bergen Radio club are held Friday evenings, and code classes have been established on Tuesdays; also, the club is engaged in building portable-mobile equipment for use in defense work.

W2OFG is new call in New Milford and

expects to be "bustin the ether" on 160 very shortly; and speaking of 160, W2EJD is back on with his temporary low power rig.

W2IPC, of Englewood, former Marine op is doing his stuff on the commercial end of radio at WHOM.

W2NPF uses a transcription for CQ and test purposes.

W2CCU will be heard on 20 meters from Maine sometime in September.

W2BVW, who has a private airplane pilot's license seldom gets ON the air lately, seems he spends most of his time IN the air.

The newly organized Bel-Ham Radio Association elected new officers at a very recent meeting.

W3IVU is the former "Mickey Mouse" station W2EKK of Newark.

W2BRY is studio supervisor at WPAT.

From "Leatherneck" to bank clerk to radioman are the various careers of Kenneth Everheart, W9BIT, formerly of Missouri, now of Newark. Ken received his "baptism of fire" with the Marines in 1927, when the Leathernecks chased Santino out of Nicaragua. After a 12 Yr stretch in Uncle Sam's forces, Ken drifted into banking and eventually made his avocation of amateur radio his job. Ken is no stranger to the second district, being formerly licensed as W2MGZ. He will be on 2½ meters soon with a small transmitter.

W2GBJ expects to leave for Pennsylvania soon to fill his new position with CAA.

W2KUW is radio operator on the "Exter" plying between New York and Lisbon.

Old-timer W2PY vows that he will be on just as soon as he receives the material for his new 66 foot steel vertical antenna.

D.V.R.A.
CLUB CALENDAR

Halloween Banquet	Saturday Oct 25
Open House meeting	Wednesday Sep 24
Code Class	Every Monday Eve.

OUR APPRECIATION

The Delaware Valley Radio Association wishes to sincerely thank the following concerns who so kindly contributed to the success of our annual outing held on August tenth, 1941, by their generous donations of material and items of merchandise which were offered as prizes:

- American Radio Co. Trenton, N.J.
 Drake 100 watt soldering Iron
 1-3/16" Greenlee Socket Punch
 Bud QSO Index in Metal Case.
- Nidisco Radio Co. Trenton, N.J.
 Beede Fan Type O-200 Milliammeter
- National Co. Malden Mass
 25 Log Books
- Harrison Radio N.Y.
 4 - 6L6G Tubes and 1 - 83 Tube
 3 - 2 mfd 1000 volt Filter condensers
- Warren-Balderson Co. Trenton, N.J.
 Vulcan Soldering Iron
- Fineburg's Trenton, N.J.
 1 - Flashlight complete
- Profy Radio Co. Bristol, Pa.
 1- 6L6G Nat'l Union Tube
 2 - Tung-Sol Sealed Beam Auto Lamps.
- Radio Electric Service Co. Phila., Pa.
 1 - 2 mfd 1000 volt filter condenser.
 (Cornell-Dubilier)
- Taylor Tubes, Inc.,
 1 - T55 Transmitting Tube.
 2 - 866 Rectifier Tubes
- Herbach & Rademann, Phila., Pa.
 1 - 866-A Rectifier Tube
- Consolidated Radio Phila., Pa.
 1 set Acme Headphones
- Sickles Co.
 1 - BFO Transformer
 2 - 1600 kc Transformers
 4 - Air Trimmers
 20 RF Chokes (small)
 2 - RF Chokes (large)
 3 - IF Transformers
 1 Set coils for Sig. Gen or Test Osc.
- Solar Mfg. Co.
 1 Kit of 10 assorted Solar Condensers.
 1 Kit of 25 Assorted Solar Condensers.
 1 - 4 mfd 1500 volt Solar filter Cond.

W3CJI Allentown Pa.
 100-2color QSL Cards.

W2AEY
 100 - 2 color QSL Cards.

ESSEX RUBBER CO. Trenton, N.J.
 1 Set Rubber quoits.

And to the many others whose names we do not have available at this writing, our very sincere thanks for your cooperation.

It certainly does pay to advertise in this little paper: In the August issue, W3CRG advertised his 500 watt rig for sale, and just two days after the paper came out this rig was purchased by W3CJI who lost no time in contacting Ed after reading the ad.

AND

while we are speaking about advertising, don't forget that on other pages of this issue are the advertisements of those concerns who are cooperating with us in inserting their ads so, contact these people and give them your co-operation when you need the material which they can supply you.

On Saturday evening, October 25th, will be held our Halloween Banquet, at club headquarters, Trenton Yacht Club, 1171 Lambertson St., Trenton, N.J. This will be another D.V.R.A. outstanding event of the season; turkey dinner with all the trimmings, and only \$2.00 per plate for all you can eat. Dinner will be served at approximately 8:00 PM, and will be followed by dancing. This is an affair for reservation only, so get your ticket for yourself and your YL, XYL, and be sure of YOUR reservation of a good time.

Keep yourself posted on all the important happenings by listening to the Official broadcasts from:

- W1AW - ARRL Headquarters - Skeds in QST.
 W3AQ - D.V.R.A. Club Station - DAILY at 7:45 PM EST on 1980 kcs.
 W3GCU - Tue - Thurs - Sat MORNINGS at ONE AM EDST on 3558 kcs.

There are STILL some QSLs to be collected by some of the boys from the file at W3CCO's. Look, fellows, these cards are getting "musty" from inactivity. Please acquire these missives of confirmation soon, will you, fellows? Thanks a meg.

ONE SIXTY METERS

After the summer season the 160 meter band is just about set to go, and promises a good winter haul. This band started to open up along toward the middle of August for good distances at times.

Listeners on the 160 band can hear a number of good phone nets operating such as the Mass. Army Amateur system on 1985 kcs every evening at 9:00 PM, and the Connecticut State Police net on 2020 kcs. There is also the SNJ Official phone net operating on 1980 kcs of which W3AQ will again be Net Control.

W3AQ is ready to start in on fall operation, and bids good on obtaining that much-looked-for W.A.S. certificate, for which we need only 7 of em.

EIGHTY METERS

The eighty-meter band is starting to "liven up" now as most of the boys are getting their rigs in order for the opening of the fall season. The AARS started officially the fall season as of September eighth. There will be a lot of net frequency changes in the coming operating season due proposed FCC regulations affecting this band. Some nets have changed and are operating in the new frequencies.

FORTY METERS

The forty meter band is still it's usual self, no matter what time you listen in there is always some signal to be heard. Old timers, and the new ones both seem to like this band.

It is suitable for medium distance contacts in the daylight hours and longer hauls at night. During the last ORS party a K7 and couple were heard, and a couple of K6's were heard here in town.

TEN METERS

During the month of August the 10 meter band was somewhat active in comparison to other years, short skip W4's, W9's, and W8's predominating; with an occasional W5 or W6 pushing through for from 10 to 15 or 20 minutes at an interval. The ground wave in this area has also picked up with some new stations working the band. Very seldom one can get a contact on 10 unless during the daylight hours; but during the usual evening dead spells some of the boys may be heard coming through occasionally. W3AHN, Wilmington, Delaware can put his signal into Trenton any evening across the approximate 75 miles intervening, and W3GVZ, Stratford, Pa., a distance of 45 miles lands another swell sig-

nal into Trenton; while W3IOU down Willow Grove way, and the gang, W3CQU, W3JLE, W3GNA and W3GDP, in Philadelphia can also be worked any evening, and on the Jersey side of the river, W3HDJ, W3MV, and W3CM are usually very consistent signals in Trenton. After three years of trying, the writer was lucky enough to contact K5AT, working that station twice during the month with a report of R7. Conditions have been more or less erratic as far as conventional skip was concerned but, all in all, this was not such a bad report. Also, during this month, a schedule between W3CCO on ten meters and W3CJI in Allentown, Pa. have been 100% successful. This covers about 40 miles air-line, so if one uses a beam on 10 there is no limit to what may be accomplished. An unusual skip condition existed around the middle of August when the first district stations came through here in Trenton, during which time W3CCO was lucky enough to snag W1NFQ, Mass. and W1DOK, Dexter, Maine, so, with the working of these two stations, only five more states are required at W3CCO for his 10 meter W.A.S. It has also been possible to work the second district from this area at time during August, when W2LHN, and W2NIE, both of Lakewood, N.J., were contacted. All in all, 10 meters has proven very interesting at various times during the past month.

THE LADIES' AUXILIARY
REPORTS!

The last meeting of the Ladies' Auxiliary of the D.V.R.A., which marked the fifth anniversary of the Auxiliary, was held at the home of Charlotte Yoder, at which time they elected the following officers for the coming year:

Pauline Raser	W3HVO	President
Natalie Hannah		Vice Pres
Charlotte Yoder (re-elected)		Secretary
Verona Kise		Asst Secy
Helen Allen		Treasurer
Patricia Profy		Sgt at Arms

DIRECTORS

Chairman of Board	Marie Whyno
Dir of Activities	Ruth Hirsch
Dir of Publicity	Edith Jamieson
Dir of Finance	Helen Allen
Bus. Mgrs.	Alma Kelly, Erma Blumel
Reporter	Charlotte Yoder

It has been brought to our attention that the D.V.R.A. gave a party for all those who gave their services at the outing on August 10th.; they gave the

L.A.D.V.R.A.

Auxiliary five bucks -- no invitation -- hush money-or--- do they want to be ALONE ???

Helen Allen and her sister Verona Kise spent a week visiting Delaware Water Gap or thereabouts -- even Lester Hurley is not quite sure as to just WHERE they were -- You're slipping, Les!

Marie Whyno made the most of her vacation by availing herself of a trip up through Maine, and your reporter, Charlotte Yoder "got away from it all" with a few days at the shore.

It has been "wise-cracked" that the Auxiliary is trying to keep their ambition to learn code a secret - 'taint so; W3HVO has volunteered to help any of the Ladies who are interested.

The 5th annual D.V.R.A. Hamfest record for the presence of YL ops reached a new top this year with the presence of eight YL ops who were: Norma, W1MOW; Jean, W3INL; Frances, W2MWW; Millie, W5IIT; Dottie, W2MIY; Mary, W2JLL; Shirley, W2IMI; and Pauline, W3HVO. We are not exactly sure just how many of these ladies are members of the Y.L.R.L., but we are fairly certain of at half of em. As you know, the Y.L.R.L. is the national organization of feminine amateur radio operators, and at present they enjoy a membership of over 250 throughout the United States and Canada, and is rapidly growing.

Frank Burke, W2MLW, of Elizabeth, N. J. took a swell group photo of the eight licensed YL ops, which will appear in QST in the near future. Nice scoop, Frank! but W3HVO and W2MWW, who were finally rounded up by the gang, almost got left out.

Two very distinguished YL visitors, Norma Winkler, W1MOW, of the Manchester Radio Club, Manchester, N.H., and Millie Jarrett, W5IIT, of the Houston Radio Club, Houston, Texas, came a long way just to be with us at this affair. Both were very charming indeed; our hats off to them for making the "big struggle".

Pauline, W3HVO, and her OM, W3ZI and family took a trip over to Fort Monmouth recently to look over that fast-growing Army Post, and were amazed at the beauty of the Signal Corps building, with its crossed flags inlaid on marble steps. On the return trip we stopped over at Lin-

croft, N.J. to see Frances, W2MWW. Frances has a very FB rig on the air on 40 meters and can sure "rattle the Bug".

ITEMS OF INTEREST

WLHFO writes:

"To the whole gang of the D.V.R.A.:

Just wanted to let you know that 1MOW and I thoroughly enjoyed being down there and meeting the gang Sunday.

If any or all of you ever get up in this neck of the woods be sure to drop in. We'll do our best to entertain you with what we have to offer. Just give us a buzz on the phone and we'll come-a runnin'. Hope to see you all soon again in person and on the air.

Vy 73 to all

BUD

WLHFO

Manchester Radio Club - Treas.

Sam Thackeray, W3IU, is very proud of his new 100 foot steel towers down there in Bustleton, Pa., and well he may be; when one passes through that territory, it is really a shame to "pass up" a look at em.

Ground was broken Friday, August 8th, at Princeton, N.J., for the new research Labs of the RCA. When completed, the buildings to be erected on a site of more than 250 acres will constitute the laboratory for radio and electronic research.

Although a little late for publicity, it is interesting to note that one of our local radio service shops copped top honors in the 1940 RCA Modernization Contest for U.S.A. and Possessions. The Radio Service Shoppe, Dave and Andy, still hold those honors. Congrats Dave & Andy!

Responsive to the notice from FCC and issuance of explanatory material on how the proposed FCC changes would work, there was a considerable flood of protest received at A.R.R.L. headquarters from some 20,000 amateurs regarding the minor technical change that suspended the requirements for Class A. So the FCC now intends to issue the first order bringing about part of the contemplated change without including this provision; otherwise just as stated in September QST editorial.

BUCKY SAYS! - We are wondering if the fact that Bill Hammah, W3EUI, got caught for the second time wiping them dishes will push him back into the dog house, from which he just recently emerged!

HIGH WIND!

We, of the D.V.R.A. take this space to thank the B.A.R.A. for the space which they so generously devoted to advertising our outing and hamfest in their little paper. Thanks again, and best of luck to all the gang down there in Baltimore, Md.

We also want to thank B.A.R.A. for the patronage afforded us by their membership at our outing.

The members of the Delaware Valley Radio Association wish to extend their deepest sympathies to W3GID in his recent bereavement in the death of his XYL.

We also wish to join in wishing a speedy recovery to Harold Simms, brother-in-law of W3HDZ, who was injured in a recent automobile accident.

The B.A.R.A. advises that the time to become a member of that fast-growing organization is getting very short. Their charter will close as of October 1st 1941 and anyone who wishes to join must do so before that date.

When ye editor went around the block to visit Les Yoder recently, he discovered Les in the act of very gently feeding the Jr op medicine off a spoon. Ya looked nachal, Les!

W3HTJ is now the proud possessor of a W.A.S. certificate, the achievement of which was obtained exclusively on 160 meter phone. Congrats Frank!

Andy, W3DEA, is the proud papa of a new YL, now about two months old - secret eh? Incidentally, Andy operates the ONLY ham station in Roobling, N.J. and may be found mostly on 75.

Bill Meade has a kite (on) antenna and we understand his signal has went up 2Rs

Chick Anderson, W3JJK, has again changed his job, now he's at Westinghouse Mfg Co.

W3IOW, Tony, is at present located at an outpost in the jungles 55 miles from his home base, Fort Clayton, C.Z., as operator of radio equipment: conditions - Very hot weather, rain mostly all times, palm trees, mosquitos, and millions of different insects: Tony says it's a swell spot to spend the next three years!

Note left on operating table at W3AQ: "Don't turn the switch on SUDDENLY, the relay is stuck". (Treat it gentle boys!)

The complaints about this year's outing were that identification tags were not big enough, and that the ladies' prizes were wrapped up so they could'nt see WHAT they were getting!

DX ATTENDING THE HAMFEST

W4EDD Coral Gables, Fla.

W5GGX Alamogordi, N. Mex.

W5HAG Albuquerque, N. Mex.

W8EXW Cleveland, Ohio.

W8SEL Sunbury, Pa.

W8RJL Sunbury, Pa.

W8WBL Sunbury, Pa.

W9EIT Kirksville, Mo.

W9ZJB Kansas City, Mo.

W9CAC Denver, Colo.

W4HFE }
W8SSN } } Registered but no QTH listed.
W9NKF }

Also a non-registered K6 and K7.

Bud Waite was in Trenton Saturday, Sept 13, and stopped in the American Radio and complained that he cannot get any traffic into Trenton: Where are all them AARS & ORS boys? Or was Bud listening for Lowell Thomas at 7:15 PM?? Bye the way fellas, Bud's new call is W2OAI!

LINE NOISE!

A short time ago, a couple of our boys installed a NEW filament transformer for the 866 rectifier tubes in the W3AQ rig. All went along very serenely until a few days later, when, one of these same fellows was operating the rig. He threw the squith to put er on the ether, and, psss, a flash, and out went the transformer -- fix er up again fella! 'stoo bad!

LATE AGAIN!

BE

PREPARED!

for all EMERGENCIES

JOIN THE A.E.C.

See your Emergency Coordinator
for all Details.

The Emergency Coordinator
for Southern New Jersey

Ted Torretti,

W3BAQ

RADIO
SERVICE
SHOP

1101½ HAMILTON AVENUE

Trenton 11J

We specialize in servicing
And aligning AMATEUR
Communication receivers



See Dave
and Andy
If you have
Trouble in
Your Shanty

QSL CARDS

By "Brownie", W3CJI

SATISFACTION GUARANTEED

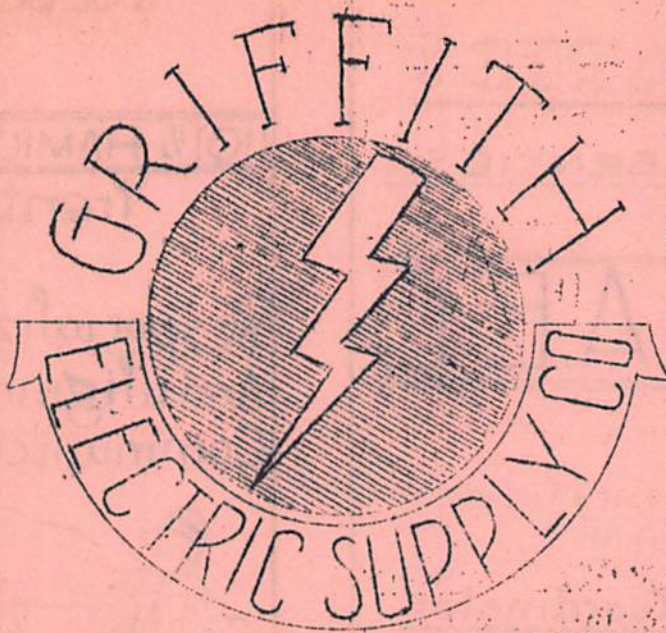
ORDER NOW:

"Remember, you will be judged many times by your QSL."

RICHARD E. BROWN, 1725 Frankentield Ave., Allentown, Penna.

GRIFFITH ELECTRIC SUPPLY CO,

*Electric
Wholesale
Jobbers*



*Consult us on
Your Engineering
Problems*

479 S, BROAD ST, TRENTON, N, J,

118-120
N. BROAD ST.

MURLEY-TOBIN CO

110-112
E. HANOVER ST.

TRENTON'S LARGEST RADIO DEALER,

VISIT OUR "MUSIC HALL" AND SEE
OUR COMPLETE STOCK OF PHILCO,
R.C.A.-VICTOR, EMERSON & DEWALD RADIOS
Portables, Compacts, Consoles, etc.
RADIO-PHONOGRAPHS - AUTO RADIOS
SOLD ON EASY TERMS

VICTOR - COLUMBIA - DECCA
OKEH AND BLUEBIRD RECORDS

WHOLESALE REPRESENTATIVE

EMERSON RADIOS
EMERSON RADIO TUBES
R.C.A. RADIO TUBES
EVEREADY BATTERIES
DEXTER WASHERS & IRONERS
WESTINGHOUSE MAZDA LAMPS
WHEELER FLUORESCENT LIGHTING
ROBBINS & MYER ELECTRIC FANS
HAMILTON BEACH APPLIANCES
TOASTWELL APPLIANCES
FITZGERALD APPLIANCES
STEAM-ELECTRIC IRONS
REMINGTON-RAND ELEC. SHAVERS
CORY COFFEE BREWERS
WESTON ELECTRICAL INSTRUMENTS
EDWARDS CHIMES
MUELLER ELECTRICAL SPECIALTIES
EMERALITE LAMPS
EAGLE ELECTRICAL SPECIALTIES
MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All!

Call or write:

LESTER H. ALLEN, W3CCO

704 QUINTON AVE.,
TRENTON, N.J. Phone: 8919

PARKER

Printing and Stationery Co.

214 So. BROAD ST., Trenton, N.J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, Etc.

Phone: 3-2784

Established 1912

SPIEZLE'S

MEN'S AND BOYS' CLOTHING

145 S. BROAD ST., TRENTON, N.J.
(Second Door from Factory St.)

QUALITY AND
STYLE without
EXTRAVAGANCE

open nites till 8:00

PHONE: 3-5234

AMERICAN RADIO Co.

TRENTON'S LEADING RADIO STORE

25 EAST HANOVER ST
TRENTON, NEW JERSEY

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

hallicrafters receivers STANCOR Transformers
BUD RADIO PARTS • Meissner RADIO PARTS
RCA TUBES • • • • Philco & Emerson Radios
Taylor Tubes • • • • Portable Batteries • • •

Complete REPAIR & SERVICE Dep't.

OPEN NIGHTS

PHONE: 2-9183

RADIO **NIDISCO** PARTS

"RADIO FROM THE GROUND-UP"

147 North Warren Street, Trenton, N.J. - Phone: 4536

DISTRIBUTORS of:

RADIO PARTS..... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

Other Stores At:

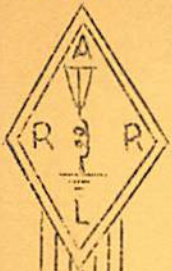
658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

NEW JERSEY'S LARGEST

100%



D

V

R

A

NEWS

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC. Trenton, N. J.

Wm. A. Reuter (W3JBL)

D.V.R.A. OFFICERS

Lester H Allen	President	W3CCO
Leslie R Yoder	Vice Pres	W3EED
William Petty	Secretary	W3HAZ
Ed. G. Raser	Asst Secy	W3ZI
William Hannah	Treasurer	W3EUH
Charles Moore	Sgt at Arms	SWL

BOARD OF DIRECTORS

Chairman	Lester H Allen
Activities	Leslie R Yoder
Special Features	Theo. Torretti
Publicity	Lester H Allen
Publication	W.R. Tomlinson
Finance	William Hannah
Radio Communic'ns	Dave Nabutovski

D.V.R.A. NEWS STAFF

Editor in Chief	W.R. Tomlinson
Associate Editor	Vaughn K Yates
Editor of Art	Wm. A. Blumel
Business Manager	Theo. Torretti
Circulation Mgr.	W.R. Tomlinson
Printing by	Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 623 East Brown St., Trenton, N.J... This amount covers the cost of mailing for the period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, sending the necessary amount and he will mail your copy as it is published.

W 3 A Q

All members, or other operators who wish to operate the club station MUST show their license, also display same in the operating room while operating the transmitter. It is also mandatory that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and presence of the Director of Radio Communications during operation and he will sign the station over and off as required by Federal Communications Commission regulations.

EDITORIAL

With the original date for relinquishing our exclusive amateur operations in the 80 meter band passed and gone, we have been granted an extension of time; but the change to other parts of the band is well under way. Traffic nets have been obliged to remove, some to other parts of the band, others to frequencies within the new exclusive CW territory in the 160 meter band. ORS nets, A.A.R.S. nets, and A.R.R.L. Trunkline Relay Routes alike, have been affected; as well as the occupants of the 160 allocation which will be utilized for CW, and still the others from the 75 phone frequencies which will now be occupied by the Army. Some of these have already shifted to available frequencies within that band, while some others are preparing to enter the new 40 meter phone field soon to be available to us. THE EXODUS IS ON--In the majority, the move has been made in the orderly, obliging manner with which the Amateur Fraternity have always responded with their cooperation and services in past emergencies, regardless of the magnitude of that emergency, national or local. The public at large should be proud of the cooperation and services of the American Radio Amateur!

W3GCU

OFFICIAL DOPE

Nr 954 : West Hartford Conn., Sept 22.

The War department and FCC state that amateurs require special permission before authorized to communicate with army stations or otherwise participate in manuevers. Army field Commanders desiring amateur collaboration must arrange thru War department Washington for individual authorizations from FCC to the amateurs concerned. This supersedes advice in first item on page 21 October QST AR

Nr 955 : West Hartford Conn., Sept 29.

IMPORTANT WARNING!

Amateurs must not handle messages whose address or text discloses the location of any Naval vessels. It is of the utmost importance and gravity to amateur radio that amateurs refuse messages addressed to specific ships otherwise than Care Postmaster at either New York or San Francisco. Either postmaster will forward messages to ships wherever located. ARRL suggests that in view of this necessary rerouting by mail, amateurs advise originators of messages to all Naval personnel except those at Naval Training stations ashore to send their communication by mail instead of amateur radio. All traffic handlers are urged to be on the alert and prevent disclosure on the air either by themselves or others of ship locations AR

ELECTION NOTES

Sometime during the first week in December, all A.R.R.L. members will receive from headquarters, a card on which you will be requested to cast your vote for Director and Alternate Director for the Atlantic Division. Just in case you do not know it, let us remind you that the Delaware Valley Radio Association has two very active members in the running for these posts; Ed Raser, W3ZI, is on the ballot for Director, and Ray Tomlinson, W3GCU, is a candidate for Alternate Director. It is a recognized fact that both these fellows have proven ability, and above all, have the interest of the Amateur at heart, and will convey our desires and needs to the floor of the Directors' meetings at A.R.R.L. Headquarters. We do not believe there is anyone who can do a better job, and a vote for these boys is a step in the right direction, so please ask your friends to give them all the supporting votes they can, and help to put these two fellows across. May we count on your support? Thank you.

ARRL Crystals for FIRST FIVE 10-member 160 Meter Section Nets!

Just as the League some years ago aided the rehabilitation of A.R.R.L. Trunk Lines, the present aim of the A.R.R.L. Communications department is to take every possible step to insure orderly, effective and early use of the 160 meter territory by the Section nets. A.R.R.L. proposes to provide quartz crystals for the FIRST FIVE FULL TEN-MEMBER Section networks to check in by radio in non-spot-frequency style on 160 with director, SCM, or headquarters monitoring the operation and certifying the time and date of such an expression of readiness by the netters. (See the SCM)

It has been suggested by "Skip" W1MGS, that the 160 meter phone gang get together and start a monthly paper for the 160 boys; the paper to consist of the doings of the gang, new kinks, swap column, etc. Anyone who wants to contact "Skip" about this project can do so by dropping him a line. Address him:

Carl Lassen Jr, W1MGS,
1175 Stratford Ave.,
Stratford, Conn.

(This would be a great idea, Skip, and we sure hope it materializes to the production stage; you may count on us for any help you may need in the way of news etc. Let's hear more about it from the boys in your territory -- go to it. Ed)

Large numbers of amateurs have volunteered to teach code and radio theory in their communities, particularly to young men who want to be radio operators in Uncle Sam's Army. Radio is the "ears" of the army. Communications in modern war are so important that three of every 100 men in the army are needed in the Signal Corps. An army detachment of an Infantry regiment and an artillery battalion on maneuvers needs a signal company of 44 men. They are equally important in the Navy; every battleship has 60 radio operators. The latest wrinkle that has army officers buzzing is the radio locator that England has found so successful in tracing enemy planes. To man a duplicate system for spotting enemy bombers approaching our coasts, the army is seeking electrical engineers and is offering them commissions in the Signal Corps.

GOT YOUR CODE ATTAINMENT CERTIFICATE??
URGE OTHERS YOU KNOW TO GET THEIRS!!

THE STORY OF WESTERN ELECTRIC

CHAPTER FIVE

When you pick up your telephone, you hold in your hand bits of America, India, Sumatra, China, Japan, Madagascar, Africa, Brazil and other countries. As many as 34 different raw materials gathered from the corners of the globe have entered into its making: the precious metals platinum, gold and silver; some of the baser metals; some of the rarer ones; and silk, rubber, mica, cotton, asphalt, shellac, Kauri gum, Carnauba wax, paper, and more. These are but a few of the items brought to factories of Western Electric by its purchasing organization.

As the Bell System's Service of Supply, Western Electric is one of the largest buyers in the United States. In a recent year its purchases exceeded \$90,000,000. They were made from 13,000 different sources located in 1,700 towns & cities of the nation's 48 states. They ranged from paper clips to automobiles, from pencils to telephone poles. Filling its contracts has kept thousands of workers busy in mine and factory, in forest and office and on the farm.

Its Purchasing Department is a student of world markets, prices, potential sources of new materials, and possible dwindling of the old. Cooperation with suppliers in meeting the System's high standards, it helps them to evolve better methods and better products.

In conducting its widespread operations, it recognizes a dual responsibility expressed in this policy: to buy at prices which are fair to the Bell System and hence to the telephone user; to buy at prices which are fair to the seller so that he can continue as a dependable source of supply. In quantity purchasing guided by such a policy there is economy for the Bell System and a desirable customer for American business.

Your telephone is made up of 248 pieces. They represent but a fraction of what the maker must turn out to supply the vast network that stretches beyond the instrument. Western Electric's factories manufacture 155,000 different piece parts which enter into 43,000 items of telephone apparatus.

There are six of these factories, the principal ones in Chicago, Kearney, N.Y. and Baltimore; a smaller one in Chicago and two more in New York.

From these factories come not only

the telephone but those devices which take your voice currents from your telephone and transmit, switch, reinforce, clarify, filter, safeguard, scramble, unscramble, invert and restore them, and bring them over any distance, even around the world, to a second telephone, and so deliver them to the listener as intelligible speech -- all within the space of a fraction of a second.

The Hawthorn works, largest of the factories, extends over 203 acres of ground and has 89 acres of floor space in its buildings. It is a city unto itself, having its own railroad, power & light plant, water supply, restaurants for employees, hospital, library, monthly newspaper, gymnasium, and athletic field.

Insure yourself of your copy of the D.V.R.A. NEWS so that you will not miss any of this story as it is unfolded further in future issues.

D.V.R.A. BANQUET DATE CHANGED

Due to circumstances unforeseen by us it has been found necessary to change the date of our banquet forward to Saturday evening, November 22d. All other arrangements remain the same: Turkey dinner with all the trimmings, at only \$2.00 per each and a good time for all. Dinner will be served promptly at 6:30 PM, and there will be seconds on the eats. This affair will be limited to 125 persons and will be by reservation only, so better see Bill Hannah, W3EUH, 904 Edgewood Ave., Trenton, N.J. and get that ticket that will insure your enjoying the dancing which follows the dinner. There will be interesting speakers from A.R.R.L. Headquarters, door prizes, and other entertainment. This promises to be one of the gala events of the season and we hope to meet you at D.V.R.A. club headquarters, the Trenton Yacht Club, 1171 Lambertson St., Trenton, N.J. on November 22nd.

Keep yourself posted on all important regulation changes, important happenings, and other official information by listening to the official broadcasts from:
W1AW - ARRL Headquarters - Skeds in QST.
W3AQ - D.V.R.A. Club Station - DAILY at 7:45 PM EST on 1980 Kcs.
W3GCU - Tue - Thurs - Sat MORNINGS at ONE AM EST on 3558 Kcs

If YOU are OBS, and wish your sked list here, just send the dope along to the editor of this paper - We'll Print em!

ITEMS OF INTEREST

W6XAO HIGHLIGHTING HOLLYWOOD HISTORY!

The Don Lee Television station, W6XAO, on a visual frequency of 51.25 Mc., and an aural frequency of 55.75 Mc., transmits four nights weekly from the top of Mount Hollywood, the highest peak in the Hollywood range, to receivers within a 160 mile radius.

The pertinent history of Mount Hollywood commences with the imaginings and venturings of Mack Sennett in those early years when everything he touched turned into money; including Mt. Hollywood.

Television had not yet arrived to stimulate the comedy-producer's interest in matters apart from Keystone Kops and Bathing Girls - but - Aviation had.

It was the Mack Sennett inspiration that life would be simpler for the high-flyers if somebody were to put a landing field up high in the air where it would serve most handily, so, he bought Mount Hollywood and levelled off the top of it to provide his friends, and, possibly, customers, with a convenient flat spot upon which to set their ships down.

The project was expansive, and expensive. There was no roadway up Mt. Hollywood, so he built one. There were no bulldozers nor mountain-climbing steam shovels, so he hired the job done by manual labor. Flattening the top of the Mount was, in double sense, a mountainous undertaking, but he undertook it.

Then the planes got bigger, flights longer, certain untoward incidents took place in Wall St. during 1929 and the Mt. Hollywood landing field became available real estate in a market with no more bottom than the mountain now had top. So, it sat: Mount Hollywood is 1700 feet high. The transmitting tower is 300 feet high. In the studio building one can walk from studio to studio, receiving room to antenna tower, and tire one's self thoroly in a couple of hours without seeing all there is to see. BUT - you have to GET UP THERE FIRST to do it.

Rolling up the man-made road, and rounding the perilous curve and gliding out upon the flat and toward the station itself, you find your car nosed smack up against an iron rail protecting one from a Hollywood hazard he has been dodging ever since arriving in town -- for plump in the foreground of the scene is one of the most magnificent swimming pools in all Cinemaland; the inevitable Sennett touch.

Beyond this stands the newly completed housing of the Frequency Modulation trans-

mitter, K45LA, which brought FM to the west.

Commercial Televising was scheduled to commence from K45LA about October first.

So -- there you have it -- Mack Sennett flattened a mountain top and Thomas S. Lee built upon it the first exclusively television station in the west, where, it is reported, there is talk of commercially televising mermaids splashing in the waters of the beautiful pool, in lesser garb than the Keystone King's famed beauties ever ventured to don, will disport themselves for the benefit of television sponsors and the lookers-in. Aug. 16, 1941 ----- Motion Pict. Her.

Les Wood, W3BWF, reports that he will soon start Official Broadcast schedules at 6:00 PM EST, daily, on 1840 Kcs.

"CURIO"

We have a copy of a letter which was written to W3CCO by Charles (Chick) Anderson, away back when Chick was working (one of his numerous jobs) at the Cottage club in Princeton, N. J., in which Chick writes, "Boy am I happy! I have a low powered rig completed (rack & panel) and I think it works out OK. The Hartley oscillator draws 20 mils and the modulator 80 mils. I can get a good spark out of the antenna coil. But something seems to be wrong, when I have the speech and mike hooked onto the modulator the oscillator whistles - I mean the way your xmitter does when you have too much gain on the speech.

But all in all I have good quality in monitor and that's the main thing, even though I don't have any dropping resistor on the oscillator. I hear Dal on the air a good deal describing his great 7 tube Ross receiver (hi) So if you have a chance you could drop me a line and maybe tell me what is whistling in my transmitter"

73
Chick

Boy! what a guy!

EIGHTY METERS

The fall operating season of the ORS and AARS nets opened up in full swing on September 8th. Some of these official nets have changed frequency, while others are scheduled to change as soon as the new 80 meter regs take effect. Traffic on both nets seems to be mostly trainee traffic. Some of the ORS nets have filed intentions of utilizing the new 160 band

A.R.R.L. CALENDAR OF
ACTIVITIES

OCTOBER:

18-19 Test of Battery-powered equipment.
19 Code Proficiency Run 9:45 PM.
25-26 Quarterly ORS/OPS Party

NOVEMBER

2 nd Code Proficiency Run 1:30 PM.
8-9)
15-16) 12th ARRL Sweepstakes Contest.
23 rd Code Proficiency Run 9:45 PM.

See details of battery-powered test in
October QST.

D.V.R.A. CLUB CALENDAR

Code Class	Every Monday Eve
10th Anniver. Banquet	Sat Eve Nov 22nd
Business Meetings	2nd & last Wed. Eve each Month.

TEN METERS

Ten meters has again shown quite a bit of activity this month; however, the band does not compare with this month of two, three, or four years past. By calculations ten should be wide open for the balance of the Fall operating season, but, instead has been spasmodic; open for a couple of days at a time, then intermittently for a day now and then. Some choice DX has been heard coming through, such as CE3ABW with an R8 signal; CE3CZ with an R9, and several Mexicans and Cubans with signals ranging from R6 to R9. (S'tough not to be permitted to work these fellows!) The Continental stations were more or less predominant; ostly W5 and W6, with a few W7 coming through during the later part of the month but this area was in for only a few days.

According to the forecasts by the Bureau of Standards in Washington, ten will be generally poor this year, especially during the month of December when the band will be open for local ground-wave contacts; so, according to all available dope it looks as though one will have to be "on the lookout and keep an eye peeled" for open skip periods. About two weeks out of the month short skip was coming through from the 8th and 9th district, mostly from around Chicago and Wisconsin and Arizona was putting through an R9 signal, as also was W6QAY, of Reno, Nevada.

FIVE METERS

We have no report from any of the boys who are working five meters this month, probably due to some of the five meter net organization which has been going on in the past few weeks. We hope to have

some information on this band activity for the next issue.

"HAM" PARADISE ON EAGLE ROCK"

Many Mobile Sets Take Advantage of
Ideal Radio Location.

Eagle Rock, West Orange, one of the Highest points along the Orange mountain range, has become a "hams" paradise. On Sunday afternoon it is the gathering place for many amateurs with short wave (mostly $2\frac{1}{2}$ meter) transceivers. There, because of its high altitude, signals can be directed to many distant points from cars in which mobile radios are installed.

The "rock" is by no means confined to the activities of local amateurs, for many drive there from distant points to test the range of their ultra-short wave transmitters and receivers. On a recent Sunday, for instance, W3DNZ of Philadelphia went to visit a friend in Rutherford, and finding the friend away, was directed to this spot from Newark Airport by W2HYI.

He had never been to Eagle Rock before and his trip was not in vain. He worked W2OEN at Middletown, a distance of some 30 miles. His best DX before was seven miles.

W2DFV, Harold DeRusha of Perth Amboy, has been to the "rock" four Sundays in a row; he works em right and left. Many new faces are seen there weekends, and all agree that the "rock" is the ideal radio location for making ultra-short wave contacts.

W2CG's signals from a transceiver with about 45 volts of "B" battery were heard recently by W2OEN; the power used was a little less than one-quarter watt.

The vacationing "ham" does not consider it a vacation unless some sort of radio gear accompanies him. A new $2\frac{1}{2}$ meter transceiver, which substituted for all pleasures Bradley Beach could offer the writer, enabled him to keep in touch with the "boys back home". At sea level contacts were few and far between. Outside of these contacts most shore amateur radio has been shamefully neglected. However, I did visit Art Hartman, W2CZC, of Neptune. Old-timers will probably recall Art when he was "King Neptune" eight yrs ago on the now defunct 80 meter phone band. An accident to Art's transmitter in 1933 resulted in complete cessation of "ham" activities. He has not been on the air since, and chances are extremely remote for any future "hamming". Art sez

"I get enough radio working at Western Electric".

Defense tests were aided by hams in the first series of tests to chart strategic points of radio communication in Livingston by members of the Livingston Radio club, working hand-in-hand with the Police authorities, conducting several successful tests. Using a large blue-print map of the town, radio-equipped cars operated by "hams" were placed at different spots in town. The two and one-half meter mobile tests were supervised by Police Chief Richard Swain and Commissioner William Buerger, chairman of the Defense Council. Among the "hams" who participated were: W2EWL:W2ICA:W2LZW:W2NRQ:W2NAP:W2MO and W2GC.

Via message center blanks and Uncle Sam's mail comes word from Sergt. George Arsics, W2MCF, of Fort Dix as follows:

"Since my last sked with Eddie Berzin, W2MIG, four weeks ago, we left for Virginia for three weeks of tough maneuvers. Returning I decided to start a real battle (?Ed note), so I made my girl friend an XYL. So now there is Martha and George and a real hamshack is part of the hope chest. Upon receipt of leave of absence, the XYL and myself honeymooned to Canada and Niagra Falls.

"As you know, we are in for another 18 months and winter is a long dreary grind. There is nothing that makes the strain more easy than relaxing with one's hobby. So I am making the first request through you, W2GPG, to start the ball rolling and ask the boys, who have an excess of radio equipment that can be purchased at a reasonable rate to get in touch with me. This is one way the gang can help the boys in service without any red tape involved. I will be glad to receive, put to use, and distribute, with the help of my radio gang, any such material received. If any of the boys want information on equipment needed please get in touch with me by addressing letters to

Sergt. George Arsics,
Headquarters Battery,
1st Battalion, 165 F.A.,
Fort Dix. N.J."

A local "ham" went off 160 and on 2 $\frac{1}{2}$ recently because his YL, who lived on the other side of town, made an art of tuning in on his QSOs. The change was made when said "ham" unwittingly dropped a remark about another girl.

W2LSM runs 60 watts crystal controlled

on 2 $\frac{1}{2}$ meters.

Ed Gursky, W2LMN, will continue as SCM for Northern New Jersey Section.

After returning from a vacation in Canada recently, W2MIG found a 1-A Classification awaiting him. Ed is cramming in all the "ham" radio he can before becoming one of Uncle Sam's "Nephews".

An old friend and old-timer, W2CRF is back on 160 meters.

Talk about "on the spot" news broadcasts: While in contact with another 160 meter amateur, Jack QRXed a few minutes to inspect at close range, an auto accident which occurred at the moment he glanced out the window. He proceeded to give a running account of the accident's details

W2IWY is on maneuvers in Virginia with an anti-tank platoon, and W2LPE is at Tobyhanna, Pa., for artillery practice.

W2MCF has received the call W3JQG for portable work at Fort Dix. W3BJU is in the wood-working business at Glen Gardiner.

W2IHR recently purchased property, some 1200 feet above sea level, atop Jugtown mountain and offers use to ultra-high frequency enthusiasts.

A second district "ham" amuses friends by letting his parrot "speak" over his 2 $\frac{1}{2}$ meter rig. (How does that parrot sign the log for these transmissions? Ed???)

W2MEU recently contacted W4DXP on five meters while on his boat cruising on Arthur Kill.

Herb Schor, W2EMN, and Frank Canning, W2GCB, have written a 2000 word article, entitled "Portibility Plus" which is expected to be published in Radio News. The piece concerns a five-watt transmitter complete and measuring but six inches square.

A 10:30 PM curfew has been placed on "hams" who operate from Eagle Rock.

Whatever became of the campaign to have call letters of "ham" subscribers listed in the telephone directory???

Anybody notice the resemblance between Actor Jean Hersholt and Doc Wilbur, W2NPFV? (Ed-That's because of his "Broad" grin)

"INTERFERENCE ANALYSIS AND ITS RADIO RECEPTION EFFECTS"

BY W. J. ZAUN
Service Division
RCA Manufacturing Co., Inc.

CHAPTER THREE
"DIRECT I-F RESPONSE"

When there is a signal present in the receiving locality, whose frequency is the same as that used for the I-F of the receiver, or near, thereto, direct pickup of the signal may take place and interference will be reproduced. This interference is not affected by tuning of the receiver, inasmuch as it has a frequency corresponding closely to the fixed I-F resonant circuits. It enters the receiver through the antenna and first stage in most cases, but may be introduced by direct induction to the I-F system.

The degree of interference is related to the amount of I-F attenuation provided in the preselection circuits ahead of the I-F system. It is usually evidenced in the form of a "birdie", or in the form of a tone, depending on whether the interfering signal is using CW or ICW during its transmission. The stations which are apt to give interference in the 450-470 kc. intermediate frequency range, are used for code communication and are generally coastal shore to ship stations.

Wave traps in the antenna circuit tuned to the exact frequency of the interfering signal, are effective in reducing this type of interference. In some cases it is necessary to shift the I-F, either up or down, to get away from the interfering station. Use of an RCA Magic Wave antenna provides an attenuation of approximately 6/1 in the I-F range.

This story appears each month in this paper; get your copy so as to have the complete article when finished. A subscription will insure all future chapters. We still have a long way yet to go!

CORRECTION

In a recent issue of the NEWS, under an article written for the Ladies' Auxiliary the particular anniversary celebrated at that time was referred to as the FIFTH anniversary. The report, as submitted in the September issue was referred to as the FOURTH anniversary: Not wishing to contradict ourselves, we changed this to read "FIFTH" anniversary again. We wish to correct this mistake, which was made by the editor; The Ladies' Auxiliary has just celebrated their FOURTH ANNIVERSARY!!! (Ed)

ELECTION - COMING UP!

We wish to take this opportunity of reminding you that the Delaware Valley Radio Association is sponsoring, for Director, and Alternate Director of the Atlantic Division, A.R.R.L., two very capable members, and we are asking your own support, as well as all other support you may be able to obtain from your friends to put these fellows in these offices.

Our candidate for Director, Ed Raser, W3ZI, has a radio background that dates back to as early as 1912, when in Phila. he visited old "WHE" the 5 KW "crashing spark" station in the Wanamaker store, & that same year was on the air listening to "NAI" League Island Navy Yard and others. In 1914 Ed was on the air in Trenton, N.J. with a half-inch "Ford Coil" under the call letters "RE". Although at that time very few amateurs thought it necessary to become licensed, it was Ed's ambition to receive the coveted "blue ticket", and in 1916 we find him journeying to Philadelphia Navy Yard for his examination. He left there the same day with a crisp new license signed by S.S. Payne, Lieut., U.S. Navy, who was the examining officer in those days, "3NG" were the call letters drawn, but any call would have been "sweet music" then. Various spark systems followed, from the 1/2 KW rotary to the nice smooth synchronous note of the big 1 KW.

Then came the war, and all amateur stations were closed down by order of the Government. Unable to stand it any longer, Ed enlisted in the Naval Radio Service and served at many stations including NAI, NSD, Naval Air station at Cape May, N.J., and various listening posts & radio compass stations throughout the fourth Naval district. From 1919 to 1922 found him aboard ship as radio operator for the U.S. Shipping Board, Southern S.S. Co., and later with the Colombian Line in 1935 and 1936. After five years as pioneer broadcast technician and operator he entered the radio sales and service business.

Military communications seemed to have always been his greatest hobby, for he served nine years with Hdqtrs Battery, 112th Field Artillery as Signal Sergeant. In 1936 he requested, and was granted, transfer to the 119th Observation Squadron, Air Corps. He was communication Specialist in that service and discharged as Technical Sergeant in September 1940. In the meantime, Ed reorganized the N.J. State Net of the Army Amateur Radio System, which at the time consisted of only

a handful of radiomen. It was a long, up-hill struggle, over a period of many years before the net became a highly organized system of rapid traffic handling networks. Many years of organization work and testing of radio circuits between the many towns and cities were accomplished. Then followed a series of appointments from Local Net Control, State NCS, to State radio Aide for New Jersey.

From the strictly amateur point of view he has held many ARRL appointments such as City Manager, District Superintendent for Southern New Jersey (now SCM), OBS, etc. Ed became a charter member of ARRL in 1915 and still has all his copies of QST right thru to the present date. His present appointments include: ORS, OPS, RM, and Ass't. SCM for Southern New Jersey section ARRL, AND he is a member of the Basic Amateur Emergency Corps, also a member of the IARU, A-1 Operators' Club, "20 Year Club", ROWH, RCC, and D.V.R.A.

In 1939 he achieved the "WAS" award for 80 meter CW, and in March 1940 was awarded an ARRL "PUBLIC SERVICE CERTIFICATE" for work involving outstanding radio communications from an airplane to ground during a search for a lost child. In other active radio groups he was past Secretary of the Central YMCA Radio Club, Trenton radio Association, and served for eight years in this capacity for the Delaware Valley Radio Association. He is also an Associate Member of the Institute of Radio Engineers, and a full member of the Veteran Wireless Operators' Association, an organization of pioneer radio operators.

Ed is now employed by the War Department, at Signal Corps Labs., Fort Monmouth N.J. engaged in research and development work. Prior to this he was State Radio Supervisor for the National Youth Administration, Federal Security Agency, located in Newark, N.J.

For Alternate Director, our candidate, Ray Tomlinson, W3GCU, who does not have the outstanding career of W3ZI, but, has been very active in ARRL activities, holds appointments as ORS, OBS, AEC, is active in net participation, is a member of RCC since 1936; is also the originator, in Trenton and vicinity, of the trainee traffic message centers operating in the various Trenton theatres, and he is an ardent supporter of ARRL and it's policies.

Again we ask your whole-hearted support for these two men for the offices mentioned. We feel that a vote for them is a vote in the right direction.

HIGH WIND!

In checking thru the log at W3HAZ, it was found that in four years of operating, August 10, 1937 to October 1, 1941, the following number of contacts as listed were made:

2½ meters	6 contacts
5 meters	15 "
10 meters	2 "
20 meters	396 "
40 meters	498 "
80 meters	1207 "
160 meters	None (hi)

Total 2124 contacts

From Oct 1, 1940 to Oct 1, 1941, a total of 1603 contacts were made: 1405 on 80, 102 on 20, and 96 on 40 meters.

That sure is "poundin it" Bill, and your suggestion on this is very fine, but, I doubt if you could get em to go back into their logs and count em! (Ed)

During the month of Sept, W3CCO had the good fortune to work K6MNV and K6FSF, after trying to hook em for the past 3 years on ten meters.

The D.V.R.A. is well equipped to render valuable service should the occasion arise -- also, the organizations whose advertisements appear on pages elsewhere in this paper are ready to serve you as the occasion arises that you require their services covered by the merchandise they handle. Try our Advertisers FIRST!

Well! well! so the D.V.R.A. had a party for those who helped with their services at the outing. We understood this party was to be a STAG affair; but have been told, also, that two of the wives of members "horned in" on the 1'il affair, and without the necessary half-buck required of the boys, Ho Hum!

And so the editor goes scoopin - with out either paper or pencil, and then has the nerve to BORROW a pencil and paper from the guy he's gonna talk about!

Les Allen has begot himself a 1940 plymouth car in place of the jallopee he has been ducking around corners in.

One night, a short time back, Les Yoder called at Ray's house, W3GCU, and Ray's XYL told Les that Ray had gone over to the park to see the outdoor movies. -- Funny part of it was, Ray was 'nt at them movies at all!

HIGH WIND

Chick Anderson, W3JX, is now looking around for ANOTHER JOB: Oh yes, he is still at Westinghouse, but, has to work nights on this job, and Chick don't like to work --nights, we mean!

While visiting Boston recently, Dave, W3ITU, worked 20 different stations on 2 $\frac{1}{2}$ meters with an Abbott DK-2 transceiver; with an over-all DX record of 56 miles on one contact.

For anyone who is interested in keeping sked for W3AQ on 160 ORS net, here is an opportunity to obtain an ORS appointment and help further W3AQ's attendance among the ORS boys. Those interested may contact W3ITU, Director of Radio Communications for W3AQ.

Interesting to note is that W3BWF is erecting a half wave ten meter antenna that CAN BE ROTATED.

Bill Knowles, W3HGS, is running only 20 watts on 10 and has a very healthy signal and considering the antenna Bill is using he sure has an outstanding signal on the band.

With the able assistance, and competent engineering abilities of W3EED, Les, W3CCO is designing a new ten meter beam.

W3HAZ has a new pigeon he is flying with, and Bill claims it to be a secret, but we have been wondering just who this "Mable" person is that he has been seen so much in company with in Lambertville!

And didja hear about Bill Hannah gettn stuck down at the club house last meetin wow! better ask HIM about it!

There is a certain ham in the club who thinks a Zenith makes a very good phone monitor. Ja ever try an Emerson? (Not a plug - Ed)

Ollie Wright, W3BBO, enjoyed himself so much at our last meeting that he expects to be "on deck" much more.

It has been suggested that a contest be conducted on who is the most outstanding amateur, the most progressive, or who has done the most for ham radio, or any other reason that anyone can think up. What do you fellows think? Speak up!

Bill Latham, W3HPE worked his first K7

during the recent "C.P. contest; we are not sure of the K7 call, but if our memory does not fail us, it was K7BC - Congrats, Bill.

Did anyone ever know that Les Allen W3CCO, had a perfect 12 year attendance in Sunday school??? Bet he didn't learn SOME of them things he talks about in Sunday School!

For the benefit of the boys who still think 2 $\frac{1}{2}$ meters is "the bunk", we refer them to SWL Charles Moore, who, between the hours of 6:30 PM and Midnite, September 22nd, logged a total of 88 different stations on that band. This list has been checked over by George, W3IDY, who is consistently working 2 $\frac{1}{2}$, and George says it is authentic, that all the stations Chas has listed as heard are consistently on the air on 2 $\frac{1}{2}$. There is plenty of activity on 2 $\frac{1}{2}$ fellows; the only thing you need to get on there is 2 $\frac{1}{2}$ meter equipment.

"OLE ZI'S KORNER"

By Ed G. Raser, W3ZI

The D.V.R.A. was represented at the Somerset Hills Radio Club annual hamfest held at Sterling, N.J., in the heart of the Wachung mountains by W3CCO: W3ZI: W3HAZ: and W3EUE, who treked into them thar hills one night last week. Ed Raser W3ZI and Les Allen, W3CCO were guest "inflaters" at the meeting.

We were more than glad to meet some of the Army boys at our "Open House" meeting at the club recently. Our old friend Louie, W3GNM, was there in uniform, and we note that he is now Staff Sergeant. Congrats to you Louie!

W3ITR, Pete Loser, can now be heard on 75 phone. Its about time some of the local boys got on this band; it gets very lonely for W3ZI, who appears is the only local station working on that band.

Joe Fricone, W3JLI, is one of the latest newcomers to ham radio in Trenton, N.J. It will be remembered that Joe attended the NYA Resident Center Radio School, at Verona, N.J., and learned his radio from "Doc" Wilbur, W3GNU, who is instructing There.

After all these years, W3ZI worked his first K7, There MUST be a Santa Clause after all. The K7 Freq was 7010.

Still with Ole ZI:

D

Dave Nab, W3ITU, is sure doing a swell job of operating at W3AQ, the club radio station at club hdqtrs, Trenton Yacht club, 1171 Lambertson St.; Dave is now NCS for southern New Jersey, OPS net.

Al Buchannah, W3EFF, has been heard on 160 meter phone the past week. Boy! its a "long time no see" Al Om, why doncha stop in an see us sometime?

W3JOL sure has a nice signal up on 160 phone, yezzer!, Bill just got his ham ticket a few months ago and has graduated from the ranks of the "CPO" -- Hi!

Les Allen, W3CCO, our club president, has been appointed to represent amateur radio as a member of the State Defense Board, which held it's first meeting in Trenton, at the Trenton Trust building two weeks ago. All branches of communication were represented at the meeting, & a committee was appointed to take immediate action in organizing it defense facilities.

Ed Raser, W3ZI, delivered a radiogram to Norman Bottoroff's mother the other evening from her Son (W3HTL, a former club member), who is now stationed at one of our West Indian bases, in Trinidad, British West Indies. Evidently the radiogram "leaked through" the almost "watertight" British censorship, as it came via the Army Amateur Radio System from San Juan, Porto Rico. Mrs. B. was delighted, of course!

Walt Filson, W3BEI, enjoyed himself so much at the D.V.R.A. outing and hamfest that he sent a radiogram to W3CCO thanking him for the swell time had while there. Glad to hear it Walt.

BUCKY SAYS: "Bill Hannah may be past-master at drying the dishes, and Les Yoder an artist in depositing medicine within the Jr Op with a spoon; but, Blumel has got em both beat; Blumel does the baby's BOTTLES! Will they FLOAT yet Bill

LINE NOISE

With war scares in the offing, and boot leggers on the air, it is not at all sur-

prising that the various municipalities are on the look-out for fifth columnists and their activities.

Recently, Detectives of the local Department made an "important" discovery of a young man who was sitting out in the woods in a Ford Coupe, listening to a radio with headphones. Thinking the incident might be of illegal nature, inquiries were made as to the reason WHY anyone should deem it necessary to make use of the headphones when a loudspeaker is so much more convenient in the operation of a radio receiver. We have not learned just what the fellow was listening to with that little "box", but we did learn that the suspected "culprit" was "Hamateur" Radioman W3IFV.

While we think of it, we want to congratulate Charles Moore on his ability to become so important that he has his picture published on the front cover of QST; the October issue cover picture is realistic portrayal of "Poor Charlie". Oh! Yea, Charles went down (again) to take his examination on Wednesday, Sept. 17th. -- No Sope again - sorry Chas.

Just think how much nicer this space would look if it were filled in with some news or information some of you mugs COULD send in! (Ed)

BE

PREPARED!

for all EMERGENCIES

JOIN THE A.E.C.

See your Emergency Coordinator
for all Details.

The Emergency Coordinator
for Southern New Jersey

Ted Torretti,

W3BAQ

RADIO
SERVICE
SHOP

1101 1/2 HAMILTON AVENUE

Trenton 11J

We specialize in servicing
And aligning AMATEUR
Communication receivers



See Dave
and Andy
If you have
Trouble in
Your Shanty

QSL CARDS

By "Brownie", W3CJI

SATISFACTION GUARANTEED

ORDER NOW:

"Remember, you will be judged many times by your QSL."

RICHARD E. BROWN, 1725 Frankenfield Ave., Allentown, Penna.

GRIFFITH ELECTRIC SUPPLY CO,

*Electric
Wholesale
Jobbers*



*Consult us on
Your Engineering
Problems*

479 S. BROAD ST. TRENTON, N. J.

118-120
N. BROAD ST.

HURLEY-TOBIN CO

110-112
E. HANOVER ST.

TRENTON'S LARGEST RADIO DEALER,

VISIT OUR "MUSIC HALL" AND SEE
OUR COMPLETE STOCK OF PHILCO,
R.C.A.-VICTOR, EMERSON & DEWALD RADIOS
Portables, Compacts, Consoles, etc.
RADIO-PHONOGRAPHS - AUTO RADIOS

SOLD ON EASY TERMS

VICTOR - COLUMBIA - DECCA
OKEH AND BLUEBIRD RECORDS

WHOLESALE REPRESENTATIVE

EMERSON RADIOS
EMERSON RADIO TUBES
R.G.A. RADIO TUBES
EVEREADY BATTERIES
DEXTER WASHERS & IRONERS
WESTINGHOUSE MAZDA LAMPS
WHEELER FLUORESCENT LIGHTING
ROBBINS & MYER ELECTRIC FANS
HAMILTON BEACH APPLIANCES
TOASTWELL APPLIANCES
FITZGERALD APPLIANCES
STEAM-ELECTRIC IRONS

REMINGTON-RAND ELEC. SHAVERS
CORY COFFEE BREWERS
WESTON ELECTRICAL INSTRUMENTS
EDWARDS CHIMES
MUELLER ELECTRICAL SPECIALTIES
EMERALITE LAMPS
EAGLE ELECTRICAL SPECIALTIES
MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All!

Call or write:

LESTER H. ALLEN, W3CCO

704 QUINTON AVE,
TRENTON, N. J. Phone: 8919

PARKER

Printing and Stationery Co.

214 So. BROAD ST., Trenton, N. J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, Etc.

Phone: 3-2784

Established 1912

SPIEZZLE'S
MEN'S AND BOY'S CLOTHING

145 S. BROAD ST., TRENTON, N. J.
(Second Door from Factory St.)

QUALITY AND
STYLE without
EXTRAVAGANCE

open nites till 8:00

PHONE 3-5234

AMERICAN RADIO Co.

TRENTON'S LEADING RADIO STORE

25 EAST HANOVER ST
TRENTON, NEW JERSEY

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

hallicrafters receivers STANCOR Transformers
BLD RADIO PARTS • Meissner RADIO PARTS
RCA TUBES • • • • Philco & Emerson Radios
Taylor Tubes • • • • Portable Batteries • • •

Complete REPAIR & SERVICE Dep't.

OPEN NIGHTS

PHONE: 2-9183

RADIO **NIDISCO** PARTS

"RADIO FROM THE GROUND-UP"

147 North Warren Street, Trenton, N.J. - Phone: 4536

DISTRIBUTORS of:

RADIO PARTS..... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

Other Stores At:

658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

NEW JERSEY'S LARGEST

100%

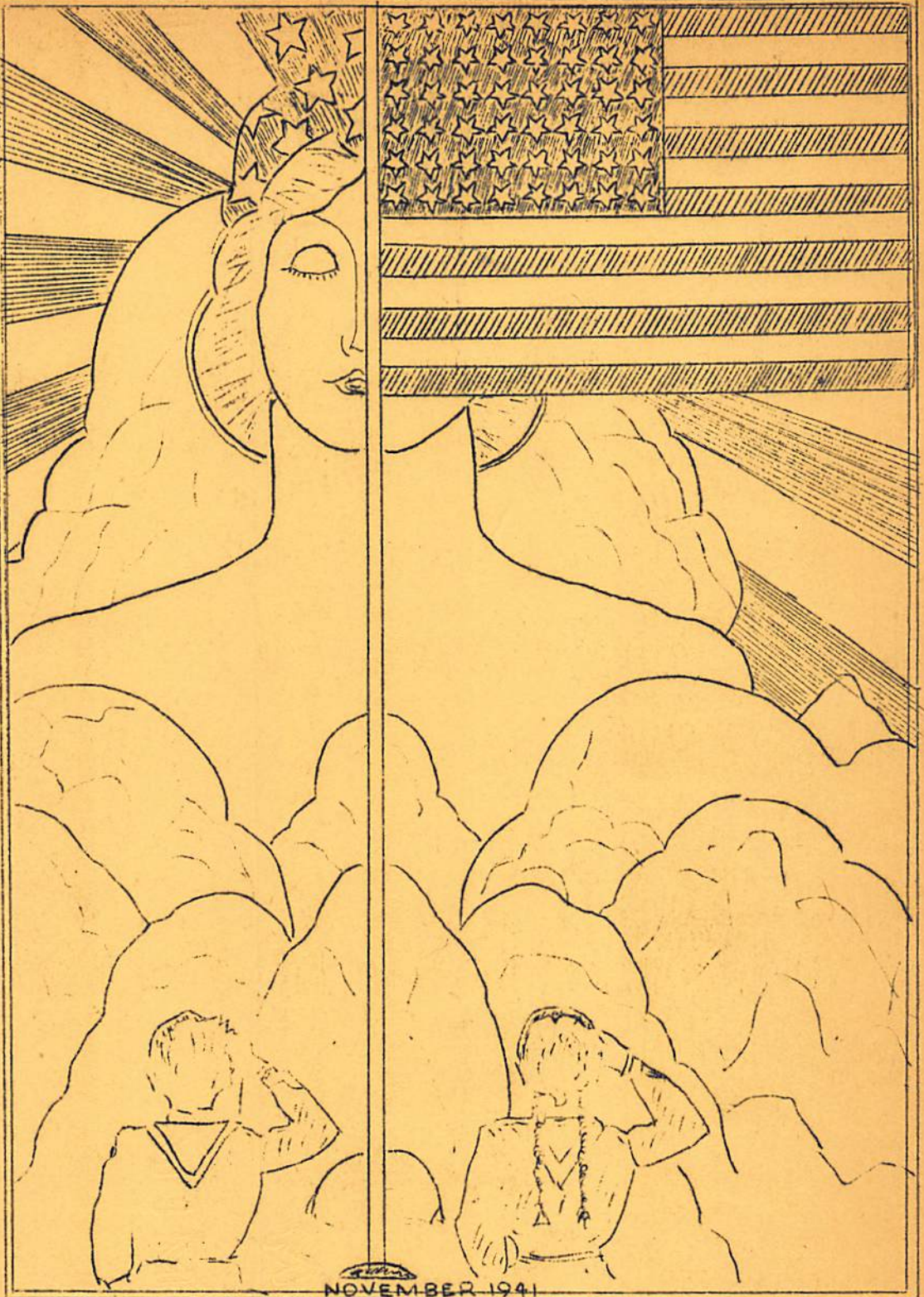


D

V

R

A



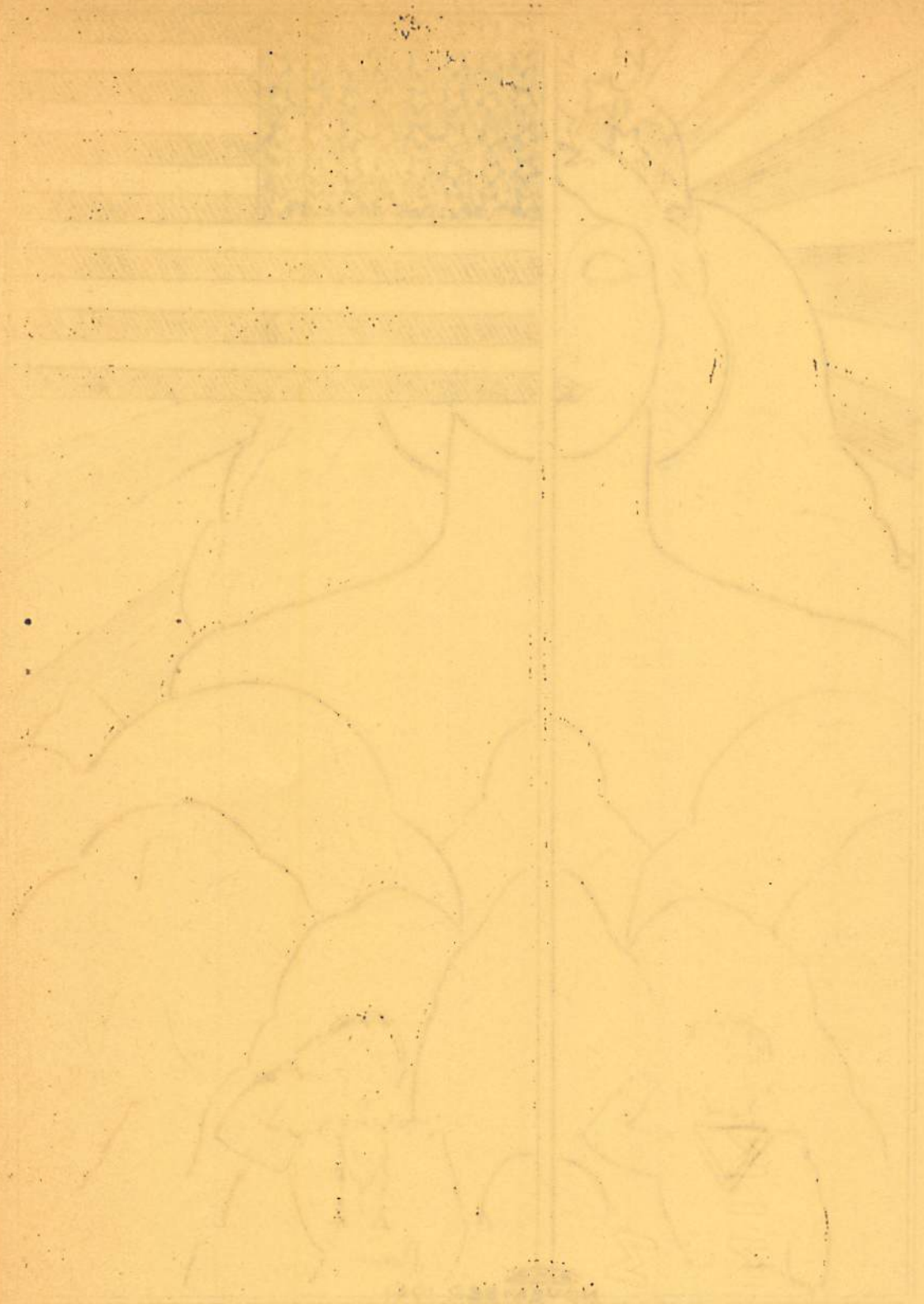
NOVEMBER 1941

NEWS

VOL.
VI
NO.
9

OFFICIAL ORGAN OF THE DELAWARE VALLEY RADIO ASSOCIATION, INC. Trenton, N. J.

Wm. A. Blumenthal WSOJL



JOY
IV
ON
9

NEWSPAPER

D.V.R.A. OFFICERS

Lester H Allen	President	W3CCO
Leslie R Yoder	Vice Pres	W3EED
William Petty	Secretary	W3HAZ
Ed. G. Raser	Asst Secy	W3ZI
William Hannah	Treasurer	W3EUH
Charles Moore	Sgt at Arms	SWL

BOARD OF DIRECTORS

Chairman	Lester H Allen
Activities	Leslie R Yoder
Special Features	Théo. Torretti
Publicity	Lester H Allen
Publication	W.R. Tomlinson
Finance	William Hannah
Radio Communic'tns.	Dave Nabutovski

D.V.R.A. NEWS STAFF

Editor in Chief	W.R. Tomlinson
Associate Editor	Vaughn K Yates
Editor of Art	Wm. A. Blumel
Business Manager	Les Yoder Sr.
Asst. Bus. Mgr.	J. Aaron Sloin
Circulation Mgr.	W.R. Tomlinson
Printing by	Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 623 East Brown St., Trenton, N.J... This amount covers the cost of mailing for the period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, sending the necessary amount and he will mail your copy as it is published.

W 3 A Q

All members, or other operators who wish to operate the Club station MUST show their license, also display same in the operating room while operating the transmitter. It is also mandatory that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and presence of the Director of Radio Communications during operation and HE will sign the station over and off as required by Federal Communications Commission regulations.

EDITORIAL

New "Highs" were attained in many phases of Amateur Radio in the past year, notably that of emergency operation in many different localities; which reflected past experience in this mode of amateur service.

To place book values on experience is very difficult, well nigh impossible; but, no service can efficiently exist without it. Experience has taught many thousands one unforgettable lesson -- that there will be future emergencies and new conditions to meet through them. Just what they will be, or when, or where, no one can foretell; but, come as they may, no matter where, Amateur Radio must not be caught "napping".

Emergency of National proportions does now exist in our country. In every Municipality Special Civilian Defense plans are being formulated. In most instances these plans include AMATEUR EMERGENCY COMMUNICATIONS SERVICES, and it is up to us to put our experience to use, and to be PREPARED to lay before our CD authorities definite information regarding our operation and equipment when called upon to fulfill our part in the protection of American Citizens through participation in Civilian Defense programs. W3GCU

OFFICIAL DOPE

Nr 956 : West Hartford Conn Oct. 6/41
The F.C.C. on September 25th amended its order number 76A to automatically extend the terms of all amateur radio station and operator licenses that have expired or will expire during the period July one 1940 to December 31, 1941, to expire on the latter date, provided that application for renewal of such licenses and the citizenship proofs under order number 75 have been properly filed with the Commission. This amended order does not include any licenses subject to special revocation suspension or hearing orders that may apply AR

EVERY HAM SHOULD BE IDENTIFIED WITH
CIVILIAN DEFENSE

ITEMS OF INTEREST

New 10-station spot frequency 160 mtr ARRL Section Nets now being organized by SCMs will give special attention to CIVILIAN DEFENSE. As many stations as possible will be located in cities that are (a) County Seats; (b) Hq. for State guard or police barracks; (c) Highway centers; (d) have rail, communications, electric power importance. The present aim is to make all nets convertible to handling communications serving state agencies if and as indicated desirable by Governors' State Defense Councils. SCMs will welcome word from ORS who can modify their set-up to take on 5-day posts in the new 160 c.w. nets.

AN "ALERT" RECEIVER

A new "defense" gadget that holds at least passing interest for the amateur is a three tube stand-by receiver that can operate at low cost, fixed-tuned to a local broadcast station. This particular type of alert receiver was developed by RCA, having about the size of a small portable receiver, costing \$15.00 or less if manufactured in quantity, providing means for equipping regulation broadcast receivers of whatever type with a means to call listeners and actuate lights, bells etc. when an especially important "alert," "public warning", news item or other event is to be broadcast.

According to the description of the development, broadcast stations, police or fire department stations etc. might to actuate this device modulate their carriers with a low-frequency, 24 - 30 cycles etc. which would actuate suitable tuned reeds, the sub-audible frequencies not

requiring interruption of the regular programs unless desired. At the transmitting end a simple oscillator plugged into the mike circuit, perhaps tuned to 30 cycles for a call or alarm, and to 24 cycles for "all clear" can actuate the relay-operated receivers or local devices. RCA engineers demonstrated the device to the Director of Civilian defense on July 29th.

There is soon to be a brand new broadcast station to serve the fair city of Trenton and vicinity. Construction has been authorized we understand, and work is well under way, both on the transmitter and studio equipment. The sponsors of this project are to be congratulated on presenting this city with the first full time broadcasting service in it's radio history. The new station will operate on the frequency 920 kilocycles with 1000 watts power under the call WTTM. We look forward toward the very successful completion and debut of this undertaking.

Of interest to "netters" and other of the boys who maintain regular skeds, who would like to have their receiver "go on itself" ahead of time to warm up without having to make the "long haul" upstairs, will be the little "Torque Switch", a small electrically operated clock and time-switch combined which can be pre-set to any desired "on-off" time. This li'l gadget may be placed atop the receiver or any small space on the operating desk and is very neat in appearance.

This item, available from Griffith Electric & Supply Co., one of our advertisers, is only one of the many articles of value which may be obtained from those who utilize the pages of this paper as our advertisers. Whenever you need anything which these advertisers can supply, try them FIRST.

OBITUARY

Let us bow our heads for a few moments in memory of a member of our beloved fraternity, Joseph Schwendt, W3ENZ, who one yr. ago, November 15, 1940, passed even beyond our medium of Communication, into the eternal Realm of Silent Keys. Joe's memory will linger long with the many with whom he was closely associated.

THE STORY OF WESTERN ELECTRIC

CHAPTER SIX

When the three main houses recently held "Open House" and invited the public as well as employees' families and friends to visit them, 145,000 people came. They gazed upon a wizardry of man and machine and were held spellbound.

They saw monster jaws descend with a force of 350 tons upon dull black dust and, opening, disclose 36 shiny telephone receiver caps. They saw the telephone itself pieced together from its 248 parts so swiftly the eye could scarcely follow. They watched 230-pound copper billets being rolled and drawn into threads 2400 miles long. They saw this wire emerging from a minute hole in a diamond at the rate of 120 miles per hour.

They saw a machine whose inventor has been said to have "stirred up a revolution in a bottle," this wise: copper wires that go into cable had long been insulated from each other by having a spiral wrapping of paper ribbon placed around them. One day the engineer mixed a solution of wood pulp in a bottle, stirred a wire in it, and found that the pulp stuck.

Out of that observation grew the machine -- a Goliath in size. Inspecting it, the visitors literally walked through it, in and out of its archways, and watched while, sensitive to the play of 60 delicate wires strung through it in harp-like array, it manufactured the paper right on them, all of them at once -- a revolution in design and method.

This is but one of a thousand revolutions which these engineers of manufacture have wrought in their persistent quest for making better products and making them in better ways. Unheralded, these developments have left their impress on modern life.

One such achievement was to put as many as 3636 wires into a single cable as big around as man's wrist. The same number of wires on telephone poles would take 60 rows of poles, each one carrying 60 wires. Under one street corner in New York City today there are 282 cables containing about 560,000 wires! Would the modern city be possible at all without the cable?

Now comes a cable with only two circuits, "Coaxial Cable," capable of carrying simultaneously 480 telephone conversations or 5760 telegraph messages, and cap-

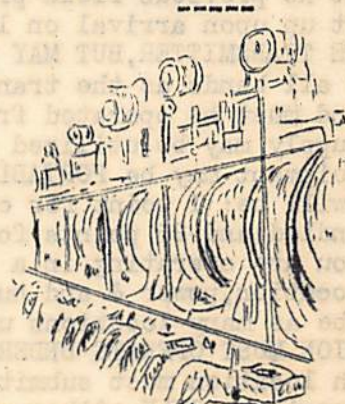
able of transmitting images in motion -- the future wire pathway for television, 55 miles of this new cable has been made by Western Electric and is now undergoing a trial between New York and Princeton N. J.

Visitors at the plants marveled, too, at the many tests which telephone products must pass. They saw handset handles dropped and banged about to try their strength and endurance; they heard a loud-speaker whistle high, whistle low, and utter endlessly this strange incantation, "Joe took father's shoe bench out." All the while a trained ear also was listening because the sentence, combining the most common speech sounds, was coming through different telephones each time and so determined, their ability to give perfect transmission.

There were other tests, where the tremor of a needle on a dial or the flash of a light was giving signal from that realm of fractions-in-the-thousandths far beyond the power of the human senses to detect, that this or that piece of apparatus was or was not good enough for the telephone user.

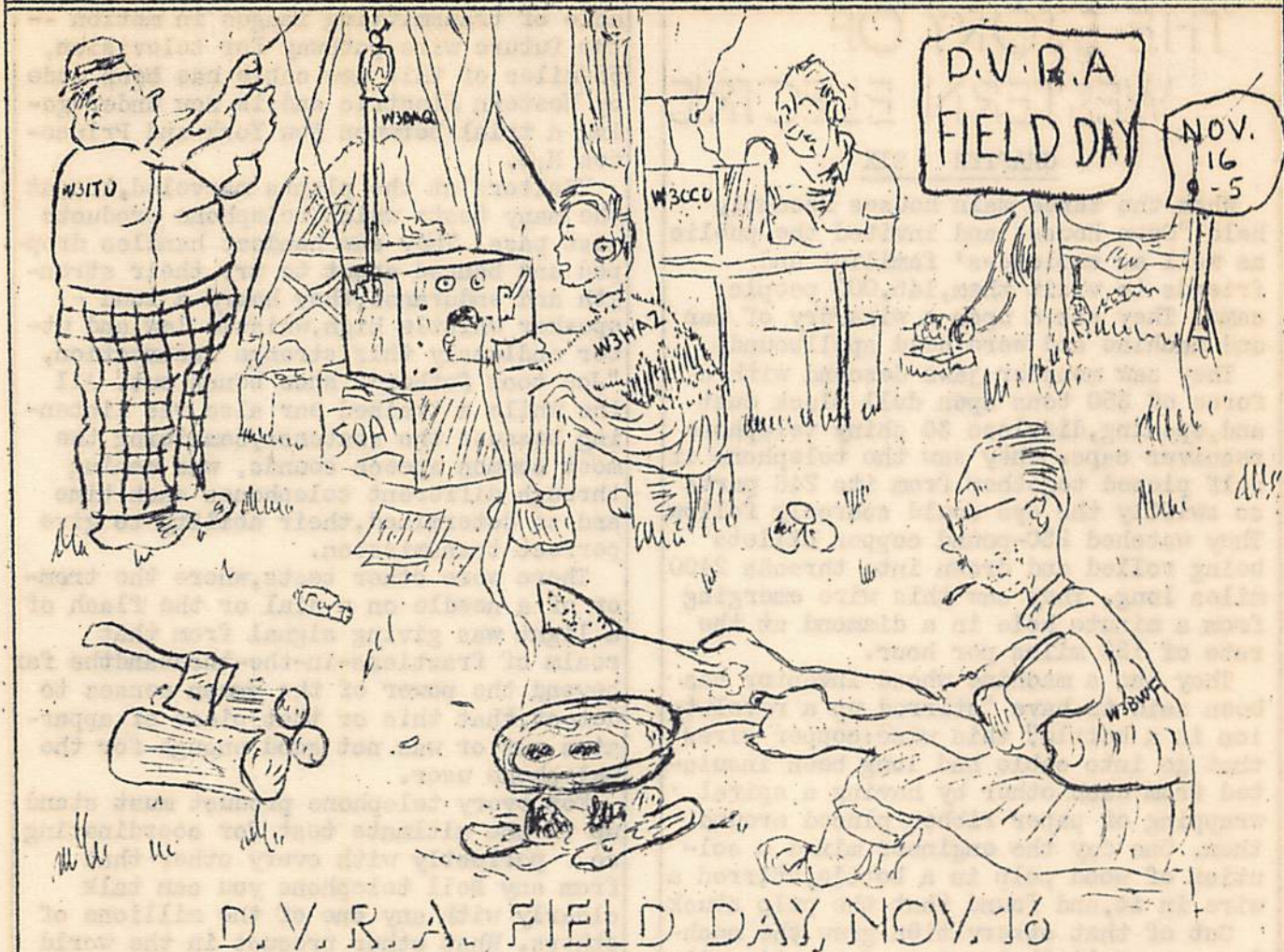
For every telephone product must stand up to the ultimate test for coordinating so perfectly with every other that from any Bell telephone you can talk clearly with any one of the millions of others. What other product in the world faces such a test?

Pooling the needs of its telephone companies and centralizing the manufacturing of their highly specialized equipment in these factories, the Bell System attains the economies of mass production and the assurance of a product that is uniform and uniformly good.



These humming spools wind up miles of paper insulated wire.

The final chapter of this interesting story will appear in the December issue of D.V.R.A. NEWS. -----



D.V.R.A. FIELD DAY, NOV. 16

A special field day contest will be held on Sunday, November 16th. To Participate in this event it is necessary that the usual FORTY-EIGHT HOUR ADVANCE NOTICE be sent to the Federal Communications Commission if you intend using your call in the field.

The purpose of this contest is to determine HOW QUICKLY one can get out into the field, get set up, and ready to go. Therefore, anyone who wishes to go out with their equipment must be at club headquarters, ready to leave there at 9:00 AM. Your location must have been previously determined so that your F.C.C. notification will be filed in time; but NO previous field preparations may be made. All antennae, equipment, etc. MUST be set up upon arrival on location from club headquarters. Each location is limited to ONE TRANSMITTER, BUT MAY USE as many licensed operators as available, and may use any or all bands as the transmitter will permit. Power input will be limited to 30 watts and must be operated from power supplied by emergency source ONLY. Any type of power supply may be utilized as long as it is supplied EXCLUSIVELY of commercial supply. Equipment may be PORTABLE; but NOT portable-mobile.

Scoring will be: 1 point for each two-way contact made; 5 points for each legitimate message handled; and 25 points for a message relayed to A.R.R.L. headquarters explaining that you are operating in a special field day for emergency tests, giving your individual location, power & and number of operators participating at your location. There may be as many locations used as there are equipment and operators to work, but EACH LOCATION MUST OPERATE UNDER A SEPARATE CALL, and no two locations may combine the score. Each location must submit separate score, and scoring MUST be obtained with use of one transmitter, ONLY, either phone or CW or both.

If you wish to participate in this contest, get your equipment and operating crew together, select your location, notify the F.C.C. of your intention to operate portable on November 16th between the hours of 9:00 AM and 5:00 P.M EST at that location, and be at D.V.R.A. club headquarters ready to leave for location at 9:00 AM EST. So, let's get together and see what kind of showing we can make for our club. It is up to you to get set up as quickly as possible. The contest starts for you as soon as you get on the air and ends for EVERYBODY at 5:00 PM EST.

D.V.R.A. BANQUET

The Delaware Valley Radio Association Banquet will be held at club headquarters 1171 Lambertson St., Trenton, N. J. (Trenton Yacht Club) on Saturday evening November 22nd. Ye Olde fashioned Jersey Turkey dinner will be served promptly at 6:30 PM, and "seconds" will be there for those who desire same. This affair is by reservation only, limited to 125 persons. There will be brief talks on various subjects; prizes, and dancing. This promises to be one of the gala events of the season in our section. Tickets are now available from William Hannah, 904 Edgewood Avenue, Trenton, N. J., and are only \$2.00 Per each. Bring your YL or XYL and enjoy an evening of fun with the D.V.R.A.

ELECTION NOTES

During the first week in December, all A.R.R.L. members of the Atlantic Division will receive from headquarters a card on which you will be requested to cast your vote for Atlantic Division Director and Alternate Director. Let us remind you that the Delaware Valley Radio Association has two very active members in this race, Ole' 3ZI Ed Raser for Director; and Ray Tomlinson W3GCU for Alternate. We know these two fellows have amateur radio at heart, and have proven ability, and will if elected, bring to the floor of our Directors' meetings our needs and desires. We do not believe that there is anyone who will do a better job. Please give these fellows your whole-hearted support, and ask your friends to do so also. A vote for these boys is a step in the right direction. May we count on your support??

During times which are unsettled as at present much valuable information and information may be obtained by listening to the official broadcasts from the following Official A.R.R.L. Broadcasting Stations:

WLAW - ARRL Headquarters - Skeds in QST.
 W3AQ - D.V.R.A. Club station - Daily at 7:45 PM EST 1980 Kcs.
 W3GCU - Tue - Thur - Sat MORNINGS at ONE AM EST - 3558 Kcs.
 W3BWF - DAILY at 6:00 PM EST - 1840 Kcs.

If you hold an Official Broadcast Station appointment and wish your OBS skeds listed here, just send along the dope to the editor of this paper -- We'll print em!

For your information and interest we print herewith the schedule of A.R.R.L.

operating activities coming up:

November:

8/9)
 15/16) 12th ARRL SWEEPSTAKES CONTEST

23rd - Code proficiency Run 9:45 PM

D.V.R.A. CLUB CALENDAR

Code Class	Every Monday Eve.
10th Anniver. Banquet	Sat Eve Nov 22nd.
Business meetings	2nd & 4th Wed
-	each month.

ONE SIXTY METERS

The past month found this territory had come into its own. The absence of static in the band made contacts much more enjoyable and pleasant, but, with the static level at the lowest in months several stations were on and the QRM was terrific. Anyone tuning over this band these days will find many traffic handling networks operating. The west coast was contacted from W3AQ for the first time this season by our Director of Radio Communications, as were some of Dave's old friends in Missouri, Minn., Texas, Nebraska, and Maine. W3AQ needs only 7 states for 160 W.A.S. and the old 160 meter band promises to be its best ever.

TWENTY METERS

Twenty meters has been quite a bit off color locally during the past month, as far as reliable contacts were concerned most stations have had trouble maintaining regular skeds. All the districts that are usually heard in this vicinity were coming through but not with the usual 20 meter "zest". W4-5-6-7-8-9 and the K6s were pulling through, but with very marked reduced signal strength. The most outstanding contacts have been W5HDK, Texas; W9LIX, Chicago; and W6ECC, California.

TEN METERS

The month of October found the ten meter band the best it has been for a long spell. Nearly eight months has gone by since this band has been reliable. The regular skip to the middle west was very encouraging and long skip the best it has been for months. K6MNV was worked several times during the month from W3CCO, as well as a few stray districts worked with good signal strength, including KB4HBX, Virgin Islands; K4HVQ-K4HZR-K4HPD, Porto Rico; several W7s and W6s. The big surprise was in working our old W9QPK, Russell Kansas, with contact holding for over an hour. According to conver-

sation on this band most of the boys are using antennae of the Lazy H type, evidently because this type antenna is not too directional, and with ten open only to mostly local contacts this would probably be the better choice. Interesting to note was that KGUSA, set up by the Malibou Radio Club in Hawaiian Islands, was heard regularly from the Malibou County Fair both on this band and on 20 meter phone. The Bureau of Standards advises that ten meter band will be the best during this month, dropping off until January or February.

EIGHTY METERS

Well, the ole' winter season is setting in again and the signals on this band are starting to pick up. From the standpoint of DX, the west coast has started to roll in at night when conditions are favorable and W3BAQ reports having a W6 logged as "worked recently. The main thing is, one must stay up late; and we do mean LATE. Looking at the band from the traffic point of view, conditions are ideal. All nets are now operating full time, while some additional nets are starting to function. A great number of nets are operating on their new frequencies because of the change in regulations effective December 20th. Traffic is plentiful for anyone who looks for it and there are several stations on the air just waiting for someone to request schedules with them.

FORTY METERS

On this band, W3HAZ reports reduced activity for the past month, just working it long enough to find out how things were in this territory. On October 25th from 12:30 AM to 2:30 AM, all districts were heard on the low end of the band. The first skip distance from here in the east seemed to be about central USA; the next one the west coast; and the Islands for the third hop. The first contact was a W9 in Iowa with very strong signal; next qso was another in Iowa who had a W6 on the line who had heard a K6 calling and was going after him. The Iowan said the K6's wrer very plentiful and said "QRU", that he was going after the K6 also. Bill also "LOOKED" for that K6. A lot of the boys are laying for K7BC who is quite active on the low end of this band during the early hours of the mornings from 1:00 AM to about 7:00 AM. Quite a few of the east coast fellows have reported working this Alaskan during the hours mentioned. We do know that at least two of our local boys have worked this fellow; W3ZI having worked him in regular qso, and W3HPE worked him during a contest.

THE LADIES' AUXILIARY REPORTS!

ATTENTION LADIES!!

All YLs and XYLs who are interested in becoming a member of the L.A.D.V.R.A. must be present at one of the regular monthly meetings, at which time it will be necessary to fill out and present the membership application for consideration. Further information may be obtained by contacting Mrs. Charlotte Yoder, or call 8919. COME ON GALS LETS SEE YOU AT OUR NEXT MEETING!

After the last meeting of the Auxiliary there was a bit of singing(?) by some of the gals with Dave, W3ITU yodling tenor! We also had a jive demonstration by Dave and Ruth Hirsch -- What fun!!

Incidentally, what has become of Patricia Profy and Alma Kelly?? They have been missed for the past three meetings. Better let us hear from you, girls, because after four absences your name is removed from the books!

Helen Allen is entertaining her Granddad from New York this week. We hope he enjoys his visit to our fair city.

Two or three weeks ago the Allens, Andy Brindly and Charlotte Yoder journeyed to Belvidere on a visit to W3BBO to look over the array of antennae. While the boys were "gabbing", the XYL there, Mrs. Oliver Wright entertained Charlotte and Helen with a stroll over the estate upon which the station is located. Mrs. Wright was very interesting and we look forward to entertaining her at one of our meetings in the near future.

A bridge club of one table has been started by Marie Whyno, Natalie Hannah, Pauline Raser, and Helen Allen, which will meet every other Friday night. These ladies are interested in getting enough ladies to make another table. Anyone have Friday nights free??

"CURIO"

At the last meeting of D.V.R.A. we finally persuaded Ted Torretti, W3BAQ, to give us an accurate description of the first receiver he ever tried to use; we present it herewith: Ted says he put up a piece of glass covered iron wire from the barn to telephone booth, another in the ground - stuck one wire in one ear - tother in tother ear - listened intently and lo! and behold! heard NOTHING!

"INTERFERENCE ANALYSIS AND ITS RADIO RECEPTION EFFECTS"

By W.J.Zaun
Service Division
RCA Manufacturing Co., Inc.

**CHAPTER FOUR
"HARMONICS OF OSCILLATOR"**

The presence of short wave code or short wave broadcast signals within the standard broadcast band is generally due to their combination with the upper harmonics of the receiver's oscillator; the difference of the station frequency and harmonic frequency being equal to the IF. Spurious reception of this type is most prevalent on receivers employing too many loop antennas.

Electrically, an antenna loop has the character of a long line, having several resonances in addition to its fundamental tuning. The secondary resonance effects may fall into and provide substantial gain in causing an appreciable level of short wave signal to appear at the first stage.

When this signal is of such a frequency as to combine with a harmonic of the oscillator, and produce I-F, reproduction takes place the same as with the fundamental signals.

Proper treatment of this type of interference should be along the line of -- (1) Orienting loop for minimum pickup of interfering SW station, (2) Re-aligning loop carefully, (3) Substituting conventional antenna coil for loop, (4) Decreasing oscillator excitation by shunting tickler section with a resistor, or taking turns off this same winding.

Each chapter of this article by Mr. Zaun, of RCA Mfg. Co. carries a wealth of valuable information, for both serviceman and amateur, and has yet a long time to go. By keeping each copy of the D.V.R.A. NEWS on file you will have on hand when the article is complete, a very handy addition to your store of information. Why not have each issue of this paper mailed to you each month by subscribing. Full subscription information will be found on page one.

Referring to the station log we have found that quite a few of the members have availed themselves of the use of the club station W3AQ. BOYS, THIS IS YOUR STATION, every member should be fully acquainted with the operation of the transmitter, and should, at some time or other, avail himself of the opportunity of oper-

ting it. Anyone who is not fully familiar with the operation of the transmitter should contact the Director of Radio Communications, Dave Nabutovski, and obtain the necessary instructions on same; the sooner, the better; you never know when YOU may be called upon to place this station on the air and operate it IN AN EMERGENCY!!

"SECOND DISTRICT TRANSIENTS"
By W2GPG

Thru an error on the part of the editor, the heading for this column was omitted. This was due to the shortage of time between issues, and in the rush was forgotten. (Ed)

The East Orange Amateur Emergency Club members will be active participants in a city-wide radio net organized for the purpose of maintaining uninterrupted fire alarm operation in event of failure of the regular fire alarm system. A medium power $2\frac{1}{2}$ meter transmitter will be installed at fire headquarters and will act as control station. Portable transmitters also will be set up at each of the fire stations in the five zones. It is also planned to equip each members' car with mobile equipment to maintain constant vigilance for fires and report to headquarters via radio when one is spotted. Dallas Akers, W2FL, the club president, has appointed captains who will be in charge of their respective districts. When work on radio equipment is complete, drills will be held weekly, simulating an emergency, which may come at any time.

These men are taking a real part in the defense of the country. It entails long hours of hard work, time and money, all of which they are giving unstintingly and it is hoped that "hams" in other cities will follow the example of the East Orange Amateur Emergency Club, and foster similar projects.

"Prankster" W2FB recently pulled this one on an unsuspecting "ham". "I'm using a new type microphone; an externally excited push-pull sound-pressure converter." Yea - its a double-button "mike".

W2GBI has returned from an extended trip out west and is on $2\frac{1}{2}$ with 35 watts.

W2LXI is a Navy radio equipment inspector and is working for a local radio concern.

W2OAZ calls himself a "Legal beagle".

The youngest radio operator in New England (15 years of age) received the call W1MAN!

To inspire members of the Somerset Hills Radio Club (who are NOT hams) to get their licenses, the club has adopted the custom of presenting them with a quartz crystal as soon as each receives a license.

The Union County Amateur Radio Association has resumed its Monday evening meetings. Election of officers took place in October.

W2KES has been licensed as W8WMLK and is operating from Pine Camp, New York. W2JOB is a radio instructor with the 24th Engineers stationed at the Camp. Eric tells us that the former National Guard barracks at Pine Camp have been converted to a radio school. Other "hams" at this Army Camp include: W2EMY; W2JIV; and W3CFT; W2HAM and W2KES who operates his own 125 watt rig there.

The enthusiastic interest which radio holds for the amateur equals, if not transcends, that of any other hobby. Unlike some pursuits, there is no pecuniary motive for the radio amateur; he functions solely for his own entertainment and enlightenment. His ardor has built up an exemplary fraternal spirit which has contributed much to the advancement of radio in general. In flood, hurricane, or other localized emergency the "ham" can be depended upon to establish communication when wire service is temporarily disrupted. And from the patriotic amateur ranks Uncle Sam is now obtaining many operators and technicians urgently needed for National defense. Therefore, there was nothing singular that a Brooklyn youth was among the many who recently applied to the F.C.C. for an amateur radio license. But remarkable is the fact that this particular applicant is deaf, dumb, and blind! Stranger still is the fact that he qualified. Despite his handicaps he took the written examination. To ten pages of questions and problems he submitted 30 pages of answers written by himself on a Braille typewriter. In the practical test he demonstrated that he could "hear" radio telegraph signals through vibrations produced by special devices. The result is that this aspiring 21-year-old is, according to records, the first deaf, dumb, and blind licensed amateur radio operator.

FOR SALE BARGAINS FOR SALE

1 complete set transformers from mike to class B output for type 210, T20, 809's. Make offer - must sell surplus equipment. Contact W3DAF

Breting 14AX - recently re-aligned - perfect condition - set new tubes - a FB modulator or speech amplifier - must turn some equipment into cash. Contact W3ITU

Hallicrafter receiver - 8 tubes - good condition - recently aligned and equipped with new tubes. Guaranteed! Contact W3CCO

250 watt phone/CW transmitter - Rack and panel construction - pair 812 final - pair 811 modulators - high gain speech amplifier and velocity mike. Complete ready to work for \$200.00. Contact W3BEI

"FORGET"

Forget the storms of yesterday
Forget the chap whose scowling face
Forgets to smile in any place,
Forget the trials that you have had,
Forget the weather when its bad.

Forget the knocker - he's a freak -
Forget him seven days a week;
Forget you're not a millionaire,
Forget the gray streaks in your hair,
Forget you ever had the blues --
BUT DON'T FORGET TO PAY YOUR DUES.

(cont.)

PRESIDENTS OF THE D.V.R.A.
Past and Present

First President	Frank Weimar	Ex-W3QA
Second President	Dallas Fogg	W3ASQ
Third President	Samuel Kale	W3VE
Fourth President	Yardley Beers	W3AWH
Fifth President	Samuel Kale	W3VE
Sixth & present	Lester Allen	W3GGO

LINE NOISE!!

Ed Peters went to Philly 'tother day and took his exam. We have been wondring if Ed looked anything like that cartoon on the front cover of October QST! Anyway Ed passed his code test but has'nt heard from F.C.C. yet, but it looks good Ed -- We'll be looking for you on the air and good luck to you on your new venture. Hey! Charlie Moore, more, more, its easy to pass that code test - Ed has just done it with nothing to trouble him but a little sweat!!!!

HIGH WIND

A traffic routing map, copy of which appears on the last page of this issue, is being compiled and copies will be available to anyone desiring them. Know your traffic and the old reliables who can clear your messages in the shortest time and the surest way.

The A.A.R.S. recently adopted the ARRL fixed-text messages as standard for convenience and simplicity in handling traffic. All stations originating messages are requested to persuade the sender of a message to try and paraphrase same to conform with the fixed-text list. For the information of anyone who may be concerned, a new number has been added to the ARRL list: Number 71 - "Have not heard from you in some time. Please write at once or reply by amateur radio".

Bill Meade, W3AFH recently erected a new ten meter beam. Bill was formerly using 15th wave spacing on director and 10th wave on reflector. The new beam reverses this procedure, using 10th wave spacing on the director and 15th wave spacing on reflector. Bill reports signal gains with this method over the old spacing, of five "R"s on receiving.

W3JNO, orchestra leader, is building a ten meter rig. Good luck Aaron!

Joe Clinton has moved his QTH to Lakeside, N.J. and intends to run his 160 mtr antenna directly across the lake.

And Bob Dunham, W3ARR, is going back on the air again from his new QTH in Morrisville, Pa. Bob is in the market for a good second hand receiver.

Bill Boyd, W3FTU in Hightstown, N.J. has completed his new crystal controlled 2 $\frac{1}{2}$ meter rig which uses an 815 in the final running approximately 60 watts input.

W3BWF has a nice R9 signal on ten meters

Steve, W3CFS, will soon be on the air from his new QTH up there in Ewing Twp. with a brand new ten meter beam. This time Steve selected himself a QTH with plenty of antenna space; his ground room now has a depth of 250 feet which is plenty to stick up a few towers. Incidentally, the street on which Steve has located is known as "Lovers' Lane" up there so if he uses his sky-button, he can very readily set himself up a privately owned

"Petters' Paradise" and let the Goofy-Goobers drive in and enjoy themselves without interference from the Crime Busters. How about a "side lunch" Steve?

Oh yea! Steve has bought himself (or should we say, the XYL) a brand new stove, an ELECTRIC RANGE - Steve aint content with gobbling up the juice with his 1 Kw rig, he sticks his neck out for more - so long line voltage regulation! H&!

W3FTU and W3IDY recently visited at the New England Division convention in Bridgeport, Conn.

For those of our club members, interested in emergency equipment and operation, it would not be a bad idea to investigate the new NINE FOOT vertical antenna, the experimental version of which has been working out very FB with R9 signals on 160 meters. AEC members take note!

Well, well! we got us another YODER in the ranks of the D.V.R.A., and MAYBEE in about 20 years or so we get us still a third Yoder eh!

The secretary received a letter from Old Sam Kale, (Captain Kale to you), expressing his regrets upon being unable to attend our banquet because of his outfit going on maneuvers for the month of November. Sam is a member of D.V.R.A. & enjoys the distinction of being one of our Past Presidents. Sam's Qth is APO - 401, 112th Field Artillery, Fort Bragg, N.C. and his amateur call is W4HOE.

Why not appoint an operating crew to operate the club transmitter in the coming A.R.R.L. Sweepstakes contest? With a coupla Class "A" ops we should be able to make a good showing, even if it CAN only be operated on 75 and 160 phone.

Earl O'Connell, W2FR, formerly of Lakehurst, N.J., paid Bill Meade a visit recently. Earl is now residing in Trenton, and was on his way to England as a Technical advisor when he was grabbed off the ship just before she put to sea, and presented with Ole W3ZI's old job as State Supervisor for NYA. Earl is the fellow who taught Mr and Mrs Charles A. Linberg the code so they could obtain their radio operators' license; he also taught Amos, of Amos and Andy, the code so he could get a license and follow "ham" radio as a hobby. Altho we could not get her call, Earl's XYL also hold a license.

FLASH!

W3AQ REPORTED HEARD IN SOUTH AMERICA

On the evening of July 22, 1941, W3AQ was heard carrying on conversation about the D.V.R.A. fifth annual hamfest and outing with W3FDY around midnight EDST, by W2MUD, who is radio operator aboard an oil tanker. The signals of W3AQ and FDY were both reported as QSA 5 R9 plus with both stations running a full Kw at the time; and the operators at W3AQ on this report were W3ITU and W3CCO. We do not have complete details regarding the town in South America in which our station was reported, but to all indications from the information in the report, it is located at the mouth of the Orinoco River in the North Eastern portion of Venezuela, S.A. While tied up in port, W2MUD thought he would give the auxiliary receiver a whirl, which incidentally is a Howard 450, and found the 160 meter band dead but for the two signals heard. W2MUD says he will forward full information as to the location of the port etc to W3AQ in a few days. W2MUD is about to put out on a trip across the Atlantic for some point in England, and, according to the latest dope he is going to monitor W3AQ on both crossings, over and back; so let's keep W3AQ active for the next month and see how many heard reports we can get from across that pond.

A lot of the boys are cranking up the forty meter whistlers in preparation for the coming (or we should say) the present 12th annual A.R.R.L. Sweepstakes contest. Even some of the fellows who have equipped their forty meter rigs for that phone allotment are busy sticking in the equipment necessary to operate on 40 CW during the SS.

The information in the latest ORS/OPS bulletin again places W3HAZ in first place for Southern New Jersey in the recent ORS contest with a score of 312, 340. This makes three in a row for Bill.

While on the subject of contests, W3AQ should be able to run away with the OPS Parties for this Section.

All licensees should now acquire two and one-half meter equipment for Civilian Defense means!

HORSE TRADER NUMBER NINE!!! W3AXU recently attended the New York convention of the 56 mc "Horse Traders," an organization which now has approximately thirteen third district members. John

was initiated into membership at that time as "Horse Trader Nr 9!" Congrats John!

Will the following please drop in and get the qsls which are now on hand at W3CCO: W3ASM; W3HTP; W3JJX; These cards are yours, boys, please pick em up!

It has been reported that the Princeton University Club is going to put a 500 watt rig on the air covering all bands. It will, under present plans, utilize an HK-54 in the final.

It has also been reported that there is a 2 $\frac{1}{2}$ meter local emergency defense net in the process of organization - Great stuff fellows!

Hi! Our old member, W3LT, Joe Clinton, has rejoined the club; having filled out the application at the last meeting. Glad to welcome you back into the fold, Joe!

Paul Binder, exW3EFE, a former resident of Trenton, is now working for CAA away out there in Utah. Paul's job is in Utah, rite across the border from Nevada; in fact he works in Utah, and lives in Nevada. Paul reports that the station at which he is now employed is all teletype equipped. Paul expects to be transferred to another location in a short time, but expects to be heard on the air under the present call W6SPK.

Rol Reed, W3ATF, recently obtained his Radiotelephone First Class License - Congrats Rol!

It has come to us that, after the little article in our last issue advising us of Les Allen's 12 year model Sunday School attendance record, there was quite some controversy, and Les's XYL emphatically declares that that statement was incorrect and that it should have read "14 years" & if some low-down mean vandal had 'nt gone and swiped the evidence, Les would have had several medals to prove that attendance! Our sympathies are with you Les, if you had em now you might be able to get enough from em to build yourself a nice final eh wat?

W3AFJ, formerly of Bristol, Pa., is now located in Newtown, Pa., and is back on from the new QTH with a new ten meter beam which commonly known as the "Plumbers' Delight", and is placing RF in the ether very FB.

Doc Wilbur W3GNU/NPV was visiting in

Trenton recently, and, as usual painted the town red along with some of the boys. Doc's Call in Verona N.J. is W2NPV.

To this writing, there are but two parties going out to participate in the D.V. R.A. field day contest November 16th. The parties are: Ted Torretti and Jimmie Hassal as one; and, Bill Blumel, Les Yoder, Om Les Yoder, and Tony Rura as the other. Come on gang, the U.S.A. needs more than aluminum, especially other metals also, so let's discard the lead and get going.

Ted Torretti has made a standing offer of two buck-dollars for any member who out-strips him and his little 30 watt rig in the number of points gained in this thing -- there you are boys, a couple of nice "frog-skins" ---- IF YOU CAN DO IT!!

Boy! W3JOL has a brand new type of transmitter: when Bill turns up the gain control he can go on FOUR DIFFERENT FREQUENCIES in the 160 meter band --- Why an ECO fellow!!

And for a while Bill had so much BCI that them "kindly" neighbors proceeded to back down his antenna; now his 160 meter antenna has all the characteristics of a pretzel.

W3GQX is back on 10 meters after repairing his beam, and NOW Ray puts out a very businesslike signal.

W3GEV is also back on ten after repairing his beam. And Wes is also intently scrutinizing all the hay bales going hither and yon to see if they happen to be encircled with the other half of his 160 meter antenna: if Wes can grab off enough number 12 copperweld, he intends to replace the half of the 160 job that "went walking". Or is it "Gone with the Wind"!

Wassamatta down there at W3AQ! the 3rd power relay going south in a very short time - sumpin wrong, Ward-Leonard equipment usually gives long, satisfactory service.

Les, W3EED says he works so much overtime that he cannot find time to put his rig on the air; and, on the other hand, if he doesn't work the overtime, he can't afford to PUT it on the air. (Contact "Mr Anthony" or "Double or Nothing" -- or SUMPIN)

Recently heard on 10 meters: W3AFH; W3BWF; W3GQX; W3IDY; W3HGS; W3AWL; W3CCO; looks like "Old Home Week" eh wat, ole Tappah?

MENU
10th ANNIVERSARY BANQUET

APPETIZER:
Tomato Juice Coctail

MAIN COURSE
Olde Fashioned Jersey
Roast Turkey with dressing.
Mashed white potatoes.
Green Peas; Cranbury Sauce; Cole Slaw.
Parker House Rolls and Butter.

DESERT:
Brick Ice Cream and Cookies.

After-dinner Mints

TENTH ANNIVERSARY BANQUET COMMITTEE

Ed G. Raser	W3ZI	Chairman
Wm. Hannah	W3EUH	Tickets
Lester Allen	W3CCO	Publicity
Lester Wood	W3BWF	Entertainment
Leslie Yoder	W3EED	Decorations
Wm. Petty	W3HAZ	Novelties & Prizes
Theo. Torretti	W3BAQ	Procurement
Dave Nabutovski	W3ITU	Reception
Chas Moore	})	SWL Utility Committee
D. Petrecca		
Ed Peters		

TENTH ANNIVERSARY BANQUET PROGRAMME

6:30 PM Dinner is Served.
8:15 PM Speakers.
8:45 PM Prize Drawing.
9:00 PM Entertainment (Floor Show)
10:00 'till ?? DANCING with Les Wood and his NBC dance orchestra.

TOASTMASTER Lester H. Allen, W3CCO.

During a recent Sunday morning qso over W3AQ, between operator Yoder, W3EED, and Les Wood, W3BWF, Yoder Phenaepled his pooch to "yipe" his "hello" over the mike. Now, the regs state that everyone who speaks over a phone transmitter must sign the station log for the transmission -- We expect to witness some funny things in the W3AQ log for such transmissions. Is that pooch "south-pawed" Les??

BUCKY SAYS: "We have at last been advised that the long awaited for club banner is to be presented formally at our November 12th meeting. 'Tis, we are told, quite an elaborate emblem. We are looking forward anxiously to seeing that banner on one side of the Officers' table and OLD GLORY on the other side -- Will we be dissappointed??

THE HOME FRONT - CIVILIAN DEFENSE - UHF
EQUIPMENT!

KEEP EM FLYING

GRIFFITH ELECTRIC SUPPLY CO,

*Electric
Wholesale
Jobbers*



*Consult us on
Your Engineering
Problems*

479 S, BROAD ST, TRENTON, N. J.

118-120
N. BROAD ST.

HURLEY-TOBIN Co

110-112
E. HANOVER ST.

TRENTON'S LARGEST RADIO DEALER,

VISIT OUR "MUSIC HALL" AND SEE
OUR COMPLETE STOCK OF PHILCO,
R.C.A.-VICTOR, EMERSON & DEWALD RADIOS
Portables, Compacts, Consoles, etc.
RADIO-PHONOGRAPHS - AUTO RADIOS
SOLD ON EASY TERMS

VICTOR - COLUMBIA - DECCA
OKEH AND BLUEBIRD RECORDS

BE

PREPARED!

for all EMERGENCIES

JOIN THE A.E.C.

See your Emergency Coordinator
for all Details.

The Emergency Coordinator
for Southern New Jersey

Ted Torretti.

W3BAQ

RADIO
SERVICE
SHOP

1101 1/2 HAMILTON AVENUE

Trenton NJ

We specialize in servicing
And aligning AMATEUR
Communication receivers



See Dave
and Andy
If you have
Trouble in
Your Shanty

QSL CARDS

By "Brownie", W3CJI

SATISFACTION GUARANTEED

ORDER NOW:

"Remember, you will be judged many times by your QSL."

RICHARD E. BROWN, 1725 Frankentield Ave., Allentown, Penna.

WHOLESALE REPRESENTATIVE

EMERSON RADIOS
EMERSON RADIO TUBES
R.C.A. RADIO TUBES
EVEREADY BATTERIES
DEXTER WASHERS & IRONERS
WESTINGHOUSE MAZDA LAMPS
WHEELER FLUORESCENT LIGHTING
ROBBINS & MYER ELECTRIC FANS
HAMILTON BEACH APPLIANCES
TOASTWELL APPLIANCES
FITZGERALD APPLIANCES
STEAM-ELECTRIC IRONS
REMINGTON-RAND ELEC. SHAVERS
CORY COFFEE BREWERS
WESTON ELECTRICAL INSTRUMENTS
EDWARDS CHIMES
MUELLER ELECTRICAL SPECIALTIES
EMERALITE LAMPS
EAGLE ELECTRICAL SPECIALTIES
MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All!

Call or write:

LESTER H. ALLEN, W3CCO

704 QUINTON AVE.,
TRENTON, N. J. Phone: 8919

PARKER

Printing and Stationery Co.

214 So. BROAD ST., Trenton, N. J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, Etc.

Phone: 3-2784

Established 1912

SPIEZZLE'S

MEN'S AND BOYS CLOTHING

145 S. BROAD ST., TRENTON, N. J.

(Second Door from Factory St.)

QUALITY AND
STYLE without
EXTRAVAGANCE

open nites till 8:00

PHONE: 3-5234

AMERICAN RADIO Co.

TRENTON'S LEADING RADIO STORE

25 EAST HANOVER ST
TRENTON, NEW JERSEY

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

hallicrafters receivers STANCOOR Transformers
BLID RADIO PARTS • Meissner RADIO PARTS
RCA TUBES • • • • Philco & Emerson Radios
Taylor Tubes • • • • Portable Batteries • • •

Complete REPAIR & SERVICE Dep't.

OPEN NIGHTS

PHONE: 2-9183

RADIO **NIDISCO** PARTS

"RADIO FROM THE GROUND-UP"

147 North Warren Street, Trenton, N.J. - Phone: 4536

DISTRIBUTORS of:

RADIO PARTS..... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

Other Stores At:

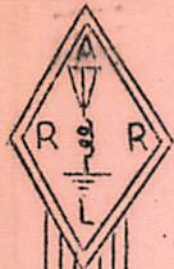
658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

NEW JERSEY'S LARGEST

100%



D

V

R

A



MERRY CHRISTMAS

FROM ALL OF US
TO ALL OF YOU!
"D.V.R.A News"

NEWS VOL. VI NO. 10

1001



MERRY CHRISTMAS

FROM ALL OF US
TO ALL OF YOU
MERRY XMAS

VOL. VI
NO. 10

NEWS

THE NEWS OF THE WEEK AND A MONTHLY MAGAZINE

D.V.R.A. OFFICERS

Lester H Allen	President	W3CCO
Leslie R Yoder	Vice Pres	W3EED
William Petty	Secretary	W3HAZ
Ed. G. Raser	Asst Secy	W3ZI
William Hannah	Treasurer	W3EUEH
Charles Moore	Sgt at Arms	SWL

BOARD OF DIRECTORS

Chairman	Lester H Allen
Activities	Leslie R Yoder
Special Features	Theo. Torretti
Publicity	William Petty
Publication	W.R. Tomlinson
Finance	William Hannah
Radio Communicat'ns	Dave Nabutovsky

D.V.R.A. NEWS STAFF

Editor in Chief	W.R. Tomlinson
Associate Editor	Vaughn K Yates
Editor of Art	Wm. A. Blumel
Business Manager	Les Yoder Sr.
Asst Bus. Mgr.	J. Aaron Sloin
Circulation Mgr.	W.R. Tomlinson
Printing by	Leslie R Yoder

YEARLY SUBSCRIPTION

The D.V.R.A. NEWS may be obtained via mail each month direct to your home by submitting a money order in the amount of fifty cents (\$.50) to W.R. Tomlinson, 623 East Brown St., Trenton, N.J. This amount covers the cost of mailing for the period of one year (12 issues). If you have a relative or friend, or desire this paper mailed direct to you each month, just advise Mr. Tomlinson, sending the necessary amount and he will mail your copy as it is published.

W 3 A Q

All members, or other operators who wish to operate the club station MUST show their license; also display same in the operating room while operating the transmitter. It is also mandatory that you sign the station log for each transmission during such operation. If you do not have your license with you, request the permission, and the presence of the Director of Radio Communications during operation, and HE will sign the station over and off as required by Federal Communications Commission regulations.

EDITORIAL

It is common knowledge that in every branch of radio services there are those stations whose duty it is to "monitor" portions of the spectrum and notify, in some manner, other stations whose signals interfere with services outside the frequencies allotted them. A notice from an A.T. & T. frequency measuring station is accepted with respect, and the trouble eliminated. The "ticket" from an F.C.C. monitoring station is NEVER IGNORED! -- Yet, there are those of our fraternity who, because that same notice comes from one of our "Official Observers", completely ignores it so far as rectifying the trouble is concerned. This is a narrow-minded attitude. To obtain an A-1 "OO" appointment one must possess quite accurate frequency measuring equipment; which represents expenditure of considerable cash; and, time listening "over the bands" outside our own territory, and a discrepancy in YOUR signal is what brings you a notice; so, why not extend to the "OO" the respect given a "bigger fellow" and take immediate steps to eliminate the discrepancy of which the "OO" advises you before a Government "monitor" runs across your signal. "Official Observer" means "Friendly Amateur Service for the Amateur!"

W3GCU

OFFICIAL DOPE

Nr 964 : West Hartford Conn Dec 1/41
At three AM EST December 20 the F.C.C. order making 3800-3900 kc available for the military pilot training program becomes effective. Amateurs must not use these frequencies for night operation starting this date though shared day operating is permitted in specified remote areas if no interference is caused government operation. On December 20 also 1800-1900 kc radiotelephone operation must be discontinued. At the same time 7250-7300 kc will be opened to all classes amateur licensees. For 75 and 20 mtr phone work a Class A license will remain necessary. ARRL suggests that all amateurs interested in the 7 mc phone band effective December 20 check new transmitter adjustments most carefully to eliminate any possibility of second harmonic or other undesired radiations AR

ITEMS OF INTEREST

F.C.C. PRESS RELEASE - November 1 1941 :
Clifford Judkins Durr of Alabama today became a member of the Federal Communications Commission, taking oath at the Commission's offices. Mr Durr was nominated by President Roosevelt on October 13 for a seven year term, and was confirmed by the Senate on October 29. He fills the vacancy caused by the expiration, on June 30 last, of the term of Frederick I. Thompson, also of Alabama.

A.A.R.S. HAMFEST NOVEMBER 2, 1941

The third hamfest of the New Jersey Army Amateur Radio System got under way on Sunday afternoon November 2, 1941 at 2:00 PM. A general rag-chew and gathering of old friends and new acquaintances was in progress from 2:00 PM 'till 4:00 PM, at which time the meeting was called to order. In the absence of the State Radio Aide, W3ZI, a few words were given by W3HAZ in his behalf. The guest speaker was Lester H Allen, W3CCO, SCM for Southern New Jersey. This meeting was under the direction of W3BZX, our NCS, WHO WAS introduced by W3EFM.

It was decided that for New Jersey 80, the general traffic period would begin at 7:00 PM. and the official drill would begin at 8:15 PM.

For those who would like to learn the CORRECT procedure and use of the ARRL fixed text messages, the AARS issued a bulletin October 15 on this subject. The correct procedure would be like the fol-

lowing example:

Nr 156 W3AQ Ck 2ARL TRENTON NJ 8P DEC 1
To: Doc Wilbur W2NPF
Verona, N.J. BT

SIXTY THREE BT
THE GANG

The text is then written out for delivery: "Most sincere wishes for health, happiness and prosperity."

D.V.R.A. CLUB CALENDAR

Code Class	Every Monday Eve.
Business Meetings	2nd & 4th Wed Eve Each Month

The Anniversary Banquet held on Nov 22, 1941 marked the close of the tenth successful year of amateur radio by the Delaware Valley Radio Association. Turkey dinner was enjoyed by all, after which a very interesting and novel program of entertainment was presented which included a very educational talk on the future possibilities of UHF for the amateur by Clinton B. DeSoto, Toastmaster, Lester H Allen, president of the D.V.R.A., rendered an interesting talk pointing out the past achievements of our organization, of which 100% A.R.R.L. affiliation was one, and has been successfully attained. The activities and purposes of the club were explained by the Director of Activities, Leslie R. Yoder, who made the formal presentation of the official club banner. Also, in recognition of his services as past president of the D.V.R.A., Dallas Fogg, W3ASQ, was presented with a genuine ebony gavel, engraved on sterling silver. An excellent program of vaudeville was presented which included: Bernie Landis, MC; Ruth Kaye, songs; Frank Ross, Magician; and Buddy Lewis, Impressions. Many valuable prizes were given, after which an hour of dancing with Les Wood and his orchestra was enjoyed by the XYLs and YLs, while the one KW club transmitter was inspected by many of the OMs. An excellent evening was enjoyed by all and the affair wound up with the usual CQs and short QSOs on the auto horns as old friends and new acquaintances parted to ply their various directions on the homeward trek.

GET ON 112 Mc UHF --- LOCAL CIVILIAN DEFENSE IS A BIG JOB FOR AMATEUR RADIO - AND CALLS FOR UHF EQUIPMENT IN EVERY AMATEUR RADIO STATION - AND - EVERY HAM SHOULD BE IDENTIFIED WITH CIVILIAN DEFENSE - THERE WILL BE A JOB FOR EVERYBODY!

THE STORY OF WESTERN ELECTRIC

FINAL CHAPTER

Western Electric has a force of technicians and equipment that is prepared to move about whenever and wherever new projects call.

This mobility has particular value in time of emergencies when the repair or reconstruction of a central office may become the focal point in restoring service to an entire community. Such occasions were the spring floods of recent years, paralyzing large cities as well as devastating the countryside, rendering thousands homeless, disrupting transport and communication, and hindering relief work as well.

At such times telephone service assumes supreme importance and telephone people swing into action with two objectives uppermost -- to defend the service against the elements so as to keep it intact where humanly possible, and at points where service is interrupted to restore it as swiftly as that can be done. To those ends the Bell System summons every resource at its command, bringing to bear its manpower, its technical skill and its reservoir of supplies.

Called to the scene from quiet sectors perhaps far distant, the men and women of the telephone system serve with like efficiency anywhere because the standards are uniform everywhere. Similarly, the equipment with which they work, rushed perhaps hundreds of miles to the spot, performs its proper function no matter where in the Bell System, because it is all designed and manufactured to a uniform standard. In such a peace-time battle, wire, cable, telephones, switchboards are the typical weapons. To support the devoted and often heroic efforts at the front lines, these weapons must be supplied when and where needed and in any quantities required. That is the part which must be performed swiftly and unflinchingly by the Service of Supply. It is prepared for emergencies before they occur, and as the critical season of storm and flood approaches, special stocks are accumulated in both Western Electric warehouses and in those of its suppliers. At the first warning, the machinery for meeting disaster is set in motion and materials move at once to the affected areas. For example, sleet storms in the territory of one telephone company alone brought down 25,000 poles over an area

of 175,000 square miles, put 2500 circuits out of service, isolated 60 towns & necessitated replacing 710,000 spans of wire. Subsequent sleet storms, although less widespread, did additional damage. This was but a preliminary to a major flood in the Ohio river, switchboards were inundated, long stretches of wire washed out, telephones in thousands of homes submerged in muddy waters. When the tropical hurricane lashed the northeastern states in September 1938, it left in its wake an area of desolation from New Jersey to Canada and property destruction which for the Bell System represented a loss of 25,000 poles and a vast amount of wire and cable, while more than 450,000 telephones were out of order and 241 exchanges isolated.

Before that devastating wind had subsided and even as the waters rose, the telephone companies' call for supplies once again put to the test Western Electric's emergency facilities. Into the stricken areas came by train, by boat, by truck, and by airplane a steady stream of supplies and equipment; while the Company cable and wire-making plants, working day and night, produced these communications essentials in unprecedented quantities. Within a week 35,000,000 feet of drop wire was sent into the stricken area, and in record time the Bell System again demonstrated resources able to cope with the most staggering emergency. These stories of material needs do not take account of telephone linemen who forged raging torrents, operators who stuck to their posts, switchboard men who rowed to their jobs and waded breast-high around their equipment, or of tireless labor by lantern light without heat and with food and drinking water rationed.

These are the human elements which in time of emergency are clearly seen to translate themselves most effectively into public service, because back of them is a unified organization utilizing standardized methods and standardized materials.

And so through a period of more than five decades Western Electric has been contributing its share towards making Bell telephone service the best and most economical in the world.

THE END

THE LADIES' AUXILIARY REPORTS!

At the last meeting of the Ladies' Auxiliary, which was held at the home of Mrs Erma Blumel, plans were completed for the annual L.A.D.V.R.A. Christmas party to be held at Weimann's Grill on Wednesday December tenth. Names were exchanged for gifts. Mrs Blumel entertained the girls with a showing of the hamfest motion pictures, and, a film of the new Jr. Op at the Blumels. Incidentally, the Christmas party of the Ladies' Auxiliary falls on the birthday date of Charlotte Yoder, so Lottie will probably make it a double celebration!

For the information of those who may be interested, the decorations for the D.V.R.A. tenth anniversary banquet were placed by Pauline Raser, W3HVO; Erma Blumel; Helen Allen; and Charlotte Yoder, with the aid of Bill Petty, W3HAZ; Pauline also arranged the center piece on the speakers' table as well as placing the guest tables.

Miss Ruth Hirsch had, as her guest, at the banquet, Frank, W2MLW, from Elizabeth, New Jersey.

Helen Allen has returned to her job after a six months' leave of absence; she says she can't get used to them early-morning hours again!!

The Ladies' Auxiliary desires some new gals to swell their ranks, and if anyone is interested, just contact Charlotte Yoder or any member of the Auxiliary, and the necessary membership information will be forthcoming. We would especially be happy to see Mrs V.K. Yates and Mrs W. R. Tomlinson at our next regular meeting to be held on January 14, 1942, at the home of Miss Ruth Hirsch, 37 Marion St., Trenton, New Jersey.

ONE SIXTY METERS

Those contemplated changes in frequency are already being noticed on the band, with the appearance of quite a lot of the high-powered 75 meter phone boys. Expectations are quite some QRM and "dog fights" accompanied by an over-ample amount of howling, squealing, and whistling. This band has been very good during the past month with plenty of DX coming through early in the evenings. It has been noticed that with coming of the full moon, the band becomes all but washed out for

local contacts, and W4 and W5 coming thru in good style. For the traffic-minded phone man, it is especially gratifying to hear the many phone networks that are making excellent progress on one sixty. We hope to have more for you in the next issue if the new regs don't create a bedlam of heterodynes on the band.

EIGHTY METERS

Conditions on 80 have been fairly good during the past month for average distance communication. Traffic has been very spotty - some days none and the next day twice as much. The band will need plenty of help during the trying days coming, so every traffic minded operator should get in and pitch. The band should be running pretty free up 'till soon after the first of the new year due to the greater number of Xmas and New Years greetings being send by Amateur Radio. A traffic map may be obtained by writing the SCM SNJ Section.

TEN METERS

During the past month the ten meter band has not been as active as it was in the previous two or three months. The skip effect has been most erratic and the majority of contacts have not lasted too long due to long, heavy, QSB. All districts were heard from again this month and all were contacted but the Wis. Best DX wrkd this month was K6TAI, a new comer to the ten meter spectrum. One of the old stand-bys on the band, W9QPK, was worked once again, and the peculiar thing was that the contact lasted thirty minutes without QSB or any other interruptions, which is quite a record the way things are at present on ten meters. Several short contacts were made in the state of Texas, the most outstanding state on the band. Ground wave seems to have picked up a little as quite a few of our local boys are being heard more or less regularly. A new contact by W3CCO was W2ANJ, of Elizabeth N.J. Another new 10 meter signal is being heard at the 10th of a certain few things, but, all in all - nothing. So all in all the 10 meter band is living right up to the prediction released in QST last month telling us that 10 meters would drop off this month and be practically usless next month for regular skip contacts.

BUCKY SAYS!

"W3CCO now has a really honest-to-goodness traffic file"

**OFFICIAL BROADCAST STATION
SCHEDULES!**

Keep abreast of current data, Regulation changes, and up to the date information by listening to the official broadcast schedules: The following stations maintain such schedules for the convenience of amateur radio:

W1AW - ARRL Headquarters - Skeds in QST.
W3AQ - DVRA Club station - DAILY at 7:45 PM EST 1980 Kcs.
W3GCU - Tue - Thur - Sat MORNINGS at ONE AM EST - 3558 Kcs
W3BWF - DAILY at 6:00 PM EST - 1840 Kcs.

**SECOND DISTRICT TRANSCIENTS
By W2GPG**

In the last issue of the NEWS we told you of a brooklyn youth, who, though deaf, dumb, and blind, successfully passed the examination for, and received his amateur operator/station license. At that writing we did not know just what call he had received, but, not we can tell that also: this young aspirant of participation in the enjoyment of amateur radio is known on the air now as W2OFU, and his handle is Leo Sandowsky. Our hearty congrats to you Leo.

W1AW has made some 5500 contacts in its three years of operation. It is estimated that the number will reach the 7000 mark before the end of the year.

A two-hour initial contact was recently held by W2NYQ and W2MYS.

(YLRL TAKE NOTICE) Five YLs are members of the Long Branch Senior High School Radio Club; the club call, W2NOZ, can be heard on 160 meters.

W2GC is temporarily off $2\frac{1}{2}$ meters due to BCI trouble -- Anyone having suggestions for overcoming BCI on the Ultra-highs please give W2GC a lift. The BCL set in question employs no aerial and is operated directly through the AC lines, which act as an antenna.

New Jersey relatives and friends of selectees at Fort Bragg, North Carolina, may contact them via amateur short wave radio. Station W4HSY, which is operated by Battery C, 12th Battallion, originally was used to train radio operators. Later, however, Major Shelby F. Little, battallion commander, obtained a license enabling any qualified amateur to operate the station. Already, in its short life, station W4HSY has transmitted over 100 messages, and all

but one was completed. This service is free to soldiers at the fort. Several other amateur stations are in operation there, but W4HSY is the only one actively engaged for the benefit of soldiers.

A newly organized AARS net meets on 2000 kcs daily at 12:30 PM.

W2MRJ is the proud possessor of a nice 35 WPM certificate.

Remember the fine looking antenna towers used at the New York World's Fair -- Well, one of em (150 ft vertical) was purchased by Tom Laird, W2COJ, who is using it at his Manasquan home. It cost Tom \$20.00 to have it crated and shipped.

A new 20 meter beam is the latest addition at W2CQV's shack.

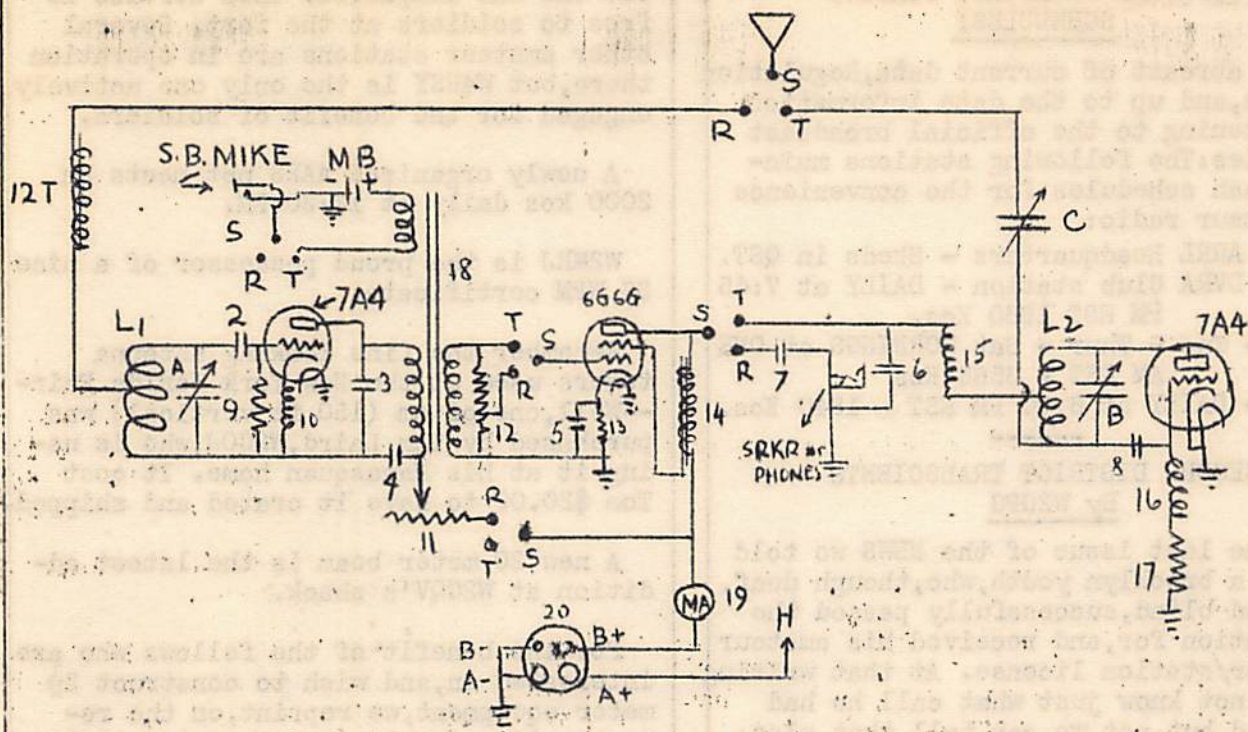
For the benefit of the fellows who are interested in, and wish to construct $2\frac{1}{2}$ meter equipment, we reprint, on the reverse side of this page, the circuit diagram of a $2\frac{1}{2}$ meter transceptor, of which six units are now being utilized by the Metuchen A.E.C. with very successful results. They are not entirely without radiation in the "receive" position, but, the radiation is so negligible that another transceptor operating in the same block can hardly be heard. The best insulation available should be used for the 7A4s sockets as this will make quite a difference in performance. Also, the point at which the resistor R9 and choke L0 are grounded are somewhat critical for smooth operation of the receiver. Connecting them to ground directly at the socket pin on the grounded side of the filaments is best.

This article and schematic diagram was obtained through the courtesy of Luther H. Anderson, W2KHK, of Metuchen New Jersey.

W2LSR IS A KEY STATION for all messages to the various Army camps throughout the South!

An amateur radio communications unit is being organized for emergency radio service with the disaster relief Committee of the Red Cross chapter of the oranges. An appeal is being made for a few more amateur radio operators owning ultra high equipment.

A meeting of the Hudson division was held in room 1316x, 90 church Street; N.Y. George Grammer, technical editor QST gave a splendid talk on $2\frac{1}{2}$ meter equipment and emergency work.



112 MC. TRANSCCEPTOR

LEGEND

- | | |
|---------------------------------------|---|
| A - Bud 15 mmfd VC. | 13 - 400 ohm 2 Watt |
| B - Cardwell ZR-10-AS | 14 - 10 Hy 40 Ma choke (Thordarson T13C27) |
| C - 3 - 30 Trimmer | 15 Z1 RFC |
| 2 - .0001 | 16 Z1 RFC |
| 3 - .004 | 17 2500 ohm 2 Wats |
| 4 - .25 Mfd. | 18 Transceiver transformer. |
| 5 - 16 Mfd. | 19 0-50 Ma--meter |
| 6 - .004 | 20 - Four connector socket |
| 7 - .25 Mfd. | MB - 1 1/2V flashlight cell |
| 8 - .0001 | S - Centralab #2517 Isolantite 2-gang switch. |
| 9 - 1 Meg 1 Watt | Antenna - 4Foot Rod |
| 10 - Z1 RFC | B# - 180 - 200 volts |
| 11 - 50 M Ohm Pot. | |
| 12 - 500 M ohm Pot. | |
| L1 - 3T #14 $\frac{1}{2}$ in diameter | |
| L2 - 4T #14 $\frac{1}{2}$ in diameter | |

This circuit is now in use at the Metuchen, N.J. Amateur Emergency Club, and seems to be operating satisfactorily.

"INTERFERENCE ANALYSIS AND ITS
RADIO RECEPTION EFFECTS"

By W. J. ZAUN
Service Division
RCA Manufacturing Co., Inc.

CHAPTER FIVE
"COMBINATION OF I-F"

Two stations in the same locality having frequency assignments differing by the amount of the receiver I-F, may combine in the early stages of the receiver, forming a difference beat frequency, equal to the particular I-F. This combination usually occurs when the first tube in the receiver is the mixer stage. It is not uncommon, however, for an undesired I-F signal to form in an R-F stage or possibly later in the I-F stages, when the signals are of sufficient intensity or the later circuits are not completely protected against signal pickup. The presence of an EXTRA I-F signal, such as brought about by this mixture of local stations, causes a "whistle" or "birdie" to be reproduced when receiving carriers (not related in frequency to interfering signals) over extensive sections of the tuning range. The "birdie" is created by the audible beat resulting from mixture at the second detector of the normal I-F and the superfluous I-F signals. The latter is a constant frequency, while the former varies with tuning. Therefore, a variable pitch audio note is produced. Zero beat is obtained at the point of exact tuning.

Discrimination against this type of interference is gained by providing ample selectivity ahead of the receiver stage which is susceptible to the mixing phenomena.

For service, discrimination can be provided at the frequency of one of the interfering signals, preferably the strongest, by use of wavetrap or attenuator circuit, tuned to that particular frequency so as to suppress its strength at the input of the susceptible stage. In applying further practical remedies for this interference, it often is essential to reduce antenna efficiency by decreasing its length or adding a small capacitor (50-200 mmfd) between it and the receiver input antenna terminal. If this treatment is not effective, backdoor points of signal entry, such as under chassis wiring, grid leads, and power circuits should be investigated. Shielding of the susceptible circuits and filtering of the power line at the receiver with standard units, may be required.

In some cases, each possible point of

entry may be contributing a component of interfering signal and each must, therefore, be corrected separately before satisfactory performance can be obtained. Re-alignment of the circuits to a higher or lower I-F will be beneficial. Change of alignment by 10 kc can usually be accomplished without serious effect on the receiver.

The fact that HARMONICS of the local stations may subtract with each other or with fundamentals of the same stations, to produce a beat of the nominal I-F, must be considered as possible causes for this type of interference.

THE Y.L.R.L. CONTRIBUTES!!

By Nita W8TAY

Since the conception of the idea of the Young Ladies' Radio League less than two short years ago, by a young lady of Washington State, Miss Ethel Smith, W7FWB, that unique organization has progressed steadily until, when, just recently, upon the celebration of their second anniversary, their membership roll exceeded the 250 mark with YL members in forty three of the states in the Union as well as enviable representation in the Possessions. Progress such as this merits the highest praise of all to whose attention it may come, and, it is to this end that we, the members of the Delaware Valley Radio Association, wish to extend our hearty congratulations to the Y.L.R.L. and its growing membership.

Nita, W8TAY, is now compiling chatter & pix to be published in "Radio" in an early edition. This article will contain info about the girls, all YL gals, many of em new ops.

The officers of the Y.L.R.L. are:
Enid Ide - Pres - Sheldon N.D. W9NBX
Marie Corcoran - V. Pres - Wyoming, O. W8TPZ
Leta Bush - Sec-Treas - St. Louis Mo W9DBD
Anna Tevelin - Asst Sec - St. Louis W9ONW
Anita Bien - Pub. Mgr. - Chagrin Falls, Ohio W8TAY

The slogan of the Y.L.R.L. is --
"QRV" - I am Ready"

Y.L.R.L. NETS

160 fone	Thur 5:30 AM EST	NCS W9EFW
80 CW	Contact 911H for time	NCS W911H
40 CW	Eastern Section	NCS W1FTJ
	Western Section	NCS W9ZWL
20 fone	Thur 3:00 PM CST	NCS W9DBD
10 --	Tues 11:00 AM PST	NCS W6RJV
(Hw. abt the freqs on these nets gals-Ed)		

Y.L.R.L.
Y.L.R.L. BIRTHDAY
By W6RYJ

There's satisfaction in good deeds done,
Receiving Laurels rightly won.
For two years now, we've strived to do
The very best we can for you;
So all join in and celebrate,
Our Second Anniversary date.
Happy Birthday, shall we say,
The same old words in a different way;
To wish success, good luck as well,
To all the girls of the Y.L.R.L.

Pearl

(Well said, Pearl ed)

The Y.L.R.L. was represented at the Boston convention by Dot Evans, W1ETJ; the others present included: W1KAU; MDV: MTB NJJ; FOF; MVU; MUW; MPP; MJE; MIM; Dot was the only YL competing for the code contest and took 5th prize, and the OM landed third prize. At the Mid-West convention, Leta, W9DBD covered for the YLRL.

WAFSE says of the YLs - "If a mere male can feel proud that he is of that band of amateurs who nurture a hobby that does not foreclose the privileges of the opposite sex, then how natural that all YLs should have pride in their own organization that embodies all the tenets of the hobby. All amateurs may justly take pride in the talents of the YLs and know that these YLs have shaped and shall ever shape those talents to the mold of credit to amateur radio. For her effort in lifting the basket from the candle light in acquainting handom with the YLRL, W8TAY rates a plume from YLRL and sincere thanks from all of us." Jim.

W1KUI, Ellen, has steamed up her 80 meter rig and is ready to go: she would like to have a sked with anyone who cares to sked her on 3548 kes.

W1MUW, Norma, received her 25 WPM certificate at the Burlington Vt. convention. Norma is also a member of MNX.

W2IXY, Dot, besides being Section Warden for the Air Radio Protection Service, working with the War Dep't.; participating in Air Force maneuvers, taking Red Cross first aid course; and having British War Relief booth every Tuesday .. Dot manages to find time to carry on swell correspondence with the "G" boys, and says SWL reports roll in when she gets on the air. (Boy, when does she sleep? ed)

W2JZX, Vi, is communications chairman of the Womens' Defense Council for Nassau Co. and is doing a very nice job. In cooperation with the Mens' Defense Council for that county, Vi did another fine job in the communications test during the Black-out maneuvers on October 10th. Vi also gives code practice each morning on 3910 at 11:00 AM (what freq after regs change Vi? ed)

W2IMY, Dottie, is now third district operating W2IMY/3

W2MJS, Emm, while operating 20 fone a few weeks ago contacted seven Phillipine Islands stations in ONE HOUR! That averages one contact every 8.57 minutes!

W2NAI, Marge, is rebuilding her rig for an increase in power to 150 watts. Marge is also teaching three classes in code for AWVS in the Bronx.

W2QNC, Vi, works for Hammurlund, goes to school in the evenings where she is taking up a Radio Communications course designed to qualify one for a government license. Vi is RCC: AED: AARS: on Sat nite SNY 80 with W2NAI as NCS: AARS Cryptography.

W2NSL, Charlotte, is giving two code classes for AWVS at Scovill High School in Forest Hills.

W3AKB, Fran, has been too busy with National Defense work to do much hamming.

W3FXZ, Mary, will resume skeds with Polly and Dot, W8UDA; while Elizabeth, W3CDQ, is waiting for the 7 mc nets to open up.

W2MIY/3 is attending CREI school and is very busy.

W4FJR, Lola, has been appointed RM and EC for her section; she is NCS for DIXIE TFC NET; her traffic total for month of Oct. was 654; she was on watch constantly during the Miami-Tallahassee storm Oct 5 & 6. Lola's frequency are 3548; 3624; 3645; 7036, 7248; 7290 Kcs.

W9ILH is proud possessor of three stage ECO with 35 watts; she will start 80 meter activities in near future. Also Leta has crystal now for 80 YLRL net.

W8TLZ is attending school in Chicago; her name is Ruth.

HI WIND!!

The officers and members of the Delaware Valley Radio Association wish to thank the following organizations and firms whose kind donations of material prizes helped so much in the success of our tenth anniversary banquet:

Radio Wire and Television Inc.,
Thordarson Electric Mfg. Co.
Bud Radio Inc.
RCA Manufacturing Co., Inc.
Harrison Radio Co.
Warren Balderson Co.
American Radio Relay League.

During the recent SS contest, W3GCU had the pleasure of contacting K6RLG on 75 meter phone. As we have only one crystal at W3AQ where this contact was made, it was necessary to qrt so as not to QRT on that frequency and get back on 160.

Doc Wilbur has resigned his position as supervisor at NYA, and will soon take up his duties with Federal Telegraph as Junior Engineer. Doc will not be on from W2NPV but will be on under his own call soon from Easton, Pa.

George Bunce, of Cleveland, Ohio, celebrated his 24th birthday at our club banquet on November 22/41

Clinton B. DeSoto was very much impressed with the neat, commercial looking rig at W3AQ.

W3CCO finally made the grade; having worked WAE (Worked All El Paso) and is now awaiting the wall paper for same.
Congrats Les.

NAA is no longer available for amateur work, but, WAR is still contacting hams - Why not put W3AQ too??

In regards to the certificate awarded for working 25 "K4" stations, does anyone know HOW to get the confirmation cards from these stations?

CIVILIAN DEFENSE -- THE HOM FRONT.

FOR SALE

NATIONAL NC-81-X receiver. Like new excellent condition. A real buy:

See Ed Raser

WANTED

Transformer - 1000 volts either side center at 300 mils.

See W3CSY.

"THE NEW-BORN HAM"

Just take a bit of solder,
And a few small rolls of wire,
And so begins the amateur
To set the world on fire.

Tubes and tank coils he will gather,
Knobs and chokes, and dials and such,
But the total contribution
Of the junk box is 'nt much.

Add to this just common knowledge,
And a yen to make a trade
Lo and behold before you know it,
A transmitter is made.

Then a crystal is essential,
Of a frequency quite rare:
Once obtained before you know it
A new HAM is on the air.

(YL Harmonics)

W3ISY Was recent visitor to W3AQ and was very much impressed with the one KW rig at headquarters; "looks like a commercial transmitter"

LINE NOISE

Les Yoder wants to know when Ray, W3GCU is going to get enough ambition to put up an antenna. Ray's excuse was that he had no place to put it but now that Les is his neighbor, he has a nice stretch across the back fence, for that much needed sky wire. Don't forget, Les, that the neighbors' PERMISSION must be obtained.

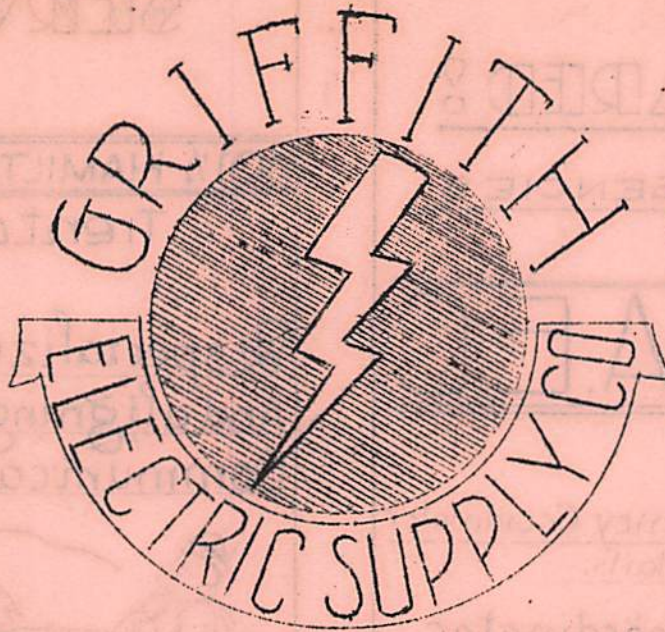
The Baltimore Amateur Radio Association now has rigs for operation on all bands. If you hear W3JOI, don't hesitate to give us a buzz on the air for a short rag chew.

W3IK has joined the ranks of the many hams signed up with the home guard.

It has been brought to our attention that, due to the inauguration of 24 hour service, Tower ops are needed at Logan Field.

GRIFFITH ELECTRIC SUPPLY CO,

*Electric
Wholesale
Jobbers*



*Consult us on
Your Engineering
Problems*

479 S, BROAD ST, TRENTON, N. J.

118-120
N. BROAD ST.

HURLEY-TOBIN Co

110-112
E HANOVER ST.

TRENTON'S LARGEST RADIO DEALER,

VISIT OUR "MUSIC HALL" AND SEE
OUR COMPLETE STOCK OF PHILCO,
R.C.A.-VICTOR, EMERSON & DEWALD RADIOS
• Portables, Compacts, Consoles, etc.
RADIO-PHONOGRAPHS - AUTO RADIOS

SOLD ON EASY TERMS

VICTOR - COLUMBIA - DECCA
OKEH AND BLUEBIRD RECORDS

BE

PREPARED!

for all EMERGENCIES

JOIN THE A.E.C.

See your Emergency Coordinator
for all Details.

The Emergency Coordinator
for Southern New Jersey

Fed Torretti.

W3BAQ

RADIO
SERVICE
SHOP

1101½ HAMILTON AVENUE

Trenton 11J

We specialize in servicing
And aligning AMATEUR
Communication receivers



See Dave
and Andy
If you have
Trouble in
Your Shanty

QSL CARDS

By "Brownie", W3CJI

SATISFACTION GUARANTEED

ORDER NOW:

"Remember, you will be judged many times by your QSL."

RICHARD E. BROWN, 1725 Frankentield Ave, Allentown, Penna.

WHOLESALE REPRESENTATIVE

EMERSON RADIOS
EMERSON RADIO TUBES
R.C.A. RADIO TUBES
EVEREADY BATTERIES
DEXTER WASHERS & IRONERS
WESTINGHOUSE MAZDA LAMPS
WHEELER FLUORESCENT LIGHTING
ROBBINS & MYER ELECTRIC FANS
HAMILTON BEACH APPLIANCES
TOASTWELL APPLIANCES
FITZGERALD APPLIANCES
STEAM-ELECTRIC IRONS
REMINGTON-RAND ELEC. SHAVERS
CORY COFFEE BREWERS
WESTON ELECTRICAL INSTRUMENTS
EDWARDS CHIMES
MUELLER ELECTRICAL SPECIALTIES
EMERALITE LAMPS
EAGLE ELECTRICAL SPECIALTIES
MODERN KITCHEN CABINETS

Prompt and Courteous Attention to All!

Call or write:

LESTER H. ALLEN, W3CCO

704 QUINTON AVE.,
TRENTON, N. J. Phone: 8919

PARKER

Printing and Stationery Co.

214 So. BROAD ST., Trenton, N. J.
(opposite Mercer Co. Court House)

PRINTING:

FROM A CARD TO A NEWSPAPER

OFFICE SUPPLIES:

MIMEO SUPPLIES,
FILING EQUIPMENT,
STAPLING MACHINES,
BOOKKEEPING SUPPLIES, Etc.

Phone: 3-2784

Established 1912

SPIEZZLE'S

MEN'S AND BOYS' CLOTHING

145 S. BROAD ST., TRENTON, N. J.

(Second Door from Factory St.)

QUALITY AND
STYLE without
EXTRAVAGANCE

open nites till 8:00

PHONE: 3-5234

AMERICAN RADIO Co.

TRENTON'S LEADING RADIO STORE

25 EAST HANOVER ST
TRENTON, NEW JERSEY

COMPLETE STOCK OF AMATEUR SUPPLIES
AT THE LOWEST PRICES

hallicrafters receivers STANCOR Transformers
BLID RADIO PARTS • Meissner RADIO PARTS
RCA TUBES • • • • Philco & Emerson Radios
Taylor Tubes • • • • Portable Batteries • • •

Complete REPAIR & SERVICE Dep't.

OPEN NIGHTS

PHONE 2-9183

RADIO **NIDISCO** PARTS

"RADIO FROM THE GROUND-UP"

147 North Warren Street, Trenton, N.J. Phone: 4536

DISTRIBUTORS of:

RADIO PARTS..... SOUND EQUIPMENT
ELECTRONIC EQUIPMENT NATIONAL UNION TUBES
BURGESS BATTERIES... AMATEUR RADIO SUPPLIES

Other Stores At:

658 ANDERSON AVE.
CLIFFSIDE, N. J.

682 NEWARK AVE.
JERSEY CITY, N. J.

205 MADISON ST.
PASSAIC, N. J.

NEW JERSEY'S LARGEST