NEW GEAR IN A.W.A. MUSEUM
Here microphone: W3GD
Tubes: W2CFB, W2PBA, T. Bair
Variable crystal: W2E3
Tapes: W1XE (A.R.R.L.), W2AFE
Written material: W3AW, W2IX, W3KQH, W2IK, Everett Berry, Jack Alli­
son, Russ Worthy and Peter Rossm­
ann.

Bob Palmer (W7ED) sent A.W.A. a rare Marconi antenna insulator. It is of
small diameter and about 2 feet long. Good guess would place it before 1910.
Russ Worthy found a Marconi Call Book published in 1915. Compiled by Frank
Hart of American Marconi, it lists
all the known wireless stations in the
world including ships. It is cross-
indexed several ways making it a valu­
able reference.

Joe Marsey, W2BMX, left his color TV scanner at the Museum last fall. Al­
though not strictly antique -- it has
a valuable place in the development
of early color TV and makes an excel­
 lent exhibit.

The A.W.A. Tape Library has two in­
teresting additions too. A recording of a spark transmitter made many years
ago by W2AF (more on this later) and a tape made at the 1964 National ARRL
Convention in New York City. The latter
was made during the banquet which fea­
tured Herbert Hoover Jr., W52H, as the Toastmaster and Harry Goldwater,K7UXA,
as Guest of Honor. This was the year
when Barry was Presidential candidate. The tape was presented to A.W.A. by

UNITED WIRELESS message blank is a
rare piece of paper. Just such a
faded blank was given to A.W.A. re­
cently by Dick Kgolf, W2WIX, who kept
it all these years. Another nice one
to frame. On the subject of U.W.T.
Co., Thorn Mayes, W6AX, is currently
working on the history of this early company and may give a talk at the
forthcoming Conference.

GOOD READING

QRD? SNOHOMISH
A book written by Conrad Burns, VE7IR

Here's a story every commercial operator will love to read -- and so will
anyone who loves adventure. It is a real story -- the story of one of the most
unusual ocean voyages in modern maritime history as told by the radio oper­
ator, Conrad Burns, a young amateur.

In September, 1947, an old ocean going tugboat of Canadian Registry, left Seat­
tle, Washington, for Buenos Aires, Ar­
gentina. The old tug (built in 1906 at
a Wilmington, Dela. shipyard) was first
used by the U.S. Coast Guard and later
years saw service along the Canadian
Pacific Coast. The author never tells
why it was named SNOHOMISH.

What was unusual? This little tug
towed a huge 270 foot barge with 53
foot beam -- and on top of the barge
were six 74 ft. steel bullied diesel prop­
lled tugboats !! Connecting the two
was a 2 inch chain which at times sag­
ged 120 feet below the surface !

This ridiculous combination was batter­
ed by storms in the Pacific and Atlant­
ic, stack on treacherous reefs off the coast
of Brazil, sent SOS signals, caught in
dangerous currents, etc.

Skippered by a tough Irish captain by
the name of P.R. MacFarlane, it finally
berthed in Buenos Aires after 3 months
and 1 day at sea.

Of interest to A.W.A. members was the
log kept by "Sparks" -- a young fellow
on his first lengthy ocean voyage. The
transmitter was an obsolete Hartley oscil­
lator using (2) 211's in parallel with the
antenna tied directly to the oscillator's
ringing circuit. There was no emer­
gency or standby equipment.

Using the call letters VCPJ, the oper­
ator experienced all the headaches one
could expect using old gear. At times
the tubes would draw 280 mills at 425
KC, and practically zero at 425 KC.

A great story. I hope you can find a
copy. It was published by Pageant Press
of New York City in 1954.

(Tax Jack Allison)

"ELECTROSTATICS" by Prof. Moore is now
available in paperback from Doubleday
and Co., Garden City, N.Y. at $1.45

Some pictures, design data, etc as the
hard over edition. (Tax W6AX)
KENNEDY TYPE 281 RECEIVER AND TYPE 521 TWO STAGE AUDIO AMPLIFIER

When a collector thinks of a Kennedy receiver it is usually the 110 or 220 model. Pictured is a lesser known Model 281 Shortwave set made about the same time for broadcast use. That's right -- the broadcast band was shortwave back in 1922-24. These two nice units belong to George Greene.

RHAMSTINE NEEDLEPHONE

was a little "cutie" which sold for $10 back in 1924. In appearance it looked like a small horn speaker driving unit without the horn. It was placed on a phonograph turntable with the needle of the mechanical reproducer placed in a hole at the top. A magnet inside the driving unit would actuate the needle as would a phonograph record!

A more familiar unit found in some collections is another gimmick in reverse. Here a single button carbon microphone is placed in the phonograph arm with the output fed into a receiver's audio system. This was the first phone pickup and eliminated the need to place the mike in front of a loudspeaker. There are several of these units in the A.W.A. Museum.

W2AN ACTIVITY

The club station has had in operation the past several months a 1928 phone/CW transmitter on 80 meters. Junk box parts ended up with a UX-210 crystal oscillator with 210 r.f. amplifier running 40 ma. at 400 volts...

Phone operation finds a UX-250 modulator and 227 speech with a 1921 S.B. Federal mike. First contact was with W2QX then W2PMN. Best DX on phone is W1NTE to the East and W8JDV in the West. Receiver: 3 tube regenerative with Baldwin phones. Only one 40 year old crystal was available (3870 kc.) plus another of 1940 vintage at 3905 kc. -- the latter being the reason the Net frequency was moved from 3910. About the time you receive this bulletin we hope to have a single 201-A in operation on 80 CW...
THE TUBE COLLECTOR

Identifying the Popular 201

The most popular and universal tube of all time is unquestionably the 201.

An interesting exhibit can be made showing the 8 versions of this tube:

1. The first version is the UV-201 which became popular in 1921. It had a brass base, short pins, clear glass with tit top and used 1 amp. at 5 volts on the filament.
2. The UV-201 was superseded in 1922 by the UV-201A of same appearance but required only 1/4 amp. filament and usually coated glass (getter).
3. The glass tit was removed in 1923 but still retained the same UV brass base.
4. A big change came in 1924 when the base was changed to bakelite and the interior construction improved (grid and plate moved closer together increasing mutual conductance).
5. A still bigger change in 1925 when the UV bakelite base changed to the long UX pin. Other characteristics of the new UX-201A remained the same.
6. The next improvement came in 1927 when the length of the bakelite base was shortened to improve appearance.
7. The spring of 1928 saw the last major change before A.C. tubes took over. The tube became slightly longer and the inside construction was radically changed. A new type of filament suspension was employed using a mica disc. This minimized possible physical damage and microphonic noises.
8. The new 1928 tube saw little change until mid 30's when it became the OLA and the modern glass dome construction added.

DAVID SARNOFF RETIRES AT 78

as Chairman of RCA (Jan. 8). I'm sure most readers saw this headline in their local newspaper. I wonder, however, how many knew he started in radio with the Marconi Wireless Telegraph Company of America when only 15 years old?? The career of this famous pioneer and business man is fairly well known by radio historians. His biography (mentioned in an earlier OTB) is excellent reading for it covers the period of our hobby's greatest development.

WIRE RECORDING

for broadcast work can date back at least to 1924 when W.R. Seigle recorded and played back entertainment made on a wire recorder at 2BOI, Mamaroneck, N.Y. The machine was a modified version of the old Telegraphone manufactured by the American Telegraphone Co. between 1906-14 (7). We can account for four of these early Telegraphone wire recorders: Smithsonian, John Caperton, Jack Gray and one at A.W.A. Museum.

The wire recorder is the invention of Valdemar Poulsen. One of the first models and believed to be the oldest in the United States (1904) is also in the A.W.A. Museum -- thanks to W2GV (R.P.I.). The wire recorder is, of course, the grand-daddy of our present-day tape recorder. More info? See Sept., 1924 issue of RADIO BROADCAST magazine.

PROBLEM SOLVERS

Bob Flanagan (WAIHAU) has on several occasions successfully converted antique BC receivers to modern AC operation without touching the original wiring. He finds the GABA miniature tube an easy substitute for old triodes such as a 201-A. He removes the glass envelope from an old burnt out tube and mounts the 7 pin miniature socket on top. Four wires are internally soldered to the 4 base prongs and then the new socket, which is mounted on a round plastic disc cut to the inside diameter of the old base, is pressed into place. The little tubes mounted on top of the old base look real slick.... (See RADIO-ELECTRONICS magazine, Sept. 1965 for more info.)

GREENPET with adhesive backing makes excellent feet or bottom for old receivers. Made by 3M, it can be purchased or ordered at most large hardware stores. (Tnx WA3LVV)

BUS BAR -- can be obtained from the Beldon Wire Co. Round tinned stock is available in 12, 14 and 16 gauge in 100 foot rolls. It can be easily made straight by unrolling about 10 feet and clamping the end in a vise. Give it several hard jerks and it will come straight.... (John Caperton)

CLEANING A-K BREADBOARD -- try Brasso plus a cream polish and plenty of patience and you will have a set that is just like new... (Frank Atlee, W4PI)
CN-239 RECEIVER

This beautiful longwave receiver is highly prized by collectors. A similar model was pictured with old time NESCO employee Ted Duvall in his article (OWB Vol. 2, No. 1) where he tells the history of the National Electrical Supply Company. The CN-239 was manufactured by NESCO during WWII and used extensively aboard ship and shore stations. It is somewhat similar to the SE-95A and IF-500 with a wavelength of 1000 to 10,000 meters. The most unusual feature is the circuit engraved on the front panel!

Look closely and you will see engraved lines connecting the various components. As an example: directly above the nameplate is the Inductive Coupling Control Knob. On each side of the knob are two engraved loops (circles) indicating coils coupled and their connections in the circuit.

The set is really a RF tuning unit there being no built-in detector. Provisions are made to use either an external crystal detector or a triode tube as regenerative detector with tickler coil controlling the regeneration. A buzzer and switch are mounted on the panel to allow the operator to find the sensitive spot on the galena. Connections are provided at the top for loading coils. A real beauty -- we wish you luck in finding one....

AWA NETS

PHONE:
Every Sunday -- 12 noon
3905 KC. AM or SSB
First Tuesday each month -- 7 P.M.
3570 KC. AM or SSB
N.C. -- W2AN/W2ICE Alternates -- W2BWK

CN:
First Wednesday each month
3580 KC. 8 P.M. EST.
N.C. -- W2QY Alternate -- K2MRI

A-Patent-a-Day

is the average for every working day since BELL LABS was founded in January, 1925. This amounts to a total of something like 14,000 patents.

PROGRAM FOR 1970 A.W.A. CONFERENCE
A.W.A. Program Committee is open for suggestions and volunteers. Write Holcomb Headquarters.

REIGNALD FESSSENDEN made headlines recently in MACLEAN'S Canadian magazine. Well written, the author tells readers they should recognize this famous pioneer as they do Bell and Marconi.
The A.W.A. takes pleasure in adding another historical radio company to its long list of manufacturers: The Heath Company of Benton Harbor, Mich. (Permission to reproduce by Earl Broihier, Heath Co.)

The Story of HEATH COMPANY

When Edward Bayard Heath founded the Heath Aeroplane Company during the early 1900's, little did he realize what would eventually evolve from his small "airplane trading post" as it was commonly called. Before he died, Mr. Heath was able to see the fruition of his early dreams. In 1926, he produced an airplane in kit form—the famous Heath "Parasol." For years this light aircraft was a favorite in the flying fraternity. Mr. Heath was killed during a test flight in 1931, marking a tragic end to a brilliant career. From that point through World War II, the Heath Company remained in the aircraft and replacement part business.

But it wasn't until shortly after World War II, that the character of the Heath Company changed. It was then that an ambitious engineer named Howard Anthony, who had purchased the Heath Company in 1935, took a calculated gamble. The ingenious Mr. Anthony bought a large stock of surplus wartime electronic parts, designed and "mail order marketed" an oscilloscope for $39.50.

Mr. Anthony based the success of his idea on the premise that anyone, regardless of technical knowledge or skills could assemble a kit himself, and save up to 50% over comparable factory-built models. All that would be required were a few simple hand tools and some spare time.

Orders poured in for the oscilloscope kit, and the foundation for the Heath Company as it exists today was established. Mr. Anthony expanded his test instrument line and soon added amateur radio and hi-fi component kits.

The key to the kit-builder's, and consequently Mr. Anthony's, success was the instruction manual. Its contents still guide the Heath Company today. It contains simple, non-technical instructions and large "exploded" diagrams that take the builder through each and every step . . . show him exactly what to do and how to do it. Proof that every Heathkit is designed to be "beginner-built" can be found in the cards and letters Heath receives daily from people of all ages and from all walks of life expressing their delight and satisfaction.

Tragedy struck again in 1954 when Howard Anthony was also killed in an airplane crash. Daystrom, Inc. then acquired the Heath Company. In 1962 Daystrom, Inc. was purchased by Schlumberger Limited, a leader in the development of electronic techniques for oil exploration.

Since 1954, more kit products have been added until at present Heath boasts 11 different product lines, consisting of over 300 kits . . . the world's largest selection. Whatever your interest, you'll find a kit to match it in this 108 pg. catalog.

In order to produce the vast array of Heathkit equipment a modern 205,000 sq. ft. plant was constructed in 1958 on the shores of Lake Michigan in St. Joseph, Mich. And recently another 156,000 sq. ft. of engineering and manufacturing facilities were added, bringing the total space to 361,000 sq. ft. If you are planning a visit to Michigan, we invite you to stop in and pay us a visit. We're located on Hilltop Rd. just off Business I-94, south of St. Joseph.

A.W.A. makes QST cover ----
A.R.E.L. members have of course seen the vy ft February QST cover showing Prexy W2GB and CM W8JDV. In the background one can make out W3WQB, W2ICE and W3QY. Real nice sharp shot by Al Crum, W2BNX, taken at our 1969 Historical Radio Conference.

CAPE HENlopen D.F. station mentioned in last QST brought quick response from Charles Henry (Chicago). Seems Charlie helped install the radio compass stations mentioned in the article when he was Navy Chief Radioman based at the Charlestown Navy Yard during WWI. He even remembers winding the loop antenna...small world.
Here are the fellows who make this BULLETIN possible:

1. to r.: Dex Deeley -- who assists in the mailing and finance departments. Larry Triggs -- the makeup Editor who places the material in order and makes final decisions on copy. Link Cundall -- able financier and handler of the envelopes.... and lastly, Bruce Kelley, the Editor who gathers the material and punches it out with two fingers. Missing of course, is our able photographer Al Cram, W2BK, who took the picture and our printer Don Ray -- par excellence -- none better!

WORD OF CAUTION

A.W.A. has received many complaints about the questionable practice of a dealer/collector in the New York City area. We are not in the position to fully judge his activities; however, since the complaints have been received from so many different sources in the past year, we've been advised to issue a word of caution to members.

You send your money or gear to be swapped FIRST. If you receive anything in return you're lucky...and when you do receive something, it is usually damaged or something different than agreed on....

Several members have indicated they may take action on grounds of mail fraud. Who is he? He lives in the New York City area...uses different names...is not a licensed amateur...and his name has not appeared in the AWA Bulletin for sometime....

CHANGE IN ADDRESS ??

Notify Link in Rochester and NOT Holcomb Headquarters. Link handles the mailing list and addresses the envelopes.....

MICROPHONE COLLECTOR

Many A.W.A. members have microphones in their amateur museums but few specialize in this field. We now have a new member whose main interest is early mikes. He is Bob Hawkins, Director of Station Operations, KVI, Seattle, Washington. In addition to early microphones -- Bob confesses having a couple old battery BC sets and shows an interest in old radio "premiums" such as Orphan Annie Ovaltine mugs, pre-war fan magazines, etc.

ANTIQUE WIRELESS ASSOCIATION
MUSEUM
HOLCOMB, NEW YORK 14469

The A.W.A. provides facilities for member's equipment and a photographic workshop for the amateur historian. Open for special events or by advance appointment between May 1 and October 31.

TELEPHONE: 315-657-7489 or 716-663-0856

Club Radio Station: Amateur W2AN
FIN STEWART -- Good news from our friend and collector in Australia. Fin has a new home with ample space for his amateur museum. The new QTH is: 78/11 Yarramanbe Rd., Darling Point, N.S.W. Australia (about 50 miles from Sidney).

ROD MEHLBUTH (W3KKY) picked up some gear that should make your mouth water: SE-1420 receiver, CM-577 receiver in mint condx, a rare Crocker-Wheeler shortwave receiver (how about that!) and lastly, two panels of de Forest fine museum incorporated. It is not trouble. It protects Jack and all those who have donated equipment for display.

KEN RUGGIT (Cedar Rapids, Ia.) would very much like to see some kind of "blue book" to guide the collector in purchasing old equipment -- somewhat similar to that available in the coin and stamp field. Swell idea Ken -- maybe as the interest grows one can be made up.

FRANK PAGANO (Brooklyn) makes a very good suggestion concerning removing pitch from old transformers. Unless you have the proper facilities -- do not use explosive gasoline as mentioned in the last Bulletin. Try kerosene or fuel oil. Frank has been showing much interest lately in his other hobbies: railroads and streetcars.

BOB COBAUGH (W2NX) suggest some thought be given to reproducing one or two of the early government call books printed in the 20's or early 30's. We'll feel this one out and get the reaction at the Conference.

JOHN TSCHOPP (Barrington, Ill.) laid his hands on a Shramrock TRF and a nice Victoreen Super 8. Jack also added several good books to his library...

EDWIN HECK (W5OPO) reports the Inter-City Radio Club (Mansfield, Ohio) Old Timers Nite a tremendous success. Pioneer Loren Windom, W5EZ, was guest speaker with A.W.A. QRM Contest contributing to the entertainment. The winner of this "stinker" was Tom Devitt, W5ANZ with Willie White, W5GDO coming in second.

TIM CHRISTIAN (San Francisco) believe it or not acquired a rare AK-5 breadboard -- and all indications are it never saw service. How lucky can you get?

PHIL CATAMO (W3JAV) is seeking circuits and info on SE-143 and CN-240 receivers both real rare ones. Can anyone help?

JOHN DRAKE (New Canaan, Conn.) tells the response on the "flyer" sent in the last QTH was exceptionally good. Guess we're going to have a fine book on historical radio sometime later this year.

JULIAN JARLIN (W2IMI) is a new member who concentrates on early Morse instruments. Interest in telegraphy rubs off on Julian naturally since his father was with W-U for 35 years!

JAMES CHERN (Jeanette, Pa.) is the lucky owner of a NESCO CN-113 U.S. Navy receiver. One problem: The name plate is missing but he hopes to duplicate it.

S.R. WITHERS (W4W4H) now has over 100 sets ranging from Amrad to Zenith. If out in Kansas -- give him a call..QTH in call box.

DOUG CHAPUT will repair most audio transformers including the tough Radiola variety. Each one represents several hours of work. He'll do it for cash or swap. Drop him a line at: 120 Tapawingo Rd., SW, Vienna, Va., 22180

RALPH THOMAS (W8UK) has the knack of finding old gear without trying too hard. Ralph recently sent A.W.A, an early commercial voltmeter and 2 G.R. Wavemeters for the Museum from W2JAV.

ED MERTZ (W82M) is another who is not really a collector but he did land an old Comet Pro for the club. There is one on the shelf but it looks as if it had been in a flood. Good going Ed.

JOE HORNBACK (W6GFB) is a new member in California with a good start in the collecting business. To date Joe has over 45 pieces including a spark transmitter and a Marconi CN-294 receiver!

HENRY WENDT (KEIKO) while attending a professional meeting in Atlantic City recently found time out to run down to nearby Tuckerton -- the site of the once famous German longwave station. The old station was demolished in the mid '50s but Henry did visit some of the present RCA staff at W8C and talked to Station Manager W2SJR.
This page contains text about various collectors and their activities, including:

- A QO STORY

- JOHN STOKES (Auckland, N.Z.) hit the jackpot in the commercial line -- he is now the owner of an original Marconi Magnetic Detector -- and he's hanging on it! This makes up for an earlier unpleasant experience on a trade deal with a "sharpie" here in the U.S. Good going John!

- WAYNE BRESTER (Boxford, Mass.) is a new member/colllector with a modest collection. He would like to meet other collectors in Massachusetts.

- BASIL ABBOTT (Mechanicsville, Va.) sent a photo of his beautiful 7 tube Music Master 1924 console. The lines of the cabinet would make it very desirable in a present day home. Better hang on to these early consoles if you have the room.

- AARON SOTOMAY (W1EDC) is a new member/colllector in Dartmouth, Nova Scotia. Welcome aboard CM. I believe at this time we have members in all VE districts except VE-6 and 8.

- THOBY HUGGINS (W1AX) has been doing outstanding work with high voltage devices including Wasshurz machines. He makes most of his equipment and photos indicate beautiful workshop.

- TATE TATUMAU (W6PX) hit a small jackpot. From W6TTF estate a Grebe CR5 components making a fe replica, Tuska, Kellogg and Amrad variometers, Tuska .001 var., plus a single slide tuner. From W6TVK: 2 Naller variometers and a variocoupler. From W8BX: 1/2" spark coil and a Navy key used at Gitmo Bay in 1910 from W8HKY. To top it off, Tate finally found Bearssag's book "803 to the Rescue" for only 3 bucks!

- EVERETT BERRY (Lansing, Mich.) promises to be one of the top BC collectors if he keeps going. Photos of his gear shows shelves and shelves of all kinds of sets and speakers. The pictures, along with other collections, will be printed sometime in a later OTB.

- DAY RAY (Breesport, N.Y.) is another collector who is finding space a premium according to pictures received. Guess the moral to all this is: get the sets while you can for they are rapidly disappearing!

- BILL BUDDE (K5UZ) sent AWA a photo he took of the WM J. MURDOCK Co. in 1951 while on a business trip in Chelsea. He happened to be next door and looked out and noticed the name on a large sign mounted on the second floor of the building. He snapped the picture and had no occasion to return. The business still there?

- BOB MORRIS (W1LV) is giving serious thought to building a 1930 transmitter for 90 meter operation -- maybe a 247 crystal oscillator with 210 final. Anyone else game? Let's get a "real" OT Net in operation. Bob, by the way, is a real active DX'er as noted by the DXCC Honor Roll...

- HALL YOUPKE (Summit, N.J.) was delighted to see the writeup on Ralph Hartley in the last OTB. Seems Ralph is Hal's neighbor -- by one block! To further interest, he sent A.W.A. copy of Hartley's patent taken out Oct. 26, 1920. We may reproduce it in a future OTB.

- LAUREN PROKSH (Breesport, N.Y.) has in addition to the Mignon ELC-2 shown elsewhere in the OTB, a Radiola Sr., IV, VI, Tuska 224, AK-9 and 10-B plus W.E. W5I transceiver...not bad.

- LIR ELITAS (Winston-Salem, N.C.) got a big kick out of tuning in WLW recently with his Crosley "Pup"...Lew has developed a means of making simple adapters for WD-11 sockets to fit UX tube bases. Good idea because WD-11's and 12's burn out VEFY easily.

- AL BLANDO (Vienna, Va.) is the proud owner of a rare CN-208 which he acquired from OT Charles Singer, ex-2BU. Al is doing a little work on it and will send a photo soon.

- STU DAVIS (122X) sent A.W.A. a vy doub production of an 1853 telegram originating at the Wall-Morse Telegraph Office, Morristown, N.J. It is being framed and hung in the A.W.A. Museum.

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**STAMP COLLECTING**

IEEE Spectrum • JANUARY 1970

Read the above issue of the Spectrum if you're interested in commemorative postage stamps of radio and other pioneers.

Our Author -- SAQO STORY

Col. Al Marcy (Ret.) is well known to most radio historians. He was the Valuation Panel Moderator at the '66 Historical Conference and shows an active interest in all phases of historical radio --- particularly early radio publications. In fact, he may have the largest radio magazine and early amateur radio publication library in the world! Amateur activity! In addition to operating SAQO, Al has appeared on the ham bands as SBUM, 5B3E, 8M3Q, M6IC and M26M. His present call is W4TD at Eau Gallie, Florida.
The Making of an Amateur Station - 8AQO

by Al Marcy, W4 ID

To commemorate our 10th Anniversary, we have selected a story, a true story, and one to which most amateurs of the 20's can find a parallel, for every area had a "big gun" -- the DX station one talked about and envied. Remember 20M -- 5ZA -- 9ZN -- 9ZT?

Central New York had its "big gun" too: 8AQO, which was described in the February, 1923 issue of QST. Our author has completed the story. We hope you like it.

Most old timers, and many of our newer amateurs are familiar with the results of the Third Transatlantic tests which took place in December 1922, and the outstanding performance of 8AQO during those tests. But few are aware that 8AQO, with almost the same identical transmitter, took part in the Second Transatlantic tests of a year earlier.

The story of 8AQO's successes in the Third tests is an interesting story in itself and has been well covered in QST and other publications of that day. The operation of the station in the Second tests is also an interesting story and one in which I was a major participant. In many ways, it exceeds in human interest and drama the later story although the same successes were not evident.

I first met Clive B. Meredith, owner of 8AQO, at his home at Fernwood, Cazenovia, N.Y., in the Spring of 1921. Cazenovia is about 25 miles from Syracuse, where I lived at the time and was not too long a drive, though seemingly much longer than today's modern transportation makes it. Sam Woodworth, 8AWP, whose station I had been operating in addition to my own 8BUM, asked me one day how I would like to go to Cazenovia with him and see if we could help a friend get his radiophone working. Always interested in radio problems and glad of the chance to get out in the country, I agreed, and we drove out to Cazenovia that weekend early in 1921 to visit Meredith.

We found Clive (as I shall call him from now on) struggling with a small radiophone, homemade with bell-wire on a Quaker Oats box, a pair of VT-2's, and a bunch of storage and "B" Batteries. Fernwood, about three miles from downtown Cazenovia, had no AC commercial power and boasted a 32 volt generator-charged farm battery system for lights in the main house, the big barn and the milking machines and house, which were a part of the extensive farm.

Sam and I looked over the result of Clive's efforts and decided that a major rebuild job would be necessary. While Sam proceeded to dismount the parts, I took the Quaker Oats box and rewound same with taps for hooking up in the familiar Colpitts circuit. After spending the best part of the Saturday afternoon on the contraption, we finally got it operating after a fashion and were then invited to the main house where we met Clive's wife and members of the family. Nothing would do but we stay for dinner, and there began a firm friendship that lasted until Clive's untimely death in an auto accident in the early 30's.

After dinner, Clive talked to us about his desire for a good amateur station, but said he had trouble with the code and was looking for someone to help him with it and to operate the station for him. There was only one other active amateur in the Cazenovia area, Ronnie Marshall, 8AXU, nicknamed "Did", whose family ran the local plumbing and hardware establishment in town. "Did" was of much help to Clive but, because of his involvement with the store, did not have time to help as much as he would have liked.

On our way home that day, Sam sug-
Probably one of the most elaborate ham stations in the world -- the "bungalow" at Fernwood Farm, Cazenovia, N.Y. which housed 8AQO in 1922 and later WMAC, which finally became famous WSYR, Syracuse, N.Y. This was a long way from the farm milkhouse where 8AQO started his experimenting!

Suggested to me that since I was to finish school that summer, perhaps I might be interested in spending some time at Fernwood, where he thought I would get some very valuable experience. However, the idea was shelved until I completed college, when having nothing specific in mind for the moment, I succumbed to Sam and Clive, who had been egged on by Sam to pressure me, to go to Fernwood. By that time Clive's radiophone was working good and we had almost nightly contacts, since I had acquired a DeForest Midget Radiophone to supplement my spark set.

As a result of this, I found myself ensconced at Fernwood in July, with a pleasant room in the main house. In the meantime, Clive had appropriated (much to the farm foreman's disgust) the milk house to house his radio station. This was a small building perhaps 70 yards from the main house and about 50 feet off the big barn at an angle. It was on the edge of an embankment that dropped off about 10 feet and was level with the floor of the embankment. Clive had a single wire running from the roof of the milk house to the peak of the barn which was about 55 feet above ground and about 75 or 80 feet away.

The milk house was about 10 by 20 feet and Clive had a double bunk in one corner, a desk or sorts across from the bunk, and an operating bench running along the side facing the barn. He had acquired a motor generator that ran off the 32 volt lighting system and delivered about 500 volts when the batteries were fully charged. We rarely had more than 350 volts in the evening and could not run the charging generator while operating because of the electrical noise it produced.

I put together a small CW transmitter using two UV-202's and we got on the air using my call 8BUM. Clive marveled at the ease with which we made contacts though the receiver at that time was only a small single tube regenerative set I had brought with me from Syracuse. He was all for higher power and better equipment right away. I pointed out to him that before we could go any further it would be necessary to solve his power problem. He contacted the local power company representatives and found that power out to Fernwood from Cazenovia was not a possibility unless he wished to underwrite the cost. Since this would have been entirely prohibitive, he asked the
representative of the makers of the farm lighting plant to come and see him. The result of this meeting was a contract for the largest size 110v battery-generator plant they could make available. As I recall, the batteries were of 150-ampere hour capacity and the generator was a 2-1/2 kw unit which was capable of recharging the batteries from full discharge to full charge in about 8 hours. A new house for this plant had to be built and it was a month before it became available. In the meantime, Clive and I and the farm foreman were busy checking the wiring and insulation for the new voltage and getting ready to change sockets and bulbs, etc. Then too, the milking machine had to be modified, but this proved to be so much of a problem that Clive replaced it with a new one.

Consideration was given to the type of transmitter we would use and lists of equipment were made and the items ordered. Clive also ordered a new ESCO motor-generator which ran off 110v. DC and had two generators, one giving 3000v. at 500 ma. and the other supplying 12v. at 20 amperes. We decided to use two UV-204's in parallel, so the parts were ordered accordingly.

Closeup of SAQO's transmitter as used in the 1921 Tests under the call 8BUM. Photo upper right: 3000 volt, 500 ma. ESCO M.G. set. (All photos from Feb., 1923 QST)

Clive dug up an old wooden kitchen table, and as fast as the parts became available they were mounted and the wiring commenced. This transmitter and layout can be seen in the picture on page 14 of the February 1923 QST except that in the picture an additional UV-204 has been added. (This was one by Ed Page prior to the Third Transatlantic tests).

The ESCO motor-generator arrived and was mounted on the floor under the bench along the wall. Clive had ordered a new Paragon receiver and this was duly installed. We were about ready to go except for a better antenna. Consideration had been given to this also and the farm foreman and his crew had scoured the acres of timber near the farm and had come up with two poles, which lashed together made a fairly substantial pole about 70 feet long. There was a large tree 40 feet high about 100 feet from the end of the big barn and in prolongation of the barn ridge, and we decided to erect the 70 ft. pole along side this tree, using it for a gin-pole.

After much fussing and a bit of judicious cursing, and using a team hitched to a line through a block and tackle, the pole was raised and lashed to the tree and guyed. After being set in the ground, it stood about 65 feet high. A four wire flattop antenna on 15 foot spreaders was swung from the peak of the barn roof to the top of this pole. At the 12 foot level on the pole a 20 foot spreader was fastened and 6 wires on
3 ft. spacing were run horizontally to the barn for a counterpoise. The leads for the antenna and the counterpoise were both taken from the barn end and run directly to the "milkhouse" shack. Both were terminated with large glass feed-through insulators.

It was late in September before all these arrangements were completed, and this was followed by a hectic period of operating. 8BUM was on the air from 10 PM each evening until 6 AM the next morning when the 110v. battery supply was so far down that the generator would just about turn over. Hundreds of stations all over the country were worked including Larry Mott's station 6XAD on Catalina Island off the coast of California. After closing the station each morning, I would first start the generator charging the batteries and then turn in for about 6-8 hours sleep, arising for a late lunch. Then to the radio shack for work on some project or for discussions with the many visitors that were always stopping by. Most of the Syracuse amateurs were regular visitors to see where the big signal was coming from and to drool over the fine equipment.

During this period of construction and operating, Clive became interested in spark and ICW and bought a 1/2 kw 500 cycle Marconi surplus shipboard set and other pieces of equipment. Some of the surplus items came from Ed Raser, then 3ZI as I recall, and many from Ken Hewitt, 2RK, who made several visits to Fernwood. Ed Raser also visited Fernwood during that period. One of the items I particularly recall was a small French 3-stage LF RF amplifier; later I saw an exact duplicate of that amplifier in a picture of the set-up that Major Armstrong used in developing the super-heterodyne. I have often wondered what became of that particular amplifier of Clive's.

Also during this period of construction and operation, Sam Woodworth, 8AWP, was a frequent visitor and made many valuable suggestions. Sam liked to fire up the 500 cycle spark and hobnob with some of his spark buddies. I recall one time when he came out with a small 3100 volt pole-pig and we hooked the primary to the output of the 500 cycle generator and the secondary to the plates of the UV-204's. This resulted in the nicest ICW you ever heard and I had a hard time keeping Clive from making it a permanent arrangement. As it was, we set it up so that it could be used alternatively. Also at these times, "Did" Marshall, 8AXU, was a frequent visitor and provided much help and assistance. Much of the construction work was with help of Did, who being a plumber by trade was much more adept with tools than either Clive or I.

Sam had been talking to Clive about the coming "transatlantics" and Clive was all geared up for these. In late October or early November as I recall, I made application for a station license for Clive with myself as custodian. I was visualizing an early return to my home in Syracuse and felt that a custodian transfer would be simpler to accomplish than to start from scratch for a license. Clive still would not spend the time to learn the code in spite of the best efforts of Woodworth and me. When the time for the transatlantics rolled around and the new license had not been received, we entered the contest as BBUM. Everything was in tip-top shape and in view of the excellent performance we had been getting, we were fully confident of our ability to "get across".

I rigged up a long-wave receiver using honeycomb coils, and we waited patiently for the big day to arrive. We had no code word so could only send "test test test de BBUM BBUM BBUM" along with hundreds of others. Most of the time we used the 500 watt transmitter with the 204's and DC. Often I would switch to the ICW and the spark set. Each morning at 2 AM operations ceased while I copied MUU for the results.
Clive leaning over my shoulder as I wrote it down. Each day we would charge the batteries to "the gills" to be ready for the next night.

Then came one morning when MUU started sending calls and Clive let out a whoop when I copied 8 BU, but no "M" came. We were both sure we had gotten across and that a mistake had been made. That was the biggest thrill during the tests, though Clive and I were both interested in the terrific signal that IBCG was alying down and kept wondering what power he was using. After the tests Clive had me write to Ken Warner, Secretary of ARRL, asking for an examination of the logs to verify that it was not 8BUM that had been heard. We received a nice reply from Warner to the effect that as soon as Godley returned he would personally check it out with him.

True enough, about a month later, we received another nice letter from Warner to the effect that he had checked it with Paul Godley and the logs and the entry of 8BU during heavy static and poor receiving conditions. Under the circumstances, Warner said, there was nothing further that he could do, since the record showed that 8BU had been transmitting that evening also.

I have neglected to describe Clive Meredith before. He was type which would have been called "typical farmer" today, about 6 feet tall and weighing probably 180 lbs. and affecting a flowing mustache. However, he was a very pleasant, likeable person, a most courteous gentlemen and very easy to get along with. I have never seen him as angry as he was upon receipt of that letter from Warner. He had previously been put out at Godley's spending so much time with IBCG, feeling that had he spent more time tuning around, he could have copied many more stations. His wire was now vented in all directions. He felt that 8BUM had let the station down as a call. Since there is a hesitation after the "U" in sending BUM and can recall many occasions where I had to correct contacts who dropped the "M" until it was called to their attention.

Clive took a map of the eastern half of the U.S. and plotted the stations reported by Godley thereon and was more than ever convinced that an error had been made since 8BU was the farthest west station reported per se'. A few months later when Pearson made a visit to this country, Clive and Mrs. Meredith (affectionately known as J.J.) took off for New York City. I always had a suspicion that he hoped to talk to Pearson about the matter but whether the meeting ever took place I never learned. Suffice to say, Meredith always believed that it was his station and not 8BU in Cleveland that Pearson logged that noisy, windy night in Scotland. Circumstantially, the case has many merits, but the record lists 8BU and that is the way it must stand for as long as amateur radio exists.

However, that did not settle the matter with Clive. I ran daily schedules with Sam Woodworth, 8AWP, on the little radiophone which had now been replaced with a more sophisticated set. Clive wanted to know if Sam could come out some weekend soon. I had a chance to talk to Sam out of earshot and told him what had transpired and that I thought Clive had further plans. Sam agreed to come out to Fernwood that weekend. I well recall that weekend but little did I realize what Clive had in mind.

After going over the entire matter with Sam, Clive said he wanted to improve his station. We discussed the idea thoroughly and it was at this meeting that 8AQO as it appeared in the Third tests was conceived. Clive's ideas overshadowed both those of Sam and myself. We all agreed that a new and better antenna system was a must. Clive insisted on 100 ft. masts. No, he did not want towers, he would find a way to get wooden masts. He wanted a more powerful transmitter. He wanted a complete new station. With Clive, Sam and I looked around the farm for a suitable spot. Clive wanted the location near the main house. The final decision was to place it in the area between the main house and the road but to the right,
on a piece of flat terrain of about 5 acres. Clive’s mother objected to this and it took him several days to get her approval. Plans for the new building went on the drawing board. Sam Woodworth and “Did” Marshall became regular visitors.

The ground system took a lot of haggling. Clive insisted on a ground system—he had little faith in counterpoises. His final plan was buried copper strips under the antenna proper with a 12 ft. square copper sheet in the center under the building and a well in the basement that would be open, so that he could run water into it at his convenience. (I have seen him dump from 5 to 10 lbs of rock salt in the well and on that copper sheet and then run water into it for a couple of hours.) However, Sam and I prevailed upon him to erect a counterpoise as well.

A complete description of this magnificent station was published in QST on two occasions so I will not go into further details here. The procurement of the antenna masts, however, presents an interesting story by itself. Clive first went to the power company; they could not help. 70 ft. poles were the best they had at that time. He wanted straight 110 ft. poles—10 feet to sink in the ground and 100 feet above. They were not optimistic. Then somewhere Clive got in touch with a nautical friend of his. Yes, 110 ft. poles of Canada fir were available, such as were used for ships masts, but they would be very expensive. Clive persisted. The upshot was that he ordered two of these masts delivered on siding to Cazenovia, N. Y. I never saw the invoice but I was told that these two masts alone cost him $1800. I believe it. They were beautiful after they arrived and were erected. But it wasn’t to be easy. The power company—could they set them? Yes, they could do it, provided they were allowed to set one of their 70 ft. poles for a gin-pole first.

In the meantime the poles were located in Canada and shipped. Trouble developed. They were so long they had to be placed on two flat cars. There was trouble negotiating some of the curves with the two flat cars tied together with two straight poles. It seemed that they usually shipped these things from Canada to the shipyards by water. But, as in all things, perseverance prevailed and the poles finally reached the siding.

Unfortunately, I did not see them erected. In the Spring of 1922, I was offered a good position with a Syracuse firm going into the radio jobbing business and so was forced to leave Fernwood. Ed Page 8SSS, of Baldwinsville took over the operating job. He stayed with Meredith until after the big triumph in the Third Transatlantics. He was a competent young chap with a physical limitation and he used a motor-cycle to commute back and forth from Baldwinsville to Cazenovia. One rainy morning a year or so after the conclusion of the tests, Ed got into trouble with his “bike”, was involved in an accident and died as a result of his injuries. There was no replacement and 8AQQ ceased to exist as an active station on the air. Instead Clive spent
most of his time and efforts in testing and research, and in running his broadcasting station WMAC. This was later moved to Syracuse and became WSYR, the leading Syracuse station today.

Thus ends the story of 8AQO, but I cannot complete this article without adding a few anecdotes about the station. In the picture on page 11 of the February 1923 issue of QST can be seen a 9-tube superheterodyne. This set was built by the author before the Second Transatlantics and was used by myself and Woodworth at 8AWP to listen to American amateurs. Louis Falconi's station 5ZA was the farthest station heard. Sam Woodworth had installed a 2000 ft. Beverage antenna at his home to which we connected the super as soon as I finished it. It has not been tried and when we turned it on, only weak signals were heard. Sam was disgusted and "kibitzing" about all the tubes, with the "baldies" clamped tightly on his ears. I said, "I know what's wrong, I have to reverse the plate coil of the local oscillator", and proceeded to do so. It just so happened that SBDA, one of the strongest of the spark stations in our area chose that moment to come on the air. As I reversed the coil and the last wire made connection, I heard the d----est shout and saw the baldies flying across the room. Sam had gotten the full bore of SBDA through that super with two stages of audio through the headphones. He was a big man as those who knew him will remember, but I am sure he had a headache to match his size for several days after that!

Clive was always doing something for the neighborhood, and during my stay there in the winter of 1921, he promised to play some music over the radio for the young people at the local church who were holding a social and wanted to dance. So he asked me to go down and run the receiver while he ground out the records. I agreed and the farm foreman hitched up a "cutter" (a form of sleigh for you city guys) to take me down. There was about six inches of snow on the ground and it was 45 degrees below zero (as it can get in Cazenovia which is about 1600 ft. above sea level). The snow creaked and we all steamed including the poor horse. But what I didn't know was that Clive was supposed to go down during the day and install the receiver and put up an antenna. So, I loaded the receiver, batteries and antenna wire in the cutter and we started out. Well, you can imagine the time I had trying to put up an antenna in 45 below weather. Needless to say, the radio portion of that social was a flop! At 8AQO, Clive had obtained two little surplus generators that ran off batteries and developed about 350 volts. They were mounted in a little spring carriage and were very quiet in operation. Clive had a nice "hobby" of sneaking up behind you with a piece of lamp cord connected to one of the generators and jabbing the bared ends into you some place and then laughing like blazes when you jumped. One day he was trying this trick on Jonesey (Ray Jones - announcer for WMAC) when Jonesey saw him coming and started to run. Clive took after him but something had to give. It did - the cord slipped back through Clive's fingers and he had hold of the bare ends himself. I don't recall seeing him try that trick again.

That winds up my story, and if you have followed it to this end, I hope you have enjoyed it. Since practically all the principals have passed away, I have had to rely on my memory and the help I received from Ronald "Did" Marshall, 8AXU, now W2TOM, who still lives in Cazenovia and is still active on the air, and to whom I offer my sincere thanks.
MIGNON RLC-2 TUNER

This rare receiver was recently acquired by Lauren Tuckerman who lives only a few miles from Earmora, N.Y., where it was made. It is one of the oldest enclosed Mignon tuners I've seen. In all probability it was made well before WTI -- maybe 1913 or 1914 since the panel is wood and the construction rather crude compared to later Mignon equipment. It bears the Serial No. 3-1. (Note: Detector was separate unit.)

---SO YOU'RE AN OLD TIMER---

well try to beat this one. “Doc” Story out in Sacramento tells us he was an operator at the Buffalo W-U Office at the time Pres. McKinley was shot! He began as a Morse man at the age of 14 when his father was Station Agent in Halifax, Nova Scotia. This started a long career as wireless and railroad telegrapher. He saw service as sparks on the West Coast between Seattle and Alaskan ports and even made a trip on the old Fall River Line. These were the days when the only receiver was a coherer/decorder and coil.

Adventurers, there were many. At the time of the San Francisco earthquake (1) "Doc" was a violinist in a Barbery Coast honky-totk... "SF" as he was known will be 91 years old this July 18th. Welcome to A.W.A. O.T.

Old Time Crystal Set

One of the slickest looking crystal sets we've seen in sometime was described in this past December issue of ELECTRONICS DIGEST. Art Trauffer describes in great detail how to build the set in a wooden box that gives it the appearance of an Aerola Junior. The illustrations are excellent.

BUILDING A 15 KW. SPARK STATION?

That is what W6AX was faced with recently --- at least by letter. Seems some outfit in Pennsylvania had this in mind and contacted Thorn for info. He gave them some good advice, made reference to several books on the subject and wished them luck!
PIONEER IN ELECTRIC POWER

Ever run into an old piece of radio or electrical equipment marked FERRANTI? The name is not common in U.S.A. but well known in Britain. Sebastian Ziani de Ferranti was born in 1864 and died in 1930. He was England's Westinghouse for he pioneered in the early development of A.C. alternators and transformers. As his manufacturing firm grew, he expanded in other areas such as induction furnaces, cables, arc lighting and household utilities including wireless equipment.

The man was indefatigable in his interests: steam turbines, power plants, cotton spinning equipment, etc. A very unusual person -- a pioneer Great Brit­an can be proud of.

(Info from booklet received from M. Groder.)

Interested in British Publications? We recommend these two:

"50 THINGS TO SEE" (in the British Science Museum) An illustrated publication covering a wide scientific field including wireless.

Order No. 0-67 Price $.70

"S.Z. de FERRANTI" (Biography)

Order No. 1112 Price $.50

Send check to:

British Information Services
545 Third Avenue
New York, N.Y. 10022

ROYAL CANADIAN SIGNAL MUSEUM

Highway 2, 1 mile east of Kingston, Ontario, Canada

Open 1-5 P.M. May to September

Vacationing in the Thousand Islands? Be sure and visit this communication museum which offers many interests.

Although oriented toward military, one can see other items in the communication field such as early telephones made by Alexander Graham Bell. There are 12 separate galleries each devoted to a different type of signalling. As an example, there is a reconstructed radio station as used by the Royal Canadian Signal group in northern Canada.

The Old Old Timers Club

now have a new editor for their SPARK GAP TIMES. He is Ray Meyers, WSMIZ, well known old timer out on the West Coast. We don't know whether we should congratulate Ray or not for editing any kind of a paper is a tough job... We're sure, however, he'll do vy fb

A famous pioneer wireless station by Lewis Cullings

Directly south of Cape Cod in the Atlantic, is the small island of Nantucket. The location was a natural for a radio station to handle ship-to-shore traffic since it was in the path of many ocean going as well as coastwise steamers.

The Marconi Wireless Telegraph Co. of America was the first to build such a station. They selected as their site the small village of Siasconset on the far east shore and following the practice of the time, assigned abbreviated call letters of the location. In this case "SC", the "M" (Marconi) added some-time later making "MSC". The Marconi station on Cape Cod (South Wellfleet) built a few years earlier (1901) went through a similar transition: CC, MCC and finally WOC.

The station, working with a lightship anchored about 40 miles south of Nantucket Shoals, became famous since they were frequently the first to send or receive news of ships making the Atlantic crossing. Much of the information was passed on to the old New York HERALD newspaper.

SC first made headlines on January 23, 1909, when the well known wireless operator Jack Irwin was on duty. (Irwin again made headlines a year later when he shipped out as operator on the motor-balloon ATLANTIC during its ill-fated crossing -- see OTB 2-5-9.)

Here Jack describes what happened:

"It was a bitter cold night and the small coal stove was going to its full capacity. With nothing to do and a clear station file, I read and dozed, then dozed and read in my chair. I had not much sleep the previous day, having gone into Nantucket on errands. The fire in the stove became low and I suddenly became alert and chilled. I rose to heap
some coal on the fire but as I did so, I heard a faint signal and paused to listen. Dimly I could hear what sounded like a station calling CQ, meaning 'all stations'. This is the call ship operators broadcast when they come on watch after being away from their apparatus and wish to learn who is within their range. Listening intently I could not hear him sign his call letters, so at the moment, I paid no further attention. The fire was replenished, the work of a minute or two, I was again listening in, lazily stretched in my chair. This time I detected something clearer coming into my headphones:

\[ \text{CQD CQD CQD NMC MNC MNC} \]

It flashed on me in a second that here was a ship in distress. Throwing in my switch, I started the dynamo and answered him. Faintly came the message that it was the SS REPUBLIC in distress reached by an unknown ship and rapidly sinking and assistance needed immediately. The message was rapidly followed by his position which placed the disaster about 60 miles south of Nantucket. With my log in front of me I was able rapidly to estimate the nearest ships to the REPUBLIC with which I was in wireless communication. I sent out a general call and broadcast the particulars. The first to answer me was a Frenchman, the JA LORNAINE. He came back with the news that his captain was proceeding to the REPUBLIC."

To shorten an exciting story, 1400 were rescued with much credit given to the SS REPUBLIC's wireless operator, Jack Binns. The incident did more to awaken the public and maritime interests to the value of radio than any other event to that time. It was instrumental in bringing about legislation requiring more wireless equipment on vessels and better safety measures.

Collectors might be interested in the equipment used at this time. The transmitter was the famous Marconi 10" spark coil with a battery of Leyden jars. The receiver -- the familiar magnetic detector.

The station became known as an excellent training ground for new operators because of its location and nature of traffic. In fact, even the Canadian Marconi Co. sent men to Siasconset to learn the business. Mr. A.H. Grinan, the original dean of old timers and later manager for British Marconi, was stationed at MSC. Other pioneer operators include E.T. Edwards, Algernon Cruttenden, Neil MacIntyre, Matt Tierney, Charles Burgess and many others -- and the most famous of all: David Sarnoff.

MSC is no more -- a few remember the station -- but it will always remain in the annals of radio history.

OLD NSS TOWERS DEMOLISHED

The old towers at Annapolis, a familiar site for over a half century are no more. In the process of updating the VLF installation, the five towers were demolished last November. A leg was selected in each tower and cut in two places. This was followed by an explosive charge -- and down came a 600 ft. giant. W3JLV managed to obtain a piece of the stranded antenna wire and one of the 100 KW. tubes for the Association's museum, Tax Charles!

ATWATER-KENT SERVICE MANUAL AVAILABLE

I have an original AK Factory Service Manual consisting of 38 pages covering AK receivers from 10-B breadboard to Model 50 -- pictures and schematics. This can be reproduced at a very low price providing I have enough copies made. Interested?? Drop me a note and I'll let you know what one will cost after I see what the demand is.

Del Barrett, 1517 Pacific Drive
Ft. Wayne, Indiana 46809

KOAN DENVER

Readers of the DENVER POST recently had the opportunity to read an excellent account of early broadcasting days -- particularly about pioneer station KOA which got underway December, 1924. Real good copy. (Tax Dr. G. Lackey)

PACIFIC STATES ELECTRICAL MUSEUM

This name could really throw you off for it is NOT on our West Coast.... It is the name Fin Stewart intends to use for his museum in AUSTRALIA. The word "states" refers to Queensland, New South Wales and Victoria...

Ampex

Do you know the origin of the trade name AMPLEX? It was coined by the company's founder, Alexander M. Ponistoff. He used his initials of A.M.P, and added "ex" for excellence and had the name AMPLEX!
OLD TIME HAM ADS

OLD TIME ADS are free to members. Material must be over 25 years old. Please write ad on SEPARATE sheet of paper and be sure and give your name, address and Zip code. If you "want something" -- better results are obtained if you have something to swap. The Association is NOT responsible for any transaction....

WANTED - Marconi 106, any condition. Need Crockley Radio Weekly in 1920-3 and Crockley Broadcast in early '30s. Jack Gray, W3JUV, 500 West Church St., Mason, Ohio 45040

FOR SALE or TRADE -- many QSTs, some CQ and a few BC sets. Write for interesting deals. Bill Traver, Box 369, Pollock Pines, Calif. 95726

BADLY NEED for construction, copy of "Design and Construction of Induction Coils" by A.F. Collins. Will purchase or trade. T.L. Mayes, W5AX, 21120 Sullivan Way, Saratoga, Calif. 95070

WANTED: Information on de Forest 1/2 KW. U.S. Navy transmitter CF-99. Have schematic but need photo or outline drawing to restore. Any information will be appreciated. Bruce Boyd, W3QA, 9003 Manordale Lane, Ellicott City, Maryland 21043. Tele.:(301)-465-7058

INTERESTED in old Meccano and A.C. Gilbert crystal sets. Buy or swap. Frank Pagano, 1835 West 7th Street, Brooklyn, N.Y. 11233

WANTED: Schematic for Samson T/C and Victoreen Super "B". Also need A.F. transformer for the Samson. J.H. Tschopp, Etc. 1, Box 276, Harrington, Ill. 60010


NEED: Vol. 1, #2 and #3 of OLD TIMERS BULLETIN to complete file. Good U.S. stamp collection to trade for old tubes and gear. Need base unit for Brandes table model talker. Walt Cleland, K3WKG, 1202 Holly Drive, Richardson, Texas, 75080

TRADE: 1 Rider's trouble shooters manual for 1925 or 26 University co-ax speaker # 6210. Will also trade a #2 Manuel & 123 condensed Rider for a W.S.A. triple detector stand shown on p. 112, Greenwood's book. Have also old tubes. Need same for CH-240. Basil Abbott, Rt. 5, Box 322, Mechanicsville, Va., 23111


WANTED -- reprint of "Saga of the Vacuum Tube" by Tyne. Also want old and unusual tubes -- open filaments accepted. Frank Erntz, 714 White Horse Pike, Stratford, N.J. 08084


FOR SALE: Large collection of Radio News magazines, receivers, etc. Will swap. Ernest Riggle, 369-27th St. NW, Massillon, Ohio. 44646

WANTED: Pilot Wasp or Super-Wasp receiver. Have Kellogg HFL induction tuned set, A-K board parts and other sets for trade. Ross Smith, 1133 Strong, Elkhart, Ind. 46514

WANTED: 1935 Harrison-Royal PBO-6 regenerative receiver. For sale: 2 alum. over-all tube shields for 6 tube Splitdorff - $1 each. Write George Publow, Box 590, Picton, Ontario, Canada

WANTED: Old A-K battery and A.C. receivers, Grebe BOBK 2 stage amp., Federal and Kennedy sets. Have for swap only: AK-33, 33X, 40, 44, 55 plus speakers. S.B. Weidner, W3AX, 1131 S. Main St., Ottawa, Kansas 66067

FOR SALE: Brass knurled nuts - cap, wing, square, hex, slotted, castle nuts (similar to Ye Old Tyme nuts), Brass and stainless steel machine, wood screws, bolts, nuts and washers. Many Naval and Silicon fasteners. Your needs? Walt Strasser, WBNL, 25714-16 Briarbank, Southfield, Michigan 48075

WANT: Radiola Concert crystal set, Federal Mod. 57 and 58, A-K broadcast Mod. 12. Lauren Peckham, Ormiston Rd., Bressport, N.Y. 14816
SWAP or SELL -- receivers, tubes and other items such as Zenith 11, Zenith 17 (A.C.), Fada VIII. Am moving and must get unload. Send SASE to C.E. Clutter, 120 Tapawingo Rd., S.W., Vienna, Virginia 22130


WANTED: early BC receivers, magazines, tubes and books. All letters answered. Will be at W.N.Y. Hamfest May 16. Bill McPherson, VE3CM, 1066 Finch Ave. Pickering, Ontario, Canada

WANTED: Battery compartment panel and small controls for Zenith Super VII, Grill for Radiola Grand and RF trans. for Trawler portable. R. Lane, 2603 Indep. Ave., K.C. Mo. 64124

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Editor: Bruce Kelley
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Staff Assistant: Dex Deely
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69 BOULEVARD PARKWAY
ROCHESTER, NEW YORK 14612

EUNICE THOMPSON (W1MPP) now has new QTH: Foulkeways, Gwynedd, Penna., 19436
IMPORTANT!

NEW DATE: AUG. 7-8-9

The date for the 1970 HISTORICAL RADIO CONFERENCE was set for Sept. 25. This seemed like a good weekend and acceptable by the Ford Museum Staff. No sooner was the date printed in the BULLETIN then things began to happen.

The A.R.R.L. announced their National Convention the same weekend in Boston and expressed a desire for A.W.A. participation. One does not change the A.R.R.L. Convention date.

Our concern was not so much the inability to participate at the A.R.R.L. affair as it was possible lost in attendance from A.W.A. members in 1st, 2nd and 3rd districts who would go to Boston instead of Dearborn because of distance.

Along about the same time we were informed pioneer broadcast station WWJ in Detroit would be celebrating their 50th Anniversary (August, 1920/1970). Maybe the A.W.A. Conference could tie in with their program?

Our hard working friend Bob Koolakian at the Ford Museum then started to pull strings since just about every weekend at the museum was booked one year in advance. Was there an opening in August? There were two: Labor Day and Aug. 8th. The Committee selected the latter since experienced had proven Labor Day a poor one.

The change was announced several weeks ago and comments from members to date are extremely favorable. It looks as if we're going to have another great time. See you August 8th.

A.W.A. MEMBER WILLS COLLECTION TO NASHVILLE, TENN. MUSEUM

The very fine historical collection of the late John Cain, W4MB, is now on display in the Children's Museum, 724 Second Ave., Nashville, Tenn. John's collection covered a wide field: Marconi magnetic detector to broadcast sets of the 20's. The exhibit will be under the direction of Houston Roberts, another amateur radio collector. W4MB advertised for three before he found the magnetic detector in England.

How come there wasn't a picture of the Guest of Honor at the 1969 Conference in the last Bulletin? A couple good reasons -- but for the record we now have two -- one from League Headquarters and this one from W2NXX. Standing rear left: Guest of Honor Roland Bourse, W1ANA and Paul Giganti, W6GVY right. Seated l. to r.: Dr. Elman Myers and wife with Howard Schrader. A good time to remind you: The 1970 Conference is Aug. 8th.
1970
CAL ENDAR

WESTERN NEW YORK HAMFEST
May 16th - 17th
Rochester, N.Y.

ANNUAL HISTORICAL
RADIO CONFERENCE
August 7-8-9
Ford Museum
Dearborn, Michigan

A.R.R.L. NATIONAL
CONVENTION
Boston, Mass.
Sept. 25-26

FALL DINNER
Locust Lodge
Ionia, N.Y.
October 24

ANNUAL BUSINESS MEETING
Nov. 14th

SILENT KEYS

ORRIN DUNLAP (73 yrs.) Feb. 1, at Great Neck, L.I., N.Y. Old time amateur HAM and first and long time Radio Editor for the NEW YORK TIMES. He joined RCA in 1940 and retired as Vice-President. He attended WWI Harvard Radio School and became operator at fame NBD, Otter Cliffs. Collectors prize the several books he authored including Marconi's biography. Orrin was an Associate member of the Antique Wireless Assn. (Tnx W2NX)

R. D. BANGAY, pioneer Marconi Engineer in England. Mr. Bangay joined Marconi in 1902 and helped install the first U.S. Coastal Station at Babylon, L.I. He later became Chief of Design for British Marconi and held several other important positions. He was with the company for 54 years. Look on your bookshelf -- you may find his wireless text book -- one of the first written. (Tnx Ernie Welling)

VIRGIL GRAHAM (68), Jan. 30 at Williamport, Penna. Virgil was an old time amateur in Rochester and at one time in charge of Stromberg-Carlson radio laboratory. In later years he became a director with Sylvania and a leader in tube standardization. (Tnx W3KDU/W4ZM)

HORTON MOSTER (W2DM, ex-8DEM, 8BB) at Scotia, N.Y. Hort was a pioneer engineer with W2Y and early A.W.A. member. (Tnx W2IK/W2AXX)

FLOYD SWYER (California, January '70) Internally known publisher of hobby/collector type books. Floyd published Greenwood's book "Wireless and Radio". (Tnx W2NX)

WILL ANDREWS (W2ONE) Dec. 30, Albany, N.Y. Former Western Union Wire Chief and member of Joseph Henry Chapter M.T.C., old time telegrapher and collector. Charter Member A.W.A.

BOB MCCORMACK (78) Washington, D.C. Former Chief Telegrapher Washington Bureau U.P.I. Mac was a high speed telegrapher and would frequently handle the stuff at 70 WPM using the Phillips code. (Tnx K3CUI)

HENRY GAWLER (87) retired President of Gawler-Knoop Co. A well known pioneer, he started with Westinghouse in 1903 and then with Pessenden's National Electric Signal Co. (1904). He was the FIRST radio inspector in the New England division and was one of the several instrumental in starting the A.R.R.L. On Gawler also held important positions with RCA, General Radio and DuMont. (Tnx Bud Fischer)

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ROCHESTER, NEW YORK 14609

(No orders accepted after May 1st)
The first ten years: 1960 - 1970

The original purpose of the BULLETIN was to provide news service to AWA members. No attempt was made to catalog contents since like a newspaper it was to be read and discarded.

I have been told this was a mistake for most members prize each issue as valuable reference. To satisfy numerous requests, I have attempted to list significant items which have appeared for the past 10 years. The FIRST number indicates the VOLUME, the SECOND -- the ISSUE and the LAST number the PAGE. Some items have been cross-indexed and others may have been overlooked. I hope you find the MASTER INDEX of value.

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Museums to visit ---

Detroit Historical Museum 5-4-6
National Telegraph Museum 5-4-12

Detroit Institute of Arts 5-1-3

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<table>
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<tr>
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