Change In Address?
Mail information to the Treasurer who handles current mailing list.
(Not the Secretary)
L. A. CUNNALL, W2LC
69 BOULEVARD PKWY
ROCHESTER, N. Y. 14612
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New Equipment
in A.W.A. Museum
K1OKO, W2GBK, WB2SPJ, W3AMQ, K4SL,
W6SAI, WB5CRQ, Clarence Tuska,
Mel Comer, George Hertsch

AUCTION

Do you plan to sell equipment or tubes in the auctions at the Conference? If so, you may obtain Instruction Sheets and Registration forms in advance.

There are very definite rules for the auctions. Write for forms after August 15. State which form: General Auction or Tube Auction. Send SASE to:
Lauren Peckham, Ormiston Road
Breesport, N.Y. 14810

IMPORTANT NET CHANGE

Effective June 15, the Sunday Noon AWA SSB Net will move to 40 meters at 4 p.m. New frequency: approx. 7240 kHz. Note: This frequency will allow operation for General Class licensees.

COMING EVENTS

ANTIQUE WIRELESS ASSOCIATION

MEETINGS

MINNESOTA (Minneapolis) May 30, 31
Upper Mid-west Regional Conference

NEW YORK (Buffalo)
Summer Meet, August 16

NEW YORK (Canandaigua)
NATIONAL CONFERENCE, Sept. 25-28

OTHER ACTIVITIES

IOWA (Des Moines) Aug. 17
Amateur Hamfest with AWA exhibit

WASHINGTON (Seattle) July 25-27
National ARRL Convention- Exhibits

NEW YORK (Canandaigua)
Annual Business Meeting, Nov. 2

FLORIDA (St. Petersburg)
Florida Gulf Coast Convention Nov. 1, 2

NEW YORK (East Bloomfield)
Annual Christmas Party, Nov. 29

What's Coming Next!

in the "Old Timer's Bulletin"
Collecting Heliograph & Equipment
Collecting Early Batteries
History of Rola Speaker Co.
Armstrong's Super-Het set
A 1932 Transmitter
Story of Local Radio
How to build a 1910 receiver
History of R.L. Drake Co.
plus much, much more........

20 METER TRANS-CON SSB NET

The 20 meter phone net has been very active this past season with up to 12 members participating each Tuesday. Listed below are stations that have checked in several times. Activity is usually slow during the summer, but let's get going again this fall.

K2WW Chuck, N.Y. W6ELW, Temp., Ca.
W2ICE, Kelley, N.Y. W7AHK, Tex., Wash.
W2SHN/4, Hoagy, Fla. W7BCT, Jim, Wash.
W3IGU, Bill, Pa. K8UZ, Bill, Ohio
W4DBT, Lew, N.C. W9ASK, Glenn, Ind.
W4JT/4, Jack, Fla. W0KCP, Harry, Co.
W5HLLZ, Reo, N.M. W6OF, Joe, Minn.
W6AX, Thorn, Calif. W6FPX, George, Mo.
W6CG, Bud, Calif. VE1OC, Aaron, N.S.
5:30 PM (EST (EDST), Tues. 14272 kc.
NEW YORK N. F. W. A.
A. W. A. - N. F. W. A. MEET, SATURDAY AUG. 16
Naval Park, Buffalo, N. Y.

SCHEDULE:
10 AM Flea market and visit to Naval Museum
12 Noon Dinner in the Galley of the USS Little Rock (Admission fee to ship. Dinner price announced later.)
1:30 PM Program- (in same room) "CROSLEY RECEIVERS" by Dave Crockier (Plymouth, Mass.) Much interest has been shown in Crosley gear this past year. Here is an opportunity to learn first-hand about this equipment.... ---- plus other talks... and there will be something for the ladies.
4:30 PM Announcement of Crosley Contest Winners
5:00 PM Wine and cheese party (at nearby Erie Co. Savings Bank).

CROSLEY CONTEST
Do you own a Crosley receiver or a Crosley component? Enter the contest... you may be a winner!

Naval Park is at the end of Main St. in the harbor area. For members not familiar with Buffalo, send SASE for map, places to eat, shop, etc. to: Niagara Frontier Wireless Assoc., Box 68, Station H, Buffalo, N. Y. 14214

IMPORTANT: Please let us know if you plan to attend the dinner... and how many. This is very important since we are committed on a dinner "count". Let me know BEFORE Aug. 10 Telephone Dick Schamberger or write to address noted above.

WASHINGTON
ARRL NATIONAL CONVENTION
Seatac Airport, Red Lion Inn, Seattle, Washington, JULY 25 - 27
Warren Green, W7JY and AWA Committee will have a fine historical exhibit. Stop at the AWA Booth and see the "gang". (Remember, AWA is an A.R.R.L. Affiliate.)

IOWA

HAWKEYE HAM and COMPUTERFEST
Veterans Auditorium, Des Moines, Iowa, August 17
Gary Liljgren, W5SH, will have an interesting AWA display of old time amateur and broadcast equipment on display. Be sure and visit the booth.

DUPICATION
A couple of members wanted to know why the SAME article, picture or information in the OTB had appeared in another historical radio publication? Answer: we don't print dupe copy if we can help it... how can we stop a contributor from sending the same material to several editors? --- all we can do is "pull" the copy if it appears elsewhere. Why have it in print twice (and take OTB space) unless it is a special up-dated feature such as Floyd Paul's excellent loudspeaker article....
Edwin Laker, Radio Engineer For WTOP Here

Retired Army Maj. Edwin T. Laker, 70, a World War II veteran who later was a radio engineer for the CBS radio network and WTOP radio in Washington before retiring in 1971, died Saturday at Frederick Memorial Hospital in Frederick, Md., after a stroke.

During World War II, Maj. Laker served in Europe, where he participated in the development of the Pathfinder long-range bombing system and served as a communications officer with the elite 82nd Airborne Division, a unit that helped spearhead the Normandy invasion.

He helped establish WCAQ, Baltimore's first broadcasting station, was a radar officer with a U.S. shipping line, and was a horticulturist for a chain of radio stations on the West Coast before establishing his own company, Fidelity Sound.

FCC Submits $77,142,000 Budget for Fiscal 1981

The Federal Communications Commission recently sent to Congress an appropriation request for $77,142,000 for its operating budget for Fiscal Year 1981, up $950,000 over 1980. The FCC budget covers 2,261 full-time employees...the same number as was authorized for 1980. The increase in the budget is largely to cover leased office space.

Communications News

Jessica Dragonette, Starred in Radio

Died in New York of a heart attack. Her age is believed to be 70. Born in Calcutta, she first starred on Broadway in "The Miracle." Shortly after she auditioned for NBC which started a radio career of 22 years. She made appearances on the "Philco Hour," "The Ford Summer Hour" and the "The Cities Service Hour" (KBDL)

Country music station sold

NEW YORK — WHN radio, the only country music station in New York City, has been sold for $14 million to the Mutual Broadcasting System, Inc., a statement released yesterday by Mutual said.

WHN, one of the leading radio stations in the New York market, formerly was owned by Storer Broadcasting, whose headquarters is in Miami. A spokesman for Mutual said the WHN format would not change.

20c to send a letter

WASHINGTON — Postal Service officials in Washington are preparing to request rate increases during the next several weeks that would outside experts say could put the cost of first-class mail between 18 and 20 cents for the first ounce, up from the current 15 cents, the Wall Street Journal reported yesterday.

AWA ASSISTS IN ARMSTRONG CEREMONY

Back in January AWA received an urgent phone call from a member of the U.S. Patent Department in Washington -- they were going to recognize Maj. Armstrong as an inventor! -- with emphasis on the super-heterodyne development. He would be inducted into the National Inventor's Hall of Fame (posthumously, naturally) and they required material for the ceremony. Could AWA help?

Of course -- Maj. Armstrong has top billing, with AWA. A package of slides and tape cassette with his voice were immediately mailed to the Patent Department.

We were later told the material was used during the ceremony with proper credit to AWA. (Being a typical government agency, they never bothered to acknowledge receipt of the material.)

Correction: The December OTB listed Frank Garnet as a Silent Key. It should have been Garnet Frank.

TUBE COLLECTORS

Are you a member of the AWA Tube Group? If not, send $2 to Chairman Lauren Peckham, Ormiston Rd., Breesport, N.Y. 14816. You will receive their newsletter ("Fact Sheet") and join them in tube collecting activities.

Communications news

HEADLINES TODAY -- HISTORY TOMORROW
HISTORY OF THE C. D. TUSKA COMPANY
by Dexter Deeley

Clarence Tuska was born in New York City in 1896. At an early age (1909) he became interested in electricity and radio. He read available material on the subject and built a simple coherer receiving set of the Marconi type. The die was cast: Tuska’s life-long interest would be radio.

Shortly after, his family moved to Hartford, Connecticut, where he became acquainted with another amateur enthusiast, Bill Ball. The two started to build and experiment with different types of receivers. This led to building receivers for others.

One of these receivers was made in a small box and consisted of a single slide tuner, crystal detector with a single head phone. Being an enterprising young man, Clarence was able to place the set in a local toy store on consignment.

After watching the store window for several days, he noticed the set was missing and promptly went in and asked the owner, a Mr. Parker, for his money. The owner replied he had sold the set to a Mr. Hiram P. Maxim, but that it had been returned because it didn’t work.

This of course upset Clarence since he had tried it out and it had worked perfectly. Finally, after a lot of encouragement from his mother, he, backed by Bill Ball, took the set to Maxim’s home to show him why the set failed to operate.

The meeting (and demonstration) was a success and they left with an order to build Mr. Maxim a “first class” radio set. With some stretch of the imagination, this could be the first commercial Tuska receiver.

Maxim was very impressed with Clarence and they soon became close friends. For a more complete report, see “A Memorable Evening”, January, 1961 QST magazine. (Maxim and Tuska founded the A.R.R.L.; that of course, is another story.)

In 1916, Maxim was asked to judge the A. C. Gilbert Company contest for boys. After the contest, Maxim told A. C. Gilbert about the great future of amateur radio. Gilbert became interested and wished Maxim to become a consultant for the A. C. Gilbert Company if they were to manufacture components for the radio amateur. Maxim said he did not have the time but knew a young man who could fill the bill, namely, Clarence Tuska.

At this time Clarence was attending Trinity College in Hartford and any income would be most welcome. So he called on Mr. Gilbert at his New Haven plant and was accepted on a
one-day-a-week consulting basis.

When World War I started, Tuska took leave from Trinity and was appointed a Second Lieutenant in the Radio Section of the Signal Corps. He recalls that his last assignment for Gilbert was work on a "trench radio transmitter".

When the war ended, Tuska returned to Hartford and resumed consulting work for A. C. Gilbert who wanted to become more firmly established in the growing radio field. Tuska believed Gilbert should abandon the toy approach to radio manufacturing and follow recognized radio standards. As an example: a black fiber panel is not an acceptable substitute for a bakelite panel as the former easily warps and would absorb moisture. A brass paper clip may look like a machined switch point but the paper clip would not have a permanent electrical connection with its brass tabs and in time would become a poor electrical connection.

Since Tuska soon found Gilbert would not accept the advice he was paying for, he eventually resigned, believing his time as well as Gilbert’s money was being wasted.

Discouraged with Gilbert’s attitude, Clarence decided to form his own company. He discussed this with Maxim, and the two recruited several other stockholders and organized the C. D. Tuska Company. (Of interest is the fact that Tuska remained a consultant to A. C. Gilbert until 1923.) Manufacturing started in a single room over Maxim’s Hartford office. The staff: Tuska and two helpers!

The first piece of equipment manufactured by the new company (1919) was a galvanometer (see Figure 2). It sold for around $5.00 and was used in connection with a Wheatstone bridge to measure resistance. Other instruments were designed to measure capacity, inductance and wavelength. Next came a self-contained 24-volt battery and rectifier. The battery would hold its charge for three weeks under normal load and then could be recharged by plugging the unit into a 110 volt A.C. line.

Neither of the first two items were big sellers, so Tuska turned to amateur radio for his next product.

In 1920, regenerative circuits were becoming very popular, so he developed a "differential capacitor" which could be connected into a vacuum tube plate circuit. It was called a "Tuska Tickler" (see Figure 3). The condenser had two sets of fixed plates and one interacting variable set which produced capacitive feedback and regeneration. It sold very well.

![Tuska Tickler](image)

The "Tickler" was advertised extensively with one ad coming to the attention of Major Edwin Armstrong and his patent attorney, Mr. Taylor. The latter approached Tuska and convinced him that his "Tickler" infringed on the Armstrong regeneration patent. Having no recourse, Clarence soon became the owner of an Armstrong license. This was to prove quite fortunate, as you will see.

With the success of the Tickler, Tuska expanded his radio component line to include a variety of inductance coils, filters, variometers and knobs. The big change came in 1921 when the C. D. Tuska Company decided to assemble their components into a "tuner kit" (see Figure 4). The kit was basically two variometers and a...
Miner, came to Tuska and described a very good feedback circuit he had discovered.

The Miner circuit had a number of excellent features for a broadcast receiver. The set resulting from this circuit was called the “Tuska Superdyne” (see Figure 6). It came in several cabinet styles including a desk (see Figure 7) and ranged in price from $120 to $350.

The year 1925 saw the introduction of the last Tuska model, the Superdyne Jr., a three-tube reflex set. Its price: $85.00.

By 1922, the broadcast craze was in full swing and a growing number of people would pay for an assembled set. Tuska rose to the challenge by re-designing his tuner kit and came out with a factory assembled tuner, the Type 220. The price was $75.00 (see Figure 5).

Shortly thereafter, a one-tube regenerative receiver was introduced for $75.00, the Type 222. This price was later reduced to $63.00.

Also that same year, the company brought out its first set really designed for the broadcast listener rather than the amateur: the Type 224 one-tube regenerative receiver. The set was priced at a low figure of only $35.00 to attract everyone.

Tuska hadn’t entirely forgotten the amateur, however, for in 1922 he also designed a deluxe three-tube regenerative set, the Type 227. This set became the Type 225 for broadcast listeners in 1923.

By 1924, C. D. Tuska was re-designing his sets to conform to the broadcast market: more selectivity, ease in tuning and a receiver that in appearance would blend in well with household furniture. At this time a radio friend, Robert

In 1926, the C. D. Tuska Company, like many others, ran into financial difficulties. The advent of the neutrodyne and superhet circuits for which he was not licensed and the large number of radio companies in the market made competition by a small organization (125 employees at peak) impossible. Clarence assessed the situation and determined the company’s most valuable asset was the Armstrong license
which was saleable with the company only. The question was: who would be interested?

Clarence approached Mr. Atwater Kent with the proposal that if he bought out the C. D. Tuska Company, Mr. Kent would at least have an Armstrong Regenerative Circuit License (Mr. Kent has not taken out too many patent licenses). Tuska also explained that suits involving the regenerative patents were pending. Mr. Kent was interested, a selling price was agreed on, and the C. D. Tuska Company was sold to the Atwater Kent Manufacturing Company. (The regenerative license was never used by Kent.)

Final arrangements were such that Tuska would join the A-K Company as a patent consultant. In time, he became an expert in the field as a result of his work with A-K and at LaSalle University, where he specialized in patent law.

In 1935 he joined the patent department of the Radio Corporation of America, becoming its Patents Director in 1947, a post he held until his retirement. Mr. Tuska is the author of numerous papers and several books and lives near Princeton, New Jersey.

References:
- Personal communication with Mr. C. D. Tuska
- QST magazine
- Wireless Age magazine
- Radio Collector’s Guide

Equipment Manufactured by the C. D. Tuska Company:

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>YEAR</th>
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<tbody>
<tr>
<td>Galvanometer</td>
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<tr>
<td>Hi-Volt Storage Battery</td>
<td>1919</td>
</tr>
<tr>
<td>Tuska Tickler</td>
<td>1920</td>
</tr>
<tr>
<td>C. W. Inductance Coils</td>
<td>1920</td>
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<tr>
<td>Tuska Filter</td>
<td>1920</td>
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<tr>
<td>Tuska Variometer</td>
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<td>Tuska Variocoupler</td>
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<tr>
<td>Tuska Knob and Dial Transformer</td>
<td>1921</td>
</tr>
<tr>
<td>Type 223 Tuner Kit</td>
<td>1921</td>
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<td>Type 222 Receiver</td>
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<tr>
<td>Type 228 Receiver</td>
<td>1924</td>
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<tr>
<td>Tuska Superdyne</td>
<td>1924</td>
</tr>
<tr>
<td>Tuska Superdyne Jr.</td>
<td>1925</td>
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(Note: There will be an illustrated talk on Tuska and his products at the 1980 AWA Conference.)
BRIEF HISTORY OF THE "B" TYPE RECTIFIER TUBE

The original cold cathode type rectifier tube was made by American Radio and Research Corporation or more commonly known as AMRAD. The company was partially backed by financier J. P. Morgan Jr. and manufactured a variety of components for amateurs and broadcast listeners in the early 20's.

Their research facilities were located on Tufts College Campus near their broadcast station WGI (Medford Hillside, Massachusetts). The company was founded by Harold Power (See book review in March 1977, OTB by Ken Gardner).

One of his most valuable assistants was Dr. C. G. Smith, who with others, developed the original "S" tube. The letter "S" was named for Smith. The "S" tube was a half-wave rectifier and was popular with early amateurs who were changing over from spark to CW operation and wanted "PDC". Four versions of the "S" tube may be seen in the AWA Museum.

The original AMRAD company ran into financial difficulties and a new organization was formed called RAYTHEON. C. G. Smith and Dr. Bush finally developed a full-wave rectifier tube which they called a "B" tube for receivers using the new UX-112A tube in the output stage at 135 volts and the "BF" for the UX171A tube which soon followed using 180 volts.

The letter "B" may have been named after Dr. Bush. At first the tubes were made by the Champion Lamps Works and later in their own plant at Cambridge, Massachusetts. These early rectifiers were popular in "B" eliminators in the 1926-29 period. An example was their use in the Majestic "B" eliminator.

In 1928, the Q.R.S. Company, manufacturer of piano rolls, was found to be making a cold cathode rectifier similar to Raytheon without paying royalties. Q.R.S. was forced into joining Raytheon and production was expanded. In 1928, Percy Spencer of Raytheon, developed a large cold cathode full-wave rectifier known as the "BA" which became popular with the radio amateur since it could rectify high voltage for the UX-210 tube. Also about this time the National Carbon Company (Eveready battery) joined forces with Raytheon in tube manufacturing.

**Raytheon-**Type BA-350 M.A.

<table>
<thead>
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<th>Your Price</th>
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<td>$4.41</td>
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Light socket power units employing this type to provide enough voltage to operate any receiver using standard 201-A tubes in series and power amplification. Carries a guarantee of 1000 hours of service over a period of one year.

Cold rectifier tubes were phased out with the event of all-electric sets using the more common UX-280 rectifier. They did, however, have a brief come-back in the early 30's in car radios when Raytheon developed the "BR" rectifier tube. The "BR", not having a filament, was a great boon to the automobile owner with his already over-loaded storage battery!

The "BR" was followed later in the 30's with the OZ4 (OZ4G) which was modern in appearance. Of the types listed, the "S", "B", "BA" and "BR" are the most difficult to find. Hopefully, either Tom Briggs or John Stokes, authorities on these tubes, will write a more thorough description with corrections and omissions to this brief writeup.

**Raytheon Type "B" Tubes for Eliminators**

Actual service in many of the leading "B" Eliminators have proved efficiency of the type "B" tube. May be used in all well known "B" Eliminators such as All American, Kingston, Acme, Burns, Majestic, B. T. Mayelin, Valley, Webster and many others. Rating 60 M.A. output at 150 volts.

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<tr>
<th>Your Price</th>
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Raytheon Type Heavy Duty Type B-H-85 M.A.

Designed for heavy duty applications of light socket power. Used in many power amplifiers and complete A. C. operated receivers. Rating 85 M.A. output at 200 volts.

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**Cartridge**

Type A—2 1/2 Amps

An entirely new and improved device for high current, low voltage rectification. Unbreakable metal cartridge, compact and simple, no liquids or filaments. An efficient rectifier for battery chargers or A power units. Low operating cost. Guaranteed for 750 hours service. Rating 2 1/2 amps.

<table>
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<th>Your Price</th>
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The "A" is quite rare and is not in same category (design) as "S" and "B" series tubes. See Lauren Peckham's April '80 Tube FACT SHEET for more information of the "S" tube.
In 1920, several amateur stations in the Seattle area with experimental "X" licenses were on the air with broadcasts and by 1921 more regular schedules had been established. The demand for receivers was exceeding the supply and sales competition was keen. As the local transmitters were low-powered, 10-20 watts, and signals from more distant stations were weak, interference from local power systems and industrial plants became a problem.

To help locate sources of "noise," the writer constructed a receiver and installed it on the back shelf of a 1921 Ford Coupe. A three-turn loop antenna on the center line of the cab was carried over the top, down the front of the radiator, across under the floor and back up over the trunk.

This resulted in an excellent figure-eight antenna pattern which was used to zero-in on sources of "noise." Also, nearby stations could be eliminated when distant stations on a common frequency were wanted. It was often a practice to go to an open field or park area and maneuver to pick up eastern and California broadcasts when local interference would otherwise have obstructed.

Two stages of audio provided sufficient power to operate a Magnavox horn speaker or headphones. The tube sockets were slotted to take both standard vacuum tubes although Western Electric VT2's were the most used as they were non-microphonic and not influenced by car vibrations. The car battery supplied six volts for filaments and 90-volt B batteries in the trunk provided the plate supply. The installation was completed in August 1921.

By March 1922, when the first stations in this area were issued broadcast licenses and call letters, this mobile radio attracted much attention and many comments by the public, acquiring the title of "Radio Liz." It continued in service until 1926 and now is an operable museum piece.

The 1921 car radio is now in my amateur museum...

The receiver shown in the photograph was assembled using currently available parts at the plant of the Kilbourne & Clark Manufacturing Company in Seattle. (I had permission to use shop facilities and the engraving machine after working hours.)

The primary circuit, including the loop antenna was tuned by the variable "capacity" which is shown at the right end of the panel. This location afforded ease of tuning over my shoulder while driving. The "coupling" has control of the variometer in the regenerative detector circuit. A two-point tap switch selects part or all of the stator winding in the variometer for band tuning.

March 1922 Seattle Newspaper. Note loop antenna running from roof to radiator, under floor and up over trunk. The official appears very dignified with his earphones...
THE "SILENT PERIOD"

by Ero Erickson, KA9DYS

Do you know what the "silent period" is? No, it is not a moment of silence in memory of those brethren no longer with us, no matter how noble they may have been or how worthy the moment may be. As a former "brass pounder" wireless operator, the lack of understanding about the "S.P." leaves me exhausted and gloomy.

In the radio log, the "S.P." has a lot of meaning, although present-day land mobile radio users have never heard of it. The silent period is three minutes during each half hour when the commercial operator worries about the "other guy." You take a moment to shut your big mouth and listen for those who might be in distress. Unheard of? In this present-day stress culture, it certainly is. With the prevailing "me first, the heck with you" attitude, the "S.P." is pretty unique.

Professional radio operators since the beginning (about 1910) have truly been concerned about the safety of others. Therein lies the story of the silent period which is observed by all wireless operators, worldwide.

Last September we "crashed" the National Boat Show for the trade in Chicago. There were three floors of marine exhibits at the McCormick Place which featured vanity boating. Your author wandered for hours through exotic exhibit areas of the latest in marine fashion products and boats presenting life-redeeming features connected with the safety of its occupants. There were a lot of Las Vegas-type, seashoregraphic craft adorned with sparkling sequins and gingerbread, but other than life jackets, most of it was high geared show biz - and expensive.

Finally at the fourth hour of trudging through the new-smelling carpeting, we ran into a display of a clock with an unselfish purpose. It was a genuine radio room clock made to U. S. Navy specifications which shows the professional and military radio operator the precise time when he should start thinking of the other guy.

They take six minutes off each hour to think about you and listen in the event that you are in distress and need help. No other service does this that I know of. On high seas, they stop all other activity and listen on 500 KHz for any distress calls. All of the marine telegraph shore stations do the same. This is the moment that you can send an SOS with the assurance that you will be heard and help will be on the way.

There are other distress calling frequencies on voice channels, but generally they do not stop their talking long enough to listen.

The Chelsea Clock Company near Boston makes a radio room clock of professional calibre, with the silent periods marked in a red pie cut starting at the 15th minute and at the 45th minute and extending for 3 minutes. The phenol-cased clocks display local and Greenwich meantime and have an eight day key-wound movement. The second-hand sweeps a red four-second sector allowing the radio operator to accurately transmit a precise alarm sequence which will actuate equipment on ships where the operator is not on duty. It rings a bell warning about an impending SOS message.

Once upon a time, I had a Westclox alarm clock marked in silent period sectors because the steamship company didn't want to spend any money for an approved timepiece. While on a trip home, the relief operator forgot to wind it up and check the accuracy, and proceeded to send a message of greeting filed by a crew member addressed to the Happy Days Tavern in Tacoma, Washington.

It was one of those "juicy" missiles addressed to one of the barmen which everyone heard in the middle of the silent period, including the Coast Guard. Being of the righteous type inasmuch as the Coast Guard turned the violation over to the Federal Communications Commission (FCC) since it didn't appear to be traffic of the distress type. The FCC sent the violation notice to the company office on Rector Street in New York, much to the consternation of the Captain.

This improved my image no-end since he was heard to make remarks about the "dumb" relief operator when I returned. The FCC ordered the steamboat company to show cause. They pleaded that the old alarm clock built in Streator, Illinois, was inaccurate. The government ordered the company to get an approved one to avoid further difficulty.

Imagine my delight when I returned to Poughkeepsie, New York (yes, ships sail there), to find a brand new radio room clock on the bulk head. Absolutely beautiful. That was 43 years ago — how sweet it was. Tempus fugit. So does money. The timepiece now sells for $360 a clock!!
This rare and beautiful receiver is part of the Willsonberg exhibit now in the A.W.A. Museum. Seen is the set before and after restoration which was done by Linc Cundall, W2LC.

Historians familiar with Arnold equipment will immediately recognize the two loose-couplers...one for short and the other for medium wave. Not seen are the two deForest Audions. Yes, there are two spherical audions inside the cabinet which can be seen through the two peep holes in the front panel. The operator had a choice of either audion (in parallel) or the crystal detector. (Photos by W2BWK)

PERIKON DETECTOR
The trade name Perikon developed by Greenleaf Whittier Pickard for the Wireless Speciality Apparatus Company was a registered trademark and derived from PERFect PICK and CONTact.

BUILD AN OLD RECEIVER!
Have you built an old receiver in the past three years? Is the design before 1940? An early crystal set? A one-tuber? or maybe a neutrodyne. Enter it in the Conference Old Equipment Contest for the Elle Award and maybe win a beautiful plaque and gift...
FROM HEADQUARTERS

Close-Up

A Lot Of Batteries

Sorting out some old papers I found a brochure telling about one-time radio station WTAM, Cleveland, Ohio. I had heard the station had used storage batteries as plate supply but didn't have the details. Here they are: WTAM was owned and operated by the Willard Storage Battery Company and went on the air in September, 1923. The plate supply consisted of 2000 Willard storage batteries in series providing 4000 volts. The station was rated at 2500 watts.

The batteries were called CTR cells. A picture shows a huge room full of batteries stacked in tiers. I assume that when the station was off the air, the batteries would be switched to a series parallel arrangement (lower voltage) for charging. The station is of particular interest to us since the master-oscillator unit used at WTAM is now on display in the AWA Museum.

Stereo TV

I like reading editorials and first-page news items in radio publications. They keep me up-to-date on latest activities and products. A magazine I’ve neglected lately is Gernsback’s "Radio-Electronics". A recent issue told about RCA’s proposed big splash in the video-disc field. As you may know, these gadgets normally hook into your TV set, you place a video disc (record) and presto, you have a full length movie of your choice ($15 to $25 per disc).

Several companies have had one type or another on the market for the past several years with only moderate success -- but RCA feels there is a vast potential market and will release their product this coming December.

On the subject of television, I also read where they are experimenting with STEREO TV Audio in Germany. They re-broadcast American TV programs -- with English on one audio channel and German translation on the other... you take your choice!

ANTENNA FARM

Jim Davis (VK7NOW) tells of visiting Grote Reber’s radio astronomy farm. He found 128 dipoles on 80 foot masts arranged in a special configuration. The receiver was solid-state with output actuating a spring-wound pen recorder. Jim says Grote doesn’t hesitate to climb the 80 foot masts to repair an antenna...

Japanese Collector

A letter From T. Taguchi (Tokyo, Japan) tells of early radio in Japan. The first broadcast station was JOAK which went on the air in March, 1925. At that time there were only 3500 receivers but by 1927 the number had increased to 20,000. Most were crystal sets but a few "high class" American sets were available such as Gillian neutrodynes and Radiolas. He says vintage radios are very scarce in Japan.

VACATIONING THIS SUMMER?
If in Washington, D.C. be sure and see Bell’s Photophone Invention At National Geographic Society

The photophone uses transmission of messages through the air on beams of sunlight -- 100 years ago.

If in England, don’t fail to visit the SCIENCE MUSEUM, London where they have a special historical television exhibit...

And lastly, the FORD DEARBORN Museum has been completely renovated with new showcases, exhibits, etc.

Pilot Super-Wasp

The pix of Bob Hertzberg on last September OTB cover ("Birth of a Receiver") can be considered a success... since he received many requests for Pilot parts, coils, etc. Bob (K4JBJ) writes that he doesn’t have any components and hasn’t seen a Super-Wasp in several years.

(Continued on next page)
NEW MEMBERS

who are (or were) with electronic communication or industry:

Richard Swanton (ex-WA6IJJG, TF2WKX)
Gould Instruments

Gary Liligren (W0SH) Stations KDPS, WOI, KAA970, etc.

Leonard Davenport, Curator Magic Spark Radio Museum, Northern Territory, Australia

Alexander Seidl, Marconi Wireless Telegraph Co., RCA, etc.

Walt Childress (W9NYE, ex-W5KMW)
BC stations WCFL, WXQL

Ralph Maddox (ex-6XAK), FTR, ITT, BTL, etc.

Delft Univ. of Technology, Delft, Netherlands (Stat. PE1MUS)

Charles Affelder (N3AYU, ex-W8HLM), Stations: WWSW, Fed. Tel. ITT, and Voice of America

George Wakefield, Bell Labs

Richard Eckert, Stations WGBB, WROW

Ernest Dawson (W2DTF) Western Elec.

Ronald Blair, Radio Tech. U.S. A. F.
Fred Sole (WB8LVP) Station WFMJ
Ben Windle (W8FCA) Broadcast Eng.

Oscar Hager (W01AZ) Civil Service Electronic Engineering

Donald Calvin, Radio & Elect. teacher
David Jefferies (W3PA) Voice of America
Darrell Parrack (W0HQM) Broadcast

Clayton Merrell (W4FX) Stations WMPM, WSFA, AT&T, etc.

Kenneth Miller (K6IR/W9NQT)
Penril Corp. (President)

Charles Altschul (W4YCW) Stat. WQMG

Howard Parmelee (K2INV) Digital Equip. Corp.

Close-Up

High Prices at Auctions

Every now and then I hear someone griping about high prices paid for old radio equipment at the AWA Auction. Let me quote the 1979 Summary of high auction prices for some other collectibles:

--- a George III commode, sold at Sotheby’s auction house (London) brought the highest auction price ever for a piece of English furniture, at $359,860 !

--- a Roman glass cage-cup dating to the second century set an antiquarian record at Sotheby’s at $1,081,600...

--- a St. Louis glass paperweight set a record price at Christie’s (London) at $106,510...

--- a Tiffany spider-web lamp set a record for glass-making houses at $150,000...

Want more? A 1936 Mercedes-Benz 500K roadster set a record for an automobile at Christie’s (Los Angeles): it brought $400,000 !

Now don’t get any crazy ideas.....

Traveling In The East

Several members from Western states (two W6’s and a W9) stayed over after the conference last fall and visited the Barn Museum. During the conversation I noted that all three had traveled in the East to gain more enlightenment in the Craft. In fact, two were past Masters in the field and I believe one had traveled in 32 states. I felt insignificant having confined my interests to a 3-state area... Ah, these collectors!

DISASTER CALL LETTERS

Received note from Bill Orr, W6SAI: could I give him call letters of four ships that met disaster? The Titanic, Eastland, Lusitania and Morro Castle. Sure, no problem. AWA has a large collection of early amateur and commercial call books. Here they are: Titanic-MGY, the Lusitania-MFA, Eastland-WFN and the Morro Castle-KGOV. Call letters were obtained either from Marconi Yearbooks or U.S. Government call books. Tracing an old amateur call? -- visit the barn museum... there is a long shelf of books starting with pre-1912 listings.

[Cont. on page 36]
Lauren Peckham, Vacuum Tube Chairman, has announced the formation of a committee to select the recipient for the Tyne Award to be given at the Annual Conference.

ELLE CRAFTSMAN AWARD

The family of Bruce L. Elle, W2VTR, and an AWA Charter member who became a Silent Key in 1979, is funding an annual award in his memory. As a Manager of Engineering, Eastman Kodak Company, Elle was responsible for numerous projects, including the design and development of a specialized camera for use on the moon by the first astronauts to land there. His skill in building equipment was reflected in his hobby of constructing a variety of amateur receivers and transmitters.

Thus, it is most fitting that an award honoring Bruce Elle recognize an AWA member who likewise is a builder. The award will be in the form of an appropriately inscribed plaque presented by the Contest Committee currently under the chairmanship of Ralph Williams.

Rules regulating the competition for the award:

1. Entries are to be receivers of any design before 1940.

2. Entries are limited to one per member per year.

3. A member winning this award will not be eligible to win future awards.

4. The entire receiver must be built by the entrant (replica parts allowed).

5. The receiver must have been built within three years prior to the Conference.

6. The receiver must be displayed at the Conference. It must be operable but not necessarily at Conference.

7. There must be at least three entries. If not, the receivers may be held over to the following year.

MATLACK AWARD FOR EARLY TRANSMITTERS

This Award was proposed last summer as a means to encourage licensed amateurs to build and/or restore early amateur transmitters. As an inducement, W3CFC volunteered to fund a plaque and honorarium. Here are the rules:

1. The transmitter can be of ANY design between 1920 and 1940.

2. It can be homebrew, kit or commercial (restored).

3. The entire transmitter must be built (or restored) by the entrant and designed to operate in the amateur bands.

4. The entrant must provide evidence (amount of work required) on a restored transmitter.

5. A member winning this award will not be eligible for future awards.

6. The amateur transmitter must be displayed at the Conference. It must be operable but not necessarily at the Conference.

7. There must be at least three entries. If not, the transmitter may be held over to another year.

8. The Judging will be handled by Ken Gardner (W2BGN) and Ralph Williams (N3VT) with a third licensed amateur selected at the Conference.

Your homebrew xmt in last OT xmt Contest? If so, bring it to Canandaigua.
SEPTEMBER 24-28

REGISTRATION with meals must be made through Treasurer Dexter Deeley, 8 Briar Circle, Rochester, N.Y. 14618 BEFORE Sept. 18

Unlimited registration for all other activities at door.

Note: Absolutely no admittance to any activity without Registration Badge.

TRAVEL: Although most members will travel by car, the nearby Rochester Airport is convenient for those who wish to fly. Rental cars are available at the Airport (see Sept. OTB for possible Hertz discount). If you desire a map with directions to Canandaigua and the Museum from the Airport, write AWA Headquarters at Holcomb, N.Y. 14469. In addition, Greyhound Bus has a regular route through Canandaigua from New York City and Buffalo.

AUCTIONS: Members wishing to sell equipment MUST register equipment during hours noted. Equipment will not be accepted after times noted. Obtain instruction sheet at Registration Desk.

MOTEL RESERVATIONS: There are many motels and eating places in the area. See listing. Although it is advisable to reserve your room in advance, space is always available if you don’t mind driving a short distance.

OPEN HOUSE

A.W.A. ELECTRONIC COMMUNICATION MUSEUM
East Bloomfield, N.Y.

VISITING HOURS

Wednesday, Sept. 24
7 to 10 P.M.

Thursday, Sept. 25
2 to 5 P.M.

Sunday, Sept. 28
9:30 to 11:30 A.M.
2 to 5 P.M.

The Museum will NOT be open Friday or Saturday.
NATIONAL HISTORICAL RADIO CONFERENCE

Programming For Everyone

THURSDAY

9:00 AM Special FLEA MARKET area opens under direction of N. F. W. A.
(ALL participants MUST register !)

2 to 5 PM A.W.A. MUSEUM OPEN at East Bloomfield. Many new exhibits.

9:00 AM REGISTRATION desk is open in Main Lobby, Sheraton Inn.

6:00 to 7:30 P.M Check-in for VACUUM TUBE AUCTION
7:30 to 8:00 PM Pre-view of tubes for sale.

8:00 PM TUBE AUCTION and identification of unusual tubes.
   Main Room, Sheraton Inn. Lauren Peckham Chairman and Bruce Roloson
   Auctioneer. (Payment at conclusion of auction.)

FRIDAY

8 to 10 AM CHECK-IN for GENERAL AUCTION (Limitation on sales)
8 to 10 AM CHECK-IN for OLD EQUIPMENT CONTEST Ralph Williams, ARCA
   (Right corridor - first floor. See Categories on last page of program.)
10 to 11 AM CHECK-IN for VACUUM TUBE Contest. (Special Room, 1st floor)

TUBE CATEGORIES:
1. Deforest: anything spherical to DL/DV series
2. Moorhead Co: all types including ER, Marconi/DeForest, etc
3. Western Electric Co: all types with spherical bulbs.
4. General Electric Co: World War I period, VT-11, TB-1, etc
5. RCA: Receiving types up to year 1928
6. Independent companies: Myers, Brighton, Daven, etc. up to 1930

Entrants can enter ONLY THREE categories. AWA will provide special display boxes for protection of tubes which must be picked up between 4 and 6 PM Saturday.

9 AM Promptly! LADIES TRIP TO CORNING GLASS CENTER (Main entrance)

9:30 AM A.W.A. AMATEUR MEETING Ken Gardner, W2BGN, Chairman
   This is the big gathering for radio hams. Meet the "gang" who check in on the various Nets and listen to tape play-back of the 1980 OT Contest signals.

10:30 AM OLD, OLD TIMERS CLUB Gus Girona, W2JE, Chairman
   A meeting for OOTC as well as QCWA, SOWP and MTC members. Program:
   "The famous WWI Tuckerton Station" by Thorn Mayes, W6AX, SOWP Tech. Ed.

11:30 to 12:30 PM Preview of auction equipment to be sold.

12 Noon SPECIAL LUNCHEON (buffet) in main dining room overlooking lake.
   (or, you're on your own.)

1 PM GENERAL AUCTION Joe Pavek, W9OEP and staff
   One of the big events of the Conference. Participating members will have
   seating preference. 10% of sales to Museum Fund. Payment for Auction sales
   at Lobby Registration Desk 9:30 P.M., otherwise by mail Oct. 10

AUCTION information: Instruction sheets and registration forms for BOTH
   General and Tube Auctions will be available after Aug. 15 by sending SASE to:
   Lauren Peckham, Ormiston Rd., Breeport, N.Y. 14816

Note: There are certain restrictions and limitations concerning items for sale.
   It is advisable to obtain these sheets in advance.
FRIDAY continued

7 PM PIONEER DINNER Old Equipment and Vacuum Tube Contest Awards
8 PM Demonstration of an 1898 coherer/Morse register receiver by Linc Cundall
   Guest Speaker: ANTHONY CONSTABLE "The Way It Is In Great Britain"
   Tony is from London, England and is co-founder and Editor of the British
   Vintage Wireless Society, a most knowledgeable historian and delightful speaker.
9:00 PM Annual A.R.C.A. Meeting
9:30 PM Payment of Auction Sales (Main Lobby Registration Desk)

SATURDAY

9 to 10 AM RADIOLA STORY Ross Smith (IHRS) and Alan Douglas
   A dual projection review (for comparison) of early receivers made by
   General Electric, Westinghouse and Wireless Speciality Apparatus
   Company. A "must" for receiver collectors and historians.

10:30 to 11:30 TO TELL THE TRUTH An informal forum with Perry
   Ferrell as Moderator. Dr. Susan Douglas and Elliot Silvowitch of the Smith-
   sonian Institution will tell and identify material from the fabulous George Clark
   Radioana Collection. Clark (RCA official historian) was considered one of the
   world's greatest professional radio collectors. Fascinating.

12 Noon SPECIAL LUNCHEON again in the main dining room overlooking lake.
12 Noon LADIES LUNCHEON and PROGRAM Tiffany Room

1:30 PM COLLECTING and IDENTIFY TUSKA RECEIVERS
   by Dexter Deeley. A new field for the collector. Both slides and actual
   receivers will be on display.

2:30 PM SHOW and TELL with Mel Comer and several guest speakers.
   Our Moderator has promised some unusual and unique solutions for the
   collectors. Always a popular program. Be there.

6 PM COCKTAIL HOUR
7 PM ANNUAL BANQUET (Prime ribs) The Grand Finale... an
   evening of fun that brings the Conference to a close. Acknowledgements and
   Awards. Participants: Dr. Susan Douglas (Smithsonian), Ray Hutt (Smithsonian),
   Don Matson (Ford Museum) and Dr. Seymour Stein (California Foothill Museum)

SUNDAY: A.W.A. MUSEUM OPEN 9:30 to 11:30 AM and 2 to 5 PM.

IMPORTANT!! FLEA MARKET IMPORTANT!!

Motel management has requested (and will enforce) a ban on flea marketing and
open trunk sales in the Motel/Restaurant parking lot. The driveways are for
restaurant and motel guests. For your convenience and to promote an orderly
program, AWA has made arrangements for a large ENCLOSED area to the right
rear of the motel entrance exclusively for flea market vehicles. Members of
N.E.W.A. have volunteered to handle the area. Management will POLICE both
parking lots. Please co-operate. (All participants MUST register !)
NATIONAL HISTORICAL RADIO CONFERENCE

OLD EQUIPMENT CONTEST

LOCATION: Meeting room on main corridor at right of Hotel Registration desk.

TIME: Check in equipment Friday morning between 8:00 to 10:00 AM. Remove equipment Saturday afternoon. Guard on duty at all times.

CLASSIFICATIONS
1. - Crystal receivers
2. - Regenerative receivers
3. - Tuned radio amplifier receivers
4. - Superheterodyne receivers
5. - All other receivers
6. - Tube transmitters
7. - Spark transmitters
8. - Microphones
9. - Test equipment and meters
10. - Loose couplers

There will be ribbons for 1st, 2nd and 3rd places in each category. Therewill also be Best of the Show selected from first-place winners. Full description of each category in the September OTB.

Ralph Williams, Awards Chairman

(See program for Tube Contest)

In addition to the above categories, there will be two special awards each with a handsome engraved plaque and honorarium to be presented at the Banquet.

ELLE CRAFTSMAN Award - the best homemade receiver.

MATLACK TRANSMITTER Award - best homemade or restored transmitter. Entries in the regular Old Equipment Contest may also qualify for these awards, however, these are very definite rules which are noted elsewhere in Bulletin.

MOTEL RESERVATIONS: Make reservations directly with motel of your choice and not thru AWA. We suggest you make your reservation early with deposit. Following is a list of motels in the Canandaigua area. The Trenholm and Valley are each about 7 miles from Canandaigua: (Canandaigua zip code is: 14424)

- Lakeside Motor Lodge, 100 Lake Shore Drive - Tel. 716-394-4640
- Kellogg's Motor Inn, 130 Lake Shore Drive - Tel. 716-394-3909
- Blue Gables Motel, 451 Lake Shore Drive - Tel. 716-394-3220
- Heritage Motel, Route 5 & 20 (East) - Tel. 716-394-6170
- Georgian Motel, Rte. 332 (north Main St.) - Tel. 716-394-2321
- Sheraton Inn, 770 S. Main St. - Tel. 716-394-7800
- Trenholm East Inn (At Thruway Exit 44) - Tel. 716-924-2131
- Valley Motel, Rte. 5 & 20, Holcomb, N.Y. 14469 - Tel. 716-657-6663

(1 mile east of AWA Museum on road to Canandaigua)

LADIES' PROGRAM

The feature attraction will be a bus trip on Friday, Sept. 26 to the new Corning Glass Center, following a scenic and historic route through the Finger Lakes grape country. A luncheon at the Corning Hilton and time to browse along the historically renovated Market Street are included. The all-inclusive price for this guided trip is $28.00. Also planned are the hospitality room as well as a Saturday luncheon and program, both at the Sheraton.

LADIES' SATURDAY LUNCHEON and PROGRAM will be held in the TIFFANY Room (adjacent to the Sheraton’s Main Dining Room) at 12 noon. Sign up early for this event. There will be door prizes.
JUDGING OLD EQUIPMENT CONTEST

WHEN IS A SET NOT A REPRODUCTION?

This question came up recently by Serge Krauss (Elkhart, Ind.). He had just assembled the crystal set described in the Bureau of Standards Bulletin No. 120 (designed and written by AWA member Harold Wheeler of the Hazeltine Corp.)

All components were of vintage stock (not new) and identical to the 1922 set. Should this receiver be called a reproduction? After all, it wasn't made with modern components (reproductions) and it wasn't a duplication of a brand name manufactured receiver. What is it?

How about a 2-tuber made with original Dubilier condensers, G-R variables, Daven gridleak, Carter jacks and rheostats, Eby binding posts, N-Ald sockets and dials, AmerTran Aft, old scrap wire and panel, etc., plus Baldwin phones and original UV-201 tubes. In fact, all components except the solder(!) were made before 1930.

In Contest Classification, shouldn't there be a Class for these sets as opposed to a similar receiver which may have may have some modern reproductions? What are your thoughts?
OLD TIME TRANSMITTER RECEIVER CONTEST

RESULTS OF 1980 CONTEST

TOP TEN SCORERS

<table>
<thead>
<tr>
<th>Station</th>
<th>Claimed score</th>
<th>Actual score</th>
<th>Confirmed score</th>
</tr>
</thead>
<tbody>
<tr>
<td>W2LV</td>
<td>820</td>
<td>808</td>
<td>796</td>
</tr>
<tr>
<td>K4TS</td>
<td>804</td>
<td>788</td>
<td>780</td>
</tr>
<tr>
<td>W2HYN</td>
<td>724</td>
<td>710</td>
<td>698</td>
</tr>
<tr>
<td>W1PEG</td>
<td>664</td>
<td>652</td>
<td>648</td>
</tr>
<tr>
<td>W2LC</td>
<td>634</td>
<td>614</td>
<td>614</td>
</tr>
<tr>
<td>K2LP</td>
<td>543</td>
<td>530</td>
<td>525</td>
</tr>
<tr>
<td>W1DM</td>
<td>540</td>
<td>532</td>
<td>532</td>
</tr>
<tr>
<td>W2BGN</td>
<td>495</td>
<td>483</td>
<td>482</td>
</tr>
<tr>
<td>W8AU</td>
<td>368</td>
<td>368</td>
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</tr>
<tr>
<td>W4NM</td>
<td>344</td>
<td>332</td>
<td>332</td>
</tr>
</tbody>
</table>

IT ISN'T only the high multipliers that produce winners: it is the down-right perserverance of making QSOs. Look at the following list which also brackets the TOP TEN:

CONTACT LISTINGS

<table>
<thead>
<tr>
<th>Station</th>
<th>Claimed contacts</th>
<th>Complete contacts</th>
<th>Confirm contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>W2LV</td>
<td>105</td>
<td>104</td>
<td>101</td>
</tr>
<tr>
<td>K4TS</td>
<td>104</td>
<td>101</td>
<td>99</td>
</tr>
<tr>
<td>W2HYN</td>
<td>103</td>
<td>101</td>
<td>97</td>
</tr>
<tr>
<td>K2LP</td>
<td>96</td>
<td>93</td>
<td>91</td>
</tr>
<tr>
<td>W2LC</td>
<td>88</td>
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<tr>
<td>W3VSX</td>
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<td>W7KE</td>
<td>81</td>
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<td>74</td>
</tr>
<tr>
<td>W1PEG</td>
<td>81</td>
<td>77</td>
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<td>K2WV</td>
<td>76</td>
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<td>VE3BDV</td>
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<td>W4NM</td>
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<td>39</td>
</tr>
<tr>
<td>W3HTW</td>
<td>37</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

Believe it or not, the 1980 Contest marks our TENTH Anniversary of the Olde Tyme Equipment Contest/ QSO Party. Bob Morris, W2LV won the first one and now the tenth. Congratulations Bob! K4TS moved up to second place and W2HYN popped into third. Congratulations to both of you also.

AND NOONE RECEIVED A PINK TICKET!

OTHER STATISTICS:

Logs not received from: W1DX, W2ZH, W2ZUX, K4IM, W5BUK, W5GWF, K6FX, W6IC, W6TO, W7WY and W7KMU.

Total number of participants: 78

Out-of-normal QTH: W8AQ/4, W3CWY/7, J3AAC (W2BJI), W8EGF/7

New participants: W1MB, W3INV, W3RG, W3VVS, K4CTG, K4DE, K4HI, K4IM, W5GWF, K6FX, W6IC, W6TO, W7KMU, W7LOG, W9HE, W9FXY, VE3AGW

Welcome aboard!

WHAT part does operation on the three bands play in the Contest?

Total On contacts 80 mtrs 40 mtrs 20 mtrs
2116 1109 593 514

NOT reflected in the above tabulation are the stations who have Old Time gear and have dropped by the wayside. Come on back. We miss you and you must miss the fun.

ALMOST everyone wants to see ALL the scores and type of gear used by entrants. This tabulation is beyond the space allocated in this report. Have patience and we will bring it all to you in the September OTB.

---73, Ken, W2BGN

(Cont. next page)
The success of a contest or QSO party depends not only on the scores but upon the amount of fun had by all participants. We had more people involved, more old time xmt rs and rcvs and your committee was snowed under with logs and letters unlike any past contest. In fact, many of you want more than one spasm of QRM a year. Now that tells the fun story!

Our scores were higher, contacts on 80, 40 and 20 were greater and that attests to the diligence of the gang in employing more and better OT gear. QRM didn't deter operation since the usual skill was displayed by signals weaving in and out of the pileups. Rock-bounders just blasted away.

Luck enters into the contest also. Like... if your OT gear holds together and maintains its characteristics or you happened to catch some of the stations who were on only for short time.

Excerpts from letters:

W6CG--Last year Bud burned up several KW trying to raise W2HYN. He got even this year because Bill consumed two cups of coffee trying to raise W6CG. Bud went bananas over the pile-ups and had to leave now and then for a prosaic check on OSCAR 8!

W2LY--says that out of 105 contacts, 62 were without OT gear. There are lots of parts in AWA. Build or buy something and get in the real fun part of our operation.

K8VBL--used a 1-tube transceiver! A single 53 tube served as a PP xtal controlled oscillator and 2-tube regen receiver (det. and i audio). A Federal five-pole double throw anti-capacity switch performed the TX to RX switch over! .7 watts output to a 90 foot piece of wire.

W2AFE--says don't "CQ AWA...it attracts the LIDS and adds QRM. Just send "AWA AWA de---"

K4TS--Chas says a 10 db gain in xmt power helps. They come back sooner...

W9HE--learned he had to tune around just like the old days...

W8AG--Ev pleads spread out more. Ya want to wear out JB's diodes?

K2LP--taped lotsa. signs for playback at Canandaigua Conference in September.

W6JE--is now retired. Watch for Yardley's smoke next year. He asks, "please tune for xtal xmt rs and always CAL! and SINE to overcome OT RX drift."

VE4ZX--says lets get out of the 20 mtr Rtty qrm and publish ALL station scores. Will do Bob.

W1BPL--sent qsls printed on real OT penny post cards. He is going out and get a new Town Auditor elected this year so he will have more time for the Contest.

W8YSK--next year an 813 final-Wow!

K6ARE--made his QSOs after a 5.5 Richter earthquake and before the after-shocks hit. We didn't hear a wobbly signal!

W2HYN--got a flat seat from sitting so long. His Ant. was a 8 00 foot V beam on 80 meters with 402 foot feeders facing E-W.

W1MB--complains of only one eighth inch of band spread on OT rx dial!

W3INV--built a breadboard TNT using a W.E. 205-D and got knocked on his can a couple times. Says we old timers have lost our touch because of modern metal shielding...uh.

K4DF--was rock-bound on 7050 and no one tuned there...so score was 0. His 47-10 MOPA will be VFO next year.

W3EGF/7--says its a brand new experience working AWA from his new Qth in Phoenix, Ariz. Woodpeckers and jammers raise the dickens there.

W4NM--says 59 tri-tet and (2) 46's parallel PA is open cause no TVI.

Several guys complained about Rtty qrm on 20. We will move next year.

Several suggest a multiplier of 3 for simple regen RX or a multiplier of 3 for simple TX under 10 watts...
JOSEPH HENRY -- The first to send and receive radio signals?

by Alan Douglas

Reprinted below is the original U.S. Patent Office report of 1859 telling of Joseph Henry's early wireless experiments. See next page for comments.

METEOROLOGY.

BY PROFESSOR JOSEPH HENRY, SECRETARY OF THE SMITHSONIAN INSTITUTION.

ATMOSPHERIC ELECTRICITY.

As an illustration of the inductive influence of free electricity at a distance on the natural electricity of a conductor, we shall direct the attention of the reader to an arrangement exhibited in Figure 9, which is that of an experiment made by the author of this paper in Princeton, in 1845. Two circular disks of wood, a and b, each of about 4 feet in diameter, were entirely covered with tin foil; one was insulated in connection with a large conductor of an electrical machine, in the upper story of a building, the other was supported on a glass foot in the lowest story, at the distance of about 20 feet below, with two floors and ceilings intervening. The upper disk being charged by the machine, the lower one was touched with the finger, so as to suffer the induced electricity to escape into the ground. If, when in this condition, the knuckle was held near the lower disk and the upper one suddenly discharged by a spark received on a ball attached to the end of a wire connected with the earth, a spark was seen to pass between the knuckle and the lower disk, a similar effect was produced when the upper plate was suddenly charged by powerful sparks from the machine, though the intensity in this case was somewhat less.

The inductive action of the electrical discharge at a distance is still more surprisingly exhibited, by an arrangement shown in Figure 10, which the writer of this article adopted during his electrical investigations at Princeton.

The roof of the house which he occupied in the college campus was covered with tinned iron, and this covering was therefore in the condition of an insulated plate; on account of the imperfect conduction of the wood and brick-work which intervened between it and the ground. To one of the lower edges of this covering was soldered a copper wire, which was continued downwards to the first story and passed through a gimlet-hole in the window-frame into the interior of the author's study, and was then passed out of the lower side of the same window, and thence into a well, in which it terminated in a metallic plate below the surface of the water. Within the study the wire was cut in two, and the two ends thus formed were joined by a spiral of finer wire a covered with silk thread. Into the axis of this spiral a large-sized sewing-needle d was inserted, the point having been previously attached to a cork, which served as a handle for removing it. With this arrangement, the needle was found to become magnetic whenever a flash of lightning was perceived, though it might be at the distance of several miles. The intensity of magneticism and the direction of the current were ascertained by presenting the end of the needle to a small compass represented by c. In several instances the inductive action took place at such a distance that, after seeing the flash, the needle was removed, its magnetic condition observed, and another needle put in its place, before the noise of the thunder reached the ear. In this experiment, the inductive action of the electrical discharge in the heavens was exerted on the natural electricity of a sphere of about 1,600 square feet, and a considerable portion of this passed down through the wire into the well. The arrangement served to indicate an action which would otherwise be too feeble to produce sensible effects.

It must be observed that the effect here described was not produced by the actual transfer of any electricity from the cloud, but was simply the result of induction at a distance, and would probably have been nearly the same had the intervening space been filled with glass or any other solid non-conducting substance. We say probably, very nearly the same, because Mr. Faraday has shown that the inductive effect at a distance is modified by a change in the intervening medium.

It is also proper to mention, in this place, although we cannot stop to give the full explanation of the means by which the result was obtained, that the electricity along the wire was not that due to a single discharge into the bell, but to a series of oscillations up and down in alternate directions, until the equilibrium was restored.
COLLECTING UNUSUAL VARIABLE CONDENSERS

Here’s a hobby that won’t empty your pocketbook and at the same time present a challenge. A wide range of collectible variable condensers have been designed and manufactured such as the "wind-up tinfoil" condenser designed by Hugo Gernsback (circa 1912-14).

How about the Crosley book condenser series: the wooden, porcelain and bakelite models? The screw compression type? The Cardwell tapered thickness plate model? Triple and quadruple butterfly types? or the conical telescoping and the Remler gear condensers? The early Murdock rotating switch model or maybe the Faradon mercury?

For a rare one, consider variations of the horizontal sliding types starting with the early E.I. model. For sheer beauty, my choice is the final tank condenser from the Japanese battleship NAGATO. Made entirely of shiny brass, it sits on four tall glass pillars. All of the above types can be seen in the AWA Museum including the E.I. sliding model which belonged to Maj. Armstrong.

A more recent one called to my attention is the Helicon designed by A. W. A. member Eric Shalkhauser, W9CI over 50 years ago. An ad describing his unique condenser can be found on page 83, April 1927, QST. It is of the screw type and provides over 5 feet of tuning space on the dial! Of interest, several years later Eric founded and became president of the R.M.E. Co. Remember the famous RME-69 receiver of the 30’s?

---Happy Hunting! (Bob Allen)
OLD TYME HAM ADS

WANTED
- circuit diagrams for AC Dayton XL4 & XL20. Also need info and advice on building or modifying a weather station such as Cotton or Raven. Bill Jelinek, 128 N. Stevens St., Rhinelander, Wis. 54501.
- info on Siemens WM11 radio with 12 sweaters, 100,000,000,000 painted wood case. Tubes used and needed are: 12K1, 12F1, 12AX7, 12L1. Also need info, records & playback heads for KG 7, 8, 8E pre-sto recorder. Harry Watkins, 2760 Greene St., Augusta, Ga. 30904.
- Paragon 100, early style Paragon AFT, panel & tuning knob (or parts set) for Clapp-Eastham Hf, cabinet & any parts for H2 amplifier. Rick Wobbe, 321 Belvidere Ave., Washington, New Jersey 07832.
- standard & tube catusc comb with writing chassis for Radiola Super VIII or Radiola 24 (need chassis assembly only). Also table model RCA or morning glory horns. K. N. Boyd, 5021 Dividend Drive, Washington, Pa. 15301.
- Hallcrafters model SX42, SX43 and SX6248 cutes, parts, manuals, and literature. Please state price by return. In first letter, Chuck Klavitter, WVZR4, 4267 N. Bartlett Avenue, Milwaukee, WI 53211.
- coil or details of coil construction for Radiola Model V. Also grid leak for same. Ken Johnston, W7LIX, Avon, Montana 59715.
- early Edison open motor fans, ceiling, table or floor types. Odd or unusual types. Richard Kane, K8JII, 21st St., Sunrise, Florida 33322.
- brush crystal headphones. Please advise condition and price. Robert A. Miller, Route 2, Box 45A, Howard Lake, Minn. 55349.

WANTED
- Kellogg 401 tubes w/good fil. Also hen type sprk in good cond. & working. State cond. & price. Will buy Majestic 180 chassis only (no pwr supply), otherwise complete. Alen Hicks, 2423 Blake St., Seward, NE 68077.
- an Omega graph in excellent cond. 1941 annual report, 29 magazines, QST in bound volume, HRTY Journal mag. Please state price & condition. Have some QST & related items to trade. Neil Friedman, 6616 River Trail Court, Bethesda, Maryland 20014.
- two R-11 tubes for my Radiola 14. AY Wall, PO Box 3698, Terminal Island, CA 90731.
- coils, filament switch & pilot 250mmv variable used as the regeneration control-null for Pilot AC Super Wasp. W. Burni, 529 Evergreen Dr., North Wales, Penn. 19454.
- operating instructions & schematic for Readrite Model 450 tube tester. Also Zenith or AK automobile radio. Mike Sauer, 601 N. Holden St., Port Wash., Wisconsin 53074.
- Tri-City Radio Corp. battery sets and info pertaining to same. John Geyer, 6345 Mitte Way, Denver, Colo. 80212.
- books "Radio Boys with the Air Patrol" (Breckenridge), "Radio Boys to the Rescue" (Chapman). Chamberlain radio/wireless fiction. Send for my want list. T. Grosecoll, 20 Holland St., Binghamton, NY 13905.
- books & info pertaining to AK Model 427, 428 & 437. Steve Thompson, 17 Rocky Clinton Rd., Danbury, Conn. 06810.

- info on Gecophon with cabinet markings BC 2770 Inst. no. 1141. John Webb, W6CRC, 6207 Squredrll Dr., San Jose, CA 95120.
- magazine called 'Radio' for the years 1930-31-32-33. L.F. Raynor, 5512 N. 71st Place, Scottsdale, Ariz. 85253.
- homemike oscilloscope and also open type crystal detector w/cathode ray tube. Frank Bake, 693 Chestnut St., Oxford, Ohio 45056.
- WANTED
  -who makes brass trim for panel corners of Kennedy V7 Need Neutrix model 140 or Junker plus Tusa 228 panel, chassis & AFTs. Have tubes, double b. mikes, R/T 10-12 nic & misc. to trade. G. Hausske, 1922 E. Indiana St., Wheston, IL 60187
  -National NC-106 or NC-100X (general coverage with HRO type dial). R. Becker, W700D, Box 355, 156 South, Washington, WA 98001
  -Rockville-Maryland 20853 (301) 774-7799
  -riders manual vol. 23. Have vols. 6-21 available for trade plus any indexes. Gene Fulk, 2701 East 185th, Cleveland, OH 44110
  -original speaker with cabinet for RME-69. Also want SW-5 & RME-60 receivers. C.H. Morrell, 655 Fairlawn Drive, McLean, VA 22101
  -six tube standard cutout box for Radiola Super. Can be in any condition (within reason) & doesn't have to work. Harvey Fitzgerald, 330 Ray Rd., Newark, OH 43055
  -Meissner & Miller ant., rf & osr caps for RC & SP bands, 2 ga. tinning lead, from the 1930s 2 3/8" x 2 5/84" 1/2 in., tuned winding machine & unused metal chassis. Rodney F. Schrock, 402 Lincoln St., Somerset, PA 15551
  -old or unusual bugs & keys. Have & trade horns. Also, set of Riders & indexes to trade or will buy outright. Carl L. Eilkins A14F, 1701 Woodland St., Nashua, NH 03060
  -crystal set wanted by newcomer. Rare item not needed, just a typical set in good shape. John Sheehan, 5656 Barbara Dr., Madison, Wis. 53711
  -solder for use on Arten, 50k 2 1/4 TRC massed resistor, 50 m/cw/ohm center tapped res., brown beehive porcelain insulators, Co. Phys.Mag., 2 5/8", old style tube tester. Dale J. Roberts, Box 162, Clyman, WI 53016
  -power supply and escuehen for Steinite model 261 or 262 recvr. Also need light cover for Radiola 20, 17, and 19, 2 ga. binding post. W 4 BTD, Box 355, Badin, NC 28009
  -6L6's with isolantte bases; Taylor T21's; Taylor TK-150a & TK-75's; metal 6L6's & 1614's. Control industries diversity recvr from 1940's. John Nagle, K4JJK, 12350 Lawyers Road, Herndon, VA 22070
  -Neutrix wound tube covers; GRL Zenith 38 & DC Superwasp front panel; Hilco, Heintor, Hygrade, Carolina Y & Piedmont sets in any cond. Buy or trade. J.W. Sears, 312 Auburndale St., Winston-Gales, NC 27601
  -Sargent WA-21 receiver and Gutham U-36 Transmitter. These sets or any info on these sets would be appreciated. David F. Thomas, 1937 N. Comanche, Tampa Florida 33604
  -Crosley PU, any condition for cash only. Earl S. Stump, WN9DNY 122 Reservation Circle, Chillicothe, OH 45601 (614) 775-6778
  -Phantom Masterpiece cabinet with or without spkr; Radiola III parts; commercial xtal sets. John W. Richardson Jr., 94 Kirk Eagle, Hackettstown, NJ 07840
  -RD-12 tube for Crosley Pup. Must be in operating condition. R. Hardman, W20W, 528 Oldchester Road, Essex Fells, NJ 07021
  -Clapp-Eastham RZ parts, in- side photo & wiring diagram. Wood base & lid for Radiola V. Also, want Mullard, Mullard, Eimac, xfr., spark gap, key, on/off switch, var. condenser, phone condenser. Richard Crouch, 6058 best r.d. N.E. Cedar Rapids, IA 52402
  -Edison stock etcher, Edisonquist medical device, commercial xfr. & recvr from 1910-1920. coherer, rotary spark gap, socket for Deforest Audion, component of plate & electrolytic 350 V battery. Jim Chisman, P.O. Box 111, Clemson, SC 29631 (803)839-2839
  -Riders manuals #14, 14, 19, 20. Also Crosley Super Tridyn, any AE breadboards with variometer tuning & other battery sets from early 1920s. James Notaris 1100 Welsh Road, Ambler, PA 19002
  -Real scale for Philco 550 and Victor RR-45 (R32, B35, R6/275 all same rf chassis). Will buy entire chassis. Also 2 Mag- sound tubes. N. Scull, 2115 S. 28th Street, Richmond, UT 84334 or call collect if you have dial scales (801)525-2108 oives or weekends
  -612 loop brace (bakerlite w/ label) photo of original grill work. schematic & info on German "wastika" Siemens K32-GW & tube battery portable, original grid & bakelite, L.35" x 6.25" x 3.5". Mark Twitchell, 165 Hunter Ave., Fanwood, N.J. 07023
  -early magnetic recording equip. by Brush,Armour Research Foundation,Machine Corp. Also want Ampex Model 400 or 401 Ranger tone. Have radio items for swap. Gaylord Elwing, 950 Wegman Rd., Wadsworth, OH 44281 Tel. (716) 247-1084
  -Scott Selectone Type 643 pwr xfr for Shield Grid 9 pwr unit. UTC L5-25 audio driver xfrm. Edison long playing Diamond Disocr. Pre-rec. P3 records. Price George Harris, 5212 35th St., Lubbock, TX 79413

- schematic for Supreme analyzer model S500. Million excitor model S200X (per set) 800-1000. Spkr driver for Dayfan Mod. 5046 & front grill panel. Bob Swindor, 2614 W.Larkspr, Phoenix, AZ 85029

- General style radio (flat or bento box). Want to trade old original 16mm film tv shows. Send for list. Need cabinet for 1920 Vibe model 81 cath.David Taylor, 106 Bass St., Tallahassee, Fl. 32301
- info on H.L. Schroeder radio. Have a such a radio made between 1924 & 1927. Any info would be appreciated. James Davis, 4224 Ocean Dr 237, Corpus Christi, TX 78411
- grandfather clock radios, ads from magazines related to same, owner's manuals, etc. 351 issues of Radio Craft & Radio Craft & TUNING. Ed Sage, 556 Civic Center Street, Richmond, Calif. 94804
- bottom cover for Crosley Pup; Radio News July & Sept. 1919, Jan. 1920 & Jan. 1920 to complete collection. Will sell or trade tape. A. R. Wolf, 7 Cambrian Way, Escondido, CA 92025

- Great Britain CH3 3RE

- For sale and/or trade
- Netforest station 1920 trans- mitter & 1200 multi-wave tuner plugs & angle & TV BOX. Have bids till 9/27/68. SAE for details. Add $1 1f Polaroid is desired. Jus. Wasielus, 229 S. Alps Lane, Pleasantville, N.Y. 10570
- Supertone Speaker Audible Inductive & tube factory super- tone. Also it int. in vol. 17-3 0TB. Excelllent cond. W/good U201-A's. $200. or trade for skelt gun. Greg Dobcker, 2819 Ave C East, Richmond, N. Dak. 58051
- four Scotts 11)4947 Mod. 168 in blonde cabinet 2)1941 Phan- tom Deluxe, cabinet excellent 3)1935 Hi-Fi With No. 4102 in fair cabinet 4)1941 All Wave Superhetrodyne. Will consider best offer. Ron Hyatt, 3711 Sherri- man, North Bend, Oregon 97459
- trade for Kennedy Type 281 for Hallcrafters Ultimate Skyrider SX-10 or S-36 WLL version. Ross Smith, 1133 Strong, Ellk, 19614
- Add in any cond. Litter up but no music w/tubes $2.50 plus shipping Westmamg House RA/DA in good cond. w/tubes it works $2.50 plus shipping West. El. Mod. 7-A or 7-B to. for other prices. List of 300 items Chet Wingor, 1014 Main St., Dolton, IL 60412

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FOR SALE/TRADE
--circo tube from 20's $30. $1.50 ea. Used octal tubes glass or metal, 40 ea. No list. Send 25% deposit. Also tube testers w/instructions & cases, 55 ea. Herman Pinto, 10 Jackson St., Somestown, N. J. 10797
--trade Hemminger Comet Pro with manual and coils in v.g. cond. (1933). Want AK48 & AK50 in restorable cond. F. W. Creed Apt 283 Fairway North, Kitchener, Ontario, Canada NA 2 PI
--complete collection, no breakouts, no shipping, approx. 50 radios inc. Pup, Paragon DX-1, AG-5 X in rack, mint, tv scanner tubes, many parts. Al Canning 5845A, 6 Camellia Dr., Delhi, Fla. 32713 Tel.(305) 668-8457
--50 reproductions of "Twenty Radio Phone Directories" including xtal & audion sending & rec. circuits w/chart of symbols & Phanphlet. $3.50 postpaid. Frank S. 228 6th, Miami, Wr. 52225
--National BBC receiver with nine coil sets, nice cond. $100. Millon Sideband slicer (match-es) $15. Paul Kluse, F00X, PO Box 88, Youngstown, Mich. 49096
--convers manual for Macrophone Model 85 used by Martin-Copeiland & Clapp-Eastham A. Smith, Stonebridge, Lincoln, Mass. 01773 Tel. (617) 259-9351
-- Hawen run, coupled 3 stage amp, kit type L-1, Frost 3 gang sockets, also GR singles, macro illuminated dials, Riders manuals 6-13, except 11. Need ring collar for Music Master spkr. Berwick, Pa. 18901 Webster City, Iowa 50595
--market priced antique radios, battery & AC A. Harrison, Tucker Hall, Univ. of Missouri, Columbia, Mo. 65201 (Send SASE for list)
--trade Grebe Synecrophone W/org. battery box stand (nice) for comparable A-K Mod. 19. Also need Crosley book condenser. Dave Crocker, Tavern Path, Plymouth, Plymouth, Mass. 02360

FOR SALE/TRADE
--KKCO stamp collection of over 1000 varieties. Make offer on lot. (In 3 albums.) Want original instructions for Acriola Jr. Ld. Price $5. cond. Please, Rod Phillips, SASAR, Box 684 Bayw Mora, Wa. 10100
--Budolm 0 meter $75., WWII German xnyr FuG10 (3-6 MW) $40., Ghiradi Radio Physics Course $5., WWII Panapjett-Oscilloscope APA10 $35., P.W. Chapman, 22 Monterey Drive, Charlotteville, Va., 22901
--radio, speakers, tubes, AK parts, service manuals & magazines. List #7-79 for $5, and large SASE W/304 stamps. Krantz, 100 Osage Ave, Somedale, N.J. 08083
--Crosley Model 56FA in good working cond. $50., Radiola VIII in working cond., but needs spr & some cabinet repair. Want Crosley spiderweb tuner for Tridyn, Rev. Bertram M. Warden, 231 W. Libby St., Jerseyville, Ill. 62052
--radio, tubes, parts & many magazines. Send large (28) SASE for list available early July. R. B. Schueler, 6848 Common- wealth Blvd., Pars Hghts., Ohio 44130
--Magnavox amplifier, Splittorf R-500, DeerForest D-10, Hallicrafters X25 & spkr, Zenith Trans-oceanic & others. Send SASE for list 80-1. David McKenzie, 170 West 52nd St., Hieage, Fla. 33122
--radios, repair parts, tubes, printed matter, etc. Send large SASE for list. Rod Goodwin, Box 1854, Ponoka, Alberta, Canada, TOC-200
--Western Electric de generator 400v, 375ma, 3500rpm w/external series resistor for field. Two GE de generators, 500v, 200ma, 45rpm on-off, all pieces broken off mounting foot. $30, x4, each one, you pay shipping. Howard O. Lorenzen, 9000 Lake Washington Blvd. NE, Bellevue, Wa. 98004
--over 200 items have to go including radios, parts, printed matter & misc. plus 100 kinds of tubes (1925-1945). Complete list: $1. Rod Goodwin Box 1854, Ponoka, Alberta, Canada TOC-200
--sell Radiools III, IIIA, V, Crosley 51, SLP, (8) meters in tube in box/clips. Need Crosley 50, 60, Radiola III cabinet. Have many used tubes 01A 24, 27 to late type tubes. Burns Getchell, 76 Mark St., St. Stephen, N. B. Canada E3L 2B5

YOUR AD MISSING? Chances are it was mailed late. Five letters were received too late for the March OTB and not printed. Deadline for the next issue is JULY 15. Suggest you mail before July 5.

MARKETPLACE

MEMBERS AVAILABLE

Members who are building or restoring old receivers will be glad to know the availability of a variety of "double-cotton-covered (DCC) and double-acony base (DAB) wire in #22 to #28 sizes in different colors. Ideal for "wire-wrapping" inductors, coo- couplers, etc. Prices appear quite reasonable. Send SASE for listing to: Charles Day, Box 205 So. Dartmouth, Mass. 02748

LARGE ANTIQUE CATALOG

What may be the largest catalog of vintage radio parts, sets, tubes and boxes for sale (mostly British) is now available for $4. (Four $1. bills) postpaid from Vintage Wireless Co. (Tudor Rees), 64 Broad St., Staple Hill, Bristol BS16 5NL, Great Britain. (They accept Mastercharge and Visa on purchases.)

RECENT RADIO AND ENTERTAINMENT OBITUARIES

MAX ABRAMS IS DEAD;
LED EMERSON CORP.

Joinied With Two Brothers to Form Radio Concern in 1922

Max Abrams, former president of the Emerson Radio and Phonograph Corp. died at his Manhattan home at the age of 82. The company at its peak in 1963 was manufacturing more than 100 products. They were one of the first to make a radio-phonograph combination.

Jane Froman, Big-Band Singer;

Jane Froman, the actress and singer whose heroic comeback from injuries in a plane crash died at her Columbia, Mo. home at the age of 72. She started her career singing at a Cincinnati broadcast station. Before WWII she was featured singer with Paul Whiteman. She appeared in several films and Broadway shows and was known by the song "With a Song in my Heart."

JIM FISK, W1HR

Jim Fisk, Editor-in-Chief of Ham Radio Publications, has died of a heart-attack. This was Jim's second attack. He was 45 years old. A highly skilled and knowledgeable engineer, he also had an interest in historical radio and had a modest collection of early equipment. As an AWA member, he participated in the Association's Old Time Transmitting Contest using vintage gear. His passing is a great loss to the amateur fraternity.
OLIVER READ TUBE COLLECTION

In my September, 1979 "Tube Column" the question was asked, "What happened to the Oliver Read Tube Collection?" A letter from Perry Ferrell tells us the collection was sold in the early 50's to the Burton-Brown advertising agency in Chicago. Burton, being a "gas-light" enthusiast, felt the display would make an interesting waiting room decoration. Further information as to its whereabouts is not available.

SEMI-MODERN TUBE COLLECTING

Most tube collectors think in terms of the very early 20's and before when seeking rare tubes. Not so. Several unusual tubes were released in the early 30's which are as interesting and as difficult to find. Here are a few that went on the market in late 1932:

Sylvania released Types 29 and 69, a special combination diode/triode detector tube. The two tubes are identical except filament ratings.

Another interesting tube of the same period is the TS-257 pentode designed primarily for DC sets. Then there are the letter tubes such as the Raytheon "BR" rectifier, the ER-LA pentode (similar to the 47) and the variations in the Arcturus "Wunderlich" tube.

MILLION WATT TUBE

Several members were curious about the 1,000,000 watt tube noted on page 36, March OTB. Generally, RF final amplifiers use several tubes in push-pull and/or parallel to obtain high power. More than one tube is hardly necessary when using the 6949!

Pictured is the million watt tube which appears surprisingly small considering its enormous power capabilities. Note the water hose connections and eye-bolt for hoisting.
WITH THE COLLECTORS

PROBLEM SOLVERS

BACKLASH IN NATIONAL DIALS

Do you have an old National NC-100, 101 or HRO with the beautiful 0-500 spinning dial — and it has backlash when tuning? You would first suspect the gear mechanism. I did.

However, I found the same problem existed in a NC-101X as well as an early HRO... it was the set screws on the main condenser shaft! I removed the cap off the top of the right-angle gear mechanism box, firmly tighten the two set screws on the main shaft and the backlash disappeared.

(Bill Shaw, W2HYN)

CLEANING BRASS

The clean up of brass escutcheons such as found on Radiola 18, Pilot Super-Wasp, etc., requires just a few minutes of scrubbing with a product which can be obtained at your local supermarket. It is called: ‘Twinkle’ copper cleaner.

It comes as a water soluble paste. Just rub it on with the sponge applicator provided and watch that brass clean up just like new.

Bill Hurni, W3HWT

SOURCE FOR LITZ WIRE

Members requiring Litz wire may obtain a listing from Cooner Wire Company. They manufacture a wide range of sizes but it was not noted whether covered wire was available. (Tks W9SNK)

Write: Cooner Wire Co., 9186 Independence Ave. Chatsworth, Calif. 91311

INTERMITTENT ROTARY SWITCHES

With growing interest in commercial amateur gear of the thirties such as used in the ‘Old Time Transmitter Contest, many of us are running head long into the problem of tarnished rotary switch contacts. These silver-plated switch contacts become coated with a black oxide over the years which makes their operation marginal at best.

These contacts can be cleaned quite nicely with a product called Tarn-x, a liquid used for cleaning silverware. It can be purchased at Woolco department stores.

If you are totally re-building a piece of gear such as I did with a Hallicrafter SX-9, the individual wafers can be soaked for about five minutes in the Tarn-x solution. This will result in bright contacts that work like new.

This treatment is not absolutely necessary however if the set is not totally dismantled. I had this problem with a Hallicrafter HT-6 that I was getting ready for last years 'Old Time Transmitting Contest'. The bandswitch in this rig was badly tarnished and operation difficult due to intermittents at various sections of the switch.

I used Tarn-x and a number of cotton tipped applicators in this situation, rubbing the contacts while rotating the switch back and forth. After about 15 minutes the switch was working like new.

Bill Hurni, W3HWT

WANTED: Your latest 'tip' on restoring equipment in your collection. Send info to: A. W. A., Holcomb, N. Y. 14459
THE FIRST CONDENSER

A condenser is essentially a pair of electrical conductors separated by a dielectric or insulator. It is one of the oldest pieces of electrical apparatus, being discovered 235 years ago, by a German named Von Kleist. Today the condenser (capacitor) has reached such importance in the electrical industry, and has so many uses, that if it were immediately removed from its millions of circuits, telegraph service in this country would be almost at a standstill; telephone, cable, radio communication, and broadcasting would cease entirely, and not an automobile wheel nor an airplane operate.

The principle of the condenser was discovered in 1745 when Von Kleist filled a Florence flask with water, corked the flask, drove a nail through the cork into the water, and held the flask in his hand, the water forming one conductor, the glass wall of the flask the dielectric and his hand the other conductor. When the nail head was presented to the prime conductor of a frictional electric machine this crude condenser became charged, and when Von Kleist touched the nail with his other hand he was uncomfortably surprised to receive a smart shock as the condenser discharges through his body.

Immediately following Von Kleist’s discovery, the experiment was repeated by Cuneaus at Leyden (which gave the name “Leyden Jar” to this form of condenser) and a little later English investigators found that an iron chain wrapped around the bottle could be substituted with advantage and comfort for the human hand; that metal filings or mercury could replace the water inside the flask; and it was even suggested that sheet lead coatings could be used as the conductors.

The principal developer of the crude Kleist condenser, however, was an American, no other than our own Benjamin Franklin, who, within three years of the discovery, had developed tinfoil coatings pasted on both glass jars and flat glass plates (the latter form being known as the “Franklin Pane”), devised methods of arranging and charging condensers in series as well as in multiple, and discovered the important fact that the electrical charge resided not on the conductors, but in the dielectric which separated them. So was Franklin’s work done that for one hundred and sixty years the jar type of condenser remained exactly as its inventor left it: a glass jar coated inside and out with tinfoil made adherent by a layer of paste, a varnished wooden top bearing a ball-jointed terminal, and a trailing piece of brass chain inside the jar for contact with the inner coating.

After slumbering peacefully for a century in every physical laboratory in the world, this form of condenser was employed without any change by the early radio companies. But as the alternator and transformer began to replace the battery and spark coil, the tinfoil coatings soon blistered under the greater load, and the resultant heating quickly cracked and broke down the glass dielectric.

In 1907 the Wireless Specialty Apparatus Company, through its Consulting Engineer, Mr. Greenleaf Whittier Pickard, found the remedy for this defect in a condenser constructed with an extremely intimate contact between the conductors and the dielectric. In the first form placed on the market, these condensers consisted of jars or plates of low-loss glass, with metal coatings burnt or fused into the glass surfaces and then electroplated with copper to secure high conductivity.

Later it was the Wireless Specialty Apparatus Company that successfully applied this principle of intimate conductor-dielectric contact to the mica condenser. An old time radio engineer would find it difficult to locate a capacitor in a modern receiver since they are now frequently part of a solid-state module.

W. S. A. was one of the first to make mica condensers. This is a later model circa 1920.
PARAGON TYPE THREE

Pictured is a rare Adams-Morgan receiver which uses three 201-A's. At first glance it closely resembles the Paragon Four featured in the June '70 OTB. The set belongs to Lyman Wengen (K8YAM) and was purchased new by his parents when they lived on a farm back in the mid-20's.

Many years ago he hooked up the receiver and found it would go down to the old 160 meter AM phone band. Result: Lyman developed an interest in amateur radio and became a ham. This is a rare model. Any other member have a Paragon Three?

EARLY TEST BOARD

This beautiful test board was used at an intermediate station on the main telephone line between New York and Chicago. Note the three sets of Morse instruments. In the early days of the telephone, it was necessary for the companies to have employees who could handle Morse code when testing telephone circuits.

All of this equipment is collectible material if you can find it!

BOOKS — MAGAZINES

A good source for early radio, telegraph and electrical books (and some magazines) is Bob Morgan, K3RBV. One of his recent listings consisted of 6 pages and included an early (1878) Prescott book on the "Speaking Telephone". Odds are it is sold by the time you read this -- but there are others. Send him a large SASE for latest list: Radio Graphics, Box 18492 Cleveland Hts., Ohio 44118

On the subject of books, a reminder that old time book dealer A.D. Santomasso has a new address. Drop him a SASE for his latest list:
A.D. Santomasso, Box 907
Jensen Beach, Fla. 33457
RESTORING OLD EQUIPMENT

How did you SOLVE a problem when re-storing a receiver? Drop us a note telling how you did it.

REPLICA PARTS AVAILABLE

Another amateur who makes components in his spare time is Roland Matson. As a service to the historian and collector, we print below some of his material:

--AK mounting board only with staples/ejects: Mod. 10 @ $30.00, Mod. 12 @ $35.00
All other sizes $25.00 Add $2.00 for UPS Shipping. Ak binding post-thumb nuts @ $8.00 per doz. Add $1.00 UPS.

--Westinghouse cabinets-Aeriola Sr. & Jr.
Bea amplifier; assembled with original type hinges & front clasp @ $20. UPS $2. Thumbtacks for Aeriola, RAD, etc. @ $10.00 per dozen. Add $1.00 UPS.

--Crosley cabinets assembled/ hinges:
Mod. 50 & 51 @ $16., Mod. 52 @ $18. Add $2.00 UPS. Binding post thumbtacks $5.00 per dozen. Add $1.00 UPS.

--Send SASE for quotes on De Forest AD-4-5-9 items, Kennedy dials and other misc. components.
 Roland Matson, 388 Concord Rd., Bedford, Mass. 01730 (Tel. 617-643-3877)

PROTECT YOUR EQUIPMENT

Wrap the set (or equipment) in corrosion inhibitor paper made by the Ludlow Corp., Packaging Division, Holyoke, Mass. I bought the paper from the Brookstone Co., Peterborough, N.H. 03458. The chemical in the paper passivates metal surfaces so they resist further oxidation. Laying a sheet in the back of a set will protect the parts for three months to two years.

--Bob Lozier

FOLLOW UP ON FILTER CAPACITOR CHECKER

There is an excellent article on checking electrolytic condensers in the March 1957 issue of "Radio News & Television" magazine (p. 42). The writeup includes a simple circuit for checking plus a graph indicating different values to use under different conditions.

(Tks Peter Best)

WHAT IS IT?

Can you identify this piece of World War I equipment? Alan Douglas is in the process of restoring the unit and has no information whatsoever as to name, make or use. Most important, he would like a picture of the front panel showing the dial layout. Write: Alan Douglas, Box 225, Pocasset, Mass. 02559

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A popular AWA slide show is one titled "Old Time QST Covers" originally assembled by Roland Bourne for an AWA Meet. Noted above is the work of one of QST’s most famous cartoonists and former AWA member Phil Gildersleeve.
MAHLOM LOOMIS: FATHER OF RADIO
(Spring 1979 RFON WORKER magazine, Public Relations Dept., Lynchburg Foundry, Drawer 411, Lynchburg, Virginia 24505)

"Well, here we go again," you groan, "Loomis and his blasted kites." It's true, this article doesn't say anything really new, and the author (like all others) loses the distinction between induction effects and electro-magnetic waves.

He also makes some unsupported statements about Loomis' use of spark-gap transmitters, high-frequency detectors, and telephones. But it's still an excellent treatment: it covers 16 pages (plus a full-color sketch) and is unusually complete with photographs, patent specifications and facsimiles of his sketches and diary pages.

I have no idea if copies are still available. Write Lynchburg Foundry (as noted above) and see. If you wonder about the connection between an iron foundry and Loomis -- he did some of his later work in the town of Lynchburg.

-- Reviewed by Alan Douglas

HISTORIC STATION 2UO/WHF STORY
by Rex Matlack, W3CFC
(February, 1980 "73" magazine)

One doesn't have to be a commercial operator or even a ham to enjoy the well documented story of the New York Time's early CW station that at one time operated in the old 40 meter band with the call 2UO. The station handled tcf with Byrd and other expeditions, sent out news dispatches and was a landmark for commercial operators 50 years ago.

Rex and Emelie gathered the information with the assistance of pioneer Reginald Iverson. Easy reading with great pictures...job well done.

HISTORY OF HAM RADIO

Members interested in the history of amateur radio can find no better source of information than the series currently appearing in "73" magazine.

The series was originally published in the QCWA Chicago Chapter news bulletin and is reprinted with excellent pictures in "73". I like to be 'picky' on historical articles...try and find misinformation...but to date, no luck.....Eric, W9CI, the author has done his homework well. (C. Z.)

JOHN STONE STONE

Now there is a name one doesn't forget easily -- and also one of which little is known. A brief biography of this early pioneer can be found in March issue (p. 55) of "Radio-Electronics" magazine. Written by Fred Shunaman, he tells about Stone's building and experimenting with wireless as early as 1892 for AT&T. He had a remarkable career lasting well into the 1930's. (See March OTB Monograph No. 4)

HISTORY OF A RADIO CLUB

There are numerous amateur radio clubs in the country with larger ones having a club historian. It is seldom, however, a club's history is recorded in book form. An exception is the York (Penna.) Radio Club which recently released just such a book.

A 68-page volume with attractive cover, it tells the history of the club from its founding (1932) to present day. Exceptionally well written with sharp pictures -- it is a goal for other ham organizations. Need I say that much credit goes to one individual? -- in this case, Bill Boyer, W3AMQ... (BK)
Australian Collectors

Fin Stewart writes he's the proud owner of a Marconi magnetic detector -- glass top and all! An addition to his tube collection is a rare Cosser AT-40, a transmitting tube somewhat larger than the "R" type. Another 'Aussie', Morris O'Brien tells of sending $50. for some material from someone in California nearly two years ago. To date: no acknowledgement or reply to his letter. Morris is very philosophical, quote, "Perhaps the poor chap has died?" (HO-ho-ho...)

More Complaints

On the subject of questionable business tactics... a "W7" up in Washington tells of ordering some material from a dealer (?) in Southern California... and waited, and waited. Finally, he dropped a note to his local newspaper "Trouble Column"... boom! Things began to fly... with quick results. Here's the trick, write your complaint (in California) to:

Division of Consumer Services
Complaint Mediation Unit
1021 "D" St., Room A-547A
Sacramento, Calif. 95814

This is a State Agency that doesn't put up with any nonsense. Fraud thru the mail is a serious offense. Another fellow in Oregon ordered a loop antenna last October and finally complained to the U.S. Post Office Department after his checked had been cashed and a long wait with no antenna. This approach also produced quick results... .

Last RCA Metal Tube

While dismantling the paint rack for shipment (June 14, 1976) to G.E.'s plant in Kentucky, the work crew at the old RCA Harrison Plant found the last tube on the "line" which someone had neglected to remove. A single 6S6. The tube was given to RCA Administrator John Thompson who in turn gave it to Bro. Pat (W2GK) as a souvenir. It is now in the AWA Museum.

GEORGE CLARK COLLECTION

As I type this column (which incidentally started as copy for "full") I received a letter from Elliot Sivowitch of the Smithsonian. He tells me there is a good possibility that he and Susan Douglas may attend the Conference and report on the fabulous George Clark collection. Clark was RCA's official historian and amassed one of the largest collections in the world -- both hard and soft ware. Susan Douglas (or should I say Dr. Susan Douglas, just received her Doctorate) has been cataloging 15,000 large glossy prints from the Clark collection. The prints, covering all phases of historical radio, were originally given to M.I.T. who in turn donated them to the Smithsonian. Let's hope they can be with us Sept. 27... 73, B.K.