Pavek - Deeley Score!

1969 HISTORICAL RADIO CONFERENCE REPORT:

-----Although the "meet" was highlighted with an excellent technical program, top award should go to Joe Pavek (W6OES) and Dex Deeley (W2KQI) for their fine and untiring handling of the old gear auction. These two fellows worked from 9 A.M. to 4 P.M. selling, recording sales and final accounting -- all without a break! Great interest was shown with all kinds of things going on the auction block. As an example: Brande phones- $2.00, A&B eliminator- $1.75, AK variometer-$8.00, ATT & T teletypewriter- $1.00, AK-10- $5.00, Century buzzer- $7.00, Radiola 26-$32.00, WE TA amp.- $22.00, RCA 103 spkr.- $5.00, Perikon detector-$31.00, Grebe Synchronoscope-$28.50, etc. Prices on tubes varied considerably--particularly since most had no way of telling whether they were good. The real deal on tubes however, was handled separately by those who had the good fortune of contacting Howard Schrader before the auction. Howard had a large supply of early European valves which were available quite reasonable. It was generally agreed that if an auction is held next year, some method must be made to streamline the procedure and not tie up Joe and Dex over such a long period of time. A trailer load of gear from Elmo Pickerill's estate was unexpected and dragged things out ....

PROGRAMMING: Feedback to Headquarters indicate those attending enjoyed and appreciated the hard work each speaker put into his "paper" or demonstration. Programming was quite diversified offer-

OUR HOSTS

Meet Nancy and Bob Merriam, W1NTE, who were our genial hosts at the Historical Radio Conference, Oct. 4-5-6 at their New England Wireless Museum East Greenwich, Rhode Island. Much of this issue reports on that great event

ing something for everyone. It was a thrill to meet and listen to Dr. Elman Meyers, radio pioneer and inventor. We secretly suspect the value of the Meyers Audion will go up as a result!

Programming was marred by only one incident -- the inability to demonstrate the Theremin, a large console model made for concert work. It was found too big and delicate to handle in the rear of Lauren's car.

Hollis Baird, television pioneer and manufacturer, gave an interesting ac-
count of the early days and finished by presenting a well deserved plaque to Roland Bourne, WIANA. Last minute need for additional seating at the evening dinner overtaxed facilities and created some discomfort but everyone appeared receptive and a good time was had by all.

ATTENDANCE: Members from NINE call areas and Canada were present including four W5's. A pleasant surprise was the appearance of old time historian and collector Paul Giganti, W6QVY, who flew in from San Carlos, Calif. Paul said he had a great time and may try and make the 1970 "meet" at Dearborn. Another pleasant surprise was Ken and Eunice Thompson who drove down from Lovell, Maine. They and others attended the well handled Friday Nite O.O.T.C. Meeting conducted by W6PSF and W6AX. Other notables attending: John Huntoon, Manager A.R.R.L. Bob Freed, Editor ELECTRONICS ILLUSTRATED magazine Elliott Silovitch, Smithsonian E.A. De Coste, Canadian National Museum.

In addition to W1KQ, the A.R.R.L. was represented by Technical Editor W6FY, YL Editor W6GEO and New England Director W1QY...and of course Curator WIANA. Bill Offenhauser represented the RADIO CLUBS OF AMERICA and Gus Garcia, W6JE, the QUARTER CENTURY WIRELESS ASSOCIATION. Tube collectors had the opportunity to meet the nation's top tube authorities: Jerry Tyne and Howard Schrader, The latter had a video camera on the scene and recorded the event for posterity.

Last, and most important of all -- the terrific job done by our host and hostess -- Bob and Nancy Merriam. This wonderful couple worked for month arranging and placing their facilities at our disposal. Nancy labored over the reservations and general paperwork while Bob knocked himself out getting things ready -- in fact, this fellow was working in the museum and the steam engines right up to the last minute.

It was well worth it since the radio and engine exhibits were exceptional.

Noteworthy was the pleasant and interesting program provided for the women. This proved to be outstanding from all reports...see you all at Dearborn in 1970...

73, W2ICE

---

**PEERLESS**

Radio Headset

United Radio Corporation, Mfg.

Calderonia Ave., Rochester, N.Y.

---

**Receiver Contest**

The old receivers entered in the contest at the National Meet were well above average and attracted much attention. One did not envy the judges for they had a difficult time making their decisions -- all entries were winners!

**RESULTS**

**CLASS I Best Homemade Regenerative Rx**

1st- Lauren Peckham (Glass enclosed, RF, det. es aud.)

2nd- Bruce Kelley (Aluminum case, tube base coils)

3rd- Bob Merriam (Wood panel, tube base coils)

**CLASS II Best Homemade RX (all types)**

1st- John Caperton (Golden leutz - two units)

2nd- Tom Rutherford (Stacy type)

3rd- Lauren Peckham (Leutz Model "C")

**CLASS III Best Homemade Crystal Set**

1st- Lloyd Jury (Replica Bowman Time Signal Set)

2nd- Ken Gardner (Original slide tuner type)

3rd- O.O.T.C. North-east Chapter (Modified type)

**CLASS IV Best Factory Made Receiver**

1st- Charles Brehsford (Grebe CR-7)

2nd- C.E. Clutter (Clapp-Eastham regenerative)

3rd- Stanley Johnson (Mercury Super)

**CLASS V Most Unusual Receiver**

1st- A.W.A. Museum (Marciniphone)

2nd- R. Loveland (Version of SE-143)

3rd- John Williams (Large loop compartment type)

Not seen in the pictures was an elaborate classic receiver demonstration in the speaker's tent setup by Russ Worthy. Russ proved that 35 year old equipment could compete with some modern hi-fi.

**NESCO**

Through the courtesy of Dick Ngolf, W2WX, A.W.A. now has a rare framed message blank (original) of Fessenden's old NATIONAL ELECTRIC SIGNAL CO. Little sheets of paper are usually thrown away -- but not this one... A.W.A. is grateful to W2WX for rescuing it.
Joe Pavek, W9QEP from Minneapolis, auctioning old gear. The event was held in a large spacious tent and provided great entertainment....

Radiola III

A VALUATION CONTEST at the Conference proved quite interesting to collectors. Bruce Boyd, W3QA, provided an original ballot box -- one which resembled the appearance of a Radiola III. Entrants marked on a slip of paper what they thought was the present dollar value of a real Radiola III. Of course there were a couple wise guys: One indicated $1 and the other $105. Totaling all figures and dividing by number of entrants revealed an average of $23 -- which is surprisingly close to what they are selling for -- this in spite of the 2 wild ones. Three entrants actually marked $23...

Freed Radio

The Conference Committee is already laying groundwork for next year's program and are off to a good start. Bob Freed, son of the founder of Freed-Eisemann Co., will present a rare movie taken in the late 20's showing receiver manufacturing 40 years ago. A test run of the film showed surprising detail for such an early production. Metal fabrication, long assembly lines, speaker manufacturing and the final packing -- all make a fascinating show. The final scene is a steam locomotive hauling away the loaded freight cars...

Bob, by the way, is Managing Editor of the well known magazine ELECTRONICS ILLUSTRATED which has published many articles on historical radio -- the latest being K4PT's Antique Receiver story in the November issue.

IT IS NOW OFFICIAL
President Batterson has received a formal invitation to hold the 1970 Historical Radio Conference at the Henry Ford Museum, Dearborn, Michigan, Sept. 26.

FREED-EISEMANN RADIO CORPORATION
JUDGING ANTIQUE RECEIVERS

Judge Chairman George Cranmer (W1DF), Thorn Mayes (W6AX) and Jack Gray (W6JDV) examining John Caperton's Golden Leutz which won 1st place in Class II.

John Caperton and Chuck Brelsford (K2WW) displaying John's beautiful Leutz...
Guest speakers admiring equipment entered in Receiving Contests. L. to r.: TV pioneer Hollis Baird, Inventor Dr. Elman Meyers and Program Chairman Bruce Kelley. Dr. Meyers has his hand on the CS-7 which won 1st Prize (IV).

Roland Matson (K1OKO) telling of problems in restoring old equipment. He is holding knobs molded by Yates Hoag. The large display at right represents some of Roland's work -- before and after. (photo by W2NX)
President W2GB and W8JDW examining some of the entries in the "Most Unusual Receiver Contest". W3KQH in far background and W2QY at right.

O.O.T.C. members get-together. l. to r.: W2KNW, K9MOA, W8JDW, W8ALW, W5KQH and W2QY.
Bob Freed (left) telling W2ICE about the movie taken in the old Freed-Eiseman plant. Bob Morris (W2LV) and Bruce Boyd (W3QA) listen in.

**CHARLES GROVER SMITH 1888 - 1969**

Dr. Smith succumbed in late June at Newton, Mass, in his 80th year. Although not well known in the field of radio in our communication sense, C.G. Smith was a pioneer in the field of gaseous electronics. He did much of the basic work in the 1920's which led to the Raytheon BA-BB rectifiers. He was very instrumental in leading the transition from battery to line operation.

He was born in Texas in 1888 and earned a BA at Texas University in 1911. Employed by Raytheon in 1922 after stints with the government during WWI and the American Radio and Research Corporation, he continued his academic career and was awarded a Ph. D. in Physics by Harvard in 1935.

Of his many patents probably the most recognizable to the radio buff is that issued August 7, 1928, and assigned to Raytheon. Prior to the issuance of this patent his scientific endeavors in the field of gaseous rectification were given public recognition and were incorporated into a full page Raytheon ad -- Dec. 1926 QST, page 77.

(Dick George, W2BRF)

THE BENWOOD CO., Inc.

---

**Silent Keys**

**WILL WEBER - K2EX, Buffalo, N.Y.**
Charter A.W.A. member and pioneer radio school instructor.

**BILL GASSETT - W8CRM, Dearborn, N.Y.**
Old time commercial operator and engineer in charge of Ford Radio station. Was instrumental in obtaining much of the historical equipment in the Ford Museum.

**HARADEN PRATT**
Well known pioneer and I.E.E.E. historian. Operator or engineer with United Wireless Telegraph Co., Marconi Wireless Telegraph Co., charge of all construction high power Naval stations WWI, charge of Federal Telegraph Co. design and construction, was with Bureau of Standards, Chief Engineer of Mackey Radio and Telegraph Co., etc.

**PHOTOGRAPHS:** With two exceptions, all photographs in this issue were taken by A.W.A. photographer Al Crum, W2BRK. Al started as a wireless operator with the old American Marconi Company in 1915. Present business: Photography!
Well known collectors examining an early crystal set held by Doc from Oklahoma. Roland Matson and Bill Laverty are at his left with Paul Giganti to his right.

FOOTHILL ELECTRONICS MUSEUM

12345 EL MONTE AVE. LOS ALTOS HILLS, CALIF. 94022

A new and wonderful electronic/radio museum is in the making and when completed will be the leading museum of its kind in the West and one of the largest electronic museums in the country. Located on Foothill College Campus, plans are to display rare equipment much of which is from the Douglas Perham collection.

The Foundation has an impressive list of officers and advisors including A.W.A. Member Thorn Mayes, W6AX. The Association will keep you informed of its progress and in the meantime might suggest if you are interested in promoting this worthy project either in funds or material -- write W6AX:

21120 Sullivan Way, Saratoga, California 95070

Crystal detector DX

Serge Krauss (Elkhart, Ind.) reports he now has picked up 15 states from New Orleans to Minneapolis and Texas to Boston on his old time crystal set. He uses an antenna only 50 feet long and 15 feet above ground...how about that!

MINUTES A.W.A. ANNUAL BUSINESS MEETING

held at Victor, N.Y., Nov. 9, 1969

Meeting called to order by Pres. Batterson. Roll call indicated 12 of 13 Officers and Trustees present. The minutes of the 1968 Meeting were read and approved. The Treasurer gave a detail report: As of Oct. 31, A.W.A. had $2024 cash in the bank, $495 property assets and $365 in tangible assets making a total of $2875. On the deficit side: $560 was listed as liabilities which consisted primarily of membership dues committed beyond one year.

The Board and members reviewed the By-laws which were amended and being sent to the Dept. of Internal Revenue. A motion by Larry Triggs, 2nd by Henry Blodgett that "Resolved, the By-laws read and discussed at the Annual Meeting held Nov. 9, 1959 be adopted." The resolution was passed unanimously by all present.

Three new committees were appointed by the President to serve a term of one year: Membership, Honor and Display. The nominating committee, consisting of W2YBK, W2UTH and W2KNHD then presented a slate of new officers and trustees. Since there were no nominations from the floor, the slate as presented was voted in unanimously. Names of officers, trustees and committee men will appear in the next Bulletin.
JOE RAYDEN (W4OEP) latched on to a real "goodie" - a Conn. T & E. Co. JR-3 receiving set using a varimeter in form of 2 pancake figure "B" coils and large "U" magnet (?) across the detector. The detector tube is missing which normally operates with four dry cells - no "B" battery!!

Everett Berry (Lansing, Mich.) now has 70 receivers (1) and over 35 speakers including several AK breadboards. He says it isn't too difficult if one does a little looking.

CHARLES HENRY (Chicago) confines his interests to books which now represents a sizeable collection. After much seeking, Charlie found Orrin Dunlap's "Story of Radio" - now a rare one.

PETE STORE (W4AR) an old timer down in Alabama, acquired a mint 3 tube Colin R. Kennedy at a local hamfest. All told, Pete has over 30 sets including Tuska and other difficult ones to find...

VERN THOMPSON (W4JW) has added another 100 tubes to his fabulous tube collection. Vern tells us he has many "dukes" which he will give serious collectors. Keep this in mind and if you plan to be in the area, drop him a line well in advance or a telephone call:

1403 South Fourth St.
Effingham, Illinois 62401

FRANK TURANO (Maryland) is a new member with some very interesting Marconi equipment. Much of his collection ties in with his father-in-law, an old Marconi operator who handled traffic during the Titanic disaster and relayed Admiral Peary's first message when he was at the North Pole in 1909. Some of the gear includes a Magnetic detector, pk transmitter, etc. - a good story for a future Bulletin.

DAVE HEMMERT (W9JWW) has a treasure. He is the proud owner of a book titled "Outline of Radio" - What's so unusual? On the inside cover is handwritten:

"For Reginald A. Fessenden with sincere regard of the author.
John V. L. Hogan, May, 1924"

WARRREN JOHNSON and DEL HUNT (W9JWW) had an exhibit of 60 pieces of early equipment at the Ft. Wayne Summer Festival. Del had a Regent 5 tube THF in operation and Warren an AK-10. Needless to say, it was a great show and the fellows ended up with a couple sets plus...

AL MARCY (W4ID) is still working hard on collecting magazines. Al wonders what ever happened to Milton B. Sleeper - prolific writer of the 20's. If in Florida this winter -- stop in and see W4ID. He has a fine collection of early gear too including some high power pk equipment.

GERREY STELLA (K4IKO) reports a successful historical celebration in his home town which included one store window full of antique wireless gear of which he helped setup. The passer-by could see RA-10, BA-2 Paragon, WWI crystal set, early BC sets, keys, etc. Wonder if display brought in any new gear - hi.

DOUG WORTHY (W4JW) had a terrific demonstration at the recent R.I. Meet. Doug proved that receivers, amplifiers and speakers over 30 years old could give some present day hi-fi components tough competition...

FRANK ATLET (W4PI) wants to know if anyone ever heard of a Bee Hive radio? He's not certain, but it may look like a miniature cone type bee hive.

FRANK MURPHY (W9JWW) located a nice Amrad basket coil type receiver, a 4 tube Hartman and several other "goodies". He's already making plans to attend the National Conference at Dearborn next year.

GEORGE BAY (Mechanicsville, Va.) is a new member who has a good start with some rare receivers: Paragon, CN-240, etc. All told he has over 25 sets not bad.

DAVE HUNT (W4ENZ) goes for commercial gear: IP-503A, SE-143, Kennedy 261, SCR-59, etc. Dave was one of the lucky ones to get in on W4AT's sale. *fb

GEOGE STARR (Latrobe, Pa.) adds a Grebe CB-5, several neutrodynes and some nice telegraph instruments on his shelf...of the latter was a rare resonator. Personal problems kept George from R.I. but he plans to make Dearborn.

FRY BASSILIANO (W9YRM) took another trip this past summer and ended up with 5 Grebes, QSTs from 1916, plus lotsa other stuff...
THALES BATE is a new member in St. Louis who has a keen interest in all kinds of radio gear -- particularly Kennedy. Good reason: Thales is a former employee of Colin B. Kennedy!

CYLDE THIVESTER (Ashland, Ky.) has been hitting the early stuff such as a huge loose coupler crystal set. The crystal detector had been replaced with an Audion detector made by The Radio Telephone Co. The "audio iron", by the way, had two good filaments....

GLEN ARDLE (KEYDM) hit the jackpot for early wireless: A Thordarson 1 KW spk xmr, Murdock OF, rotary gap, Federal GO,, and many other choice items...all this out in South Dakota...Ph Glenn...

JACK GRAY (WJJLV)-- in between writing books (!), Jack is adding a new section to his fine museum. Place Mason, Ohio, on your vacation itinerary next year, and see one of the better all around radio museums in the East. Be sure and write him in advance.

ROB LANE (Kansas City, Mo.) added any number of new sets to his collection recently. The best may be an early Voscophone made by Firco. Others include a Zenith Super VII, Grebe Syn., Erla, etc. Can't be much left in K.C. Bob!

PAUL THOMPSON (Santa Barbara, Calif.) has just about a complete run of Radiolas with a VII-B being the latest. Paul has six different AK breadboards not counting different types of Mod. 10.

JOHN CAPERTON (Louisville, Ky.) has 6 new sets of interest. He would like info on the W.E. 32-A transceiver -- anyone help him ?

GAY EWING (Bresepport, N.Y.) had a neighbor drop off a little box while he was out. On return he open the box and found a mint Radiola II with original tubes...that's the way to get them!

NEW GEAR IN A.W.A. MUSEUM

TUBES: W2FCK, W2SNN, Grote Beber, Bruce Balston, Howard Schaad, Everett Berry, John Caperton.

RECEIVERS: W2NNX

MIXERS: W2GFC (Cornell Univ.) W2NXX, W2QNNX

WRITTEN MATERIAL: W3QBN, W2WX, John Haggerty

CRYSTALS: W2NXX


FROM HEADQUARTERS

A.W.A. REFERS OLD GEAR FOR SALE

The Association is unique -- it is the only historical radio group of its kind. This results in many letters from people wishing to sell equipment for cash. They include attorneys closing estates, widows, antique dealers and so on. Present practice is to refer them to the nearest A.W.A. member known to be interested in purchasing such material.

On rare occasions, equipment must be purchased immediately. (i.e. -- brought to A.W.A., local flea-market, etc.) On such occasions, with approval, the object is purchased by the club. If it is a duplicate, it will be auctioned off to members. An example was the Benwood gap sold at the Dearborn Meet -- the A.W.A. added $10 to its treasury and a member was made very happy...

We try to minimize this practice because it makes more work for our auditor when going over the books for the annual report...and besides, we're not in business buying and selling...so do not be surprised if you receive a telephone call or letter saying they have old gear for sale with A.W.A. for reference...

WRITING A.W.A. ? SEND S.A.S.E.

When writing either Treasurer Gundall or Secretary Kelley, how about enclosing a self-addressed stamped envelope if you expect a reply ?

This would save them both time and money. The volume of mail has now reached the point where it is difficult to handle correspondence with members and impossible with non-members...letters from the latter are filed in the wastebasket...sorry, members come first.
GOOD READING

MARCONI AND HIS SOUTH WELLFLEET WIRELESS - - - -
tells about the first high power wireless station in the United States located on Cape Cod. Built in 1901, it was phased out during WWI. The booklet is good reading plus technical info.

South Wellfleet is now a National Park and is marked by this small building which houses a replica of the original station made by Fred Parsons, W2EXM. A playback tape allows the visitor to listen to the preambles of old WOC. The tape was presented to the Park Service by A.W.A. with Irving Vermylen, W1ZE (former station manager) doing the sending. Interested? Send 75¢ plus postage to:

CHATHAM PRESS, INC.
Box 281
Chatham, Mass. 02633

(Photo by W2NX)

NEW FUN FROM OLD RADIOS by Frank Atlee, K4PI, ELECTRONICS ILLUSTRATED magazine (Nov., 1969) -- -- --

Frank does a bang-up job telling about our hobby of collecting old radios. The article is well illustrated with many pictures taken of A.W.A. member Ralph William's collection. Pb copy.

TELEGRAPH HISTORY - the amateur historian in search of early landline info should try and find the March, 1931 issue of RADIO ENGINEERING magazine where there is a lengthy and well-illustrated article on the subject. The author goes into some detail on pre-Morse signaling methods such as semaphore, multiple wire indicators, etc. He concludes with the latest techniques (1931) employed by Western Union.

ELECTRIC SPECIALTY CO.

The Maiden Voyage

Any author who tackles the Titanic tragedy faces a problem. He cannot simply separate legend from fact; the unsinkable Titanic was built to be a legend, and this was the central fact that led to her death. The trivia, the conceits, the illusions of the Gilded Age are a part of the story; they can not be ignored, and many writers have been swamped by them.

In addition, most historians dwell on the ship and its passengers and overlook one of the most significant details: it awaken the world to the value of wireless.

The author, Geoffrey Marcus, has compiled the best book written on the ill-fated ship. He tells of its regal appointments: There was an army of stewards, valets and maids on the TITANIC, but not one spare crew member to carry an urgent ice warning from the radio room to the bridge.... The TITANIC had Turkish baths and trellised verandas, but not enough lifeboats for more than half the people aboard. The pantries were stocked with fine wines, but the binoculars were missing from the masthead, where the lookouts scanned the sea for icebergs.....

To the radio historian -- THE MAIDEN VOYAGE offers the best account yet given of the role played by wireless. The 706 people who did survive mainly to radio and the TITANIC'S two operators, Jack Phillips and Harold Bride, all made history. It was the distress call that brought the liner CARPATHIA racing to the scene, too late to rescue swimmers but in time to rescue survivors in lifeboats.

The book includes photographs of the Marconi wireless equipment and a good deal of interesting detail about the training and lives of the operators. A terrific story (320 pages) that should be read and placed on every member's bookshelf for reference. The book first came to our attention in a book review in the SATURDAY REVIEW (including quotes) It is published by VIKING PRESS for $8.95 and may be ordered from your local bookstores.

OLD ADS that appear at the bottom of a page now and then are "fills" -- a means of filling up space. It saves juggling copy and reminds the reader of the old days....OK?
Gift to Smithsonian

By now most of you know some of the TV pictures from the Appolo missions used a version of the old scanning disc for color. Joe Marsey, W2EMX, ably demonstrated such a setup at the recent Historical Conference. Of particular historical interest is the ORIGINAL equipment used in developing the system is now being readied for permanent display at the Smithsonian Institution. Pictured is C.B.S. Dr. Peter Goldmark, Hungarian born physicist-inventor with his original "field-sequential" color system taken in 1940. His first successful color TV broadcast took place Sept. 4, 1940 atop the Chrysler Building, New York City, using the rotating disc with three colors: red, blue and green. Call letters were: W2XAB. Dr. Goldmark is President of CBS Laboratories, a division of the Columbia Broadcast System. Readers might also be interested in knowing that Dr. Goldmark was instrumental in developing the LP record which scooped RCA...sort of a give and take proposition......RCA scooped CBS on the final color system.

A.W.A. NOW SPORTS NEW BANNER

--- Members attending recent A.W.A. functions have had an opportunity to see the Association's new 4 x 6 foot felt banner hanging conspicuously for all to see. Having no club colors, the Committee selected dark yellow letters on very light blue background. We hope you like it.

HUGE INSULATOR-- now at A.W.A. Museum.
(Gift of Jack Allison, Commack, N.Y.)
The antenna insulator is over 5 feet long, 8 inches in diameter and takes 2 men to lift it... We understand it was once used at RCA's huge installation.

Tesla

A recent query from Gale Research Co. concerning the TESLA SOCIETY reveals the organization became defunct in mid-1967 after 14 years of operation. It was originally founded to coordinate activities in connection with observance of the Tesla Centenary in 1956. (Tax Lee Anderson)

Rocky Point, N.Y...maybe on the Multiple tuned VLF antenna. AWA owes both Jack and W2AFE (who transported it to Holcomb) a great big THANKS for an unusual gift....
OLD TIME ADS are free to members.
Material must be over 25 years old.
Please write ad on SEPARATE sheet of paper and be sure and give your name, address and Zip code. If you "want something"--better results are obtained if you have something to swap. The Association is NOT responsible for any transaction...

SWAP--or pay cash--need the books "The Ocean Wireless Boys on the Ajax" or "Tropic Queen". No other books required. Ted Woolner, WAIABP, 139 Beverly Rd., Worcester, Mass. (5)

SELL or TRADE: Redola speaker 103, cone type, octagon frame, needlepoint face. Reasonable offer. John Elder, 15 Churchill Rd., Pittsburgh, Pa. 15235

SELL or TRADE: QST's from 1916, call books from 1921 as well as large stock of handbooks. I want old receivers, books, magazines, etc. Erv Rasmussen, W6XPM, 164 Lowell, Redwood City, California, 94062

WANTED: Transmitting condenser .01 at 25,000 volts for spkr transmitter. Also need 3 Grebe sockets, 2 Grebe AF trans., 1 dual variable condenser for Kennedy 220 and tinned bus wire. Glenn Angle, KXVOM, Clear Lake, South Dakota 57226

FOR SALE: Canadian collectors: WWI Radiola, 1265 model radios to 1930 listing 865 manufacturers of about 6,500 model radios to 1930 giving date, model #, name and price, # dials and tubes, power and circuit. Duplicates for $3.75 pp. Robert Lane, 2603 Independence Ave., Kansas City, Mo. 64124

SELL or TRADE: RCA Model 59 10 tube Deluxe superhet radio combination with carbon mike. Walnut cabinet, 1932 mod. Everett Berry, 1919 Real, Lansing, Michigan, 48910

WANTED: Transmitter transformer for Paragon RA-10. can you help me? Clyde Trivette, 1500 Beverly Blvd., Ashland, Ky. 41101

FOR SALE: "Popular Electricity" (1909 and 1913) magazine and others. Also Hawkins' Electric books. Write Dick Johnstone, K6FZ, 67 Heather Way, Larkspur, Cali., 94939

SALE: Antique Redrite resistance and capacitor tester made in late 20's. Converted for AC use. Good condition. Many attachments. Best offer in cash or swap. Frank Atlee, K4FI, 92-31st Avenue, St. Petersburg Beach, Fla. 33706

FOR SALE: Brass knurled, capwing, slotted, castle, square, nuts -- very similar to Ye Olde Tyme Nuts. Brass machine, wood, screws, bolts, fully threaded rods, hex nuts, washers, etc. Many Naval, Silicon, Bronze threaded washers--also same in stainless steel. Write: Walt Straesser, W8BHY, 23716 Brierbank Court, Southfield, Michigan 48075

WANTED: Schematic for AMRAD 5 tube neutralode Ser. #1010. Have numerous sets, parts, etc. to swap. Let me know your needs. Del Barrett, 1517 Pacific Dr., Ft. Wayne, Ind. 46809

WANTED: WWI Aeroplane transmitter Type BC-L3A (SHR-65-A). Have material to swap. Dave Hunt, 2394 Castillojo Way, Fremont, Calif. 94536

WANTED: To complete OLD TIMERS BULLETIN file--Vol. 1 #2 and 3, Vol 2. #1

Sell or swap: De Forest Sanabria 7" oscillator complete in working order. Walt Cleland, 1262 Holly Drive, Richardson, Texas 75080

FOR SALE: about 100 typewritten sheets listing 655 manufacturers of about 6,900 model radios to 1930 giving date, model #, name and price, # dials and tubes, power and circuit. Duplicates for $3.75 pp. Robert Lane, 2603 Independence Ave., Kansas City, Mo. 64124

SELL or TRADE: RCA Model 59 10 tube Deluxe superhet radio combination with carbon mike. Walnut cabinet, 1932 mod. Everett Berry, 1919 Real, Lansing, Michigan, 48910

WANTED: Wilcox-Gay disc recorder made in 1940's. Must be complete with mike. Have AK Model "N" horn speaker to swap. Gaylord Ewing, Box 308, Breesport, N.Y. 14816


WANTED: 130 degree carbon resistance for battery control on 1060 receiver. Selwyn Blake, 186 Summer St., Andover, Mass.


SELL or TRADE: Sw-3 with two sets of coils. Also have Hammerlund Comet. Make offer. John Drake, Box 507, New Canaan, Conn. 06840

For Immediate Delivery

CLAPP-EASTHAM HR
REGENERATIVE RECEIVERS
While on vacation this past summer I happened to be in town where Alfred P. Morgan once lived. Having some time to kill, I took a chance and picked up the telephone book and ran my finger down until I hit A. Morgan. Having nothing to lose, I dialed the number and a woman's pleasant voice answered. I asked if she were related to one time radio pioneer, author and manufacturer by the name of A.P. Morgan. She assured me she was. It was her husband and would I like to talk to him?

To make the story short -- I spent an enjoyable afternoon with the couple. A.P. is now 80 and has a slight loss of hearing. Other than that he was chipper then ever and recounted many anecdotes of the past: his work with Gernsback, de Forest, Godley and other famous pioneers. He spoke of how he started the ADAMS-MORGAN CO. while still in school, built an airplane when only 19, attended MIT and Columbia, patent litigations, etc. He proved to be a fascinating fellow with a bit of wit.

Although most A.W.A. members associate Morgan with his manufacturing company (Paragon RA-10, etc.), others owe this pioneer credit for their start in radio for it was his book THE BOY ELECTRICIAN that ignited the spark!

Plan E.L.F. Sub Signals At Radio Frequency of 7 Cycles

In spite of the big public row over the Navy's Project Sanguine - the gigantic Extremely Low Frequency transmitter and antenna network planned for the upper part of Wisconsin - it would seem that the project will be carried out someplace or other, in spite of the Navy's preference for the soil bed/rock conditions of Wisconsin. Plans call for a 140 by 150 mile network of wires buried six feet for an effective operating mode of an antenna 10 miles above ground!

Basic circuitry for the transmitter was developed by German Scientist W.O. Schumann and will operate on 7 cycles. We repeat: 7 cycles R.F.!!! At this low frequency a submarine will be able to pick up signals at a depth of 1500 feet almost anywhere in the world.... Think we're crazy? See page 104, September, 1969 issue of POPULAR SCIENCE magazine.....
Grote Reber Talks Space
At August AWA Confab

54 members and friends attended the regular August meeting at Holcomb with most taking in the dinner at the nearby Holloway House. Here they had an opportunity to listen to Guest Speaker Grote Reber, pioneer Radio Astronomer from Ohio State University. Grote spoke briefly of his work in Tasmania and indicated it tied in somewhat with the "steady state" theory of the Universe.

Several members brought equipment for display or swap including George Warder who rigged up an old Federal (in mint condition) and had it playing. George believed in authenticity -- wet storage battery and "H" batteries! Of particular interest to the "gang" was a short talk by Yates Hoag who showed and told how he made replacement knobs for old receivers. Yates actually makes a mold and ours in the plastic.... He finds it very difficult to restore the silver on Kennedy dials -- result: he makes new dials as good if not better than the original! The group spent much time in the club's museum admiring the many new pieces recently acquired which included several oddball keys....

FAULT FINDER

A good tip and simple expedient in trying to get an old A.C. set in operation is to clean the tube contacts. This is especially true with high current low-voltage tubes such as 24's and 27's. One of the easiest ways of doing this is to work the tube up and down a few times in the socket. This cleans both the prongs and socket contacts. An old ERD using 57's and 58's was tried out recently at AWA and found to perform poorly after having been left on the shelf for several years. A 2 minute operation as described made one of the hottest receivers we had listened to in some time....

TABLE OF CONTENTS

Volume 10, No. 4 will contain a complete index of all material printed in the OLD TIMERS BULLETIN for the past 10 years. This should be of great value to historians who plan to bind their series for reference.

The Omnigraph Mfg. Co.
K6FZ, Dick Johnstone, President of Society of Wireless Pioneers, admiring rare wireless gear at the Society's Walnut Creek (Calif.) Picnic. Well over 100 attended the gathering including pioneers from Arizona and the state of Washington. Seen in the foto is a Marconi Magnetic detector, U.W.T. Type "D" tuner, American Marconi receiver 103/107A (1913), an USN SE-1420 and many other "goodies"--all part of Thorn Mayes (W6AX) collection.

Collins Radio Will Supply NASA Antennas

Ever wonder about the large antennas used in various space programs such as Apollo and the future Viking project to Mars? A key antenna at present is located at Barstow, California. It is a 210 foot diameter dish mounted on a 5,000 ton re-inforced concrete pedestal. The success of its operation has prompted the government agency to order two more from Collins Radio at an estimated cost of $20 million. One will be located near Canberra, Australia and the other at Madrid, Spain. They should be operational by 1973 and may assist in possible missions on Mars in the 1980's. Remember when Marconi and others thought they heard signals from Mars back in the early '20s? Antennas in those days were long wires and long wavelength.

Radio Story--will appear in the next Bulletin. A true account of one of the more unusual hams stations of the 20's. W3HI has volunteered the illustrations.

Air Force Museum Seeking Pre-WW II Aircraft Gear

WRIGHT-PATTERSON AIR FORCE BASE, OHIO

This museum is the specialized type, it being the largest of its kind in the country. Located just outside of Dayton, it houses one of the most interesting exhibits imaginable--over 100 planes from Kittyhawk to latest research jets. Admission is free daily 9 A.M. to 5 P.M. Why are we telling you all this?? Simple. They are looking for pre-WWII airborne communication gear from the period 1920 thru 1940. Items donated are tax deductible. A good cause. Write: Blair Brown, Chief, Material Division Wright-Patterson AFB, Ohio 45433

LONG DELAY "COSMIC" ECHOS

Reviewed from R.S.G.B. magazine: RADIO COMMUNICATION, Aug. 1969 issue

A very revealing and seldom mentioned subject: the strange phenomena whereby SW signals have been known to echo back to the sender with delay times between 5 to 15 seconds indicating tremendous distance (?) for the echo. As an example: In 1932 WSADP was working the well known Belgian station OM2AU on 28 mc. Turning off his CW xmt and listening he had the eerie experience of hearing:......

"OM2AU de WSADP K"

A.R.R.L. and other groups are interested in this un-explained phenomenon with many observations dating as early as 1927......

WORLD'S LARGEST AUDIO SYSTEM?

Remember in the old days when the 120 and 112 audio output tubes were announced?--real high power !!! --- but what a comparison to the newly installed p.a. system at the Indianapolis Speedway which requires about 10,000 watts to operate -- ! This system pumps audio into over 300 large speakers (horn) plus dozens of smaller ones in the tower, offices, etc. covering altogether 537 acres. Powerful? The horn speakers at the track have to be set loud enough to overcome the roar of the racing cars and be heard by hundreds of thousand racing fans.
Bootleg Tubes

I have always been curious about ads in old time magazines and newspapers promoting sale of oddball tubes and tube repairs. I was only "taken" once, this back in 1938 when I went into a small shop on Cortland Street and purchased an unlabeled oversize 210 for only $3.50.

I was a little hesitant because $3.50 was a lot of dough in the depression years but the proprietor assured me it was a real buy since it would take a greater load than the conventional 210. Perhaps it would -- but not for me! No matter how I adjusted the circuit it wouldn't draw over 20 mils with 600 volts on the plate and my flashlight loop indicator barely glowed when I pushed it into the plate coil.

Having learned my lesson, I stayed away from all oddball makes and in time forgot my experience until the other day when I happened to be thumbing thru the December, 1924 issue of RADIO magazine. On page 10 was an article titled "On the Trail of the Tube Sharks". It seems the author spent some time visiting and tracking down many "ads" claiming repairs to burned out tubes for a fraction of the original price. This was when the average receiving tube sold for around six bucks and a set for a conventional neutrodyne cost $30.

In many incidents the author couldn't locate the "hole-in-the-wall" shop since they operated only by a P.O. Box #. I might add he confined his exploring to Metropolitan New York and Newark. When he did locate one-- it was usually manned by only a couple people in a backroom somewhere. Equipment was invariably crude and frequently setup in such a manner they could pullup and move out over night.

Their method in repairing a filament was extremely crude and they tended to shy away from the more difficult replacements such as a WD-11. It appears there were several methods to repair a tube including the "top-end" approach where the clever bootlegger would burn out the upper end, replace the filament, re-seal, pump exhaust and bombard. Original RCA 201's would look like new except the noticeably large top tip.

Speaking of "bombarding" the tube, which is the final operation-- a method to get rid of accumulated gases (otherwise the tube would go soft), some rather clever methods were used. The trick was to get the tube real hot while it was still on the pump. One method was to use a WWI surplus 500 cycle 2 KW quench gap spark transmitter.

First one obtained a 110 AC/110 DC WD set. This would drive a 110 volt DC 400 cycle 500 watt set which supplied the power for the spark transmitter. The RF output was coupled through several turns of wire wrapped around the tube. When this ingenious (?) arrangement was fired up, the tube would get real hot and I imagine so would anyone listening in within a mile radius!

The author not only visited "repair" shops, but also bootleg manufacturers most of whom sold tubes of questionable quality -- and characteristics. He concluded by saying there were a few legitimate ones but the vast majority were a bunch of crooks.

---- Kelley, W2ICE

Many Dealers Are Offering Worthwhile Antique Gear

Several members have sent A.W.A. lists itemizing old gear for sale by non-AWA members. One appeared quite interesting from a JOHN WALKER of Nego Park, N.Y. which listed many rare receivers, etc. well below present going prices. Anyone dealt with John Walker? Another flyer was received from Samkofsky who appears to be in the business commercially since he also listed modern gear for sale on a large scale. Of special interest were large quantity of tubes: W.E. VT-5's @ $1.35, UX-200's in orig. box @ $1.50, Blue Arcturus tubes @ $2.50, etc. We have not bought from these dealers so cannot vouch for them. Suggest you send the latter a S.A.S.E. and ask for his latest sales sheet:

SAMKOFSKY
201 EASTERN PARKWAY
BROOKLYN, N. Y. 11238

Also keep in mind that Barry Electronics, John Meshna, Arcturus and other surplus dealers also list old tubes. For old gear -- pick up a copy of ELECTRONICS ILLUSTRATED which now publishes an "Antique Electronic" buy/sell/swap column. much of the equipment listed in the last copy we saw appeared to be of 1930 and 1940 vintage...nothing real old.
The Cape Henlopen installation where Jack Widmyer was stationed located on the beach about three miles from the town of Lewes, Delaware.

1918
Radio Compass System

At the time of WWI, there were three Naval radio compass stations at the entrance to Delaware Bay. The station at Cape May was the control station with the other two at Cape Henlopen and Bethany Beach. A.W.A. Member John Widmyer, ex-3CD, was assigned to Cape Henlopen during the war and left active duty in July, 1919. He tells of its operation:

"A 24 hour watch was kept on a special wavelength reserved for radio compass work and which I think was 300 meters. When a ship wanted its position, it would call Cape May. After alerting Henlopen and Bethany Beach, they would request the ship to send a series of V's. After a bearing was obtained (degrees from north), Bethany Beach would transmit their reading by land wire to Henlopen who would then transmit both readings to Cape May by radio. After plotting these results, Cape May would then inform the ship its position."

BOOKS OUT OF PRINT:
Two excellent books covering early radio are now out of print. Both were reviewed in OTB within the past few years:

"On the Early History of Radio Guidance" by Benjamin Miesner

"History of Communications-Electronics, U.S. Navy"

U.S. Government Printing Office

The loop antenna. At first the wire was wound in a form of a box around the outer parallel bars. Later, a Lt. Peterson from Washington suggested the pancake type as noted which proved superior. From then on it was known as "Pete's Peerless Pancake Finder". The antenna was rotated by the operator in the room below until the signal strength was at a minimum.
Communication with Cape May was with this 1/2 KW quench gap transmitter. It was located in a shack about 1/2 mile from the receiving room. A conventional flat top antenna was used. Power was obtained from a bank of storage batteries which was kept charged by two gasoline engine driven DC generators. AC was supplied by a motor-generator set located just below the transmitter. It was controlled by a power relay.

A.W.A. MEMBER FORMER P5TZ -- Much to our surprise we recently found out that A.W.A. member Janice King, W6TPI, was formerly licensed as F5TZ. Of greater interest, however, is the fact she was the FIRST American woman ever to be licensed in France under the reciprocal agreement. Janice is the daughter of W2AFE and can be heard regularly on most bands -- you guessed it -- operating CW!

SAGA OF THE VACUUM TUBE
Paul Thompson reminds the group there are TWO sections to Part Nine of Jerry Tyne's history of the vacuum tube. The first part is in the November issue and the second part in December 1943, RADIO NEWS magazine.

The receiving position at Henlopen. Although not identified, the receiver looks like an old Navy job with crystal detector and buzzer adapted for vacuum tube use since one can see a detector and 2 step audio at right. At far right is the wheel which turned the directional loop antenna. This room, incidently, was completely enclosed with copper screen to prevent any distortion in the receiving pattern of the antenna directly above.

THE KENT MUSEUM
Calais, Vermont
by Bill Lightfoot, W1PID

Known to few is the KENT MUSEUM, a small museum located up in Vermont. The building was built in 1833 and was originally intended as a hotel. The last Kent owner died in 1916 after which time it changed hands several times. One day in 1928, the owner decided to knock off several chimneys. A Kent descendant living nearby protested and in 1930 Mrs. Ira Rich Kent purchased the building bringing it back into the Kent family again. With the help of Atwater Kent (of radio fame) the beautiful building was restored and in 1953 given to the Vermont Historical Society as a public museum.

It is an excellent example of colonial architecture with original Americana furnishings. Of particular interest is the Arts and Craft Shop. All items sold are made by senior citizens during the winter months. Old radios ?? I'm afraid the radio visitor will be disappointed since all I could find was a Model 10 breadboard and a Model 20. I might add the season is very short -- open only in August and September, however, plans are to extend visiting hours.
We've been trying to drop this one but just can't seem to win. Maybe the answer would be to poll members. The HERROLD story in the June issue drew much criticism and just about when things were quieting down, Perry Ferrell, Editor of POPULAR ELECTRONICS magazine, called our attention to an article in the E.B.U. REVIEW, a magazine published by the European Broadcasting Union and printed in Geneva, Switzerland.

The March, 1969 issue printed an extremely well documented article titled "The Birth of Broadcasting" by N. Tj. Swierstra which states the first REGULARLY BROADCAST broadcast in the world was made Nov. 6, 1919 by a young Dutch engineer, Hanso Idzerda over PCGG at the Hague, Netherlands.

Two VERY important things should be noted:
1. The station was AUTHORIZED by the Dutch Government and a CALL LETTER assigned Aug. 14, 1919, for the purpose of broadcasting to the general public.
2. The regular broadcast schedules (programs) continued and were announced in ADVANCE...(published in a Dutch newspaper and magazine)... The equipment, by the way, was not crude arcs, etc. used by early experimenters, but a modern transmitter of the time ---- a tube job using valves manufactured by the Phillips Co. at Eindhoven.

Most agree that all broadcasts prior to WWI were of questionable character and duration -- this would include stations not officially authorized to broadcast entertainment, stations with uncertain programming (not regularly published in advance in a public news media, etc.). There were many pioneers in this category including Herrold, de Forest, etc. In this group, most historians agree that Reginald Fessenden's musical broadcasts and announcements at Brant Rock in December, 1906, constitute the FIRST BROADCAST. This is a hard one to beat...

The "purists", however, do not accept Fessenden and other pioneers. They contend these early broadcasts were of experimental nature, never intended primarily for the listening public and, only a few experimenters received the transmissions. The definition of a regular broadcast station would then be:
1. A station that has been authorized by the government to specifically broadcast news and entertainment and nothing else.
2. A station with authorized call letters.
3. A station that prints in advance programs in newspapers similar to other forms of entertainment and public service.
4. A station that maintains a regular schedule over a lengthy period of time.

Under these rules and accepting published evidence, it would appear PCGG could very well be the world's first regular broadcast station preceding American stations KDKA, WWJ, etc....

This tube is slightly different than some since the anode is smaller in diameter and bulb proportions elongated. Its the real thing however, for etched on the glass is:
"Royal Eliswan, Fleming Oscillation Valve" 4 volts

Believe it or not, but according to the lucky owner (Bob Middleton, San Ramon, Calif.) the filament is still good!

AWA Nets
Phone: Every Sunday -- 12 noon Approx. 3906 Kc. AM or SSB
First Tuesday each month 7:00 P.M. E.S.T. Approx. 3870 Kc. AM or SSB
CW: First Wednesday each month 8:00 P.M. E.S.T. 3580 Kc.
(Note new frequency for Sunday Noon Phone Net)
This will be a new column in our Bulletin. Members currently restoring old equipment frequently solve their problems with some real original ideas—so how about dropping a short note to Kelley telling what you did so it can be passed on to others. We'll start with open audio transformers—an ever lasting problem. Here are a couple good ideas:

**JOHN CAPERTON** (Louisville, Ky.) has found an easy way to get the impregnated winding out of the metal case. Suspend the transformer slightly above the bottom of a container filled with white gasoline (or real cheap gas with minimum lead). Remove after 3 days and you will find the gasoline has completely dissolved the pitch. This eliminates the messy heating approach.

Once the clean core/winding is dry—determine where the opening is. If it is a poor solder connection your problem is over—but if it is an open winding, then you have work ahead.

If you don't wish to re-wind, **CLYDE TRIVETTE** (Ashland, Ky.) suggests you purchase a new transformer from ALLIED RADIO. Stock No. 54-A-2062 is a neat little one with ratio 3 to 1, 7000 to 20000 ohm windings. He found it slid neatly into the original transformer case from an AK-10. The same core also fits early Crosley and Radiola III cases. Price: $2.21 (page 331, 1970 Allied catalog)

---

Montreal—California

(More than 2500 Miles)

On One Myers Tube

Remarkable radio reception is an every-day result with MYERS TUBES. Mr. W. E. Gerrard, 73 Pine Avenue, St. Lambert, Montreal, Canada, using only one MYERS TUBE, hears KDZB, Bakersfield, California.

Get distance with clarity. MYERS are the only tubes correctly designed for radio without bunched leads. Two types—for dry or storage battery. Insist on MYERS at your dealer's—otherwise send purchase price and be supplied post-paid. Write for free circuit diagrams.

$5 EACH, complete with mounting clip ready to mount on your set; no sockets or extra equipment required.

---

Dr. Elman Myers, inventor and manufacturer of the Myers Audion, is still in research. Several AWA members attending the R.I. Meet had the good fortune of seeing his latest invention which is a new approach to third dimension—a curved mirror reflecting a dimensional image. The results are quite startling.
THE MARCONI WIRELESS,
THE MORSE TELEGRAPH,
AND THE BURNING BRIDES...
by Capt. Richard Johnstone (Ret.) K6FZ
(former KPH Opr. San Francisco)

Here fellows what could be termed, a
story, a narrative, but better still,
just a plain bit of communication HIS-
TORY, probably unknown by many, and
forgotten by most...

The action took place, let us say,
from 1914 thru 1917, and, as this is
written in 1969, half a century has
gone by the board.

During those years Japanese immi-
grants were permitted to enter Cal-
ifornia in limited numbers so to work
as farm hands and laborers. They flocked
to agricultural areas and were soon
in great numbers all over the state.

But alas, something was wrong ----
someone had overlooked a detail or two.
There was a problem. This problem was
readily solved by using the "mails" to
procure the females.

In the Japanese homeland, women who
desired to come to California, sent
their pictures to prospective California
farmhand bridegrooms of Japanese an-
cestory. The recipient of the picture
would immediately make arrangements for
the "picture-bride" to take passage on a steamer and to notify him by wireless
when her ship would arrive in order
that he could meet her at the dock in
San Francisco.

At that time the Pacific Mail Steam-
ship Company had seven large liners
plying between the Orient and San Fran-
cisco, namely: SS MONGOLIA (WWH),
SS MANCHURIA (WWK), SS KOREA (WWK),
SS SIBERIA (WWJ), SS CHINA (WWA), British
SS NILE (VRE) and SS PERSIA (WW-MBS).

The Japanese Steamship Line, Toyo
Kisen Kaisha, had four liners on the
same run: SS SHIYO (JSH), SS TENYO
MARU (JTY), SS CHITO MARU (JCT) and the
SS NIPPON MARU (JNF).

The "picture-brides" took passage
on these liners. At least one ship a week
would arrive in San Francisco with 100
to 200 brides-to-be. Each bride followed
the explicit instructions of the pros-
ppective hubby and filed a wireless mes-
gage as soon as the ship left Honolulu
for the coast stating when the ship
would dock in California.

The addresses and signatures were of
course Japanese. This sample will give
an idea:

<table>
<thead>
<tr>
<th>TO: HIROKATA MAKOTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOX 7XB</td>
</tr>
<tr>
<td>DINUBA (CALIF.)</td>
</tr>
<tr>
<td>ARRIVE TUESDAY COME</td>
</tr>
<tr>
<td>(Sig) NIKCO</td>
</tr>
</tbody>
</table>

All of the ships in those days used
spark wireless equipment and crystal
detector receivers. The messages were
sent to the Marconi KPH station at Hill-
crest, San Francisco.

Sometimes it would take two or three
"midnight to eight AM watches" to clear
this traffic as other ships had messages
too. It was a long watch with frequent
interference and atmospheric disturb-
ances.

This was a big weekly chore for KPH
operators, who, after accumulating the
batch of traffic, then had to send each
message to the Western Union downtown
San Francisco office. The KPH Western
Union call was "PH" and we would give
the "SF" operator notice to make up a
book as 90% of the "picture-bride" mes-
gages had the same text and in each case
from the same ship.

Considering the handicap involved:
fading of the ship's signals, atmospheri-
and man made interference, the re-trans-
mission three times (!) from the ship
to point of delivery, few were undeliv-
ered and very few required the GBA ser-
vice. (Give Better Address)

This was indeed an unusual experience,
perhaps unknown and also forgotten by
many over the years. I certainly cher-
ish the memory of my participation as a
"midnight-to-eight in the morning oper-
ator" at the old Marconi Wireless station
KPH and the never to be forgotten clickety-clack of the Morse sounder
with its tobacco can amplifier -- a
fascinating sound, seldom, if ever
heard today on commercial communication
circuits.
Shades of 1929
Wall Street

Copy covering the radio industry after the 1929 Wall Street Crash in the last OTB provided much interest among members. As a followup, Bob Bleiberg, Editor of BARON'S stock market paper, has given us permission to use the following material from his paper (Sept., 1969). We're sure the amateur radio historian will find what happened to Kolster Radio of value. (Tnx J. Garcia)

Radio Static

Stocks of newly established radio manufacturing companies had led the market upward during many a rousing day in 1928 and early 1929 and had repeatedly set off recovery rallies in the entire list. Their plunge was, therefore, all the more unexpected, Calrorey Radio, selling at 80 times earnings, dropped from a high of $177 to 15 (in 1932 it sold at 21/4). Grigsby-Grunow, priced at 93, fell to 14 (it sold at 3/4 in 1932 and was bankrupt in 1933). Raytheon Manufacturing, operating at a slight deficit in 1929, sold at a peak of 81 and sank to 18 in the break (and to 9/2 in 1932). Zenith Radio selling at 23 times earnings broke from 62 to 6 (it sold at 2 in 1932 and did not equal its 1929 high until 1951).

The story of Kolster Radio merits some detailed consideration. The stock, which was issued to the public in 1927 at $20 a share, possessed those characteristics which would make it a prime candidate for inclusion in the portfolios of today's "performance" funds. It was thinly capitalized (under 800,000 shares were outstanding).

Management exuded optimism at all times and repeatedly issued statements to shareholders and the press about the glowing future for the company and for the radio industry. The stock had a strong "enticement" aura which attracted speculative buying. A number of brokerage houses readily "bullied" the stock and issued florid market letters about the prospects of the company and the huge sums of money which would be made by investors who had enough foresight to invest in the "new, wonderful medium of radio, one of the miraculous discoveries of our times." This drum-beating was particularly useful when the professionals in the stock wanted to unload.

The stock was chased, from the date of issuance, by an ever-growing army of speculators who had become mesmerized by the first commercial application in the United States of that new, mysterious force: electronics. In essence, the story of Kolster Radio was the story of the torrid, irrational and frequently costly love affair which the American investor has had with the electronics industry for over 40 years.

Within a few months after issuance, the stock raced up to 46. By the end of 1927, it had vaulted to 68, although the company reported earnings of only 87 cents per share for the year. In 1928, it climbed to 75, although the management, still exuberantly confident, reported earnings of 20 cents a share. Sometimes before the September crash, the management made a deal with a master manipulator of the period. They advised him that the company would show a modest loss for 1929 and offered him a liberal number of options if he "put the stock up." This he did; within one month, he hypoed it from 70 to 90. A few months later, during the crash, it sold at 3. Kolster's "modest" loss turned out to be around $1 million, enough to put the small firm out of business: it was declared bankrupt in 1930.

An investor who bought 100 shares in each of the aforementioned radio issues at the top of the 1929 market would have paid a total of $44,300 for the five stocks. After the crash, his holdings would have brought $5,600; in June 1932, they were worth $375.

Hartley

Does the name Hartley ring a bell? It should if you were a radio amateur before 1930 since just about every ham at one time in the 20's used his circuit. Old timers will be pleased to know that Ralph Hartley, now retired from Bell Laboratories, lives in Summit, New Jersey.

Ralph started in the Labs back in 1913 after attending the University of Utah and three years of Physics as a Rhodes Scholar at Oxford, England. He worked with famed vacuum tube pioneer H.D. Arnold and in time developed the well known oscillator which bears his name. He became an experiment on receiving sets and was listening in San Francisco during the famous Arlington Tests.

From then on, Hartley pioneered and helped develop many forms of communication. Now an octogenarian, Ralph likes to look back and reminisce about the great days of radio. And interesting enough -- every now and then his famous circuit "pops up" in modern solid state design! (Tnx Jerry Tyne)
**AMATEUR PREFIXES**

There was no need for prefixes in the early days of amateur radio since the amateur was lucky to be heard outside his state let alone a foreign country. All this changed with the advent of shortwave and long skip. Early DX contacts (between 1922 and 1924) could be a bit confusing since any number of amateurs would be using the same call. Little by little the amateur developed their own prefixes. At first, U.S. "hams" used the prefix "U" such as U-2JN or C-3KA for Canada. By the mid-20's the continent prefix was added and U-2JN became NU-2JN, etc. We produce the complete listing as of February, 1927. It was shortlived for soon after all prefixes were changed to the way we know them today. (Result of International Radio Conference)

### International Intermediates
(Effective February 1, 1927)

<table>
<thead>
<tr>
<th>Continent</th>
<th>Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA</td>
<td>Arabia</td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>Afghan</td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>China</td>
<td>(including Treaty Ports), Including Manchuria, Mongolia, and Tibet.</td>
</tr>
<tr>
<td>AD</td>
<td>Aden</td>
<td></td>
</tr>
<tr>
<td>AF</td>
<td>Siam</td>
<td></td>
</tr>
<tr>
<td>AH</td>
<td>Afghanistan</td>
<td></td>
</tr>
<tr>
<td>AI</td>
<td>India</td>
<td>(including Baluchistan) and Goa</td>
</tr>
<tr>
<td>AJ</td>
<td>Japan</td>
<td>and Chefoo (Korea)</td>
</tr>
<tr>
<td>AM</td>
<td>Federated Malay States (with Straits Settlements)</td>
<td></td>
</tr>
<tr>
<td>AN</td>
<td>Nepal</td>
<td></td>
</tr>
<tr>
<td>AO</td>
<td>Oman</td>
<td></td>
</tr>
<tr>
<td>AP</td>
<td>Palestine</td>
<td></td>
</tr>
<tr>
<td>AQ</td>
<td>Iraq</td>
<td></td>
</tr>
<tr>
<td>AR</td>
<td>Syria</td>
<td></td>
</tr>
<tr>
<td>AS</td>
<td>Siberia</td>
<td>including &quot;Central Asia&quot;</td>
</tr>
<tr>
<td>AT</td>
<td>Turkey</td>
<td></td>
</tr>
<tr>
<td>AU</td>
<td>Cyprus</td>
<td></td>
</tr>
<tr>
<td>AZ</td>
<td>Persia</td>
<td></td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>Austria</td>
<td></td>
</tr>
<tr>
<td>BB</td>
<td>Belgium</td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td>Czechoslovakia</td>
<td></td>
</tr>
<tr>
<td>BD</td>
<td>Denmark and Feroe Islands</td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>Spain and Andorra</td>
<td></td>
</tr>
<tr>
<td>BF</td>
<td>France and Monaco</td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td>Great Britain and Northern Ireland</td>
<td></td>
</tr>
<tr>
<td>BH</td>
<td>Switzerland</td>
<td></td>
</tr>
<tr>
<td>BL</td>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>BM</td>
<td>Jugoslavia</td>
<td></td>
</tr>
<tr>
<td>BN</td>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>BO</td>
<td>Norway, Spitzbergen and Franz Josef Land</td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>Sweden</td>
<td></td>
</tr>
<tr>
<td>BS</td>
<td>The Netherlands</td>
<td></td>
</tr>
<tr>
<td>BT</td>
<td>Irish Free State</td>
<td></td>
</tr>
<tr>
<td>BU</td>
<td>Portugal, Madeira Islands and the Azores</td>
<td></td>
</tr>
<tr>
<td>BV</td>
<td>Bulgaria</td>
<td></td>
</tr>
<tr>
<td>BW</td>
<td>Rumania</td>
<td></td>
</tr>
<tr>
<td>BX</td>
<td>Sweden (Finland)</td>
<td></td>
</tr>
<tr>
<td>CY</td>
<td>Poland, Estonia, Latvia, Courland, and Lithuania</td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>U.S.S.R. (&quot;Russia&quot;), Including Ukraine</td>
<td></td>
</tr>
<tr>
<td>EV</td>
<td>Albania</td>
<td></td>
</tr>
<tr>
<td>EW</td>
<td>Hungary</td>
<td></td>
</tr>
<tr>
<td>EX</td>
<td>Luxemburg</td>
<td></td>
</tr>
<tr>
<td>FY</td>
<td>Greece</td>
<td></td>
</tr>
<tr>
<td>EZ</td>
<td>Zone of the Straits</td>
<td></td>
</tr>
<tr>
<td><strong>Africa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FA</td>
<td>Abyssinia</td>
<td></td>
</tr>
<tr>
<td>FB</td>
<td>Madagascar, Reunion Island, Comoro Island, etc.</td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>Belgian Congo, Ruanda, Urundi</td>
<td></td>
</tr>
<tr>
<td>FD</td>
<td>Angola and Kabilia</td>
<td></td>
</tr>
<tr>
<td>FF</td>
<td>Egypt</td>
<td></td>
</tr>
<tr>
<td>FG</td>
<td>French West Africa, including French Sudan, Mauritania, Senegal, French Guinea, Ivory Coast, Upper Volta, Dahomey, Civil Ter. of the Niger, French Togoland, etc.</td>
<td></td>
</tr>
<tr>
<td>FH</td>
<td>Gabon</td>
<td></td>
</tr>
<tr>
<td>FI</td>
<td>Italian Somaliland</td>
<td></td>
</tr>
<tr>
<td>FJ</td>
<td>Somaliland Protectorate and Socotra</td>
<td></td>
</tr>
<tr>
<td>FK</td>
<td>Kenya, Zanzibar Protectorate, Uganda, Anglo-Egyptian Sudan, and Tangan鉴ka Territory</td>
<td></td>
</tr>
<tr>
<td>FL</td>
<td>Libya</td>
<td></td>
</tr>
<tr>
<td>FM</td>
<td>Tunisia, Algeria, Morocco (including the Spanish Zone), Tangier</td>
<td></td>
</tr>
<tr>
<td>FN</td>
<td>Nigeria</td>
<td></td>
</tr>
<tr>
<td>FO</td>
<td>Union of South Africa, Northern and Southern Rhodesia, Bechuanaland Protectorate, and Southwest Africa</td>
<td></td>
</tr>
<tr>
<td>FP</td>
<td>Portuguese Guinea and Cape Verde Islands</td>
<td></td>
</tr>
<tr>
<td>FQ</td>
<td>French Equatorial Africa and Camerons</td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>Rio de Oro and adjacent Spanish Zones, Ifni, and Canary Islands</td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>Sierra Leone</td>
<td></td>
</tr>
<tr>
<td>FT</td>
<td>Equatorial Guinea</td>
<td></td>
</tr>
<tr>
<td>FU</td>
<td>Rio Muni (Spanish Guinea) and Fernando de Noronha</td>
<td></td>
</tr>
<tr>
<td>FV</td>
<td>French Somaliland</td>
<td></td>
</tr>
<tr>
<td>FW</td>
<td>Gold Coast Colony, Ashanti, Northern Territories and British Togoland</td>
<td></td>
</tr>
<tr>
<td>FX</td>
<td>Seychelles Dependencies</td>
<td></td>
</tr>
<tr>
<td>FZ</td>
<td>Mozambique</td>
<td></td>
</tr>
</tbody>
</table>

### North America
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Alaska</td>
</tr>
<tr>
<td>NB</td>
<td>Bermuda Islands</td>
</tr>
<tr>
<td>NC</td>
<td>Canada, Newfoundland and Labrador</td>
</tr>
<tr>
<td>ND</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>NF</td>
<td>Bahamas Islands</td>
</tr>
<tr>
<td>NG</td>
<td>Guatemala</td>
</tr>
<tr>
<td>NH</td>
<td>Honduras</td>
</tr>
<tr>
<td>NJ</td>
<td>Iceland</td>
</tr>
<tr>
<td>NL</td>
<td>Jamaica</td>
</tr>
<tr>
<td>NO</td>
<td>Lesser Antilles</td>
</tr>
<tr>
<td>NM</td>
<td>Mexico</td>
</tr>
<tr>
<td>NN</td>
<td>Nicaragua</td>
</tr>
<tr>
<td>NP</td>
<td>British Honduras</td>
</tr>
<tr>
<td>NR</td>
<td>Cuba and Isle of Pines</td>
</tr>
<tr>
<td>NS</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>NT</td>
<td>Haiti</td>
</tr>
<tr>
<td>NU</td>
<td>United States of America</td>
</tr>
<tr>
<td>NX</td>
<td>Greenland</td>
</tr>
<tr>
<td>NY</td>
<td>Panama</td>
</tr>
<tr>
<td>NZ</td>
<td>Canal Zone</td>
</tr>
</tbody>
</table>

### Oceania
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OA</td>
<td>Australia (and Tasmania)</td>
</tr>
<tr>
<td>OD</td>
<td>Dutch East Indies</td>
</tr>
<tr>
<td>OE</td>
<td>Melanesia</td>
</tr>
<tr>
<td>OH</td>
<td>Hawaiian Islands</td>
</tr>
<tr>
<td>OI</td>
<td>Micronesia</td>
</tr>
<tr>
<td>OO</td>
<td>Polynesia</td>
</tr>
<tr>
<td>OP</td>
<td>Philippines Islands</td>
</tr>
<tr>
<td>OZ</td>
<td>New Zealand</td>
</tr>
</tbody>
</table>

### South America
<table>
<thead>
<tr>
<th>Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>Argentina</td>
</tr>
<tr>
<td>SB</td>
<td>Brazil, Trinity Island, and St. Paul Island</td>
</tr>
<tr>
<td>SC</td>
<td>Chile</td>
</tr>
<tr>
<td>SD</td>
<td>Dutch Guiana</td>
</tr>
<tr>
<td>SE</td>
<td>Ecuador and Galapagos Archipelago</td>
</tr>
<tr>
<td>SF</td>
<td>French Guiana</td>
</tr>
<tr>
<td>SG</td>
<td>Paraguay</td>
</tr>
<tr>
<td>SH</td>
<td>British Guiana</td>
</tr>
<tr>
<td>SK</td>
<td>Falkland Islands, and Falkland Dependencies</td>
</tr>
<tr>
<td>SL</td>
<td>Columbia</td>
</tr>
<tr>
<td>SN</td>
<td>Ascension Island</td>
</tr>
<tr>
<td>SO</td>
<td>Bolivia</td>
</tr>
<tr>
<td>SP</td>
<td>Peru</td>
</tr>
<tr>
<td>SU</td>
<td>Uruguay</td>
</tr>
<tr>
<td>SV</td>
<td>Venezuela and Trinidad</td>
</tr>
</tbody>
</table>