ANTIQUE WIRELESS ASSOCIATION INC.  
HOLCOMB, NEW YORK 14469  
"An amateur organization devoted  
to the history of wireless"

OFFICERS

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VICE-PRESIDENT  
Kenneth Gardner

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Bruce Kelley

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TREASURER  
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ASSISTANT TREASURER  
Dexter Deeley

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Al Crum (3)  Dick Ransley (2)
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MUSEUM FUND COMMITTEE

Ken Gardner (Chairman)
Joe Massey, Larry Triggs, Bruce Roloson, Bruce Kelley

ATTORNEY

Sherwood Snyder, W2KPU

PHOTOGRAPHER

Al Crum, W2B4K

AMATEUR STATION: W2AN

CALENDAR OF EVENTS

1974 HISTORICAL RADIO CONFERENCE  
Sheraton Inn  
Canandaigua, New York  
October 4-5-6  
THREE BIG DAYS OF PROGRAMMING!

FALL MEET

New England Wireless Museum  
East Greenwich, R.I.  
SATURDAY, SEPT. 7  
Dinneun 7/2 Noon  
Historical Programming and Swap Session for Collectors

ANNUAL BUSINESS MEETING

Sunday, Nov. 10  
Holloway House  
East Bloomfield, N.Y.  
Meeting: 2:30 P.M.  
Dinner: 5:30 P.M.

Start preparing now for the winter months with an old time transmitter. The next issue will feature the

HARTLEY CIRCUIT

BACK ISSUES

The following OLD TIMER BULLETINS are available for historical reference.  
Order direct from: Bruce Kelley  
Main St., Holcomb, N.Y. 14469  
$1 each (First Class Mailing)

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Rare issues at $2 each  
Vol. 9 #3  Vol. 10 #4

Vol. 1 #2, Vol.1 #3 and covers binding, All three for $1

Change In Address?

Mail information to the Treasurer who handles current mailing list.  
(NOT the Secretary)  
L.A. CUNDALL, W2QY  
69 BOULEVARD PKWY  
ROCHESTER, N.Y. 14612
FROM HEADQUARTERS

What's New
ANTIQUE WIRELESS ASSOCIATION

HISTORICAL GROUP IN FRANCE

Starting with this issue, AWA will exchange Bulletins and other material with a like organization in France called MUSEE L'ÉLECTRO-ACOUSTIQUE. They publish an illustrated paper of several pages telling about receivers, telephones, phono-pickups and other early equipment in their collections; unfortunately, all in FRENCH!

However, their Secretary, Jean Engelking, writes and speaks English and several local AWA members have no problem with the French language so there will be no problem exchanging information.

ANTIQUE WIRELESS ASSOCIATION, Inc.

MUSEUM
Holcomb, New York 14469

Member:
-- AMERICAN ASSOCIATION OF MUSEUMS
-- REGIONAL CONFERENCE OF HISTORICAL AGENCIES

Affiliate:
-- AMERICAN RADIO RELAY LEAGUE

Special note: The Association is currently moving facilities to new quarters one-half mile from the present site. Until further notice, the Barn Museum will be open only for special events.

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

50¢ YEAR INCREASE

At the semi-annual business meeting (Saturday, June 8) a resolution was passed to increase dues 50¢ a year to cover rising mailing costs and general expenses. The increase wasn't a surprise since both Treasurer and Secretary had previously hinted the organization was working "fairly close to the line". With one exception, letters received were unanimous in wanting to maintain present size OTB and mailing 1st class even if costs were to increase $2.00!

ARMSTRONG HALL

Most museums have a theme and tend to specialize in certain areas. AWA leans toward amateur radio and broadcast development. Members have indicated great interest in Major Armstrong's work. Having the latter in mind, it has been decided to name the Museum's main room ARMSTRONG HALL which will house a special showcase with Armstrong artifacts and equipment.

LIBRARY

Although the AWA Library will be rather small, it will house a valuable collection of books and other memorabilia mostly donated by Clarence Tucks. The shelves will hold a complete set of I.R.E. (I.E.E.E.) Proceedings, early reference books and magazines while the walls will be covered with rare photographs and certificates. Henry Brodgett has volunteered to be custodian and has done all the carpentry work including new side paneling.

CORPORATE SEAL

A.W.A. now has a Corporate Seal—a big heavy gadget with a handle which makes an impressive emboss on VIP documents, book leaves, magazine covers and other trivia.

The Association has been incorporated for several years but never had great need for a Seal until the recent signing of contract with the Bloomfield Historical Society at which time our Attorney Snyder felt it would be a good idea to have one. (Tks Sherwood)

IMPORTANT NOTICE
OVERSEA MEMBERS

Much interest has been indicated in providing OTB Air Mail service. Land/sea mailing takes 3 to 6 weeks (or more!) Airmail is costly. However, if members outside U.S.A./Canada want this speedy service, we'll Airmail the BULLETIN at an additional $3 per year or a total of $8 with the new $0.50 increase. Make note when paying dues to Treasurer Cundall.
GATHERING AT FOOTHILL MUSEUM

1. to r. -- A.W.A. President Charles Brelsford (KEWW), Dr. Leonard Fuller, A.W.A. Secretary Bruce Kelley (W2ICE) and A.W.A. Advisor Thorn Mayes (W6AX). Guest Speaker Dr. Fuller has had a brilliant career which started with Reginald Fessenden (1912) working on small arc transmitters and heterodyne receivers. He eventually was appointed Chief Engineer for the Federal Telegraph Company and retired as Dean of Electrical Engineering, University of California at Berkeley. (Photo by Paul Giganti, W6GYY)

SPECIAL REPORT:

FIRST CALIFORNIA "MEET" AT FOOTHILL COLLEGE

The first West Coast AWA meet was a definite success. Members journeyed to Foothill College Electronic Museum (south of San Francisco) from southern Cal to British Columbia (Jack Rhodes). A surprisingly large contingent were also on hand from the East Coast including your President and Secretary as well as El Raiser and Charlie Meass. "In-between" members included George Greene (Missouri) and Barney Wooters (Colorado).

The weekend started with a Friday gathering of Society of Wireless Pioneers in San Mateo. It was an enjoyable occasion which many distant members, such as myself, had looked forward to since it provided the first opportunity to meet in person friends known only by letter. In our humble opinion, SWP is the ELITE of all old time fraternal organizations.

Other than for a couple mechanical failures (Murphy's Law?) meeting facilities at Foothill College were superb with the Electronic Museum the highlight of the trip. A large open parking lot and a beautiful sunny day provided excellent opportunity for members to buy, sell and swap old gear -- reminiscent of previous "meets" in the East. Choice sets were on display and entered in Receiver Contest.

Diverse programming was the order of the day with Dr. Fuller, former Chief Engineer of Federal Telegraph Company as the main speaker. Comments and letters tells AWA there MUST be another "meet" at Foothill....

B.K.

(Cont. on next page)
WESTERN REGION CONTEST WINNERS
(Poohill Electronic Museum)

ORIGINAL RECEIVERS
1st-- Boston Scale (tuner & 2 stage)
   JOE HOFFATH
2nd-- Perikon crystal detector
   WOODY WILSON
3rd-- Kennedy 281
   Fred Barry

RESTORED RECEIVERS
1st-- Silvertone neutrodyne
   HARRY STANWERT
2nd-- Murad WALT
   BILL BAKER
3rd-- AK-5
   Stan Kirt

MOST UNIQUE EQUIPMENT
Spark transceiver, HOWARD HEIN
JUDGES: Guy Martin, Mel Prater and Ralph Williams.

A.R.C.A. MEET ----

ARCA members from 11 states converged at Elgin, Ill. in June to attend a 2

day session geared to their hobby. The highlight of the occasion was a tour

through Ralph Muchow's new museum judged to be one of the best in the Midwest.

We say "new" since he has moved his

fabulous collection to new quarters

where one can view the history of wire-

less from Marconi through to scanning
disc TV -- all of which is housed in
countless showcases and shelves. The

magnitude of the collection can be

judged by the fact he has 40 different

AK breadboards and 125 crystal sets!

The meet was topped off by a banquet

with TV/radio personality Lynn Ander-

son as Guest Speaker. We might add Lynn

is also a top collector specializing in

Grebe gear. Ralph opens his museum

only by appointment at 107 Center St.

(Tele. 312-741-0573)

WCC

The Cape Cod National Seashore Park
(National Park Service) is in the pro-

cess of erecting new facilities and

displays at the old Marconi South Well-

fleet (WCC) site. Much interest has

been shown in the project particularly

by Elison Lohr, Marconi historian and

scholar.

Frank Caswell (W1ALT) writes there is

need for certain wireless items to com-

plete the display. He will give a pro-

gress report at the Rhode Island AWA

Meet Sept. 7 Our Association will

assist wherever possible for it is a

most worthy cause.

SUMMER MEET

The first joint AWA/INHS Meet held at

Purdue University (W. Lafayette, Ind.)

was a great success in spite of rainy

weather and a date conflict with ARRL

activities. The Committee is to be con-

gratulated for selecting the University's

facilities which were superb.

The Theme of the occasion was most

appropriate: Marconi's 100th Birthday

(1874-1974). This was dramatically

emphasized with a huge photograph pro-

vided by Glenn Rogers. Diversified

programming was well received including

an added feature: a brief slide review of

Jack Gray's Museum by John Broming

(WGDR).

Attendance was not confined to Indi-

ana members with some traveling as far

as Mississippi (W5AO) and Bill Halligan

(W9AC) putting in appearance from Chi-

cago.

Yes, there was an excellent display of

equipment with a Contest. Here are the

winners:

CLASS I Best reproduction of early gear
   Ross Smith-- Box relay telegraph set
CLASS II Best radio tube display
   1st -- Leo Gibbs
   2nd -- Warren Johnson
CLASS III Oldest Headphones
   Mc Whorter -- early solid back
CLASS IV Best portable pre-1930
   1st-- Ralph Muchow (Zenith)
   2nd-- Mc Whorter (Kennedy 311)
CLASS V Best spark transmitter part
   1st -- Ralph Muchow (Federal key relay)
   2nd -- J.W. Johnson (Amrad spark coil)
CLASS VI Best Scientific or wireless
   instrument
   1st -- Ralph Muchow (Kolster decimeter)
   2nd -- Ed Taylor (Vesta meter)
CLASS VII Best telegraph instrument
   J. Benne

THE COLLECTOR

Members who collect and restore old
telegraph instruments may obtain spare
parts, keys, etc. from: WILLIAM NYE CO.,
1519 130th N.W., Bellevue, Wash. 98005.

This company took over the telegraph
business from R.F. Johnson Co. A.W.A.
carried knobs for telegraph keys from
them about a year ago and found they
gave prompt service at reasonable price.

OLD TIME TRANSMITTER

A photo of WIREF's winning station will
appear in the next Bulletin.
The Museum

Our Museum will not be a slick million dollar edifice with pillared halls, but we believe it will offer a certain appeal that cannot be found elsewhere.

Members have been generous in their donations—both in money and material. Linc Cundall, Joe Marsey and others have unselfishly devoted many hours restoring and building display items. We hope all A.W.A. members may sometime visit the Museum which will formally be open in May, 1975.

A.W.A. Historical Museum Fund

Our museum fund committee has formed its program of raising the money for an A.W.A. Endowment Fund and formal solicitation of members and friends will soon begin. An informative brochure about the Museum and AWA is being prepared. Meantime, word has got around on what our purpose is and we have already been receiving some respectable contributions. This is very encouraging. The final endowment will insure the future of our very valuable museum and of course will greatly stimulate the functions of AWA in behalf of its fine and loyal membership. Solicitation of funds will cover many kinds of industrial and educational institutions as well as the hundreds of people who have shown a special interest in our continuing work of developing the history of wireless communications. Future issues of the Bulletin will report the progress of our campaign and the good things it is making possible.

Work progress on the A.W.A. Museum is something to be proud of. A small dedicated crew has saved the Association thousands of dollars and will enable A.W.A. to move into the new facility well ahead of schedule (1975). On several occasions this past summer, volunteers have given a full workday: painting, building shelves and wiring our area in the Bloomfield Academy Museum. In addition, special skills of some members have been especially valuable to our project.

Joe Marsey volunteered to install new safety locks on all doors and wires in an alarm system. The latter is a sophisticated device which will react when doors and windows are tampered with. Horns and flashing lights will startle the intruder and bring the Sheriff to the premises. In addition, Joe plans to install several smoke/heat sensors as a fire alert. There has even been some thought of having a hidden camera to photograph would-be thieves!

Much credit must be given to Bruce Robison and Ted Kerrick who have completely rewired our part of the building. These two fellows have worked tirelessly on the project—not leaving on some days until 6 P.M. They have done a professional job we can be proud of.

Besides wielding a hammer, George Butterfield volunteered one of his trucks and crew to cart a load of beautiful showcases and other material donated to A.W.A. by a large Rochester store (McCurdy’s) through the effort of Bob Lautzen.
GEAR AT A.W.A.

Sometime in the near future A.W.A. will offer a limited number of surplus items for sale with the proceeds going to the MUSEUM FUND. The date is uncertain since an inventory must be made as equipment is moved into the new building.

Most of the items are duplicates and part of Bruce Kelley's original collection dating back 35 years which he is donating to the Fund. In addition, some items have been left at the Museum with specific instructions to sell or swap to further the Museum's cause. Equipment donated or on loan for display is NOT AVAILABLE UNDER ANY CIRCUMSTANCES.

AWA NETS

PHONE
Sunday -- 12 noon
3903 Kc.
Tuesday -- 8 P.M.
3565 Kc.
CW -- 3584 Kc.
8 P.M. First Wednesday of each month
4 P.M. Daily
EDST.

WLS comes home

WLS, call letters for a Chicago television station are back to their original home - Sears Tower. Exactly 50 years ago April 24, 1924 the first signal from Sears-owned WLS radio station went out from the "tower" headquarters at Homan and Arthington. The station was sold in 1928 and eventually acquired by the American Broadcasting Company. Today, perched 1,517 feet above ground, the station's antenna provides viewers with the best possible picture any station can transmit. Welcome back, WLS. to the home of the World's Largest Store. (W5DEM)

News Journal
OLD TIMERS BULLETIN

EDITOR: Bruce Kelley
MAKE-UP EDITOR: Larry Triggs
CONTRIBUTING EDITORS:
Jerry Tyne
Lauren Peckham
Ken Gardner
PRINTER: Don Ray
The BULLETIN is published quarterly and mailed in March, June, September and December. Send all news items to Secretary: MAIN STREET HOLCOMB, NEW YORK 14469

DUES and ADDRESS CHANGES:
Lincoln Cundall
69 Boulevard Parkway
Rochester, N.Y. 14612
OLD TYME ADS are FREE to members who are interested in collecting and restoring historical equipment as an amateur. They are not to be abused.

RULES FOR ADS:

1. Material must be over 25 years old.
2. Ad MUST be written on separate sheet of paper --- not part of letter. For acknowledgement --- send S.A.S.E.
3. Give full address, zip number and call letters (if any).
4. AWA will not print repetitious ads or ones indicating regular sale for profit.
5. The Association is NOT responsible for any transaction.
6. AWA retains the right to reduce size of ad.
7. All ads must be received 6 weeks prior to mailing date.
8. Mail to Antique Wireless Assn. Main Street, Holcomb, N.Y. 14469

TRADE: G.E. GL-857-B xmtg. tube, Revere 15 hr. auto cartridge tape player. Want schematic for Seeburg Symphony 78 Juke Box Model 147, also literature, magazines, photos, etc. on 78 Juke boxes. Geo. Brehm, Box 462, Norwalk, Calif. 90650

Q.W.A. Museum knowledge of donations of old time gear with donors name recorded. Help preserve wireless for scientific and educational purposes. Write or visit radio hill, Clarence Seid, W2KW, Curator, Radio Hill, R. 1, Middletown, N.Y. 10940

WANTED: Urgently need WWI set Types EC-17 & 14, also AK tuner TA-11. Will buy or swap. Tim Christen, 2208 Bettina Ave., Belmony, Calif. 94002

FOR SALE: 31 volumes of QST 1919 thru 1950 in brown leather and in excellent condition. Make offer. Also have "Meléhan Valiant" key for $40.00 plus postage. Mrs. Louis Rios, 822 Lafayette St., Salem, Mass. 03970

SWAP: AK-7 (chassis & spkr.), RCA-8, RMS-45, Musicaire 4, tube, etc. Want E.H. Scott sets, SX-73, SX-117. Send O.S.H.E. for list. W9QYE, 314 Lakeview, Milwaukee, Wisc. 53217

INFORMATION wanted on a Boston, Mass. radio manufacturer called "B & C Radio Co." Their trademark was triangular with initials B&C. Any info appreciated. B.W. Noyes, 162 Tuttle Road, Cumberland, Maine, 04021

FOR SALE: Battery radios, early electric radios, Cathedrals, parts, tubes, etc. Buyer pickup. No lists. Prefer to sell local. Call after 5 PM 609-763-0400. Krantz, 714 White Horse Pike, Stratford, New Jersey 08084

WANTED: Junk WE 7-A amplifier (I need good nameplate). Also Bud 4 or 6 prong plug-in coils for regen. revs. and Bud or Hammerlund 140 cf. tuning cond. Rodney Schrock, 402 Lincoln St., Somerset, Penna. 15501

WANTED: 2 stage amp. for AK breadboard, also info on how the inside of a Radiola TV cabinet is arranged. Barry Watkins, 2163 Greene St., Augusta, Georgia 30904

WANT: Battery and other info on a pair of wireless sending sets No. 38 MK2 (range 0.6 - 7.4 mc/s) 5 valves V1A, V1B, V1C, V1D & V2A, also on WE #360 horn mike. Basil Abbott, Rte. 5, Box 322, Mechanicville, Va. 23111

TRADE or SELL: Radiola VII, Federal 110, Torrola Isoloyne, Calyp-Bastiam RIM, Leutz C-7 Improved Super, Crosley XJ, Hallicrafters SX-24, 27, 28 & 42. Want breadboards and pre-1921 items. R. Brewer, 1 Concord Rd., Fishkill, N.Y. 12524

SELL or TRADE: Round DeForest Audions, tubular Audionons and Electron Relays, QST's from 1917 and QJ's from 1946. I want early radio & wireless gear and early radio magazines. Erv Rasmussen, W6YPM, 165 Lowell St., Redwood City, Calif. 94062

DEADLINE FOR OT ADS
Jan. 15 ------ March issue
Apr. 15 ------ June issue
July 15 ------ Sept. issue
Oct. 15 ------ Dec. issue

NEED: Horn for WE 10-D, Baldwin headband band & cord, AK-20 battery cable, socket assem. & AFT for RADA, tuning cond. for Crosley Pup, hookup card for PE-15. B.T. Wooters, W5K RO, 8303 East Mansfield Ave., Denver, Colo. 80237

WANT: RADA, Radiola IIIA or Kennedy sets or parts to rebuild sets I have. Also need parts for St. James set. Will buy, or swap AK sets, etc., wire recorders, old C.W. parts, coils, tubes, etc. Bill Lavery, RD #1, Box 62K, Egg Harbor, New Jersey, 08215
WANT-- a good Radiola X and UZ-1320 horn. Still have a good Crosley XJ horn for trade. Bob Lozier, 318 E. Houston St., Monroe, N.C. 28110

WANT: E.H. Scott "All-Wave" set -- any version in mint condition. Also interested in any E.H. Scott set or literature. John Field, 1700 Mission St., Santa Clara, Calif. 95060

SELLING the last of my collection. Attractive discounts on quantity deals. S.A.S.E. please for list. Yates Hoeg, 3 Fineview Dr., Utica, N.Y. 13502

SELL or TRADE: I still have some early 1920 radio parts for builders of my old-time radio projects in magazines. No lists. Send SASE and state wants. Art Trauffer, 120 Fourth St., Council Bluffs, Iowa 51501

SWAP or BUY: Loose coupler p. 49 Duck 1919 Catalog #12, same as Comet Receiving xfrmr p. 24 1919 Sears Roebuck Wireless cat. Swap Murdock coupler p. 21, 1919 Sears cata. Want: Jones Radio crystal detector with slate base. Trade US coins. N.D. Saiseon, Rte. 1, Box 142, Petoskey, Michigan 49770

SWAP-SELL: Radiola 28 w/loop complete for AK breadboard or early small screen TV. Have tubes and over 300 magazines for sale. Jim Clark, 1617 Roselawn, Lansing, Michigan 48915

SELL: large collection of early battery receivers 1923-25 especially suitable for new collectors. Also large supply of parts (separate lists). Send large SASE, Robert Robbins, 253 Stanforth Rd., Merion Sta., Penna., 19066 215-204-2178

WANT: Ware Neutrodyn -- type with enclosed rotating loop controlled by knob on front panel. Frank Shannon, 140 Bosphorus Ave., Tampa, Fla. 33606

FOR SALE: 10Y tubes (repl. for 210) @ $2.50 each p.p. Send large S.A.S.E. for list of old sets, tubes and books to sell or trade. J. Wasieliec, W2DQC, 229 Saries Ln., Pleasantville, N.Y. 10570

FREE-- an original shipping carton for a Crosley receiver Mod. NFL-75 in only fair condition. Contribution for shipping charges will have to be made. Daniel Gadacz, 342 West River Road, Orange, Conn. 06477

WANTED: Driver & base for Magnavox horn speaker. Also need Paragon II, will buy or trade. Richard Cane, 4-25 Treasure Lane, Ft. Lauderdale, Fla. 33313

WANTED: Case & fittings for Kennedy 311, Socket & 1000 ohm stabilizer, resistor for Crims 4D, Knobs & binding posts for Magnavox "J", Send for my needs list and you return stamps. Have late 20's & 30's magazines. SASE for list. Rick Ammon, 410 W. 6th, Mt. Carmel, Ill., 62863

FOR SALE: Concord Radio Corp. unmounted crystal detector. In original box with mounting hardware and wheel type knob. (No crystal) $1.25 each P.E. Bill Taylor, 245 N. Oakland Ave., Indianapolis, Ind. 46201


WANTED: QST for Feb. & Mar. 1922. Must have covers. Will take either or both. Ken Conrad, 5462 Crittenden Road, Akron, N.Y. 14001

TRADE: Webster Chicago Wire Recorder Mod. 18-LR for old battery or crystal radio. I will pay difference. Harry Williams, WMNE, Pleasant Hill, Missouri 64080


(Cont. on next page)
OLD TYME HAM ADS

SELL -- special tubes -- WD-ll type
Based on "for direct replacement of
WD-ll's in Radiola III, etc. $7.50 ea.
F. V. Kohl, 7116 Capital View Drive,
McLean, Va. 22101

WANT -- early super-het transformers;
Receptrad, Reeler, etc., to complete a
Receptrad super. Also need Radiolas 24,
25, 26, Super VIII and Regenoflex. Have
items to trade. Will be a R.I. Meet.
John Walknovics, 11 Hartford Rd.
Worcester, Mass. 01606

WANT: Kennedy 52l, AMP and Radiola V
amp, nameplate, will trade "Radio News" of
'20s or a good Music Master 21" horn
if I don't ship. Geo. Haukask, W9AND,
1922 E. Indiana St., Wheaton, Ill. 60187

NEED for restoration of Radiola V
Two metal covers & top wood cover &
one tube socket. Will buy or trade.
Ray Klusewitz, 825 N. 2nd St.,
Reading, Penna. 19601

WANTED: To complete file of "Modern
Electrics" -- 1908 July, August, November
and December. Have 11 issues of 1909-1914 for trade.
Thorn Meyers, W6AX, 21120 Sullivan Way,
Saratoga, Calif. 95070

WANTED: Cabinets for Stromberg-Carlson
neut., Howard A-6 neut., & Grebe Synchro.
Power xmr for Philco 531, driver for
Rola Re-creator, N/S for Majestic 91.
Gene Rippen, W6FXX, 16619 Marchmont,
Los Gatos, Calif. 95030 (408-356-3415)

RADIONA 28 & Stromberg-Carlson 601
chassis needed, have cabinets. Have
AK-30,49, Trexler port. to swap, sell.
Robert Lene, 2301 10th Ave., K.C.,
Mo. 64124

WANTED: Omnigraph code machine. Have
AK-33, Deforest condenser, telegraph
components, etc. L.W. Elias, W4DBT,
3919 Point Dexter Dr., RDF #8,
Winston-Salem, N.C. 27106

NEED: UV-199, 80, 27, 71A and 26 tubes.
Also right-hand door for RCA ARS12 plus
info on AR812. Jim Berg, P.O. Box 72,
Cloverdale, Calif. 95425

WANTED: Telegraph keys especially
cameo-style model. Also FN-1,5,6,15
(parts of the SCR-575 VHF D/S station).
John Elwood, W7GAP, Box 1243
Lancaster, Calif. 93534

Western Electric Company

This partial listing of W.E. tubes
will help the collector identify
the various types by cross refer-
ence to other designations.

Bill Gould, W2NFR

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Genuine De Forest
Tubular Audion

"There Is Only One Audion — The De Forest"

Chas. Freshman Co., Inc.
Radio & Condenser Products

10
MODERN TRANSMITTERS

On the return trip from the Purdue University I.H.R.S. Meet, Elmer Schubert (W8ALW) arranged a tour through the large VOICE OF AMERICA station located at Bethany, Ohio.

The Station Manager, Dick Walker, was a most willing host as he showed us through the large station complex and then a trip in the Government station wagon around the 730 acres of antennas. We believe it is the second largest in the country with the Greenville, N.C. being the largest.

The building contained 10 transmitters including three 250 kW Collins sets reputed to be the latest in high power shortwave design.

We were most impressed with the huge antenna system consisting of eight curtain types each with 21 dB gain and 14 rhombics with gains of 17 to 19 dB! Our interest in the curtains (stacked/ phased collinears) quicken when Dick told us that Jim Weldon of Continental Electronics fame was the prime designer. Mark Bullock (Guest Speaker at the 1970 Conference) is Weldon's associate.

A fair percentage of the 24 member staff are radio "hams" including Dick who is W8BKJ! Jack Gray, W8JDI was a Supervising Engineer until his retirement.

ARE YOU A 1923 MAN?
IF YOU ARE—GET OUT OF THE RUT

WITH THE COLLECTORS

Mel Comer has made a plea for more interest in components. Sure, it is great to have a complete set but how about some of the beautiful parts that make up the receivers?

One could have an interesting display of variable condensers (not capacitors) or maybe coils. The latter could be divided into several groups such as chokes, variometers and plug-in types.

A prize collection would be one of crystal detectors or spark gaps or even maybe just the ordinary switch. To increase interest in this field maybe AWA should have a "Component Contest" at a future meet....

EMERSON RADIO

Collectors of "souvenir" radios are having tough time finding cash to supply their needs. A "Mickey Mouse" Emerson (1934 table model) was recently priced at $300!

(Frank Pagano)

EDWIN HOWARD ARMSTRONG

MAN OF HIGH FIDELITY

This rare book is still available for only $1.75 pp. Send check to Richard Dansley, 9 Felden Avenue, Sodus, New York 14551
WITH THE COLLECTORS

Lauren A. Peckham

Ormistone Road
Breesport, N.Y. 14816

R.T. WoopErS (Denver, Colo.) found several rare tubes including deForest DR rectifier, deForest Oselenium, tubular with D.F. on plate and RCA type UV-196. New sets include Crosley Pup, Crosley ACE Type V and Fred-Eisemann FE-15.

Claude Runie (Port Hueneme, Calif.) sent some nice fotos showing a deForest EC-14A WWI crystal rec., and an unusual "HALOWAT" using 8 UV-193's made by Ballock & Watson Co.

Fred Rice (Philadelphia, Pa.) finally found a complete Pilot 3" TV set plus a Brunswick Fanatopoe radio/phono combination and a Radiola 28.

David Pierce (Breesport, N.Y.) was pleased to receive a very early W.E. photo-cell tube Type 1-A from a well known collector in upstate N.Y.

Richard F ansley (Sodus, N.Y.) came home from the recent ARCA meet in Chicago with a nice Leitz super.

Peg Delrey (Rochester, N.Y.) also had good luck at the ARCA affair adding a Fred-Eisemann FE-15 and a Kennedy 521 amp. to his collection.

Gay Evans (Breesport, N.Y.) stopped at an antique shop on his way home one day and came out with a Radiola complete with WD-11's!

Alan Kutendall (Douglasville, Penna.) found some choice items at recent fleamarkets including a de Forest D-10, AK 10B breadboard and an Aerila Sr.

Daniel Gaidosz (Orange, Conn.) has some nice W.E. gear including a 4-B super and 7-A amp. Other receivers include a P the 5 and Clar-A-Dyne Model K.

Erv Rasmussen (Redwood City, Calif.) still finds early items: 1913 Clapp-Eastman 2 slide tuner with 1913 J.J. Duck catalog, 4 deForest Audions !, Grebe CR-9 and W.E. 4-D rec. with matching antenna tuner. He topped everything off with several breadboards. Station ECRA (Sacramento) put on a TV show of Erv's collection.

Guy Martin (Glendora, Calif.) sent a photo of a beautiful Adams-Morgan crystal set all factory made and mounted on a nice wood base including a loose-coupler for tuning.

Linc Cundall (Rochester, N.Y.) received a letter from Tim Christen of Belmont, Calif. Seems Tim went to London and found 2 coherer/de-coherer sets with matching transmitters -- all made in 1902 and 1904 !

John Elwood (Lancaster, Pa.) has a fine key collection now numbering around 132 -- some samples are: English brass pump handle model by A.W. Gamage, a U.S. Navy straight key used in WWII, a very large old key with ½" contacts and cooling fins a and strap key made by Leeds & Northrup of Phila., Penna.

Lauren Peckham (Breesport, N.Y.) was pleased to locate a complete set of the "Radiogram" magazine published by the Mignon Co. of Elmira in 1915. Receivers to the collection include a SCH-29 Airplane set and a Fred-Eisemann NR-6.

R.T. Millard (Lancaster, Pa.) is another happy owner of an AK 10B breadboard plus an unusual horn speaker with wood grain made by "Silver-Voice". Bob likes early TV sets and watches on a RCA Model 63OTS.

Alain Beckard (Lewistown, Pa.) went to a public sale and found 3 AK breadboards, 4 lighted AK "ad" signs, a Radiola 28 and Radiola VI with Ampliflex loop !

Remember -- the deadline for the next OTR is October 15. I must have your material before this !

Bruce Boyd (Ellicott City, Md.) and Rod McTimish put on a antique radio display at the Westinghouse Center with 60 selected sets from their collection.

Mel Cooper (Arndale, Penna.) came thru with a Radio Apparatus (Pottstown) long wave receiver K-315 with an Audio-tron mounted on the panel.

Paul Giacante (San Carlos, Calif.) just acquired a Norcen-Hauck Super Ten in mint condition with original invoice! along with a mint Radiola V and Radiola R.F. (Senior plus another mint set -- a Radiodyne AK breadboard.)

Wayne Beever (Palmyra, Mo.) is an old railroad man and radio ham (W0N1K) who has a nice start with over 20 sets including some rare ones. Wayne actually places his sets in operation.
OCTOBER 3 4 5
SHERATON INN, CANANDAIGUA, N.Y.
On Rt. 20 directly on beautiful Canandaigua Lake,
770 South Main Street, Canandaigua, N.Y. 14424
Phone: 1-315-394-7800

General Information...

Registration with meals must be made through Asst. Treasurer Dexter Deeley, 50 Rockingham St., Rochester, N.Y. 14620 before SEPT. 23 (Unlimited registration without meals at Conference for only $4). Your dinner tickets, program with registration badge will be waiting for you at the Sheraton Inn Headquarters Room #137.

RESERVATIONS AT SHERATON INN. A.W.A. does not handle room reservations--you must make your own directly with the Inn. Use enclosing card and be sure to mention you're attending A.W.A. Conference. Send S.A.S.E. if you wish Confirmation.

(Note: There are also several all season commercial motels in the area which do not require advance reservation.)

Transportation: Some members may wish to travel by plane to the nearby Rochester Airport (30 miles) where one can obtain Hertz rental cars.

Other attractions: Add an extra day to your trip and visit the fabulous Corning Glass Museum (50 miles), Eastman House of Photography (30 miles) or Niagara Falls (80 miles).

Programming For Everyone

MAKE MOTEL RESERVATIONS NOW! (Special rates to A.W.A. Members)
ANTIQUE WIRELESS ASSOCIATION
ANNUAL HISTORICAL RADIO CONFERENCE AND PIONEER BANQUET

Program

SOMETHING FOR EVERYONE....

THURSDAY EVENING

8:00 -
10:00 P.M.

OPEN HOUSE at the partially completed A.W.A. Museum to be opened in May, 1975 (East Bloomfield, N.Y.).

FRIDAY MORNING

8:30 A.M.

REGISTRATION Room #137 at SHERATON INN.

9:00 A.M. to 12:30 P.M.

SPECIAL FEATURE SWAP AUCTION

ROSELAND PARK PAVILION Joe Pavek, W9OEP Chairman

Here's your chance to swap unwanted items and pickup what you need. The auction (10 A.M.) will include items with proceeds going to the Museum Fund. For smooth operation, participants are asked to register in advance. No junk please. Tables provided for members who wish to display swapping material. ONLY A.W.A. MEMBERS PERMITTED ON GROUNDS!

11:00 A.M.

O.O.T.C. MEETING President Andy Shafer, W0TE Director's Room

12 NOON LUNCHEON a la carte

FRIDAY AFTERNOON

2:00 P.M.

COLLECTOR'S PANEL Indiana Historical Radio Society

ROSS SMITH, Moderator

3:00 P.M.

POLAR ADVENTURE Preview of A.W.A. show to be finished and released to A.R.R.L. in 1975. WNP operation to high adventure with the Byrd Expeditions.

BUD WAITE, W2ZK

4:00 P.M.

THE APGAR STORY Fascinating WWI spy story centered around the Sayville German Wireless Station.

REX MATLACK, W3EFX

FRIDAY EVENING

6:30 P.M.

START-OFF DINNER

8:00 P.M.

SLIDE REVIEW of past A.W.A. "Meets" and Conferences..... (Illustrated slide show)

9:00 P.M.

SOCIETY OF WIRELESS PIONEERS (Director's Room) Unusual tape (playback) of two simulated spark transmitters.

(Thorn Mayes, W6AX)
SATURDAY MORNING

9:30 A.M. ARC Transmitter
BRUCE BOYD, W3QA & ROD MELHUISH, W3KKY
Discussion of problems encountered in making an arc transmitter to be followed by an actual demonstration.

10:30 A.M. COLLECTOR'S SYMPOSIUM
Larry Whitlock, WAIINN
"Show and Tell" your latest restoration project.

11:00 A.M. OLD TIME TRANSMITTER SESSION
Ken Gardner, W2BGN Director's Room

12 NOON CONTINENTAL SMORGASBORD

SATURDAY AFTERNOON

1:00 P.M. OLD TIME RECEIVER CONTEST
Director's Room
(See next page for details)

1:30 P.M. JOHNSTOWN FLOOD -- 1889
Lou Moreau, W3WRE
Origin of communication emergency tradition as played by landline telegraphers. Rare pictures of a tragic event.

2:30 P.M. WORLD'S HIGHEST TOWER
Fred Hammond, VE3HC
Breathtaking views of the now completed CN Tower (Toronto). Its construction and purpose.

3:30 P.M. DEVELOPMENT OF ATWATER-KENT BREADBOARD RECEIVER
Dual projection will enable the collector to compare early models of the more popular "breadboards".
Ralph Williams, WA3SNR

SATURDAY EVENING

6:00 P.M. COCKTAIL HOUR
Director's Room

ANNUAL BANQUET

Toastmaster: ED REDINGTON, W4ZM
Old Time Transmitter Contest Award
Old Time Equipment Contest Awards
Collector's Panel Awards

Guest Speaker
MORGAN MC WAHON
"Trends on Collecting"

HOUCK AWARD PRESENTATIONS

Presentation by
Elliot Sivowitz
Smithsonian Institution

At the end of a perfect day...
OLD EQUIPMENT CONTEST

The old equipment contest serves two purposes for the historian and collector. It offers a competition for all to enjoy and it provides a means for all attendees to examine and learn about equipment that is beyond one individual collection. In a sense, it is an instant museum! This year the contest will offer a change in pace to attract different and interesting equipment. The categories will be:

TRANSMITTER: Bring your choice and if this category is active we can sub-divide in the future.

HOMEMADE RECEIVERS 1920 and AFTER: The competition will be for design and craftsmanship. Restoration will not count for or against.

BEST RESTORATION: This category is for the super-mint condition. Parts substitution will not count against, but the set should operate.

MOST UNIQUE DEVICE: will include test equipment, speakers, tubes, detectors, kits and the like. Bring your favorite "thing".

PRE-1920 RECEIVER: This category will show the early receiving equipment. No limit on circuits, detection method or amplification (if any).

BRING ALL EQUIPMENT TO THE DIRECTOR'S ROOM AT 1 P.M. (Saturday). Each piece must have tag or label with owner's name and address. Judging will take place during the afternoon at which time members may view the display. All material must be removed SATURDAY night. Room will be locked during the Banquet.

Committee: Mel Comer and Ralph Williams

FRIDAY
2:30 P.M. SHERATON INN Director's Room
"Old Time Movie"

TOP HAT
Fred Astaire, Ginger Rogers, Edward Everett Horton. Music by Irving Berlin.

One of the fastest-moving and most popular of the Astaire-Rogers series of musical comedies. The story, which is set in Venice, Italy, centers around the effort of an American dancer to gain the attentions of a pretty society girl. Irving Berlin's top hits "Cheek to Cheek" and "The Piccolino" are included in the score.

LADIES PROGRAM

SATURDAY

Luncheon and Program at historic
HOLLOWAY HOUSE
East Bloomfield, N.Y.

Private cars will leave Main Entrance, Sheraton Inn at 11:00 - 11:15 A.M.
You MUST register in advance!

NATIONAL HISTORICAL
RADIO CONFERENCE
OCTOBER 4-5
SHERATON INN,
CANANDAIGUA, N.Y.

UNLIMITED
REGISTRATION
FOR ALL EVENTS
ONLY $4
This is a full-wave rectifier tube made by Westinghouse and marketed by RCA. It appeared shortly after the UV-213 and was what might be called an electrical mirror of the 213. It must have been designed to be used in a power supply the output of which had the positive terminal grounded. The power supply was probably made by Dubilier since the sample tubes shown have Dubilier stickers on the bulbs.

The UV-196 had two oxide-coated filaments which were brought out separately and one anode which was connected to the base shell. Each filament took 0.55 ampere at 4.25 volts. Thus, the power transformer which supplied it had to have two separate windings, insulated from each other for the full anode voltage of 440 v. r.m.s. The output rating was 50 ma. d.c.

The sample in the center of the photograph has the ordinary ceramic insert carrying the base prongs. The one at the right has a thicker molded (or poured) black insert which extends below the metal base shell. An RCA marking in raised letters appears on the bottom of the material.

**Exhibit For Marconi Centennial**

Summer visitors to the Chicago Museum of Science and Industry had an opportunity to see an exhibit marking the 100th Anniversary of Marconi's birth.

The exhibition was organized in Italy by the Director of the Caproni Aeronautical Museum in Rome, in cooperation with the Marconi Foundation. It featured a number of Marconi artifacts including original equipment, documents and other material.

**SIGNAL CORP MUSEUM**

A portion of the U.S. Signal Corp Museum may be moved to Fort Gordon, Georgia next year. This famous museum has been located at Ft. Monmouth, New Jersey for many years and displays a wide variety of military equipment. The move is in conjunction with a similar move by the Signal School. It is hoped the change will be for the better since their exhibits lack up-dating and are in drab surroundings.

---Jack Allison

"More Watts Per Dollar"
To tell the story of the "bug" is to tell the story of Vibroplex because, with the two very brief exceptions, the only legally permissible semi-automatic key was the six different models produced by Horace G. Martin's Vibroplex Company for over twenty years. As early as the 1880s there were attempts to develop a telegraph key that would work on an automatic, or on a semi-automatic principle producing the code through a system of vibration of the key lever. Walter Phillips, for example had such an invention, as did several others of that time. These instruments had little or no provision for damping thus causing split dots, poor, and often indistinct characters, and on a string of dots were unable to create heavy enough impact to operate the relay when used on sluggish wires through many repeaters. Thus, although attempts were made, none were successful until after the turn of the century when the forerunner of the Vibroplex, the "Autoplex", an invention of Horace G. Martin, was granted a patent June 30, 1903 (See page 7, March, 1974, QST).

The Autoplex was the first key to employ the method of manually made dashes, and automatic dots. This instrument was powered by a pair of dry cell batteries that activated the dot mechanism; but when switched to dashes energized a pair of magnets to hold the lever stationary so that the dashes could be made manually. The most important part of the patent for this "Telegraphic Transmitter" were the almost blanket specifications contained in those eight pages of drawings and descriptions. In it Martin covered every form of creating dots automatically, and dashes manually so that when the patent was granted he literally slammed the door on any possibility of anyone manufacturing this type of key with just two exceptions. The Autoplex was manufactured by Martin himself in New York, and by the United Electric Manufacturing Company of Norcross, Georgia.

Walter Phillips, of United Press was assignor of one half of that first patent, but it is evident that Martin soon acquired the full patent rights from him for his name is connected only with the Autoplex of 1903, and is not with any of the Vibroplex that appeared the following year. Nor is it with the patent applied for in 1903 and granted in 1904. Mr. Elmo N. Pickerill, who knew and worked with them stated in 1958: "Phillips gave Martin a lot of encouragement while he was working on the key, and put a little of his own money in it."

Martin improved the Autoplex design to produce a less cumbersome and lighter key. On August 9, 1904, he received a second patent for a smaller, more compact instrument that could be battery powered, or was self-activating. This self-activating key was the Vibroplex, and that name appeared for the first time on the nameplate in 1904. All these keys were custom built to order by Martin. According to operators as P. J. Faulkner, John Alcorn, and E. N. Pickerill who worked with Martin as telegraphers, the operators would see his key, order one from him and pay five dollars, and several days later he would deliver the key to them. Louis Dow, later of Dow Key, and P. J. Faulkner, demonstrated this key to Western Union, Postal Telegraph and the result was acceptance of this key for their wires, and also on the wires of the press associations.
The NEW Easy-Working
VIBROPLEX No. 6
Reg. Trade Marks: Vibroplex; Bug; Lightning Bug

In Attractive Colors Blue Green Red

The smoothest, easiest-working bug on the market. 10 New Features. Fast or slow speed. A great bug for amateurs.
Black or Colored...... $17 Nickel-Plated...... $19

Famous Improved VIBROPLEX
Used by tens of thousands of operators because of its ease and perfection of sending.
Black or Colored...... $17 Nickel-Plated...... $19

Special Radio Model Extra Large, Specially Constructed Contact
Points for direct use without relay. Black or Colored................. $25

Your old Vibroplex accepted as part payment
Remit by Money Order or registered mail

THE VIBROPLEX COMPANY, Inc.
825 Broadway, New York City
Cable Address: “VIBROPLEX” New York
THE VIBROPLEX KEY

In January 1907 improvements were added by a change of the mounting of the dot contact on the pendulum from a single leaf-type spring mounting to the familiar "U" style.

Although Vibroplex patents effectively prohibited all other attempts to market this key, two inventions were successfully produced commercially due to loopholes in the otherwise tight Martin specifications. In 1909, the Hulitt Transmitter, of the Hulitt Company of Topeka, Kansas, that operated by use of a spring driven action of the pendulum that was key wound, much in the same manner as winding a clock, to produce dots, and a separate lever was provided for manually made dashes. This key had a brief existence on the commercial market, and was later absorbed by Vibroplex.

The other was the Mecograph, more popularly known as the "Right-Angle Bug." This key operated on a release of spring tension principle in contrast to the Martin design that utilizes creating tension on the spring to create automatic dots. The Mecograph Company of Cleveland, Ohio, produced four models of this key, based on the Coffe, Bellows, and Behner patents, in the period from 1906 until 1914, when they were absorbed by the Vibroplex Company.

Martin continued introducing modifications, and improvements of the Vibroplex to meet special needs in the telegraph industry. In 1911 he introduced the two-lever Vibroplex that reflected the dual lever action of the Hulitt key, with a completely separate dash lever and mechanism designed to eliminate the possibility of split dots.

Although the tradename Vibroplex was used by Martin on all his instruments from 1904 on, it was not until 1911 that these keys appeared with this name as a registered Trademark, issued as Trademark Number 84356, on November 28, 1911.

1912 saw the marketing of the "Model X." This key operated on a new principle that employed a single contact to make both dots and dashes with a stop mechanism that held the pendulum stationary while making the dashes.

From 1913 on Vibroplex was acquiring some of the Royal L. Boulter, of Los Angeles, California patents and adding his inventions for possible future use in their instruments. Probably the most interesting feature of the Boulter patents held by Vibroplex was one with a sketchy "keyboard" idea in 1916. A form of this key appeared briefly in the western United States, but none of these designs were ever made by Vibroplex.

In 1914 Martin answered the need for a smaller size, lighter key that could be carried more easily to cover remote operation at special events. The Vibroplex #4, a 3/4 size model of the original that used a "U" type damper mount appeared in 1914.

Also in 1914, following the death of Benjamin Bellows in May of that year, Vibroplex took over the Mecograph patents, and for the duration of the patents that had been a part of that company, advertised as The Martin Vibroplex and Mecograph Company of New York. At that time the J. E. Albright Company was the sole agent for these keys.

Despite Martin's tight patent hold on semi-automatic keys, there were many attempts to produce this popular instrument, and a number appeared on the commercial market, but only briefly, for only Hulitt, and Mecograph could be sold commercially without a patent infringement. However manufacturers such as M. Auburn Specialty Company, O. M. Thomas Electric Company, the A to Z Electric Novelty Company, the Thomas J. Dunn Company, and others, were manufacturing and selling keys of the semi-automatic style. The A to Z product, sometimes called the "ATOZ" was a particularly flagrant infringement in that it was advertised as "The Improved Vibroplex" and so named on the nameplate. It was an almost exact copy of the original Vibroplex including the black japanned base, and the gold leaf "carriage [Continued on next page]
markings" that were associated with the Martin keys. None of these instruments lasted on the commercial market because patent infringement suits brought by Vibroplex.

However, these so-called "bootleg" semi-automatics were, in many cases excellent instruments. Operators had purchased them, and were using them despite the fact that they were not the legally approved Martin product. The Albright Company convinced the major telegraph companies that Vibroplex was the only key that could be produced legally, and that all keys not made by them were infringements on the patents with threat of legal action so that none of the "bootleg bugs" could be used. This action almost caused the operators strike since most of them preferred to work with their personal keys, and it had long been a policy of the industry to permit the operator to work with the key that suited him best and with which he could turn out the most work. So, a compromise was reached. If the key, inspected by a representative of the J. E. Albright Company, as agent for Vibroplex, was able to meet Western Union specifications, and was comparable to Vibroplex in clean sending, and no split dots, then it was possible to purchase a special license authorizing the use of the key for $2.00. This license was a brass plate that read:

"This machine is not guaranteed nor made but only licensed by
The J. E. Albright Company.

Each plate had a serial number. For those used at Western Union the plate was stamped "Special W. U. No.-.-." For those individual operators not connected with Western Union the number was designated as "Special No.-.-." These keys were nicknamed variously "The Legal Bug," "The Legitimate Bug," (naturally) the "Albright Bug," but most often they were called "The Bastard Bug," by the operators.

By 1917 Martin found still another need for a key for a special use, and the fifth of the Martin designs appeared for a key to be used in crowded operating conditions where space was at a premium as on a wire chief's desk. This key using the 1912 "X" model design employed only one contact for both dots and dashes, and the entire mechanism was mounted vertically on a 2-1/2" x 3-1/2" base. Advertised as the "Upright Model," or "The Wire Chief's Key," it was nicknamed the "Vertical Bug" by the operators. Both the "X" model, and the "Wire Chief's Key" were made until 1925 when both models were discontinued.

In 1923 Martin's greatest key appeared as "Vibroplex #6," or the "Lightening Bug," and the famous, very familiar stylized version appeared on the nameplate, and was listed officially as one of the three Vibroplex trademarks.

Martin's final design for Vibroplex came in 1934 with the "Martin Junior" designed with larger contacts for amateur radio operation.

Martin left Vibroplex in the 1930s and went into business as the Martin Research and Manufacturing Corporation, producing the "Martin Flash Keys," and, in 1939, just prior to his death sold his patents and dies to the J. H. Bunnell Company.

The expiration of the exclusive manufacturing rights, and the Martin Vibroplex patents opened the commercial market to the production of semi-automatic keys from the mid-1930s.

Vibroplex continued to produce the "Original," the "#4," the "Lightening Bug," and the "Martin Junior." In 1940 John La Hiff took over the company and added his patented "jewel movement" as well as more types of semi-automatic keys: The "Original," the "Lightening Bug" (formerly #6), the "Blue Racer," (formerly #4), the "Champion," the "Zephyr," all were made with the jewel movement in the deluxe models, or plain base without the jewel movement in the less expensive models. In 1941 they brought out the "Presentation," that had a gold plated base and added adjustment to the pendulum. And, with the advent of the electronic keyers, they decided it was better to "jine 'em" than to "fight 'em"? and produced the misnamed "Vibrokeyer" a key that is used to activate the electronic keyers.
TUESDAY SSB NET at 8 PM has had most satisfactory results. QRM has been at a minimum and transmission conditions have been generally quite good with stations ranging from New England to Ohio and down to Winston-Salem checking in. Again, please keep transmissions SHORT.

SUNDAY SSB NET at Noon on 3902 will continue there during the summer and so far conditions have been good. The Tuesday Net, incidentally, operates on 3965 Kh.

IT WAS GREAT hearing George, W2GB on again after a long silence caused by transmitter trouble. Reed, W1ZM is again putting in an appearance but his telephone keeps ringing and interrupting his transmissions (and probably his rxsions and sleep also)! Seems that he is in charge of setting up a Ham station at the Smithsonian depicting American Folklore. It will be complete from CW to two meter FM, operating under the call W3JAF. How about having the operators check into the various AWA Nets?

Occasionally the 4 PM CW Net on 3584 gets a special thrill when one of our members comes on the air with a new OLD TIME TRANSMITTER. Such was the case when W2IK fired up his original transmitter consisting of a pair of 171-A's. He also operates his old 199 receiver. We hope to get pictures of this gear from Ralph.

ANOTHER STATION to watch for in upcoming Nets and Contests is W5DFM. Wes can use either a WE-242 or a 211 in his 50 watt set. Our ears are flapping.

OLD TIME TRANSMITTER CONTEST

The OLD TIME XMTTR QSO party in March suffered poor conditions again but good scores were submitted never less. Who was the winner? Don't ask or everybody will know you are not familiar with AWA OT Xmttr QSO contests. Naturally, we expect Bob, W2LV in first place — and he is — but this year we have a tie for first place. Right alongside him is Dick George, WATEP. Congratulations Dick and Bob!

WSTKF wasn't in the Contest last year. He was resting up, tuning up the xmttr, checking out antennas, polishing up his CT revr and otherwise preparing for a big crack at the '74 Contest. He writes that he "will rely on chasing DX to keep his frustration index at high level." There you have it — the key to winning contests. I always thought DX was good for something!

AND ANOTHER TIP: This business of shooting hard and straight for first place is getting serious. Linc, W2QY and Art, W1DM busted thru for a tie at 2nd place. Linc's Boston key and Art's M3 sure got a workout.

THE MARGIN is narrowing that with more Old Time receivers making the appearance and boosting the multiplier.

CASUALTIES are beginning to occur. W2AN blew a 516 but his stockroom supplied a spare! W4JT had component trouble and W2BJT's 203-A wouldn't work. W2IK blew a 111-A and guess where he got a replacement— at the local Radio Service Shop. Which is older; W2IK's xmttr or the radio shop? W1DM spent 25 minutes calling on his dummy antenna and is going to put in either a pilot light or a big red 100 watt lamp! W2FE has an xtal that oscillates gayly when hooked to a 76 tube but refuses to drive a 210....

WE2BN VISITED W6SAT at his KH6ADR QTH and found that Bill is still working on his old UV-204-A gear. Did you see the ad in QST by KIDAC featuring an OT 204-A xmttr? Perhaps Bill is giving us a preview of things to come.

A MAJORITY of participants using OT xmttrs complain about QRM from modern high power transmitters. They point out that modern gear operators have their QSO parties on regular Fone and CW nets, that is, the daily 4 PM 3584 Net, the regular 1st Wed. of the month Net on 3584 at 8 PM and the regular Sunday Noon 3902 Net as well as the regular Tuesday 8 PM 3865 Net. Old or modern gear can be used on these circuits. Should we confine our OT Xmttr contests to xmttrs and revrs of date prior to 1940? Should we increase multiplier for OT revrs? Should we increase multiplier for xmttr pre-1930? Should we increase multipliers for power under 50 watts? Canandaigua will tell!
1930 TWT TRANSMITTER AT VE3BDV
Toronto, Ontario

This little transmitter has been heard (and worked) by numerous A.W.A. members around 3585 KHz. It is extremely neat in appearance and puts out a fairly decent signal using a single UX-245 as self excited oscillator. Here are the parts Lou used in building the set: Bremer-Tully RF choke, Sangamo mica condensers, Carwell variable, Chelsea socket, NA-ALD dial and Birnbach bee hive insulators— and of course, Fannestock clips. (FB photo by Al Brown, VE3AB)

RESULTS 1974 OLDE TYME XMTR CONTEST

TOP TEN
W2LV tie W6TTH 1st place, W1DM tie W2QY 2nd place, W2WJI 3rd place; then in the following order W3KIO, W2BN, VE3BDV, W2AFE, W3BBF, W2EB and W3BBM.

Stations Submitting Logs

<table>
<thead>
<tr>
<th>Call</th>
<th>Tx year</th>
<th>Rx year</th>
<th>Score</th>
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<tr>
<td>W2LV</td>
<td>31</td>
<td></td>
<td>60</td>
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<tr>
<td>W6TTH</td>
<td>38/38</td>
<td>38</td>
<td>60</td>
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<tr>
<td>W1DM</td>
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<td>37</td>
<td></td>
<td>58.5</td>
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<tr>
<td>W2WJI</td>
<td>23/27</td>
<td>38</td>
<td>55</td>
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<td>31</td>
<td>52.5</td>
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<tr>
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<td>30</td>
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<td>51</td>
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<td>VE3BDV</td>
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<td>38</td>
<td>45</td>
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<td>W3BBM</td>
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<td>35</td>
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<td>W5TOS</td>
<td>50</td>
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<td>7</td>
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Participating Stations NOT submitting logs:


STATISTICS

OT Xmters: 19  OT Revrs: 9
Oldest Tx: W2WJ (1923)
Oldest Rx: W2IK (1923)
Lowest power: W2WJH (2 watts)
Highest power: W2AN (120 watts)
Oldest tube: W2WJI (UV-202 Hartley)
Biggest tube: W2WJI (UV-204-A TMTG)
Newcomers: K6AE, W7JE, K6Z, K2WW/7, W2USD, K4TS, VE3BDV, W3KIO, W3CWY/7, W8SS and W2SOQ.
NEW MEMBERS

who are or have been in the communication field.

JACK WAYMAN (Falls Church, Va.) Staff Vice-President -- Electronics Industries Association

CARL BERNAU (Fairfax, Va.) Elec. Eng. Signal Corps, Radio Free Europe


GENE McCAY (Floral Park, N.Y.) Radio Repair Chief U.S. Army, Radio & TV.

ALFRED HOME, W3UJJ, ex-V2ZFF Canadian Marconi

RICHARD CAME, W2ZEZ, Electronic Eng. Video Tape Systems

L.F. GRAY, K3AK Communications Satellite Corporation

RAYMOND MOORE, KLDB Engineering and Management

WARREN STIMPSON, ex-9AVH, KG1M, Mackey Wireless, KPH, Press Wireless, etc.

ERIC CRUSHER, W2DVR, F.A.A., L.F.S.R.

HUGO Cohn, N.Y.C. Retired Pres. of Radio Receiver Co. (General Instrument)

THEODORE SUMMERS (Lemont, Pa.) Gregg Electronics

STANLEY JACOBS (Pelham, N.Y.) Grand Central Radio

TUDOR REES (Bristol, England) Rees Antique Wireless Service

PHILLIP Sager, W4FDY Federal Communication Commission

LARRY TAYLOR, W3MFX, Chief Engineer Station WAKY-TV

GARNET FRANK (Potsdam, N.Y.) Clarkson College of Technology

RICHARD O'BRIEN, ex-W2JNE, Grumman Aerospace Electronic Proc.

DAVID FLETCHER (Berkeley, Calif.) Audio Clinic

NORMAN PARSONS (Branford, Conn.) Aladdin Radio Service

PAUL WANDER, W2AU, ex-2ACY, Link Radio, Zenith Radio, DeForest, Unadilla Radiation Products, etc.

HENRY SITKA (Bowling Green, Ohio) Rollins Cablevision and WIKU-TV

ALLEN ZELLNER, K6MQ, Sr. Communication Engineer, State of Calif.

WILL KLETT, WNOJVB, Mfg. Rep. & Radio-TV dealer

GEORGE MEER, W6IC/W8IC, ex-8AIQ, 8IB, 3PA, etc. ITT World Communications

THOMAS THOMSON (Iron Mountain, Mich.) Stations WNR, WRVM

KRM MILLER WB5BJX, Varian Associates, Ford-Philco, KMPH-TV, KICJ, KNOS, KICZ

CONRAD FOWLER, W3JAD, Vice-Pres. American Electronic Laboratories

ROBERT NEWBROOK (Quakertown, Pa.) Westinghouse Broadcasting Co., W2Z, Triangle BC Co., WFL, etc.

BRITISH RECEIVERS

A.W.A. welcomes Tudor Rees of Bristol, England as a new member. In addition to historical wireless, Tudor is also interested in early cars and motorcycles. Members who seek information on British receivers made between 1920 and 1940 may write him for a listing which he'll provide for a nominal fee: Tudor Rees, 18 Brook Rd., Mangotsfield, Bristol BS17-3DY, England

ANYONE FOR 1580 METERS?

Much interest was generated with the above headline in QTB 13-1-3. Although activity has lessened in some areas on the 160-190 kilohertz QRP bands, interest has picked up elsewhere.

Dick Hilberty (W7TOS) Roswell, N.M. reports 3 stations operating in New Mexico: W5SOT (189.5 KHz.), W5ZB (181.8 KHz.) and W5TOS (1/54.4 KHz.) with the operating distance approaching 195 miles! None of these stations are using the maximum allowed 50 foot whip.

Heights of 33 feet seems to work well over these great distances providing there is minimum man-made QRM. The best time for operating is of course during the day when natural VIP QRN is also at minimum.

Senate OKs $15AM-FM Radio Bill

WASHINGTON, D.C. -- Bill No. S- 585 was passed in June by the Senate to give the Federal Communication Commission discretionary power to require radios retailing over $15 to be AM-FM types. The bill was sent to the house for further action.

The FCC had advised Congress earlier that if it had such power it would consider using it first with car radios making it necessary for all future sets to be both AM and FM.

Congressional experts estimate it would take the FCC at least 18 months to make such a change effective.
REM ARK ABLE JOB

EDITOR OTH,
Dear Bruce,

For the past several years Rod Melhuish, W3EKY and I have been absorbed with the idea of building a replica, or at least an electrical replica, of an arc transmitter. During this time I have attempted to supply what help and information I could. Since I appear to be the spokesman for our two man organization on this and similar projects, I am writing to tell you of the progress that has been made.

To begin with, neither of us has ever seen an operating arc transmitter or even heard of one since they were banned nearly 50 years ago. While there are quite a few good references on the subject, it has been difficult to extract specific information, particularly as criteria for normal operating conditions. Therefore, we have had to do a lot of cut-and-try experimenting and it is only within the last month that we have been able to generate recognizable CW signals.

Rodney is very competent with mechanical construction (I am not) and he has built a terrific model arc chamber complete with mechanical cathode feed, rotating cathode electrode, water-cooled anode, alcohol feed, pressure relief valve and transverse magnetic field—all the features of the best commercial arc sets!

At the first trial of the complete transmitter all we could get in the way of a signal was a sputtering and some clicks that sounded like a degraded spark transmitter. The frequency was around 1 Mhz.

By re-reading the literature and reading a bit between the lines, we concluded that at least two things were wrong. First, we were trying for a frequency too high for the de-ionization time of the arc and second, the power supply was too "stiff". What we need was a power supply that gave poorer regulation. This would allow the tank circuit voltage to rise further during the period when the arc current was at a minimum value.

To accomplish these changes, we designed a new tank circuit to operate at 100 KHz and Rod built a real brute of a
power supply which has a no-load voltage of over 400 volts and delivers an arc current of over 10 amperes. With this combination we get a real CW signal over a range of 50 to 150 kHz. The no-load tank voltage is 1500 volts with an arc current of 2 amperes.

We plan to continue experimenting with the following objectives:
1. Increase stability of arcing.
2. Measure power output and efficiency.
3. Apply telegraph and telephone modulation.
4. Determine the maximum satisfactory operating frequency.
5. Determine effects associated with the transverse magnetic field and arc chamber atmosphere.
6. Take oscillograms of operating r.f. waveforms.

I am telling you about all this because one of the motives for starting this program was to produce a working model that could be used to demonstrate how an arc transmitter works and how it must have sounded on the air. A demonstration of this kind might prove interesting to A.W.A. members.

73,
Bruce Boyd, W3QA
Ellicott City, Md.

Editor's Note: The arc transmitter was the ultimate in radio transmitter design during the 'teens. An invention of Vladimir Poulsen, engineered and designed by Doctor Fuller at Federal Telegraph Company (see photo elsewhere in OTE) it reached its zenith with several 500 kW, installations in different parts of the world and a 1000 kW, set at Lafayette, France.

Its first real competitor was the Alexanderson alternator followed by the vacuum tube. There were few in operation by 1930.

Bruce and Rod will demonstrate their working model at the National Conference, October 5 -- providing they don't blow the fuses!

--- NEW GEAR AT A.W.A. ---

TRANSMITTER: Yates Hoag
RECEIVERS: Clarence Tuska, Yates Hoag
TV RECEIVERS: WCCT
TEST EQUIPMENT: W3GW, W3CUN
WRITTEN MATERIAL: Clarence Tuska
MUSEUM MATERIAL: W3GW
MISC.: W3GW, W2NW, W2SNK, Yates Hoag and Clarence Tuska

Yates Hoag, old time amateur and collector recently gave the Association one of his early transmitters and receivers made around 1930.

He tells us it was more work restoring and getting the equipment in operation than it was making it 45 years ago!

Chet Sakura, WCCTI carted two large Philco TV sets from Milwaukee to Holcomb this past summer to place on display. They're "eye-catchers" -- for they are the so-called "gas-pump" models so named since they resemble the old fashion gasoline filling station pumps -- the tube is swivel mounted separately on top!

--- RCA Silences Master's Voice ---

After 52 years of manufacturing radio receivers, RCA has announced it is phasing out all home audio products except television sets and phonograph records. At their peak, home audio products made up a major part of their sales but has declined to less than 5% in recent years. Much of their present equipment (RCA radios, tape players and phonographs) are now made in Japan. Total consumer electronic sales are around $8 billion a year. They predict $16 billion by 1985 with TV-related products on top. (K3CL)

--- POOR COPY ---

Errors will find their way into the BULLETIN. Excluding a couple misspelled words (typographical errors?) there is need to make two corrections in the last OTE (June '74)...

Under "Tube Adapters" the UV-210 should obviously be UV-201 and on p. 18 under "Deadline for Ads", Feb. 15 should be Jan. 15 and June 15 be July...

On the subject of "corrections", K4PI writes that his Japan/American receiver on p. 17 of same issue was REALLY made in U.S.A. even it was marked "Tokyo, Japan" on the panel.
FALL MEET AND DINNER
SEPTEMBER 7
THE NEW ENGLAND MUSEUM OF WIRELESS AND STEAM, INC.
Tillinghast Road, East Greenwich, Rhode Island

SATURDAY, SEPT. 7, 1974
"10th Anniversary Meet"

8:30 A.M. REGISTRATION
Coffee and doughnuts

9:00 A.M. FLAG RAISING
Kentish Guards Fife & Drum Corps

9:15 A.M. DUPLICATION SALE
Lover floor of Meeting Hall
Members Swap & Sell Muriel:
Park with trunks facing walkway
between Hall and Museum

9:30 A.M. LADIES TOUR
Depart for Newport Tour

11:00 A.M. EQUIPMENT CONTEST

CLASS I Spark xtrs under 100 watts
II Tube xtrs under 100 watts
and before 1935
III Loose-coupler receivers
IV Regenerative receivers

Judging at 1 P.M.
Prize Awards to be given at Banquet

12 NOON LUNCH at Museum

2:00 P.M. LIVE STEAM EXHIBITION generating electricity

3:00 P.M. GERALD TYNIE, Museum Director
"History of the Transistor"

4:00 P.M. FRANK CASWELL, W1ALT, Progress
on new facilities at South Wellfleet

4:20 P.M. WHIZ Team contest with audience participation

5:30 P.M. RECEPTION and BANQUET at
Velle's Steak House adjacent to
Sheraton Inn and Providence Airport

8:00 P.M. Guest Speaker: DANA RAYMOND
Attorney for Mrs. E.H. Armstrong
"History of litigation involving
Armstrong's Patents."
Program: AN AMERICAN INVENTOR
Life of Maj. Armstrong presented by Bruce Kelley, W2ICE

REGISTRATION $3, LUNCH $3, BANQUET $8
TOTAL: $14
Absolute deadline for dinners: Aug. 30
Telephone -- 401-884-1710

10th Anniversary Meet

SILENT KEYS

CHARLES KOLSTER died earlier this year
at age of 67 years. He was Engineer at
the F.C.C. Office in N.Y.C. and held
numerous positions earlier with Dept.
of Commerce. He was brother of Dr.
Kolster of decimeter fame.

KENNETH CHASE (June 3) Rochester, N.Y.
former SMA and W6ZZB.

ED GUMMINGS, ex-LWP, Cranston, R.I.
Charter AWA member

DAVID OPPERMANN (June, 1974)
Lemoyne, Pa. OT spark operator

JOHN REID (Little Rock, Ark.)
Former Engineer with Norden Hauck Co.
where he designed their first All-Wave
superhet. He was later with RCA at
Camden and Manager of Research for
Crosley Division of AVCO. He retired
as V.P. of Baldwin Electronics, Inc.

MURRAY G. CROSBY, ENGINEER, DIES
A Pioneer in Multiplex FM Stereo Held 200 Patents
June 11, 1974, 70 years, Syosset, N.Y.

Alfred N. Goldsmith
RCA pioneer dies. Alfred N. Goldsmith, 86, electronics
engineer and inventor, died July 2 in St. Petersburg,
Fla. At his death, Dr. Goldsmith was honorary VP
of RCA and its senior technical advisor. Among inventions
credited to him were first commercial radio with only two
control knobs and built-in speaker, and first commercial
radio-phonograph. He also made significant contributions
to development of first color television tube, employing
color screen of color phosphor dots and perforated plate —
said to be basic idea of shadow-mask color picture tube now
in extensive use throughout world. When RCA was formed in
1919, Dr. Goldsmith was named by late David Sarnoff to
head company's research and development activities. He
served as research director and later as VP and general
engineer of RCA from 1919 to 1931, when he resigned to
become independent consultant. (W2NX)

---NOTICE---
The OLD TIMERS BULLETIN is published
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quency, content and size from time to time.

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- without permission of the Editor.
RESTORING OLD EQUIPMENT

How did you SOLVE a problem when restoring an old receiver? Drop us a note telling how you did it.

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TUBE SOCKET PADDING

Professional replacement of the vibrating isolators on tube socket assemblies such as found in the Radiola III and Michigan MRC II can be made by using DOR-TITE, size 5/16 x 3/8", weather-stripping which can be purchased at most hardware stores.

For replacing the vibration isolators on tube sockets on Kennedy V, use ARPMALEX, 1 3/8" I.D. x 5/8" thick sliced into 1/4" wafers. Armaflex can be obtained from supply houses which sell air conditioning equipment.

(Daniel Gadacz, Orange, Conn.)

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FILLING IN LETTERS

Here is an inexpensive trick I used to fill in the letters on my DeForest D-12. Make a thick paste of chalk dust and Elmer's Glue (White squeeze bottle type) using more chalk dust than glue.

Clean the letters with a pin point and work paste into grooves with your finger. Let dry and remove excess with blunt knife blade. Can't vouch how well the letters will hold up if panel is washed with water, etc.

(Mark Mitchell)

---

POT METAL PROBLEM

Owners of a Crosley Bandbox (601) may have potmetal ends on the condenser stator and rotor. It can be easily removed by dissolving area in sodium bisulfate which leaves clean aluminum. The collector will have to determine his own method of application but beware not to breath the fumes.

(Frank Pagano)

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HISTORICAL DOCUMENTARY

A magnetic tape recording covering the California AWA Meet (Foothill College) is now available at $5. The tape covers introduction plus historical programming highlighted by Dr. Fuller's dissertation on the development of the Federal Arc. Write W6AX or Paul Giganti (W6SYV):

2429 San Carlos Avenue
San Carlos, California 94070

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MOST-OFTEN-NEEDED DIAGRAMS

is the title of the latest release by Morgan McMahon for the radio collector. Actually, there are 8 volumes of circuits of different years with the largest (600 models) covering the span from 1926 to 1938.

We found this volume of great interest and feel it is a handy reference to have on the shelf. Obviously, it does not contain the schematics of all sets of that period but does have a fairly representative selection.

If interested, drop him a line for a purchase blank. He is also interested in gathering material for other early historical equipment and would like your thoughts on what you would like to see in print. Write:

Morgan McMahon
26451 Dunwood Rd.
Rolling Hills Est., Calif. 90274

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GOOD READING

Radio Collectors may be interested in a little publication issued by AWA/THRS member Jim Fred titled "ART".

It is printed on 8½" x 11" sheets and contains an occasional column on old gear plus a "Wanted" section. AWA members may have read one of Jim's articles published in ELEMENTARY ELECTRONICS magazine. Drop him a note for more info:

James Fred, P.O. Box 42
Rossville, Ind. 46065

BOOK REVIEWS: Have you recently purchased (or read) a book on historical radio that has not been reviewed in this column? If so, share with others your find. Write the Editor telling about the book or periodical, the author and publisher so we can include it in a future issue.