SUMMER GATHERING IN HOLCOMB

Left to right: Lloyd Jury, Pres. George Batterson (W2GB), George Warder and Ken Conrad (W2IIE). Well over 60 local members and wives gathered at the club's museum (July 20) to look at old gear and discuss restoration problems. The beautiful Atwater-Kent dealer display plaque held by W2GB was purchased by George Warder for $10.00. The "gang" agreed it was a good buy since some tried to purchase it from him for $15.00! One of the two restored A-K breadboards in the foreground played all afternoon; needless to say, not on storage and "B" batteries!

exhibit

In the very near future there will be a historical radio exhibit in the WILLIAM PENN MEMORIAL MUSEUM at Harrisburg, Pennsylvania. It is being sponsored by the Pennsylvania Association of Broadcasters. In addition to the antique radio display, there will be educational exhibits on how a radio works and a licensed amateur station in operation. The A.W.A. has a particular interest in the exhibit since the Association may provide an early television for display -- an original RCA belonging to Ray de Vos, ex-2TAM.

SEE INNER PAGES for complete information on NATIONAL HISTORICAL CONFERENCE.
MOUNT VERNON MUSEUM OF INCANDESCENT LIGHTING

717 Washington Place, Baltimore, Maryland (21201) is an unique museum and one of the few in the world of its kind ---it is devoted solely to the history and development of the lamp. The display was started as a hobby by Hugh F. Hicks, D.D.S., Acting Director. Requests from various individuals and institutions to study portions of the collection made it desirable to place much of the material on display. Approximately 1/5 of the total number of lamps are now on display.

The Museum has seven display cases containing six hundred lamps. Case #1 demonstrates Edison's earliest attempts at commercial illumination. Lamps showing the development from his bristol board filament type first used at Menlo Park, through those with metalized filaments -- when Edison sold out to General Electric-- may be seen. The #2 Case completes the history of the all tungsten filament development.

Case #3 contains earlier attempts of electric light bulb manufacturing from all areas of the world where such development took place. The Museum has on display the largest lamp ever manufactured in Case #4. The smallest ever made may be seen with a 50 power microscope. The longest -- a 3 foot tubular -- is also displayed.

Case #5 demonstrates the development of miniature and decorative lamps. It is interesting to note that flame and other decorative types, are still copied today. In Case #6 you may see, lighted, the most unusual decorative lamps manufactured. Crosses, stars, grape clusters, flower bouquets, etc. are displayed. Some where manufactured in the late 1880's.

Case #7 shows electric light bulbs and non-vacuum tubes used in legitimate dentistry and medicine, as well as those used by medical "quacks."

Members of the Antique Wireless Association and their friends are cordially invited to visit the Museum Sunday afternoon, October 6, following the Historical Conference. See Secretary Bruce Kelley for more information.

A.W.A. OLD TIMERS BULLETIN
WINS 1967-68 AWARD

for "Outstanding Coverage of the Antique Phase of Amateur Radio".

JUDGES: Milton Chafin, WWF
John Huntcon, WILWQ
David Talley, WEPF

MORE ON ROBERT MARROTTT---you may have missed his autobiography in the June IEEE Spectrum -- but if you can locate the April, 1926 issue of Radio Broadcast magazine you will find a feature article by Marriott covering early pioneers prior to 1900. The author knew his subject well and did not hold any punches. He described Marconi -- not as a famous inventor-- but a "super salesman!"

The Museum is open on a daily basis from 9 a.m. until 5 p.m., six days a week. By telephoning 752-8586, a person or group may be assured of having someone on hand for explanations.

CATALOG PRICE -- Normally we don't mention equipment transactions, buying, selling prices, etc., but we couldn't pass this one up. While glancing through a popular antique trading magazine recently we saw an ad for old books and magazines. The only radio item for sale was a 1930 Allied Radio catalog -- price: $5.00 Need we say more ?

TEST SET

Ted Hannah (KJCUI) writes that one can test most old tubes in a modern Heathkit Tube Tester by using the supplemental sheet which lists 0AAs, 12Aa, 2Aa, 26, 27, 7Aa, 59, etc. About the only one missing is the WD-11. In this case (if you're lucky to have one) check for continuity and forget the emission test !
SUMMER GATHERING IN HOICOMB found members discussing best way to restore old dials, re-wind coils and replace cones in W.E. speakers. Some traveled as far as Virginia and Pennsylvania to attend "meet". (Photos by W2BWK)

ADVANCE WARNING

Indications are we'll have a maximum turnout at the forthcoming Washington Historical Radio Conference. Facilities are such we can handle any size group for all activities except the noonday luncheon which is restricted to 250. Late comers will have to eat in the Smithsonian's public dining room. We strongly advise you to make reservations NOW...first come -- first served. Other than for the two Guests of Honor EVERYONE must pay for their meals --- this includes ALL Officers and speakers. (Sorry, but we're working on a limited budget...)

BUS FROM HOTEL TO SMITHSONIAN

For your convenience, the A.W.A. is chartering several buses to carry those staying at the Marriott to and from the Smithsonian. This will eliminate the need to hire a cab or drive in the Washington traffic and park on the Mall. The cost will be $1 per ROUND trip. The bus will leave the Marriott Main Entrance at 8:45 A.M. and return at 4:30 P.M. Be prompt! Bus reservations will be available only by paying in ADVANCE.

REMEMBER: Be sure and send S.A.S.E. for reply when writing to Sec./OTT Editor.

ST. JAMES SUPER-HET

This interesting glass panel job belongs to Joe Meditz, W2CKQ. He would like to re-store the set and would very much like to see the circuit. How about it fellows -- when browsing through your old "Radio Broadcast", "Radio", "Radio News" and other magazines, if you see the circuit -- drop Joe a line at: 66-18 Freshpond Road Ridgewood, N.Y. 11227
William B. Duck Co. of Toledo, Ohio, operating from 1909 to 1932, unquestionably had some lively competition in the wireless business. There are no statistics to show who did the biggest business in the wireless gear in these exciting times, but Duck in 1913 claimed that his mail order business "is generally conceded to and unquestionably is the largest in its line in the United States." Could be!

Duck sold wireless telegraph equipment not only to amateurs but to many educational institutions and to the U.S. and foreign governments. He absolutely guaranteed everything he sold, largely because much of it was manufactured to his specifications, including such heavy equipment as 2 KW commercial and marine sets. Because the business grew out of the electrical contracting business of his brother, J.J. Duck, a typical catalog featured such electrical items as motors, sewing machines, toy trains, telephones, lighting equipment, meters, telegraph instruments and Victrolas and Victor records.

It all began in 1908 when William B., a young Toledo lawyer, became interested in this new thing called "wireless." In scanning a picture of a spark set in a catalog at his brother John's shop, the 27-year-old lawyer proposed to brother John that they get into this promising new business. John was reluctant but finally gave in. Up to 1914, it was called the J.J. Duck Co., but the mail order part of the business had grown to such proportions by this time that William B., now 33, decided to cease practicing law and devote his whole time to it. John therefore withdrew and turned it all over to William B. The business was moved into larger quarters and the name changed to WILLIAM B. DUCK CO.

The 1909 Duck catalog contained 100 pages describing a varied stock of transmitting and receiving instruments for experimental and amateur use. The firm did $5000 worth of business the first year and had doubled it every year until John withdrew and William took over. By this time, the catalog ran to 300 pages and over and in very fine print, at that. Descriptive copy was leisurely yet enthusiastic. One senses that William B. was copywriter and that he loved his business. Between the 1913 and 1918 catalogs, more and more wireless gear was being shown and somewhat less space was devoted to electric appliances.

By 1921, when broadcasting started, Duck was ready for the BC boom. He ran a small broadcast station in Toledo - WHU - for a brief time. As it happened, the BC boom grew so fast and so many enterprisers got into the family receiver business that Duck's mail order business in broadcast receivers fell to such a low point in 1923 that the profit went out of it. In 1925, Duck developed a BC radio receiver said to be far ahead of its time but it was expensive and soon succumbed to competition. By 1932, with the depression in full swing, Duck decided that the business had had it. He closed its doors, sold out all his stock and parts, and retired - at the ripe old age of 52! He had been in the radio business continuously longer than any other person in the U.S., according to his associates. In failing health for some years, William B. died at his home in Marietta, Ohio in 1952 at the age of 71.

The AWA Museum has on file a number of the famous Duck catalogs. Perusing the indexes, one concludes that there was almost nothing in the world of wireless that William B. Duck didn't sell, from coherers up to 1 KW spark sets. One of the most interesting offers in the 1913 catalog, for instance, is your choice of no less than eleven "Transmitting Sets" (or kits) consisting of batteries, key, coil, Leyden jars and spark-gap plus a helix for sets intended for longer distances (10 to 50 miles!). Deluxe sets were for 110 or 220 volt, AC or DC current, including a half KW rig. A line of "Receiving Sets" (kits) was also offered, ranging in complexity from a crystal with headphones to "hot" sets boasting Ferron detectors, tuning coils, and variable condensers. In addition, of course, several factory-built transmitters and receivers were offered.

Electro Importing and other mail order competitors of the day of course offered similar mechanicals, but it seems agreed that William B. Duck Co. was up there in the front line with everything everybody wanted for a full 23 years and that his customers were in every strata of electronics, from amateur to professional - and from pole to pole!
"Receiving Transformer" advertised in 1913 J.J. DUCK Catalog. Made by Clapp-Bastham, it sold for $15.00 and tuned up to 1500 meters with an antenna over 60 feet in length. Note novel method of sliding the contacts by actuating knob.

"Sending Transformer" advertised in 1913 J.J. DUCK Catalog. Made by Clapp-Bastham, it sold for $15.00 and tuned up to 1500 meters with an antenna over 60 feet in length. Note novel method of sliding the contacts by actuating knob.
OLD TIME HAM-ADS

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

WANTED: Loop for Radiola VIII, wire for loop, speaker or cone for AK-82 and AK breadboard. John Schwerbel, RD #1, Box 215, Catskill, N.Y. 12414

WANT or SWAP: Mod. 403B G.R. Signal Generator with instructions. Uses 2 WD-11 tubes. Mod. 726A G.R. VVVM (very old) also various tube testers. Looking for AK breadboard components. Roland Matson, KLOKO, Highland Rd., Pinehurst, Mass. 01566

WANTED: SE1420 or IP-501 or SE1012 receiver, Also Audion Box SE-1071. Frank Shannon, K2OT, 140 Bosphorus Avenue, Tampa, Florida 33606


FOR SALE or SWAP: large assortment of call books, Wireless Age, Electrical Experimenters, etc. Erv Nasassen, WD8FM, 164 Lowell St., Redwood City, California 94062

SWAP: 3rd Pilot TV receiver and rare 1939 4 Channel Dumont TV set. Want Type "II" AK Tuner, "On-Off" switch for AK breadboard, WD-11 tubes, etc. Write: C.E. Clutter, 120 Tapawingo Rd., S.W., Vienna, Virginia 22180

FOR SALE: Several small antique radio items and parts reasonable. Local sale and pickup only. R.V. Brant, 6645 Sterling Ave., Detroit, Michigan 48202

WANT/SWAP: seed pair of matching variometers for a Autoplex receiver I'm building -- can you help me? Pin Stewart, 628 Mowbray Rd., Lane Cove 2066, N.S.W., Australia

WANT: 2 dials for de Forest Inter-panel set. Need same to complete receiver. Bob Waller, K8EKT, 1113 Foxon Ave., Lansing, Michigan 48910

FOR SALE: Old tubes including Audions, early W.E., etc. Also have Radio News from 1925-1926. Send S.A.S.E. Gene Tee, 4364 Lorcom Lane, Arlington, Virginia, 22207 (Tel 522-5417)

SWAP/WANT: Marconi receivers in any condition. Have Fleming valves, deForest spherical audions, Wireless Speciality Apparatus sets, Paragon, Grebe, etc. or will pay top price for Marconi receivers. All letters answered. Phil Weingarten, 67-61 Alderton St., Forest Hills, N.Y. 11374

FOR SALE: Re-issue of F.D. FITTS catalog (ca.1919) Shows pre-WW1 gear, etc. 24 p. blue cover. $1.50 per copy. Re-issue of YOUNG & CO COMBS catalog (ca.1916) with early radio telegraph & telephone equip. such as deForest unit-panel set, 48 p. $1.75 per copy or BOTH for $3.00 R.G. Middleton, 1920 Meadow Lane, Walnut Creek, California 94598

WANTED: Kennedy Amplifier Type 525 pay cash or swap. Have 3" Pilot IV, old battery radios, etc. Leslie Bohl, 42205 Camino Santa Barbara, Fremont, Calif.94536


WANTED: to buy or duplicate, Instruction Manual for Patterson PA-10 All-Wave receiver circa 1934. Also looking for WD-11 tubes for Radiola III-A. Write: Bill McPherson, KACNN, 1066 Finch Ave., Pickering, Ontario, Canada

SWAP/WANT: Chelsea No. 10, 23 plate condenser for my Chelsea 110. Have restored Atwater-Kent Mod. 10 for swap of something of equal value. John Drake, Box 507, New Canaan, Conn. 06840

FOR SALE: Rare "Year Book of Wireless Telegraphy & Telephony" 750 pages, pub. by Marconi Pub. Co. Best offer. Ed Raser, W2ZI, 19 Blackwood Dr., Trenton, N.J. 08628

A.W.A. INFORMATION

MUSEUM HOURLS: Open only by appointment. Best time is a weekday evening. Write or telephone:

BRUCE KELLEY 315-657-7489
LINK CUNDALL 716-663-0696

If neither are available, call George Betterton or Charles Brelsford (Rochester, N.Y.)

A.W.A. BULLETINS: Available only to members as a news journal. Printed every 12 weeks and mailed in March, June, September and December.

LETTERS: When writing to either Secretary or Treasurer -- please send a self-addressed stamped envelope for reply.
JOHN F. STacey

is the name engraved on the panel of this 5 tube reflex receiver made in Arlington, Mass. and now owned by Tom Rutherford. Ever see one? It is beautifully constructed with Acme parts.

The front has sliding doors that roll back revealing 2 tuning dials and a rheostat.

FUTURE ISSUES

There is on hand an abundance of excellent material and photographs for future bulletins. If you have sent something in -- be patient. The A.W.A. has 4 or 5 different interest groups and, although not always successful, an attempt is made to print something in each issue for these members. Here for an example are some of the articles scheduled for the future:

--- "Who has priority -- KDKA or WWJ ?"
--- Information on Colin B. Kennedy Co.
--- How to convert a Command receiver to copy 600 meter signals.
--- How to Restore Brass Dials.

LEGAL COUNSEL: Sherwood Snyder, W2KPU

In the process of incorporating, the A.W.A. turned to fellow amateur and attorney W2KPU who handles legal work for the Rochester club. As indicated by his call, Sherwood has been around for sometime and shows an interest in the old days... He is a welcome addition to the group and we will heed his advice on all future legal matters.

While on the subject of A.W.A. -- a reminder... if you have equipment in the Association's museum and never received a confirmation/assignment statement... write the secretary for one... Every effort has been made in recent years to acknowledge material received and having the donor/loaner designate future assignment in event of dissolution. Kelley reports many items have been left without any identification whatsoever. George Batterson, W2GB
SUMMER VISITORS TO A.W.A. MUSEUM

The club's museum opened its doors again this past summer to many organized groups plus hundreds of visitors including several from foreign countries. The added wing and new exhibits makes the 2½ story building a gold mine for the radio historian. The tube section has been increased by over 400 making a total well over 7000 ranging from the 1905 Fleming Valve (received from British Marconi Co.) to the $15,000 test scanning tubes used on the Lunar Orbiter!

The new wing houses 4 station setups: A 1929 Broadcast Station consisting of a 500 watt Western Electric transmitter Type 9-A, W.E. speech equipment and several W.E. 600 meter monitoring receivers plus a variety of early broadcast microphones. This section also has John V.L. Hogan's original W2XR (WQXR) hi-fi transmitter and the old xtal oscillator and low power driver from W2AM.

The 1917-18 commercial station has three quench gap transmitters (W.S.A. and Marconi) plus an arc transmitter made by Sperry. The installation is complete with 500 cycle M.G. set (1) and several longwave receivers. On the east side of the room is the 1906 Marconi setup consisting of a Magnetic Detector/Multiple Tuner and the 10" spark coil transmitter. One can also see a 1904 Telefunken transmitter and two coherer receivers - Marconi and Telefunken. At the entrance to the wing is W2AM which has been described in previous bulletins. All other amateur equipment including the many spark transmitters are located on the second floor.

Arctic Schooner Bowdoin Returns Home For Restoration

Funds have finally been obtained (see last QST) and the BOWDOIN of WNP fame is now in temporary berth at Camden, Maine. Apparently she was purchased by a group calling themselves THE SCHOONER BOWDOIN ASSOCIATION, INC. who plan to restore her. It is reported she only leaked one barrel of water on her two-day trip from Mystic, Connecticut. (Thanks Dick George, W2THR)

CLEANING OLD PANELS? I find that just good old soap and water does the trick. Use a toothbrush on the dials... (W2HBR)

A.W.A. BADGE -- Be sure and wear yours at the NATIONAL HISTORICAL RADIO CONFERENCE, WASHINGTON, D.C.

One of the several overseas visitors: Per Bigom, OZ5PB (Copenhagen, Denmark) examining the 1906 wire recorder made by Vladimir Poulsen. (On loan from Rensselaer Poly Institute - W2GH)

The Naval Museum

(Washington Navy Yard)

This is a museum you must visit when in Washington, particularly if you've been to sea, since it is filled with historic Naval objects from 1775 to the atomic age. One can see huge guns, torpedoes, midget German and Japanese submarines, etc. The displays are both inside and out. There is even a working periscope from a submarine that sank more than 100,000 tons of enemy shipping during WWII, a mockup of John Glenn's Mercury capsule -- you name it and it is there!

Your Host and Director of the Museum is Capt. Roy C. Smith, a dedicated curator who is making every effort to have the museum a top attraction. He is currently interested in building up the early radio display and is on the lookout for equipment made prior to 1930. Roy tells us that any material donated will be credited with the owner's name in the display and that such donations are tax deductible. Interesting? -- why not visit the Yard during your weekend at the Historical Conference?
The Antique Wireless Association
Annual Historical Radio Conference
FRI. OCT. 4, SAT. OCT. 5, SUN. OCT. 6, 1968
Host: SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON D.C.

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<th>DAY</th>
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<tr>
<td>FRI</td>
<td>Museum of Technology</td>
<td>9:00 A.M. HALL OF ELECTRICITY Early Radio Exhibit</td>
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<td>2:00 P.M. Private Tour of Reference Collection</td>
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<td>Marriott Hotel</td>
<td>7:00 P.M. COMMONWEALTH ROOM Registration and Cocktail Hour</td>
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<td>8:30 P.M. Old, Old Timers Club Meeting</td>
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<td>Museum of Natural History</td>
<td>8:45 A.M. Buses Leave Motel for MUSEUM OF NATURAL HISTORY</td>
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<td>9:00 A.M. Registration at Entrance to Auditorium</td>
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<td>9:30 A.M. LAST VOYAGE OF QUEEN MARIE, Art Goodnow, W4LM</td>
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<td>SAT</td>
<td>Museum of Technology</td>
<td>10:00 A.M. MAGNETIC DEFLECTOR DEMONSTRATION, Jack Gray, W8JDV</td>
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<td>Auditorium near pendulum on main floor</td>
<td>10:15 A.M.</td>
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<td>10:30 A.M. NIKOLA TESLA, RADIO'S DRAMATIC PIONEER, Lee Anderson</td>
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<td>Marriott Hotel</td>
<td>11:15 A.M. NO TEARS WITH MARDONI, Lincoln Cundall, W2QC</td>
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<td>12 Noon QRT Walk to MUSEUM OF HISTORY AND TECHNOLOGY (next door)</td>
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<td>12:30 P.M. IRON AND STEEL HALL Buffet Luncheon (Take escalator to</td>
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<td>SUN</td>
<td>Museum of Technology</td>
<td>2:00 P.M. HIGH SPEED MORSE DEMONSTRATION, W2ZX, W4KX and W868BO</td>
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<td>Auditorium near pendulum on main floor</td>
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<td>2:45 P.M. EARLY TV DEMONSTRATION, Elliot Sivowitch, W2JX/K3JJA</td>
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<td>3:15 P.M. ORN CONTEST, Thorn Mayes, W6AX</td>
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<td>3:45 P.M. IN RETROSPECT, Moderator: Oliver P. Ferrell, W2JXI/K3RJA</td>
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<td>Marriott Hotel</td>
<td>4:30 P.M. Buses Leave Museum of History and Technology</td>
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<td>6:00 P.M. Cocktail Hour CHERISHAPEAKE ROOM</td>
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<td>7:00 P.M. Welcome by Pres. George Batterson, W4GB (W4Ab's spk xmr.)</td>
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<td>ANNUAL BANQUET: Toastmaster -- Raymond Guy, W4AZ</td>
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<td>Guest of Honor -- LLOYD ESPENSCHEN</td>
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<td>Marriott Hotel</td>
<td>8:30 P.M. HISTORY OF RADIO BROADCASTING, Bruce Kelley, W2IC/GCP</td>
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<td>11:00 A.M. Commonwealth Room SHAP/AUCTION Joe Pavek, W4JOBF</td>
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<td></td>
<td>Museum of Technology</td>
<td>12 Noon Private Tour of Reference Collection</td>
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<td>Radio and Electrical Exhibits</td>
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NOTE: All programming will be held to EXACT times as scheduled. Take special note that the morning and afternoon programs are held in DIFFERENT BUILDINGS.

ADVANCE REGISTRATION ( ALL meals $1.00 extra at door until sold out ! )

- Registration only                      $3.00
- Registration and Luncheon (limited capacity)  $5.00
- Registration, Luncheon and Banquet (Sea Food)  $11.00
- Registration, Luncheon and Banquet (Steak)    $12.00
- Registration and Banquet (Sea Food)          $8.50
- Registration and Banquet (Steak)             $9.50
- ROUND BUS TRIP between Marriott and Museum-- add $1.00

All prices include gratuity and tax. Checks MUST BE RECEIVED BEFORE SEPT. 28

When mailing for reservations, note number attending and Dinner Code Letter (A, B, C, etc.) Make checks out to: ANTIQUE WIRELESS ASSOCIATION and mail direct to: ELLIOT SIVOWITCH, DIVISION OF ELECTRICITY, SMITHSONIAN INSTITUTION WASHINGTON, D.C. 20560
SPECIAL RADIO EXHIBIT

Members of the Museum Staff will set up a special radio exhibit for the A.W.A. Conference. This display will be in the HALL OF ELECTRICITY and remain for several months. The theme: PATENT CONTROVERSY IN THE HISTORY OF RADIO. Exhibit will cover: Marconi tuning patent, Electrolytic detectors, Vacuum tubes, the Regenerative circuit, Superheterodyne, Neutrodyne and early Television involving pioneers such as Fessenden, Tesla, Stone, de Forest, Fleming, Weageant, Armstrong, Zworykin, Farmworth, etc.

Some of the equipment is extremely rare such as Fessenden's "Liquid Barrier", de Forest's "Responder", Fleming valves and Weageant tubes, very early Armstrong super-het...all laid out in accordance to patent suits.

Other displays: Early Broadcast Station WNM licensed 12-22-21 for operation on 360 meters will be set up and operated by Pete Borsari, W4HII. This may be the oldest BC installation in existence with all original components ready to go on the air! In addition, the visitor will see original Morse Telegraph of 1835-37, original Bell apparatus (1876-79), early satellites, original carbon microphone used at KDKA broadcast of Nov. 2, 1920, historical television equipment, cathode ray tubes designed by DuMont, etc.

PRIVATE TOUR OF SMITHSONIAN reference collection is limited only to those who have registered. Meet in the Main Lobby near the elevator and show identification. Tour will start promptly and no one will be escorted to the archives after it starts. This is an opportunity to see part of one of the world's largest radio collections.

FRIDAY

O.O.T.C. MEETING will again start the conference. It will be a special occasion since the meeting will be presided over by Old, Old Timer Club's President Raymond Guy, W4AZ, Lighthouse Point, Florida. Many officers and directors from all over the country will be present. If you're not already a member--this is a good time to sign up!! A cocktail bar will be set up prior to the meet and slides of previous gatherings will be shown.

SATURDAY NIGHT ENTERTAINMENT -- as in the past, old time entertainment will follow the banquet ceremonies. Working with sound and photographic material from many sources, the fellows again have put together a delightful presentation titled HISTORY OF ENTERTAINMENT with emphasis, of course, on radio. The auditorium will be open to the public without charge since it is an amateur production.
SATURDAY

LAST VOYAGE OF QUEEN MARY is based on recordings made by Westinghouse Engineer Art Goodnow, W1MB, during the ship's last official trans-Atlantic crossing. The QM is one of the last of the large liners and her final transmissions are of great historical value. As a bonus, the audience will hear ONTT as she rounded South America on her final voyage to Long Beach as copied by Norm Burton in Sydney, Australia! Pictures of the Queen, maps, newspaper clippings, etc. provided by W2BML will be projected on the screen as the recordings are played back.

MAGNETIC DETECTOR DEMONSTRATION should prove of interest to the radio historian and home-builder. We were not surprised when Jack Gray (who needs no introduction to A.W.A. members) decided to build an early magnetic detector; and of course it follows that he did a beautiful job. After the demonstration, he will briefly tell of construction problems.

HIGH SPEED MORSE TRAFFIC HANDLING:
This could well be the most unusual demonstration on the program. It certainly is an operation few have witnessed and possibly one never to be seen again since old time high speed landline telegraphers are becoming scarce. All three participants are members of the MORSE TELEGRAPH CLUB. The Dispatcher, Lou Moreau, needs no introduction to the traffic handler and certainly not to the fair members of the amateur fraternity for she is QST YL EDITOR. (See writeup on her museum elsewhere in OTB.)

Our two distinguished telegraphers are tops in the field. J. Ralph Graham began his career with Western Union in 1920, followed by work with Associated and United Press, various railroads and stock brokerage firms plus instructor in the Signal Corps. He is now Chief of Communications, U.S. News and World Report, Washington, D.C.

E. Stuart Davis has also had a colorful career starting as a R.H. telegrapher and following through with Western Union, Postal Tel., Associated and United Press. He has acted as engineer with Bell Labs, Aircraft Radio Corp., Weston Instrument, Research Associates and several other organizations retiring as Director of Research for the Potter Aeronautical Corp. His Hobby: The National Telegraph Museum.

MARCONI STORY is a fast-moving show covering the life of Marconi and his commercial interests. Link Cundall spent over two years gathering the material which should be interesting not only to V.W.O.A. members but to all historians.

NICKIA TESLA - RADIO'S DRAMATIC PIONEER covers the high points of this most unusual inventor. Our speaker, Lee Anderson from Minneapolis, is a Tesla historian (see article in OTB) and knows his subject well. We feel this addition to the program will be very enlightening.

TELEVISION DEMONSTRATION using Nipkow disc. Elliot Sivowitch, who with Dr. Bernard Finn are our hosts representing the Smithsonian, will have a TV installation of the late 20's in operation. This promises to be a rather elaborate set-up and one seldom demonstrated. In the course of documenting and restoring equipment at the Smithsonian, Elliot has uncovered a wealth of information and has become an expert in the field. Many will remember his unusual audio demonstration at the Franklin Institute.

ONM CONTEST to be handled by Thom Hayes, W6AX, may end all contests! He will attempt to reproduce the chaos of 1922-23 when non-selective receivers brought in just about everything at one time. He will pile amateur spark, NAC and chirpy CW on top of commercial 500 cycle and ICW. The winner will be the fellow who can copy the greatest number of call letters!

IN RETROSPECT: A breezy panel discussion with POPULAR ELECTRONICS Editor Oliver F. Ferrell as Moderator. Ever wonder about the pros and cons of: BC stations monitoring the 600 meter band? --- crazy circuits of the '20's? longer the wavelength greater the distance? --- etc...Three well known radio men who well remember the past will re-evaluate events 40 to 50 years ago:

Ralph BATCHER (x-9IT, Eng.Cardwell/Grebe)
Bill HALLIGAN (W9AC, Founder Hallicrafter)
Geo. STERLING (W1AE, FCC pioneer/author)

CONFERENCE COMMITTEE
General Chairman:
BRUCE KELLEY, WE2ICE/QCP/AN
Smithsonian Representative:
ELLIOT SIVOWITCII, W2JXL/K3RJA
Registration: Lincoln Cundall, W2QY
Joe Marsey, W2BML

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Joe Marsey, W2BML
QUEST OF HONOR  (Evening Banquet)

LOLLY ESPENSCHEID

It would be difficult to tell you about this great pioneer in a few sentences. He started as an amateur in 1903 and became a wireless operator for United Wireless in 1907 during vacation while attending Pratt Institute. Upon graduating he joined Telefunken Wireless Telegraph Co. as Asst. Engineer (1909). Shortly after he entered AT & T's Engineering Department where he had a notable career.

For the past 60 years the name Espenschied has appeared in countless magazines and journals as author or inventor. He has over 100 patents in his name. Some of his outstanding contributions include the development of the co-ax cable (1929), the first filter using a crystal instead of the usual coil and condenser arrangement and the invention of the radio altimeter. He is the recipient of numerous honors and medals and now devotes most of his time to radio history. He is most qualified since "he was there!"

As a young man he was present when de Forest made his announcement of the 3 element Audion! About the same time he visited Tesla's famous tower when it was still intact! He was the receiving engineer in Hawaii during the well known NAA radiophone tests (1915). Do you work SSB? Espenschied with H.D. Arnold helped develop SSB in 1922 and wrote several engineering reports on the high power Trans-atlantic SSB tests. The A.W.A. is greatly honored to have Lloyd Espenschied a member.

LADIES PROGRAM; Although a regular program is not planned, guided tours will be scheduled if there is sufficient interest. The ladies, of course, are encouraged to join the men for both the luncheon and banquet entertainment that follows. For those staying at the Marriott, may we suggest you ride over on the bus Saturday and spend the day in the several museums and art galleries on the Mall.

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON, D.C. 20560

TWIN BRIDGES MOTOR HOTEL, U.S.I., WASHINGTON, D.C.

BARQUET TOASTMASTER:

RAYMOND GUY, W4AZ

Ray is most qualified to act as Toastmaster. He is past President of numerous professional organizations including I.R.R., de Forest Pioneers, WWOAA, Broadcast Pioneers, etc. He is recipient of N.A.B. Engineering Achievement Award, WWOAA Marconi Gold Medal and Special Award from Radio Corp. of America for development of American Television System. Retiring as Senior Staff Engineer of N.B.C. Headquarters Staff, he subsequently became consulting engineer to Governments of United States, South Vietnam (created a national broadcasting system), Morocco (planned a national television and microwave system) and acted for broadcast clients in U.S.A. and Phillipines. A real "go-getter", numerous advisory committees have had the benefit of Ray's experience, including Voice of America, for which he was Engineering Chairman.

Early experience? W4AZ was first employed (1915) by Marconi Wireless Telegraph Co. and then Independent Wireless. Following the war he was employed by Westinghouse WJZ (Newark) as engineer and announcer (Sept. '21). Since this may be the second regular broadcasting station in the world preceded only by KDKA, and since all other personnel from these stations have left the field, he may well hold the world's record for the longest experience in the broadcast game!

Ray was transferred with the station to Aeolian Hall WJZ/WJY in 1923; then as head of RCA Research Lab BC section, and in 1929 to NNC as Staff Engineer. What is he doing today after retirement? Ray is President of OOTC and the Goldcoasters -- a real busy fellow!

SUNDAY

SWAP/AUCTION of old equipment, books and magazines. Here's an opportunity to unload or pick up items for your collection. This session went over extremely well at previous meets and should prove again successful since our old friend JOE PAVEK, W3CPS from Minneapolis will once more be in charge. This is also an opportunity to show some of your more unusual gear which the "gang" may be interested in. (Tables will be provided)
THE FAMOUS IP SERIES RECEIVERS
by George Clark...an article under this title appeared in the May, 1943 issue of FM RADIO-ENGINEERING. It may take some real looking to find this magazine but if you’re an "IP" fan it is worth the trouble. As RCA Historian, George had a wealth of information to work with. He starts out by stating the first receiver was the "I-P-76, 1907 Type" and noted that originally there was a dash between the "I" and "P". He goes on to say there was a redesign change of the IP-76 almost every year ending up with the familiar "double-decker" in 1914.

Clark found an old IP-501A in a New York junk shop (Canal Street), hooked it up and found it worked perfectly. He wonders "if some of the current 1943 equipment then being made will work as well in 20 years or 1963?"

(On page 57, June, 1963 I.E.E.E. SPECTRUM, Marriott/Pratt state: "The IP-76 was first designated 1P76." Who is right?)

RADIOIA AGAIN (see last OT, p. 16)
RCA and "Radiola" are inseparable... Not so -- for it seems someone else used the name first. A small company out in San Francisco by the name of Wilson and McGuire was using the name Radiola for their receivers in late 1921 and had an ad in RADIO, January, 1922. We understand they sued RCA and won the suit (hard to believe!) and sold the name to RCA for $500.

(Tnx W6YPM)

BREADBOARD ATWATER-KENT
Have available the EXACT replica of the breadboard blank made from three pieces of mahogany pieced together, the staples, wire, brown eyelets and spaghetti. Complete with instructions for staining and finish to your own specifications. If you have the A-K components, here is the base and hardware to finish one of these highly prized sets. Write Roland Matson, KIKO, Highland Rd., Pinehurst, Mass. 01566

WEST COAST GATHERING AT W6YPM
Left to right: Erv Rasmussen (W6YPM), Paul Giganti (W6GVY), Author Jane Morgan and Mrs. Lee de Forest (standing). The receiver is the fame RS-501 made in 1920 and pictured in PACIFIC RADIO NEWS magazine. (Ed. note: We had to twist the printer's arm to print this picture since the original was in color; however, it was one too good to pass up. Most of you know Erv and Paul but we wanted our readers to meet Jane Morgan, author of ELECTRONICS IN THE WEST and of course Mrs. de Forest who is following the interest of her husband and is now WN6ZJR.)
On Review

RADIO ANCESTORS -- An autobiography by Robert H. Marriott, condensed by Haraden Pratt (IEEE Spectrum, June '65)

Although titled "autobiography" it is really one of the most concise reports we've read on pioneer wireless in this country. In a little over 8 pages, Haraden Pratt tells of great events and people in Marriott's life with a minimum of superfluous words. In fact, one has to read the article a second time to really appreciate all the information... Robert Marriott was one of the founders of Radio. He organized the Wireless Institute which merged with another organization and became the Institute of Radio Engineers (1912). His interest in radio covered an span of 50 years -- from the time he started with the old American Wireless Telegraph and Telephone Co. in 1900 until his death in 1951. He pioneered in all phases of wireless and knew all the "grands." Marriott was one of the "good guys," well liked and respected by all. His autobiography is very modest -- he tells of the work of others and little of his own accomplishments. Great credit should be given to historian Haraden Pratt for his excellent condensation.

RADIO CORPORATION OF AMERICA; Four Historical Views. The booklet outlines the history of RCA from the beginning to present day. The first section, "The Years to 1938" should be of special interest to A.W.A. members. Copies may be obtained by writing to:

Radio Corporation of America
Public Affairs, Bldg. 19-4
415 South Fifth Street
Harrison, New Jersey 07029

No charge. (Fax: K3CUI)

TECHNICAL HISTORY OF SOUTH WELLFIELD by E. P. Lohr, Park Historian

Collaborating with Fred Parsons, WEEM, the author has written a 7 page pamphlet on old WOC. To the uninitiated, the Marconi South Wellfleet station on Cape Cod was the first high power wireless station in the United States and is revered by the old time commercial operator. The original site is now a National Park with a small building displaying an unusual model of the station made by WEEM. Replicas of the signals, sent by WEEM and taped by A.W.A., are played back to the visitor.

Mr. Lohr has done an excellent job in piecing together the technical information... and providing drawings of the installation and antenna. In addition, he shows the receiving and transmitting circuits plus the operation of a coherer. Much of the information was obtained from old time historian WEEM. The booklet is available to visitors at the Park or may be obtained by writing.

TITANIC PICTURE -- large photographs of ships are quite attractive in the old timer's radio shack and famous vessels such as the TITANIC, LEBANON and LUSITANIA are highly prized -- but very hard to come by. Ted Woolner (WAlABP) obtained an old print of the TITANIC and using his photographic skill, "blew it up" to 12 x 18". Using a special technique, he colored in the details and then mounted it in a large glass frame. It is now hanging over the 1912 Marconi equipment in the AWA museum...Tx Ted!

But there is more to the story... A relative of Ted's of the same name was a survivor of the TITANIC disaster.

JEWELL ELECTRICAL INSTRUMENT CO.

At a recent dinner of the local historical society, I found myself seated next to Bob Fox, an associate of the Eastman House Museum. In the course of conversation the subject wandered from old cameras to old radios and Bob informed me he was once an employee of the old Jewell Meter Company. Not being able to remember what happened to this pioneer company, I asked him what he knew about Jewell.

As well as he could remember, the company was founded in 1899 and was located in Chicago. Bob started with Jewell in 1924 and worked for them until 1932 when it was bought out by Weston. At that time it was owned by two brothers, Roy and Orville Simpson. Five years after the sale (1937), Roy Simpson started again to manufacture meters -- this time under the newly formed Simpson Electric Co.

I mentioned to Bob that we had several Jewell meters in our club museum which were highly prized by the amateur in the old days. Result: He gave us six large boxes of old meters, dial faces, jewel points, magnets, screws and other meter components which he managed to salvage when the company was dissolved. Need parts for a Jewell meter? Next time you're in Holcomb poke through the material and see what you can find... "Kelley"
Pictured is one of the top key/landline instrument collections in the country. The owner, Lou Moreau (W3WKE/WB6BBO) concentrates primarily on telegraph equipment; however, she never overlooks a good wireless key if available. Like a good historian, she tries to build up her collection in both development as well as chronological order. All told, Lou has over 120 keys dating back to 1849. The center shelf holds a complete Vibroplex line including Martin's first Vibroplex (1904) that he custom built to order. One can also see on the shelf the rare upright model called the vertical "bug". The picture frames hold early telegrams some of which date back to 1853! Keys with a story? - - there is one that was concealed behind a curtain in the --- "smoke filled room" when Harding was chosen in 1920 (?)..and it's documented too! This same bug also has sent out quite a few other interesting stories too...

**New Ideas**

A very handy source of felt bumpers for the bottom of cabinets is a product called "Stickadoo". For 49¢ you get 44 pads and strips. The round bumpers are also just the thing for placing behind knobs to prevent mar­ring the panel. The things are self-adhesive; you just press them in place. The size I find best is ST-6.

---- Ted Hannah, K3CUI

**THE MONMOUTH MESSAGE (Ft. Monmouth, N.J.)**

Newspaper, June 20, had an entire page devoted to Army Communication starting with the Civil War. Most of the pictures were quite rare such as scenes of 1938 Radar set, Gen. Pershing's Radio Headquarters at Chaumont, France, etc...

Good copy from W3AW.

**DIAL RESTORATION SERVICE**

For anyone who does not care to restore their black brass dials such as used on certain model Amrads, Kennedy 281's, RADA's, Clapp-Eastham, etc. I will gladly perform this service for a small fee or swap for some inexpensive item. Roland Matson, K1CKO, Highland Road, Pinehurst, Mass. 01566

**DETERMINING VU?**

A tricky little circuit was published in RADIO-ELECTRONICS magazine, March, 1963 by A.W.A. member Bob Flanagan. It shows how to hook your Signal Generator into a simple circuit using a single 6A6 tube and determining frequency of an unknown VLF inductance. Frequency range that you can check (obviously) depends on range of signal generator.
FRANK SMITH writes that the local museum was delayed somewhat by the last September terrific hurricane but things have finally shaped up and he will be setting up his exhibits about the time you receive this bulletin.

BRUCE BOYD (W3QA) has restored a Westinghouse RADA receiver mentioned by K3CW in last QTH and expects to be copying 600 meter traffic in near future — like the 'ole days! Bruce, by the way, was in on the first lab tests (October, 1940) of the WL-530 radar tubes also mentioned in last QTH.

EVERETT GRANT (ex-SPQR) finds it necessary to reduce his collection as result of new QTH; however, he will remain many of the smaller items.

ED BASER (W2ZI) and XYL have really been traveling this past summer ending up in such remote spots as Moscow, etc...Bill does all his traveling (when possible) by water and as an old commercial 'op' usually ends up in the ship's radio shack.

FRANK SHANDON (W3GH/K4OT) picked up some old instruction books issued by the Washington Navy Yard signed by Lt. Eaton, USN. A treasure! Just full of info on WWI receivers, etc. Makes wonderful reading. Result: Frank is now looking for an old longwave commercial set.

JOHN CAPPERTON (Louisville) toured the East this summer in his beautiful 1907 RECAULIN. He belongs to an antique car group identified as TOP BRASS — automobiles prior to 1910. A classic radio collector, he likes Leitz, Norden-Baucks, etc. John has an early Webster Electric Co. (Racine, Wis.) receiver which has (2) untuned RF stages and is tuned by a variocoupler. Ever hear of this one?

ROONEY SCHROCK (Somerset, Pa.) is in the same predicament as many others — where to find WD-11’s? He wonders if it would be practical for some company to make these early tubes for collectors? Rod just went through the pains (and smell) of re-working the catacombs of an old Radiola AR-814. Result: The set works perfect.

LESLIE BOH (Fremont, Calif.) now has 100 sets in his collection. The prize was located back in June when he found a Marconi Type "D" tuner which had been stored in the basement of a house for many years. Good going Les!

CARL ZEIGLER (Springfield) became a light bulb collector overnight as result of purchasing over 60 bulbs from a neighbor who obtained them years ago from a nearby college. They must be quite old since some of the newspaper wrappings were dated pre-WWI and according to Carl only a few have the familiar screw base. He also added a Radiola II and a Crosley receiver to the collection.

ROSS SMITH (Elkhart) has been picking up a set now and then but encounters the usual problem with audio transformers. In one case (Radiola III-A) someone actually removed the PP input xfr...you can’t win Ross.

RUSSELL WORTHWy calls our attention to an unusual BC set made in the 20’s — the LYRADON — made in Mishawaka, Indiana. As early as 1922 they were making a phonograph combination. Prices ranged from $130 to $2150!.

TED WOOLER (Shrewsbury, Mass.) has pinned down a 2 tube Crosley Shortwave receiver which uses plug-in coils. This appears to be a rare one. WAI3EP is also a collector of "Wireless Boys" books and would like to swap dupes.

JACK ALLISON (Commack, N.Y.) just published a list of his equipment and we find he has quite a few rare ones. Jack and family visited Holcomb for the summer ANA Meet and did some swapping. A long jaunt from Long Island.

TED HANNAH (K3CUI) just restored a Stewart-Warner 301-A shortwave converter and is having lotsa fun DXing the SW broadcast bands. The converter is a 1931 model and uses a 2¾ detector and 27 as oscillator into a 1933 Philco super-het. He finds the combination surprisingly sensitive and stable.

VERNE THOMPSON (K4JWW) plans to visit England this fall to look at lamp and tube collections. A recent visit from John Stokes yielded a rare English crystal set, a beautiful light cell and an early rectifier tube.

BILL MC KIBSON (VE3OM) finds it difficult to locate old gear in Canada.....Result: Bill comes over into New York occasionally and looks around. He picked up some gear from Yates Hong recently and located a Patterson PR-10 from W8NOQ.

LLOYD PERRY (St. Paul, Minn.) is back in business again and placed a Federal 110 on the shelf and a nice little 3” Pilot TV (very rare) on the table.
our young collector reports
and to top
it shows the
Gay Ewing--
Crosley Super Tridyne from
drf
FRANK
47. BILL LIGHFOOT (BOB
starts up
the real fun is finding a n d matching
Dick recently did some restoration work.
Dick concentrates his "hunting"
and he just obtained a new "re-producer" and hopes to
the AWA SSB Net this fall when it
starts up again.

FRANK BARNSLEY (Sodus, N. Y.) has been
doing some beautiful restoration work
recently. Dick concentrates his "hunting"
in the Syracuse area where he works.

Gay Ewing--
your young collector reports
he tried cleaning and waxing the base
the old receivers with excellent results. Gay obtained a
Crosley Super Tridyne from W2 lIE and has
it working but finds it difficult to tune.

Bill Lumber (W1PEO) has started to
work on an early 1930 transmitter described by George Grammer in QST....
(How about that George !) It uses a
47, 210 and 203A in final. Bill says the real fun is finding and matching the exact parts as described in QST.

Bob Pianagan (W2HBD) has come up with
a good suggestion: The A.W.A. have an Annual Calendar to hang in the radio shack. The calendar could have some old time "ads", etc. We'll check into this Bob.

Frank Atlee (K2PI) really hit the "jackpot"
when he made a bid on some old gear from the Roger Barrington estate and ended up with a de Forest Type "a" audion control box, a multi-crystal detector, MBCO spark gap, many real early tubes, etc. Frank is now in St. Petersburg but will join the "gang" in October...at the Smithsonian.

Jim Howe (W2REU) found a rare Grebe 14 along with an Aerilola Sr., Stewart-Warner, Fada, etc. Jim is on the lookout for WD-11 and 199 tubes. (Suggestion: if you have WD-11 or 12 tubes...and they are good...don't use them unless necessary...they burn out too easily.)

Perry Cornwell (Hardin, Ky.) reports
several new sets in the past few months plus a number of speakers and headsets. In addition, he located some old R.R. telegraph sounders and keys. Perry finds most of his stuff in antique stores and salvage shops.

George Starr (Lafayette, Pa.) has branched
off on to landline equipment with many new sounders, relays, keys, etc. He isn't doing bad radiowise either for
he added a Kennedy 430 (tubes out of panel), Grebe CA-14, early Murdock receiver, 2 slide tuner, coils, etc. George is a devoted historian and is currently collecting info on old radio companies. (See article on W6, Duck Co.)

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Jack Gray (W0JDU) just built a real old
time 10 watt radiophone for his museum with authentic GE/RCA components. It uses grid-leak keying and a magnetic modulator for phone. Located near the rotary gap spark set -- it shows the transition from spark to CW. Jack has been busy this past summer showing many visitors around the museum -- and to top it off -- word comes in the Governor may make a visit !
The life story of Nikola Tesla might well have been the imaginative product of a fiction-spinning writer. Some of his exploits even jar those who have made a searching inquiry into his work. One outstanding example is the behemoth tower and laboratory that he established on Long Island. Only last year (1967) the newly created Brookhaven Town Historical Trust designated the Tesla laboratory building as a historic site. The building is located 65 miles from New York City, on Route 25A between Rocky Point and Wading River, and now occupied by Peerless Photo Products, Inc.

The story of the famous tower and laboratory had its beginning in 1899. Tesla journeyed to Colorado Springs and erected an experimental station to test his hypothesis of wireless power transmission. There, he produced the greatest point-to-point discharges achieved by man with a gigantic form of the oscillation transformer now bearing his name. The outer winding of the two-section transformer secondary was 51 feet in diameter. Currents reached 800 amperes, and when operated at night the ground would glow from sparks between the grains of sand.

Having convinced himself of the soundness of his hypothesis, he returned to New York City early in 1900 and proposed a World System of wireless transmission. J.P. Morgan immediately put up $150,000 for trans-Atlantic communication. Famed architect Stanford White, who was fatally shot a half-dozen years later on the roof of old Madison Square Garden over a love triangle, agreed to design the tower and laboratory for the site to be named Wardenclyffe.
Several members have sent material on Tesla's Tower, notably, Bob Cobough, \textit{WXN}, a native of Long Island. Although a Tesla issue is planned sometime in the future, it was felt most appropriate to print Lee Anderson's article at this time to coincide with his talk at the Smithsonian. 

By mid 1901 the large brick laboratory building and octagonal massive wooden tower began to take form. The building, which doubled as a transmitting station, housed a 200 KW Westinghouse alternator to excite the system. Four 7 foot high oil filled steel tanks contained the transformers; four others housed the condensers, and one special tank contained an elaborate assemblage of coils and regulating apparatus intended to give every imaginable regulation control that could be foreseen. Only two such units were ever made, designed by Tesla and Westinghouse engineers, one delivered to Wardenclyffe and the other retained by the Westinghouse Pittsburgh operations.

The large skeletonized sphere topping the 187 foot tower was completed in 1903. It was 63 feet in diameter and weighed 55 tons, but was never enclosed with metal plates as originally designed, a 10x22 foot wall lined by tile, wood and steel, descended to a depth of 120 feet beneath the tower. Excitation currents passed through a 16 section telescoping shaft that rose under air pressure 300 feet from the bottom of the well to contact the bottom of the sphere. Large multi-strand cables connected the shaft termination to the periphery of the sphere.

On July of 1903 initial tests were conducted on the system. Local residents were aroused at night by startling lightning-like flashes, but no one knew exactly what the activities were at the plant because the whole operation was shrouded in secrecy. In a few years Tesla was no longer seen as a frequent visitor to the laboratory. The workers vanished. The project had reached an irrecoverable financial disaster. Morgan, who had invested in a project to capitalize on multi-channel wireless message transmissions across the Atlantic, was not the least interested in power transmission—which Tesla viewed as the ultimate goal.

The laboratory was eventually abandoned. LloydEspenschied has written that he visited the laboratory in 1906 when abandonment became known. He saw one of Tesla's radio controlled submarine boats built and demonstrated before 1900. According to an inventory taken in 1915 there were two (see, for example, photographs in the June, 1916, \textit{ELECTRICAL EXPERIMENTER}). But the place was vandalized soon thereafter—by those as grave robbers in search of gold. All brass fittings were stripped from slate starting box panels, steam engine fittings, motors, generators, etc. Four truckloads of records, papers and books were strewn around. (Some of these materials may yet be lingering in the area.) A one-time caretaker remarked that half the garages in the vicinity were supplied from the laboratory. Exhibit cases containing Tesla's lecture apparatus, 1000 tubes and bulbs in various stages of evolution, and instruments that were given to him by Lord Kelvin, all disappeared.

Tesla's method of wireless power transmission, never publicly tested, was covered by patents 787,812 and 1,119,732 issued in 1905 and 1914 respectively. Reprints of published articles, such as those appearing in the \textit{ELECTRICAL WORLD} and \textit{ENGINEER}, March 5, 1904 and January 7, 1905, and other brochures covering his work at Shoreham, Long Island, have now become collector's items.

\textit{THE QST-COUNTERS} is an unique little organization made up of old time amateur and commercial operators most of whom live in Florida. Activity reaches an all time high at their regular luncheons...which almost outshines their club paper...titled \textit{QST}...This publication is unlike any other radio paper printed...past or present. There are no technical articles, dreary run-of-mill editorials, etc. In fact, it is difficult to describe this publication ...and more so the cartoons ! Who is the Editor of this breezy paper which was acclaimed by Amateur Radio News Service ?? We all know him as W4AZ !

\textbf{Marriott MOTOR HOTEL}

\textbf{Twin Bridges U. S. #1}

\textbf{Washington, D. C. 20001}

Attending Annual Historical Conference and plan to stay at Headquarters Motel? If you missed or didn't receive the Marriott Registration card sent in last Bulletin -- write AWA Secretary for one and receive special rate given to AWA members...
Wireless Museum of Forest Hills belongs to Phil Weingarten, 67-61 Alderton St., Forest Hills, New York, and represents several years of collecting both amateur and commercial equipment. Phil was a good friend of Hugo Gernsback which resulted in a nice gift of old catalogs, tubes and various R.F. items from his son Harvey Gernsback. If you subscribe to Hi/FI Stereo magazine, note the beautiful cover on the '67 August issue — several of the speakers were from Phil's collection.

Complaints

Several well known collectors have written complaining they regularly receive letters from strangers demanding information, circuits, the value of old sets, etc. This isn't bad — but seldom do they ever bother to include a self-addressed envelope or postage stamp. Needless to say — these letters usually end up in the wastebasket unanswered. Along this same line — if you plan to visit a fellow collector — do him the courtesy of telephoning in advance.

Bakelite — is a product of phenol-formaldehyde resins, was developed and named after its founder Dr. Leo Henrik Baekeland (1909).

New Equipment in A.W.A. Museum

Stockticker and Relays: W-U (W2KMD)
Tubes: R.P.I. (W20H), W2BHN
AR-2 Paragon receiver: W2UK
Transmitter: W2SHN, W2SBN
Early superhet: W2J3
Cohers: R.P.I. (W20E)
Telegraph equipment: John Caperton
Misc. equipment: W2AKX, W21MK, W2SHN
W2IEE, Jack Allison
Written material: W4UM, W4UDV, W4ZN

Club Badge

Are still available for $1.00
Better get yours now for future A.W.A. Metts. See notice in last Bulletin…….