General info re the "Bulletin" - present circulation is over 50 copies with about 40 going to historians and collectors - the remainder going to old time radio men, and this without any advertising! Letters received indicate everyone is pleased with our amateur efforts and apparently the "swap" column is paying off for the collectors. At the present time it appears that we will change from a monthly to a quarterly basis. We're still undecided, however, whether to continue using ditto or actually start paying for the printing. A printer has quoted a price of 25¢ per copy for off-set print with photos for quantities of less than 100. With quantities of 200 or more we could reduce the cost to 10 to 15¢ per issue.

73, W2ICE

F.C.C. AUTHORIZATION TO OPERATE A SPARK TRANSMITTER

Ever wonder about obtaining permission to operate a spark transmitter again? After a second thought the interest returns to zero when you visualize an act of congress to fulfill such a desire - however, there are two known occasions on record in recent years when the F.C.C. authorized such operation.

The first incident was in March 1956, when the F.C.C. issued to Hugo Gernsbach the call KE2XSX. The occasion was at the Annual Meeting of the I.R.E. in New York City. Some of
the conditions were:

Frequency: Above 30 mc., Type "B" emission, 100 watts input, call letters not to be used - and most important of all - transmissions not to exceed 5 seconds during each 15 minute period.

The second such occasion was at the A.R.R.L. National Convention in Washington, D. C., in August 1958. The Antique Wireless Assn. planned a large exhibit which included two spark transmitters - a Clapp-Eastham 1 kw. Hy-tone job and a 1 kw. "sink" rotary spark set. The latter being homemade with variable primary allowing lower inputs.

Aware that the operation of such a transmitter would be the hit of the convention (it was - the A.W.A. Exhibit won First Prize) all efforts were made to obtain F.C.C. permission for temporary operation. Fortunately, an A.W.A. member resided in Washington and thru his efforts - which were great - permission was finally granted. Unlike Gernsback's license, no call was issued. Some of the conditions were:

Transmissions not to exceed 15 seconds each hour.

No antenna to be utilized (hi!)

Operation not to cause harmful interference.

Interference did exist somewhat - Collins, Hammarlund and other receiver exhibits in the immediate area could hear the brief transmissions in the background of their receivers, however, no objections were made and everyone joined in the fun. The real interference was the terrific audible sound from the gap itself which drew huge crowds. The only time when the transmitter was operated off schedule was when General Curtis LeMay and George Bailey (W1KH) I.R.E. Sec. came to see the rock crusher in operation.
Indications are that it is almost impossible to obtain F.C.C. permission and even then only for very special events. If you know of any other occasions other than those mentioned we would like to hear about them. If interested, we will send you a verifax copy of the A.W.A. license.

COLLECTOR EXTRA-ORDINARY!

In our travels we've encountered some unusual people - but by far, one of the most unusual is Howard Schrader of Princeton, New Jersey. You'll find he is a tough fellow to "pin" down or get a letter out of - but once you've made the grade - one couldn't find a more interesting and congenial host! As might be expected from his address, Howard is associated with Princeton University, however, his avid interest in tubes has no connection whatsoever with his work at the school. Tube collecting is strictly his hobby - and what a hobby!! He has we believe, the largest historical tube collection in the world. It consists of over 40,000 various "dupes" alone which he is willing to swap for ones he doesn't have - and believe it or not - there are still innumerable common ones he is still looking for!

The rarest tube in the collection is a genuine 1907 DeForest Audion (tubular type) which he values at $10,000! In future issues we'll tell you more about this fabulous collection.

OLD TIMER'S NIGHT COMING UP IN APRIL
IN TRENTON, NEW JERSEY

The Delaware Valley Radio Assn.'s Original OT Roundup, the 15th Annual Affair, is scheduled for April 30th, 1960. Same time and place - Hotel Stacy-Trent, 6:30 P.M. - on a Saturday night. Such famous amateur operators as Howard Seefred, W6EA of DX Spark fame is coming all the way from California - and Ted
Ostman, ex 20M, one of the Hoover Cup Winners in the early 20's will be with us this year.

ANOTHER EVENT FOR THE OLD TIMER --

Antique Wireless Association's Open House and Luncheon, Saturday, May 14. This is an annual occasion in conjunction with the Western New York Hamfest. More dope later.

NEW EQUIPMENT AT THE A.W.A. HISTORICAL BARN MUSEUM

by W2QY

There are now three new pieces of gear on display at the Club's museum which are of special interest:

Item #1 - An unusual Russian Commercial receiver from W7DVW of Mackay Radio. It consists of a stage of tuned R.F., detector and 2-step audio - looks somewhat like an SW-3 or SW-5. The plug-in coils resemble the old home-made tube base variety. All markings are in Russian. Vintage circa 1930's.

Item #2 - An extremely rare 3 tube receiver made by the Marconi Instrument Co., Ltd., London, England. The 3 valves are held by clips on the front panel. Coil coupling controlled by an unique pullet arrangement. Hedgehog open audio transformer, etc. A good guess would place it around World War I.

Item #3 - A 1/2 KW. Arc Transmitter manufactured by the Sperry Gyroscope Co. Type CS-814 with companion receiver and wavemeter. The whole unit is enclosed in a huge cabinet requiring 3 to 4 men to lift. The xmtr is a modified arc which operates at 500 volts D.C. Unlike most arc jobs, the arc is struck each time the key is pressed. The A.W.A. is indebted to Worcester Polytech for this beautiful set. How about it OT's - any info on this piece of equipment??
WITH THE HISTORIANS

W8DG needs no introduction to most of you OT's. Dan can be heard regularly on the Morse Net and is active in the QCWA. He plans to make some tape recordings of W8TE in the near future. W8TE has had an unusual background in early wireless.

W2IA started in 1911 signing "AP" - been active ever since. George retired recently from the Telephone Co. (Bell) and has a modest collection of old gear. He only needs 9QSTs to complete his file. How about helping him out?

W2ONE is a pioneer telegrapher and historian. In fact, Bill is OFFICIAL HISTORIAN for the Morse Telegraph Club of America! If you want to know anything about wire telegraphy or the Western Union - here is your man.

K6MOA is an old timer out in South Dakota. Ed is working up a small collection and would like to contact some of the fellows.

W3GQQ unlike W8QP (87 years old) is only 17 which makes him the youngest in the group. "Jonesy", which is his nickname, inherited his father's fine collection of old books and magazines and wishes to carry on where his Dad left off. It is well that there is some "spirit" in some of the younger group.

W1HGM is the other famous Key Collector in our midst...and would'nt you know it - it is another she - Virginia Zitzow! Virginia has over 65 rare keys in her collection. She and W3WRE (Louise) are doing an outstanding job in their field and can put many an OT to shame with their historical background.

W4AA reports that he has a 1900 Coherer and De-coherer... Wayne did'nt say, however, whether he has it in operation or not.

W6KKP is an official in the Bell Telephone Co. Harry is interested in old tubes and is active in the local QCWA.

W6GVY and W2AAA got together as a result of the collector's column...fd.
W3WRE adds another name to the museum list: U.S. ARMY SIGNAL CORPS MUSEUM at Ft. Monmouth, N.J. Lou also tells us that G5CS is the Curator at the British Museum. More on Museums later.

W8JDV is one of the several that plan to visit the Ford Dearborn Museum after reading W8FX's article in the last Bulletin.

W2ZI reports having received one of the old receivers used at Riverhead, L.I. (RCA) on the long wave circuit. Made by G.E. in 1920, it tunes from thru the medium wavelengths up to 20,000 meters - a choice item!

W1QCM is another OT who is active again after many years. Max has a general interest in old time wireless and scientific apparatus.

W4WPF is trying to arouse interest down in Florida. "Marv" is a director at the City Museum where they have started a collection. More dope on this collection later.

W2AAA understands that they may publish a book on his "OT Articles" - if so, here is another "must" for your library. He will keep us posted.

-- -- Just received some excellent material from E.T. Jones of RCA. Ed hardly needs an introduction to most of you - a real OT in both the "ham" and commercial game. More dope on Ed later.

WITH THE COLLECTORS -- --

WANT - old keys of any description - buy or swap. W1HGM

WANT - Atwater Kent Models #9 and #12 (breadboard) broadcast receivers. Earl England Ex-VE3QL, 6651 Pollard St., Los Angeles 42, Calif.

WANT - old commercial marine (spark) gear. Will pay any reasonable price. K2ZSA

SELL or SWAP - IP-500, IP-501 and IP-501A receivers plus several early broadcast sets. Want DeForest responder. W1AAT

SWAP - Bunnell "Mascot" variable condenser in beautiful cherry wood case - vintage of about 1915...also dozens of old tubes... W2ZI

SWAP - Freed-Eisman NR-9, W.E. Studio mike Mod. 387-W, W.E. Mod. 7A amplifier and many early broadcast sets - for what have you ? W6GVY

WANT - QSTs from December 1915 to December 1916 inclusive. Will pay any reasonable price. W3GQQ

SWAP - QST, March 1917 in mint condition - want QST Vol. II, No. 1,2,3 and 10, and Vol. III, No. 1 and 2. K0MOA

WANT - pay $5.00 cash for January 1945 "CQ" magazine. W4AA

SELL - U.S. Army Signal Corp (First War) regulator tubes. Type TB-1. $1.50 for carton of five in original boxes Howard Schrader, P.O. 185, Princeton Junction, New Jersey.

THE STORY OF AN UNIQUE KEY COLLECTION

by Ed Raser, W2ZI

Realizing that the key is the fundamental instrument of both wire and wireless telegraphy, I became intrigued with the idea of knowing more about their various types and styles. The fact that one is a telegrapher also adds to this interest and makes "the game" more enjoyable. My telegraph experience dates back to 1908 - both wire and "king spark".
The collection consists of 80 keys all told - many of which have exceptional background such as the first key to fly the Pacific in the airplane "Southern Cross", the Byrd Antarctic key (first over the pole), the partially burnt Morrow Castle key which was removed from the ship while still on fire, the Tuckerton key (control) or possibly an Italian Marconi key - once owned by the great inventor himself - are all but a few. Other odd ones would be a French key used at the Eiffel Tower (with oil break pot) or a 10 KW. air cooled key made by the old American DeForest Wireless Co. with radiating fins on the contacts, a British cable key dating back to 1890 plus numerous aircraft and submarine keys, European land line keys, etc.

It may be of interest to mention that included are Morse keys dating back to the 1870 period (with their sounders) featuring such patents as the early Lewis, Tillotson and Ghegan models plus several made at the old Altoona shops of the P.R.R. with straight lever. An early type Foote-Pierson Morse Register which taps out the code on tape is also included in the Morse exhibits.

Now to mention some of the old time wireless keys which include keys from all of the major wireless systems operating from 1904 to the end of War I. We're speaking of old companies which have long ago disappeared from the American scene such as United Wireless Telegraph Co., The American DeForest Wireless Telegraph Co., Massie Wireless Telegraph Co., Marconi Co., Wireless Specialty Apparatus Co. and many others. There are also keys made in London by the Marconi Wireless Telegraph Co. and the Marconi International Telegraph Co. I have one model which is identical to and an exact replica of the key that was aboard the ill-fated "Titanic" which was lost at sea in 1912. Of special interest is a huge Massie Wireless key mounted on a slate base which broke the primary circuit of some 35 KW. at the Old Point Judith station back in 1908. This key is some 19 inches in length and weighs around 18 lbs!
This gives you some idea of what the old time wireless man had to contend with in the early days of the game.

Along the line of early amateur keys known in the early days are some beauties on marble bases such as the Clapp-Eastham and "Reco" varieties, the heavy brass types made by J.H. Bunnell & Co., "Mesco", Signal Electric Co., etc. Sideswipers made by Bunnell and the missing "link" - that famous "cootie" key made by Bob Karlowa, W9XR back in the early 20's. This key had the real neat "flowing action" that most others did not have - they being too stiff. Other oddities in the collection are a very early "Mecograph" made in 1903 and an "Ultimate" model - both of the "bug" varieties - not to mention the various Vibroplex types. The real "cutie" I must mention is the tiny Bunnell key weighing only a few ounces and small enough to be worn as a watch charm!

Foreign keys are also worth mentioning although the Japanese types seem to be the easiest to find. The collection includes keys from most of the major countries such as France, Italy, England, Germany, Czechoslovakia, Austria, China, etc. One in particular is the one that keyed the circuit between Karachi and Kunming, China during the last war, dispatching the planes which flew over the "hump" in the C.B.I. area. As you can see, collecting keys can be interesting as well as lots of fun. 73, Ed

FOR THE HISTORIAN — —
A tip on two magazines to read:
"RADIO CRAFT" March, 1938 (Jubilee Issue)
"RADIO ELECTRONICS" April, 1948 (Anniversary Is.)
Both of these magazines were published by Hugo Gernsback and contain excellent material as well as many rare pictures.

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COLLECTING ANTIQUE BROADCAST RECEIVERS
by W2ICE

The collecting and restoring of early commercial made broadcast sets is a relatively easy and inexpensive field for the newcomer interested in starting a collection. Unlike amateur and commercial gear which has a historical span of over 40 years, historical broadcast equipment is confined within a period of only 10 years - 1921 until about 1931. However, within this short period of time, tens of thousands of receivers were made and with a little patience one can build up a nice collection by scrounging through attics and second hand stores.

Broadcast sets are in 3 historical groups:

Antique - 1921 thru 1923. These are the first receivers offered to the public when broadcasting was in its infancy - the amateur was still operating around 200 meters and in many incidents was the local broadcaster! A well rounded historical collection should include at least one receiver made by Westinghouse, General Electric and Wireless Specialty for RCA under RCA patents. These receivers were manufactured before RCA started to make their own products. You will find the one most difficult to obtain will be one manufactured by Wireless Specialty Apparatus Co. for RCA. (a tip - it might be a crystal set in a metal box!).

The easiest to find toward the end of this era will be, of course, RCA's own product - the Radiola III or III-A using WD-11 tubes. Another well known receiver about this time that the collector should have is one of the several models of the Atwater-Kent breadboard sets using UV-201's or the Westinghouse Detector and 2 step job in the "R" series.

Vintage - 1923 thru 1927. This is the period between early broadcasting and the A.C receiver. It would be impossible to
cover the dozens of manufacturers of this era. Suffice to say, the author feels that the collectors should try and find a few of the notables such as the Fada "One-Sixty" or a Stromberg-Carlson neutrodyne, an early Crosley, a Freshman "Masterpiece" or a Grebe "Syncrophase", and last but not least, one of the famous RCA superhets using the cata-comb and UV-199 tubes.

Classic - 1927 thru 1931. This represents the end of a great era. Several manufacturers made huge semi-custom built receivers such as Scott, Silver-Marshall, Remler, etc., all of which were ultimately replaced by mass production receivers without individuality!

Thru these ten years of course, there were "gems" which never should be overlooked, if they can be found!.....these include the Federal, Zenith, Kennedy, Leutz, Norden-Hauck, etc. With the exception of the last few, most of the receivers mentioned in this article are not worth over $5.00, in fact, a dollar or two would be considered a reasonable figure.

- - NOTES OF SPECIAL INTEREST - -

We were very pleased to hear from another old timer, Ed Handy, W1BDI at League Headquarters. Ed noted the comment in Bulletin #1 regarding Les Benson of Benwood Gap "fame" and promptly fills the "gap" (no pun intended) by telling us that Bill Wood is a W4 down in Florida! Ed also was interested in W2ZI's article on NBD. Seems 1BDI comes from Maine and lived in the shadow of ole NBD!

One of the few real amateurs left in the country who still designs and makes his own equipment is W9AX out in Shelbyville, Ind. "Thorn" is making a complete spark set (shielded, of course) - however, the unique thing about this spark transmitter is that it is provided with different primary frequencies resulting in notes up to 500 cycles! Once in
operation, he plans to tape record the various signals for posterity. A "dupe" is already on order for the A.W.A.

ATTENTION: The next "Bulletin" (sometime in March) will list all the collectors and historians.