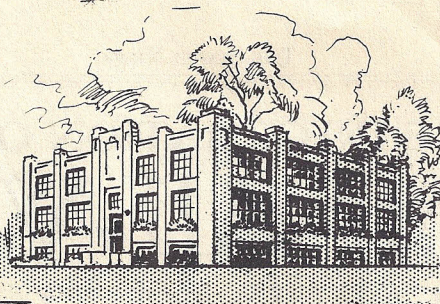


The Scott News




Vol. 5

JANUARY, 1933

No. 1

WHAT FAMOUS ORCHESTRA LEADERS THINK OF THEIR SCOTT RECEIVERS



Mr. E. H. Scott,
Scott Radio Laboratories,
4450 Ravenswood Avenue,
Chicago, Illinois.

Dear Mr. Scott:-

Just a word of appreciation for the satisfaction I am having in the using of your set.

In the years I have been making and broadcasting radio programs, I have been wanting a radio set that would give me what I wanted. I have wanted a set that was precise, that would enable me to check my programs from a local station against an out of town station and know that I could get it as surely as I could a telephone number.

I want you to know that I have it in your set and I desire to thank you.

So far, on the short wave band I have E A Q from Madrid whenever they are on, Venezuela, and have also heard Ecuador. In addition I have much fun listening to plane talks, amateurs, police calls, etc.

I should probably have better reports on the short wave band, but have not had time to really devote myself to the proper workings of the set.

But it is what I have been looking for ever since I entered the radio game, and once more, my sincere thanks for a radio instrument that is really dependable and accurate.

Sincerely yours,
Frank Westphal
Frank Westphal.

FW-F.

STATE OF ILLINOIS }
COUNTY OF COOK } ss

February 4, 1933

I, E. H. Scott, President of the E. H. Scott Radio Laboratories Inc., hereby affirm that the two letters reproduced on this page from Messrs. Frank Westphal and Guy Lombardo were absolutely spontaneous expressions of their opinion of their receivers, wholly unsolicited by me.


I further affirm that they ordered and paid for SCOTT ALLWAVE DELUXE RECEIVERS in the ordinary process of our business without solicitation from us and the letters reproduced on this page were given by them without any promise either implied or actual, of remuneration of any kind whatsoever for them.

SIGNED: E. H. SCOTT

Subscribed and sworn to before me this fourth day of February, 1933.

ATTEST: E. B. BARNARD, Notary Public.

My commission expires Nov. 8, 1934



MUSIC CORPORATION OF AMERICA

AMOUNT BUILDING
NEW YORK
ONE CHICKERING 9400

312 WEST HANCOCK STREET
CHICAGO
PHONE STATE 1807

OVATT BUILDING
LOS ANGELES
PHONE TRINITY 6263

ADDRESS REPLY TO NEW YORK

Mr. E. H. Scott
E. H. Scott Radio Laboratories Inc.,
4450 Ravenswood Avenue
Chicago, Illinois

Dear Mr. Scott:

I want to take this occasion to tell you that the pleasure I have derived from my new Scott Radio, is far beyond anything I had anticipated.

Being vitally interested in radio, I naturally pay particular attention to tone qualities of the various sets, and in my opinion, Scott Radio produces the finest and truest qualities of any radio I have ever heard. I do not think that the tone can be improved - it is already perfect.

Scott Radio is more than an instrument - it is the product of a master craftsman and produces the true qualities of master artists.

Sincerely yours,
Guy Lombardo

GL:CS

CKOK CANADIAN INTERNATIONAL STATION PLACES ORDER FOR SCOTT ALL WAVE RECEIVER

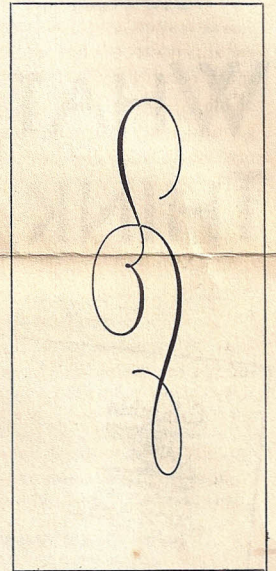
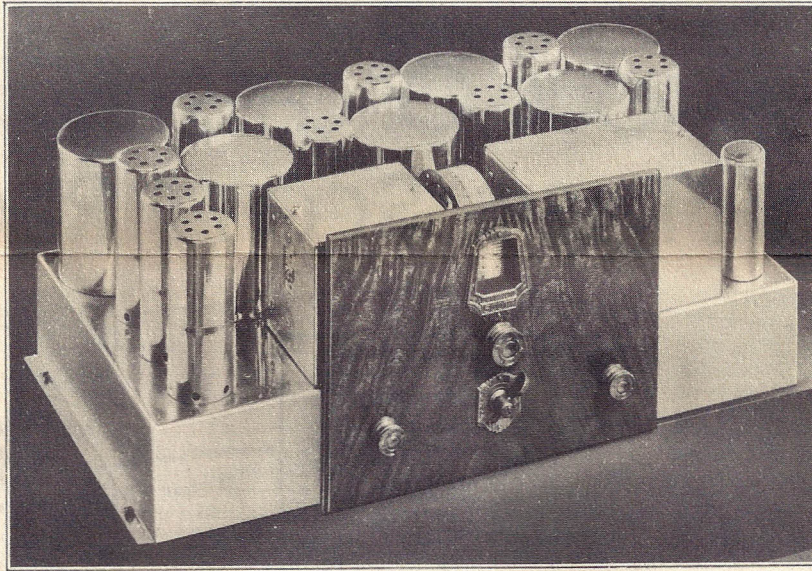
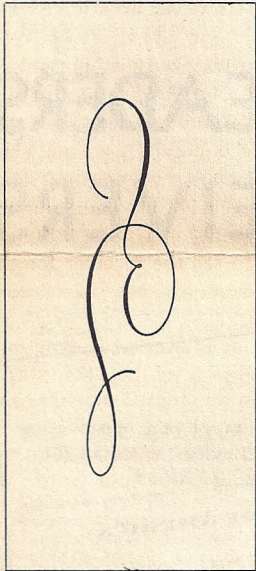
Recently CKOK, Canadian International Station at Windsor, Ontario, Canada, telephoned us stating that they had a large advertising contract from a client who insisted that he be able to pick up the program direct in Chicago. This station operates on 540 meters, just outside the regular broadcast band, and they informed us they had not been successful in securing a receiver that would reliably play their station in Chicago during daylight hours.

We immediately went to our test room and tuned in CKOK clear and strong. The next day, we received their order for a Scott All-Wave DeLuxe to be delivered direct to the home of Mr. Doason, General Sales Manager of the Purity Bakeries Corporation, in Wilmette, Illinois. Thus, a SCOTT RECEIVER became a part of the contract with their client, so that he could check daily his program as it left the station.

SCOTT RECEIVERS are now in daily use by dozens of prominent radio advertisers to check their programs as they leave the air from the various stations broadcasting them. Where difficult reception is required, the Scott Allwave DeLuxe is the receiver that performs when others fail.

MORE INFORMATION ON THE Latest Scott All-Wave Super

Reception tests with this receiver were discussed in detail in the two preceding articles of this series. This month two interesting incidents of the test are described and more information is given on the receiver itself



THE RECEIVER CHASSIS

Totally inclosed in chromium-plated shields, the chassis is a thing of beauty. The power-amplifier, power-supply unit (not shown) is a fitting mate for this chassis in both utility and appearance

IN two preceding articles (August and September issues) the results of reception tests covering both the short-wave and broadcast-band reception were described. These tests demonstrated the sensitivity and the selectivity of the new Scott DeLuxe all-wave receiver and provided an ample check on the characteristics as shown by means of curves in the August article.

Since writing the first two articles there have been two interesting experiences with this receiver which may well go on the record. The first one is not particularly unusual but is cited to show one of the "stunts" which add to the pleasure of possessing a good all-wave receiver. The second is unusual—so much so that the reader cannot be blamed if he takes it with a grain of salt. No one who had not actually witnessed the feat could be blamed for being skeptical, but it was actually demonstrated and was witnessed by two members of the Radio News staff, who can vouch for its authenticity.

The first experience occurred on the Fourth of July, or on the Saturday following (the log is not clear as to the date). About 6:50 p.m., while idly tuning in the short-wave range, a phone station which signed itself WEF (a commercial 'phone station) was heard calling LSX of Buenos Aires. Contact was established and WEF explained that it was calling to arrange test details, preparatory to an American rebroadcast of the LSX program. Tuning the receiver then to LSX, this South American station was picked up, and thereafter both sides of the conversation and tests were brought in by shifting back and forth between the dial settings of the two stations. This continued until about 7:10 p.m., after which LSX stayed on the air continuously.

It developed that the rebroadcasting was to be done by the Columbia chain, beginning at 7:15 p.m. Switching the receiver to WABC'S setting

on the broadcast band, the rebroadcast was heard to start shortly after this hour, and thereafter, switching the receiver back and forth between 349 meters (WABC) and 30 meters (LSX), a comparison was made possible.

The quality of reception direct from LSX was a surprisingly close approach to that of the rebroadcast from WABC—surprising because here we were using a Scott receiver with a mediocre antenna and only an average location (Fairchild, Connecticut), while the commercial station which was picking up and relaying the program via land wire to WABC had the advantage of receiving equipment costing many times as much as our receiver, plus probably an ideal directional antenna, in an excellent location. Actually, the only substantial difference between the original and the rebroadcast was found in the occasional interference caused by the ignition systems of automobiles passing on a road about 30 feet from the receiving antenna. The program as received direct was strong and clear, free from background noise (except the automobile ignition interference, and this was only slight), with fading so slight as to be almost imperceptible. In every respect the direct reception was such as to be thoroughly enjoyable.

It is not intended to convey the idea that the comparison between direct and rebroadcast reception is always so favorable. When fading is bad, for instance, the special antenna equipment and almost unlimited facilities of the commercial phone receiving stations may permit volume to be held at more constant levels. Also, the use of directional antennas helps to hold background noise to a minimum. But, given reasonably favorable conditions, a really good all-wave receiver such as the one under discussion can provide the thrill of enjoyable direct reception of important foreign programs, eliminating dependence on local broadcast

By S. Gordon Taylor

stations which may or may not be rebroadcasting the desired programs.

The second experience referred to above occurred one evening in the middle of July. About 8:15 p.m., EAQ of Madrid, Spain, was tuned in and was found to be somewhat stronger than usual.

Europe Without an Antenna

After listening to the program for a few minutes, the outside antenna was disconnected and a short indoor antenna connected in its place. This worked very well, so it in turn was replaced with a 6-foot wire then a 1-foot wire, and finally the antenna was eliminated entirely and still signals came in with sufficient strength to be heard by a member of the family sitting on the porch about 12 feet from the speaker.

With such a completely shielded receiver (even the tubes are shielded, except for the vent holes in the caps), it appeared that the pick-up must come either through the ground lead or through the metal body of the antenna binding post itself. The next step was to disconnect the ground lead from the receiver, and—believe it or not—the station was not only audible, but understandable (announcements are made in both Spanish and English) out on the porch. This meant that, with nothing connected to either the antenna or ground binding posts, the program from several thousand miles away was still being heard!

On Monday, July 25, shortly before 6 p.m., the same thing was tried on 12RO, Rome, and the same results obtained as previously with EAQ. Then it was repeated on the Eiffel Tower station in Paris, proving that antennaless reception was not just a freak of the 30.4-meter wavelength on which EAQ transmits.

It might be well to add that to eliminate the possibility that pick-up was being transferred from the nearby antenna lead which had been disconnected from the receiver, this lead was first grounded and later removed entirely from the vicinity of the receiver, without any noticeable decrease in the received signals.

Single-Control Tuning

In the first article of this series the outstanding features of this receiver were mentioned. Since that time the author has had considerable experience with the receiver, operating on all wavelengths, and more detailed first-hand information can now be given on some of these points.

The true single-control tuning has proven during these reception tests to be all that was claimed for it. It is no great trick to provide a single control for a *broadcast* superheterodyne, but to extend single-control operation, with no auxiliary verniers of any type *throughout the entire wave-band from 550 meters down to 15 meters*, is a real accomplishment. That it has been accomplished effectively in this receiver is quite evident from the sensitivity and selectivity demonstrated on all wave-bands. The success of this system is due to a feature of the electrical design of the receiver which makes tracking of the circuits mostly automatic. It would be impossible to apply the ordinary methods of ganging over such a wide frequency band, but by combining these methods with special coupling design, the seemingly impossible has been accomplished.

In the broadcast band there are three tuned circuits—the r.f. tube input, the first detector input and the oscillator. When the band switch is thrown for any of the three short-wave bands, the tuned input circuit of the r.f. tube is automatically taken out of the circuit and, instead, the primary of the broadcast antenna coupler is connected directly into the grid circuit of this tube. The result is that for short waves the antenna is conductively coupled to the r.f. tube and, by means of the local-distance tap switch, even this circuit is partially tuned. The first detector input

and the oscillator circuits are both tuned when operating on the short-wave bands, the same as on the broadcast waves.

The band-switching system has proven itself flawless in operation. A simple throw of this switch to any one of its four positions selects the desired wave-band. An interesting illustration of the simplicity of this arrangement is found in tuning from W8XK, the Pittsburgh short-wave station that operates on 48.86 meters, to WEAF. It so happens that W8XK comes in at exactly the same point on the dial as does WEAF. Thus with the band switch set for the 23-61 meter band and with W8XK tuned in, a turn of the band selector switch to the broadcast range is all that is necessary to bring in WEAF.

Another interesting point disclosed in tests was the accuracy of the frequency calibration on the broadcast band from 550 kc. to approximately 1000 kc. Every channel below 1000 kc. may be tuned in right on the dot as indicated by the frequency scale. From 1000 kc. up, the calibration is slightly off, but the maximum variation is less than one channel (10 kc). The advantage of this degree of accuracy is seen when a station is tuned in and one can tell at a glance the frequency upon which it is operated. For the DX enthusiast this feature is invaluable. Even to those who are not particularly interested in DX reception, it is most decidedly an advantage to be able to set the receiver for the frequency of any desired station with the assurance that that station will be heard.

The receiver employs two stages of audio amplification feeding into a push-pull stage, using a pair of type —45 tubes, a total of three stages in all. This unusually large amount of audio amplification makes the audio system excellent for phonograph or microphone reproduction. A pair of binding posts for connection of these devices is provided on the back of the chassis. Likewise plenty of amplification and power are available for home recording.

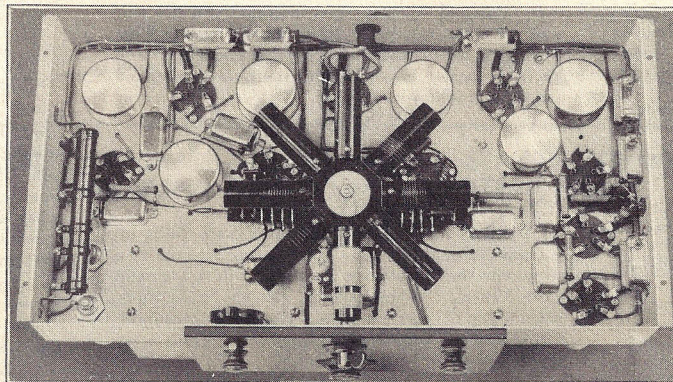
Antenna Requirements

Naturally, the antenna requirements are an important consideration in the case of a modern receiver. In the tests conducted by RADIO NEWS various antennas have been tried with the set. The one used in most of the tests is approximately sixty feet long, and with this the all-around results on both the short wave and broadcast bands are excellent. On the other hand, an antenna approximately 200 feet long and with an unobstructed elevation of 100 feet has been tried. Naturally the signal strength from distant stations was greatly increased by this tremendous antenna. As for selectivity, WEAF, the strongest "local" station, just barely reached over into the adjacent channel occupied by WMAQ of Chicago. Other New York stations, about fifty or sixty miles distant from this antenna and using up to 50 kw. power, were confined strictly to their own channels, permitting out-of-town stations to be tuned in on the adjacent channels on either side. From this it would appear that in average location there is almost no limit to the size of the antenna that may be employed. With a short antenna, such as is normally used with a high-powered receiver, the results will be excellent and the selectivity almost unbelievable, whereas with a very large antenna the signal strength will be greater and the selectivity still good enough for all practical purposes.

On the whole, this receiver seems to be one which will meet the demands of every type of radio listener. Its operation is so simple that even a novice will not have the least difficulty in using it. On the other hand, its performance is such as to satisfy the requirements of the most rabid DX fan, and not the least of advantages is the fact that maximum performance is easily obtained, even by one who knows nothing about the technical side of radio.

THE MULTI-WAVE COIL ASSEMBLY

Some idea of the precision construction of the receiver is gained from this bottom view of the chassis with shield plate removed



PROGRAMS FROM EVERY COUNTRY ON THE GLOBE RECEIVED BY SCOTT OWNERS

ZEESEN, GERMANY 100 FT. AWAY

"This morning I listened to ZEESEN on 19.7 meters with tremendous volume and clarity. With the set's local distance switch set on the local tap, ZEESEN could be heard 100 feet from the set with the volume control turned about half on. This is indeed remarkable reception and one must actually hear it to believe it can be done. The tone was so perfect and the carrier so steady and positively quiet that it sounded like WWL, a 10,000 watt station in New Orleans."

F. L. Pullen, Baton Rouge, Louisiana.

10 KC SELECTIVITY 100% CORRECT

"Without question this is the most sensitive radio receiver I have ever seen, and frankly I have owned or had available practically every set built. Local service men also concur with me in this thought. As to selectivity, I find your claim of 10 KC selectivity is 100% correct."

S. G. Persons, Montgomery, Alabama.

DID NOT BELIEVE RADIO HAD REACHED SUCH DEGREE OF PERFECTION

"Ten years experience with radios of every type and make has made me a bit sceptical of all claims you make. I did not believe a radio receiver had reached quite the degree of perfection you claim for the DELUXE. Here's my apology—your set is all that you have claimed for it."

H. C. Jung, Berkely, California.

FOREIGN RECEPTION ANY DAY

"I am more and more pleased with my DELUXE RECEIVER every day. On the regular broadcast band I have heard one or more stations on every channel. I hear Californian stations almost every evening and Mexico every night. On the short wave bands I can get foreign reception any day—France, Italy, England, Germany, and Spain come in good and I am also able to get the two Australian stations whenever they are on the air.

My new Receiver came on Wednesday. We had it set up in about an hour and never before have any of us heard such wonderful tone or so much power. The next day I began to use the short waves and heard Italy, England, France and on Saturday morning I heard VK3ME, Melbourne and this morning VK2ME at Sydney came in strong—also Germany."

R. P. Hess, Meriden, Conn.

RECEPTION FROM ALL PARTS OF THE WORLD

"It may interest you to know that my seven year old son has been receiving the past six to eight weeks reception from RW59, VK2ME, VK3ME, EAQ, DJA, 12RO, G5SW, Pontoise and I have sent logs for verifications. Between us we have received many more stations but do not understand their language. The DELUXE is gorgeous and a great success when it comes to building receivers you belong ahead in the highest class."

Charles Kiehl, Kittery, Maine.

HEARS NATIONAL ANTHEMS FROM THREE COUNTRIES WITHIN 30 MINUTES

"It is with a lot of pleasure that I write this letter to you. Your receiver is all that you said it is and more too. On Christmas day within a period of 25 to 30 minutes we listened to Pontoise, France, and then England and then to Germany, each with a Christmas program. Stations come in clear and distinct. It was a peculiar incident but we heard the national anthem of each of these countries played on each program."

Oscar L. Horton, Athol, Mass.

MOST NATURAL TONE HE HAS EVER HEARD

"I have spent practically all my life in the electrical industry and have for the last 20 years in the electrical business being an electrical inventor and therefore believe myself qualified to state that this receiver is a marvel.

"I had hardly believed it possible to so accurately calibrate an allwave receiver that both broadcast and short wave signals would come in exactly where they were expected.

"This morning I got up early to try to listen to VK2ME, Australia for the first time. I had not previously located them as you suggested but simply calculated the dial setting by the use of your circular short wave station finder. The dial settings were exact and VK2ME came in with such volume so that it could be heard all over the house from the loud speaker.

"On other occasions I have received England—France—Germany—Italy, South America. Reception is equally satisfactory on the broadcast band. I find the receiver so selective that interference between stations is eliminated. The natural tone which comes from the loud speaker is the best I have ever heard. Let me congratulate you on your ability to create such an all-around receiver at any price. I can easily understand the great amount of thought that has been given to the development of such a receiver."

Grant Wheat, Marlboro, Mass.

FRANCE, ITALY, MOROCCO, GERMANY GOOD AS LOCALS

"Some time ago you made a statement that if someone gave you a million dollars you could not build a better set than your DELUXE model. I sure do agree with you that it is the best receiver I have ever handled or heard. When a receiver pulls in VK2ME at 3:00 p.m. on Sunday afternoon, then it deserves credit. France, Rome, Rabat, Morocco, Germany, Argentine and many others all come in as good as stations on the regular broadcast band. So, when you make a receiver that will beat your regular DELUXE, then I want to hear from you."

Joe Minarick, Midland Park, N. J.

BETTER THAN EXPECTED

"I am glad to inform you that I am exceedingly pleased with the most wonderful performance of your SCOTT ALLWAVE DELUXE model superheterodyne. It is quite a revelation and performs even better than I expected. Allow me to congratulate you and your staff on your wonderful achievement, regarding its selectivity, utmost sharp tuning, naturalness in general for both regular broadcast and short wave reception and the splendid workmanship."

Dr. I. Dreyfus, Brooklyn, New York.

AUSTRALIA - GERMANY - ITALY EVERY TIME

"My DELUXE RECEIVER is certainly doing all you said it would do. Just this evening I tuned in a station on the short waves and it came in so loud and clear I thought it was Mexico. Imagine my surprise when the announcer announced station EAQ, Madrid, Spain. I pick up Paris and Berlin and get Australia every time I try for it."

A. E. Maynard, Chagrin Falls, Ohio.

PERFORMS WONDERFULLY

"My receiver arrived Friday and I got busy immediately and installed it in my fine oak cabinet. It looks like a million dollars and is performing wonderfully. Despite wretched weather conditions here and the use of a temporary short wave aerial I have been able to hear 12RO, G5SW, Pontoise, DJA and the three Daventry stations and telephone tests, both VK2ME and VK3ME, HJB phoning EAQ, a station in the Bahamas calling 4XB at Miami. HBQ is another of the League of Nations stations heard and YV1BC at Caracas, Venezuela."

W. C. Gangloff, Cincinnati, Ohio.

BIG BEN IN LONDON SO LOUD SHAKES ROOM

"In the SCOTT ALLWAVE DELUXE I feel that I have the greatest receiver it is possible to own. I have tuned in England, Spain, France, Italy, South America and Australia with plenty of volume. Only last Saturday I listened to G5SW for one hour straight without any interruption and heard Big Ben so loud that the vibrations just seemed to shake everything in the room."

William H. Abel, Cleveland, Ohio.

WOULD NOT TAKE \$500 FOR HIS RECEIVER

"Our receiver came Saturday morning, the 15th, and was placed in the console by Sunday afternoon. About 4:30 we turned it on and were amazed at the results. Absolutely no noise and the tone is inspiring. How any reproduction could be more natural is beyond our imagination. Ours is truly a precision built instrument and I would not take \$500 for it for fear that another set could not be bought quite as good as the one we have."

J. Lee Harmon, Bloomsburgh, Penna.

GETS STATIONS NEVER BEFORE HEARD

"My DELUXE RECEIVER arrived just three weeks ago and it is just a wonderful piece of work. I was quite skeptical of your claim "foreign reception every day" so I started the day I installed the receiver and so far I have tuned in Berlin every day since January 1st. I have brought in a French station with good volume a few degrees below on the dial from Berlin. The German station comes in clear with lots of volume. The lady living in the apartment below us understands German very well and she enjoys these German programs in her kitchen every day.

"On the broadcast band I get stations that were never heard of before in this location. One day last week I went over the dial and tuned in 62 different stations."

Kenneth Milligan, Scranton, Penna.

MOST NATURAL TONE

"When a man's possession is meritorious he is always proud to say something about it especially when it is free from brag. That is the case with my SCOTT ALLWAVE. It is absolutely the most wonderful toned radio I have ever heard from the standpoint of naturalness, including all high and low notes when tuning either at high or low volume. One of the many outstanding features of this receiver in my opinion is its freedom from noise, especially on what may be called local reception. By this I mean stations including as far away as 2000 miles. There is no hum, scratching or crackling so common in other so called "super sets." I can only say direct from the heart that I am more than pleased."

John C. Dengler, Dallas, Texas.