

# The Scott News



Vol. 10

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No. 2

## AN IMPORTANT ANNOUNCEMENT

This announcement brings news of the final perfection of a radio receiver design development which I believe will require the setting up of entirely new standards for orchestral, instrumental and vocal radio and phonograph reproduction. After nearly a year of continuous research and

development in our experimental laboratory, The E. H. Scott Radio Laboratories announce with this issue of The Scott News—perfected VOLUME RANGE EXPANSION for both radio and phonograph reproduction.

### *Mile Stones in Radio Receiver Design*

THE first radio receiver was a simple affair consisting of a coil, variable condenser and a crystal detector. With this apparatus and a set of head phones, voice and music was first received out of the air.

#### *First Major Development— the Audion Tube*

The FIRST major development in radio receiver design, after the invention of the crystal detector receiver, was the invention by Dr. Lee DeForest in 1907 of the Audion Tube, which has made it possible to increase the distance range over which a signal could be received from a few miles, to the reception of signals from broadcast stations thousands of miles distant.

#### *Second Major Development—the Tuned Radio Frequency Receiver*

The SECOND major development was the introduction of the Tuned Radio Frequency Receiver, which by using several tuned stages of R.F. amplification made it possible to secure greater Sensitivity and Selectivity.

#### *Third Major Development—the Superheterodyne Receiver*

The THIRD major development was the Superheterodyne Receiver, which came into general use in 1923. The Superheterodyne circuit enabled so much greater Selectivity and Sensitivity to be secured, that it quickly made obsolete the less efficient Tuned Radio Frequency circuits, and today is the basic circuit used in every modern radio receiver.

#### *Fourth Major Development— the A. C. Tube*

The FOURTH major development came three years later, in 1926, with the introduction of the A. C. tubes, which made it possible to eliminate the heavy, costly storage batteries and dry cells, and operate a receiver direct from the electric light socket.

#### *Fifth Major Development— the "Allwave" Receiver*

The FIFTH major development was the introduction in 1929 of a combination short wave and broadcast band receiver which is now generally known as the "All Wave" receiver. This development has made possible in one receiver, the reception of programs from broadcast stations from foreign countries as well as local broadcasting stations. It is significant that although the combination receiver for the reception of foreign stations on the short waves, as well as stations on the broadcast band, has only been generally adopted by other radio manufacturers within the past three years, the Scott Radio Laboratories recognized it as a major development over seven years ago, and have been continuously engaged in designing and building this type of receiver since 1929.

#### *Sixth Major Development—Automatic Volume Control*

The SIXTH major development in radio receiver design came in 1931 when Automatic Volume Control was introduced to eliminate fading and to keep signals from distant stations at a constant level.

#### *Seventh Major Development—High Fidelity and Variable Selectivity*

The SEVENTH major development came last year, 1935, with the introduction of High Fidelity and Variable Selectivity. This development, as incorporated in the highly efficient custom built 23 tube SCOTT FULL RANGE HIGH FIDELITY RECEIVER, has made it possible to extend the Overall Fidelity Range from 30 to 16,000 cycles, thus including every tone or note that can be heard by the human ear, and any degree of Selectivity required from 2 to 16 Kc., enabling weak distant stations on channels adjacent to powerful local stations to be brought in without interference.

#### *Eighth Major Development—Program Volume Range Expansion*

This issue of the "Scott News" announces what I believe will prove to be the EIGHTH major development in radio receiver design—the perfection of PROGRAM VOLUME RANGE EXPANSION designed for general use in a moderately priced radio receiver and operating on both radio and phonograph reproduction, automatically performing a function which is astounding all who hear it. A description of this revolutionary development will be found on the following pages.



# A NON-TECHNICAL DESCRIPTION OF RADIO'S LATEST DEVELOPMENT—SCOTT PROGRAM VOLUME RANGE EXPANSION

THE latest radio development, SCOTT PROGRAM VOLUME RANGE EXPANSION, marks what I believe is one of the greatest advances made in years in the reproduction of orchestral, instrumental, and vocal music. Perhaps some idea of what this new development means can be obtained if you could imagine the effect it would have on you were you to see a statue of stone or bronze suddenly become alive. When you turn on the SCOTT PROGRAM VOLUME RANGE EXPANSION Control, the music you are listening to immediately changes to practically its original range of volume with all the light and shade, and the brilliant, sparkling, living tones you hear with the musicians or vocalist in your presence.

## Supplies What is Now Missing in Reproduced Music

So that you may fully understand the reason why all music as you now hear it from a radio receiver or phonograph record lacks to a large extent the living tone and depth heard when listening to the instruments or to an artist singing in your presence, and why this latest miracle of radio, SCOTT PROGRAM VOLUME RANGE EXPANSION, literally seems to restore the dynamic qualities of the original that are now missing, it is necessary to understand something of broadcast station transmission and phonograph recording technique.

## Sensation Difficult to Describe

It is difficult to describe the sensation felt when you first sit and listen to a selection played through the receiver in the regular way, then hear the same selection with the SCOTT PROGRAM VOLUME RANGE EXPANSION connected. You experience much the same sensation as when you watch a magician perform some amazing feat right in front of your eyes that just looks impossible, for one minute you are listening to a selection in which the reproduction appears to you to be so good, that you can hardly believe it can be improved, then, as the SCOTT PROGRAM VOLUME RANGE EXPANSION is switched on, you suddenly realize that what you thought before sounded so perfect, was comparatively flat

and lifeless compared to what you are now listening to, for it now has a life and vitality which you felt was missing before.

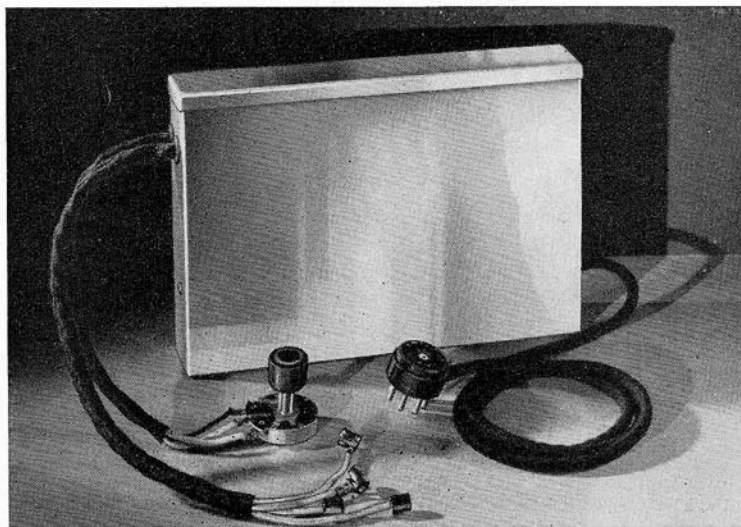
To clearly understand the reason for the remarkable improvement which appears in all music as reproduced with the SCOTT PROGRAM VOLUME RANGE EXPANDER, and the 23 Tube SCOTT FULL RANGE HIGH FIDELITY RECEIVER, it is necessary to understand something of what happens to a program between the time it is played at the broadcasting studio and before it is put on the air.

noticed at one end of the room a large plate glass enclosure, behind which sits the "monitoring" engineer with an array of dials in front of him. Suppose we imagine that music from a Symphony Orchestra is being broadcast from the Studio and directed by one of the world's great conductors. You know that such a conductor seems to put every ounce of his energy into his interpretation of the music the orchestra is playing. When you are actually in the studio or in the concert hall, you thrill to those low toned whispering pianissimos, the thrilling crescendos, and the loud crashing fortissimos passages which characterize the music from a Symphony Orchestra. Strangely, however, when you listen to this music in your home through your radio receiver, you find that all of those soft pianissimo passages have been raised considerably in volume, while the loud forte passages all sound much weaker than you heard them actually played by the orchestra in the concert hall or Studio. What has happened?

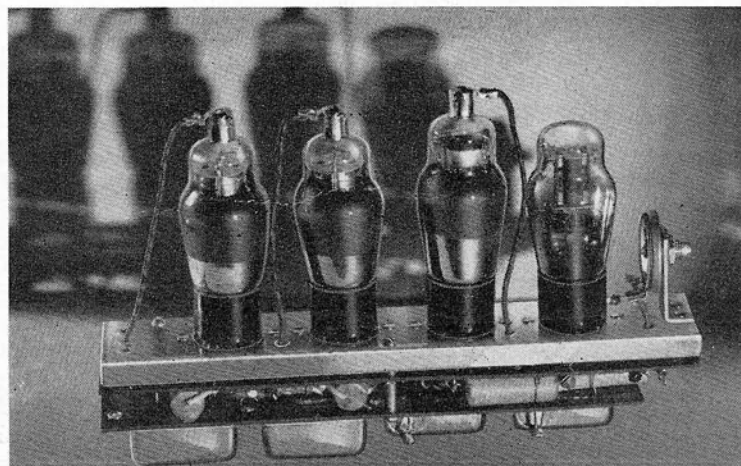
## Why Monitoring Engineer at Broadcasting Station Makes Soft Passages Louder—Loud Passages Softer

The original music which the conductor and the audience hear with the actual musicians in front of them, is "picked up" by microphones suitably placed around the orchestra, and goes immediately to the monitoring room where sits the engineer watching intently certain meters which indicate the volume range of the musical sounds from the orchestra. When the soft pianissimo passages come through, he turns a control and INCREASES the volume, deliberately making the weak passages louder so that they can be heard on your receiver with sufficient volume to overcome audio line and tube noises, microphone hiss and station hum.

When those thrilling fortissimos reach the monitoring room, the monitoring engineer immediately turns a control once more to REDUCE their volume so that they do not exceed a certain level, for otherwise the transmitter would be overloaded by the heavy notes or passages which would cause bad distortion in the music heard through your receiver.



The Scott Program Volume Range Expansion Unit and Cables Ready for Connection to Receiver.



Inside View of Unit and Tubes.

## Why You Never Hear a Symphony Orchestra Through Your Radio As You Do in Auditorium

If you have ever watched a program being broadcast from a studio, you will have

In other words, the monitoring engineer in the Studio actually compresses the dynamic volume range of music and voice, leaving it comparatively dull and lifeless, as compared with how it sounds when you are listening to the music in the Studio or concert hall.

### **Why Phonograph Music is So Often Referred to as "Canned Music"**

Phonograph music has often been referred to as "canned music," because it usually lacks the certain life-like and brilliant quality of the original. Records lose their brilliant quality because the same limitations are imposed in the phonograph recording, for the volume of the faint passages must be INCREASED, so that they will not be drowned out by the record needle scratch, while the strong crashing fortissimos must be REDUCED to a lower volume level in order to prevent overcutting of the record grooves.

### **New Development Restores Missing Quality to Radio and Phonograph Music**

While the design of broadcast stations, especially in the tonal and fidelity range, has been constantly improved, even the newest and most powerful broadcast stations cannot overcome the difficulties of transmitting the full dynamic volume range from the softest to the loudest passages. So over a year ago, research and development work was started in our experimental laboratory to perfect a system that would automatically restore as near as possible to music and voices heard over the air and through phonograph records, the full dynamic volume range which had been cut out by the monitoring and phonograph recording engineer.

This year of intensive work has culminated in the perfection of the SCOTT PROGRAM VOLUME RANGE EXPANSION system which was first incorporated in the truly remarkable 40 tube Scott Quaranta. This magnificent instrument has been the source of wonder and amazement to all who have heard it, but unfortunately, few people can afford to invest the \$2,500.00 such an instrument costs.

### **New Development First Designed for \$2,500.00 Instrument—Now Designed for Use with 23 Tube Scott Full Range High Fidelity Receiver**

However, the system of SCOTT PROGRAM VOLUME RANGE EXPANSION incorporated in the Quaranta has now been developed into a compact special unit which can be directly connected to the 23 tube SCOTT FULL RANGE HIGH FIDELITY RECEIVER, so making it now possible for its owner not only to reproduce the full audible frequency range of every musical note, but also practically the complete DYNAMIC VOLUME RANGE of even a full Symphony Orchestra, from either radio or phonograph records.

This has been accomplished by automat-

ically reversing the monitoring which is done by the engineer in the broadcast station or phonograph recording studio, thus putting back into the music that which the monitoring or recording engineer had taken out, enabling you at last to listen to the reproduction of even a large Symphony Orchestra with practically the full dynamic volume range of the original.

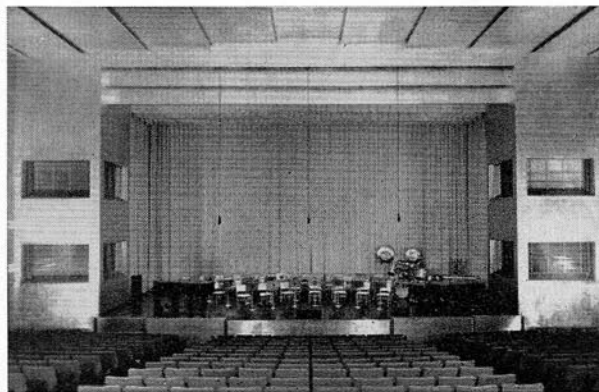


Photo Courtesy WGN.

**A View of a Very Modern Broadcasting Studio. The Monitoring Engineer Sits in the Lower Glass Enclosure at Left.**



Photo Courtesy WGN.

**The Monitoring Engineers Control Board, Through Which He Regulates the Range of Volume of Soft and Loud Passages.**

### **Orchestra or Artist Appears to Actually Open Door in Your Radio and Walk Into Your Room**

As the SCOTT PROGRAM VOLUME RANGE EXPANSION Control is switched on, it literally appears as if the orchestra or artist were actually opening a door in your radio receiver and walking right into your room. Both instrumental and vocal music become so absolutely natural that you cannot help wondering what miracle scientific research will perform next.

### **Simple to Connect in Few Minutes to 23 Tube Scott Full Range High Fidelity Receiver**

The SCOTT PROGRAM VOLUME RANGE EXPANDER unit has been designed specially for present and future

owners of the 23 Tube SCOTT FULL RANGE HIGH FIDELITY RECEIVER, as it is absolutely necessary for perfect results that the receiver with which it is used cover the complete frequency range from 30 to 16,000 cycles, so that all the fundamental tones and overtones of every musical instrument and the human voice can be perfectly reproduced. The design of the unit is very compact, and as no structural changes are required in the receiver, it can be connected and ready for operation in a few minutes. The unit itself uses four tubes and is housed in a chromium plated box 10 $\frac{1}{8}$ " long by 1 $\frac{7}{8}$ " wide and 7" high.

A variable control which can be installed in the front panel or the side of the receiver cabinet is used, so that any degree of expansion, from nothing to the full range of the Expander, can be secured on either radio or phonograph reproduction.

### **Hear It at Either Our Chicago or New York Studios**

The announcement of the SCOTT PROGRAM VOLUME RANGE EXPANDER unit has already created a wide amount of interest. No printed description or illustrations can convey to you the amazing transformation in radio reproduction made possible by the new SCOTT PROGRAM VOLUME RANGE EXPANDER. Your ears alone have to convince you.

To enable those in the vicinity of Chicago and New York to hear this remarkable development, our studios will be open from 9:00 A.M. in the morning until 9:00 P.M. in the evening every day in the week except Sunday, until further notice. It will be a pleasure to have you visit either the Studio here in Chicago, or our Studio in Rockefeller Center, New York, and hear for yourself the tremendous difference between instrumental and vocal music as received in the usual manner, and as it is reproduced through the SCOTT PROGRAM VOLUME RANGE EXPANDER and the new 23 tube SCOTT FULL RANGE HIGH FIDELITY RECEIVER.

**YOU CAN PURCHASE ANY MODEL SCOTT RECEIVER ON OUR BUDGET PLAN. PAY FOR IT OUT OF INCOME. WRITE TO OR CALL AT EITHER OUR CHICAGO OFFICE, 4450 RAVENSWOOD AVE., OR NEW YORK OFFICE, 630 FIFTH AVE., FOR DETAILS.**

## Two Adventurers' Thrilling and Exciting Experiences At Sea With Scott Receivers

There are more ways than one of beating the depression, but I believe most of my readers will agree that the Millers and Zimmermans, whose letters are reproduced on these pages, have discovered one of the most exciting ways of doing it. It certainly was

interesting for the crews of both boats to meet in a small port way down in the South Seas, and find the same make of radio had proved of such assistance and entertainment during the long hours at sea, and helped them chart their course safely to port.

November 23, 1935.  
Enroute Tahiti-Christmas Island.

Dear Mr. Scott:

"It would be an endless job to try to list the stations we have listened to on the Scott since leaving Chicago on the 'Zarak.' We have received everything—England, France, South America, etc., and this is being written, about 8:00 P.M., we are listening out here in the middle of the Pacific Ocean to Jan Garber playing at the Trianon in Chicago. It is utterly impossible for me to describe the sensation of sailing in a small boat out here in the wilderness of the Pacific, a stiff blow out of the northeast, the wheel lashed, all snug below, and listening to a favorite program on the Scott coming in as clean as the Tahitian moonlight.

"As you know, we sailed from Chicago through the Great Lakes, down the Mississippi to New Orleans, then to St. Petersburg, Florida. We were ready to leave St. Petersburg at the time of the annual boat race between St. Petersburg and Havana. Although the 'Zarak' is not a racing vessel, I entered just for the fun of it.

"While in St. Petersburg, I met the pilot and radio man of the Goodyear Blimp who offered to send weather reports and news to me while enroute to Havana. There were about 21 boats in the race. The first call which was received at noon on the 30th of March was a distinct thrill, for over the radio came the voice of the announcer—'Calling Zarak, Calling Zarak,' and for three days thereafter we received the weather reports and time signals at noon from the Goodyear Blimp. The only other boat in the race that was equipped with a receiving set was not able to get the signal, thus the 'Zarak' was the only boat in the race that was kept in contact with weather conditions, time, etc., all through the race.

"In addition to this, every day I have received the time signals from Arlington at noon. My son Bill is the radio operator, and one of his principal duties each day is to turn in the time signals, then check the chronometer and other sailing mechanism.

"The weather reports were received from Miami on the broadcast as well as short waves during the entire trip through the West Indies. Stations in London and Paris

came in at times better than the U. S. stations.

"Down in the West Indies, we had bad luck with the breeze, or lack of it, and the

on the deck, while the rest of our guests sat down in the room where we have the Scott installed.

"To my mind, this was one of the most impressive scenes on the whole trip as far as the radio was concerned, for when the King said 'To all my subjects on land and on sea,' all of the faces of the natives peering down through the hatch, broke into a wide smile, and from the expression on their faces, one could see that they really believed the King was addressing his message to them personally.

"Before I go any further, I must tell you, in a general way, where our voyage has taken us. As you know, we started from Chicago, sailed through the Great Lakes, down the Mississippi to New Orleans and then to St. Petersburg, Florida. From there we sailed down to Havana and to the West Indies, Jamaica to Panama, then through the Canal to Balboa, and from there to the Galapagos Islands, then on to the Marquesas, to Tahiti, round through the islands of Morea, Roitea, Tahoo, Bora Bora, Christmas Island, and will soon be on our way to Honolulu, Hawaii. Mrs. Zimmerman and my daughter, Jeanne, sailed with us from Chicago and went through the West Indies, and left the boat at Panama after nearly an eight-month cruise. From Panama, Lenard Bowman, my son Bill and myself have sailed the boat.

"Oh, I nearly forgot to mention that another very important member of the crew departed at Panama, Fritz our Schnauzer dog. However, the heat was a little hard on him, so he left with Mrs. Zimmerman and Jeanne at Panama.

"In many of the ports we touched, people were surprised to learn that I had a radio receiver on board, but I was more surprised to find that when I told them it was a Scott that such a large number of them immediately told me they had heard of it, and that I had the best there was to be had. You certainly have built up a reputation for your set not only in U. S., but outside of it as well.

"The receiver is built into a locker with all tubes concealed, with the panel opening just above my bunk. No trouble whatever has been encountered with the mechanism of the set itself. The only difficulty we have



Mr. Zimmerman's Ketch Zarak.



The Crew of the Zarak—Left to Right—Larned Bowman, Jeanne, Bill, Ralph and Margret Zimmerman.

currents, and had 19 days of cruising up and down the Caribbean sea. However, between Cuba and Jamaica we had nice weather and a long wind.

"We arrived at the island of Jamaica just before the King's Jubilee celebration in May. The island was decked out in flags, and being an English province, four days' celebration had been planned, so we decided to stay for the celebration.

"On the first day of the celebration, the 'Zarak' fired a 21 gun salute. On the day of the King's Jubilee speech, we invited the crew from a turtle boat, and also the party on another American boat that was anchored in the harbor to come over and listen in. The natives from the turtle boat stayed up

had has been in stormy weather when the batteries would get wet. However, as soon as they dried out, everything was OK again.

"I am sure you will be interested to know that when we sailed into the harbor at Papeete in Tahiti, we met Mr. and Mrs. Miller who are doing much the same kind of trips as we are on their boat the 'Viva.' They are just as enthusiastic about the Scott set they have on board as I am about mine.

"You will notice the very unusual stamp on the envelope in which this letter will arrive. Christmas Island has the only private post office in the world, and it might be of some interest to you in knowing that the 'Zarak' is carrying the mail from Christmas Island to Honolulu. In the ordinary course of events, of course, the trading ships calling at Christmas Island would transport the mail.

"I believe this is all for the present. As far as the 'Scott' is concerned, I believe it is the best thing on the boat and Bill and 'Larney' agree with me. Best regards from the skipper and crew."

Ralph Zimmerman,  
Yacht Zarak.

**And Here is the Letter from Mrs. Miller Describing Their Further Experiences on the "Viva"**

Papeete, Tahiti,  
October 15, 1935.

Dear Mr. Scott:

"It has been a long time since I had an opportunity to post a letter to you, for since I last wrote many long tiresome weeks and much water has passed in and over the 'Viva.' We expected a long tiresome trip from Fanning Island to the Marquesas, but did not expect to spend the entire Summer at sea—yet that is just what we did—98 days to Windward, 4,500 miles—storms, squalls, gales and calms. We were in the region of the doldrums for most of the entire trip.

"The calms of four or five days at a stretch were the worst part of the trip, usually the storms were of much shorter duration and not nearly as trying. The radio saved our lives and I was able to get the time signal tick all the way every day. For some unaccountable reason our chronometer which had been keeping its regular rate, dropped six minutes one day right near the equator, which would have made an error that would have sent us over 90 miles out of our course and we might have missed land altogether if it had not been for the radio.

"Our lone sailor went berserk during the trip—the water spouts and the fear of being out of the steamer lane were too much for him. He prayed and read the bible, but this did not

prevent him from deliberately destroying a whole suit of sails and ruining the engine and several other acts of sabotage—all with the hope of turning us back to Honolulu. Finally, I told him we would go to the Marquesas even if it took us the rest of our lives, and we at last did reach them in spite of him.

"We were at Autona ten days, and Faiahee a month, then came on to Papeete, and

have been here since. Mr. Miller lost 20 pounds, weighing only 160 when we arrived, but has gained 20 already. I seem to have fared the best, losing no weight at all, but I was able to sleep and not worry.

"One of the first things I did on arriving here was to buy some new B batteries which were getting low (our spare set was ruined by water getting into the place where we had them stored), and the set is now working like a house on fire. We put the speaker in the cockpit for an hour in the evening, and the natives gather round by the hundreds, as many have never heard a radio. Our native, 'Terry,' never tires of telling the other natives that the music is coming 7,000 miles. He speaks a little English—I have a great time trying to get across to him what I want done. It is a great place for strange and interesting people of all kinds, including nuts, etc.

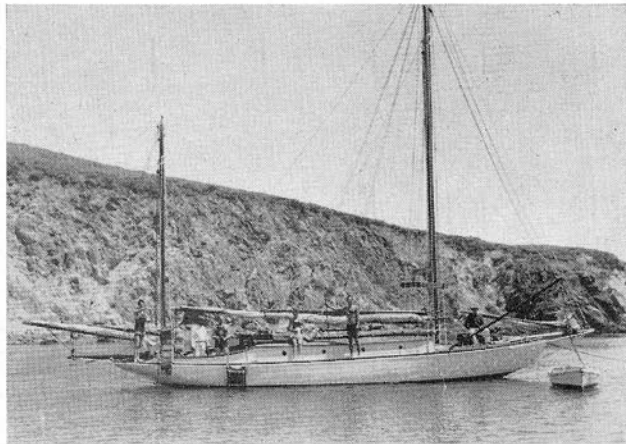
"Mr. Zimmerman and his party from Chicago on the 'Zarak' have been moored along side us until this week. Each day he would say 'Now, I must write Mr. Scott,' and at last just before they left on their way to Honolulu a few days ago, Mr. Zimmerman said 'You give him my best when you write and tell him that the radio is working fine.' I am enclosing a picture showing Mr. Zimmerman's 'Zarak,' and the 'Viva.'

"We will be here until after the hurricane season is passed in the Spring, but may run up to Bora Bora after the engine is fixed. The mail boat from New Zealand which will take this letter to U. S., is just entering the reefs, one and one-half days late, so will put this aboard. Best regards."

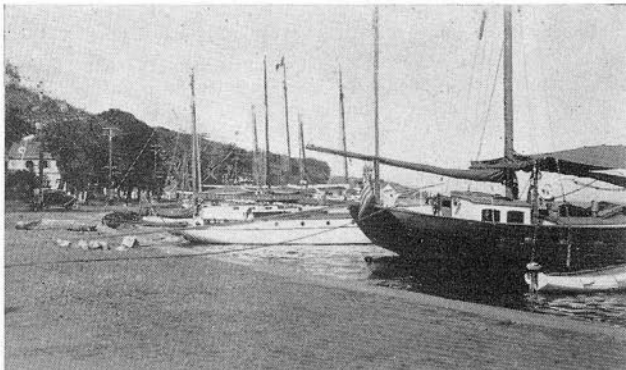
Mrs. S. I. Miller.

P.S. "Reception here is very good, get the New York stations and WOR direct, also London and the New Zealand and South American stations on the short waves, and New Zealand and Australian long wave stations as good as the States."

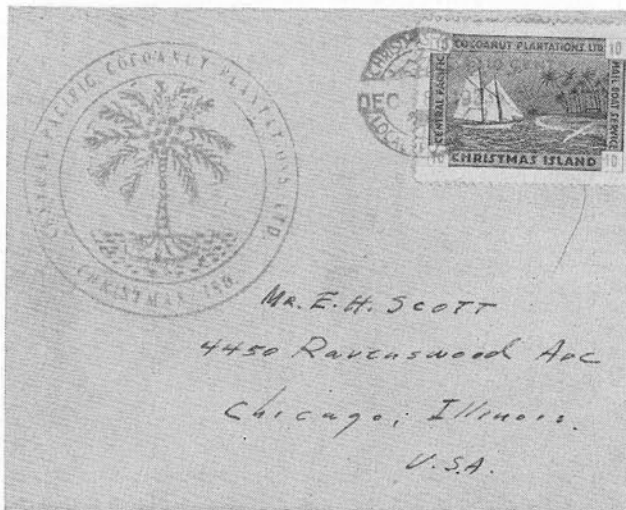
NOTE:—The above yacht installations are just two of the many we have made in the last few years. Some of the others are on board Mr. W. K. Mellon's yacht "Vagabondia" and Mr. Leon Mandel's yacht "Buccaneer." A radio receiver in order to give satisfactory results on board a yacht must not only be very efficient and powerful but have low battery drain because it is often times called upon to give many months of service on one set of batteries. The Scott Custom-Built 11 tube Battery Radio Receiver is, we believe, one of the most efficient battery sets designed and makes an ideal radio receiver for use not only on yachts but also at summer homes, camps, ranches, plantations and other places where alternating current is not available.



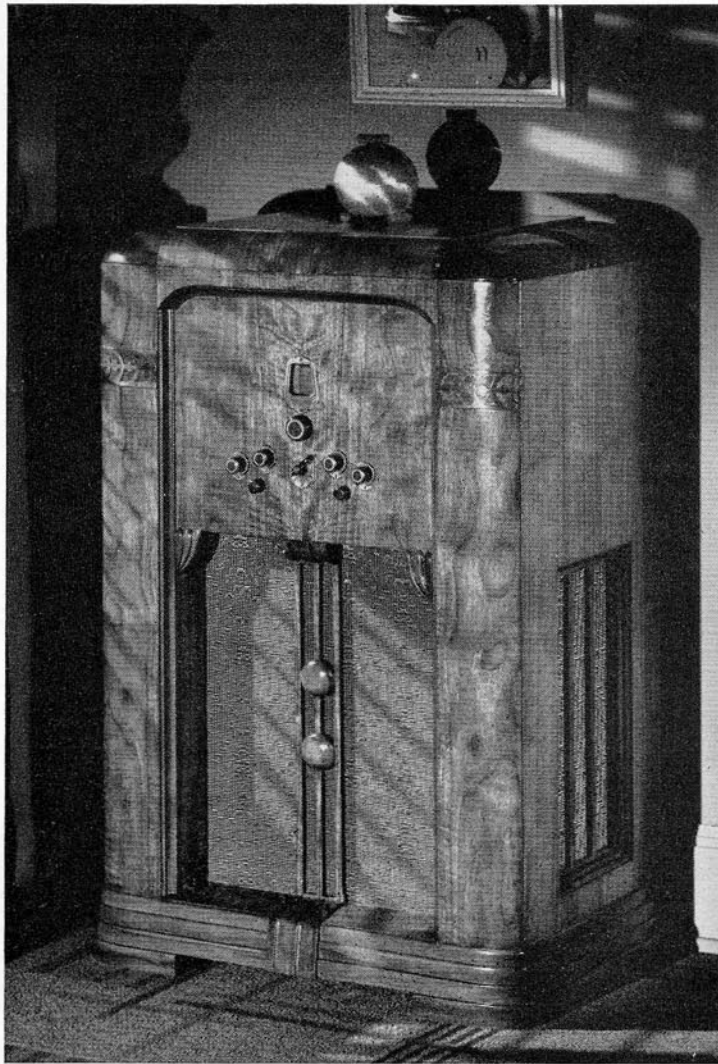
*The Viva at Anchor in Faiohae Bay, Muka Head.*



*Mr. Zimmerman's Ketch Zarak and Mr. Miller's Yawl Viva Berthed on Beach at Papeete in Island of Tahiti.*



*The Unique Stamp and Post Mark on Mr. Zimmerman's Letter from Christmas Island.*

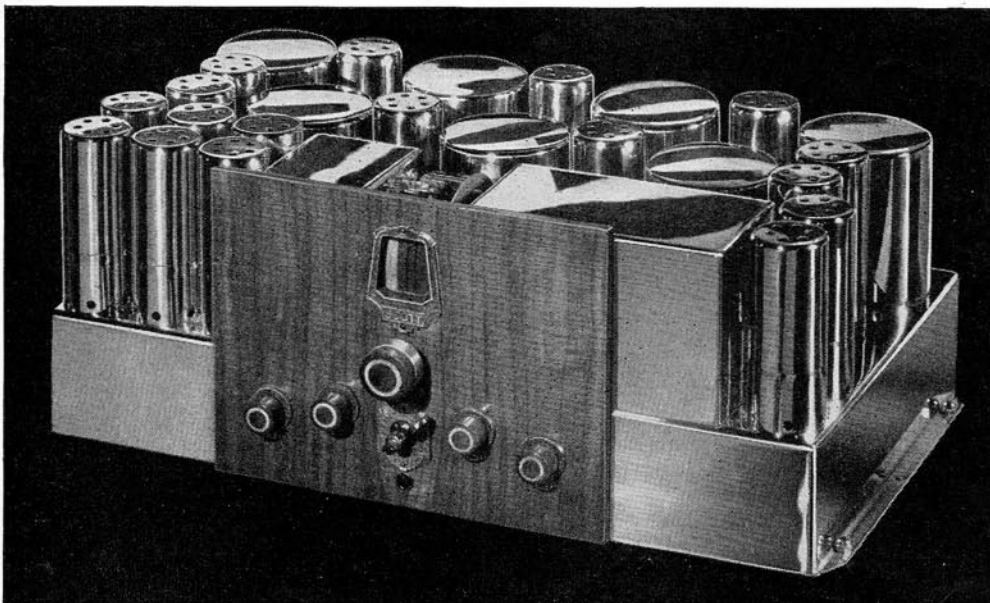


## The WARRINGTON

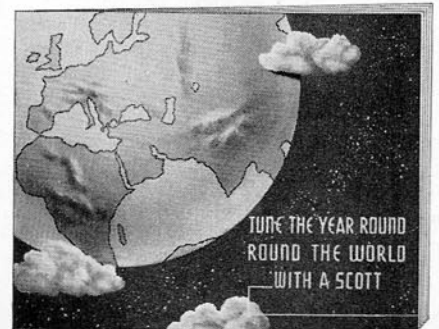
Probably the severest critics of Scott Console design are the various members of our own organization here in the Laboratory. When I say that the new Warrington Console illustrated on this page has had the enthusiastic OK of *every* member of our organization, and that during the few days it has been on display here in our studio it has attracted the immediate attention of practically everyone who has seen it, you will gather some idea of its distinctiveness and quality.

The Warrington is beautiful—modern, yet not too much so—fairly low—and so exactly right that it will be in complete harmony with any room decorative scheme. It is custom built to the usual Scott high standards of craftsmanship with front panel, side pilaster, and center top, of beautifully Figured Rotary Walnut Veneer. Sides are of striped Walnut Veneer and top sides of quarter sawed Red Gum. It is equipped with the exclusive Scott "TONE TRUTH" Sound Chamber that eliminates the "barrel like" tone so prevalent in the usual type of console. The top is hinged to permit easy access to the chassis and tubes.

### NEW TECHNICAL BROCHURE DESCRIBING 1936 MODEL 23 TUBE SCOTT FULL RANGE HIGH FIDELITY RECEIVER JUST OFF PRESS



1936 Model 23 Tube Scott High Fidelity Receiver Chassis



If you are interested in advanced radio receiver design, you should have a copy of the new Technical Brochure, just off the press, describing the 1936 model custom built 23 tube SCOTT FULL RANGE HIGH FIDELITY RECEIVER. In addition to a complete non-technical description of its many highly advanced and exclusive electrical and mechanical features, a complete set of Laboratory curves and technical data is given. The Brochure will gladly be sent on request to anyone interested.

# SOME INTERESTING PERFORMANCE REPORTS FROM SCOTT OWNERS IN DIFFERENT PARTS OF U. S. A.

## *Receives English Stations in California*

"I have the receiver installed and have been having wonderful reception for this locality. I have received GSC consistently from 7:00 to 8:00 P.M., P.S.T. Tonight it was like a local. I tuned in early, 6:55 P.M., this evening in order to hear the striking of 'Big Ben' and was surprised how clearly it came in. I also get all kinds of South and Central American stations as well as French, Spanish, Italian, Hawaiian, Australian and Alaskan stations."

J. H. Redstone, Jr., Bakersfield, California.

## *Eastern Stations as Good as West Coast Locals*

"I feel that I have given the High Fidelity Scott Radio a good test and am well pleased with it. On the broadcast band I play the Eastern stations as quiet and clear as stations on this coast. As for short waves, all bands are good. Big Ben, London, at 7:00 P.M. comes in with a bang, also Radio Colonial, EAQ, Spain and Germany."

C. E. Mowrer, Santa Barbara, California.

## *Beyond Comparison*

"I am extremely well pleased with my receiver. The Tone is beyond comparison the finest I have ever heard. With the assistance of the Broadcast and Short Wave Station brochure which you sent me the other day, I am steadily learning new and interesting facts about foreign stations."

Harry Stern, Denver, Colorado.

## *New Set Truly Wonderful*

"I think the new set is truly wonderful—more volume than one can ever use—wonderful tone and with the new bass and fidelity controls, one can just suit his own fancy for tone quality, clarity, etc. I have had no trouble at all on short waves. I get London very good between 5:00 and 6:00 P.M. and 9:00 and 10:00 P.M. almost every night. I have had GSC between 5:00 and 6:00 practically as strong as our local station KAH—in fact, it was almost unbelievable. I have had 2RO, very good and DJC several times with good volume. On Sunday JVT, Japan came in with very good volume. Of course, South American stations are very easy to get. In fact on many of them I don't think I have had the volume more than ¼ on at any time for the short waves. It certainly has worlds of volume to spare. I have your letter where you say I am probably saying—'What, another letter from Mr. Scott.' Well, Mr. Scott, besides building what I think is the best radio today, the next best thing is the interest you take in your customers. If every man tried to build his product as good as you build yours, then believe enough in it to stick with the buyer after he got his money, to see that he gets the performance out of it that you know is in it, well, I don't know just what to call that, but I do know it is a very great pleasure to do business with the Scott Radio Laboratories. Believe me, I preach that to everyone I talk radios to. I have had several people down to hear it, some that have heard the —, and they all say the Scott is the most wonderful they have ever heard. The new tuning guide is sure handy and very simple to understand—thanks for the same, also for the monthly Scott News which I always look forward to and enjoy very much."

C. W. Rosey, Wichita, Kansas.

## *Quality of Music from Europe Finest He Has Ever Heard*

"After three weeks' use of the SCOTT FULL RANGE HIGH FIDELITY, I can say that I have never heard its equal. So far, I have not missed Paris and Rome. I believe that here in Montana we are in about the toughest spot in the country for bringing in the Europeans. But in spite of this fact, I have not only brought them in every day, but on a few of those days the quality of the music from Europe was the finest I ever heard by short waves, and I have played around with short waves for at least five years. As to the quality of music on the broadcast band, I will set my set up against the world. As one of my friends remarked 'you might as well be right in the Studio, it sounds the same.' It might interest you to know that transmission No. 1 on GSB from London at 1:30 A.M., M.S.T. comes in excellently every morning, although I believe their directional antenna is directed to Shanghai, China."

F. W. Harris, Great Falls, Montana.

## *The Ideal Radio*

"After tuning your new receiver for 30 minutes and getting accustomed to the different controls, I find that it is the ideal radio, with nothing more to wish for. The new features you have incorporated in your receiver are marvelous. The features I like are Variable Selectivity, Bass Control, Sensitivity Control, Improved A.V.C., and the Automatic Voltage Control, and, of course, the superb Tone quality. I find tuning on all bands very simple, with no distortion. I have no trouble in tuning in DJB, Germany, or GSF, England each morning. I notice there is a big improvement in receiving short waves, being more steady and coming in with less noise."

L. A. Sanquist, Canton, South Dakota.

## *Gets Good Results in Difficult Location*

"I enjoy my Scott 23 Tube Allwave very much. I have stations on my log that I could never get on my old set. My wife and I were listening in the other night after KOA, Denver, went off the air and I picked up LRS on 830 and LR-1 on 980, and had both of them OK. Last night I had LS-8 at 1230 and LR-4 on 990. I never had a set before on which I could step out and get these stations. Mr. Scott, this country is the hardest country I was ever in for radio reception, as there is a big mountain that is filled with copper and iron, and it takes a good radio such as yours to skip out and bring them in. I have had 25 watt police stations in Washington and I have had police calls from New York to Florida."

Raymond J. Austin, El Paso, Texas.

## *Remarkable Clarity and Volume*

"I tune in Germany, England, France, Italy and many South American stations quite readily. The Variable Selectivity Control cannot be praised too highly. Music and voice come in with remarkable clarity and tremendous volume if you care to use it."

John G. Troppman, Pierceton, Indiana.

## *Measures Up to All Claims*

"My set functions beautifully and measures up to all you claim for it, and then some. The

tone quality is in a class all its own. Tonight I listened to station 2RO, Rome, Italy, my first attempt there. It came in very good. I thank you kindly for the Scott Broadcast and Short Wave Tuning Guide. Congratulations on your efforts in producing such a most convenient publication for your owners. Count on me as ALWAYS remaining a SCOTT BOOSTER."

W. H. Muehlhouse, Baltimore, Maryland.

## *Listens to Concert from England Like Local*

"My mother and I have been obtaining some very pleasurable reception with our new radio. The more I tune it the better I realize its remarkable stability of operation. We kept up with the death of King George V, and the proclamation of the Prince of Wales as King Edward VIII with wonderful clarity and volume. In fact, I am now listening to a concert over GSC coming in like a local."

David L. Hill, Corinth, Mississippi.

## *Rome, London, Berlin with Broadcast Band Fidelity and Volume*

"Casually dialing on the short waves last night and for a few moments early this morning, I pulled in such widely separate points as Rome, London and Berlin in Europe, with broadcast band fidelity and volume, and Winnipeg, San Francisco (two stations), Honolulu, and any quantity of South and Central Americans. My experience indicates that the set is all that you have claimed for it."

M. H. Weyrauch, Brooklyn, New York.

## *Listens to Germany for Over Three Hours and Understands Every Word*

"Knowing that you are interested in seeing that your customers get everything your radio can give, I will tell you that last Saturday I had Germany for three and one-half hours and understood every word, and the next day had Germany and England for over two hours. I am more than satisfied."

Jacob Philippi, Milwaukee, Wisconsin.

## *Musician Now Really Enjoys Radio Music for First Time*

"I am sure I can say that I have never before heard anything like the fidelity of tone on both voice and orchestra. The foreign stations on the short waves I am quite sure come in better on my radio than on any other make. The Norfolk area is a notoriously severe test for any radio as far as static and distance are concerned. The static on the broadcast bands to and including Detroit and Chicago is practically eliminated and the local stations entirely so, under any and all conditions. Permit me to say that I look upon your instrument as one of our greatest engineering accomplishments. I might add that my wife, who for many years earned her living in the better fields of music, simply cannot be torn away from the programs of the great artists and orchestras. Until we got your instrument she rarely if ever paid any attention to the radio other than the news flashes. Now, she will sit before it for hours. In fact, she is jealous every time I get a curiosity to try for some foreign station."

Harry A. Garrison, Portsmouth, Virginia.

## The Scott News

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E. H. SCOTT, Editor

### What Do Performance Proofs Really Mean?

When I consider purchasing a certain article or product, if a claim is made that it is superior in some respect, or will give finer or better performance than some other product, I always like to see some PROOF of that claim, OTHER



E. H. SCOTT

THAN THE MANUFACTURER'S MERE ASSERTION THAT IT IS SUPERIOR. For that reason, I have tried in all of the literature describing the performance and various features of a Scott Receiver to give prospective purchasers the same kind of factual information I would like to have if I were in their place.

For example, for many years, I have advertised the fact that Scott Receivers are capable of giving their owners regular reception from foreign stations thousands of miles distant.

### Scott Performance Claims Based on Actual Tests

That claim is not based merely on the reception obtained from a receiver operated here in the Laboratory, or reception obtained by a comparatively few owners located in favorable locations. It is based on the knowledge obtained over long periods of time actually tuning in REGULARLY, and in the hundreds of reception reports from Scott Owners, stating that programs from distant foreign stations were being received regularly by them on their Scott Receivers.

For example, between June 1931, and June 1932, I conducted a reception test with two Australian stations, MAKING A DETAILED LOG, AND FROM THREE TO TWENTY ALUMINUM RECORDS OF EVERY TRANSMISSION PUT ON THE AIR BY ONE STATION, AND EVERY TRANSMISSION (EXCEPT THREE) FROM THE OTHER STATIONS, DURING THIS TWELVE-MONTH PERIOD.

### Scott Owners Prove Our Performance Claims

This reception from these stations, both over 9,000 miles distant, was fully verified in every way. However, shortly after this test was commenced, a few people who had heard that I was making it, suggested I might be using a specially built set for this test. To prove this was NOT so, I invited Scott Owners in all parts of the country to

send in detailed logs of programs from foreign stations they were receiving on their Scott sets. The result was that during the period from January 1 to June 30, 1932, these Scott Owners, located in every part of U. S. A. sent in a total of 19,257 logs of programs from 320 foreign stations, located in 46 foreign countries.

### Four Leading Radio Editors Check Foreign Logs

So that there could be no possible question about the authenticity of these foreign station logs, four of the leading radio editors in the country individually checked and verified a large number of them. A complete description of this test, together with the number of times the various foreign stations were heard by Scott Owners during this period, is given in the booklet "Proof."

### A 24,000 Mile Reception Test

Not content with this, again in 1933 a Scott Receiver was put thru a particularly severe reception test on an ocean liner during a trip from the United States to New Zealand and Australia, then back again. During this period, the reception from a Chicago station was observed and reported on by cable every night. The cable mentioned the names of certain numbers, some remarks of the announcer, and name generally received and read over the air the same evening of the broadcast. The reception was fully verified in every way by the station.

In addition to the station verification, the reception was witnessed each night by one or other of the ship's officers, who also verified the reception. This test is fully described in the booklet "A 24,000 Mile Radio Test on Land and Sea."

You will notice in practically every issue of the "Scott News," there is from a page to two pages of letters received from enthusiastic Scott Owners—letters that are quite unsolicited, and which tell of the results they are securing with their Scott Receivers.

### A Book of Proof Supplied by Scott Owners

About three years ago, I published a booklet "Performance In Every Part of the World." Here is the Foreword in that booklet:

"When a manufacturer describes his product, he naturally makes the description and results that can be accomplished with the product as enthusiastic as possible. Most people, however, prefer a little more unbiased evidence. If you were contemplating the purchase of a certain article and knew of a friend who actually had one in use, you would feel much more confident in your friend's opinion of the article than you would of the manufacturer's. In this little booklet you will find the unbiased opinion of owners of Scott Receivers who have used and tested them in practically every corner of the world. Here in the Laboratory we have six large books filled with hundreds of letters just as enthusiastic as those reproduced. In glancing thru these pages you will find ample proof that a SCOTT ALLWAVE RECEIVER gives their owners maximum enjoyment in the reception of programs, not only from stations in their own country, but from broadcasting stations of the world. If, however, you would like to actually hear and see a Scott Receiver before you place your order, advise us the location nearest to you and we shall be very happy to give you the name and address of the owner there."

Following this Foreword was a letter from an owner in each of the 48 states (it would have made the booklet too bulky to have

reproduced more than one letter) and just underneath the letter was given the names of the other towns in that State in which Scott Owners were located.

This booklet was published so that you could see exactly the towns in your State where Scott Receivers were being used, so that you could, if desired, send a post card or letter to me, which would have brought the name of the owner in the location nearest to you where you could see for yourself just what kind of reception was being secured in that location.

### You Can Check Our Performance Claims in Your Own Home

In addition to all of this very definite proof of the kind of performance Scott Receivers were giving their owners, not simply in one particular spot, but in locations practically all over the world, I have also, for a number of years, given prospective purchasers the privilege (in U. S. A. only) of actually trying out the receiver for 30 days in their own home. If, during this period, you should decide that the performance has been misrepresented to you in any way, and if it does not give you the kind of reception claimed in the booklets describing it, then you have the privilege of returning it and receiving every cent you paid me.

There are no "if's" or "and's" about this guarantee. It means exactly what it says. You have 30 days after a Scott Receiver is delivered to your home, and if it does not satisfy you in every way—AND YOU ARE THE SOLE JUDGE OF WHETHER MY RECEIVER MEASURES UP TO THE CLAIMS MADE FOR IT, THEN YOU HAVE THE PRIVILEGE OF RETURNING IT AND RECEIVING BACK EVERY CENT YOU PAID ME.

I believe you will agree that only a product in which the manufacturer has the utmost confidence could afford to give such a liberal guarantee, and is ample proof of the confidence I feel in the ability of a Scott Receiver to do all that is claimed for it.

### Can You Suggest a Harder Test

But I have exhausted every possibility I can think of to give prospective purchasers of Scott Receivers definite, factual proof, of the superiority of a Scott Receiver. The idea behind this editorial is to see if any of my readers can suggest to me any further means that I could employ, to give more conclusive proof of performance, than the type of proofs I have already presented. If you have such a suggestion I can assure you I will be most happy to hear from you.

I would also appreciate very sincerely your candid opinion of the type of proof I have submitted to prospective purchasers of Scott Receivers in the various booklets I have referred to.

I sincerely believe that the new 1936 model 23 tube Scott Full Range High Fidelity Receiver is the finest I have ever built, and invite you to match it for performance against any other radio receiver in the world.