

# The Scott News

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## Why "Custom Built" Radio ?

*Just As The Finest Clothes Are Custom Made—*

*The Finest Furniture Is Custom Built—*

*So The Finest In Radio Is Custom Built—*

Placing a label on a thing identifies but often does not accurately describe it. One of the most loosely used words in the advertising pages of radio magazines and literature today, is the word "custom built," as used in describing the quality of radio receivers. When

anything is described as "custom built," the picture that immediately comes to your mind is something exclusive, finely made and built by craftsmen, from the very highest quality materials. You imagine something outstanding in design and above the average in every respect. The word "custom built" or "custom made," implies an exclusive product made in very limited numbers for those who desire something far above the ordinary.

Everyone is familiar with the difference between a suit of clothes bought ready to wear for about \$25.00 and one made by a fine custom tailor. While the ready made suit will usually prove wonderful value for the money, and worth all that is paid for it, it never has the quality of material, the distinctive cut and appearance, nor will it retain the original appearance and shape, that is so characteristic of the fine custom made garment.

Where does the difference lie? One suit is duplicated by the thousands by high speed production methods, generally from good, but not the highest quality material, whereas, the other is an individual product, hand made by a man who has spent years in the creation of fine garments. In every field where fineness is the standard to be met, the creations of the hand stand supreme.

When we talk about a "Custom Built" radio receiver, just what does it imply—in what way is it different from the regular commercial type? First—It implies a receiver that is designed to give performance far beyond the ordinary "commercial receiver."

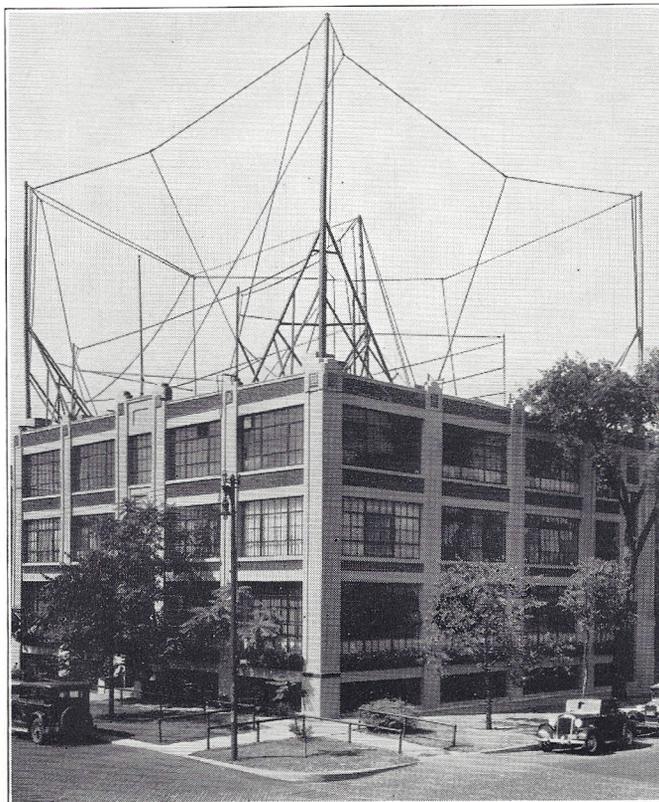
Second—It implies a receiver designed by one whose name is well known thruout the radio engineering profession as an outstanding figure in radio receiver design.

Third—It implies a receiver built from the very highest quality parts.

Fourth—It implies a receiver built in limited numbers by laboratory technicians with many years of experience in the building of fine receivers, *men who are paid on a straight salary basis*, and who are not tempted to hurry thru their work as is the case with men working on a piece work basis.

Fifth—It implies a receiver which is checked in every step of its construction by experienced laboratory engineers.

Sixth—It implies a receiver *which is actually designed and built in the Laboratory of its maker, and sold exclusively by him* and which in every way conforms to the generally accepted high standards associated with true "custom" construction.



SCOTT RECEIVERS are designed, built and tested in this modern Laboratory. On the top floor, left side, is located Research and Experimental Laboratory—on right side Construction and Test Departments—the second floor houses the General Offices and Demonstration Studios—on the first floor is located the Foreign Department.

### SCOTT RECEIVERS BUILT IN SUPERBLY EQUIPPED LABORATORY

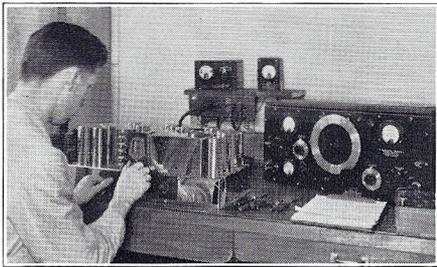
The technicians who build SCOTT RECEIVERS labor almost as much for the love of

doing fine work in the finest way as for the sake of earning their wages. But more than ordinary technical ability is required of those who construct SCOTT RECEIVERS. Each worker on these superlatively fine instruments is trained to know exactly *why* each operation is performed in its particular way, as well as to know the mere "how" of doing it in that way.

The result is, naturally enough, a production of intelligence bearing the mark of individually fine craftsmanship, exercised under the unceasing watchfulness of men who take honest pride in being identified with the creation of "The World's Finest Radio Receiver."

### EACH STEP IN CONSTRUCTION CAREFULLY CHECKED

Thruout every operation in the building of a SCOTT RECEIVER until built there is a constant testing, checking and rechecking to assure consistently perfect performance in the finished receiver. This exacting



Testing and Checking Scott Receivers in Shielded Test Room

supervision begins with the basic parts of the receiver, which are made to meet exceedingly close specifications.

To cover all of the interesting and vitally important tests to which SCOTT RECEIVERS are exposed in course of construction would require a volume. Suffice it to say that no single point is neglected and that the time spent solely on merely testing and checking during the construction of a SCOTT RECEIVER is, I believe, MORE than the total construction time required for the complete assembly and testing of about ten ordinary production type radio sets.

### EVERY SCOTT CUSTOM BUILT RECEIVER TESTED ON FOREIGN STATION

But with the completion of the construction process, the testing and checking of the SCOTT RECEIVER really begins. Each must undergo engineering measurements for accuracy and keenness of selectivity and sensitivity, for fineness of tone quality, for perfection of calibration of wave lengths, and then, finally, must demonstrate its ability in actual performance on the air when it must bring in, with good volume, stations in various parts of Europe and South America, as well as broadcasts from the U. S. A.

To carry on such extensive and exacting tests under proper engineering control

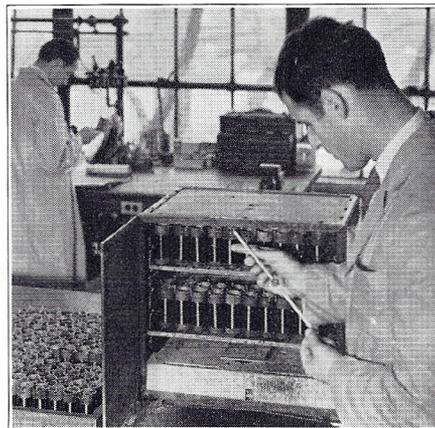
Wiring a Scott Custom Built Receiver



requires a vast amount of delicate and unusual laboratory equipment, to say nothing of much time on the part of highly skilled technical men. Only in the finest of custom built receivers will you find the perfection that results from such painstaking care and the employment of true laboratory methods. Its presence in the SCOTT ALLWAVE FIFTEEN, however, is testified to not only by the enthusiastic praise of all owners all over the world, but by a definite warranty that if this receiver does not, to the entire satisfaction of its buyer, outperform any other receiver, it may be returned for credit without question.

### WHAT SIDE BY SIDE COMPARISON SHOWS

There are many very fine production type receivers available today which are worth all that is asked for them. The standard of workmanship in many receivers of this type is good, but an actual side by side comparison of the production type receiver with a true "custom built" receiver such as the SCOTT ALLWAVE FIFTEEN instantly shows that the production receiver lacks the distinctiveness of the true



Electric Oven Baking Moisture From Coils

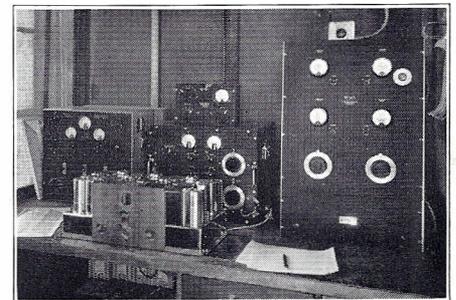
craftsman in the custom built model. In the SCOTT ALLWAVE FIFTEEN that distinctiveness is recognizable in finer tone, more capable performance, greater sensitivity and selectivity and general all-around superiority.

### RADIO ENGINEERING DEVELOPMENTS PIONEERED IN SCOTT RESEARCH LABORATORY

From our experimental laboratories have come many of the new and revolutionary developments in fine radio receiver construction. The list of Scott "firsts" which have been pioneered and developed in our Laboratory during the ten years we have been in the radio business is long and distinguished.

Among them may be mentioned the following:

The FIRST Superheterodyne receiver to successfully use more than one tuned stage in an I.F. amplifier was the Scott World's Record Super 8; the receiver which in



Calibrating and Measuring Apparatus in Research Laboratory

1924 created a sensation in the radio world by establishing four completely verified world's records for the consistent, night after night reception of broadcast stations 6000 miles or more distant.

The Scott Laboratories were the FIRST to introduce 210 power tubes as a part of the basic design in a radio receiver and the World's Record Super 10, in which it was used gave to the radio world an entirely new conception of what really fine tone quality could be obtained from a radio receiver.

Scott Laboratory Engineers were the FIRST to introduce a receiver incorporating the revolutionary screen grid tube, the Scott Shield Grid 9, using it fully a year before it was found in other commercial receivers.

Probably the most outstanding "FIRST" which has been pioneered and developed in the Scott Laboratory is the now universally used Allwave receiver. The Shield Grid 9 which was brought out in 1928 tuned all wave lengths from 20 to 550 meters, and so for the past 6 years all Scott Receivers have been Allwave. As you are probably aware Allwave receivers have only been introduced by most other manufacturers within the past nine to twelve months, proving that in this feature the Scott Labo-

ratories were at least 5 years ahead of the ordinary commercial receiver.

The Scott Laboratory pioneered and introduced the now universally used Noise Reducing Short Wave Antenna which has been copied in various forms by practically every other manufacturer in the radio industry. This type of antenna was developed for use and sold with the SCOTT ALLWAVE introduced in October, 1930.

**SCOTT ENGINEERS UNAFRAID OF "COST OF PRODUCTION" GHOST**

Such accomplishments are the result of untrammled effort in our laboratories and the problem is not that of designing a radio receiver to sell for a certain price, for SCOTT RECEIVERS are built to a quality standard—not a price mark.

From such unfettered experimental engineering—plus custom construction methods that carry the laboratory precision of theory into the practicality of day-after-day manufacture—comes results such as the unrivalled richness of tone of the SCOTT ALLWAVE FIFTEEN; its world-girdling ability of distance getting; its accurateness of calibration; its unflinching perfection of service in every part of the world.

And Scott Engineers are contented, happy workers for never, in their secluded laboratory, does the grisly ghost of "cost of production" peer over their shoulders to discourage their efforts.

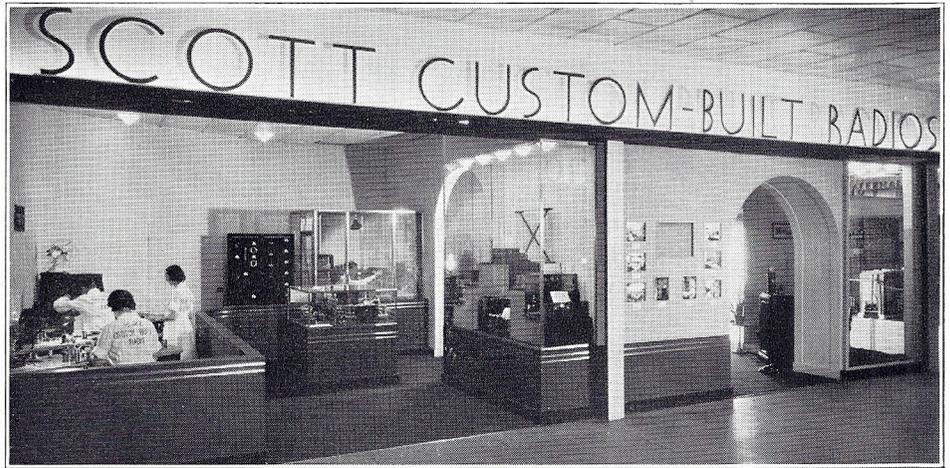
**ONLY WORLD'S FAIR RADIO EXHIBITOR SHOWING EXACTLY HOW SET IS MADE**

Visitors to Chicago's 1934 Century of Progress Exposition should not fail to visit the Electrical Building on Northerly Island for there they will find a great thrill in the interesting exhibit of the E. H. Scott Radio Laboratories.

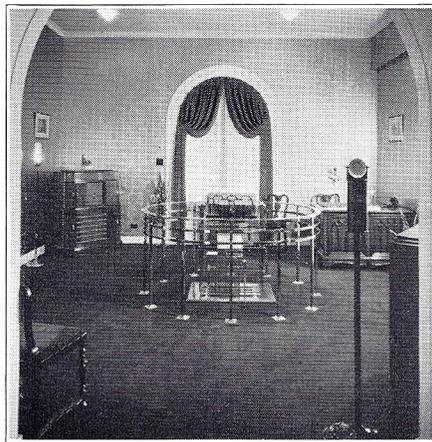
The most interesting feature of the exhibit is the showing of the actual wiring and testing of the receivers which is done in full view of the crowd. Many visitors have been heard to remark on the fact that this is the only one, of the many radio manufacturers' exhibits at the Fair, *where the actual construction of sets is carried out.* From the morning opening hour until the closing of the building, a constant throng watches the deft movements of Scott technicians as the receiver is slowly built up, then is passed on into the testing booth. This testing booth is an exact du-



Wiring and Assembly Department



Working Exhibit at Century of Progress Showing How Scott Custom Built Receivers Are Made



Section of Exhibit Showing Completed Chassis and Exclusive Consoles

plicate of the one in regular use here at our Laboratory and is a completely shielded room equipped with the delicate measuring and testing apparatus required for charting curves on Selectivity, Sensitivity and Fidelity of Tone.

**DEMONSTRATION OF "CUSTOM BUILDING" AT WORLD'S FAIR**

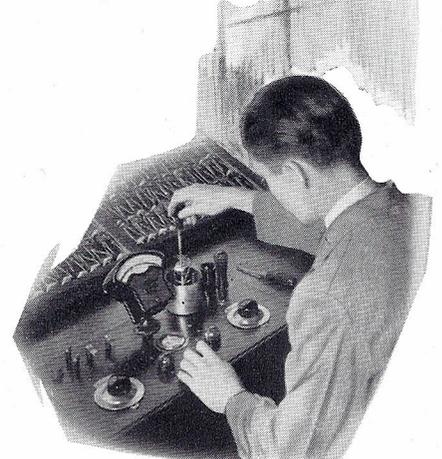
A demonstration of such custom building methods is convincing, and once a visitor has watched the skill and assurance with which the workers at the Scott World's Fair exhibit go about their tasks, there is little doubt as to the superiority of this type of construction over usual "production line" methods of manufacture. Many of those who visit the Scott booth at the Fair are so interested in the superlative workmanship displayed there that they later come to the laboratory itself to inspect the complete processes. They are, of course, gladly welcomed and shown thru our modern Radio Laboratory; one of the most completely and modernly equipped in the world.

Even those Fair visitors who fail to see the Scott exhibit itself are almost sure to see and hear Scott Receivers in operation, for they have been selected for inclusion

in the beautiful furnishings of several of the Model Homes on exhibit where their artistic consoles carry out the charming decorative schemes. Also, at the top of the cloud-scraping Sky Ride Towers, Fair visitors see and hear Scott Receivers, for SCOTT ALLWAVE FIFTEENS were selected for the arduous task of entertainment here. Surrounded by a veritable web of steel, set amidst a confusing array of electrical machinery; and combating every possible unfavorable reception condition, these powerful instruments are delivering consistently fine performance that amazes every radio wise visitor.

Scott owners, however, are inclined to react matter-of-factly even to such remarkable demonstrations of radio ability, knowing from their own experience—which is being duplicated daily in every state in the U. S. A. and 110 foreign countries—that Scott quality assures excellence under almost any reception condition.

Laboratory Technician Matching and Checking Coils





## THE SCOTT ALLWAVE FIFTEEN RECEIVER

WORLD WIDE RANGE FROM 13 TO 550 METERS

### Perfect Undistorted Tone

SCOTT RECEIVERS have always been noted for their very beautiful tone. However, constant research has enabled us in the SCOTT ALLWAVE FIFTEEN to produce an instrument that has even finer tone than any previous model we have ever built. When you are listening to a voice, you hear that voice so clearly and naturally, that if you close your eyes it is not a difficult task to imagine that the person is standing talking to you, face to face.

You will find when you are listening to an orchestra that you will hear instruments in the lower and higher ranges that you have never before heard coming from the speaker of any radio receiver. You will hear violins, trumpets, cymbals and other instruments just as naturally as you would hear them if the orchestra were in front of you. When you listen to a piano, you not only will hear the notes of the piano coming from your speaker as clearly as if the pianist were playing in your own room for you, but you will hear it so clearly and naturally that you can actually, at times, hear the thud of the felts on the hammers striking the piano strings. We believe we can say without fear of contradiction that the new SCOTT ALLWAVE FIFTEEN sets an entirely new standard in the reproduction of voice, or instruments from a radio receiver.

### All Tuning Controlled with Single Knob

The tuning of all stations, both on the short waves and broadcast band is accomplished by a single knob located directly below the dial. No trimmers are required to secure 10 KC selectivity on any wave length.

### The I. F. Amplifier

In the design of the Intermediate Frequency Amplifier stage lies one of the secrets of the remarkable performance of this new SCOTT ALLWAVE FIFTEEN RECEIVER. In our Research Laboratory we have developed a system of so completely shielding the secondary of each I.F. unit from the primary, together with a special method of coupling them, that we secure tremendous amplification, raising the Sensitivity or gain of each I.F. stage to three or four times more than has ever before been possible with an I.F. transformer coupled and shielded in the usual way. Yet, with this increased gain, the receiver is always perfectly stable and free from oscillation at any degree of volume.

### Volume Automatically Controlled

Once the volume is set at the desired level, it is kept there automatically in the new SCOTT ALLWAVE FIFTEEN by the perfected Automatic Volume Control system incorporated in its design, which holds the volume of signals from stations near and distant at a practically constant level.

### Wave Bands Covered

All wave lengths between 13 and 550 meters are covered by four wave bands.

### The Short Wave Station Locator

One of the difficulties experienced in tuning in short wave stations on the regular type of allwave receiver is due to the fact that all short wave stations come in on a very small fraction of the dial, and until one has had considerable experience, it is difficult to locate short wave stations. To overcome this difficulty, a Short Wave Station Locator is incorporated in the design of the new SCOTT ALLWAVE FIFTEEN which makes the tuning of the short wave bands as easy as the broadcast band.

### All Parts Guaranteed Against Defect for Five Years

The SCOTT ALLWAVE FIFTEEN is built from such high quality parts; the actual building of it is done by such highly skilled technicians; all units so impregnated and treated to protect them against the effects of moisture and all adjustments so carefully made and permanently fixed that we believe no part of this receiver will ever break down.

Every SCOTT RECEIVER produced the past four years has carried a Five Year Guarantee, and many hundreds of them have been in constant use for years, and are today still serving their owners and giving them perfect satisfaction in nearly every part of the world.

### Complete Technical Data

We have prepared a 12-page booklet giving complete technical details of the SCOTT ALLWAVE FIFTEEN and will gladly send this if you desire further technical information.

**E. H. SCOTT RADIO LABORATORIES, Inc.**

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