



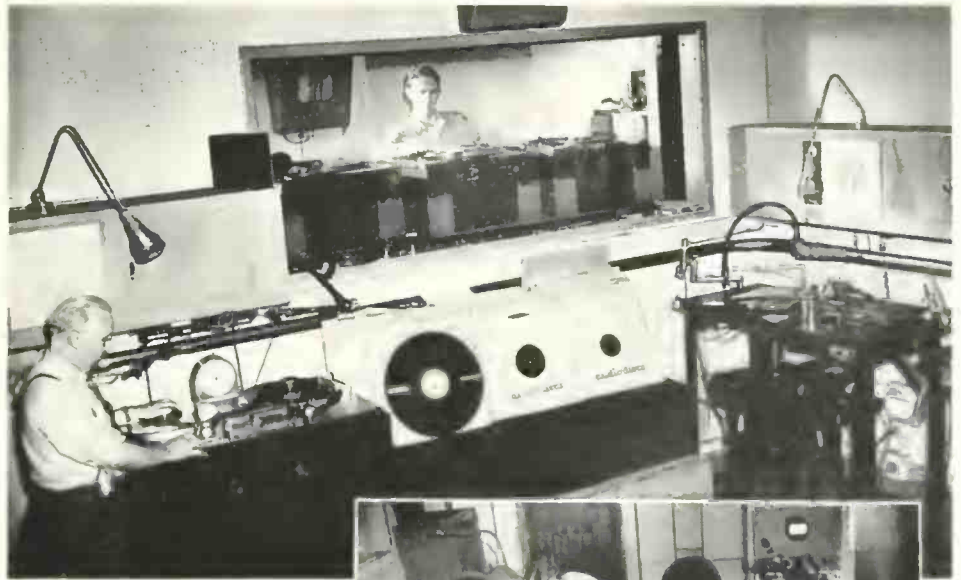
Muzak Transcription Division Makes Recording an Artistic Science

Here, in one of Manhattan's leading studios, musically talented technicians turn out top quality recordings for discriminating clients

To most people, the word "Muzak" brings to mind soft lights and sweet music from the strains of Brahms or Beethoven to the latest hits from Broadway shows, accompanied by the clink of cocktail glasses. And a menu that says "Music by Muzak."

Actually, the Muzak Franchise Service — the wired music so familiar to patrons of finer hotels and restaurants throughout this country, Canada, Mexico, Hawaii, and Puerto Rico; and to employees in many

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ABOVE: Monitoring from disc to tape in Muzak's central control room — showing transcription tables (behind window), console model professional tape recorder (lower left) and one of the many specialized disc recorders (lower right).



AT RIGHT: Cutting original vertical master and safety of a live program originating in the main recording studio.



Mrs. Neta Kaye Stokely at work in her home studio, making an original Audiotape recording for one of her "personalized" children's stories.

Making Records with the "Personal Touch"

Mrs. Neta Kaye Stokely's Personalized Discs Delight Youngsters from Coast to Coast

It all began with an idea. The idea that children's story-records could be made much more interesting if they were given the "personal touch." And putting this idea into practice has enabled Neta Kaye Stokely (Mrs. Roy Stokely), of Oklahoma City, Oklahoma, to develop a unique and profitable recording business that she conducts in her own home, in her "spare time."

Now — instead of just listening to ordinary recorded stories about mythical fairy-tale characters—youngsters can hear about themselves, their pets, their playmates, and interesting events in their own lives.

At the start, Mrs. Stokely decided to try out the idea with her own two children, Craig and Jean. So, calling upon her own extensive background of radio broadcasting experience, she wrote a couple of short fairy tales, with Craig and Jean as the principal characters. These were recorded on tape and transcribed onto 10" discs. The records made a big hit with the youngsters. They would listen by the hour. They brought their friends in to listen, too — and their friends brought their friends. It wasn't long before the news was all over town — and Mrs. Stokely found herself with a flood of orders on her hands. Other parents wanted records about their "kids", too. They supplied the information — names of the children, their pets, their playmates, and their habits (both good and bad). These Mrs. Stokely skillfully wove

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audio record

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industrial plants and business offices — is but one of Muzak's diversified recording operations.

Another, very familiar to the radio field but not too widely known by the general public, is Muzak's Associated Program Service. This up-to-the-minute "Basic Library" of scripts, sales aids, and recorded music is a vital and continuing source of high quality musical program material for broadcasting stations from coast to coast. More than five thousand recorded selections are available in this library — and new ones are continually being added and distributed to subscribing stations on a "lend-lease" basis.

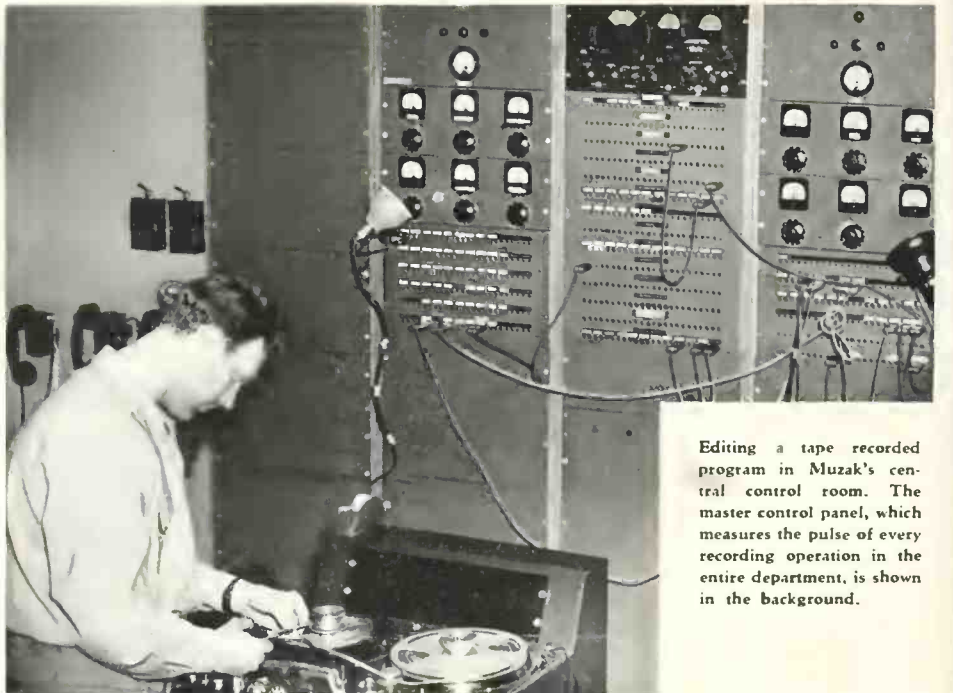
Keeping these two transcription services supplied with top-quality recordings is a man-sized job of itself. Yet it is but a part of the work handled by the Muzak Transcription Division. Their recording studios, located at 151 West 46th Street, just off Times Square, make no claim to fame as the largest of their kind. But they are one of the oldest and newest in existence — old in years of service to the recording art and experience of their personnel; new in ideas and equipment for the modern recording application.

In addition to turning out all recordings for Muzak Franchise Service and Associated Program Service, the Transcription Division handles a wide variety of special work for broadcasters, industrial firms, government agencies, music societies, educational institutions, program producers, and advertising agencies. They also recorded and processed and pressed all Silvertone Records distributed nationally by Sears and Roebuck in addition to many nationally known independent labels.

The main recording studio, conveniently located on the ground floor, is big enough for a concert orchestra, and contains a full complement of percussion equipment — from a Hammond organ to chimes and kettle drums. The walls of the room are provided with a combination of fixed and adjustable baffles which enable the engineers to obtain any desired acoustical effects for any recording applications, from full orchestra to one or two voices. At one end of this studio is the control room considerably more spacious than most, and



In session—the "Deep River Boys", making a recording for the Muzak Associated Program Service.



Editing a tape recorded program in Muzak's central control room. The master control panel, which measures the pulse of every recording operation in the entire department, is shown in the background.

with all controls at the fingertips of the recording engineer.

Immediately behind this is the studio recording room, containing the disc recorders for cutting the original studio masters. All of these masters are cut in duplicate, using vertical rather than lateral recording. The inherent advantages of the vertical recording provides a studio master of as life-like quality as it is possible to obtain. Although all pressings for the Franchise Division and Associated Program Service are vertical, the original masters for the other types of discs are recorded vertically, and then dubbed from vertical to lateral on Audiodiscs for manufacturing and distribution purposes. In so doing, it is felt that the final recording is of superior quality.

The central control room — virtually

the nerve center of the entire department — is located on the floor above. Here a large master control panel, designed by their own engineers, measures the pulse of every operation going on in any of the various recording rooms. A unique feature of this panel is the fact that all circuit elements are in duplicate, with provision for automatic and instantaneous change-over in case of failure of any unit. Also located in this room is another bank of disc recorders for dubbing and cutting master Audiodiscs from tapes and other recorded sources.

As far as the actual recording equipment goes, the Muzak studios are not greatly different from those of other major recording firms. Muzak, however, takes par-

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audio pointers for the Recordist

by C. J. LeBel, Vice President,
Audio Devices, Inc.

RECORDING, HALF PROFESSION AND HALF MEDIEVAL CRAFT

Three years ago the writer scribbled an indignant article for the "Audio Record", bemoaning the old tradition of secrecy in disc recording (and other branches of audio engineering), a tradition which was keeping it in the class of an ancient craft. It was felt that the time had come to turn a craft into a profession.

Well, three years have passed, and much has happened. We now have a professional society devoted entirely to the audio engineering field, and its local sections meet monthly to discuss audio engineering matters. We have had the first Audio Fair, the first audio convention ever held. Nevertheless, a great deal more remains to be done.

With the encouragement of the Audio Engineering Society, we have seen free verbal discussion of audio problems become generally accepted. It is not hard to get speakers on an audio subject. Everyone seems willing to share his ideas with his immediate neighbors, and this is a vast step of improvement over several years ago. But how about sharing them with the whole country? Ah, that is where the battle starts. After a year or two of prodding, poking, and pushing, it may be possible to extract an article for publication, or again it may not.

Audio engineering will not become a full fledged profession until free publication becomes as well established as free discussion. We will have to make publication as automatic in our field as in the older field of radio engineering. One of the earmarks of the medieval craft was its willingness to exchange ideas within the town, and its complete lack of interest in sharing ideas with other towns. By this token, recording is still a craft.

Now that our readers have been thus prodded, we hope to see more contributed papers on recording problems in the



C. J. LeBel

"Audio Record" and elsewhere.

Here are a few subjects that need more attention than they have received in print in the past:

1. Tape recording bias—there is too wide a gap between theoretical explanations of rf bias operation, and the actual rules of thumb used in the field. These rules are simple, but they lead to irreconcilable results if applied to nominally identical oxides whose bias-output curves differ even slightly.

2. Tape recorder maintenance—how often should heads be demagnetized or cleaned, or clutches adjusted? How about noise reduction compensating voltages?

3. Tape recorder operation—how about a more extended discussion of editing time-savers?

4. Disc recording styli—there is too much disparity between published data on improved stylus characteristics, and experimental results. More experimental results should be published.

5. Hot stylus process—What experiences have you had with this new method of cutting? What average and maximum stylus life is achieved?

6. Recording room layouts—In my travels a lot of nice ideas are encountered, but nobody is energetic enough to write about his improvements.

7. Speech input system improvements—these also need more attention.

8. Finally, how about circuit ideas and convenient gadgets?

The "Audio Record" would welcome articles in its field. If you have some more fundamental thoughts, the Audio Engineering Society would welcome a chance to consider them for publication. Such manuscripts should be sent to the Audio Engineering Society, Box F, Oceanside, N. Y.

We are looking forward to hearing from you.

How to Apply Paper Labels to Audiodiscs

We have received a number of inquiries as to the best method of applying paper labels to Audiodiscs. In all such cases we recommend the method used at our factory, for it has been successfully tested on several million Audiodiscs. Also, it is a method that can easily be used in any recording studio or at home, without any special equipment.

First, lightly soak the label in a small quantity of solvent, such as acetone, which can be purchased in any drug store. Even nail polish remover can be used if desired. After soaking, the excess solvent should be removed by drying the label between the

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into the same basic story patterns she had first developed—one about "The Galloping Butterfly" and the other about "The Absent Minded Cricket."

From this simple beginning, Mrs. Stokely has expanded to a profitable mail-order business, with customers in practically every state in the country. The extent to which her fame has spread is indicated by the fact that she was recently featured in the "Interesting People" section of The American Magazine. Purchasers fill out a "MY OWN STORY" questionnaire order form, giving the pertinent information about the child for whom the record is intended. Mrs. Stokely does all the rest—"personalizing" the story, making the original tape recording, and having it transcribed onto an unbreakable ten-inch disc. Normal delivery is about two weeks—the cost, \$3.50 per record. Readers who are interested in this unique recording service can obtain complete details and questionnaire order forms by writing to Neta Kaye Stokely, 1620 Northwest 44th St., Oklahoma City, Oklahoma.

Mrs. Stokely makes all of her original recordings on Audiotape, right in her own home, using a portable tape recorder. She has found that she can record about five stories an hour. The tape is then sent to a local sound studio, which transcribes it into disc form so that it can be played back on any home phonograph.

The convenience of magnetic recording tape—its ease of editing and erasure—have done much to help make this venture so successful. Mrs. Stokely says: "I'm so thankful there are such things as tape recorders, or my little project would be much more difficult to execute. Three cheers for Audiotape."

When all free liquid has been absorbed but while the paper is still moist, carefully apply the label to the disc surface.

When dry, the label becomes permanently affixed to the disc, as the lacquer itself serves as the "adhesive".

It should be noted that lacquer solvents, such as acetone, must be handled with caution, as they are highly inflammable. Also, it must be remembered that if any solvent is dropped on the surface of a disc it will damage the surface and make it unsuitable for recording at that point. We therefore suggest that this procedure be practiced on a few old discs that have no further value, before using it to label new recordings. Once the technique has been mastered, it will be found extremely simple and effective.

Talking Displays Offer Newest Selling Aid

"Advox" Magnetic Tape Unit Enables Merchandise to Give Its Own Sales Talk

Tomorrow's shopper is in for a surprise or two. For the age of mechanization has now been extended to the age-old art of salesmanship.

Suppose you're shopping around for a new car. You go into a sales room and start looking around at the various models on display. Maybe you're a little relieved to find that no fast-talking salesman has but-tonholed you. Emboldened by your freedom, you open the door of one of the cars to get a better look inside. Suddenly a soft, pleasant voice from out of "nowhere" invites you to step inside — to sit behind the wheel. As you do so, the voice continues to point out the many desirable features of the car. If you're particularly observant, you'll notice that the quiet, conversational voice — speaking to you alone — is coming from the loudspeaker of the car radio. It's just as if the car itself were speaking to you. A little surprised and considerably impressed, you listen to the end of the one or two minute sales message. It's told you a lot of the things you wanted to know about the car — except where it got its voice. You'd find the answer to that in the trunk compartment — a compact, magnetic tape reproducing unit, connected to the car radio and operated by a concealed switch on the car door. It's the new Advox unit — developed by Audio Displays, Inc., 241 West 17th Street, New York City.

The possible applications of Advox in the merchandising field are limited only by the imagination and ingenuity of the user. A typical example is the talking refrigerator, which gives its message when the shopper opens the door. The speaker is inside, while the reproducing unit is concealed behind the machine, or in some other out-of-the-way place. Or the talking washing machine, that starts to speak as soon as the lid is lifted. In one installation, the Advox unit is concealed in a food bin at a large supermarket. It is operated by a hose switch under a rubber mat in front of the exhibit. Whenever a shopper strolls by with her "pushcart", Advox automatically tells its story through an external loudspeaker. And, taking advantage of the fact that the shopper always looks around for the source of the voice, this unit is wired up to turn on a lighted transparency over the bin.

Through the modern medium of tape recording, Advox makes sure that the prospective purchaser always gets the desired



AT LEFT: This "talking refrigerator" gives its own sales talk as soon as the shopper opens the door — through the Advox speaker unit on top shelf. The reproducer unit is separately mounted out of sight.

BELOW: The Advox reproducer unit — measuring only 8 3/4" x 10 1/2" x 7 1/2", and weighing only 15 pounds — plays back recorded tapes of up to two minutes in length.



sales message — whether a clerk is around or not. And, still more important, it makes sure that the message is always given exactly as the producer of the merchandise wants to have it told. It never forgets a point — never stutters. And the very novelty of it goes far to impress the listener.

The sales message, up to two minutes in length, is recorded on an endless roll of magnetic tape. Messages can be changed as often as desired, by substituting new tapes, which are contained in a special easy-loading cartridge. The tripping arrangement that sets the unit in operation can be of any desired type — from a simple door switch to an electric eye.

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ticular pride in the experience and background of their personnel.

The type of work handled covers the complete range of the recording art — turning out everything from 16" studio transcriptions to special 3" records for a novelty item — from conventional to microgroove recordings — from tape to special wire recordings for mobile equipment.

The Muzak Transcription Division makes all of its own virgin vinylite pressings from exclusive formulations developed and manufactured in their plant, and they have recently opened a new and

The Advox reproducer unit, developed especially for talking-display service, is unusually compact — measuring only 8 3/4" high by 10 1/2" wide x 7 1/2" deep, and weighing only 15 pounds. The tape speed is 3.75" per second, and frequency range, 100 to 6000 cycles. It operates from any 110-115 volt, 60-cycle power supply.

ultra-modern processing and pressing plant in Kentucky. The processing masters are shipped to the plant in specially designed containers which assure safe arrival at their destination.

The Muzak philosophy, if you could call it that, could probably be summed up as follows:

Recording is both a precise science and an art. As such it requires the finest precision equipment, and the artistic skill of recordists who know both their subject and their medium. Having these things, it is no great problem to maintain the highest standards of recording quality with minimum lost motion — and with minimum wear and tear on the client.