

"PORTRAITS IN SOUND"

A New Idea in Tape Recording That Has Been Made Into a Flourishing Business

A little more than two generations ago a bride posed rigidly with her new husband to the tune of "Hold it — Hold it" while a camera took endless minutes to record her new state for posterity.

Today there is a new wrinkle in such portrait taking. A young army veteran has set up shop under the name of Magnetic Recording Company and is making a lively business of taking what he calls "Portraits in Sound".

No fly-by-night, Art Foy, who spent nearly four years as a technical adviser in the Army Airways Communications System, is fast becoming a respected young businessman in his community.

His friends call him a recording demon. No matter what he has to work on and no matter how adverse the circumstances — which usually refers to acoustics—he manages to iron out the difficulties and come

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Veteran recordist, C. Art Foy gets all set to record a church wedding — unknown to the bride and groom. The microphone is skillfully concealed in a basket of flowers, as shown by the arrow in the insert above.

Music Goes Round the World

— Via International Music Program of American Junior Red Cross

The use of recordings to promote international friendship has found a new vehicle in the American Junior Red Cross International Music Program. Five hundred albums of American school music have been sent to Red Cross societies in fourteen foreign countries to be played in schools. The object of the program is to let children in other countries hear for themselves the songs American children love to sing and play, providing another bond of interest and affection among world youth.

Each album contains six records of school orchestras, bands, choruses, and instrumental ensembles from all over the United States. The twelve selections were chosen from 174 recordings which were submitted for consideration from 51 school music groups. Some of the original recordings were made on tape, but most of them were

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Swing Choir at Hillsboro, Oregon recording "Comin' Thru The Rye" for Jr. Red Cross Record Album.

audio record

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Portraits of Sound

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through with a high class professional recording. Like the time he boarded the New Columbian of the B & O Railroad and recorded its initial run along with the complete ceremony, or recording in a huge cathedral where echoes are everywhere. Thus the phrase of "Magnetically Recorded by Foy" has come to be used.

Although unmarried, he seems to be particularly fond of recording weddings, and he likes best to take his wedding "Portraits in Sound" when the couple is unaware that they are being recorded. "I always get a kick out of their exclamations of surprise when they find out that Mom and Dad had the foresight to have the whole thing recorded. They always want to know where on earth I had the microphones!"

Art and his staff take pride in the places they manage to conceal their microphones. "We choose our spots well, and sometimes are like a bunch of kids hiding Easter eggs." Art has been using egg-size microphones but now that he has found one the size of six dimes stacked up, he is in recorder's seventh heaven.

Whether he is recording a wedding, a college concert, a speech or an operetta, he makes it a point to be on hand an hour or so before the event and have his equipment completely set up and out of sight with his tiny microphones hidden in plants, chandeliers, behind vases or what have you, and even though the performers know he is on the spot, they are completely unaware of his presence. One chance remark overheard while leaving a church following a wedding still has Art patting his back. One lady said to another "I couldn't hear the bride and groom at all", with the reply of "Oh, well, we'll hear them when we hear the recording".

Art, who fell in love with radios at the age of eight and was operating his own hand-made ham station fully equipped with an FCC radio license at the age of fourteen, and was one of the first amateur radio operators on the air in the U. S. occupied zone of Germany, now has his own radio shows over Evanston's AM and FM stations. On WEAW, called "On-the-Spot", many of his recordings are aired and also on WNMP called "Your Church



The "Magnetic Recording Company" goes anywhere — any time. Here, Mr. Foy sets up his equipment outdoors, to record a football game.

Choir" plus special feature shows where on the spot recording is necessary. He also works with WOAK (FM) in Oak ark and has weekly transcriptions aired on WCFL in Chicago.

Art likes to point out that his business is possible only because of the great advancements that have been made in the high-fidelity recording field. "Just think", he says, "Out in Des Moines right now a radio station may be playing a record of a church choir that was tape recorded in a Columbus, Ohio church and then sent to me to be made into a disc recording. That sort of thing makes a guy in the recording business feel that he is well, you might say," he finished ruefully, "helping to knit the people of the United States closer together." Sitting in his place of business at 1465 Sherman Avenue, Art surprisingly declared, "My studio is portable." He explained that instead of having people such as singers, speakers, musical instrumentalists, or choral groups, come to him to make their records, he preferred to go to them on their home ground where they can feel perfectly natural and at ease. As he facetiously pointed out, "You know if it's their piano that shows up with an out of tune note on the recording, they can't blame me." His customers are particularly pleased to find out that tape recordings can be played back right away; the sour spots found and erased. Thus, they may repeat their performance over and over until they are completely satisfied and then have the final approved recording transferred to a 10 inch or 12 inch record to be preserved.

When Art recorded the almost two hour long Sonja Henie Ice Show he learned a new trick. Any show he records for later airing he edits very carefully, selecting the highlights and cutting out mistakes to make a jam-packed thirty minute show. He found that to splice tape is wasteful since it can be erased and re-used; so he hit on the idea of working the Sonja Henie show

by recording the parts desired on another tape — the result, no tape wasted.

Art and his recording equipment are a familiar sight at school and college musical and dramatic productions. But he gets the biggest thrill from recording younger children in their recitals and activities. They are tremendously interested in his equipment to begin with and then, as he says, there is no greater fun than standing back and observing their expressions when they hear how they sound on record. Art explained, It's this way — "Here is Little Janie who plays the violin and at home she really doesn't sound so very good, but mom keeps her practicing. Yet, when she gets to school with all the others in the band or orchestra they begin to sound really good. Well, when Janie takes home a professional record of her playing she has a definite pride of accomplishment and the record has invoked in Mom and Dad at home an interest far deeper than before. Janie practices harder, too. That sort of thing makes me feel like I'm helping build our community in a small way. Guess I just like children anyway," he said. Mothers who have discovered that their wax recordings of Junior's lisping to Santa or the Easter Bunny made by department stores can be put on a permanent 10 inch record are losing no time in bringing their cardboard discs to Art.

Tight spots are no novelty to Art. At one large concert, he could not find a place for an overhead microphone which was needed to pick up the orchestra and choir. Not at all stumped he quickly canvassed the neighborhood and found a house wife who was willing to lend him her much beknotted clothesline. He hurried back to the church and before the guests arrived he had the clothesline nestled cable-fashion among the rafters out of sight with two microphones pinned on it. We learn as we go along, he said, and now a clothesline is a permanent part of his equipment.

Art laughingly recalls one of the first weddings he worked on. He recorded the ceremony and submitted the tape recording for approval before making the twelve inch discs. "I knew this was one time I had wasted a lot of effort; no one would buy a recording as full of extracurricular noises as this one. Imagine my surprise! They smiled at the airplane roaring into the middle of the prayer; they chuckled when the dog barked as the soloist sang, and they laughed outright when the fire engine broke into their vows, as it clanged by the church windows." They wanted the recordings just as they were. He has found that such noises practically sell the recording. One young bride laughed and laughed when she identified the clunking sound, as her father stumbling against the pew as he stepped back to his place after giving her away.

The son of a Methodist minister, Art has no trouble finding his way about in churches. Ministers and Priests often chat with him. They all seem to like the idea of couples having the opportunity to hear their vows at leisure and without the strain of the wedding day. As one minister said, "There might be a much less chance of couples separating if they had the recording of their vows to listen to at times of marital strife."

Art recorded his first wedding in 1935 as a stunt to surprise the bride and groom. The married couple's pleasure gave him an idea as to just how successful recording weddings could be. And today he is certainly proving it. "After all," he says, "recordings aren't any more expensive than a set of wedding pictures and listening to yourself is just as much fun as looking at yourself."

Improved Lacquer Formulation Gives Audiodiscs Lowest Surface Noise at all Diameters

The problem of surface noise has long been a "headache" to professional as well as amateur recordists — particularly the progressive increase in noise as the cut approaches the center of the disc.

Audio Devices' chief chemist, George M. Sutheim, has now found a practical solution to this problem — by perfecting an improved lacquer formulation that gives lowest surface noise at all diameters. And the variation in noise level is only about 2 db from 5" to 11" recording diameters. Other discs normally have a variation of about 10 db between these same limits.

This important development, now in full production on all Audiodiscs, will be discussed in detail in the next issue of Audio Record.



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

SOME REMARKS ON EDUCATIONAL RECORDING



C. J. LeBel

Our subject for this month is somewhat of a departure from the usual technical aspects of recording. It is a very important one, however, and we believe it will be of interest not only to educational recordists, but also to others who are concerned with the problem of making good recordings under unfavorable conditions.

The writer recently had an opportunity to speak to a group of high school teachers; this was followed by a short research project with Prof. William J. Temple of Brooklyn College, reported on at the recent Eastern Public Speaking Conference. The contrast between these two activities was so great that an article seemed desirable.

After watching the high school teacher at work, looking over his equipment, and hearing the acoustical performance of his studio (the classroom), only one conclusion is possible: he is trying to do a man's job with, almost literally, boys' tools.

The work with Prof. Temple indicated that a recorder which is to be useful in all speech applications must have surprisingly wide frequency range. In general, an educational recorder is not used to show the well trained teacher the student's faults! It must reproduce the student's mistakes of diction, etc., clearly enough so that the student himself can hear them clearly. The outcome is a need for uniform response to at least 7.5 kc. This is one aspect of the faithful vs. pleasing reproduction debate that has gone on for years. Very clearly, the teacher needs photographic realism,

complete faithfulness, in his recording system.

Such a degree of faithfulness cannot be achieved by using an ordinary home recorder bought from the most persuasive salesman — it calls for a professional machine and professional accessories.

The average classroom is so reverberant that its use for recording can be condoned only by custom. If you have such a room, heavy (fireproofed) drapes, spaced several inches from the wall, can reduce the fault if not eliminate it. The only fundamental solution is to have an acoustical contractor treat the room.

If the classroom is too reverberant, it is almost mandatory to use a unidirectional microphone of the cardioid or super cardioid type. This will at least minimize the pickup of reverberation. To use the ordinary inexpensive omnidirectional microphone often supplied with the recorder is merely to compound the original acoustical error. If the microphone has a high impedance output, it can even be used to feed the most inexpensive home recorder directly. If the microphone has only a low impedance output, matching transformers are obtainable that can be fastened directly to the microphone cable.

When making a dramatic-class recording, it is heart breaking to try to get proper balance of cast and effects with a single microphone, and lost time or a poor performance surely will be the outcome. Two microphones and a two-position mixer would save a lot of time and trouble. If standard professional technique is to be used, a third microphone and mixer position for the announcer would be desirable. All of this makes it desirable to provide a control room where the program balance can be set properly. Monitoring through headphones is not a good way to maintain the balance of a complex production.

We conclude with a pair of sharp remarks. The first is a paraphrase of a bit of Prof. Temple's recent article in "Audio Engineering" magazine. You cannot convince a student that he lisps if the recording machine itself suffers from a permanent lisp. Secondly, we seem to be going through a cycle very similar to that pursued during the early days of educational disc recording. At first, the educators bought the cheapest home type machines. Finding results disappointing, they changed to better and better professional machines. Today, the average educational disc recorder is of thoroughly professional quality. In the magnetic recorder field, the colleges have already begun to change to the \$500-\$800 class of professional machine, and it is only a question of time before the high schools do the same. History seems to repeat itself with annoying regularity.

The Telephone That Answers Itself

... with magnetic recording tape

The Swiss have a name for it. They call it the Ipsophone. We call it one of the most ingenious applications of tape recording that we have seen so far. In fact it "thinks"—"remembers"—and has the audacity to talk back, too!

Briefly, the Ipsophone — a Swiss invention — is an automatic telephone answering device that records messages on magnetic tape and plays them back later, when called for. No "operator" is required anywhere along the line, where dial systems are in use. Here's how it works.

You have an urgent call to make to your friend, Mr. Jones. You dial his number. If he doesn't answer after the first three rings, Ipsophone swings into action and a recorded voice says, "Hello, hello. This is the residence of Mr. Jones. Your message is being recorded automatically. Ready! Please speak now." And if you're not too surprised to remember what you wanted to say, you go right ahead and give your whole message, just as if Mr. Jones were there himself.

Then, when Jones gets home, he calls the Ipsophone number. As before, the tape recorded voice answers, saying "Hello, hello. This is the residence of Mr. Jones. Your message is being recorded automatically. Ready!" Right there (before it says "Please speak now") Jones breaks in, saying "Hello, hello." That makes the Ipsophone change its mind, and instead of recording a message, it automatically plays back the part of the tape that you recorded, giving your message, in your own words, exactly as you said it.

The operation described so far is a fairly simple one. Where it gets really complicated — and quite ingenious — is in the system which enables one master Ipsophone to handle many different subscribers, yet keep messages strictly confidential, to be played back only to the individual for whom they are intended. If you want the confidential service, your telephone is provided with a code key, on which you set a secret combination of code numbers known only to yourself. Then, when you call Ipsophone for a message, it automatically reads off a series of numbers, beginning with zero — stopping for 4 seconds after each number. You simply say the magic words, "hello, hello", after each of the code numbers you selected. Your message is then transcribed back to you from the tape, as before. However, if anyone tries to "break" your code, and misses a single number, he either gets a busy signal or is disconnected. You can change your code numbers as often as you want, so there's practically no possibility of

anyone "breaking" your code.

The Ipsophone recording mechanism is a compact and complicated assembly of telephone relays, timing devices, sequence switches and other sensitive electronic equipment — arranged for proper control of the multiple tape recorders.

Although a newcomer to this country, the Ipsophone has already found extensive use abroad. Department stores use them for recording after-hours orders. Banks use them to take important messages after closing time. The Geneva Journal uses them to record messages from foreign correspondents all over the world—as also does Reuters, the British news agency. In fact the Ipsophone is being widely applied for most of the applications where we, in this country, have been using a personal telephone answering service. Ipsophone, however, has the added advantage of absolute privacy — plus the infallible accuracy of a tape recording.

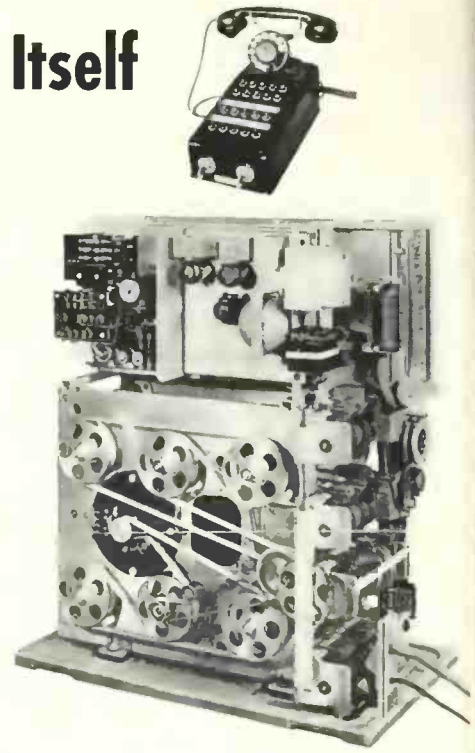
We may see — and hear — a lot more about this telephone recorder. For an American corporation is making arrangements with the Swiss company to mass-produce thousands of them over here. So

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put on discs. Nearly all were made in radio studios or recording studios. The final recordings were made of unbreakable vinylite in a bright blue color. The album has a colorful patriotic jacket.

Screening of the 174 offerings submitted was done by a national committee made up of members of the American Junior Red Cross staff and members of the Music Educators National Conference, co-sponsors of the program. After listening for three days to Negro spirituals, love songs, folk music, classics and light opera, they chose a concert band, three full concert orchestras, three mixed choruses, two boys' choruses, three a cappella choirs, two vocal ensembles, a wood-wind ensemble, and two informal numbers. The committee selections were made upon quality of performance, quality of recording, and securing a good program balance in the six-disc album which would also represent all parts of the country.

The albums have been made available to all countries through the League of Red Cross Societies in Geneva, Switzerland. Thus far, the following countries have requested, and have been sent, an average of 30 albums each: Austria, Belgium, Czecho-



Ipsophone mechanism with casing removed multiple tape recorders and associated control equipment for fully automatic operation. (Photos and data, courtesy of *Mechanix Illustrated*.)

don't be too surprised if your next telephone message is automatically recorded on tape.

slovakia, Denmark, France, Germany, Iran, Japan, Norway, Sweden, Switzerland, Yugoslavia, Puerto Rico, and Australia.

The future of this novel experiment in international understanding is uncertain. There has not yet been time to receive an evaluation of the foreign reception of these albums. No plans are being made to go ahead until this has been done. If the response is favorable, streamlined methods of handling the technical details must be developed before the program can be offered to a larger number of schools enrolled in Junior Red Cross.

It is hoped, however, that like the Junior Red Cross school correspondence and the international school art program, the experimental music program will develop an understanding among the youth of many nations, providing one more "get acquainted" avenue to world peace.

DON'T BE BASHFUL! If you have any recording stories that you think would be of interest to our readers, send them in. Audio Record is now distributed, by request, to 1480 radio stations, 3950 schools and colleges, 3300 recording studios and recordists, and 950 distributors and dealers. Address contributions to: Editor, Audio Record, 444 Madison Ave., New York 22, N. Y.