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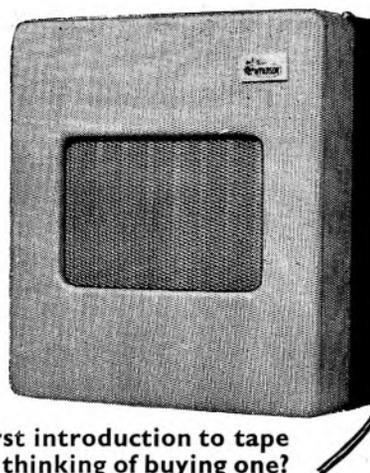


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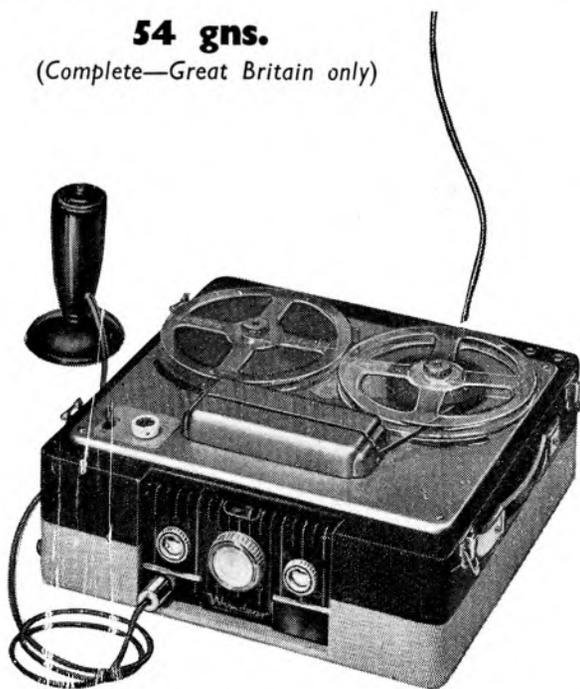
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The 1957 SOUND

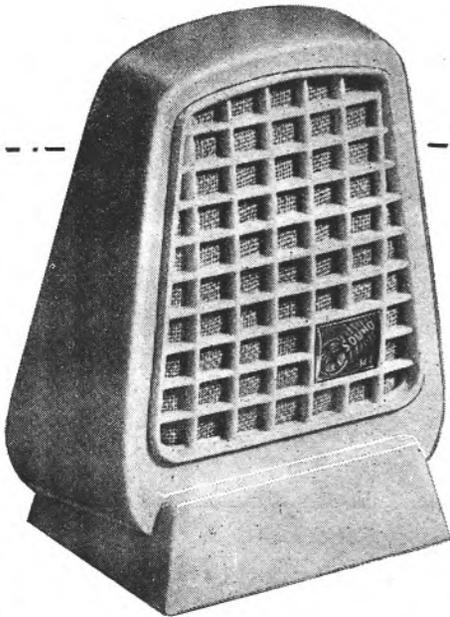
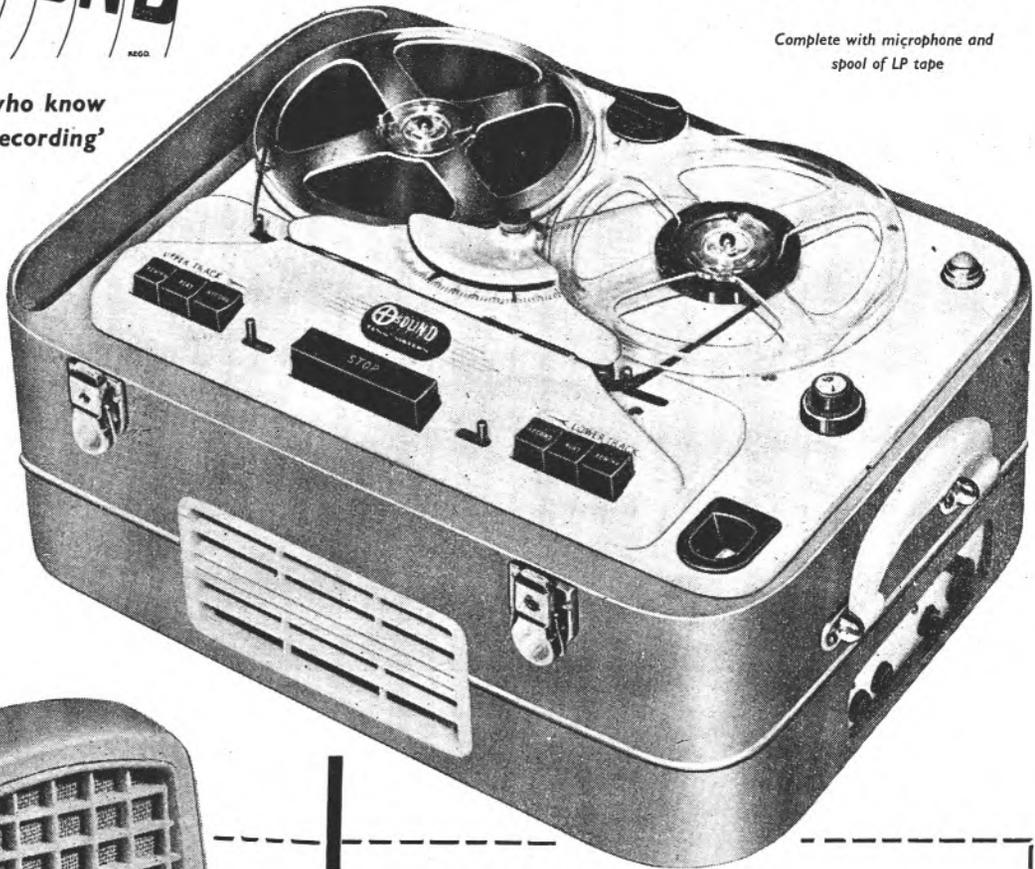
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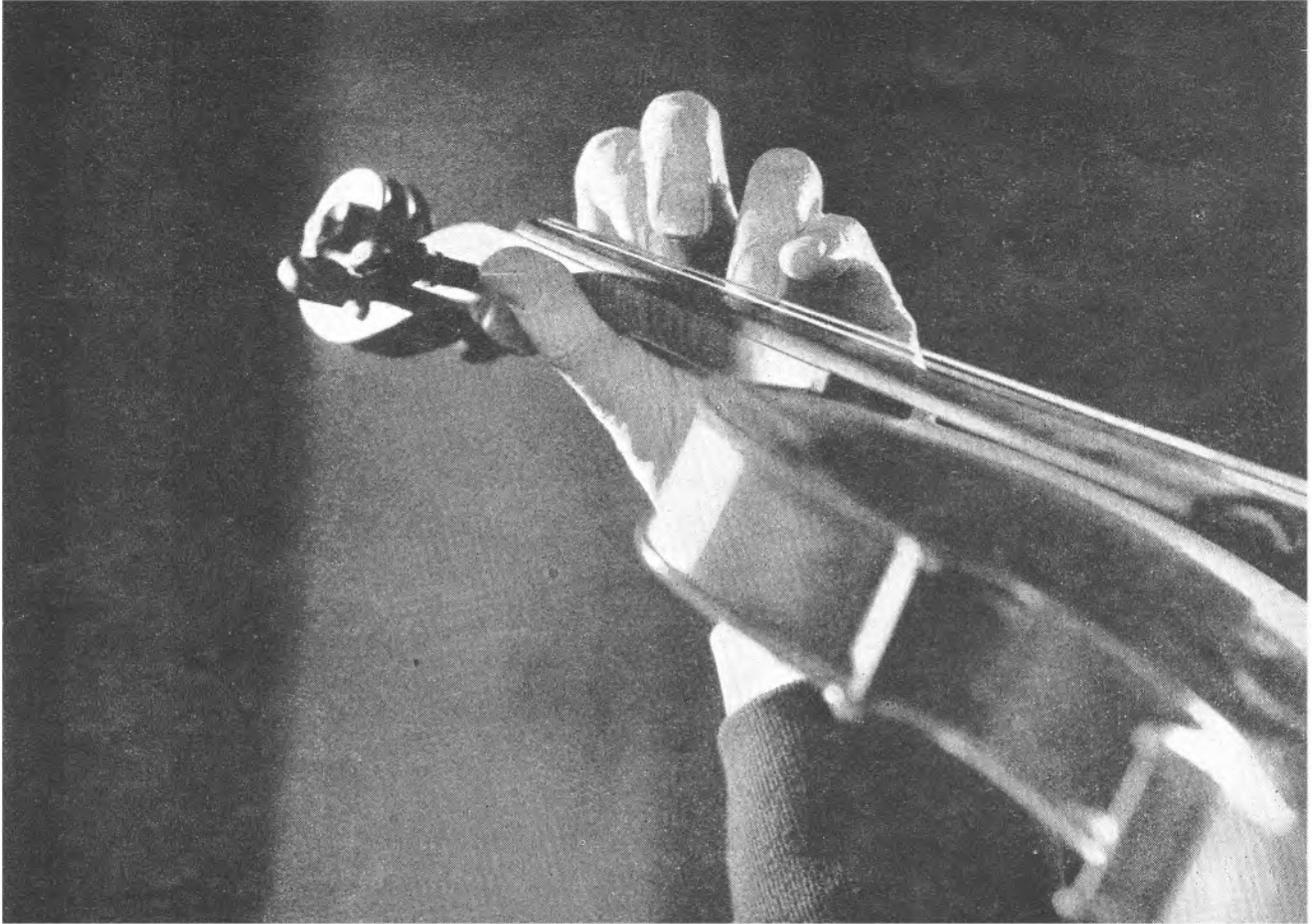
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*reporting on the home, office, factory, school, ciné,
amateur dramatic and musical uses of sound tape*

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Sense of Proportion

MAGNETIC TAPE is such a flexible and exciting medium that it is inevitable, in these early experimental days, that people will use it foolishly as well as sensibly. In the States, we hear, there was a craze for hiding recorders in ladies' powder rooms, and playing back the results to cause the maximum amount of embarrassment. If we can avoid, in Britain, some of the more gauche activities of this kind, so much the better.

Often there may be doubts as to whether tape is a suitable medium for a particular task. We are reminded of the problem by the recent decision by the Vatican forbidding taped music or sermons in religious services.

What must be immediately obvious to anyone is that the mechanical reproduction, by whatever means, of music or speech excuses the individual from making an effort which it may be better for all concerned that he should make. The most exciting thing about magnetic tape is that it can encourage creative activity, in an age when so many things stimulate an entirely passive attitude. Always this magazine will seek to encourage this creative use of sound tape. That is why we have launched the British Tape Recording Contest, further details of which are given in this issue. The making of features on tape is one of the most satisfying and challenging activities possible. It is the intelligent way to use a tape recorder in the home, for those who have become dissatisfied with casual, unplanned switching on for snippets of family gossip.

In this issue we focus attention on other creative and progressive uses of tape: in hospitals, for the blind and the physically disabled at home. It is an exciting thing that literature can be made available to the sightless by putting readings on tape; and that they can communicate with one another without writing. But a moment's thought will suggest that some extensions of the idea might become dangerous: Why not put stories on tape for children? Doubtless, that is a good idea. But how long will it be before material is put on tape, instead of in print, for adults who are too lazy to read for themselves? How long before, with tape equipment selling at popular prices, people start handling their correspondence on tape, instead of with a pen? And how long before they decide it is no longer necessary to learn to read and write?

This vision of 1984 may be a far-fetched nightmare of the intellectuals, but it reveals some uncomfortable possibilities. In our enthusiasm for tape, we must keep a sense of proportion. We must seek to use it intelligently, for the purposes for which it is suited.

The story of a triumph for Britain

Until last year no British recording enthusiast had entered a tape in the International Amateur Recording Contest. G. HOLMES TOLLEY, of Evesham, tells how he became a pioneer, and walked off with a first prize.

DETAILS of the International Amateur Recording Contest first came to my notice in August last year. I learned that, though it had been open to recordists in Great Britain, not one entry had been received in the past. This fact had prompted criticism in the journal of the French Sound Recording Association, on the lines that the "insular British" lacked interest.

As there were four categories, in which one could enter disc or tape recordings, I decided to aim high and enter three tapes, in an attempt to put Britain on the recording map.

As I specialise in actuality recording, that category interested me most. The tapes I entered were a speech recording by a young lady aged nine—Susan Roberts, of Birmingham, reading her own short story for children, *The Grey Teddy Bear* (this received a consolation prize from Holland), and a selection of Shakespeare's sonnets, read by a young drama student and recorded outdoors in the gardens of New Place, Stratford on Avon (once the property of Shakespeare).

A recording of a Rumanian folk dance, which received first prize, was taken during the annual festival of English folk dancing at Stratford on Avon. It was in this lovely market town that I met Sybil and Kenneth Clark, the Midland organisers of the English Folk Dance Society, and to whom I extend my thanks for their patience and assistance, during the setting up of my recording equipment.

It may be remembered that the weather last summer was changeable, with considerable rain and high wind. Needless to say these conditions were quite useless for outside recording. Although the weather was unsettled on the day of the display, in the evening, shortly before the dancing commenced, the wind dropped. As a result of these improved conditions, I was able to begin recording.

Some readers will know the Bancroft Gardens, where the folk dancing takes place, within a short distance of the Shakespeare Memorial Theatre and the River Avon. They are popular with both residents and visitors, particularly during the summer months, for picnicking, strolling, or sunbathing.

An oblong wooden platform had been placed on the grass for the performance. This was to emphasise the sounds of stamping feet, on which the dance depended. The dancers, six men and six women, members of the Young Artists Club of Bucharest, were accompanied by a small group of Rumanian musicians.

Using the E.M.I. portable battery-operated tape re-

recorder, type L2, and Emitape 88, with a Lustraphone LFV/59 pencil type moving-coil microphone, I set up my position within 12-15 feet of the dancers, and opposite the musicians. This produced the desired effect of balancing the wild and enthusiastic shouts and dancing against the musical accompaniment.

I must praise the E.M.I. portable recorder for actuality recording of this nature, for it is possible to get within close range of the subject without causing interference or inconvenience to anyone, due to cables or microphone leads.

I found it was better to hold the microphone, "panning" where necessary, and moving with the performers. This was an added advantage when the audience applauded, for it enabled me to "pan" away from the loudest, and nearest, source of sound. I prefer the "panning" technique, as opposed to a static microphone (i.e., one placed on a stand), as it enables one to pinpoint the various sources of sound. In this particular case it picked out the rhythmic stamping of the dance, and definitely assisted in building up the required sound picture.

Having taken a satisfactory recording (only just in time, for it started to rain soon after the performance ended) I could not wait to hear the final result on my Ferrograph recorder at home.

I must admit the recording quality was astonishing; I had succeeded in obtaining a very strong signal without distortion, or print-through.

The next headache was editing. To enter the contest in the actuality category, the maximum time permissible was four minutes, I had something like 8½ minutes of recorded sound . . . where was I to cut? By sheer good luck, the dance was so well received by the audience, that it was repeated. This enabled me to edit during the first round of applause.

An advantage with the Ferrograph tape recorder is that gradual erasure of the tape is possible; so it was quite simple to play through the dance recording until the applause was reached, then gradually to introduce the erase signal. The result, on final playback . . . a complete sound picture . . . dancing and shouting, applause, fading slowly at the end.

It is interesting to note that, in connection with the Recording Contest several Continental broadcasting organisations reserve space in their programmes for amateur recordings. One is tempted to ask why the British Broadcasting Corporation does not make similar



The author, seen with portable recorder, outside the Shakespeare Memorial Theatre at Stratford-on-Avon

AND NOW

BRITAIN'S FIRST

CONTEST

With this exciting
programme for
the top seven

arrangements? Surely there must be many amateur and semi-professional recordists in this country, who could produce good quality recordings and script material suitable for transmission.

The 5th International Amateur Recording Contest, 1956, was held in Paris, and considerable difficulty must have been experienced by the jury in reaching their decision, for some four hundred entries were received, with over fourteen countries participating.

Imagine my surprise when, at the end of last year, I received a letter from the secretary of the organising committee in Paris, notifying me of a first prize award (250 Swiss Francs) in the actuality category, offered by Radio-Bâle, Switzerland, and a consolation award from *le Muiderkring*, Holland. As there were only a handful of entries from this country, I felt rather pleased with my achievement. It had been useful experience, and really worthwhile; added to this, I had managed to put British recordists on the map.

Now I am planning my recording schedule for the sixth contest, and this year I hope that many more disc and tape recordists will summon enough enthusiasm to enter. May I take the opportunity of wishing them good luck, good recording, and successful editing.

The announcement that TAPE RECORDING MAGAZINE is sponsoring Britain's first amateur tape recording contest has caused wide interest and enthusiasm. Many readers have already begun work on 15-minute feature tapes on the theme: "Summer 1957."

We are proud to announce this month that Electric and Musical Industries Ltd. have offered their full support for this Contest.

E.M.I., whose EMITAPE factory at Hayes is the largest producer of magnetic tape in Europe, join with TAPE RECORDING MAGAZINE in the plan to make the British Amateur Tape Recording Contest a major event in the development of tape in this country.

They have agreed to provide an exciting programme for the winner of this contest and the six

runners-up when they come to London in October to receive their awards.

First, there will be a visit to the E.M.I. Recording Studios to watch a professional recording being made of a well-known star.

Then there will be a luncheon, at which the Contest winners will be the guests of E.M.I.

After that, there will be a conducted tour of Hayes giving a unique "behind-the-scenes" view of the factories in which the famous EMITAPE products are made.

Next month we hope to announce the distinguished panel of judges being assembled for the contest.

This interest-packed programme will be in addition to the official presentation of awards and play-back of winning tapes at a function on Saturday, October 26 being organised by TAPE RECORDING MAGAZINE.

The winner will receive a special framed certificate and a £10 cash prize. Six runners-up will receive certificates of merit.

This is going to be a big occasion. Be in on it. Write today, enclosing a stamped, addressed envelope, for your entry form, which will give full conditions governing the contest.

Eighteen year old John Beckingham, of Cobham, Surrey, tells how tape is helping him to overcome his handicap

I WORK MY RECORDER WITH MY TEETH

WHEN I contracted poliomyelitis on November 13, 1952, I little realised that it would give me the chance of having two tape recorders. Since I decided to take up journalism as my career, the thing I wanted most of all was a recorder.

By holding a rubber tipped rod in my mouth I found that I could type, using an electric typewriter. The only trouble was that when I started typing I found it difficult to do any constructive thinking at the same time.

It seemed to me that the only way I could surmount this difficulty was to record what I wished to write, then to play it back as I typed, much as a business man would dictate to his secretary.

But where was the tape recorder coming from? My prayer was answered during an interview on television. One of the questions the interviewer asked was whether a recorder would be of any use to me. I replied that it would, and gave the above reasons. By the time the programme had ended several kind people had telephoned making me offers of tape recorders.



I accepted two of them. Both machines are the Grundig 'Stenorette' model.

I use the same rod that I use for my typing to operate the recorders. The five main controls of the 'Stenorette' are similar to the keys of a typewriter. But the 'on and off' switch and volume control is a wheel set edge on to the operator. Luckily, the rubber tip of my rod can grip the serrated edge and I found that I had very little difficulty.

I am unable to use the switch on the microphone, because it needs to be pushed down and to one side in a single motion. As the 'mike' is only small and on an equally small base, it is not stable enough for me to use any pressure. So I leave it in the 'on' position, and work the recorder with the main switches alone.

There is one more thing I should like to say. Some people, when I tell them how I manage, say how clever I am. Ask anybody who has got over a similar handicap and I am sure they will agree with me that it all adds up to that old saying: 'Necessity is the mother of all invention.'

HELPING THE HANDICAPPED

The perfect medium for the blind

"Tape recording is almost the perfect medium by which the blind person can express himself and certainly the most wonderful hobby for him to enjoy."

"The blind tape recordist can be the complete equal of the sighted recordist."

THESE words, used by Mr. Eric Payne, of Redhill, Surrey, in an interview with TAPE RECORDING MAGAZINE, sum up the importance of this modern technique for those who are blind.

Mr. Payne is Secretary of the Blind Service Section and Editor of its new quarterly Blind Service Tape Magazine.

The Blind Service Section is affiliated to, but distinct from, the BATRS. Membership is open to any registered blind person anywhere in the world and is entirely free.

Mr. Payne outlines the objects of the organisation as follows:—

1. To produce the Blind Service Tape Magazine;
2. To put on tape all the printed literature of the BATRS;
3. To establish a tape library for the blind;
4. To provide sighted readers for the blind (the blind providing the material to be read and the tape);
5. To co-operate in the blind activities of the Voicespondence Club, the Tape Respondents International and the World Tape Pals;
6. To secure the co-operation of sighted persons in general work;
7. To secure the co-operation of manufacturers.



Eric Payne

The first quarterly issue of the Tape Magazine for the Blind appeared on April 1 and the next one is due out on July 1.

Mr. Payne, whose years of experience of tape includes joint editorship (with Mr. John Amphlett) of the BATRS monthly bulletin on tape, is responsible for this production and has achieved a remarkably fine standard.

The first issue contained an introductory "editorial," a talk by Ted Yates, the BATRS Secretary, an article on the development in the U.S.A. of a new electronic travel aid for the blind, first in a series of "Turntable Talks" about records, a test review, and a reading from a book of cricket stories.

T.R. MAGAZINE has given permission for any of the contents of this magazine to be reproduced on future tapes, if the Editor wishes.

MR. PAYNE is already getting co-operation from manufacturers. A gift from the MSS Recording Co. started off his stock of tape on which to produce the magazine.

Now he has been able to negotiate with the E.M.I. Records Division an agreement under which they will supply tape records to any registered blind person in the United Kingdom at discount prices (as they already do with discs). Orders must be placed through the Royal National Institute for the Blind.

CURING THE SICK

Recording muscles —and heart beats

BY NORMAN K. HARRISON, F.I.B.P., F.R.P.S.

THE sound recorder is proving its worth and is being increasingly used in medicine. One use of the electromyograph is to obtain sound levels from muscle impulses and these electrical impulses are recorded on tape. These sounds can then be correlated with the electrical impulses as seen on the oscilloscope screen.

In the study of heart conditions, tape is being used to record sounds made by the heart in various pathological conditions. Everyone is familiar with the "Lub-dub, lub-dub" heard when the ear, or a stethoscope, is placed against the chest wall. When diseased, the heart sounds differ from normal and form a valuable diagnostic aid, and these sounds can now be recorded on tape and played back by a cardiologist when lecturing to medical students.

At the Institute of Ophthalmology in London sound recording machines are used in many ways. In the clinics, the Emidicta apparatus is used for dictating letters, and tape recorders are used during discussions between two or three people, so that the salient points may be later abstracted.

IN the field of medical cinematography, the tape recorder is of great value. Many of the teaching hospitals and medical institutes now have films, in both colour and monochrome, made by their photographic departments. These are initially silent, but often have sound tracks added, and it is here that the tape recorder proves its worth.

It is common to project the film when it is first received from the processing laboratory and as it is being screened to speak into the microphone such comments as are necessary for editing, removal of bad shots, etc. These comments can then be transferred to paper and the notes used when the cutting copy comes to be handled by the editor.

To see whether a written commentary will "fit" the film for which it has been written a tape recording is made, and this is run as the film is projected, and any discrepancies either way can be made good.

Silent medical films are often used by others than the sponsors for whom the film was made. Here it is possible for a tape recorded commentary to be made by a medical authority, and for the tape spool to accompany the film spool. Absolute synchronisation is not essential, and this method has the advantage that the commentary can be easily "tailored" to fit a particular audience.

Guy's Hospital, St. Mary's Hospital, Westminster Hospital and the Institute of Ophthalmology—all noted for their medical motion picture productions—use tape recording apparatus in their work.

Even a cursory study suggests there are increasing possibilities in the day-to-day work of the hospital or clinic, in medical research and in medical education. Not all apparatus is suitable for this work; much of it is cumbersome and needs a mains power supply. What is needed is a recorder of reasonable weight and with self-contained power supply, so that it can be used anywhere, at any time. Some enterprising manufacturer should realise there is an immense potential market in the field of medicine.

The story of the way in which tape enthusiasts are helping to make life brighter for hospital patients

PATIENTS CAN TAPE MESSAGES —TO RELATIVES

IT'S not only the B.B.C. programmes that flow into those headphones that hang at the heads of the beds in our hospitals; not by half.

All over Britain, tape recording enthusiasts are mobilising to give hospital patients something special, something out of the ordinary, something with local or personal appeal.

In Liverpool, for example, Mr. Monty Lister has been producing a "Music with Monty" programme once a fortnight for years. So well established has it become that Mr. Lister now averages 40 letters a week from former patients who have appreciated his programmes.

Mr. Lister gets around, interviewing stars and collecting music. For a recent rock 'n roll programme, he gathered the voices of Bill Haley, Tommy Steele and Winifred Atwell.

In earlier programmes, he interviewed Dickie Valentine, the Beverley Sisters, Dave King, Lonnie Donegan, Humphrey Lyttelton, Stan Matthews and Geoff Duke.

Elsewhere in the North several hospitals get regular football commentaries recorded on tapes at the local grounds on Saturday afternoons and played over the hospital networks later during the weekends.

In the south-west, Toc H has played a notable part in building up the hospital broadcast network.

In Bristol, 10,000 patients at hospitals in the city are served by a radio-diffusion unit. Mr. Alan J. Lovell, area representative of the BATRS, plays an active part in the development of this service.

One notable feature is that recorded messages on tape may be sent by any patient to relatives or friends in any part of the world. Similarly, messages may be sent to patients and played over the hospital network.

Mr. Lovell is now preparing a series of 30-minute request record programmes and has visited many patients to seek out their tastes.

He has also arranged programmes on local boxing and wrestling events.

It is already clear that these hospital programmes on tape are going to become universally popular in this country. While the essence of a good programme is its local and personal flavour, there will inevitably be many occasions when co-operation between the various networks will be worth while.

The best way to learn about recording is to experiment. But you will get the results you seek more quickly and painlessly if you study the theory a little before you start. In this article, R. HAWORTH, M.B.E., who has taught many established broadcasters about technique, gives invaluable advice

STUDY THE ACOUSTICS.. AND MIKE TECHNIQUE

THERE is no reason at all why the owner of a good domestic tape recorder/reproducer, who is prepared to master the basic principles of a rather complex art and who uses a suitable microphone, should not achieve quality as good as, or possibly even better than, that of a number of the broadcast programmes he already may have recorded via a VHF radio receiver.

Contrary to general belief, elaborate studio equipment, with a large number of microphones, is not essential. Indeed, the best possible quality will always be obtained where a *single* microphone is used, whether the source of sound consists of a single voice or a choir of a thousand voices, plus a full symphony orchestra and organ.

High-Quality

Recording

For the recording of speech, an ordinary sitting room, normally furnished and in a quiet location, might well prove more satisfactory than many a broadcasting studio (the design of small studios for talks and discussions presents a number of acoustical problems which have not yet been completely solved.) A large drawing room, with the carpet rolled back, may be admirably suited to the recording of a string quartet, piano or a small rhythm group.

Given a high-quality recording and reproducing system, correctly operated, only two factors can possibly influence the quality of the recorded sound. These are first, the acoustical environment; secondly, the microphone itself, and its location in relation to the source of sound. A lifetime can be devoted to the study of these two factors.

It is quite impossible to overestimate the importance of the role played by acoustical environment, for it influences the quality of every sound, musical or otherwise, that we hear—unless the source of sound happens to be only a few inches from the ear. This fact must always be borne in mind if it is desired to make recordings which sound true to life.

In any enclosed space, such as a room, sound does not become inaudible at the same instant that the source itself ceases to operate. Sound waves, after travelling outwards from the source, are reflected and re-reflected by the bounding surfaces of the room, the number of successive reflections depending on the composition and rigidity of the walls, ceiling and floor, the general shape of the room, and also on its furnishings. At each reflection, a proportion of the sound energy is lost, until eventually it is all completely absorbed. So when a source of sound in a room is stopped abruptly, these multiple reflections cause it to remain audible for a short time, growing progressively weaker as more and more energy is absorbed, until at length it can be heard no longer.

This effect is known as reverberation, the time in seconds taken for sound to die away to the point of inaudibility (or to one millionth part of its original intensity) being the reverberation period. Large rooms have a longer reverberation period than small rooms, as will a bare, unfurnished room compared with a room of similar size but containing curtains, carpet and upholstered furniture. One reason why good value for money is obtained when singing in the bath is that the reverberation reinforces the voice, especially at certain resonant frequencies, and helps to give the singer a feeling of great vocal power.

An average furnished sitting room will have a period of about 0.4 second, while in a large church it may be 4 or 5 seconds or even longer. In concert halls it is usually 1.25 to 2.25 seconds according to size, with an audience present. For speech, the reverberation should be less than 1.0 second (0.5 second would not be too short), otherwise intelligibility will suffer owing to the running together of successive words and syllables.

It is important that a room or building should have a reverberation period appropriate to its intended use. For example, organ music composed for performance in a church, rarely sounds right when played in a concert hall; the listener often gets a feeling of being shut up in a box with the machinery. In this connection, it is illuminating to compare the recording of Bach's well known Toccata and Fugue in D minor, played by Germani on the Westminster Cathedral organ (H.M.V.C.3971) with more recent "hi-fi" recordings of the same work performed on concert hall organs.

A Reduction of Reverberation

The reverberation time of a room may be controlled to a limited extent. It can be made shorter by means of sound-absorbing materials applied to the walls and ceiling; many proprietary absorbents are manufactured for this purpose. The approximate total area needed can be calculated in advance. If a temporary reduction of reverberation is required, this can be accomplished by partially covering one or more of the walls with loosely draped curtains, or by means of "absorbent screens." The latter consists of a blanket of acoustic material (rockwool or fibreglass are very effective) mounted in a light wooden skeleton frame, approximately 6 feet in height by 3 feet wide. The reverberation can be made longer by making the bounding surfaces of the room more efficient as reflectors of sound, by removing carpets and curtains, painting the walls, etc.

There are many other factors, in addition to reverberation, to be taken into account, but so vast a subject cannot be more than touched upon in a short article. The reader who wishes to learn more should refer to a text book dealing with architectural acoustics. The mathematics of the science will probably

STUDY THE ACOUSTICS AND MIKE TECHNIQUE



By courtesy of the BBC

repel most people. Two helpful books which contain an absolute minimum of equations are "Acoustical Designing in Architecture," by Knudsen and Harris, and "Acoustics in Modern Building Practice," by Fritz Ingerslev.

When a microphone is placed in a room which has appreciable reverberation, it will respond not only to sound reaching it directly from the source, but also to the indirect, reverberant sound. The relative proportions of direct and reverberant sound, which influence to a very great extent the ultimate quality of the recording, depend on the distance of the microphone from the source. If this is only a few inches, the direct sound appearing at the microphone will be so much louder in relation to the indirect, reverberant sound that the latter will make no impression. Thus, the voice of a person speaking at close range will lack acoustic perspective, and the listener will have no means of judging whether the speaker is standing in a room, the open air, or on Paddington Station. This effect corresponds to the "close-up" in TV and the cinema, in which the screen is completely filled with the face of the actor, leaving no room in the frame for the inclusion of any scenery.

The Mike and the

Source of Sound

A marked change will be observed if the microphone is moved farther from the source of the sound. The direct sound will now be reduced in volume owing to the increased distance, but the intensity of the reverberant sound appearing at the microphone will be unchanged. Hence, the mixture will include a much greater proportion of reverberant sound, with the result that the listener will now receive a certain amount of information about the acoustics of the room. It will be possible to judge whether the room is large or small, a fully-furnished room or a bathroom. In a similar manner, more scenery is included in the film or TV picture as the camera recedes from the subject.

If the microphone is removed still further, to a point where the proportion of reverberant sound is greater than the direct sound, then the maximum amount of acoustical information concerning the room will be conveyed, corresponding to the "long-shot" of TV and cinema. Most beginners make the mistake of working too near the microphone, resulting in the complete absence of acoustic perspective. This makes exceedingly dull listening.

When Recording

Plays and Features

When recording plays and features, full advantage should be taken of the many different acoustic effects that, as experience will show, can so easily be obtained. It is good practice to record the different scenes in rooms which have acoustics appropriate to the action.

Even out of doors, all sounds are characterized by reflections from nearby buildings. The distinctive echoes heard in a school playground, a parade ground, or beneath a bridge, the "chinky" effect in a narrow passage between tall buildings—these and many others can be captured *provided the source of sound is not too close to the microphone.*

For the best possible quality in the recording of music, it is especially important that the microphone should not be too near. Few musical instruments can be listened to with pleasure for long if only the direct sound is heard. True beauty of tone depends on a large proportion of indirect, reflected sound being allowed to reach the microphone. No carpets and a distant microphone must be the rule. This is particularly important in the case of the violin. The present day fashion for close microphone technique is responsible for much of the steel-like brittleness of the string quality, noticeable in many modern orchestral recordings.

The exact distance between the microphone and the source of sound will have to be found by experiment, in each different location. It depends partly on the acoustics of the surroundings and partly on the directional properties of the microphone itself.

A somewhat bewildering variety of microphones is available, and the prospective purchaser will have to decide on the type best suited to the work intended. It will pay to buy a good instrument. It would certainly be false economy to attempt to feed an expensive recorder with the output from an inferior microphone.

(Continued on page 14)

**MAKING A
FEATURE**

Acoustics and mikes

(Continued from previous page)

Apart from its principle of operation, perhaps the most important thing to know about a microphone is the manner in which it responds to sounds arriving from different directions. It is therefore convenient to arrange all microphones in groups, according to their directional characteristics. There are four main groups:—

GROUP I. This includes all non-directional microphones, which respond equally to sounds arriving from any direction. These are simple to use, as speakers or instruments may be grouped round them in a circle. They provide a greater degree of acoustic perspective for a given working distance than any other type; this feature may not always be an advantage. The smaller the microphone, the more truly non-directional it is likely to be.

GROUP II. Bi-directional microphones. These are sensitive on two faces, within an angle of about 100 degrees on each face, but become progressively less sensitive as this angle is exceeded, being completely unresponsive to sounds arriving at an angle of 90 degrees to the axis. All ribbon microphones belong to this group and, used correctly, they are capable of giving exceedingly good quality.

A minor disadvantage is that ribbons cannot normally be used as close-talking microphones. If the source of sound is closer than about two feet, the lower frequencies are exaggerated, an effect which becomes more pronounced as the distance is reduced. In the case of speech, vowel sounds will become too loud in relation to consonants, and an unpleasant quality will result. If used out of doors, the greatest care must be taken to shelter the microphone from wind, owing to the extreme fragility of the ribbon itself.

GROUP III. Uni-directional, or cardioid, microphones. These are sensitive on one face within a fairly wide angle which may approach 180 degrees, but are insensitive at the back. This characteristic is not easy to obtain—it is contrived, broadly speaking, by combining the characteristics of two types of microphone in one case, one a non-directional, and the other a bi-directional, in such a manner that most of the sound arriving from one direction is cancelled. This uni-directional property has a number of advantages, which have led to the wide adoption of cardioid microphones for broadcasting and professional recording. Good balance and realistic acoustic perspective are easier to obtain than with any other type of microphone, and they are probably unequalled for choral work. With a few exceptions, most types are somewhat complex, need skilled maintenance, are exceedingly expensive, and hardly suited to amateur use. Several makes have an adjustment which enables them also to be operated in a bi-directional or non-directional condition at will.

GROUP IV. Microphones which have a directional response varying with frequency—being considerably more directional to higher frequencies than to low. This was a characteristic common to all early designs operated by large diaphragms. Owing to the many balance difficulties which result from these directional properties, they are little used today for studio work. However, a good modern type will be perfectly adequate for one or two speakers, if not for a large group.

In the opinion of the writer, a good ribbon microphone will probably prove the most satisfactory type with which to make a start. It will be found sufficiently flexible for most purposes. It has been the microphone most generally used by the majority of broadcasting organizations since the middle 1930s, and there is no likelihood of it being entirely superseded for a very long time.

If a second microphone is purchased, it should be a non-directional type. Next, in order of preference, the writer would place a cardioid.

To conclude, having bought the microphone of your choice, try this method of exploring its possibilities, and, incidentally, the acoustics of the room you propose to use. Mount the microphone on a floor stand, start the recorder, then walk in a circle round the microphone, keeping at a distance of three feet, talking all the time and frequently identifying your position relative to the microphone axis. It will help to mark the points and half points of the compass in chalk on the floor. Speak facing the microphone. Repeat this facing *away* from the microphone.

You will probably learn that even the insensitive side of a ribbon microphone can sometimes be utilized with good effect.

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VATICAN BANS TAPE FOR ITS SERVICES

Ambassador's tape

Mr. Whitney, the American Ambassador, was heard but not seen at a recent New York banquet. The occasion? He was due to receive the Albert Einstein commemorative award for Citizenship. He made a tape recording of a short speech to be played back at the function. It was flown over as Mr. Whitney is too busy to leave this country at present.

THREE months after the Archbishop of Canterbury's ban on tape recording in churches in his diocese, the Vatican has issued instructions on similar lines to Catholic clergy.

The Sacred Congregation of Rites has forbidden the use of all mechanical devices for religious services.

The ban covers not only tape recorders, but gramophones and film projector as well.

But there is an interesting contrast in emphasis between the Church of England and the Church of Rome.

The Archbishop of Canterbury forbade the use of tape or film to record the marriage ceremony. The Vatican edict is directed at the use of mechanical devices to provide sacred music or sermons as a part of the service.

The Church of England ban is not universal. The Bishop of Rochester, for example, has publicly expressed disagreement with it.

Some clergy are putting tape recording in a different category to photography—permitting the first, but not flash-light photographs.

TAPE TITTER



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NOW, DOCTOR, AM I RIGHT?

AN ingenious use for tape was reported to the *Sunday Express* recently by a reader, in a letter to the Editor. It opened up a prospect of family doctors having to listen to tapes, as well as examine patients!

"My chemist," said the *Sunday Express* reader, "had a request from a customer for a cough mixture. The customer explained that the patient was a child and he was sure the complaint was whooping cough."

"But," said the customer, "the child never coughs when the doctor comes, so I've recorded the cough on my tape recorder and we'll play it back to the doctor on his next visit. Then we'll get a real prescription."

Council invests in recorder

CAMBERWELL (London) Council has equipped itself with a tape recorder with which to record important municipal activities. The tapes will supplement the photographs and minutes which are already collected.

First use of the machine was at a town hall conference to which more than sixty local organisations were asked to send delegates.

Now it's tape for printing —and for the rates demands

A RUSSIAN has invented a method of printing newspapers by using magnetic tape.

A special transmitter is used to transfer a magnetic image of a newspaper page on to the tape.

This is then placed on to the cylinder of a normal printing machine, and paper is fed in, in the normal way. But a fine powder is sprayed over it and this adheres only where it contacts magnetised portions of the tape.

In this way a clear-cut impression of each letter or illustration is transferred to the paper. Heat is then used to melt the powder, so fixing the impression firmly to the paper.

Another fascinating application of magnetic tape is reported from Norwich.

The city council has just taken delivery of the first electronic computer of its kind ever built and sold for entirely commercial work in Britain.

Basic information about the 30,000 houses, shops and other premises in Norwich is recorded on six reels of tape.

The tape is fed into the computer, together with information about the current rate. The machine then prints, at the rate of four every minute, demand forms for every ratepayer.

The whole batch can be produced in little more than a week.

With equal ease, the computer will calculate the pay and salary of staff or handle and sort out invoices.

It cost £37,000. It will enable seven people to do the work previously done by 28.

The problems that

beset you



TAPE ON POLYESTER BASE

I have been reading about the superiority of U.S. tape named MYLAR, on polyester base, which, in 1.5 ml., has a tensile strength of 25,000 psi (cf. 11,000 for acetate), a break elongation per cent of 95 (cf. 20), a moisture absorption of 0.3 per cent at 100 per cent RH (cf. 9.0 for acetate), and is therefore much more valuable for sync. work with film.

Now I see in your magazine an advertisement that "Scotch Boy" extra-play 150 is on polyester base.

Is this, therefore, the same as MYLAR, please? And is it possible to get polyester tape on normal thickness, not long-play, as I hear there may be printing on some of these thin tapes unless wound and rewound frequently?

S. J. JERSEY, C.I.

REGARDING your query about the U.S. Tape called MYLAR, I can tell you that "Scotch Boy" 150 Polyester base tape is comparable in all respects.

It is not possible to get this tape in normal thickness, but the manufacturers have had no experience of excessive printing through this tape, although one must bear in mind that the possibility of this happening must always be greater with the thinner tape.



WHY THIS GABBLE?

I have two tape recorders—a Grundig Reporter type 700L and a Grundig TK5. I find what I record on the TK5 will not be reproduced on the 700L machine, and vice versa. What I get is a gabble—it sounds as if each machine is reproducing the voice backwards.

I use the same speed—3½ i.p.s. Can anything be done to put this in order, or do I need two identical machines if I want to interchange tapes?

M. S., LONDON, W.9.

YOUR assumption that each machine is reproducing the recording backwards is, in fact, correct. The 700L machine conforms to continental standards, tape

moving from left to right. Recording and reproduction takes place on the lower track.

The TK5 was designed to conform with British standard specification compiled in 1954, which laid down that, with tape moving from left to right, recording and reproduction takes place on the upper track.

In order to enable you to interchange tapes, a modification will be necessary to the position of the head on the 700L machine. For a long while Grundig Ltd. supplied suitable conversion kits, but unfortunately supplies are now exhausted and the infrequent demand does not justify further production.

There is, however, a firm in North London which has been approved by Grundig Ltd. to carry out this conversion, and I suggest you contact them direct. They are The Scientific Engineering Co. Ltd., Hampden Road, Muswell Hill, N.10.

The cost of the conversion is approximately £4 4s. 0d. provided the head does not have to be replaced, but it is, unfortunately, the experience of the Grundig people that in a large number of cases this is necessary, in which case the additional cost would be in order of £4.



BATTERY-OPERATED RECORDERS

I possess a Grundig TK9, but I am finding that I need a portable battery model more and more. Could you advise me on the best makes?

B. D., MANCHESTER.

THERE are only three battery-operated tape recorders to my knowledge, and two of these are quite unsuitable for quality reproduction. The one that is suitable for high quality reproduction is the E.M.I. Model L2. This equipment, which measures 15¼ × 7½ × 8¼ inches, weighs 14½ lb. including all batteries. It operates with a 5 inch spool, and three versions are available, operating at 3½, 7½ or 15 i.p.s., as desired. Erasing facilities are not provided with this equipment and this would normally be carried out on a separate mains recorder. The equipment operates from two Ever-Ready type B.101 67.5 volt batteries, and ten Ever-Ready type U.2-1.5 volt cells. The U.2 cells give

ADVICE BUREAU

Our Technical Advisory Editor answers more of the many problems that are sent in to our office. Send your problem, together with a stamped addressed envelope. We can probably help you. Your problem may help others . . .

By E. SWAIN
A.M.I.E.E., A.M. Brit. I.R.E.

an effective operating life of 1½ hours for intermittent operation, whilst the H.T. batteries have a life of approximately 15 operating hours. The cost of the equipment is in the order of £100.

Another battery portable, suitable only for speech, is the "Minifon" Pocket Wire Recorder. This measures 6½ × 4½ × 1½ inches and weighs 2½ lb. complete with battery and wire, for this is a *wire* recorder, not tape. The frequency response, however, is such that it is quite unsuitable for music recording.

The other portable of which I am aware is the Boosey and Hawkes clockwork tape recorder, which has a speed of 7½ i.p.s. and 3½ i.p.s., according to personal choice. This recorder will run for eight minutes on one winding, but again the wow and frequency response make it unsuitable for anything other than speech.

NOTE: Since replying to this letter, we have discovered another portable, the German "Butoba," details of which are given in the reply to a correspondent, printed below.



A NEW GERMAN MACHINE

Would you be good enough to let me know the manufacturer of the spring-driven battery powered "Butoba" tape recorder? Also the initial distributors in this country? Have you any comments on its performance?

L. K., CHICHESTER.

THIS is a German machine, the sole distributors being Henri Selmer and Co. Ltd., 114 Charing Cross Road, W.C.2. The motors are spring-driven, whilst the amplifier is designed to operate from either mains or battery. It is provided with two speeds—3½ and 1½ i.p.s., and takes up to 5-inch spools.

The frequency response of this machine is 50 to 9,000 c/s at 3½ i.p.s. The price is £78, plus 3 guineas for microphone.

I have not actually heard this machine running, but I hope to do so in the near future and shall be commenting on it in the magazine.

Next month

THREE EXCITING FEATURES NEXT MONTH

1
PORTABLE, BATTERY OPERATED TAPE RECORDERS—A FULL SURVEY OF THE NEED, AND THE MODELS NOW AVAILABLE

2
Another article in our new series of expert reviews of tape machines. This time, a model in the higher price range.

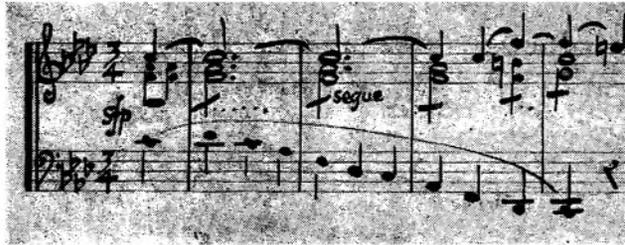
3
TAPE IN THE CLASSROOM— A TEACHER TELLS MORE OF THE FASCINATING STORY OF A REVOLUTION IN EDUCATION.

AND ALL THE POPULAR REGULAR FEATURES, TOO

EDWARD GREENFIELD, recorded music critic of the
'Manchester Guardian,' discusses

CLASSICS ON TAPE

Symphonies and Concertos



BESIDES the vast array of classical L.P.s available today, the list of pre-recorded tapes is still tiny. But tiny as it is, those in E.M.I. responsible for choosing the items have, on the whole, done their job remarkably well.

Already, five of the nine Beethoven symphonies are available (Nos. 3 to 7) and five out of the six concertos (all but the first piano concerto). Fortunately, they include a high proportion of what are, to my mind, the best recorded performances available in any form.

Of Beethoven's seventh symphony, I have never heard a recorded performance to rival Klemperer's glowing account with the Philharmonia Orchestra (CAT 282), and the recording lets through inner strands of the music which one rarely hears even in the concert hall.

Karajan's performance of the "Pastoral" symphony, also with the Philharmonia Orchestra (CAT 269) is another which has still to be outshone.

On the other hand, I think E.M.I. have made a mistake to use Furtwangler's slow and heavy-handed performances for their tape-records of Nos. 4 and 5 (HTA 20 and HTA 12). Maybe as Klemperer completes his Beethoven cycle, they will issue all his versions on tape. I hope so.

Of the concertos so far issued, pride of place must go to Solomon's wonderful performance of the "Emperor" (HTA 21), which, when it was issued on L.P., had me playing it repeatedly.

Solomon's recordings of Nos. 2 and 4, coupled conveni-

ently on one tape (good value for money this) must also be highly recommended (HTA 1). Then Edwin Fischer's performance of No. 3, with the soloist, in the old eighteenth century manner, conducting from the piano, has always pleased me more than any since Schnabel's ancient "78" set (HTB 402). There are, as yet, no Beethoven stereophonic tapes.

Brahms is less well represented, but it is good to find Karajan's electric performance of the first symphony (CAT 251) and the warm, affectionate performance of the violin concerto by the young Hungarian violinist, Johanna Martzy (CAT 260). Most exciting of all is a stereophonic tape just announced (and which I have yet to hear) of the Brahms double concerto, with David Oistrakh and Pierre Fournier. This has not yet appeared in any other form (BTB 305-5).

A concerto recording which I must especially recommend is an unforgettable performance by David Oistrakh of Bruch's well-known first violin concerto. No one hearing this could call the work hackneyed. It is coupled enterprisingly with Prokofiev's lyrical first violin concerto, a fascinating work which no one need fight shy of (CAT 275).

Then there is the incomparable Oistrakh again in Khachaturian's attractive violin concerto, with the composer conducting. Quite as attractive as this Russian music are Vaughan Williams' concertos for oboe and base tuba, the latter particularly delightful (HTB 410).



THESE I RECOMMEND



Here is a list of other concerto and symphony performances I can recommend without reservation:—

- Berlioz, *Symphonie Fantastique*, Karajan, CAT 264.
- Borodin, *Symphony No. 2*, Kletzki, CAT 256.
- Dvorak, *Cello Concerto*, Tortelier, sat 1000-1.
- Elgar, *Cello concerto*, Tortelier, HTB 405.
- Grieg, *Piano Concerto*, Moiseiwitsch, (with the Schumann concerto), HTC 607.
- Grieg, *Piano Concerto*, Moura Lympny (with Rachmaninov's *Concerto No. 1*), HTC 604.
- Miaskovsky, *Cello Concerto*, Rostropovich, sat 1012.
- Mozart, *Four Horn Concertos*, Dennis Brain, CAT 270.
- Two *Piano Concerto*, Anda and Haskil, bta 109.

- Prokofiev, *Classical Symphony*, Malko, sdt 1750.
- Symphony No. 7*, Malko, sct 1505.
- Rachmaninov, *Piano Concerto No. 2*, Anda, CAT 253.
- Saint Saens, *Cello Concerto No. 1*, Rostropovich, sbt 1251.
- Schubert, *Symphonies Nos. 4 and 5*, Bletch, HTC 601.
- Symphony No. 6*, Beecham, bta 104.
- Symphony No. 9*, Barbirolli, HTA 6.
- Schumann, *Symphony No. 4*, Cantelli, HTB 401.
- Sibelius, *Symphony No. 2*, Kletzki, bta 101-2.
- Symphony No. 5* (with Finlandia), Karajan, CAT 255.
- Tchaikovsky, *Symphony No. 4*, Karajan, CAT 273.
- Symphony No. 6*, Cantelli, HTA 3.
- Piano Concerto No. 1*, Anda, CAT 259.
- Vivaldi, *The Four Seasons*, Virtuosi di Roma, HTA 15.

KEY—Single-channel: HTA and CAT, 84s.; HTB and CBT, 63s.; CCT and HTC, 73s. 6d.
Stereophonic: sat and bta, 63s.; sbt and btb, 47s. 6d.; sct and btc, 55s.; sdt and btd, 42s.

LETTERS TO THE EDITOR

We invite readers to send us their views, comments and ideas, or any news of unusual or interesting experiences with tape. Please keep letters brief.

MUSIC FOR RECORDING

ONE unusual use to which I have put my recorder was for learning a series of facts while I was asleep. I recorded then on a 1,200-foot tape, put an electric timer between the circuit and the recorder, set the timer for the time I wished it to operate, and turned the recorder on.

At the pre-set time, the timer clicked over, feeding electricity to the recorder, which began playing back the tape.

At the end of one hour, the timer cut out and the recorder stopped.

Audio was by means of an under-

pillow speaker attached to the output of the recorder.

While the results were interesting, there was not enough conclusive evidence. . . . I intend to continue my experiments.

Yours,
ROBERT R. REED.

Toronto, Canada.

I THINK your latest edition is the best to date. In your feature "Making a feature tape" was a reference to the laws of copyright. Any unauthorised re-recording of commercial records or of radio music—especially when a public performance is contemplated—constitutes an infringement of copyright.

To surmount the difficulty, the British Amateur Tape Recording Society is now building up a library of privately recorded music.

The *Tape Bulletin* Editor, Mr. Dennis Scotney, is using music recorded for BATRS by accordion-player Warren Eagle, leader of a well-known East Midlands Dance orchestra. In my record review feature in the *Bulletin*, I use vocal recordings made by a Crosby-style singer, Eddy McDermott; and Carol Levis discovery, Les Bullman, provides an accompaniment with a banjo-leli.

STAN WHITE.
Rothwell, Northants.

Bouquet for a manufacturer

MANUFACTURERS nowadays get more bricks than bouquets, and one often hears complaints, but seldom the other side. I think your readers may be interested in the following experience.

For various reasons connected with cine sync., I wanted my Soundmirror to run at an exact 7.5 inches—the same speed I used for another machine electrically linked with a projector. Alas, it was one second behindhand each minute—a hopeless 15 seconds after a fifteen minute film! Even strapping, to increase voltage slightly, refused to solve the problem, though it speeded up a little, with the prospect that though the motor might be able to take this extra ginger, the valves, condensers and resistors would not like it. I consulted Messrs. Thermionic Products.

In a few days, back came a specially turned capstan assembly with a slightly smaller pulley, giving a speed 1/60th faster. How they gauged it is a mystery to me, but when I tried it out with a talking clock of known accuracy, it was dead on 7.5 inches! The invoice was marked "No charge," much to my astonishment. What service! I wonder if a car or radio manufacturer would have been equally generous?

I have no connection with the firm, beyond that of a satisfied customer, for though the Soundmirror was one of the first models, I think, I still regard it as of very handy design, and (if one keeps it properly adjusted) of superb sound quality.

Jersey, C.I.

S. JEPSON.

Prize-fight language

THE idea of running a tape recording competition is a good one. I have only one criticism to make: Mr. R. Brown, in his article on making a feature tape, refers to it as a "creative exercise." If this be true, why is the announcement of the competition couched in the language of the prize fight? The winner of a photographic competition is not referred to as "Britain's Photography Champion." Is the President of the Royal Academy "Britain's Champion Painter"?

The creative recording of sounds is an art form—albeit a minor one. I feel that this should be reflected in the tenor of your otherwise excellent journal.

London, E.16.

ALAN STABLEFORD.

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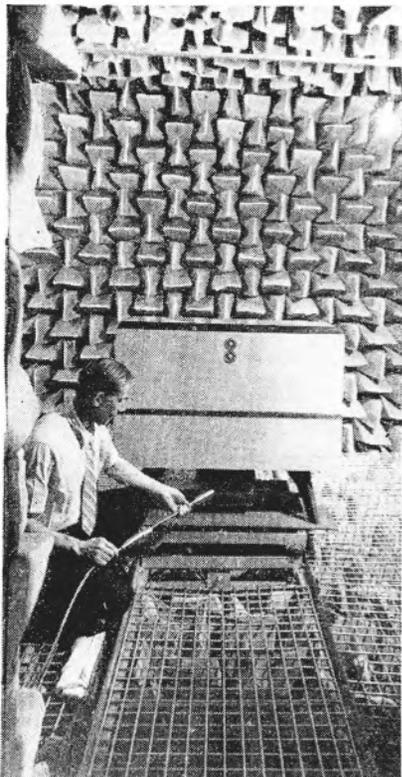
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**PUZZLE
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NEWS FROM MANUFACTURERS

A new approach to speaker design



Well, what is it, all you experts?

A man in a cage, trying to cut his way out with an electric drill?

A stockman counting off piled-up packages of flour?

The correct answer comes, with the photograph, by courtesy of the General Electric Company.

It is a photograph of Mr. F. H. Brittain, inventor of the periphonic speaker system, working in the special acoustics room at the G.E.C. research laboratories.

He is using a microphone to investigate the response of the new equipment.

ANOTHER new approach to speaker design is announced, as the result of work at the General Electric Co's research laboratories. It was shown publicly for the first time at the Audio Fair.

This system has been christened the "periphonic," and is designed to exploit fully the low-distortion qualities of the metal cone loudspeaker.

Instead of being mounted in the usual way *inside* the cabinet, the periphonic system employs two metal-cone speakers mounted—one inside the other—in a V-shaped enclosure on the *outside*.

The sound is radiated through a small slot in the cabinet from the peripheries of the speakers. The "air-coupling" of the two cones reduces distortion, particularly at the bass frequencies, by over sixty per cent.

The complete unit consists of the periphonic speaker system and six presence units.

In spite of its large size, the cabinet is constructed to eliminate all resonances. As will be seen from the photograph on this page, the structure is reinforced with struts, and diaphragms are placed within the enclosure to break up any resonances of the air columns. With the presence units, the overall reproduction is "transient true"—that is, no resonances are introduced by the units, and a short, sharp sound is faithfully reproduced.

The system takes advantage of the wide arc of distribution of the higher frequencies which is associated with the presence units. By the use of three separate pairs of units mounted in the front and on either side of the cabinet, an effect of spaciousness is given to the sound reproduction. An impression of depth can be produced which enhances orchestral works. By a selective switching

of the presence units, it is possible to vary the nearness of the orchestra to suit individual listening tastes.

As readers will know, sound waves from a speaker are ideally generated at the low frequencies by a perfectly-rigid, freely-suspended cone—but that is practically impossible. Some flexing of the cone shape is bound to occur, but the use of metal substantially reduces it. The periphonic system is intended to deal with this small residual distortion.

Distortions introduced by one of the two metal cones are cancelled out by an equal and opposite flexure of the other. This compensation is achieved by mounting the two speakers close together, with their surfaces moving in opposite directions.

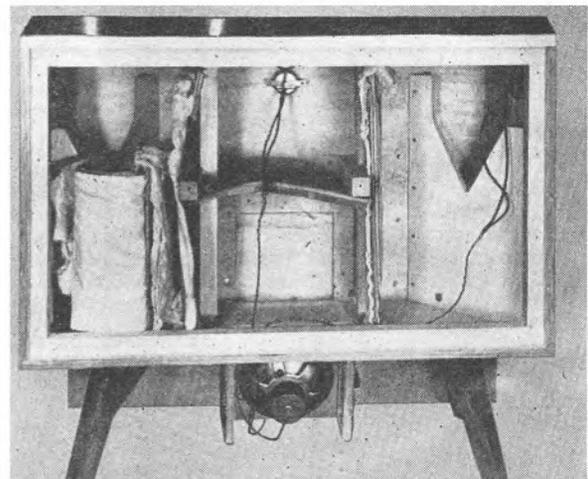
The subsequent compression of the air layer between the cones appears as a pressure wave which is transferred into the cabinet through the slot. At the same time, direct radiation occurs from the exposed surfaces of both cones.

The air compression in the gap is considerable and the manufacturers suggest that any but a robustly-constructed cone could be torn to pieces.

The metal-cone speakers for the system cost £9 5s. each and the presence units £3 19s. 6d. each

G.E.C. are marketing the cabinet at £63, but full constructional details for those who wish to have their own cabinets built are available free from G.E.C. at Magnet House, Kingsway, London, W.C.2.

The inside of the periphonic cabinet, showing the diaphragms and the cone speakers mounted externally below



MAGNETIC PLANNING A NEW RECORDER

A NEW quality tape recorder is being contemplated by the Magnetic Recording Company. We understand that it will be a more expensive machine than this firm's popular Wyndor Regent, which was reviewed by our Technical Advisory Editor last month.

Production of the Wyndor Regent will, of course, continue unchanged.

Copies of the first "Tape Recording Magazine" technical report on the Wyndor Regent are available on sending a stamped addressed envelope to the Magnetic Recording Company, 99, Shacklewel Lane, London, E.8.



The front panel of the handsome Pilot HFA11 combined amplifier and control unit, showing the seven controls provided

Two new amplifiers for tape enthusiasts

THE High Fidelity Division of Pilot Radio Ltd. have recently announced two new amplifiers likely to interest tape enthusiasts. Both have facilities for tape recording (with or without monitoring) and replay.

The HFA11 combined amplifier and control unit (illustrated on this page) provides 10 watt output and is claimed to show extremely low intermodulation and harmonic distortion.

The seven controls on the front panel provide for (i) loudness/off; (ii) volume; (iii) treble; (iv) bass; (v) 7-position selector recording equalisation switch to compensate for L.P. and 78 records,

AES and RIAA curves, radio tuner, tape amplifier, and auxiliary; (vi) filter to remove rumble in some types of turntable; (vii) scratch filter, cutting high frequencies to remove surface noises produced by older records.

The tape output is 1,000 K ohms impedance. Frequency response is quoted at plus or minus 1 db at 20-20,000 cps.

This unit is priced at £31 10s.

The other new Pilot item is the HFA12 power amplifier at £21, coupled with the HFC12 control unit and pre-amp at £16 16s.

Specto's new speed controller for films

SPECTO LIMITED have just put on the market a Speed Controller that will be of great interest to those who wish to use tape recordings to provide music and commentary for films.

This method does not involve any mechanical or electrical connection between projector and recorder.

The Speed Controller can be fitted to any Specto projector to provide a governed speed of 16 frames per second.

Any tape recorder, using any speed—provided a reasonably constant performance can be depended upon—can then be used. And it can be positioned behind or below the screen.

During the recording process, the film is threaded in the normal manner in the projector and is marked at a convenient point. The introductory commentary is

commenced on the recorder and, at a pre-determined cue word, the projector is switched on.

The commentary continues while the projector runs at its governed speed.

For play-back, film and tape are re-wound and the film positioned so that the mark is in the same position as when first made. The recorder is started and, at the cue word, the projector is switched on.

Film and commentary will now remain in step. But if, for any reason, there is loss of synchronisation, it can be immediately cured by using a special fast-slow button on the Speed Controller.

When this button is released after use, the projector immediately returns to the governed speed.

Price of the equipment is £9 15s.

IT'S NOW E.M.I. RECORDS LTD.

ELECTRIC and Musical Industries Ltd. announce that, in order to co-ordinate all their record activities in Britain, a new company has been formed under the title of E.M.I. Records Ltd.

Mr. C. H. Thomas has been appointed Managing Director.

The new Company will be responsible for production, manufacture, marketing and distribution in Britain and overseas.

Classified advertisements

Rate—Sixpence per word (minimum 5s.); Trade, ninepence per word (minimum 10s.); box numbers, one shilling extra. Payment with copy.

FRIENDLY FOLK ASSOCIATION, 87 Terrace, Torquay—Leading International Correspondence Hobby Club since 1943. Now included, facilities for Tapesponding. Details free.

GRUNDIG STENORETTE with Microphone and spare Tape. Mint condition, £30. The Manager, Regent Cinema, Bridge Crescent, Scotswood-on-Tyne.

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WORLD TAPE PALS

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(an international association for the exchange of recorded tapes)
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Warwickshire.

When writing to manufacturers for leaflets or information, please mention that you "saw it in T.R. Magazine"

NEWS FROM THE CLUBS

BATRS names its first Council—and 200th member

FURTHER strides forward are reported from British Amateur Tape Recording Society headquarters at Chester. General Secretary Ted Yates has just named the first Council of the Society and, almost simultaneously, announced the recruitment of the 200th member. This represents a spectacular increase in strength in the first four months of this year, and applications are reported to be coming in in a steady stream.

The new Council is made up of the following: Sir Mark Dalrymple, Bt., President; Mr. Ted Yates, General Secretary and Chairman; Mr. James M. Baird, Scottish Secretary; Mr. Frank Micallef, British Forces Commonwealth representative; Mr. Eric E. Payne, Blind Services Secretary and Editor; Mr. Alan Lovell, British Hospital Service Secretary; and Mr. Dennis Scotney, BATRS Tape Bulletin Editor.



The 200th Member is Mr. Brian Ward, of 44, Daybrook Road, Merton Park, London, S.W.19, a 20-year-old printer. He uses a Truvox recorder and is particularly interested in recording music on tape, his enthusiasm being for jazz and pops tunes.

Mr. Ward was introduced to the BATRS through news of its activities printed in TAPE RECORDING MAGAZINE.

Members of the Society are now receiving through the post the Spring Supplement, detailing recent developments, listing officers, setting out the rules and bylaws, and bringing up to date the full list of BATRS members, with details of their equipment and interests. Because of the recent influx of recruits, this is the biggest—and, incidentally, the most attractively-produced—publication from the Society so far.

International to Guarantee Standards

The International Association of Recording Clubs, with headquarters in Noel, Virginia, U.S.A., has now been formally established. The inaugural member clubs are the British Amateur Tape Recording Society, the Voicespondence Club of the U.S.A., and the Australian Tape Recordists' Association.

The aim of the new International is stated as "mutual co-operation and mutual policing of the ethical standards of recorder-owner clubs."

Any tape organisation will be able to join the International, if it can guarantee the following minimum standards:

1. Each member-club must be properly chartered by its local government as a non-profit organisation (although its officers may receive pay for their services);
2. Financial reports must be given by each organisation to its own members at least once a year;
3. Each club must work actively to promote interest in magnetic recording and this work must be of an original nature;
4. A club must have a minimum membership of 50 bona-fide, paid members;
5. Each member club must send copies of all its printed material and publications to other member clubs, but there must be no pirating of material or ideas among the member clubs.
6. There shall be no raiding of other clubs' membership lists, and each club shall work independently to obtain new members;
7. No extravagant claims, misleading statements or half-truths shall be contained in any material published by any member club. There shall be no padding of membership lists, and each entry therein shall be that of a bona-fide, paid member, currently in good standing.



Scotney now tape editor

MR. DENNIS SCOTNEY (above) has now taken over the editorship of the BATRS Tape Bulletin. He succeeds Mr. John Amphlett and Mr. Eric Payne, who shared the responsibility until pressure of other work recently compelled them to resign.

Mr. Scotney is a 27-year-old aircraft electrician, who has been a tape enthusiast for five years. He uses a Ferrograph 2A/N and has recorded church services, plays, brass bands and jazz bands.

The first tape magazine appeared in November, 1955, and eight numbers were issued; but the two editors supplied most of the material themselves, and the project collapsed for lack of support.

In the autumn of last year, when the BATRS came into active existence, a new effort was made. Four very successful issues were produced, establishing very high standards.

B.A.T.R.S.

(British Amateur Tape Recording Society)

Personal membership 15s. per annum. Affiliated membership for public bodies £1 1s. per annum

(non profit-making)

Details from

E. YATES, General Secretary,
210, Stamford Road, Blacon,
Nr. Chester, Cheshire

Tape enthusiasts No. 1

RON D. YOUNG



MR. RON D. YOUNG, as the accompanying photograph shows, has created a most impressive studio for his radio and tape recording activities at his home at Danbury, Chelmsford.

His principal recorder is a British Ferrograph, with speeds of 3.75 and 7.5

ips. He uses a Collaro tape-transcriber for play-back only, through a Rogers amplifier. This gives him the additional play-back speed of 15 ips.

His 14-valve R.A.C. receiver covers all bands from 10 metres upwards.

For discs, he uses a three-speed Collaro unit with the Rogers amplifier.

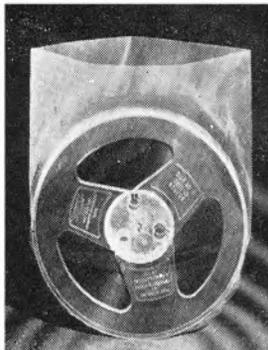
He has two Stentorian speakers, one in the studio, the other in a downstairs room, so that he can "pipe" down any programme from radio, record player or tape.

Mr. Young and his wife keep in touch with tape friends around the world—in the United States, in South Africa, and, of course, in many parts of Britain.

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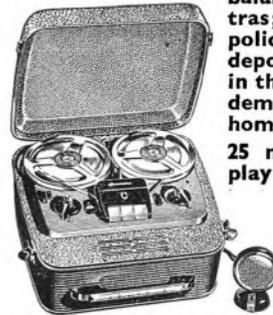
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