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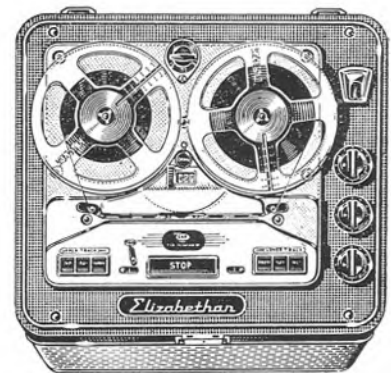
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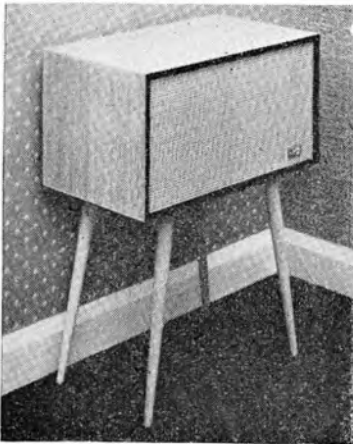
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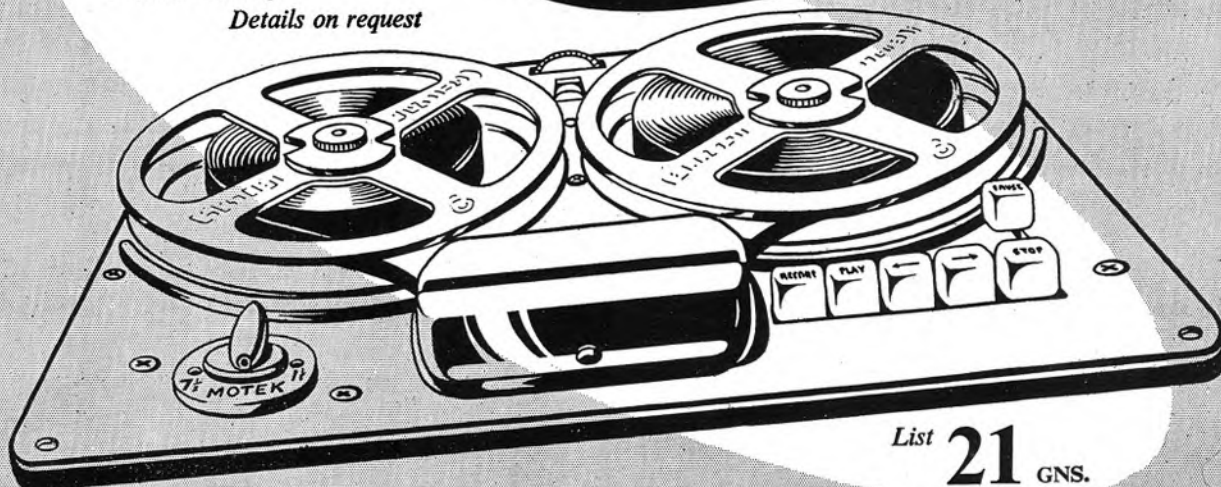
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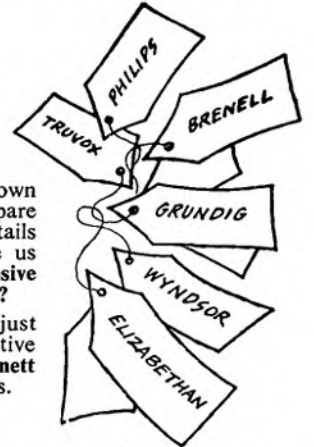
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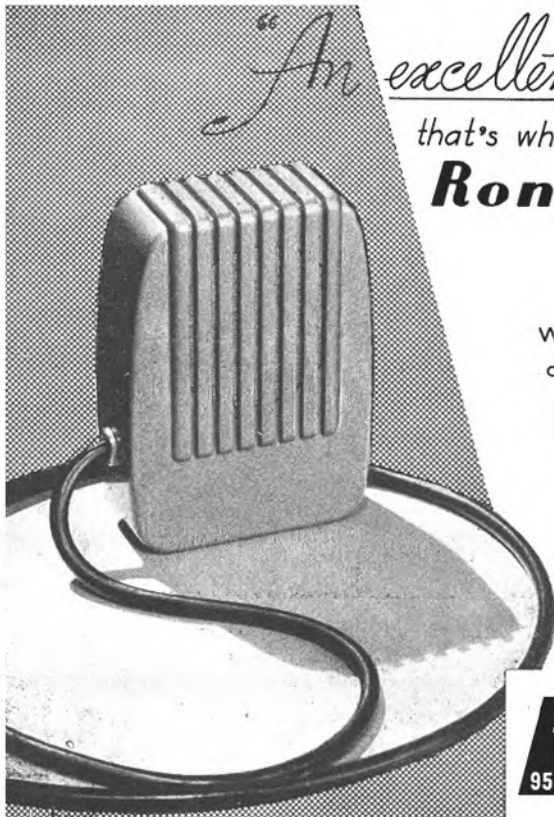


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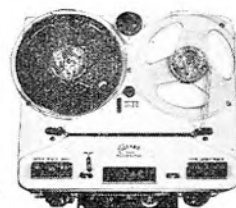
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CONTENTS

THE EDITORS' VIEW

**PLAYS ON TAPE**

The second article in this series  
by Harold Rottesman  
Pages 14, 15 & 16

**HOMO TAPIENS**

Our popular personal column  
Page 17

**LETTER FROM AMERICA**

Page 18

**Mr. FOLK SONG**

Alan Lomax tells us about his  
recording work  
Pages 20 & 21

**TAPE IN THE HOME**

Furnishing your tape and hi-fi  
equipment  
Pages 24 & 25

**THE IDEAS POOL**

Page 27

**NEWS FROM**

**MANUFACTURERS**

Pages 32, 33, 34

**TUNERS REVIEWED**

Page 35

**KNOW YOUR RECORDER**

No. 3

Pages 36, 38 & 39

## 1958 year of stereo

RUMOUR HAS IT that the first stereo discs will be on sale in this country within the coming year. The B.B.C. marked the New Year with an interesting, unheralded experiment in transmitting a stereo programme. These two events may mark 1958 as a decisive year in the development of stereophonic reproduction in Britain. Tape has a substantial start in the stereo field, and manufacturers of tape equipment, as well as the recording companies, have a part to play in determining the ultimate direction in which we shall move.

No one supposes that tape will supplant disc—there is plenty of room for both—but we should look now for a change in the balance between the two techniques.

The reasons for the popularity of disc over tape for monaural reproduction at the present time are obvious: turntables have had many years start and are cheaper to buy. Vast sums are tied up in the tens of thousands of gramophones now in use. And, of course, discs are cheaper than tape records.

But stereo will change the picture a good deal. To enjoy it, present enthusiasts will have to spend a good deal of money—on the second amplifying channel and speaker. Related to this general expenditure, the cost of adding a tape deck may seem modest. New recruits, buying hi-fi for the first time, will find it makes little difference to the overall cost whether they have turntable or tape deck.

On the other hand, tape will give them the facility of recording, as well as reproduction, and this ought to be decisive in tipping the balance in favour of tape . . . provided those who are interested in tape show sufficient energy and initiative in pressing their claims now.

The B.B.C. may play a decisive role. It is expected to experiment further with programmes on two v.h.f transmitters or alternatively on a medium wavelength plus the TV sound channel. When it decides—as in due time it must—to transmit stereo programmes regularly, the real incentive to large numbers of people to install dual-channel hi-fi systems will arise.

No one knows yet when that will be. But those who are now beginning to develop a hi-fi system will appreciate that only on tape can one get immediate and top-quality results.

## HAROLD ROTTESMAN,

author of this article, is one of a band of enthusiastic recording amateurs at Oxford University. Three of his colleagues (left to right), John Daghish, John Wrigley and Arnold Thompson, are seen here, recording a scene.



I'LL now elaborate on what I said in my last article: that the beginner in recorded microphone drama should produce his plays "in bits." I said (and if you try it I think you'll agree) that for the amateur it's impracticable to record his play in one continuous stretch, cueing in his effects and music, as in a live broadcast play. Having tried this myself, and having continually failed, I've evolved this method of recording a play piecemeal—in two dimensions, as it were, in length and in depth.

By this I mean that my first stage of recording entails recording the dialogue only (with no effects or very few)—scene by scene, and often even in smaller sections. The next stage of recording entails dubbing the dialogue—bit by bit—via a mixer on to a second tape, and now mixing in effects and music from a third tape and/or from discs.

The advantages of this method (which may shock the purists—I was one myself once) are legion. First, let us consider the dialogue. Recording in fairly short stretches is easier for amateur actors. They can sustain a high level of "performance" when frequent rest periods occur; it is less strain on the memory; and it is easier for the producer to pinpoint below-standard patches and repeat them on the spot.

To avoid stopping more times than necessary, tell your cast at the outset that if they fluff any lines they should automatically repeat them without an instruction from you; and mark them all in your script as they occur so that you can eventually edit them out.

The blank side facing your page of script is a good place for this, using something standard as a symbol such as a capital R ("Repeat") in a square or circle.

It is also possible, though not greatly to be recommended, to have a somewhat dispersed cast with this method. For instance, if for any reason your actors cannot all be brought together at the same time, the flexibility of the medium makes it possible to record their scenes or even speeches separately and intersperse them with the others later.

This can be done (in "The White Deer" the Narrator had to record all his speeches two days before any other members of the cast arrived in Oxford) and by skilful editing and production it can be done convincingly and unobtrusively, provided your continuity is maintained. Obviously, however, it's a trick to resort to in emergencies and not to employ as a general principle.

The most important advantage, though, is that you are able to concentrate on one thing at a time and on perfecting one stage before going on to the next. First, you can concentrate on securing perfect performances.

When the dialogue is recorded "cold" you can later edit in repeats, which would be impossible if there were an effect of music backing. And however frequently you have to repeat mixing sequences in later dubbing sessions, your performances are fixed and permanent.

If you are trying to cue in effects, at the same time as recording dialogue, you'll find to your dismay that each time you have to repeat a section for technical reasons, your actors' performances deteriorate.

The psychological importance for the actor of knowing that nothing can "get in the way" of his performance on its way to the tape cannot be overestimated. When technical hitches occur, they distract the actor, worry him, damage his confidence in the producer, and ruin his sense of "audience"—which in any case is a very tricky thing in radio.

And conversely, of course, you can take your time later—as much as you want—in getting the effects and music exactly as you want them without the distraction of keeping other people waiting.

The only effects you can conveniently incorporate at this stage are "spot" effects—done in the studio on a separate microphone (opening doors, mealtime effects, rustling pages, etc.); and vague pre-recorded background effects that needn't synchronise exactly with the dialogue—such as wind, crowd noises, outdoor atmosphere, and so on.



This will save you a little trouble later on, but will mean you can't edit in short "repeats" of isolated lines or sections of a scene.

Having recorded all the dialogue (and allow an extra day before you finally dismiss your cast, for you are certain to want some sections repeated when you come to listen to the tape by yourself the morning after recording) the next job is to edit and assemble it.

This can take some time, depending on the length of your script and the number of breaks you've made. I sometimes go to the lengths of listening to two or three "takes" of a particular scene, selecting the best bits of each, and splicing them together into a composite "take."

If you record your sequences, as far as you can, in script-order, the editing will be much speedier and easier. Otherwise you may spend hours rewinding and winding-on, transferring isolated lengths of tape to odd spools, etc.

As a rough guide, allow about five minutes for finding each "edit" and splicing and checking it. Editing a 30-minute radio revue I produced, recorded in about 30 sections, took approximately three hours. A second stage of editing, for the purpose of cutting out odd pauses and overlooked extraneous matter, and sometimes inserting pauses, is usually desirable.

# "BUILDING UP" A PLAY ON TAPE

## Mix well—and you will get drama

When your dialogue is assembled into script-sequence, you're ready, at last, for effects and music. I always prefer to record these on a tape rather than play them from discs. The reason is that you can, this way, prepare "composite" effects by mixing several discs and tapes on to one recording; you can, similarly, make music sequences that synchronise with the changes in the dialogue; you can prepare combined "music and effects" sequences on one recording; and, most important, you can effect "cueing." I'll say more about that in a moment, but first a word or two about effects and music themselves.

Before deciding to go ahead and manufacture all your own effects, remember that this takes quite a long time; and while it's a good thing, in principle, to do your own, there are a lot of fairly standard effects that you can get on commercial discs.



This will save you time—and the ironic truth is that the amount of time and trouble spent on making one's own sound effects is almost always out of all proportion to the appreciation vouchsafed by your audience—if they notice them.

For a five-second horses' hooves effect in "The Thirteen Clocks," my S.M. and I went to the lengths of buying two coconuts, drilling holes in them and draining the milk, sawing them in half (an *unbelievably* strenuous undertaking!) and scooping out the nut—when a commercial disc would in any case have sounded far more convincing.

The consolation in this case, however, was that in the evening, when the demons of feedback, hum, and general breakdown were savagely rampant and making us tear our hair, we were able to appease the infuriated cast by feeding the coconut to them.

Of course, your imaginative and surrealistic effects you'll want to manufacture, and it's right that you should. Directions like "the jewels turn to tears, with a little sound like sighing" or "the Todal gleep" (from "The Thirteen Clocks") are a joy for producer and technicians and you can give your imagination free rein in cases like these, often with excellent results.

Otherwise, save your inventiveness and ingenuity for the original use of effects rather than for creating them.

Choosing music and dubbing it to tape (particularly choosing it) takes a long time, too, though it's a delightful and fascinating job. In general, the first thing to do is to work out what composer or type of composer, or work or type of work, is *in general* most in harmony with the moods of your production.

Then just *listen* to as much music as you can as many times as necessary.

Later, when you've narrowed down the field to a limited number of records, go through listening for your specific cues, in the order in which you need them. You should prepare a list, with timings in seconds.

For "The Thirteen Clocks" I knew from an early stage that Ravel and Stravinsky were the two composers who exactly suited my interpretation of the story, and so the task was comparatively simple.

My hardest job with music was for "I'm the Dragnet," where I wanted a number of brief, isolated, dramatic "punctuating" phrases. After much fruitless listening, I eventually discovered that Messrs. Boosey & Hawkes issue a disc of specially composed "dramatic pointers," which proved ideal. I believe these are not on general sale, however, so you may not be able to secure them yourself.

On the whole, "pointers" are the hardest cues to find (background or atmosphere music is easy) though composers

### THE SECOND, CONCLUDING ARTICLE ON HOW TO PUT PLAYS ON TAPE

like Ravel and Stravinsky, Bartok, Bliss, Prokofiev, and others are always helpful. If you leave the choice of music until after you've recorded the dialogue, you will be able to make experimental mixes or dubbings of alternative cues and choose the ones that come off best—another advantage of producing stage by stage.

The problem of cueing can be solved in two ways, each of which has something to be said in its favour. They both presuppose that at least one of your machines can be started instantaneously without inducing any electronic interference ("plops").

The first method is to dub the dialogue via the mixer until you get to the exact spot where the effect is to be cued in (say a thunderclap or a gun shot or a burst of music): then stop the tapes.

Find your effect on the effects tape, set the levels on the mixer (and note the settings on your script once you've determined them by ear), set the effects tape back at the beginning of the effect and the dialogue at the next line of dialogue, and then start your next section of dubbing—*beginning with the effect*, and following with the dialogue at the right moment.



Then, in your final editing session, all you have to do is to snip out the few inches pause and the effect comes right in on cue.

All this is much easier to do than it sounds; and you can do it equally well by using a turntable for gramophone effects if three tape-machines aren't available.

The beauty of this method is the ease of doing it and the fact that, after editing, the breaks won't be noticeable since the flow of the original recorded dialogue, which won't be affected by anything you do in subsequent dubbing sessions, will maintain continuity. You couldn't do it very extensively with actors in the studio, though now and then it will come off.

The same principle applies when effects or music have to fade in under dialogue. Break your dubbing a line or two before the entrance of the effect, rehearse the timing and balance, in that order, then start dubbing again with the dialogue, releasing the effects tape at the right moment.

It is possible in this way to do countless consecutive "music-mixes", even if you have only a turntable to work with, provided that you're cunning enough to break the recording and change the music at unobtrusive moments.

Since your dialogue is continuous and can't be harmed by intermediate editing, you'll be able to stop in the middle of a sentence if you want, or even (I've done this, successfully), in the middle of a word! The changeovers won't, strictly speaking, be "mixes", but the dialogue should disguise the fact.

(Continued on page 16)



## RECORDING PLAYS

(Continued from page 15)

The second method which it is not possible to sustain for very long unless you are working with an expert team with infallible memories, rehearsed to perfection pitch, is to mark the beginning of each effect visually on the tape, have your colleague check each one, over headphones, a little prior to its entrance (taking the headphones from an output independent of the output-to-mixer if possible), and trust him to cue it in at the right moment.

This way you avoid the necessity of breaking the dubbing sequence and editing later, but it demands a great deal of practice and a high degree of alertness and efficiency to be successful. And this method requires an associate, whereas the first can be done single-handed.

As in recording the dialogue, doing the effects bit by bit reduces the strain on the nerves and the memory and the frustration of having to stop in the middle of a long stretch.

Where your effects are particularly complex, involving several superimposed layers of sound, again the answer is to do it in stages. Mix the dialogue and one effect, then mix this result with the next effect, and so on. Or mix all the effects on to one tape to begin with, which you can then mix with the dialogue.

But be careful not to dub so many times that the quality begins to deteriorate seriously. Remember in general that, especially when working alone, controlling more than two channels simultaneously is a tricky and somewhat unnerving operation.

When dubbing, always standardise the level settings of your mixer output (master control) and recorder input, as well as the volume settings of the gram, effects machine, and dialogue machine. Then you need only note on your script the individual variants of the settings for each mixer channel.

If you've read this far, you may wonder why you ever imagined you wanted to do a recorded play at all. It's very hard at this point to see the play as a whole, or to get any idea of continuity. This is where you really need patience, stamina, perseverance, and frequent refreshment!

You can mix in your echo if you require one either at this stage or at the final dubbing stage. To leave it until now or later reduces complication when recording the dialogue, and it also means you can take your time in experimenting and getting subtler effects.

To produce an echo effect you'll need a room or hall large enough to have its own echo, and reasonably well insulated against outside noise.

From your dialogue-tape machine take an output, via a separate amplifier if possible, to a speaker set up in the echo room, and another direct line to channel one on the mixer. Then place a microphone in the echo-room (the positioning will require experiment), and feed it into channel two on the mixer.

This way you can control the ratio of echo to dialogue with unlimited freedom, and vary the amount of echo at will, fading

Two of the University's amateur studio managers—left, John Richardson, at the control panel during the production of "May Morning in Oxford" (1956); right, Michael Woodhouse, operating the effects door in "If You Like" (1956)

it in or out merely by turning a knob. The degree and quality of the echo will depend, apart from the acoustic qualities of the room itself, on three variable factors—the volume of the speaker in the echo room; the relative placing of echo speaker and mic; and the relationship between the dialogue level and the echo level on the mixer. Again, experiment will take time but will give you the answer.



You will eventually reach a stage at which all that remains to be done is to edit and assemble your master tapes into a continuous production, and embark on the final dubbing session. The "assembly" stage is, if you've done your work well, a tremendously satisfying experience. This is where, for the first time, you begin to hear your conception of the production realised in a concrete and continuous form—just when you've almost lost sight of it.

Before you do begin the final dubbing session, you should, as with the dialogue stage, allow a day or so in which to listen to the continuous tape several times from beginning to end. When you've recovered from the first intoxicated delight and self-satisfaction it's very likely that you'll want to do some work with the scissors—cutting out countless tiny pauses, inserting a few silences (polishing up the timing of the production in other words); and possibly you may want to repeat some effects or music sequences, if their timing or balance is not exactly as you'd like it.

In the final dubbing, all that's necessary is to do a continuous dubbing from your complete but spliced tape on to a new unspliced one. First, though, play through the tape and note the fluctuations of volume from scene to scene or take to take. You'll probably need to adjust the controls every now and then to keep a fairly constant level. Note these variations in your script.

Keep the original—in case of accident, and so that you can do subsequent dubbings without loss of quality. I always find, in any case, that the "original" tapes have a tremendous "sentimental value"!

I'd like to finish by repeating that I offer this not as an ideal method but merely as a suggested procedure until further improvements develop, or better approaches suggest themselves. There's a lot of room for original thought and experiment in the field of amateur radio production technique, and I'll be very pleased indeed to hear of new ideas and improved methods from those who, like myself, find that tape is an absorbing and exciting medium to work in.



# The local tape club movement

CARDS are coming in steadily from people who would like to see a local tape recording club in their area, and it should not be long before several more are on the map. Plans are in hand for starting a local club in Bournemouth, and anyone in the area who is interested should get in touch with Mr. F. T. Gaymer, 67, Old Christchurch Road, Bournemouth.

There can be no doubt that a start is all that is needed in the case of most well-populated areas, and there are already stirrings in many places where it should not be difficult to establish a flourishing organisation very quickly. I have in mind, particularly, the cities of Liverpool, Oxford, Halifax, Newcastle and Worcester. I particularly urge readers in these centres who have not so far done so to send me a card and indicate their readiness to play a small part in starting a club.

I should like, also, to hear from dealers in these and other areas who are ready to lend a hand, because their co-operation can be invaluable. Many of them, I know, are tape enthusiasts themselves.

Cards will also be welcomed from West Middlesex, the Rayleigh area of Essex, Sutton, Coventry, Aldershot, Guildford, Horsham, Luton, Glasgow and Manchester.

Please just send a postcard with the words "tape recording club supporter" and your name and address. Any other points should be dealt with in a separate letter.

## Testing . . .

### One, Two, Three Pants

EVEN the shirts and socks of *homo sapiens* nowadays achieve the distinction of being recorded on tape, for at least one London network of laundries, I am informed by Mr. J. A. Edley of Truvox, uses recorders at its receiving counters to list the contents of each customer's consignment. Later on, when the cargo has been washed, ironed and generally tamed into submission, the voice of the counter-maid plays itself back to the nymphs and dryads of the assembling and packing section so that justice can be heard, as well as seen, to be done.

### Gelosoitis

I HAVE been trying to make up my mind exactly why I am enthusiastic about the Geloso. Having had one of these little recorders around for a few weeks I find that the attachment I formed for it has about it something of the affection one feels for a small motor-car that does not pretend to the luxury and big performance of a Rolls but which has a great deal of character and does what it can do with cheerful and easy willingness.

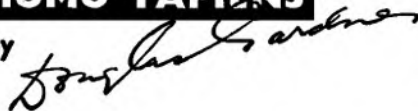
The tonal quality of the Geloso is very good indeed considering its size. Voices reproduce with the ring of authenticity and, if we disregard the natural lack of deep base, even music comes through smoothly and pleasantly.

## KEEPS GROWING

A very important thing about it is that it is really portable—my definition of real portability being the weight and bulk one can carry in one hand for at least a quarter of a mile without feeling absolutely compelled to change it to the other hand. Moreover, when the Geloso is standing on a table or shelf it occupies

### HOMO TAPIENS

by



very little surface area and doesn't seem to be, or look, in the way. These are both friendly qualities. Another thing that one appreciates about the Geloso is its responsive press-button controls. Operating the machine is, in fact, almost an effortless process.

Naturally, it is not as easy to secure a smooth and rapid response as in more complex machines, but the lesson I have learned from the Geloso is that such controls, and such compactness and portability, are extremely desirable things. They make one use a tape recorder at times when the slightly greater physical problem of operating a large machine might give the victory to the demon sloth.

### Tape and the Theatre

THE use of tape in the theatre is developing rapidly. In a number of plays I have seen during the past few months I have noticed some first-class sound effects which have added enormously to the atmosphere. What is significant is not the use of the more obvious noises, such as cars stopping and starting, but of more subtle sounds, such as bird calls, church bells, dogs barking in the distance, and far-off train whistles, effects not specifically called for in the text but which project moods and ideas like loneliness, isolation or the slow passing of time. They serve a further purpose of fostering the illusion that the world the playwright is depicting stretches far beyond the limits of what is visible on the stage.

The practical point I have in mind is the scope that seems to be offered in this fascinating field for anyone with a tape recorder, imagination and some interest in the theatre. If this sort of thing appeals to you why not contact your local amateur dramatic society and offer to lend a hand with their next production. At first they may only realise the cruder "noises-off" possibilities, but

once you have shown what can be done with tape, any good producer will soon be collaborating with you enthusiastically in the creation of really imaginative sound effects.

### Dogged

IT is remarkable how much can be accomplished by hard recording and hard editing. Take the case of the young Dutchman who astonished French radio listeners a short while ago by presenting a programme of song tunes barked by dogs.

What he did, of course, was to record a lot of barks and then select and re-arrange them.

Easier said than done, however. He had to record several hundred dogs to get the effects he needed—and the editing must have been a long and tricky job too.

Talking of barking, I am told that a West Hartlepool tape recordist, Mr. Albert Pollard, is recording the voices of the pets of hospital patients so that they can hear them played back at their bedside, together with messages from human friends who are unable to visit the hospital. He believes that animal lovers will feel much better after hearing the voices of their dogs, cats and birds.

### Cure-all

THERE is a train of thought here that might lead to many other discoveries. What about the curative properties of the sound of the family car starting up, the dining-room clock striking and the lawn-mower at work in the garden.

Or to explore the finer subtleties, what do you think of the possibilities of a special tape for patients who are feeling better and becoming over-anxious to get back into circulation? This tape would feature such noises as those of the vacuum cleaner, a collapsing heap of washing-up, the shovelling of coal into the scuttle, the alarm clock, a typewriter at work and the delicate sound of tyres swishing on wet roads followed by "Ting-ting" and the voice of a conductor intoning: "Sorry, full-up!"

### As you were . . .

THE result of the battle of the dictating machine versus shorthand notebook in offices is more or less a foregone conclusion. At first the typist's fear of the machine is a handicap, but when tape is tried on a broad front over a long period, there is rarely any going back to the notebook and pencil.

I must say, however, that I enjoyed hearing the other day, of how a London tycoon and his secretary moved into this modern age of tape dictating. A very expensive machine was installed in the office, and now every day the great man of business switches on and dictates his letters into the microphone—with the admiring secretary sitting by his side.

When dictating is finished, the machine is carried into the secretary's office, and there she plays the dictation back—and takes it down in shorthand, because one can type so much better that way!

# NEWS FROM AMERICA



**T**HE techniques of tape recording in the U.S.A. differ little from those in Great Britain. Operation is the same, tape travels from left to right, operating on the top track. Recorders have two inputs and an output for external speaker. Some recorders record and play in both directions.

American recorders cost slightly less, on an average, than British (for a substantial discount is almost always available on the manufacturers' list prices) and range from £30 to £200. They are sometimes less well constructed, but I think they are better designed.



But tape recording is much more widely known and used in the United States; there are many more manufacturers, and a much larger diversity of accessories and equipment.

The reason is economic. While American wages are about three times those paid in the United Kingdom, sets are cheaper or about the same, and tape is less than half the price. A reel of recording tape in Britain costs a working man's daily wage; in the United States it is less than an hour's work, or about 15s.

There are over twenty reputable tape recorder manufacturers, excluding those who concentrate on professional equipment or battery driven apparatus. European machines are relatively unknown, except for the British Ferrograph (which has a very considerable reputation, but costs twice its English price), the German-made Grundig, and the Scandinavian Tanberg.



Four makers of recording tape dominate the market: Audio, Irish, Scotch Boy and Soundcraft. Tape is available on acetate or mylar, the 7 inch reel being the standard of the industry; standard tape comes in 1,200-foot lengths, long playing in 1,800 feet. An extra type, however, unknown in the U.K., is a tape half a mil in thickness, allowing 2,400 feet on a 7-inch reel, or four hours of playing time at 3½ ips.

American producers show great ingenuity. Audio Tape present their reels in a plastic of red, yellow, blue or green. Tape comes in the conventional brown, as well as green and blue.

Leader tape is readily available on 3-inch reels marked in 7½-inch lengths so that the speed of a recorder can be

checked, and Soundcraft has an attractive kit of four 3-inch reels of leader tape in gold, red, green and white.

America has also taken a substantial lead in the field of stereophonic sound at an economic cost. Stereo recorders are now available for as little as £50, and Dactron Corporation sell an attractive accessory which can be attached to the side of a standard machine to convert to binaural sets for about £10. Almost every gramophone company in the U.S., and they are legion, is turning out stereo tapes and forty different firms offer the public over five hundred recorded stereo tapes.

**Yankee ingenuity is coming up with many other innovations. One is a new tape reel in the form of a cassette, which can be inserted into a tape recorder like a coin in a slot. There is no leading, no spillage and no breakage.**



From our  
American Correspondent  
**WILLIAM G.  
FARQUHAR**

Another is the project of a Californian firm which records, for busy doctors, information of the latest discoveries in the world of medicine which they listen to on a special recorder in their car, as they travel from patient to patient. It is presumed that they are too busy to sit down at home and listen to a conventional tape recording.

Tape recording has arrived in a big way in the United States, though it has still not overcome the gramophone business. It is estimated that over £5,000,000 worth of tape was sold last year, much, of course, for commercial use, and this represents an increase of 25 per cent on 1956.

When that all-important adjunct, the reel of tape, can be produced at a relative price, and used, as it is in the United States, almost like a piece of paper, Britain must be the first country to follow.

**Next month:**

**MY WORLD OF SOUND**  
*an unusual feature article by*  
**ERIC PAYNE**

# Tape Types

by Alastair



# MISTER FOLK SONG

ALAN LOMAX talks to 'T.R. Magazine' about

his unique recording career and experiences

**F**OLK music has for each its own image: perhaps one of earnest people dancing in the village hall, or of unusual songs from distant places. That picture is less than accurate.

For the Grand Old Man of folk song recording is a Grand Young Man of Science.

"Folk music must be taken into the laboratory and studied scientifically," Alan Lomax told *T.R. Magazine* the other day. "A science can progress only so far as the instruments at its disposal enable it to assess its subject. That is how the tape recorder is helping us to reach out towards the ultimate in folk song recording. We can do things undreamt of a few years ago, particularly in the accuracy of our recordings."

You see, the man you associate with jazz and folk recording considers himself a serious scientific worker: "I was

trained in the philosophy of science in Harvard and the University of Texas." His other primary interest is literary.

Recording technique is in his blood. His father was the pioneer of folk song recording, wrote many books on the subject and recorded singers now world famous.

Alan Lomax started working with him in 1933. Born and brought up in Texas he made his first recording at the local penitentiary, working with an Ediphone. "I've been fascinated ever since." His career bears it out.

He recorded the Bahamas at eighteen; Haiti at twenty-one. He worked for many years establishing the Folk Song Archives of the National Library of Congress in Washington. He worked both in the field and the studio. He used aluminium discs on portable recorders and later, acetate discs.

Going beyond musical recordings, he began to take down complete biographies on discs. *Mr. Jelly Roll*, his

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best selling life of jazzman Jelly Roll Morton, was a product of this type of work. He then proceeded to record the folk life of a Mississippi Delta town on discs, and in 1946-7 he bought the first available tape recorder to assist in this job. The pioneer album, *Murderer's Home*, was the first of these recordings—and the earliest field folk music recording on tape.

He arrived here in 1950. London became his headquarters; Europe his workshop. One of his first BBC programmes dealt with songs of Scotland. This programme, *I Heard Scotland Singing*, was the first BBC programme in which tape was used in the modern documentary manner now familiar in the programmes of Denis Mitchell.

## The growth of folk recording

Since then he has written and produced thirty or more programmes of folk music—largely personally recorded—the emphasis always upon the importance and beauty of the true documentary sound taken live in the field. The last series, ending in January, 1958, was the first complete survey of the folk song of the British Isles—in collaboration with Peter Kennedy and Seamus Ennis.

Europe has meant for him two years in Italy, a year and a-half in Spain, a year in France, three in Britain.

Appropriately enough he regards his Italian work as the most important. Starting in Sicily, he worked up to the Alps, recording for the most part songs which had never previously been taken down.

The result: his long-playing records in the Columbia Library of Primitive Music of the World. (Only one album of the sixteen he has edited and collected for that splendid library.)

Remember; once the tapes have been made only an infinitesimal part of the work has been done. He analyses origins of songs, symbolism, their tonal patterns and tries to relate all this to the wider cultural history and background of a country.

As a result of all the field work he and his father have undertaken, folk music study has become an accepted part of the American pattern. Now hundreds of field workers carry out their own researches. He believes the pattern will spread here.

## What sort of musician to become?

The work of Peter Kennedy in England (he will be writing on his own work in an early issue), Hamish Henderson in Scotland, Seamus Ennis in Ireland, together with our own well-known English Folk Song and Dance Society, is providing Britain's national archive. It is a movement likely to spread rapidly.

Alan Lomax believes the time will come when a young person can decide to become a particular type of musician ("say a Balinese singer") and study the technique of the culture concerned. "After all, opera may have its home in Italy and jazz in Africa, but you can teach an Italian the tonal pattern of African music as well as that of opera to the African."

We could write a separate article on Mr. Lomax's technique of interview and use of equipment (as you would



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"I've got those Alan Lomax ain't-been-around-to-record-me blues"

expect, mainly American—Magnecord). Yet the amateur has one common advantage. Alan Lomax learnt his methods in the field, by trial and error. There will always be a need for such experiments in the future.

His future plans include laboratory study of his field work, to discover all that his tapes contain. For instance, there is a tonal pattern common to all primitive Indian music throughout the whole of the Americas, from the Bering Straits to the far south of Latin America. And more to be discovered.

Who can be better equipped? He has heard on the spot or through the innumerable tapes he has studied almost the whole range of world folk music. It activates his attitude to other music. "I regard classical music as being a well-defined plateau like a cultivated garden." It is obviously in the more unexplored territories that he feels at home.

He is returning to America soon; but not to immediate field recording. He has exhausted his present studies and will probably work in the laboratory and among the American national archives until such time as vision and sound are combined and he can alter his technique accordingly.

You will be surprised to learn he considers that time not far distant. "Perhaps we are in the same position as the 'tape revolution' was in 1947." Which is quite a thought, particularly if your interests lie just beyond the tape horizon.

Yet he feels that sound radio will remain as an important minority art form and instances two recent BBC programmes on *The Life of Gandhi* and *Reminiscences of James Joyce* as evidence.



# THE MAKING OF **EMITAPE**

The third stage in the making of Emitape is the coating of rolls of PVC base film with the prepared "oxide dope".

Rigid precautions are necessary in this process to ensure that the coated surface is completely free from foreign particles—a condition essential to ensure that the tape travels smoothly over the recording heads. No persons other than operators are allowed in the coating room—this view has therefore been taken from outside—and supplies of uncoated film and "oxide dope" are fed into the room through special hatchways. The coating

room itself is pressurised with filtered air, which is re-filtered before being drawn into the coating machines. Evolved over a period of years, the coating machines embody many original features; for example, all aspects such as air flow, speed, tension of tape and temperature are automatically controlled. The machines are capable of applying the coating to the extremely fine limits of  $\pm 1/100,000$  of an inch, equivalent to a variation of less than a quarter of a decibel in output. Special gauges have been developed to ensure that these limits are maintained.

**EMITAPE** *the world's finest magnetic recording tape*

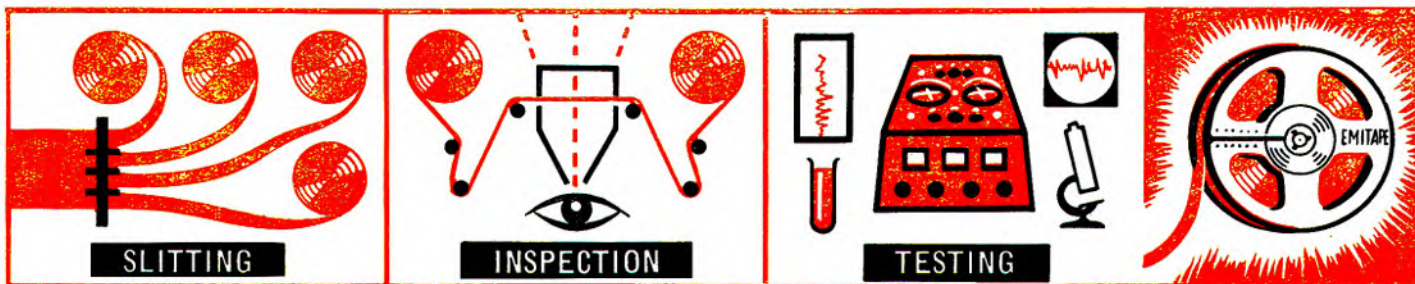
**EMITAPE** is produced at Hayes, Middlesex, by E.M.I. in the largest magnetic tape factory in Europe. E.M.I.'s technical skill and accuracy and over 60 years of research in sound recording ensure that Emitape is the finest magnetic recording tape in the world.

EMITAPE consists of a PVC base film coated with magnetic oxide particles. Heat treatment first renders the oxide particles magnetic and they are then mixed with special varnish for adhesion to the base. The coating

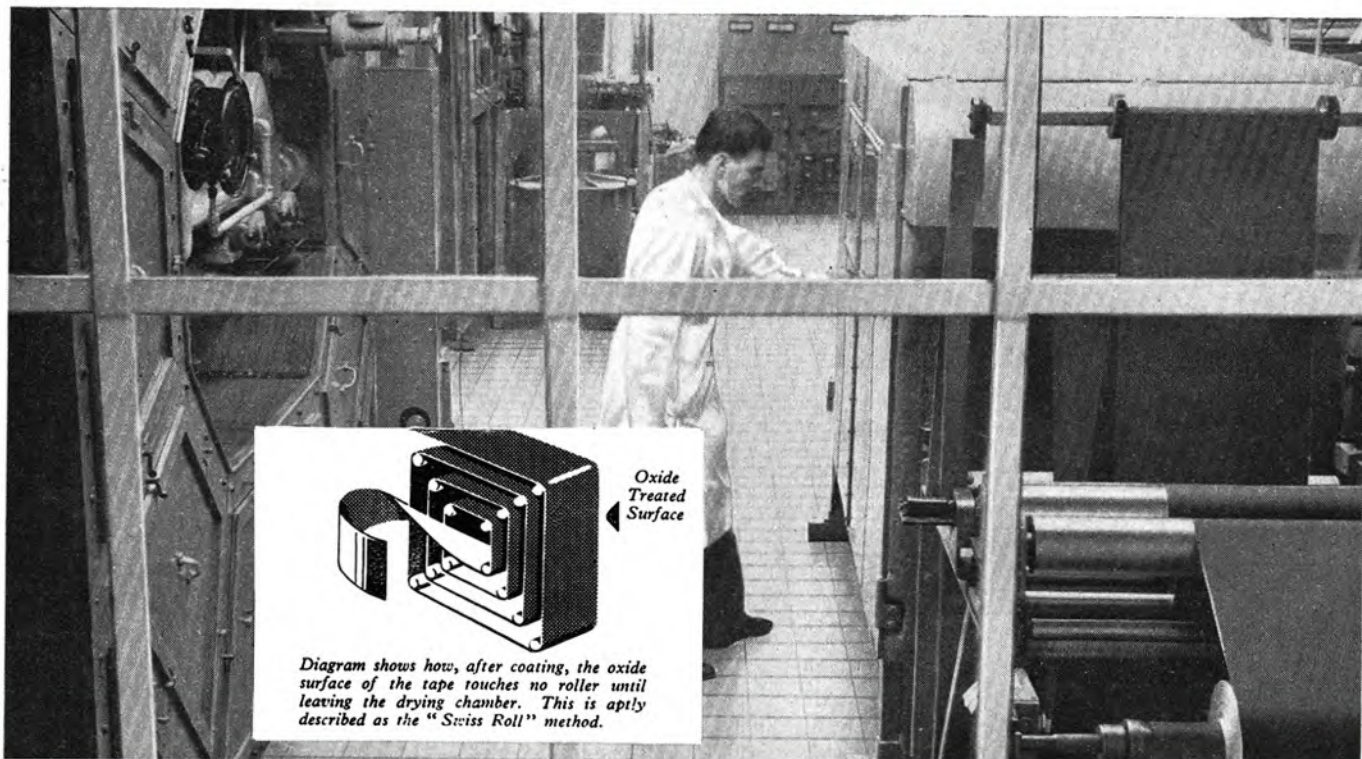
process is a highly critical operation where every effort has to be made to ensure that the tape surface is completely free from foreign particles.

In the next stages, the coated film is slit by precision cutters to standard  $\frac{1}{4}$ " widths and wound on to the various size spools. Individual visual inspection and thorough laboratory tests for possible electrical defects ensure the consistently high quality of recording which only Emitape can give you.

**E.M.I. SALES & SERVICE LTD**  
*(Recording Equipment Division)*  
**HAYES • MIDDLESEX • ENGLAND**



## STAGE 3 COATING

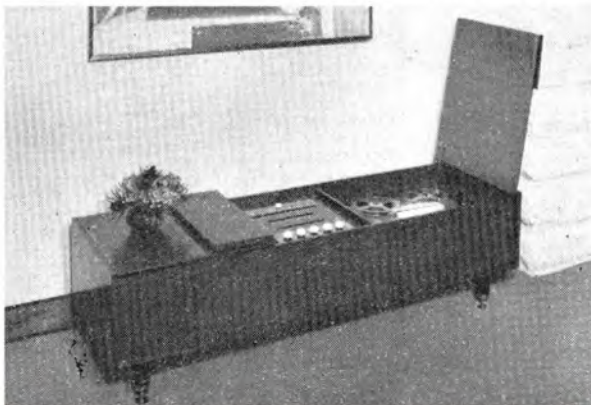
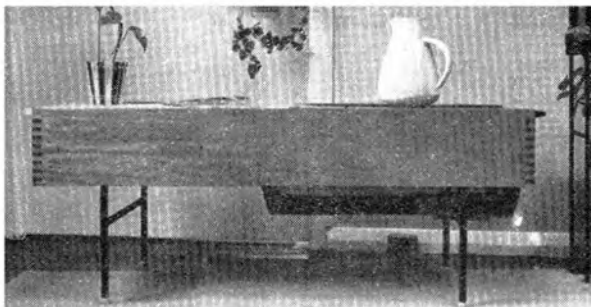


### HERE ARE EMITAPE'S OUTSTANDING TECHNICAL FEATURES:

- \* High sensitivity.
- \* Low noise level.
- \* Low print through factor.
- \* Anti-static.
- \* Freedom from curl and stretch.
- \* The new polystyrene container, EMICASE, solves your tape storage problems. Emicase can be placed upright on a shelf or between bookends, protecting spools from dust and damage, and giving easy identification of leader tapes.

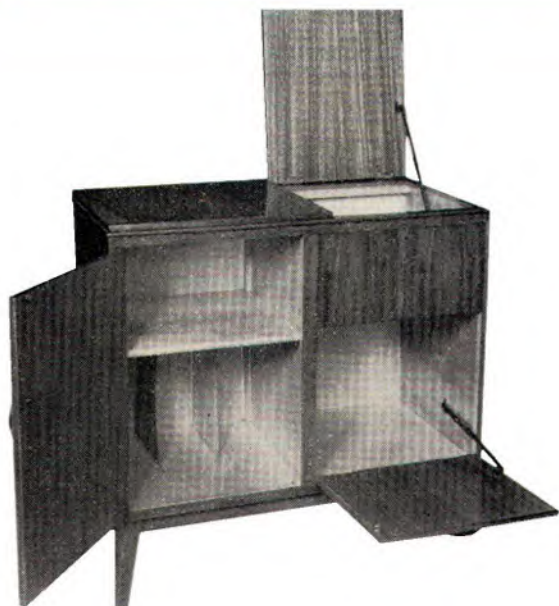
EMITAPE "88" General Purposes. EMITAPE "99" Long Play, giving 50% increased playing time.

**E.M.I. SALES & SERVICE LTD**  
 (Recording Equipment Division)  
**HAYES · MIDDLESEX · ENGLAND**



Two examples of the coffee-table type of cabinet for tape and all general hi-fi equipment. Immediately above is a G-Plan range unit designed to match other furniture in the G-Plan range. The lids fold back in the centre to give access to the controls and then lift up for access to the end compartments. The finish is walnut brown with legs of black lacquer and adjustable brass screw-in feet. The Price is £29.

Top: The Maggie Player Table, which as a polished birch hinged lid and a sliding plastic heat resisting top for the other half. The body is of polished mahogany on black tubular legs, with height adjustment. The place for the amplifier is between the legs, with liberal ventilation through the wire mesh cage. The price is 22 gns. Below: The Hartique Hi-fi Cabinet, and excellent all-purpose cabinet costing 21 1/2 gns.



# TAPE IN THE HOME

*High-fidelity tape recording should not be incompatible with good contemporary interior decoration.*

**DOUGLAS GARDNER**

*discusses here some of the ways in which the two ideals can be reconciled*

**A** TAPE recorder can be completely self-sufficient and, since it is usually a compact and reasonably portable piece of equipment, need not—if that is the end of the matter—raise any serious problems in the home from the furnishing point of view.

Most of us, however, have at least a radio as well, and many of us own, or plan to acquire, such things as gramophone turntables, hi-fi amplifiers and separate speakers, large and small; so that the danger of clutter, if not of the complete annihilation of any semblance of interior decoration, is a very real one for the tape enthusiast and those around him.

We may be tempted to take the attitude that appearance should be a minor consideration if one is truly devoted to the pursuit of quality in sound; but, on the other hand, anyone who appreciates perfection in sound should also be prepared to admit that visual beauty is also a worthy objective.

Undoubtedly the ideal is to decide at the outset on the range of equipment to which you aspire and to obtain furniture that will accommodate everything, even if you have only just begun to buy some of the items.

## To match or not to match

You may decide on one piece of furniture; but if real high fidelity is the aim you will probably visualise a separate speaker, preferably to stand in a corner of the room. In the latter case there is much to be said for matching cabinets, one containing the speaker and the other your equipment.

In some circumstances, however, for instance in a small room, two practically identical cabinets may command too much attention, and a better alternative may be to have a vertical speaker cabinet and a low horizontal unit for the equipment. Harmony can be achieved by using similar materials and finish. You may be glad that you decided on the contrasting low unit for the equipment if you eventually go in for stereophonic reproduction with its two separate speakers.

Whatever you decide on you will find a wide range of cabinets available, most of them designed originally for hi-fi systems based on a gramophone turntable. Whether the cabinet suppliers mention it or not, most of them will house a tape deck instead of the turntable, but measurements should be carefully checked first to be on the safe side. It is important to ensure that there is plenty of room "below deck," for you will need a tape pre-amplifier as well as the usual hi-fi amplifier and pre-amplifier, and an FM tuner unit is almost certain to be added at some time.

Do not be satisfied with just enough room to get everything in, because if the units are too close together they will become



overheated. In any case, see that there are good ventilation apertures in the cabinet.

All this is comparatively simple if we assume that the intention is to have a built-in tape deck. It is not quite so easy when we face the fact that, in most cases, our centre-piece and starting point is a portable tape recorder.

One possible answer is a cabinet designed to take all the radio equipment, etc., and with a compartment large enough to take the complete tape recorder. The latter is then out of sight when not in use and the deck becomes accessible by opening the lid or door of the cabinet. The tape recorder's own lid can be off while it is in the cabinet, and there can be a special place for this lid in the cabinet.

## The extra speaker

In some cases, opening the door or lid would permit the tape recorder's own speaker to be heard satisfactorily. However, since the speakers built into portable tape recorders can never be as efficient as one (or two) fitted into a heavy and generous cabinet, the logical thing is to invest right away in a speaker drive unit (which can cost as little as £5) to be fitted into the front or side of the cabinet, or else in an entirely separate speaker enclosure, where the choice is limitless. Enclosures capable of handling a wide frequency range satisfactorily vary from those like the economic CQ Reproducer to those such as the larger Tannoys costing twice as much as some tape recorders.

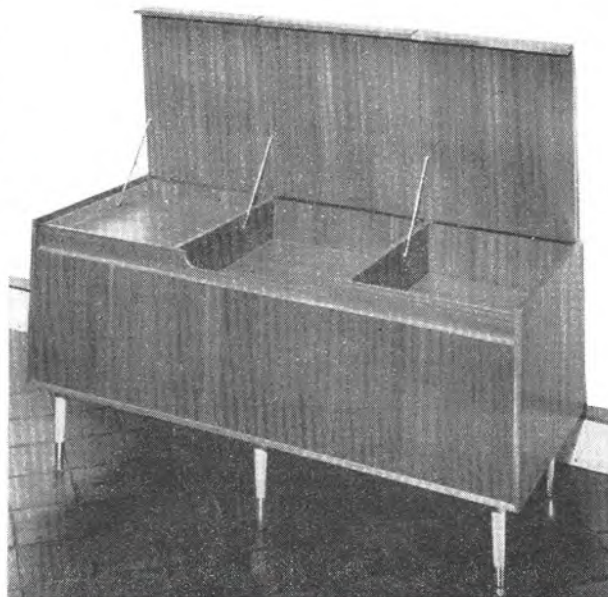
Of course, we can only reap the full benefit of such expensive speaker systems when a really high-fidelity amplifier is brought into play.

If the above plan is adopted then the transition from portable to home-base use is fairly simple. The recorder is placed in its compartment and jacks are plugged into the extension speaker socket, or to the output to separate amplifier, as the case may be. A switch or plug to mute the internal speaker may also be desirable, but there should be no other complication.

I have applied a ruler to many equipment cabinets and found that simply by lowering the baseboard intended for the turntable, or tape deck, it is often possible to create a compartment large enough to house a complete tape recorder. All that then remains is to ensure that the room remaining is sufficient for the FM unit and other items likely to be added later.

A mid-way variant worth considering is to make or have made a long, low equipment cabinet just the right size to permit the tape recorder to stand at one end of it as though it really belonged there; the cabinet itself should be as innocent as possible of exposed knobs and dials, these being hidden beneath a lid at the other end of the cabinet or behind a front flap.

Yet a further alternative is to fit everything into a range of bookshelves, the jutting out part of the tape recorder being accommodated, perhaps, on a narrow bureau-style flap which can be closed up when the machine is elsewhere. Further flaps and sliding doors can conceal radio dials and other controls.



This fine cabinet made by Imhof, to special order, costs £38 and will accommodate all the equipment the hi-fi enthusiast can desire.

Among those who supply cabinets suitable for incorporating tape recording equipment are the following:—

Rogers Developments (Electronics) Ltd., Rodevco Works, 4-14, Barmeston Road, Catford, London, S.E.6.

Armstrong Wireless & Television Co., Ltd., Warlters Road, Holloway, N.7.

CQ Audio Ltd., 2, Sarnesfield Road, Enfield, Middlesex.

Imhofs (Retail) Ltd., 112-116, New Oxford Street, W.C.1.

Maggie Furniture Ltd., Station Approach, Mortlake, S.W.14.

Hartique Products, 243, Upper Street, Islington, N.1.

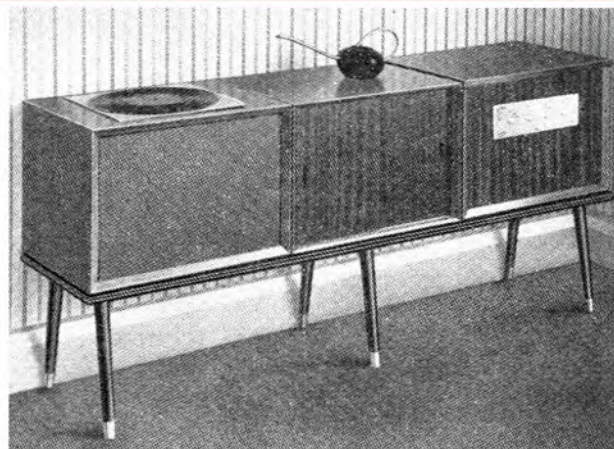
A. L. Stamford, 20, College Parade, Salisbury Road, N.W.6.

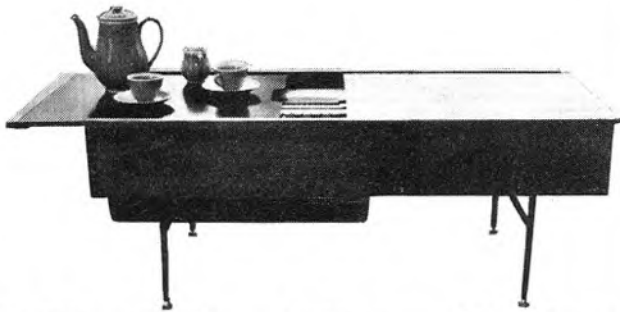
Northern Radio Services, 11, Kings College Road, N.W.3.

Record Housing, Brook Road, Wood Green, N.22.

B.K. Partners Ltd., 229, Regent Street, W.C.1.

Left: In this Audio plan arrangement by B. K. Partners Ltd, the speaker unit, equipment unit and storage cabinet (available separately) are on a "table top" with adjustable tilt-glide legs. The cost is approximately £65. Right: Introduced in February, this arrangement of cabinets by Record Housing uses a sturdy and good-looking base priced at £4.14s.6d. With the units as shown, for speaker, storage and equipment (which are also available separately), the total cost is approximately £22.



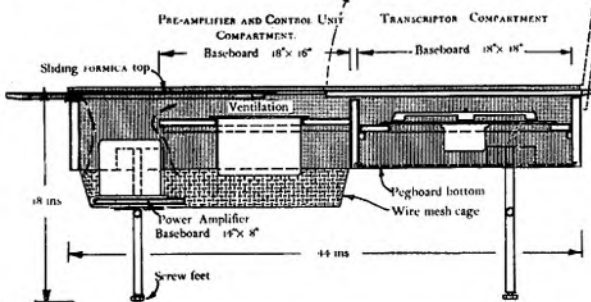


## Magpie Furniture LIMITED

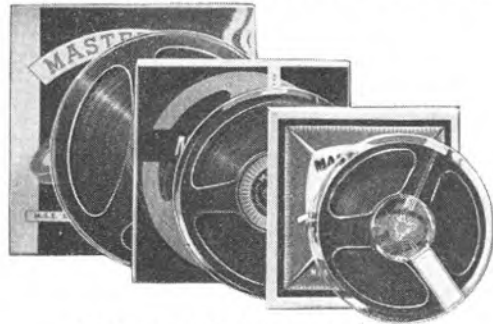
Station Approach, Mortlake, London, S.W.14. Prospect 8071

### THE MAGPIE PLAYER TABLE

Price 22 guineas



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### M.S.S. MASTERTAPE

P.V.C. Magnetic Recording Tape on latest type plastics spools. Not surplus but brand new, perfect and boxed. Will work with any Recorder. Satisfaction or money back guaranteed.

1,200 ft. Standard on 7" spool, List 35s. ....	Lasky's Price	21/-
850 ft. Standard on 5 1/2" Continental spool, List, 28s. ....	Lasky's Price	16/6
600 ft. Standard on 5" spool, List 21s. ....	Lasky's Price	12/6
1,200 ft. Long Play on 5 1/2" Continental spool 35s. ....	Lasky's Price	22/6
850 ft. Long Play on 5" spool List 28s. ....	Lasky's Price	16/6

Post. 1 spool 1s. 6d., 3 or more post free.

### LASKY'S RADIO (Dept. T.R.)

LASKY'S (HARROW RD.) LTD.

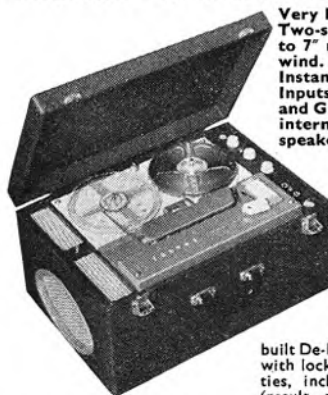
42, TOTTENHAM COURT ROAD, W.1. MUSEUM 2605.  
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**THERE CAN BE NO DOUBT WHATEVER** that "Symphony" Tape Recorders represent the greatest value for money on the market today in spite of the fact that we do not give away coupons with our machines nor offer any other artificial inducement to buy our make. A demonstration will prove to you that both our Table Model and our Portable Model will outclass in quality of reproduction, ease and silence of operation any other make of comparable price on the market. All this is combined with **sheer long-term reliability**—a rare feature indeed among Domestic Recorders today!

**HOW IS ALL THIS POSSIBLE?** We are not subsidised by the State or other body. It is possible because we **SUPPLY DIRECT TO THE PUBLIC** and give you what would otherwise be a discount to the trade. The time to consult us is **before you sink your money**. Even in the case of makes of recorders other than our own, we submit that **THE PROTECTION AFFORDED BY OUR TECHNICAL RESOURCES IS WORTH A GOOD DEAL MORE** (both before you buy and after) **THAN ANY OF THESE SO-CALLED "SPECIAL TERMS OFFERS."**

Call for demonstration between 9 a.m. and 6 p.m. any day except Sunday, or send 1s. in stamps towards the cost of our High Fidelity Catalogue giving details of the following Tape Instruments and a host of High Fidelity Equipment.

#### "SYMPHONY" DE-LUXE TAPE RECORDERS



PORTABLE MODEL

Very high quality reproduction. Two-speed, twin track taking up to 7" reels. Fast wind and re-wind. Very low motor noise. Instant temporary stop/start. Inputs for Microphone, Radio and Gramophone. Outputs for internal speaker, external speaker, and external amplifier. Handsome cabinet, 20" wide x 14" high x 14 1/2" deep. Available in Standard, Medium Walnut, Light Oak or Mahogany. High-grade elliptical speaker.

Portable Model specification as above, but housed in strongly-built De-Luxe, Rexine covered cabinet with locks. Special acoustic properties, including Bass Reflex Action (result of original research)—gives audio impression of much larger cabinet speaker.



TABLE MODEL



#### THE "SYMPHONY" CONCERT GRAND REPRODUCER

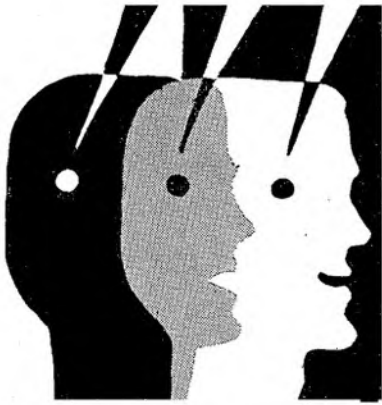
No. 2 Symphony Amplifier with Remote Control .....	£19 19 0
Lenco GL50 Transcription Unit with transcription quality pickup cartridge.....	£21 17 6
F.M. Tuner .....	£15 15 0
Truvox Mark IV Tape Deck with revolution counter.....	£30 9 0
Truvox Tape Amplifier .....	£17 17 0
Concert Grand Cabinet with pneumatic lid-stay in sapsel mahogany, walnut or oak....	£19 0 0
Lorenz Triple Cone Loudspeaker with condenser.....	£15 4 6
Symphony 12" Bass Reflex Cabinet in matching veneer and contemporary style .....	£11 10 0

Items available singly. Outfit can be built up gradually.

## NORTHERN RADIO SERVICES

11, Kings College Road (off Adelaide Road), London, N.W.3.  
It is essential to mention this Journal when replying.

Telephone: PR1mrose 3314.



### ECHO? NO, NO!

**R**EADING your correspondents' letters about echo tempts me to ask: is our nomenclature deteriorating?

Surely echo and reverberation are entirely different things with entirely different effects.

Echo is the same sound being repeated after an interval. Reverberation, on the other hand, is the mixture of many echoes blending together to give a sense of spaciousness as experienced in a concert hall. Put in another way the decrement of the sound depends on conditions. With reverberation the rate of decay may vary with frequency: this does not apply to a false echo caused by repeating the sound after a time interval.

A reverberant, not echo, room is suggested. Some of the sound is reproduced and picked up with a suitable microphone and amplifier and added to what is going on the tape. A gain control on this subsidiary system will give considerable latitude. There could even be some frequency discrimination.

Preferably the loudspeaker and microphone should be oriented so that the sound reaching the microphone is nearly all reflected. In some cases an acoustic screen in the direct mic/speaker route will help.

Take the towels and mats out of the bathroom first! Or it can be done along a corridor, or from one room to another, if the damping is not too heavy. The corridor method can have the disadvantage of favouring one particular decay time and thus get us back to near echo conditions. Again, work from reflected, i.e., a multiple path sound to diminish this.

D. T. BENNETT.

*London, N.W.3.*

### SEASIDE SOUNDS

**E.** JONES, of Hampstead, asks about recording seaside sounds of waves breaking and gulls flying. We have had some experience of this type of recording, although the results were not always satisfactory.

We have a Simon Portable mains-operated SP/2 Tape Recorder.

The first difficulty which arises is the provision of A.C. mains. You can't use a street lamp, and if you try some café or even coffee stall, it's either not near

*Still the questions come, and still the answers flow in response. If you have a problem, write to "The Ideas Pool" about it. And if you think you have an answer*

## THE IDEAS POOL

*to any of the queries, let us hear from you soon.*

enough to the sea or there are too many talkative people about.

We overcome that by using a government surplus rotary converter driven by the car battery giving us 230 volts A.C. at 100 watts. A short heavy duty cable should be used between battery and converter as it takes a lot out of the battery.

Our SP/2 wants 120 watts but we have had a recording at slightly reduced speed at 7½ i.p.s. We overcome this by playing the recording back at home off the battery at the same reduced speed and dubbing on to a second tape recorder. We find it advisable to record with the

## SUGGESTIONS

engine of the car running at a speed which gives about 40 mph in order to boost the battery a bit. This of course brings in a further difficulty in that, unless you get the microphone well away from the car, you also record the engine noise. This can be overcome by using a 50 foot cable between converter and tape recorder.

We recorded on some low cliffs to the east of Southbourne near Bournemouth. The sea was rough and very noisy. The

## AND QUERIES

gulls screamed and everything seemed fine. Naturally to get these conditions the wind was 25-30 kts gusting. Everything recorded faithfully as we carried out a voice test and "interviewed" someone at the time.

The problem we have not quite solved is how to protect the mic. absolutely from the wind while still picking up the required sounds. Any wind blowing across the crystal mic, causes a hiss and extra loud boom when a sudden gust comes round the screen we erect. It obliterates all other sounds.

It is an experiment we intend to repeat and would be interested in other people's results. I think we got better results at home with a tub of water and stones rattling synthetically.

I should like to congratulate you on the increased size and interest in the *TAPE RECORDING MAGAZINE.*

PHYLLIS M. COPINGER.

*Southall.*

### LOCATION PROBLEM

**A** QUESTION of concern to myself and other blind tape recording enthusiasts, is to find a device by which we may find given positions on the tape. I have owned a "Ferrograph" for over seven years, and although I am fairly good in locating places, it is a hit-and-miss affair on occasions.

Could any reader of this publication suggest a device to overcome this deficiency; either mechanical or electrical, please? My first thought is naturally for my own machine, but if something could be invented to fit most makes and models it may be possible to get it manufactured.

MERVYN C. MILSTED, L.G.S.M.

*London, S.E.27.*

### QUICK TURN

**W**HEN recording symphonies and similar works from the radio I often have a nerve-wrecking time wondering whether the tape is going to last. Even worse is the moment when I decide to turn the spools over for Track II during the few second pause between movements. No doubt a time and motion study expert could help me to perform the operation in the brief time available. Or, maybe, one of your bright readers may be able to suggest a way in which the problem can be overcome mechanically.

CHRISTOPHER BIDMEAD.

*London, N.W.11.*

**TAPE RECORDER HIRE**

**TAPE TO DISC 78-LP**

**RECORDING STUDIO**

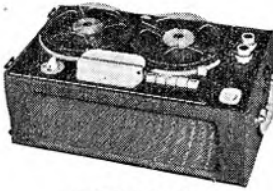
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**MORE NEW  
RECORDERS . . . .**



**THE NEW  
MAGNAFON M.1**

Featured this month is the new Magnafon M.1 Portable Tape Recorder, an unusually compact instrument in the true high fidelity class. The dimensions are 18" x 11" x 8" and the weight is only 26lbs. There are three speeds and it comes complete with microphone and 1,200 ft. of tape at 48 guineas.

This year we have had a prolific crop of new tape recorders—some good and some not so good. At Quality Mart we regard it as part of our service to "vet" new products and to stock only those which are sound in construction and reliable in performance.

Among the newest are the Harting, Revox and Elizabethan Essex tape recorders. Others held in stock include the Walter 303, Grundig, Elon, Magnafon and Elizabethan 56. Details of all of these will be sent on request and demonstrations are always available at our showrooms.

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SPEAKERS : TAPES : RECORDS  
MICROPHONES : GRAMOPHONES**



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FOR ALL REQUIREMENTS**

**"Ribbonette"**

MODEL VR/64

**A Highly Efficient "Pencil"  
Ribbon-Velocity Microphone**

LOW, LINE OR HIGH IMPEDANCE

Based primarily on the design of the high quality LUSTRAPHONE Studio Ribbon Microphone VR/53, this new model, the "Ribbonette" is of relatively miniature dimensions. Response substantially maintained to 14 kc/s. Full blast screens fitted. With new type improved swivel mounting. Silver-hammer finish. £7.17.6



Full details of the "Ribbonette" Microphone sent on application to the makers.

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LUSTRAPHONE LTD**

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REGENT'S PARK ROAD,  
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**M A S T E R P I E C E . . .**  
Enthralling eloquence and emotion, the hushed tension of the dramatic moment, the rapture of the last long note . . . Mastertape alone captures the true beauty of the human voice in speech and song.

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Stand 19 and Room 242

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MAGNETIC RECORDING TAPE BY

MSS RECORDING CO. LTD., Colnbrook, Bucks.  
Telephone: Colnbrook 2431

Mastertape and MSS recording equipment are in regular use by many exponents and connoisseurs of fine music. Their preference proves that you too will find Mastertape a masterpiece!



# CHALLENGE CUPS

and many other prizes in the  
biggest tape event of the year

The British Amateur Tape Recording Contest is being dramatically extended this year and we are now able to announce that, through the generosity of the industry, there will be two challenge cups, an impressive prize list, and an exciting social programme for the winners.

The Contest is being divided into two separate sections. The first is for individuals; the second is for schools.

The outstanding entry in the individual section will be awarded the E.M.I. Challenge Cup, presented by Messrs.

E.M.I. Sales and Service Ltd., Hayes, Middlesex.

The outstanding entry in the schools section will be awarded the Grundig Challenge Cup, presented by Messrs. Grundig (Great Britain) Ltd.

In each case the cup will be held for one year. But miniature replicas will also be awarded, to be retained by the winners.

Details of the schools section are printed in the panel on this page.

## THE SCHOOLS CONTEST

The rapid spread of tape recording activities in schools has led "Tape Recording Magazine" to the decision to make a special Schools Section in the British Contest from this year.

Any school with a recorder is free to enter. Groups (which may be classes or any other convenient combination of pupils) are required to produce a joint entry in the form of a feature tape not exceeding 20 minutes on the subject: "Discovering the World."

The panel of judges will decide which is the best tape received and the school which has submitted it will be awarded the Grundig Challenge Cup and other prizes to be announced later.

In addition, a special function will be arranged, either in London or in the area in which the school is situated, to which all the pupils who played a part in preparing the tape will be invited as soon as possible after the Contest. The cup and prizes will be presented at this event.

The winning tape will later be entered in the International Contest, to compete against schools on the Continent. Prizes in this contest include a sum of 40,000 French francs and a bronze work of art.

## International link

THE individual section of the Contest will be sub-divided into four separate categories. The panel of judges—the full list of names will be announced shortly—will select the best tape in each of these four categories.

There will be prizes for the winners in each category.

The judges will then decide which they consider to be the outstanding tape in the whole section and this will be adjudged the Tape of the Year, winning the E.M.I. Silver Cup and other prizes.

The industry and trade is rallying to the Contest, as last year, with generous offers of prizes. We are already able to announce that the prize list will include the following:—

A tape recorder, presented by Messrs. E.A.P. (Tape Recorders) Ltd.;

Five TA 3 radio jacks; presented by Messrs. Truvox, Ltd.;

A ribbon microphone, presented by Messrs. Film Industries, Ltd.;

A supply of magnetic tape, presented by Messrs. Olympia Sound.

Until the list of prizes being provided by the industry and trade is complete, it is not possible for us to allocate particular items to particular categories.

But it is already clear that the winner of each of the four categories, as well as the entrant who submits the Tape of the Year, will carry off an exciting bag of prizes.

In addition, individual winners will be invited to the special lunch at the Savoy Hotel, which will again be arranged by Messrs. E.M.I. Sales and Service Ltd. There, the successful competitors will

meet the distinguished judges. Other items will include a visit to the Earls Court Radio Show.

The date will be Saturday, August 30.

But that will not be the end of the matter for the lucky winners. Their tapes will be automatically sent on as entries in the International Amateur Recording Contest.

There they will compete against entries from amateurs in seven other countries for the international prizes, which include sums of 100,000 French francs, 10,000 Belgian francs and 1,000 Swiss francs.

The judging will take place in Berne in October.

*Write immediately for your entry form.*

## AUDIO FAIR 1958

TICKETS for the 1958 Audio Fair are now available. Please send stamped, addressed envelope stating which day and your requirements. Dates: Friday April 18th, 11 a.m. to 9 p.m. (Trade), 4 p.m. to 9 p.m. public; Saturday 19th, Sunday 20th, and Monday 21st, 11 a.m. to 9 p.m.

## BINDERS

WE can now accept copies for binding. Please send volume one complete, stating clearly your name and address, and marking your package "Binders" to 426, Camden Road, London, N.7. Cloth bound, gold lettering, price 21s., postage and packing 2s. 6d.

## AID FOR THE BLIND - IDEAS WANTED

CAN you think of some good ways in which tape can be used to help the blind? Ideas are sought by a newly formed organisation "Tape Programmes for the Blind." The chief organiser is Mr. M. L. Chambers, 139, Goldthorpe Avenue, Sheldon, Birmingham 26, who writes:—

"Your splendid magazine has been responsible for the formation of the Birmingham 'Tape Programmes for the Blind'—we thought we would like you to know!

"The idea came to the undersigned when mentions were made of the work done by BATRS, and after approaching the Birmingham Welfare Authority who

gladly gave the scheme its blessing and the promise of co-operation wherever possible, the organisation was born. . . . Friends of the Organiser have rallied around with contributions and in a few short weeks we are established with a Philips Ag 8108 and a goodly supply of tapes of various sizes.

"What we need now are IDEAS, and it was felt that if you could be kind enough to give us mention in *Tape Recording Magazine* that would do the trick, as there must be many thousands of readers who would like to help.

"Meanwhile we would not dream of closing without saying thank you for such a splendid magazine—it doesn't come round quickly enough for us!"

### Lively in London

THE monthly meeting of the London Tape Recording Club was a lively affair. "If the membership keeps shooting up, we'll have to think about getting more room," reported John Amphlett, the club's energetic chairman.

Lady members are still outnumbered by men, although their presence is encouraged by the "one membership fee for all the family" rule.

An enthusiast from South Africa, Miss Cleone Titlestad, is to be the club's first overseas guest. She will make a tape about her trip from Africa and her first impressions of England on a club member's machine, and send it back to her parents.

A copy of the club's Christmas Greetings tape sent to the South Goodwins Lightship was played. It included two messages in Welsh, one from Mr. Trevor Davies, now "exiled" in Stockwell, who proved he knew what he was talking about by translating his message into English! *writes Pat Fryer.*

Mr. W. P. Copinger of Southall, Middlesex, one of the runners-up in the 1957 British Amateur Tape Recording Contest, was given a cordial welcome.

Secretary Roger Aslin demonstrated the Winston "Thoroughbred". Afterwards members filled in a seven point questionnaire which will be sent to the manufacturers.

### Voicespence Magazine

AS from March 1st Ronald E. Davies, London representative of the Voicespence Club, Noel, Virginia, U.S.A., is to circulate among members in the British Isles a bi-monthly magazine tape entitled *Voicespence Magazine* to enable all members this side of the Atlantic to get to know a little more about the general affairs of the Club.

Anyone who is already a Voicespence member can obtain further details if they write to Mr. Davies, who will also supply membership application forms and literature to others who are interested. Subscriptions are still only 6s. a year. The address is 99, Caulfield Road, East Ham, London, E.6.

### World Tape Pals

ROGER D. SMALLWOOD reports that World Tape Pals have now set up a "World Tapes for Education" bank of some of the more interesting tapes in the series. It is being managed by Laurence Hill, 39, Woodburn Terrace, Edinburgh 10,

Educational, cultural or similar bodies interested can obtain dubbings of these



tapes free of charge. All they have to do is send sufficient tape and the cost of return postage.

The blind section is under the control of Charles Standen, himself blind, and Len Watkins, 40, Stockwell Road, Balham, S.W.12. Blind people wishing to borrow tapes, or those wishing to read for the blind, should contact Mr. Watkins.

Mr. Smallwood had hoped to collect subscriptions here for the W.T.P. *Tape Topics*, but because of exchange difficulties this cannot be done. He asks us to request subscribers to make the payments direct to Dallas.

### BATRS Now BTRS

THE latest changes in the organisation of the British Amateur Tape Recording Society are that it is now registered as a company, and that it is to be known as the British Tape Recording Society, incorporating BATRS. The organisers have adopted a replica of the Lustraphone microphone as a badge.

BATRS report that they are the sponsors of an Audio Exhibition scheduled to take place at the Midland Hotel, Manchester, on Saturday and Sunday, 1st and 2nd March, from 10 a.m. to 8-30 p.m. on Saturday and from 9-30 a.m. to 7-30 p.m. on Sunday. Admission is 2s. at the door.

E.M. Office and Factory Equipment Company (Electronic and Stereophonic Division) of Crewe are, the report states, acting as honorary organisers.

Tape recorders will form only a part of the whole exhibition, which will include gramophones, amplifiers, tuners, etc., and hi-fi furniture.

BATRS Tape Bulletin *Retrospect* has been produced by Mr. John Buckler, Leicester. Highlights of the January-February Tape Bulletin, produced by Mr. E. Yates and Mr. J. Talling, include "Belinda Calls," introducing the BATRS Hospital Service, and "a serial documentation (drama) in six parts" on the invasion of the Channel Islands in World War II.

The secretary reports that 85 members rejoined BATRS in January, and that 31 new members were enrolled.

### South African Recording Club

MR. R. PENFOLD has been appointed U.K. representative of the South African Recording Club. Overseas members are accepted, but not canvassed, and one of Mr. Penfold's aims will be to arrange tape contests between relatives and friends in the two countries. His address is 48, Holbrook Lane, Coventry.

### T.R. International

THE Blind Services Committee of Tape-Respondents International have stepped up the tempo of operations, and readings are being made on such subjects as ham radio, electronics and economics, as well as of all kinds of fiction. There is a shortage of readers in England, as in other countries, and any tape recordists prepared to help are invited to contact Bill Rawle, 12, Glenfield Road, Darlington, Co. Durham.

Operating as a division of TRI is a new radio library for the blind sponsored by the South-East Amateur Radio Club, of Cleveland, U.S.A. It provides braille and tape-recorded readings on all aspects of electronics.

TRI are distributing a monthly tape on tape recording which will include excerpts from *Tape Recording Magazine*.

with the club movement in full swing, J. E. AMPHLETT tells

# HOW TO START A CLUB

The author is chairman of the recently formed London Tape Recording Club. Some of the members are seen in this photograph, taken at an early meeting



**I**T is obvious from the last few issues of *Tape Recording Magazine* that tape recording clubs are springing up all over the country. It may be that your town or district has no club yet, but you feel sure one would be welcome among recording enthusiasts.

It is fairly easy for two or three people who wish to do so to start one; the real difficulty comes at a later stage, when it is a problem to keep it running smoothly to the satisfaction of most, if not all, of the members.

*The first thing is to call an initial meeting of all interested, and to lay the foundations upon which the success of the club will depend.*

Having fixed the place, date and time, and circularised all known enthusiasts and, perhaps, advertised in some way, the business of the meeting should follow a set pattern.

## First meeting

With a temporary Chairman, the meeting decides, and formally votes, to form a club. Then there is the election of a permanent Chairman (usually the man already in the chair), a Secretary, a Treasurer, and the rest of the Committee, the number being appropriate to the size of the meeting. If it has not been done already, a name for the club should be decided.

Next comes the formation, but not the passing, of a Constitution. The Committee are required to meet at a later date to draft out and prepare the full Constitution for presentation and approval at the next meeting of the club.

This official business may well take up most of the evening, but it is a good idea to provide some light relief (on a tape recorder, of course) and, if cash and circumstances permit, some refreshments. A complete recording of this first meeting could be kept in the club's archives.

Although the Committee make all the arrangements for the running of the club,

the members themselves should direct the Committee as to what activities they want.

*It is important not to let the club become a one-man show, especially if his ideas are at variance with the wishes of the members and they find they cannot do anything about it.*

The Chairman holds an important post. He co-ordinates the working of the Committee, sees that the club meetings are run smoothly and is the social and business link between the club and other organisations.

The Secretary is the most hard-worked member of the Committee and is the true back-bone of the club. He prompts the Chairman at meetings and surreptitiously signals by a tug of the sleeve when to shut up and sit down. The club is lucky indeed if it has a first-class Secretary.

The Treasurer must be meticulous in his accounts and energetic in his hunt for subscriptions. He usually becomes a little tired of jokes about Continental holidays. The other members of the Committee not only lend their support but are required to organise, when necessary, specialist activities during the year.

The Constitution should not be too unwieldy, but should cover in simple form the most important regulations. Briefly it must include:

1. The name of the club.
2. The aims and objects.
3. The management (officers and Committee).

4. Rules concerning membership.
5. Fees and subscriptions.
6. Accounts.
7. Meetings (frequency of Ordinary meetings and rules governing Annual General or Special meetings).
8. General rules, including those covering alterations and additions to the Constitution.

## Plan these projects

After the first two meetings the club is well away. However, before it really gets settled down there are one or two things still to organise. Printed membership forms, headed note-paper, printed copies of the membership list, and publicity hand-outs are wanted. Some form of printed or duplicated news-sheet or a monthly sound magazine may be started.

Other possible projects are: a club diary, a library of books and tapes, club-owned equipment. Plans can be made for future activities such as recorder demonstrations, competitions, socials and contact with tape recording clubs in other districts.

These brief notes give only a rough guide to the problems of starting a club. There are a few good books written on the subject and I am sure that the secretaries of well-established clubs and societies will be only too pleased to give advice. I am also sure that you will get a great deal of fun out of it all.



# NEW BRENELL TAPE PRE-AMP

**T**APE, even more than disc, is by nature a high fidelity medium, and the new Brenell Tape Pre-amplifier is an important contribution to the work of translating this potentiality into hi-fi reality. It is designed for use (with the Brenell tape deck) by those who already possess good quality sound reproducing equipment in the form of FM radio tuner units, disc reproducers and, particularly, good pre-amplifiers and main amplifiers linked to the best loudspeaker systems they can afford.

One of the essentials of this approach is the ability to record at high quality from the radio, a point which the Brenell designers have kept well in mind.

Some of the main features of the Brenell tape pre-amplifier are:—

Frequency correction at three tape speeds ( $3\frac{1}{2}$ ,  $7\frac{1}{2}$  and 15 ips) during recording and playback.

It takes no longer than three seconds to demagnetise the record playback head of any magnetism which has built up during the recording process. This gives a quieter playback and avoids partial erasure of the high frequencies, which occur when tapes are played back with slightly magnetised heads.

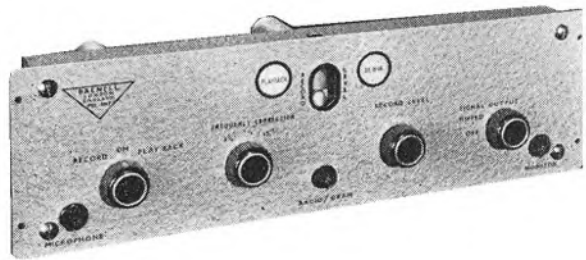
A monitoring socket provides a signal of sufficient strength to operate headphones of 2,000-4,000 ohms impedance, or the signal at the "output" socket may be used for monitoring through the main amplifying equipment.

Output signal is terminated at a co-axial socket on the rear of the chassis for transference via co-axial cable to the associated amplifying equipment. A co-axial cable of up to 6 ft. is permissible.

By the turn of a switch, the output socket may be muted when required, to prevent acoustic feed-back.

Since, in some installations, inconvenience may be caused if the mains switch is situated on the power unit (which may not be easily reached from the front of the cabinet), a double pole mains switch has been incorporated in the "output signal" switch so that mains switching may be carried out from the tape pre-amplifier. Alternatively, this switch may be used to switch the H.T. and heater supplies when these are obtained from the main amplifying equipment.

The panel of the Brenell tape pre-amplifier



The pre-amplifier is coupled to the erase and playback heads, power unit and amplifying equipment by unobtrusive plugs and sockets.

Two input sockets (taking standard jack plugs) for microphone and radio (or pick-up) are accessible from the front of the tape pre-amplifier. The radio socket is also connected to a standard co-axial socket at the rear of the chassis, facilitating a permanent feed from the radio unit. Insertion of the microphone jack plug in the microphone socket automatically disconnects the radio socket.

The power requirements of the tape pre-amplifier (1.5 amps at 6.3 v. heater supply—400 milliamps at 300 volts H.T.

supply) can usually be supplied from the main amplifying equipment. The power unit is needed only if the equipment is to be portable or if the main equipment is incapable of supplying the extra power.

The unit contains mains transformer, rectifier valve, reservoir and smoothing condensers, humdinger (variable earthing to heaters) smoothing resistor, fused mains adjustment plug, mains switch and a 3-hole non-reversible socket for mains input to the tape deck.

The frequency response is given as 60 c/s to 10 kc/s at  $7\frac{1}{2}$  ips and 50 c/s to 14 kc/s at 15 ips. Noise level is stated to be 40 db below signal level at full output. Price 17 guineas.



## SOUND JACKS

**S**PECIALY designed for all audio purposes with the object of reducing electrostatic pick-up from external sources, the "Sound" screened Jack Plug, made by Tape Recorders (Electronics) Ltd., is attractively finished in heavy chrome-plating. It is manufactured to G.P.O. specification and is priced at 4s.

## Two New Philips Loudspeakers

**T**WO new models in their range of loudspeakers have been introduced by Philips Electrical Ltd. The ET 3089 is a 7 in. moving coil loudspeaker, for desk or wall mounting, priced at £4 15s. (volume control 10s. extra); and the ET 3090 is an 8 in. speaker priced at £6. In both cases one end of the cabinet is broader than the other giving the sound an upward direction when desk mounted and a downward direction when the speaker is mounted the other way up on a wall.

## NEW MOTEK DECK GIVES $1\frac{7}{8}$ IPS



A new British tape deck, the Motek K 9, manufactured and introduced by Modern Techniques, Wedmore Street, London, N.19, is designed with the object of being fitted easily by tape recorder manufacturers. Another aim is simplicity of control.

The deck gives a choice of three speeds— $7\frac{1}{2}$ ,  $3\frac{1}{2}$  and  $1\frac{7}{8}$  ips, obtained by the turn of a knob. It has a built-in rev. counter, and pause control switch, and the main controls are by press button. There are eight two-way change-over switches available on the record and play wafers on the push-button unit, allowing for possible amplifier wiring. The price of the deck is 21 gns.





# WYNDSOR DAUPHIN SETS NEW CONSOLE STYLE

## Harting deck and three speakers

**D**ESCRIBED as the first complete, self-contained transportable hi-fi unit in the tape field, the WyndSOR Dauphin Console Tape Recorder and Reproducer is the latest product of the Magnetic Recording Co., 2 Bellevue Road, Friern Barnet, N.11.

The cabinet of the WyndSOR Dauphin, of Landroma contemporary design, constitutes a bass reflex cabinet incorporating a 3-speaker assembly—a 10 in. circular speaker, a 9 in x 5 in. elliptical unit and a 4 in. tweeter.

The deck is a Harting, with a third lead added and with speeds of 3½ and 7½ ips. There are independent record and playback amplifiers; boost and cut controls for bass and treble; high and low gain inputs; provision for straight through amplification and monitoring facilities throughout.

Other features include a magic eye recording level indicator and digital revolution counter.

The microphone supplied is an Acos Mic 39/1 crystal microphone with gilt stand.

The WyndSOR Dauphin is supplied with a matching oak stand, similarly contemporary in design. Without the stand the dimensions are 21 in. long, 16½ in. deep (lid closed), and 16½ in. height. The height with stand is 30 in.

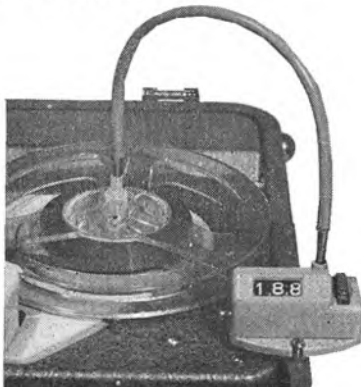
Frequency responses claimed are 50 c/s to 8,000 c/s at 3½ ips and 50 c/s to 15,000 c/s at 7½ ips. Wow and flutter are given as better than 0.1 of 1 per cent, and signal-noise ratio as better than 40 dB unweighted. Output is 3 watts ultra-linear at 15 ohms.

The price of the WyndSOR Dauphin is 89 gns. complete with stand, microphone and 1,200 ft. tape in Emicase.

## Philips announce rev. counter

**D**ESIGNED to clip on to the edge of the carrying case of the AG 8109 tape recorder, the Philips EL 3979/17 programme indicator (three digital rev. counter), is a new accessory now being marketed by Philips Electrical Ltd. It can also be used by clipping to the carrying handle of models AG 8105 and AG 8107. A programme indicator is already available for model AG 8106.

The new indicator is finished in grey plastic to match the AG 8109 and the digits are in white. In operation, a plastic cap at the end of the drive cable is pushed over the spool spindle. The accessory can therefore be very quickly and easily fitted and removed as required. The price is £3 7s. 6d.



## YOU CAN EDIT ON THIS TAPE

**T**HOSE who carry out any quantity of tape editing will welcome a new development in ½ in. tape by F. A. Hughes Ltd., agents for B.A.S.F., called "Editing Sound Tape." To all intents and purposes, this tape is equivalent to the well-known B.A.S.F. product, except that the reverse side has a yellow matt surface which will accept pen or pencil markings.

The normal method of marking tape is with a chinagraph type pencil, which is not at all permanent and easily rubbed off. The facility of marking modulations with say a ball pen should appeal to a large number of readers.

For instance, when compiling a sound track of effects for adding sound to your home movies, quite a number of short lengths of tape are used which require easy identification. It is sometimes necessary to alter a certain passage in a speech or commentary, delete an odd phrase here, use another take there: a tedious job at the best of times, but made easier through the use of Editing Sound Tape.

F. A. Hughes tells us, that the tape will be available shortly to wholesalers.

JOHN ALDRED.

**TAPE TO DISC SERVICE**  
78's or L.P.  
QUEENSWAY RECORDING STUDIOS  
123, Queensway, London, W.2.  
Tel: BAYswater 4992  
**TAPE RECORDERS FOR HIRE**

## Stuzzi Mambo

**A** NEW Austrian tape recorder, the Stuzzi Mambo, is being marketed in this country by Recording Devices Ltd., 95, Villiers Road, London, N.W.2.

This is a neat machine, weighing roughly 19 lbs., and measuring 13½ in. x 10½ in. x 6½ in. It has a tape speed of 3½ ips but in spite of this the claimed frequency range is 50-12,500 cycles. Other features of the machine include: magic eye modulation control; 3-figure digital type counter; tone control giving combined bass/top lift and cut control, and a safety control to prevent accidental erasure.

The retail price of the Stuzzi Mambo is 53 guineas, including microphone, screened tape and screened connecting cord with plugs.



## Superimposition on new D.S.2 Veritone

**A**N attachment which can be fitted to the machine to permit super-imposition of a new Veritone recording over an existing one without erasing the original is now supplied as standard equipment on all Veritone Model D.S.2. Price of the machine remains at 55 gns.

The attachment can also be fitted to any of the existing Veritone machines.

The new D.S.2 has a re-designed cabinet in three-colour styling, and when the lid is closed there are no exposed working parts. For normal use the speaker is contained with the set, but it can be detached and extended on any length of lead.

The built-in mixer facilities provide separate volume controls for the two inputs. The microphone supplied is the new Acos Mic 39/1, a high quality pencil microphone, with 12 feet of cable.

The frequency range claimed for the D.S.2 is 50 c/s to 12 kc/s at 7½ ips. The speeds available are 7½ ips and 3¼ ips.

\* \* \*

Details of the new Walter 505 tape recorder will appear in next month's issue of *Tape Recording Magazine*.

## MORE NEWS FROM THE TRADE

**R**E-STYLED models of the Reflectograph tape recorder are to be introduced at the Audio Fair in April, following the acquisition of the patents, goodwill and trade marks of Rudman Darlington (Electronics) Ltd., by Multimusic Ltd., a newly-formed subsidiary of Multicore Solders Ltd., formed to manufacture and market specialised tape recording equipment.

Mr. Arbib, Chairman and Managing Director of both companies, and the

patentee of the Bib tape splicer, reports that they do not intend to enter the mass production market for tape recorders, but that they hope to enjoy a share of the limited market for the simpler type of professional recorder for use in industry and the home.

They also intend, he says, to develop the sales of the Reflectograph continuous player, enabling four hours of music to be played and repeated continuously.

**M.S.S. RECORDING CO., LTD.**, Poyle Farm, Colnbrook, Bucks, have made available a strong manilla envelope, approximately 6½ in. x 4½ in., expressly for the purpose of mailing a 3 in. reel of tape. It carries the inscription "Mastertape Voice-Letter" in one corner.

**T**HERE are to be more sound demonstrations at this year's Radio Show at Earls Court (27th August to 6th September). A special audio section will cater for high fidelity reproduction enthusiasts with more sound-proof demonstration rooms, large and small.

**MAGNAFON LTD.**, have asked us to point out that the price of the magnafon MI tape recorder is 48 gns. and not 56 gns. as stated in their advertisement on page 35 of our February issue.



# Goodsell

## switched VHF·FM Tuner

- incorporates Automatic Frequency Control giving freedom from drift
- highly sensitive
- easy instant station selection

Price **£16·9·0** inc. tax

Trade inquiries invited

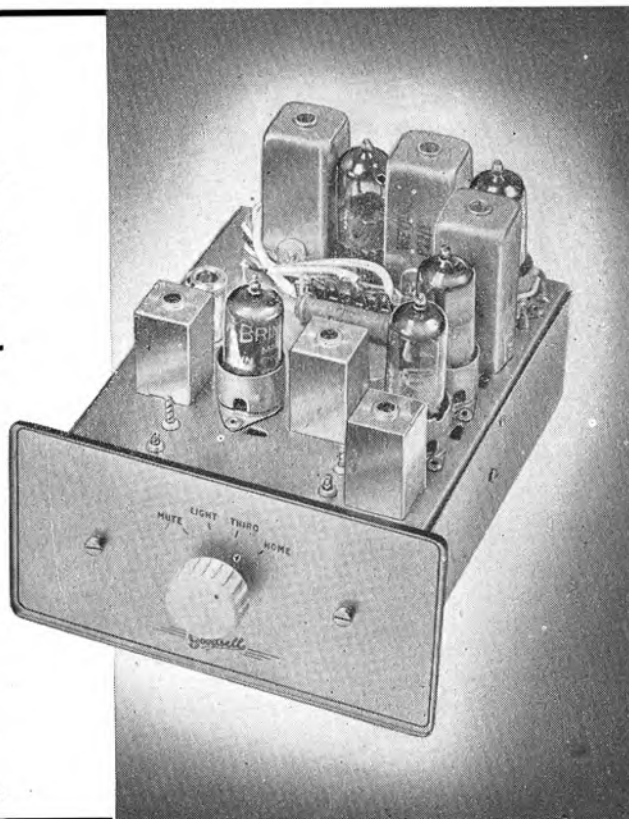
(Full dealer discounts available)

★ Demonstrations from principal Hi-Fi Dealers ★

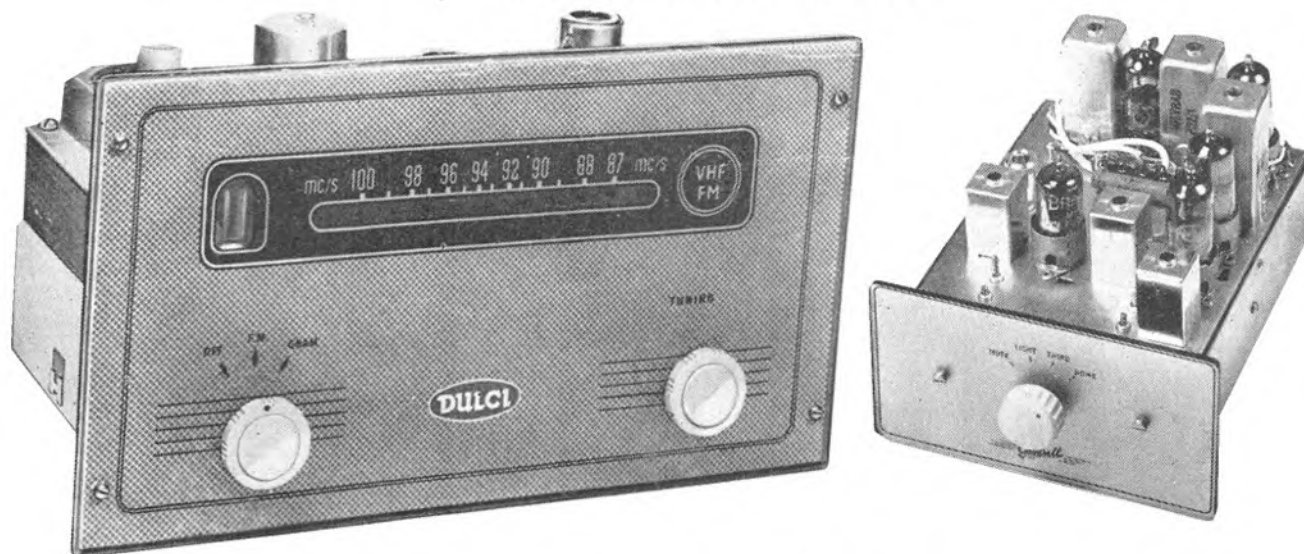
B.K. Partners Ltd., The Classical Electrical Co. Ltd.,  
John Lionnet & Co., Musicraft, Rare Records, Melford Radio, etc. etc.

Write for full details to:

**GOODSELL LTD.**, 40 GARDNER STREET, BRIGHTON, 1 Brighton 26735



The two tuners reviewed below are the first in a series of articles in which we propose to deal with hi-fi equipment for use in conjunction with tape recorders and decks.



Left: the Dulci tuner and right, the Goodsell

## TWO STERLING TUNERS

**T**HE Dulci FM tuner first appeared on the market back in 1956, while the Goodsell unit appeared this year. Both units gave sterling performances when tested under normal domestic home conditions.

The Dulci tuner is a handsome piece of equipment which incorporates its own power supply. It has a magic-eye for accurately tuning-in the selected station, and a positive slow-action dial. The dial face is illuminated and the station calibration in megacycles is picked out in red. The attractive panel, black with a criss-cross gold-line pattern, makes this unit, suitably incorporated in a cabinet, an ornament to the home.

High-grade components and imaginative design ensure that the best advantage is taken of the often superb quality of reproduction possible from the B.B.C. VHF/FM programmes. Highly sensitive, the built-in attenuator at the back of the set is needed in all but fringe areas. Neatly built, all components of this unit are easy to get at. The unit incorporates switching for connection to pick-up sockets, amplifiers and tape recorders, and incorporates an on-off switch and a pre-set output level.

The price, including tax, is £17.10.3. The manufacturers are the Dulci Company, Ltd., of 97-99, Villiers Road, London, N.W.2.

Both the Goodsell and the Dulci units were tested in conjunction with a Leak amplifier, Vortexion tape recorder and a three-speaker loudspeaker system. Many high-quality recordings on tape with these units attest as to the possibilities of achieving recordings "off the air" equivalent to the best of long-playing records.

The Goodsell FM unit gives the desired station at the flick of a switch. It has a four-channel pre-tuned selector switch, to select the three B.B.C. programmes, with facilities for tuning a fourth. On some units, the fourth position embodies a muting control.

This unit has the virtue of being compact and can thus more easily be built into an existing cabinet to convert, perhaps, an existing AM-only radiogram to VHF.

The neat gold panel is black-edged, with the stations clearly marked. This unit has also the virtue of being well constructed, easy to get at, and neatly wired. High-grade components are used throughout.

Automatic frequency control ensures freedom from drift. While highly sensitive, it is rather less powerful than the Dulci unit described above.

The output will feed quite satisfactorily into a radiogram, tape-recorder or amplifier. The unit needs a power supply, as this is not incorporated.

The price of this unit is £16.5.0, which includes tax. The makers are Goodsell, Ltd., of 40, Gardner Street, Brighton, 1.

In conclusion, the VHF/FM tuner may be said to be the "heart" of a hi-fi installation. Both these units are well up to standard and can be recommended for the home without qualification.—G.P.

### TAPE NEWS DIGEST

**R**ECORDING his town's entire musical talent is the objective of Mr. Arthur Mandy, 38, Durham Road, Luton. His intention is to record everything local and amateur in the way of music, including orchestras, choirs, piano soloists, child singers, skiffle groups and dance bands.

Mr. Mandy visits the local concerts and other music venues and makes recordings on the spot. He also does some recordings in a temporary studio. Ultimately he will edit them so that each tape is a complete concert in itself—with, if possible, some introductory words by the Mayor.

Then he intends to offer the tapes to

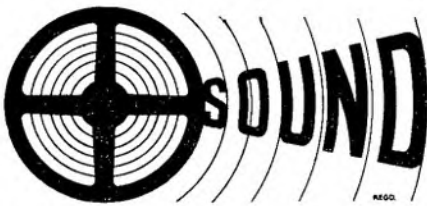
Luton Libraries Committee for the town archives.

\* \* \*  
Mr. Geoffrey Sharp, manager of the "Share My Lettuce" company had his tape recorder stolen from his car recently. It had a sketch recorded on it, and when the thief switches on he will hear the words "Don't move Carruthers! This is Inspector Kenneth Williams of the Yard."

\* \* \*  
Eric Swain, Technical Advisory Editor of *Tape Recording Magazine*, lectured to the Institute of Musical Technology on "Modern Trends in Tape Recording" recently.

The

KNOW YOUR RECORDER . . . No. 3



Latest in our series for those able to service their equipment. These pages can be cut out and pasted on card for easy reference.

## HOW TO CURE TROUBLES

### LOSS OF TOP RESPONSE and/or OUTPUT FROM RECORD/PLAY-BACK HEADS, and INCOMPLETE ERASURE:

These conditions may be due to tape failing to make intimate contact with the faces of the heads, owing to build-up of oxide dust and cellulose. Clean all heads with a soft, clean rag dampened in methylated spirits, at the same time wiping capstan, pinch wheel and tape tensioning pins. *Do not use petrol.*

If output remains low, bear in mind that a recording may have been made before the fault was cured, so test with a new recording. If condition persists, then check the pressure pad.

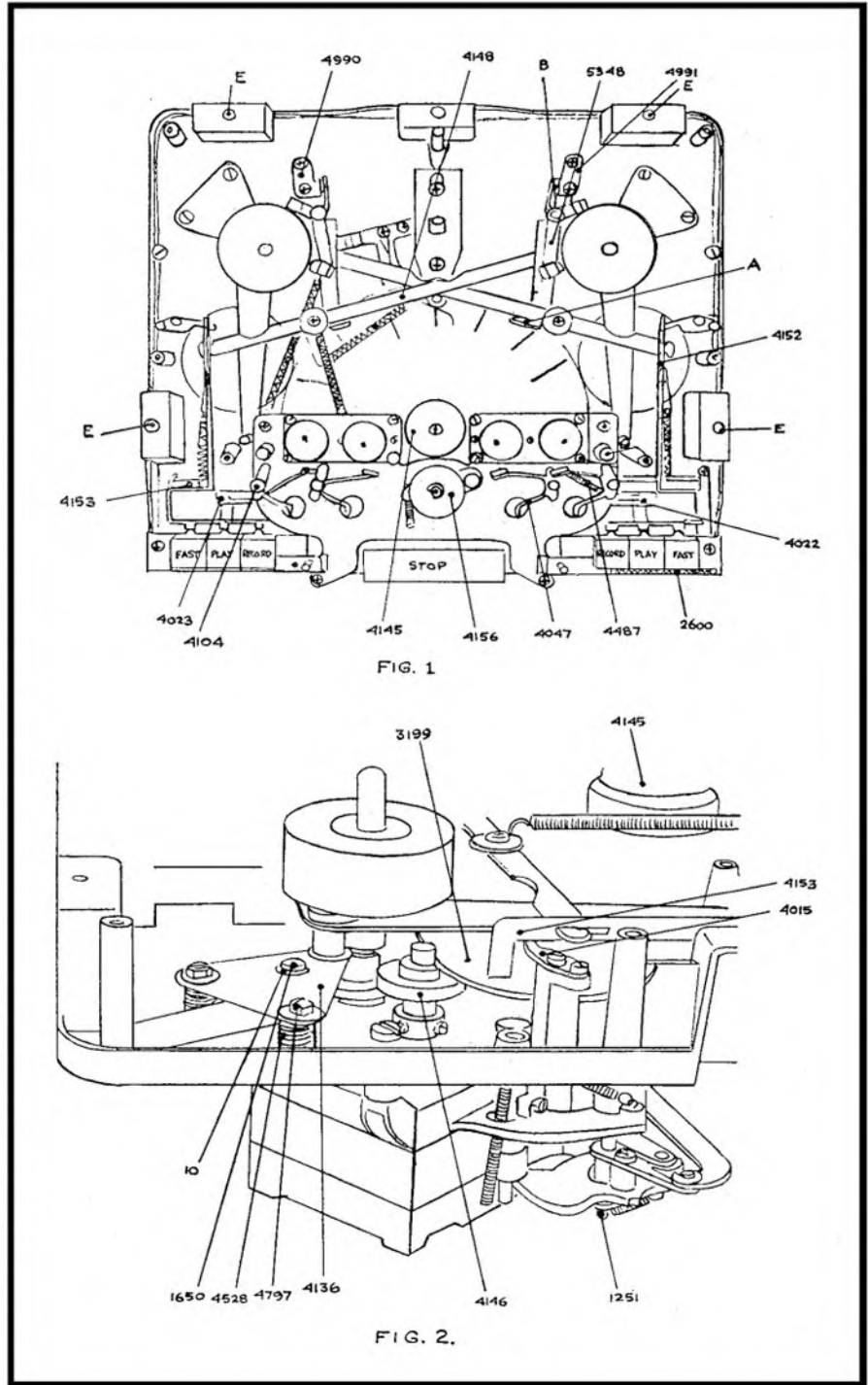
#### PRESSURE PAD ADJUSTMENT:

A pressure pad not seating correctly against the head face can cause loss of top response, poor output, or incomplete erasure. Make sure pads are secure and, if loose but in good condition, reglue in position. Otherwise, replace. Check pads (4104, Fig. 1) are not fouling edges of the slot in the head covers; any slight interference can be cured with a razor blade.

If interference is more serious, the pad carrier arm (4047, Fig. 1) may have to be bent up or down, but extreme care must be used, so as not to loosen the riveted pivot post. Ensure that the entire pressure pad carrier is free on its pivot (4104, Fig. 1). If tight, apply a very small quantity of thin machine oil with a sharpened match.

The felt pads should apply maximum pressure directly opposite the gaps in the heads. If this is not the case, bend the bracket slightly to alter the angle of the pad in relation to the head face and line of tape.

**WARNINGS:** Pads are correctly adjusted when machines are despatched and adjustments should not be necessary for a considerable time. Do not attempt to alter the tension of the pressure pad springs (4487, Fig. 1). Pressure pads should only be dry lubricated with a quick-drying colloidal graphite.



#### WOW AND FLUTTER:

Some of the possible causes of wow and flutter are listed below:—

(1) Driving members dirty and/or greasy; (2) insufficient pinch (or too much pinch) between pinch wheel and capstan; (3) brakes dragging; (4) tape reels rubbing top cover; (5) idler pulley fouling stepped drive pulley; (6) idler pulley or pinch wheel tight on bearing;

(7) spool carrier tight on spindle; (8) incorrect pressure pad adjustment (see above).

To correct such faults proceed as follows:

(1) Clean with soft cloth dampened with meth. the drive pulleys (4146, Fig. 2), motors, all three diameters, idler pulleys (3199), flywheel rim (4145, Fig. 1),

(Continued on page 38)

# HERALDING.....

# The WyndSOR Dauphin

**CONSOLE  
TAPE RECORDER  
AND REPRODUCER**



Here at last is a complete, self-contained transportable hi-fi unit. Now you can obtain superb reproduction with a single piece of equipment instead of having to connect up two or three separate items. The WyndSOR Dauphin console has been designed and developed as one instrument in which all the parts work together perfectly: the handsome bass reflex cabinet and 3 speaker assembly, professional type tape deck, and the high quality amplifiers.

**MAGNETIC RECORDING  
COMPANY**

2 BELLEVUE ROAD  
FRIERN BARNET, N.11  
Telephone: ENTerprise 2226

The WyndSOR Dauphin costs no more than you would pay for a high class portable tape recorder alone, but see all the extra features you get:—

- i. Handsome Bass reflex speaker cabinet.
- ii. 3 matched speakers (10" circular, 9" x 5" elliptical and 4" tweeter.)
- iii. Famous Harting tape deck with third head added.
- iv. Full tape monitoring through third head.
- v. Independent Record and Playback amplifiers and controls.
- vi. Bass and Treble boost and cut controls.
- vii. High and Low Gain inputs.
- viii. Provision for straight through amplification.
- ix. Attractive oak stand in contemporary design.
- x. A 1200' tape in New Emicase.
- xi. A high quality crystal microphone with gilt stand.

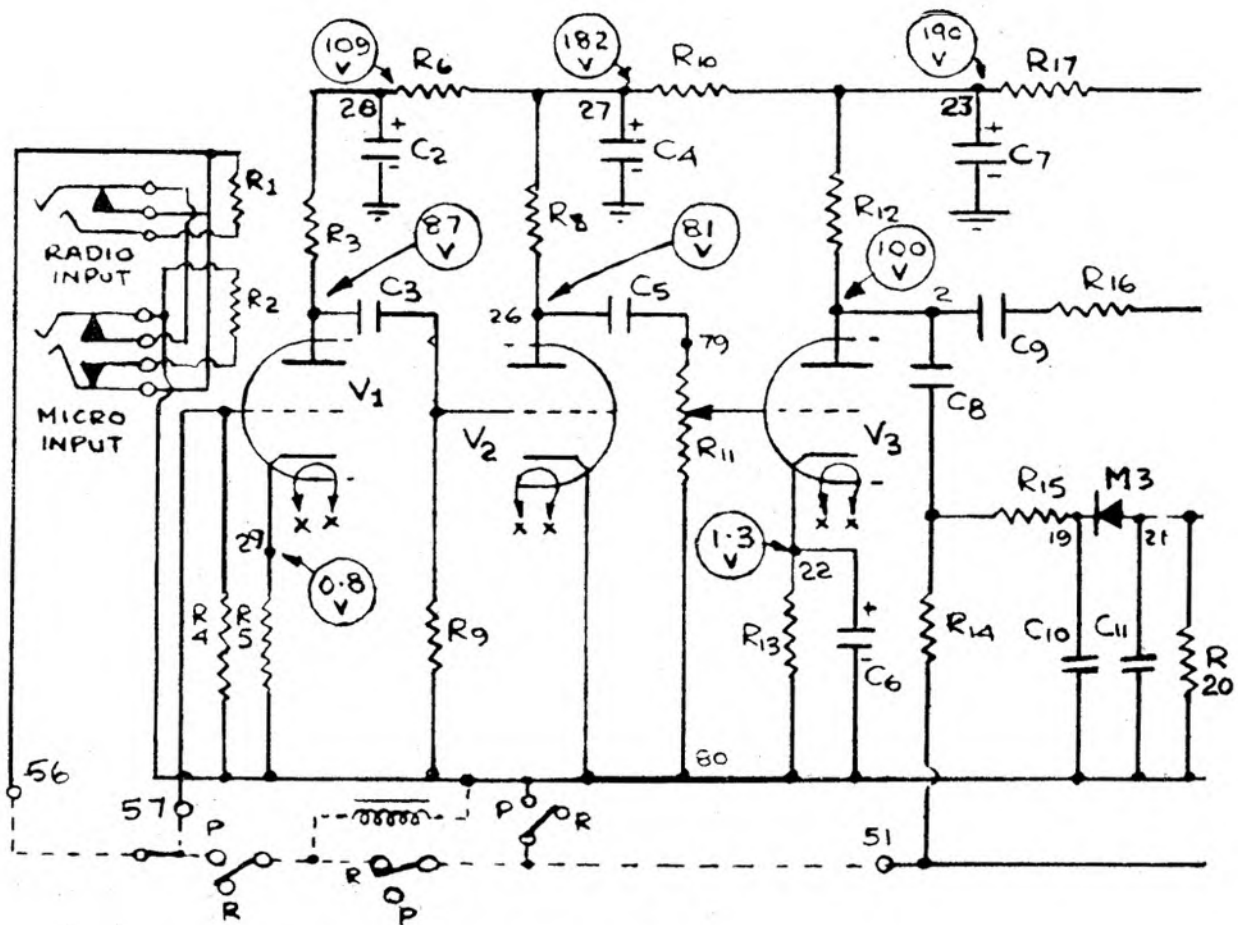
The WyndSOR Dauphin is a logical and up-to-date approach to the problem of getting hi-fi performance without the usual hi-fi paraphernalia. Be sure to see the WyndSOR Dauphin before you invest in a tape recorder. We'll be pleased to send you a leaflet giving you full particulars.

**BRIEF TECHNICAL DATA :**

Tape speeds ... .. 7½ & 3½ ips  
Frequency response ... { 50—15,000 c/s ± 3dB @ 7½ ips  
50— 8,000 c/c ± 3dB @ 3½ ips  
Wow and Flutter ... .. better than 0.1 of 1%  
Signal/Noise Ratio ... .. better than 40dB unweighted  
Output ... .. 3 watts ultra-linear at 15 ohm  
Magic Eye recording level indicator. Counter type position indicator

**89 GNS.**

**Complete including Stand,  
Microphone and Tape**



RECORD/PLAYBACK HEADS

(Continued from page 36)

capstan (4145), and pinch wheel (4156). (Note: the capstan is the centre boss of the fly-wheel.) These parts are easier to clean with the machine running in *record* or *play* position. Do not use petrol.

(2) If pressure between pinch wheel and capstan is cause of the trouble, determine first whether upper or lower track needs adjustment. Under top-plate are two ribbed levers (4022-3, Fig. 1), which carry the pinch wheel (4156) towards the capstan (4145) when either *record* or *play* buttons are depressed. When pressing right-hand button, only right-hand lever operates and vice versa.

To increase pinch pressure, bias the lever in towards the capstan, by slightly bending at the switch end of the lever. To decrease pressure, levers should be biased away from the capstan. Do not make pressure too great or capstan speed will be affected. Correct pressure can be determined by pulling tape between pinch wheel and capstan with machine in *play* position; the tape should not readily slip through, but should tend to turn the fly-wheel in at least one direction.

(3) Check that brakes are not rubbing on spool carrier drum. For brake adjustment, see below.

(4) A badly buckled reel can cause uneven running; replace it.

(5) See **Spool alignment** below.

(6 and 7) Check idler pulley, spool

carrier or pinch wheel for tight or dirty bearings by spinning in free state. If sluggish, lubricate slightly with thin machine oil. *NOTE: Do not get oil on rubber components. All parts have self-oiling bearings and should require little or no attention. Use castor oil if possible.*

(8) Always ensure tape pressure pads are not sticky.

#### BRAKE ADJUSTMENT:

Before attempting any adjustment, disconnect from electricity supply.

Press right-hand *play* button. Both brake pads of the right-hand brake assembly (5348, Fig. 1) should be clear of the spool carrier drum by approx.  $1/32"$ . If it is less, adjust by bending the bottom adjusting lug (A, Fig. 1) nearer to the operating bar (4148). Next bring machine to *play* position on other track and right-hand brake pads should still be clear of the drum by  $1/32"$ . If it is less, bend the top adjusting lug (B, Fig. 1) nearer the vertical stop member (4990-1).

Repeat the procedure using the opposite controls and lugs to adjust left-hand brake.

Recheck that, in *stop* position, both brakes are on, with lower track operation, right-hand spool carrier is free; and with upper track operation, left-hand spool carrier is free.

**WARNING:** Do not attempt to alter brake-spring tension.

#### IDLER PULLEY ADJUSTMENT:

With machine switch off, both idler pulleys (3199, Fig. 2) should rest in a position where they cannot contact the flywheel (4145) and motor pulley (4146) simultaneously.

If this is not so, idler release lever (4015) should be bent forward until it contacts the brake and idler release plate assembly (4152-3, Fig. 1). Should the idler release lever slip under the end of the control bar (4153, Fig. 2) with the speed knob in the 15 ips position, adjust by a slight upward bend.

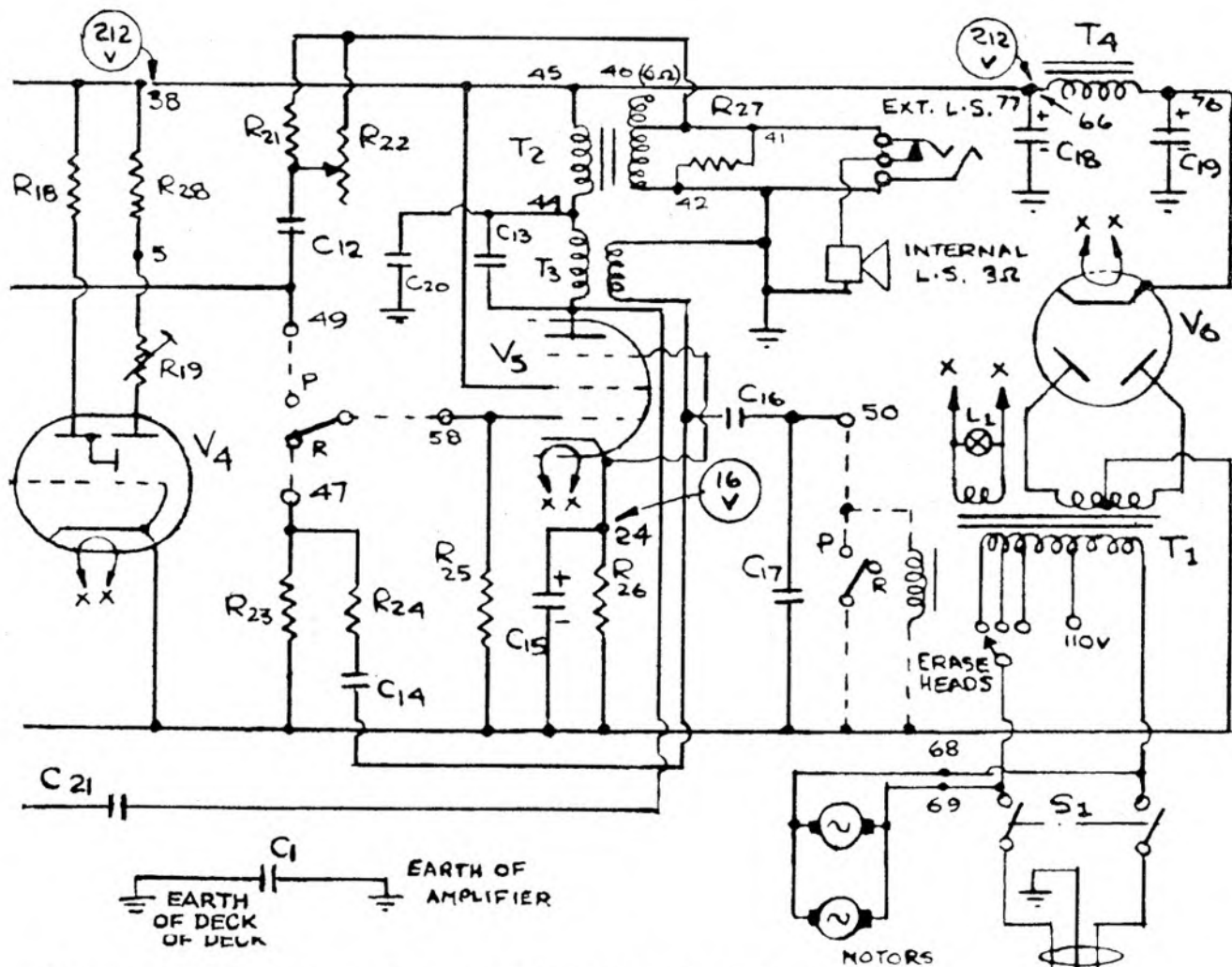
The idler may be adjusted for height by means of the 4 B.A. self-locking nuts (1251, Fig. 2) on the three speed cam spindle.

When in contact with the motor pulley in the  $3\frac{1}{4}$  or  $7\frac{1}{2}$  ips position, the idler pulley must not contact the side faces of the diameter immediately below, as this might cause wow.

**Warning:** Do not leave machine switched on (i.e. with *record*, *play* or *fast* buttons depressed) with the electric current off, as this may cause flats to appear on the idler pulleys.

#### SPOOL ALIGNMENT:

Adjustment is provided by two 4 B.A. hexagon-headed screws (4797, Fig. 2) at the back of the tape tensioning arm carrier plate (4136). To turn these screws while the top cover is in position, use a



flat open-ended 4 B.A. spanner. The outer screw is for adjusting in a forward and outward position and the inner screw will adjust in an inner and backward direction. Adjust until spool is level all round with top cover. (In some earlier models, two slotted screws were used.)

#### SPOOL CARRIER ASSEMBLY:

To remove the spool carrier and tape tensioning arm, first remove the spring (2600) from the short end of the tape tensioning arm. Now remove the centre screw (1650, Fig. 2) with the spring

washer (10) and the two hexagon-headed adjusting screws from the carrier plate. The complete assembly may now be removed. Use care not to disturb the tyre on the rewind pulley.

To refit, place the two compression springs (4528) in position on the chassis, then place the complete assembly over them and pass the screws through and enter into the chassis. Loosely assemble all three screws, refit spring (2600), tighten centre screw, and then loosen one half-turn. Before fitting top cover, readjust as under "Spool Alignment" above.

## TO REMOVE FROM CASE

**R**EMOVAL of top cover is simple, but when replacing, press right-hand play button and (with earlier Collaro decks before use of rev. counters) hold position indicator arm in stop position.

To remove deck mechanism from the recorder, remove four retaining screws (E. Fig. 1), put speed knob at  $7\frac{1}{2}$  ips, and lift mechanism upwards. When clear of cabinet, unplug deck connection sockets. When the deck is lifted clear, amplifier and power unit will be exposed.

When replacing, care should be taken to see that all switch inter-connection leads are lying flat on the deck casting and are held by the cable cleats provided. Failure to follow the correct disposition of leads within the cabinet, or failure to secure the

leads firmly, may result in hum problems.

To remove the amplifier, unscrew the three gilt screws on the right hand side of the cabinet, near the handle; unplug the connections to the power unit; and disconnect speaker connections by unsoldering at the speaker.

To replace amplifier, first check that the top of the screening can carries an insulation piece; then fit amplifier in position in cabinet, screw gilt fixing screws into position, using the gilt cup washers; connect speaker and plug in power unit connections.

To remove power unit, unscrew four retaining nuts and unplug all leads.

The speaker is secured by four retaining nuts.

- RESISTORS**
- 200K;
  - 2.2K;
  - 50K;
  - 1M;
  - 500 ohms;
  - 200K;
  - ;
  - 200K;
  - 2M;
  - 10K;
  - 1M. VC;
  - 100K;
  - 1.5K;
  - 200K;
  - 200K;
  - 100K;
  - 10K;
  - 300K;
  - 100K Var.;
  - 1M;
  - 50K;
  - 250 K TC;
  - 12K;
  - 47K;
  - 200K;
  - 370 ohms;
  - 47 ohms;
  - 50K.

- CONDENSORS**
- .01 mfd;
  - 16 mfd;
  - .01 mfd;
  - 16 mfd;
  - .01 mfd;
  - 25 mfd;
  - 4 mfd;
  - .1 mfd;
  - .1 mfd;
  - 300 pf;
  - .25 mfd;
  - .01 mfd;
  - 1,000 pf;
  - 1,000 pf;
  - 50 mfd;
  - 5,000 pf;
  - .015;
  - 16 mfd;
  - 16 mfd;
  - .001 mfd;
  - 200 pf.
- These values subject to variation without notification.

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### 27/6, 78 rpm. 13/6

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and MELODY HOUSE, 43, HALLGATE,  
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MANCHESTER 13 ARDwick 5762



## LETTERS TO THE EDITOR

Two lively letters from our postbag are given special display below.

### Reader calls for social history on tape

I SUPPORT the British Amateur Tape Recording Contest as a worthwhile venture. I think the same is true of the International Contest.

Tape recording should be encouraged by these activities. It should become an 'art-form' in its own right. But to talk about 'art-forms' may sound high falutin to some—not I hope to your correspondent, Mr. Harold Rottesman, a very worthy pioneer. This should not, however, discourage another brand of recording activity—namely, social history.

I think the written word has as great a future as it has a past, but types of communication change. If, as it is reported, a tape that can last a hundred years or more has been invented, there seems little doubt that we can have cosy chats to generations unborn!

This is, above all, with film, the best way of preserving the conversation, dialect and memories particularly, of older folk. But it really is a technique to be pioneered like 'plays on tape.'

So let's get out and record the everyday life around us, in the streets, the pubs and home. It will probably interest the sociologist of 1994. And why not include such a category in your competition? It is the sort of thing *Tape Recording Magazine* should encourage.

Bayswater.

*The Editor writes: Surely such a category is agreeable to our readers either under 'documentary' or 'actuality.' Either category can accommodate the sort of recordings he discusses.*

M. HIGGINS.

*And don't be too pessimistic! On another page Alan Lomax talks about just the sort of recordings you mention. The same is true of recent work in Suffolk, Liverpool and Hampton Hill, Middlesex.*

### HAVE A HEART!

MAY I, as a service engineer of some 30 years standing, be allowed to comment on your series "Know your recorder?" You head the article with a suggestion that "many readers have the knowledge and skill to service their own equipment."

Not for one moment do I doubt that this is correct, but please Mr. Editor, how about those who are not capable? Have you not heard the saying that "a little knowledge is a dangerous thing?" It is not good enough simply to say that it would be foolish to take a recorder to pieces because of, shall we say, a broken mains lead—that is exactly what the uninitiated are likely to do.

Then they will be frantically searching through the section marked "how to cure troubles."

What a hope! How can they tell whether pressure pads have got 15-17 grams—or lbs for that matter!

Can you imagine what's going to happen? If not, I can tell you: it will all be bundled back into the case, and taken down to the long-suffering dealer to sort out.

Please, have a heart.  
Enfield.

E. A. GIDDENS.

# New!

## BASF EDITING SOUND TAPE

the tape you can write on

This new rough backed tape will be a winner among tape recording enthusiasts and users of cine cameras.

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# Classified advertisements

Rate—Sixpence per word (minimum 5s.); Trade, ninepence per word (minimum 10s.); box numbers, one shilling extra. Payment with copy. Copy should be sent to Advertisement Department, Tape Recording Magazine, 1 Crane Court, Fleet Street, London, E.C.4.

**TAPE DUPLICATING SERVICE.**—14 K.C.S. at 7½ ins. EDITING. LADBROKE 5071.

**SONOMAG ADAPTABLE**, new June 1957.—As new, with powerpack, £22. 20, Church Lane, Weddington, Nuneaton.

**SOUND NEWS PRODUCTIONS**, Britain's oldest full-time transfer service would transfer your recordings to 78/LP records at 1952 rates. Equipment hired, serviced. Very limited quantity extended play-tape from 37s. 6d. (1,800 ft.) standard 25s. (1,200 ft.) on 7" reels. 10, Clifford Street, London, W.1.

**THE TAPE RECORDER SPECIALISTS** offer wonderful bargains in Tape. Famous British make. 7 in. 1,200 ft. 22/6; 5½ in. 1,200 ft. (L.P.) 22/6; 5½ in. 850 ft. 19/6; 5 in. 850 ft. (L.P.) 19/6; 5 in. 600 ft. 14/6; Each plus P. and P. 1/6. Send now only 500 reels available. **TAPE RECORDERS** bought for cash. All makes stocked, no interest terms, free offers, specialised Repair Service. **E. C. KINGSLEY & CO. (T)** 132, Tottenham Court Road, London, W.1. EUSton 6500.

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Please insert the advertisement set out below in the next issue of *Tape Recording and High Fidelity Reproduction Magazine*. I enclose cheque/postal order for..... in settlement at the rate quoted in adjoining column.

(Signed)..... (Address) .....


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Name.....

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 .....  
 .....

**GRUNDIG TK9**, good condition; mike, foot control, earphones, etc., 10,000 ft. tape. £58 (cost £98). A. Edmonds, 8, Blenheim Road, S.W.20.

**SIMON SP/2 Recorder**, Simon V.H.F./F.M. Unit, Lustraphone LFV/59 Dynamic Microphone Table Base. All perfect condition. Cost £115. Sale £85. Box 235, Tape Recording, 1, Crane Court, London, E.C.4.

*We regret that Stanley Jepson's last article in the series on "Synchronisation with Cine" has had to be held over till next month.*

**COMPREHENSIVE 78/LP Tape to Disc Recording Facilities.** Rendezvous Records, 19, Blackfriars Street, Manchester 3.

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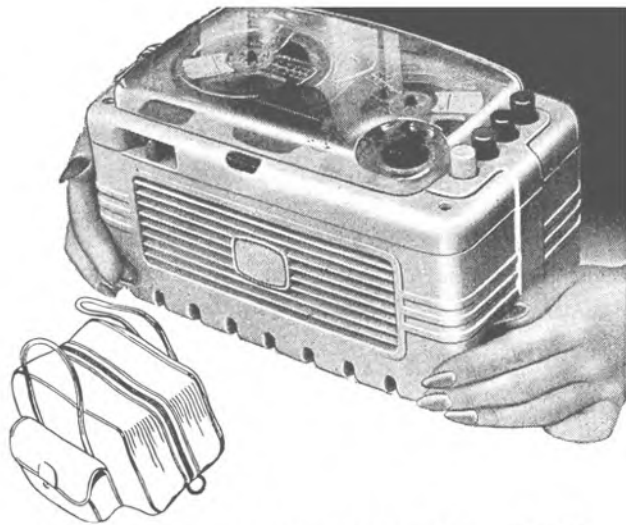
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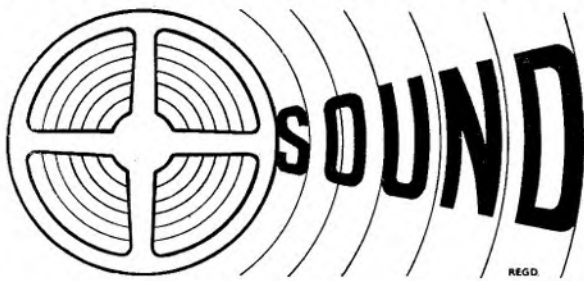
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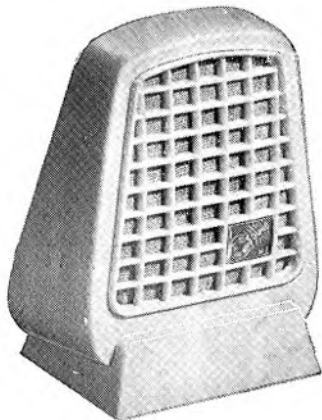


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