

MAY
1957

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TAPE RECORDING

AND REPRODUCTION MAGAZINE



SOUND-FOR-CINE

SPECIAL ISSUE

Progress and prospects with synchronisation

Pages 12—15



"POPS" COME ON SPOOLS

A survey of music-on-tape Page 11



BRITAIN'S FIRST TAPE CONTEST

"Summer 1957"— full details Page 7



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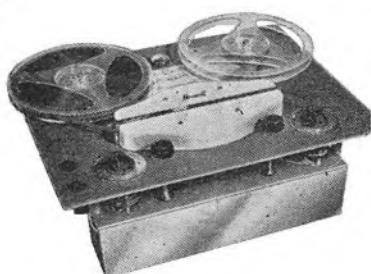
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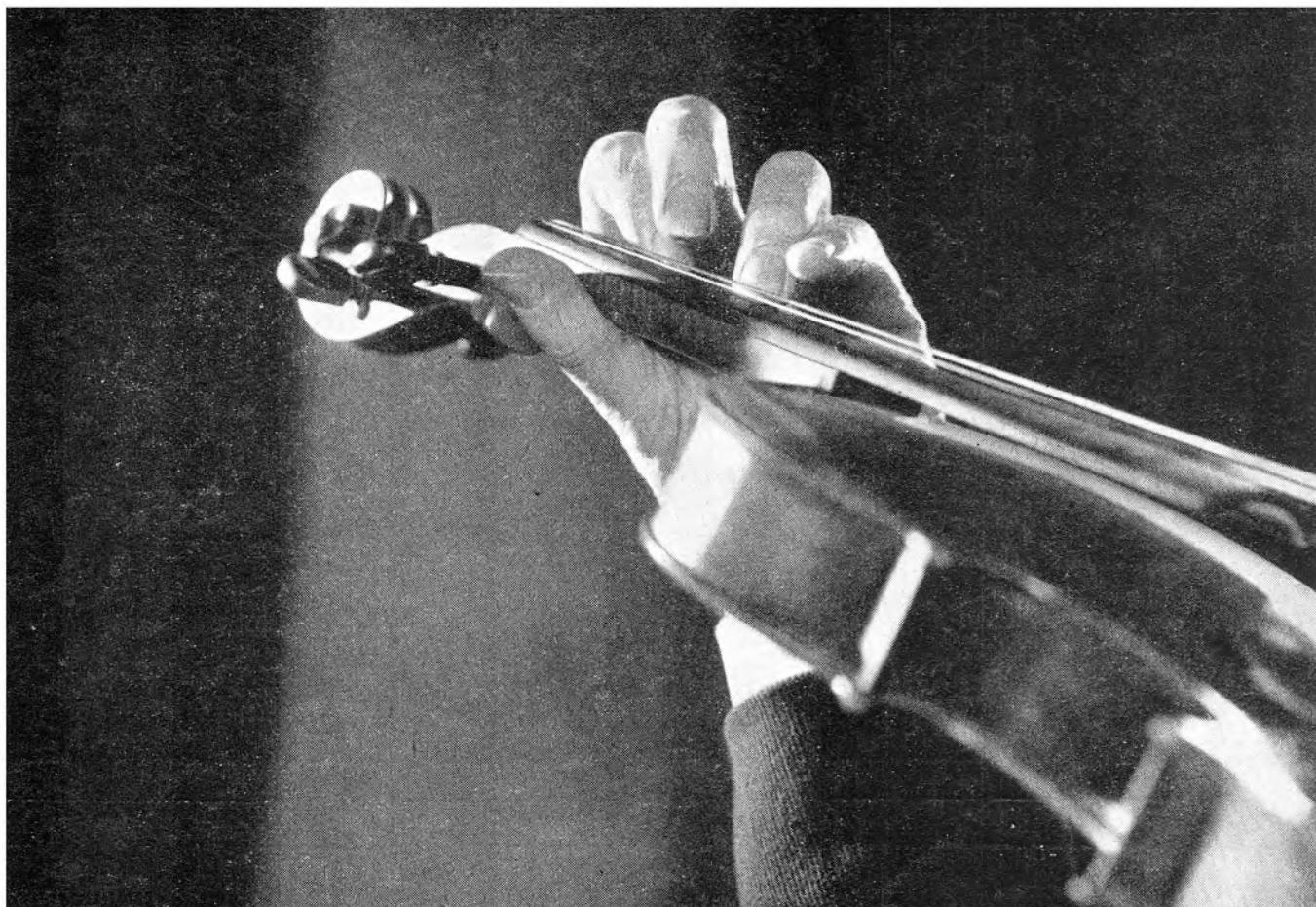
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reporting on the home, office, factory, school, ciné,
amateur dramatic and musical uses of sound tape

CONTENTS

THE EDITORS' VIEW

BRITISH AMATEUR TAPE RECORDING CONTEST

Preliminary announcement

Page 7

MAKING A FEATURE TAPE

First of a new series

Pages 8 & 9

"POPS" ON SPOOLS

Current issues reviewed

Page 11

CINÉ SECTION

Progress with tape for films

Pages 12 to 15

RECORDERS REVIEWED

The Wyndson Regent

Pages 16 & 17

MORE ABOUT SOUND EFFECTS

Pages 18 & 19

COVER ILLUSTRATIONS by courtesy of Brighton Corporation and Brian Worth.

The Budget and the Future

EVERYONE CONCERNED WITH the manufacture, marketing and use of tape equipment has been anxious and apprehensive for months past, lest the Chancellor of the Exchequer should extend purchase tax to this field.

The danger is now past, and everyone can breathe a sigh of relief and set to with renewed enthusiasm and vigour to expand the industry. Expand it was bound to in any case, but the knowledge that there is to be no artificial fiscal check on it is bound to stimulate growth.

There is, in fact, every reason now for confidence, indeed for optimism. One can appreciate how wise, as well as courageous, were the manufacturers who went ahead with bold plans and produced the exciting new equipment now reaching the shops.

Many of our readers will have seen it at the Audio Fair, which this year proved a most inspiring occasion. One knew, as one studied the exhibits there, that one was walking around the ground floor of a major revolution. This revolution is going to make magnetic tape a familiar and essential adjunct to our everyday lives, on a scale which may surprise even those who are alive to the gathering momentum.

Some of the ways in which the scientist is now learning to use magnetic tape seem staggering to a lay mind. It has passed far outside the audio field. Tape is part of the "brain" of the electronic computer and of the automated factory. Tape is likely to revolutionise television and photographic techniques. From time to time, we shall keep our readers informed about these exciting possibilities and achievements.

But our main responsibility lies in the field of sound reproduction. As the Audio Fair indicated, the rich and dramatic opportunities rest in the hands of manufacturers whose vision and ability should give us confidence.

Tape Recording Magazine believes this is the moment to make its own special contribution. In this issue readers will find the first announcement of the British Amateur Tape Recording Contest. We believe this can be an important stimulus to the home use of tape recorders. The Contest will begin on a modest basis this year, but we resolve to build it up into an event of major importance as tape recording becomes more widely established in Britain.

ANOTHER STORY OF OVERSEAS
ADVENTURE WITH A RECORDER

Fame for a Chinese in Alice Springs

AYERS Rock—three hundred miles south-west of Alice Springs, in the heart of the Australian desert—has probably been seen by only a handful of white people. This huge, mysterious mountain plateau springs straight up from the surrounding scrubland. How it got there puzzles geologists. From what strange pre-historic convolution it sprang remains a mystery. Constance Paul, star of T.V.'s *Careering with Constance* series is among the few visitors.

She has filmed the area—both still and ciné—and has made on-the-spot recordings—particularly at Alice Springs—where some of the world's most original artists and cosmopolitan characters live.

Constance Paul is herself a "character." From the salons of Knightsbridge where she lives, to the log huts of Alaska, the down-town areas of San Francisco, and the golden road into Kashmir, she takes all in her stride.

As a young girl in post 1914-18 war London, she studied art and architecture. As an interior decorator and a lecturer she toured America in the 1940's. As a film-maker of documentaries she toured the world in the 1950's. As a recording enthusiast she now combines both roles—with that of a T.V. personality.

She is relaxed and enthusiastic about her new career as well as the future of sound recording. Yet she is not the sort of person to let grass grow under her feet. If the mood takes her she will up and away.

That was how it was several years ago when she went to make a film in Yugoslavia. "I took a Grundig TK.9 with me for the first time, ran it off the car battery and brought back some first class recordings—particularly of folk singing." This recording machine has had many subsequent adventures. We will come to them in a moment.

Since then she has filmed in Alaska, parts of India, Egypt and aborigine Australia—to mention only a few.

Aborigine Australia has been the scene of some of her most exciting recording adventures.

For at Alice Springs live some of the world's most splendid primitive artists, including the great Natmatjara. Untrained, uninfluenced by any other artists, they set down in paint and crayon their world, the hinterland of Australia, as it appears to them. Their works, when "discovered" by European observers, have astonished the outside world. They have been exhibited in several continents, astonishing



Miss Constance Paul with her recorder and some of the valuable paintings she brought back from the Australian bush

audiences by their bright colours; above all, their sincerity. Natmatjara is the greatest of all. Yet he remains a comparatively humble man, living the life of his ancestors.

We heard his voice, his views on life, on his art, and his surroundings—on the recording Constance Paul brought back. We heard the Italian immigrants of Alice Springs endeavouring to render their native operatic arias above the din of a community get-together, and we felt something of the remoteness which these people must feel when dwarfed by the vastness—the sheer unconquered "bigness"—of Australia today. We heard all this on the new TK820 which Constance Paul now uses (*as above*).

What happened to the TK.9? Thereby hangs a tale. A Chinese lives in Alice Springs (that's not so remarkable when you come to think about it). He has a daughter who has an exceptionally fine voice. She wants to be an opera singer. But the journey to the Sydney Conservatorium is long and expensive, and so would be the cost of maintaining his daughter there.

He heard the TK.9 and offered to buy it. He recorded his daughter's voice and sent it to Sydney. Back came an encouraging report. A career was launched—and now the recordings pass to and fro frequently.

Has Miss Paul any tips to pass on? Yes, spontaneity is one. "Try and get out and about with your recorder. Don't be afraid of trial and error methods. One can wait too long for perfect conditions."

Judging by the results of some of her recordings she has certainly achieved spontaneous—and highly successful results. You may be hearing some of them in her future television programmes. Listen, and judge for yourself.



- ★ Here is your chance to show your tape-recording skill, and to have a lot of fun at the same time. Get the flavour of this Summer into sound.
- ★ Perhaps you will make yourself Britain's first tape recording champion.

Competitors are asked to submit a recorded tape with playing time not exceeding 15 minutes on the theme of "Summer 1957."

A panel of expert judges—the names will be announced later—will decide the winner, who will receive a special framed certificate and a cash award of £10.

★ Those sending the six next best entries will receive certificates of merit.



★ TAPE RECORDING MAGAZINE believes that this can become an important and exciting annual contest and, if the support for the present competition confirms this view, will later sponsor an annual British Tape Recording Contest on a more ambitious scale, with classes catering for different types of recording and with larger awards.

★ Meanwhile, no one need be deterred from entering the present contest because of lack of experience of recording. This issue contains a second article on sound effects.

It also contains the first in a new series under the general title: "Making a feature tape." Regular articles in this series will provide all the basic information which you need; then it is up to you to experiment.

launches the first

BRITISH TAPE RECORDING CONTEST

By the time you have had your summer holiday you should have been able to collect all the "raw material" for your recording. Then a fortnight to select and edit it.

And your finished tape should be submitted to **TAPE RECORDING MAGAZINE** not later than Saturday, October 5, 1957.



The winner will be notified by telegram and will be invited to come to London (at the magazine's expense) to attend a special gathering on Saturday, October 26. There, he or she will receive the certificate and cash award and the winning tape will be played, together with any others considered to be of sufficient merit and general interest.

Details of this gathering, to which all readers of TAPE RECORDING MAGAZINE will be invited, will be announced later.



In judging entries for this competition we shall give full weight to all relevant factors; for example, the fact that a recording made on a battery-operated portable includes a fuller range of effects than one made on a mains-operated model will not in itself be decisive. Oxford accents in a commentator will count for no more (and perhaps less) than a broad Northern brogue. So, as we say, every reader can enter this competition with a genuine chance of success.

Application forms, with full details, will be ready soon. Do not write yet. We will give further information in our next issue.

For the moment, study the relevant articles in this issue, and start planning your "Summer 1957" feature. It may make *you* the champion.

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COMPLETE WITH CABLE



By R. BROWN

The author of this article is an experienced broadcaster with several B.B.C. scripts to his credit

THERE are three principal ways in which to make good use of a tape recorder in the home. One is as a tape-gramophone—to play recorded music. Another is for vocal correspondence—to keep in personal touch with tape friends all over the world.

The third, and probably the most fascinating, is to make feature programmes on tape. These can be as important a part of the family archives as the old-fashioned snapshot album or the increasingly popular ciné films. It astonishes most people when they experience for the first time how sounds can recapture the magic of the past and create a joyful mood of nostalgia.

But there is a stronger argument for feature-making: it is a genuinely creative exercise. In the modern world, in which more and more people get their amusement in purely passive ways—by watching or by listening, it opens the door to activity in which you get your interest and excitement in direct relation to the effort of imagination and technical ability which you yourself are prepared to make.

Once you have made up your mind to try, do not rush to your tape recorder. Take a week or so to think quietly about what you want to get on to your tape. You want to make a recording on the *Tape Recording Magazine* contest theme of "Summer 1957"?

Start, then, by sitting back in your armchair and letting your thoughts roam over other summers in your memory. Just relax and enjoy your recollections for a while.

Then start to concentrate on the sounds that remain alive in your memory. Try sternly to exclude all visual impressions and only to hear the sounds. Remember how the water lazily splashed against the side of your rowing boat when you went fishing off that little Cornish harbour. Remember that gay and crowded beach at St. Malo and the harassed mother shouting *Depechez-vous* at the vagrant children. Remember, if you are a girl, how that sleek young fellow told you, above the cacophony of the band in Blackpool's Tower Ballroom: *There's not another gal like you in Lancashire*.

Get out pencil and paper and make a list of the sounds that come back to mind to re-create the happiness of past summers. Those are the sort of sounds you need to get

★ Continued in next column



USE YOUR IMAGINATION

making a feature tape

The first in a special series of articles, advising beginners how to make a feature tape suitable for the National Tape Recording Contest announced in this issue.

on to tape now if you are going to make a success of your feature.

Your list will depend on your interests. These are some of the things that might appear on it:

*Waves splashing on a shore;
Water lapping against a boat;
"Good morning" broadcasts at a holiday camp;
The crack of leather against willow and the muted
applause at a village cricket match;
Church bells at evening in the country;
The gaiety of a dance hall;
Snatches of foreign languages or songs;
Children playing;
Farmyard animal noises;
Train, car or plane engines;
Bee-buzz and bird-song in a quiet garden.*

The next step is to decide the scope of your feature. Are you going to attempt to build up a sound picture of a whole summer season? Or will you take one symbolic day spent on a picnic, or at a cricket match, or out motoring? Obviously, the latter will be an easier project to handle.

When you have decided, go through your list of sounds and pick those that are likely to be appropriate to the feature you have in mind.

Next try to form some idea of the *shape* of the feature you will make. Obviously, you cannot be too definite about this in advance of the actual happenings which you are going to describe on tape, but you should try to visualise the sort of things you hope you will be able to capture.

If you propose to record a day's outing by car to the coast, think of an appropriate opening sound for the feature. Usually music provides the best "curtain raiser" (but, whenever you are using musical effects, keep in mind the laws of copyright).

You might fade out the music to an announcement, dramatising your voice more than normally: "*August Bank Holiday, 1957. . . . The sun rises boldly in a sky full of promise. Another day of golden glory in the*



cavalcade of this memorable summer. And in the kitchen of 55 Nelson Street. . . ."

The narrator's voice fades out and in comes the excited chatter of children, inquiring if the sandwiches are cut, and what's in them, and what time will we get to the seaside, and who's going to sit in the front, and where's Peter put his bucket and spade, and Oh, do be quiet for a moment, children.

Get the idea? Bring it out in a breathless rush, phrase piled on phrase, to capture the excitement of the moment.

And you're away. Build on that: a little narration, a little conversation, some background sound effects (like the car engine running), suitable music to suggest progress (the William Tell Overture—if you get along as quickly as that!).

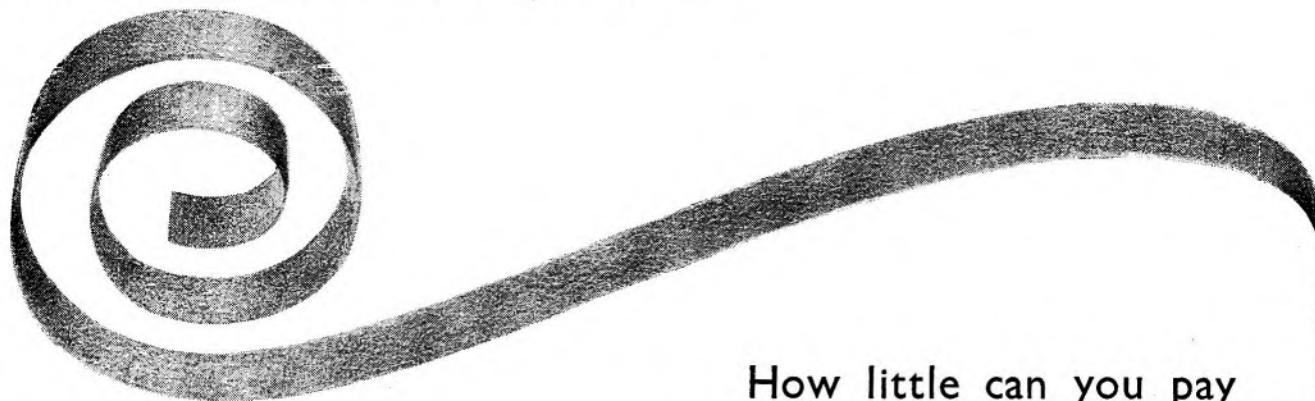
Start off at a cracking pace. Slow down as the day proceeds, the sun gets hotter, the children more tired. Fade out on some pleasant but soulful music, weary Pa and Ma home again in their armchairs.

The previous seven paragraphs indicate the sort of thing you should map out in your mind before you start. On the day, things may not work out as expected, and the whole thing may need to be amended. But at least you will have had a preliminary exercise in *shaping* a programme.

When the day is over and you play over the recordings you have made, you will soon be able to reorganise your plan to fit the actual events and sounds.

Then rough out a script, showing the music you intend to work in, the sound effects, the narrative, and the conversation and the like. The narrative, which is the connecting link between all the other components, is added last and should be written out fully and rehearsed once or twice.

When you have done all this, you will be ready to edit, dub and put together your final tape. How to set about these tasks will be described in later articles.



How little can you pay for a **good** tape recorder?

Sixty guineas? Fifty-five? Fifty? Stop guessing—here's a really good instrument for only *thirty-nine guineas*. It's the Walter 303 and people who've already tried it tell us we've got "a winner". With the 303 you can (1) build up your own record library of broadcast music; (2) record from discs or microphone; (3) record 'live' instrumental and vocal performances; (4) record and play back, rewind or reverse the tape, and erase—all with *one* control, the ingenious 'Joystick'. You can also connect the 303 to a radio or other amplifier for greater volume—but you won't often need to! Even *without* an extension loudspeaker the maximum volume on playback is great enough to fill a medium-size hall. Technically speaking, the Walter 303 has an output of 3 watts, a frequency range of 40—10,000 cycles, and a signal-to-noise ratio of —35db. It's housed in an attractive two-colour case and is easily carried from one place to another. The 303 is in the shops now. If you *do* have any difficulty, please let us know at once and we'll send you the address of your nearest stockist.



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ON SPOOLS



The tape recorder is a music reproducer PLUS. That's why young people are turning to it as the best way of getting their pops tunes. LESLIE DOWSE here discusses the tapes already available—and makes suggestions for future issues.

THE slender catalogues issued to date demonstrate that no definite policy has yet been decided regarding the issue of tape records of popular music and jazz.

Beethoven by Solomon, Mendelssohn by Menuhin, and Mozart by Elisabeth Schwarzkopf—all of these recordings are available, which is as it should be.

But what is there to offer the lover of the less serious forms of music? At the moment, the choice lies between the perennial Victor Sylvester Orchestra, the Melachrino Strings and the Orchestra of Norrie Paramor (with or without Mr. Eddie Calvert, otherwise known as the Man with the Golden Trumpet).

TAPE NEWS DIGEST

COLLECTING FAMOUS VOICES

TAPE recording has opened up a new hobby, akin to autograph collecting, but more exciting. It is the collection of famous voices.

An American pioneer, Rev. H. B. Kishpaugh, of Olive Bridge, New York, has among his collection the recorded voices of Tolstoy, the Emperor Franz Joseph, Thomas Edison, Pope Pius XI and Eamon de Valera.

RECORDING HELPED HIS FOOTBALL

AN 18-year-old left-winger who has just made his debut with the West Ham team was started on the road to soccer fame by a tape recording.

Terry McDonald used to be a ground-staff boy at West Ham. Eighteen months ago he bought himself a tape recorder and asked Manager Ted Fenton to record advice on his play.

Mr. Fenton put on tape a summary of the points which McDonald should concentrate on improving. In the 18 months while he waited for his chance in the first team, McDonald listened to the recorded advice many times.

CROSBY COLLECTORS USE TAPE

ENTHUSIASTS for Bing Crosby recordings have launched a new bi-monthly duplicated magazine called the *Crosby Collector*.

Explains editor Ron Davies: "We are not, repeat not, a 'fan club' and none of this degrading type of material will ever see the light of day in this magazine. . . . We are interested in Bing from the point of view of the entertainment and worthwhile recordings he has given us for so many years."

A sound magazine called *Tape Crosby* is planned to appear at a later date. Hon. President is Stan White, 61, Stanley St., Rothwell, Northants.

Next month

HOW THE BLIND USE TAPE

Classical music on spools—a survey

ANOTHER ARTICLE ON MAKING A FEATURE TAPE

The most enthusiastic admirer of these best-selling music-makers would admit that the sounds they produce are essentially background music. Surely, nobody ever really sits down and *listens* to Mr. Sylvester?

Ballet, opera and symphony are already well represented on tape, but for the serious student of the twentieth century's own form of music there is as yet nothing of any consequence.

It is a sad thought that the only recording from the pen of the prolific, immortal Thomas "Fats" Waller is a version of *Alligator Crawl*, by Philip Green and his Orchestra, under the heading "Interlude for Rhythm."

What have the "Friends of Fats" to say about this, when they consider the numerous records by this popular jazz artist—long playing and 78s—that have been released by HMV during the past few years?



The music of Glenn Miller is another example. Only last year an album of five 12-inch long-playing records of his Army Air Force Band was issued, placing on record some of the finest white swing band arrangements ever made.

Could not a suitable selection from this mammoth album be issued on tape? Not everybody has £9 and three hours to spare, even on this deserving subject, and the Miller Appreciation Society would doubtless make such a venture a commercial proposition.

No doubt it is the constant consideration of the prospects of financial success of tape records that has guided the companies in their releases so far. Yet when one considers the interest shown nowadays in all the varied and highly publicised forms of show business, it is difficult to understand why there has been such a delay in recording on tape the great names of the entertainment world.

Many subjects come to mind—the saga of Louis Armstrong over thirty years, Bing Crosby's consistent appeal during two decades, a history of the early Blues singers, an evening with Danny Kaye.

There we must leave the matter for the consideration of the gramophone companies, with this last thought. "The Music of Eric Coates" will sell well on stereosonic tape. So will the music of Duke Ellington, and on as many spools.

JOHN ALDRED introduces readers to the exciting possibilities of**MAGNETIC RECORDING FOR
HOME MOVIES**

SINCE the introduction of recording on magnetic tape, the addition of sound to home movies is within easy reach of anybody with an ordinary tape recorder. Tape is the ideal medium for ciné use, being easy to record, giving permanent recordings, and erasure when desired. In the past one had to rely on either a disc recording of the acetate variety to play with one's film, or a rather costly photographic sound track, which was available to 16 mm. users only. There are three gauges of sub-standard film for amateur use, 8 mm., 9.5 mm., and 16 mm., but in the last few years the 8 mm. gauge has enjoyed an ever-increasing popularity, being by far the most economical. One loading of the camera with a 25-ft. double run lasts for four minutes, at a cost of 23s. for black and white, and 29s. for colour. A 200-ft. spool of film will run for 16 minutes, and ties up very nicely with 600 ft. of tape running at 7½ inches per second.

Family sounds

The majority of amateur films consist either of family records or holiday adventures; so the type of sound track required will no doubt consist of a commentary by yourself, together with some kind of musical background. This does not call for anything elaborate in

the way of equipment for synchronising sound with picture. Providing you make a start mark on the tape and also on the film, by starting both machines together, it is a fairly simple matter to adjust the projector speed slightly. A few frames loss of sync. will not be very obvious with a commentary, and by manufacturing a simple stroboscope for your tape recorder a more accurate projector speed can be maintained.

Making a strobe

Some will be familiar with this simple device. It consists of a series of spokes of a wheel, which can be made to appear stationary at a certain speed when illuminated with an interrupted light source. The beam from your ciné projector can be conveniently utilised since it is interrupted 16 times per second by a shutter which has three blades. This gives 16 x 3, or 48, pulses of light. The stroboscope can be added to the capstan shaft of your tape recorder. The number of spokes required is found by the formula N multiplied by S equals 48. S is the capstan speed per second. By placing your tape recorder so as to catch some spill light from the projector beam the spokes can be kept stationary both during recording and playing back, by manual operation of the projector speed control.

All 8 mm. projectors have a series wound variable speed motor, and by a slightly more elaborate attachment known as a synchroniser the tape itself can control the motor automatically. There are several of these attachments on the market and all operate on the same principle. The running of the tape recorder is unaffected, except that the tape path is extended between the capstan and take-up spool. A second capstan is coupled, via a flexible shaft, to the projector drive or sprocket shaft, and a loop of tape is formed between the two capstans round an idler roller on the end of a movable arm. This arm is attached to the slider of a resistor inside the synchroniser box, and connected in series with the manual control on the projector itself. In operation the recorder and projector are started simultaneously, and the projector speed adjusted for the slider arm to take a central position. Then any variance in the size of the tape loop will automatically be corrected by a corresponding alteration of the projector speed.

To mention several makes available, there is the Bolex Syncromat at £33 10s., the Norris at £19 19s., and the Eumig at £18. If you are prepared to construct one yourself on the above principle, the cost should not be more than £3 or £4.

Another method of adding sound to 8 mm. is to record on the film itself. A magnetic coating is made on to the base of the film after editing has been completed, between the sprocket and the edge of the film, at a cost of 1½d. per foot. A magnetic recording head playback attachment can be obtained, such as the Peterson for 75 gns. or the Sonor for 85 gns. The sound quality is not so good as with ¼-inch tape, since a film speed of 16 frames is only 3½ inches per second, and the track width is very small. Users of 16 mm. can obtain superior results with a wider track and by increasing the speed to 24 frames per second (which is the accepted standard for optical sound). But the 16 mm. recording projector is an expensive piece of equipment, costing up to £350.

There is one tape recorder worthy of note which is designed for the ciné user. This is the Excel, and costs around the £100 mark. The makers will adapt your projector, be it 8 mm., 9.5 mm., or 16 mm., and guarantee perfect sync. with good sound quality. Three capstans are available, for 15, 7.5, or 3.75 inches per second, and tape reels of up to 3,280 feet can be accommodated.

Making a background

Perhaps by now you will be keen to get cracking and try out your own ideas for a sound track to your home movies. A few words about your musical background. It is generally known that re-recording of commercial gramophone records is strictly prohibited. There exists, fortunately, quite a large variety of discs recorded by various music publishers for the express purpose of re-recording for films, radio, and television. A nominal dubbing fee of 5s. per side is payable for bona-fide amateur films, and application for copyright

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MAGNETIC RECORDING FOR HOME MOVIES

clearance should be made through either the Federation of Ciné Societies or the Institute of Amateur Cinematographers. The Federation is at 16, Princes Gate, Kensington, and the Institute at 8, West Street, Epsom. Music publishers who operate a record library include Boosey and Hawkes, E.M.I., Chappell, Paxton, Francis Day and Hunter, and Bosworth, to name a few.

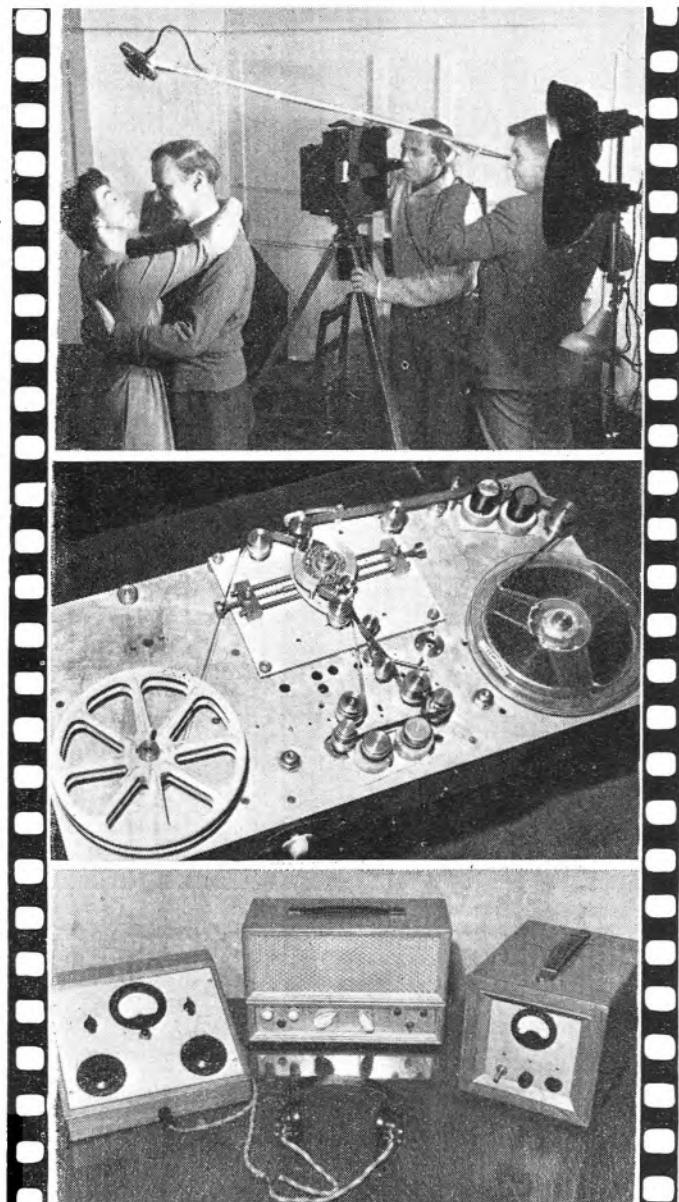
Some tape recorders have provision for mixing together more than one input, but usually one has to provide an alternative input arrangement for mixing your commentary and music. You can, of course, hold your microphone in front of the speaker on your record player and raise it when you wish to commentate, thereby lowering the music level. But this is hardly the best way to tackle the problem. At least two turn-tables will be required to play a continuous background, perhaps three, if you wish to add some sound effects. A mixing panel can either be made or purchased to control the volume from discs and microphone. Grundig make such a panel for use with their own recorders.

Prepare commentary

The commentary should be written, or preferably typed, beforehand, and run through with the film for timing and any necessary alterations. It is a good idea to make a music cue sheet, showing the discs required for each scene and noting when a fade or mix-across from one disc to another is to be made.

When making a recording, the commentator should be as far from the projector noise as possible and should use a ribbon microphone. This will ensure minimum pick-up of the projector. Give your commentator a bell-push, connected to a cue light near your mixing panel. When he is about to speak the light will cue you to fade down the music to a background level, and up again when the light goes out. Always try to mix across on the music underneath the commentary, as it will then escape unnoticed. By using one of the synchronising units, it is possible to repeat faithfully the timings made when you were recording, even during a run of 15 minutes or more.

So far, I have mentioned only one type of sound track for your home movie, that made with a projector after the film has been completed. To record your sound at the same time as you are filming requires a different set of conditions. Lip-sync. dialogue recording is necessarily involved, as there must be no possibility of losing sync. at any time, and there must be provision for editing both the sound and picture records. Normally magnetic film is used on a special recorder running interlocked to the camera, either mechanically or electrically. A 16 mm. recorder is manufactured by Messrs. Kelvin and Hughes, but since it is in the £400 bracket it is beyond the



Top picture: The author, behind camera, at work on an amateur sound film

Centre: An amateur-built tape deck to handle 16 mm. magnetic film

Bottom: A sound system in three units, left to right, mixer, main amplifier, power unit and oscillator. The two-way mixer combines inputs from tape, disc and microphone

reach of most ciné fans. But that it is possible to build an amateur machine is shown by an accompanying photograph.

There is a lot of fun to be had out of magnetic recording for home movies, and a whole host of ideas will no doubt spring to mind. For instance, if you cannot find a certain sound effect you require, it is a simple matter usually to go out and record your own.

An ex-government converter will run your recorder from a 12-volt car battery, so you will not be limited to any mains supply. Amateur ciné is a fast growing hobby, so is tape recording. They have a great deal in common, so try your skill at adding sound to home movies.

By
STANLEY JEPSON

A.R.P.S.

**Hints on
copying
your tapes**

**How to
tackle
timing
problems**

THE PREPARATION OF SOUND TRACK FOR CINÉ IS GREATLY SIMPLIFIED BY A LITTLE FRIENDLY CO-OPERATION

YOU haven't got two recorders, and do not intend to buy another! But people can co-operate to lend and borrow. This article will show just how valuable is the idea of using two, instead of one, in the field of amateur ciné.

The first advantage is duplication. Other things, like recording quality, being equal and good, the copy can be much better than the original. This is, of course, the principle behind the professional neg. pos. system of ciné—the print irons out the unevenness in the negative densities, and then the master negative is copied and is of even density, not requiring variation of light.

The same idea applies to sound. Happy the amateur (and how rare) who does not have tape recordings where there are fluffs, mispronunciations, and other mishaps, which have to be cut out; or volume variations, so that the idea of leaving the speaker volume control on one position cannot be obtained. The title music opens with an unwanted burst of noise, or something else is too low.

By cueing these mistakes in judgment alongside a timing sheet they may be rectified by gentle—repeat gentle—variations in volume during the copying, watching the needle and listening to the monitor speaker. For timing, the author finds ideal a self-starting electric clock plugged into a two-way socket to start and stop with the playback recorder.

Another advantage is that once a valuable recording has been made for a film, it is wise to take a copy. You may send it away for competition purposes, or lend to a friend, and accidental wiping off is an ever-present peril in this game!

The original tape may be full of splices, and sooner or later many splices do give trouble. The copy will be without splices . . . we hope!

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TIMING PROBLEMS

Where a tape is made to fit a film with exact synchronisation—obtained by light-linking with a strobe or some other method—it is important that the speed of the recorders used for duplicating should be exactly the same. By timing a length of tape over several minutes from cue sound to cue sound, you will probably find that the two recorders vary. Even half a second a minute will tot up to 15 minutes variation in a full spool of 1,200 feet of tape, which will throw you right out. Unless you are the fortunate owner of one of those expensive machines with gently variable speeds, when you can match the two, proceed as follows.

Make a talking clock, and keep it with your library tapes, as it is always useful for testing any drop or increase in speed. Say "Start" when the darkroom clock is started, and then speak every ten seconds . . . "ten," "twenty," etc., continuing for ten minutes. If you have a footage counter on your machine you can test whether your recorder is running slightly slow or fast.

Another way of testing exact speed is to use a testing tape.

(Continued on opposite page)

2 RECORDERS ARE 24 Times as valuable

By tests with your talking clock, you will have found that the two recorders available vary by x seconds. You compensate for this in the simplest way, by copying from A recorder to B, then back again from B to A, when you have the original time again. You can test this idea with your talking clock. If it is not so, then one recorder is not constant in its speed and should be adjusted.

I am an advocate of making recordings for films in stages. I do not mean necessarily in small bits and pieces as this results in the bugbear of stopping and starting. But music and sound effects should first be recorded, and then the commentary. You then proceed to marry the two.

ALTERNATIVES

Once you have all the background music and effects on one tape, you can proceed in one of two ways.

You can give the commentary, while letting the tape play, varying the volume when talking and recording both through the mike. But you will, of course, get better quality by the use of a mixer. Instead of doing a "live" commentary, you could, of course, record it on a second tape and then "marry" the two on a third tape through a mixer—though this, of course, involves three machines and a lend and borrow arrangement!

The second method is probably easier and better, but involves the use of a recorder with a variable bias and a super-imposition device. The author has a British machine, a Celsonic linked recorder, and with this the tape can be passed through any number of times, adding sound effects over the music, and with experience and by watching the meter, one knows just how much to erase so that some of the first sound is left, though this varies with different types of tape and experiments should be made. In this

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way, there is none of that nervous strain with the employment of a mixer, which so often is shown in the voice quality!

When I first used my Celsonic with link to projector (operating resistances which keep the projector at a dead 16 fps.) I thought I would sell my first recorder. Instead, I sent to the makers for an overhaul and now I find the use of two invaluable. For instance, after spending some time making a musical background from my tape library, I make a copy of this. Then, if I spoil the first one when superimposing the voice, I can use the second without starting again from scratch. Or I can record the voice only, and then feed it to the music previously recorded by superimposing—after I am satisfied that all is well with the commentary.

Yes, two recorders are just four times as useful, in my view!

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TAPE RECORDERS REVIEWED



a machine which, because of its separate speaker,
has a special appeal to amateur ciné enthusiasts

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

THE MAKERS

Magnetic Recording Co.
99 Shacklewell Lane, London, E.8

FIRST impressions are important, and it would be a strange buyer indeed who could resist the style and elegance of this very attractive Wyndson Regent model. The equipment, which is completely self-contained, is finished in rexine of oatmeal and olive green. The lid houses a Goodman 10in. elliptical speaker—the gilt fret of which enhances still further the appearance of the complete unit. I was particularly impressed with the very attractive perspex automatic-colour-change control panel, which becomes a subdued red or green, depending whether the record or playback position is engaged.

The control panel has three main controls. On the left is a three-position switch which selects record, playback or amplifier

position. When switched to the amplifier position, a general purpose amplifier, giving an output of approximately $3\frac{1}{2}$ watts, is available. The large control knob is termed a *master volume control* and operates when recording from the microphone input jack, and also during playback. On the extreme right is the *gram volume control* and on/off switch for the whole equipment; this control operates when recording from the *gram input socket*.

Situated at the left- and right-hand bottom corners of the control panel are two black perspex sliding doors which conceal, on the left-hand side, the *mic* or high gain input socket, and the *gram*, or low gain input socket. The right-hand door covers a two-way switch, giving either bass boost or bass cut on playback or amplifier position. To the right of this there is yet another input socket, marked *monitor*, to which head-phones may be connected so that the operator may listen during the recording process to the signal that is being put on the tape. A sensitive "magic eye" level indicator completes the control panel.

At the rear of the recorder is a three-position mains adjustment panel, the mains input socket, and the input socket for the loudspeaker, which can be located as far away from the recorder as is desired. The microphone mains lead and speaker lead pack away very neatly in a compartment provided below the speaker in the lid of the equipment. A compartment is also provided in the rear of the deck to house a spare spool of tape.

THE SIZE

Overall dimensions: $14\frac{1}{2}'' \times 15'' \times 9\frac{3}{4}''$
Weight: 35 lbs.

The Wyndson Regent incorporates the Lane tape deck, which employs three motors and provides speeds of $3\frac{1}{2}$ and $7\frac{1}{2}$ i.p.s. The centre of the three motors drives a two-step pulley, and operation of the speed selector control, which is located between the spools, changes the spring driving belt from one step to the other on this pulley. The driving belt, in turn, drives the heavy capstan flywheel. As is to be expected with this method of speed change, the manufacturers stress that the tape deck must be switched off before any attempt is made to change the speed. The other two motors drive each of the tape spools, either for winding-on or rewinding, the time for the latter being approximately 55 seconds.

The controls for the tape deck comprise an on/off lever switch and a three-position rotary switch. These two switches are mechanically interlocked so that the lever switch always returns to the off position when the rotary switch is returned to record/playback position from either the *reverse* or *forward* position.

The recording sense is in accordance with the C.C.I.R. specifications—that is from left to right on the top track; twin track facilities are provided by reversing the spools. Both the high impedance record/playback head and the erase head are fully screened.

When the tape deck is switched to the off position, brake bands are applied to both spools. This results in very effective braking with a complete absence of tape spill. A calibrated scale is provided beneath each spool so as to enable the operator to locate any desired position on a recorded tape.

★ Continued in next column

MAGNETIC RECORDING TAPE



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THE WYNDSOR REGENT

The amplifier, which has been designed to be removed from the front of the cabinet by merely removing two self-tapping screws, consists of three valves plus rectifier and "magic eye" level indicator. The pre-amplifier stage (6BR7) amplifies all signals fed in via the selector switch from the record/playback head or microphone input socket. The output from this stage is fed into the first grid of the double triode (12AX7) via the *master volume control*. The input from the gram socket is also fed into this grid via the *gram volume control*. The coupling from the anode of the first triode to the grid of the second triode incorporates the compensation network. The output from the second anode feeds the "magic eye" level indicator (EM84) and the record head when switched to the "record" position. When the selector switch is in the *amp or playback* position, the output from the second triode is fed to the grid of the output valve (6BW6). During the recording process, the output stage is caused to operate as an oscillator, providing the high frequency bias current to the erase head.

The two-position tone control switch merely brings into circuit on the "Bass Boost" position, a selective negative feed-back path to the second cathode of the 12AX7. This point can also be used to supply an output for use with an external amplifier.

By using the microphone in conjunction with an input to the gram socket from either a gram pick-up or radio tuning unit, it is possible to record from microphone and gram or radio simultaneously. This mixing facility can be very useful, especially in cases where one requires a musical background to a commentary.

The mains transformer and rectifier are separate from the amplifier chassis.

With a tape speed of $7\frac{1}{2}$ i.p.s. it is claimed that the frequency response is substantially level from 50 to 10,000 i.p.s.

The microphone supplied with the Recorder is the Cosmocord crystal microphone (MIC. 36) but before discussing the recordings made on this machine, I should like to make one or two general comments.

The tape loading procedure is extremely simple; all that is involved is the unscrewing of a large nut on the top of each spool, after which the spool may be lifted clear. The mechanical vibration of the base plate of the deck, with the motors running, is quite negligible. The motors are not completely silent but on the other hand, the noise from them is not sufficient in any way to mar the quality of recordings.



With the machine I had for review, the tape did not always wind itself evenly and there was a certain amount of noise due to the tape brushing against the outer edges of the spool. The tape guides are merely polished sections at either end of the cast alloy cover for the heads.

The braking system was extremely efficient, without any suggestion of spill-over. When tape speeds were checked, it was found that on both the $3\frac{1}{4}$ and $7\frac{1}{2}$ i.p.s. positions the speed was about 5 per cent high; but I am given to understand that a correction for this error is now the subject of an official modification to the spring-driving belt on the tape deck.

THE PRICE
54 GUINEAS

The figures for the wow content of the deck are not specified, but a sustained 2000 c/s signal was put on the tape at $3\frac{1}{4}$ and $7\frac{1}{2}$ i.p.s. and the quite evident pitch variations when the tape was replayed indicated wow was by no means negligible. It was particularly apparent when the 2000 c/s signal was recorded at $3\frac{1}{4}$ i.p.s. and replayed at $7\frac{1}{2}$ i.p.s., although this is, of course, a most stringent test.

While the hum level from the amplifier was fairly pronounced when the volume control was set to its maximum value, it was almost inaudible at the setting normally required for replay.

The direct recording tests were made with the microphone supplied with the equipment. The results obtained, both on speech and music, were very good, provided one paid heed to the manufacturers' advice as regards the position of the microphone. They suggest that the microphone should be about 12" away from the subject, and it was my experience that if this distance was exceeded to any great extent, the recording had a tendency to be a bit harsh, by virtue of an apparent loss of bass response.

Speech recordings at $3\frac{1}{4}$ i.p.s. were very satisfactory.

A signal was then fed directly into the recorder from a Collaro Transcription P.U. and, using a tape speed of $7\frac{1}{2}$ i.p.s., I was most impressed with the excellent reproduction obtained. There did appear to be a falling off in response at the lower frequencies, but this is to be expected with the restricted baffle area of the loudspeaker. Recordings were also made at the slower speed, and although one would not class the reproduction as high fidelity, it was nevertheless not unpleasant. Recordings made from an F.M. tuner unit maintained the same high standard of reproduction.

The one disturbing feature of this recorder is lack of protection against the possibility of rewinding on the *record* position and thus erasing the recording. True, the red recording light should be a warning, but we are all apt to be careless at times, and, though I was aware of this danger, I still contrived on two occasions to erase a test recording I had made.

The price of this recorder is 54 guineas, and I feel that the manufacturers have, within the price range, produced an instrument capable of giving results representing a most satisfactory return for money spent.

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BOOKS WORTH READING

Prophet of progress

THE simple fact that Mr. Burnett James and his publishers have produced a new edition of *Hi-Fi for Pleasure* (Phoenix House, 9s. 6d.) has a particular significance for those interested in tape reproduction. It contains a new section about tape records—the name which the author sensibly insists should now become standard when we mean pre-recorded music on tape. And Mr. James uses a very optimistic tone when he discusses the future.

He is convinced that we can look forward to "a rising tide of tape records." He is satisfied that they mark a definite advance towards the highest attainable standards of reproduction.

He declares that widespread acceptance of tape as the best medium for reproducing the larger musical works cannot now be long delayed—"the advantages are too great and obvious for either conservatism of mind or operational difficulty, such as it is, to prevent the eventual conquest by tape of home and demonstration hall."

Of course, like the rest of us, he is concerned about the present cost, but he hints that we may expect some relief before long. He discusses some particular items of reproducing equipment; but, so swiftly is the industry now surging ahead, there is much more worth reporting that has come along after the book went to press.

The merit of this little volume is such that we can confidently look forward to further editions, so that Mr. James will have his opportunities to try to keep pace with developments.

Meanwhile, there is a wealth of commonsense advice for the budding enthusiast, most of it written, not only without technicalities, but with an attractive charm.

Mr. James understands what people want to know, and he tells them. That means naming specific products and quoting prices; he does not shirk the duty, and the book is all the more valuable in that it thus gives us some standards by which to work as we settle by the fireside to dream and plan.



AS this issue of *Tape Recording Magazine* emphasizes, there is a lot of common ground between the amateur photographer and the amateur sound recording enthusiast. A Penguin handbook on *Photography* (6s) is, therefore, likely to appeal to most readers.

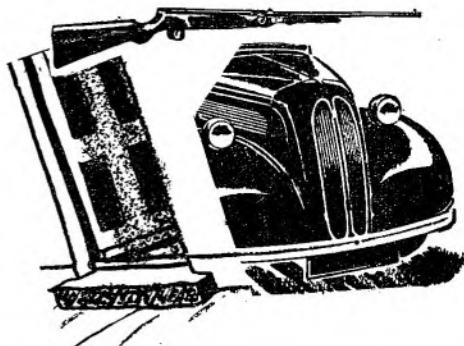
It is one of the most attractively-produced of all Penguin volumes, with many explanatory sketches and 64 pages of excellent photographic reproductions.

The author, Mr. Eric de Maré, has been an enthusiast for 37 years—since he was a boy of ten, and there is little he does not know from personal experience.

The scope of his book is astonishing—it is a veritable encyclopaedia—ranging over the history of photography, its aesthetic values, even a collection of aphorisms about the subject, before it gets down to the solid business of technicalities.

Then Mr. de Maré guides us through the details of camera construction and use, processing techniques, and the use of colour.

A few evenings browsing through this book is bound to improve the results of almost anyone's "snap-shottin'."



By H. J. MORRISS

IN my previous article I dealt chiefly with sounds which do not contain definite or consistent harmonic patterns. It is necessary in these cases to choose a basic related noise to achieve a given effect, then to add the required depth of sound plus perspective to bring about the illusion.

Listen to a gunshot. Unless one can see the revolver, it will be hard to identify the difference between the sound, a car backfiring, or a cardboard box being slapped with a lath.

Why not, one may ask, record a gunshot, instead of thinking in terms of faking? By all means record actual gunshots if they are required for *background*. But for foreground action, in terms of close-ups to microphone, it will be found that the projected shock wave of the gun's explosion in near proximity will overload apparatus. Eventually, therefore, the position of the gun will be far removed from the microphone to avoid distortion. Then, the effect will contain a high percentage of indirect sound, apart from the direct sound of the gunshot, giving a distant perspective which is not quite what is wanted.

What we must endeavour to produce is a sharp explosive sound without an extreme pressure wave. If a fairly large cardboard box is given a sharp slap with a wooden lath approximately four feet long held in parallel with a flat side of the box, an explosive noise should result. The sympathetic reinforcement of sound to the initial slap of lath is obtained from the resonating cardboard box.

Squeaks

The reproduction of various forms of squeak may interest those who are anxious to set people's teeth on edge or their hair on end. A long eerie squeak from a slowly opening door at the height of the dramatic plot in a play does help the atmosphere. It may be obtained as follows. Tie a six-foot length of fairly stout string to the handle of a door. Procure some powdered resin, or powder a piece down finely. Sprinkle a little of it on to a folded cloth measuring roughly six inches square (a folded handkerchief would do). Hold the cloth around the string with pressure of forefinger and thumb in line with the string and pull the cloth along the string.

The length of the taut string determines the duration of the squeak. If the squeak is commenced near the door handle, a higher pitch will result, due to the short length

★ *Continued in next column*

GUNSHOTS . . .

MOTOR CARS

Eerie squeaks

and small mass of the string. The deeper notes will be produced as the taut and vibrating string lengthens.

Another method is to use a piece of hard wood, such as oak or beech. It should be roughly two inches square, and about six inches long. Drill a hole of half-inch diameter into the centre to a depth of an inch and a-half. Now fashion a peg of similar wood to fit the hole, complete with handle. The friction agent is a small amount of powdered resin placed in the hole. Rotate the peg in the hole with slight pressure for a healthy rasping squeak.

This squeak is suitable for the interior sounds of large sailing ships, especially in company with the effects of slap of water and wind whistling through rigging, etc.

A more delicate squeak may be obtained from a cork pressed down and twisted on to a board carrying a small amount of resin on the surface.

One other variety of squeak is that of the continuous rhythm of a swinging sign or rusty wheels. The implements required can be borrowed from the kitchen, namely a saucer and a fork. The saucer is held in one hand and the fork held uppermost, with the prongs contacting the saucer by the other hand. The fork is turned around the outside of the saucer in the same vertical position. The depth of sound or loudness may be controlled by various reinforcing surfaces.

Motor Cars

The recording of motor vehicles presents certain difficulties, although recordings of cars ticking over, approaching and stopping, driving away may be made without too many technical difficulties. On the other hand, the constant running of a car (either exterior or interior) will need the installation of apparatus to be contained within the car. Voltage supply in this case is from batteries. Alternative apparatus is usually a portable transmitter sending to a recording point.

The drawback of recording modern motor cars is the lack of identifiable sounds, due to the quiet running of component parts. Let us imagine a recording is made of a modern car driving off in great haste, made especially for a dramatic scene. Unless one of the actors states emphatically that *it is a car* during the general panic, there might be some doubt in the listener's mind as to the villain's mode of exit. This will naturally cause some distraction to a listener and is, therefore, to be avoided.

The solution is to find an older car, with a full-blooded urgency of sound and willing to do its best in the strain and tension of the drama. If technical facilities are available, music or sounds containing similar frequencies relative to the car may be added to heighten the effect.



How would YOU get them on tape?

Our contributor, one of Britain's leading experts on sound effects, gives more valuable advice in this second article

During all recording exercises the operator should literally close the eyes during the initial try-out of effects. This will be of great help in considering and analysing the various sounds.

For the recording of trains a similar procedure as in the case of motor vehicles is suggested.

A point to be reiterated, and applicable to the recording of all effects, is the careful placing of the microphone in relation to the source of sound. The careless handling of microphones may bring forth most peculiar and unrecognisable noises. An example might be provided if a microphone was held a foot or so from pavement height to record footsteps. The resulting effect might be marred by the reflection of a very high order of frequencies—possibly in excess of 10,000 C/S—from the paving stones. The sum result of this indirect sound, the reflection, plus the direct, would add up to distortion. The capabilities of the microphone in use should, therefore be well known, particularly frequency response and directional properties, in order to cope with specific problems.

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ADVICE BUREAU

We have received a large number of queries from readers and these are being dealt with as speedily as possible. All queries are answered by post and a stamped, addressed envelope should always be enclosed when you write. The most interesting extracts from the questions and answers will be published here.

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

HOW PERMANENT ARE RECORDINGS ON TAPE? — THE DIFFICULTIES OF EXTENDING MICROPHONE LEADS

I should be glad if you could advise me as to the actual permanency of recording on tape, as I understand that the B.B.C. re-record tape material every five years.

C. B. SEYS, Redditch.

MODERN recording tapes have not been in existence long enough to be able to give a definite answer about their long-term stability. But there is every reason to believe that, if correct conditions of storage are observed, with due regard to humidity and temperature, a 20 years safe period could be relied upon.

There are in Germany to-day recordings made in 1934-5—still in perfect condition. They have, of course, been stored under laboratory conditions, but nevertheless it shows what can be done.

One of the threats to preservation is spurious printing and this can be

minimised if the tapes are rewound periodically, irrespective of whether they are played or not. A further cause of spurious printing is stray magnetic fields, due to such things as loud-speakers, mains transformers, etc.

It has been my experience that one of the most serious drawbacks to the modern tape recorder is the relatively short length of microphone lead invariably supplied with it. My recorder is a Grundig 700L, and any attempt to extend the microphone lead has resulted only in an excessive amount of "hum" which completely wrecks any recording made.

When it is desired to use the recorder for interviews, for example, amongst people in a large room, it is necessary to have a mobile microphone on a long lead. Similarly, when recording a play or similar performance in a hall, one hardly wishes to operate the tape recorder on the stage a few feet away from the microphone.

S. A. SEDDON, Southport.

UNLESS the extension is carried out with a screened cable correctly earthed to the tape recorder chassis, "hum" will inevitably result. Further, even if the lead is screened, use of the wrong type of cable may well upset the input conditions to the amplifier. Grundig produce microphone extension leads for all their models, and I feel that purchasing one of these would, in the end, be the most satisfactory solution.

LETTERS TO THE EDITOR

WE very much welcome the publication of this journal, since we are sure that it will fill an urgent need. We are convinced that tape recorders can be segregated from radio, etc., and still meet a large public demand. For this reason we are one of the few firms specialising only in tape recorders.

We should like to assure you of any assistance we may be able to give you in the future. . . .

J. M. TUGHAN.

"Teletape"
London, N.21.

* * *

CONGRATULATIONS on publishing TAPE RECORDING MAGAZINE. Tape enthusiasts, professional and amateur, business and private, are legion; TRM embraces all.

G. A. THORNLEY.

Rayleigh, Essex.

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NEWS FROM MANUFACTURERS

Armstrong announce new equipment

ARMSSTRONG Wireless and Television Co., Ltd., demonstrated a new amplifier and control unit (A.10, mark II, illustrated below) and a new FM tuner at the Audio Fair.

The new amplifier is a development and refinement of this firm's well-known A.10, maintaining the basic design and performance, but providing some additional facilities. These include more power, greater sensitivity, additional equalising and a four-position pick-up matching selector.

The FM 61 is a completely new VHF tuner, priced at £22 1s. It has six valves and full band II coverage, with exceptional sensitivity.

* * *

A new professional tape recorder, the TR 51, is announced by EMI. It is based on the TR 50, widely used by broadcasting



and recording companies, but has improved response and monitoring facilities.

It is mobile equipment intended for use where larger studio-type recorders are not practicable.

The incoming signal can be monitored before, as well as during, recording.

* * *

Mr. H. P. Spring, A.M.Brit.I.R.E., A.M.I.P.R.E., Chief Engineer of Grundig (Great Britain) Ltd, lectured on tape recording to the British Transport Association at Berkeley House, London, recently.

* * *

Truvox have announced retail prices for their new mark IV deck, which has already been described and illustrated in *Tape Recording Magazine*. This deck is now available, on order, through the trade—previously it has been supplied in bulk to manufacturers.



CAR POWER PACK

A new vibrator power pack has been produced by Valradio to facilitate the use of recorders in cars. Author and journalist Nigel Buxton had one installed in his, so that he could make good use of his Grundig during a tour of Greece and Italy. After recording, the plug can be removed from the pack and immediately used to play back on normal AC mains.

speaker unit to operate with this equipment.

* * *

Philips Electrical announced at the Audio Fair "a new and exclusive development in high fidelity whereby the amplifier output transformer has been eliminated." They call it "Hi-Z."

It is claimed that the new technique guarantees delivery of full rated output power throughout the audio frequency range, exceptionally wide and level frequency response, negligible phase shift, and superlative transient response and low distortion.

The new principle is employed in a range of equipment which was on show.

* * *

Mr. Kenneth H. Williman has been appointed Managing Director of Simon Equipment Ltd., Simon Sound Service Ltd. and Simon Development Ltd.

Mr. R. W. Simon continues as Chairman of the Board of Directors of the companies.

Mr. S. J. Robinson has been named Sales Manager.

TAPE TO DISC RECORDING

Microgroove L.P. (30 mins.) 25/-, 78 rpm. 12/-

S.a.e. for leaflet: Deroy Sound Service (A.D. Marsh), Little Place, Moss Delph Lane, Aughton, Ormskirk, Lancs.

B.A.T.R.S.

(British Amateur Tape Recording Society)

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

(non profit-making)

Details from

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

WORLD TAPE PALS

Headquarters: P.O. Box 9211,
Dallas, Texas, U.S.A.

(an international association for
the exchange of recorded tapes)
No subscription in Great Britain

Details from

**ROGER D. SMALLWOOD,
28, Wrekin Road,
Sutton Coldfield,
Warwickshire.**

With timing scale, it is priced at 26 guineas and with precision revolution counter at 29 guineas.

The popular mark III deck remains available at 23 guineas.

* * *

A. Prince Industrial Products Ltd., whose UHER tape recorders are known to readers, are now introducing four new AKKORD radio receivers, to the British market. These are made in the first and only West German factory specialising on portable radios.

The Pinguin "U" 57, at £41, is a seven-valve VHF superhet in an elegant cabinet, but weighing only seven lbs. The Jonny 57, at £19, is a three-waveband midget weighing only 4 lbs. 4 ozs. It measures 9½ in. x 3 x 6½ inches and can be operated from mains supply or batteries.

* * *

Electric Audio Reproducers Ltd had two record reproducers accepted, by arrangement with the Council of Industrial Design, for display on the British Government stand at the U.S. World Trade Fair and at the Milan Samples Fair last month.

At the Audio Fair this firm showed a wide range. Of particular interest to our readers was a new six-watt push-pull amplifier. EAP have developed a new

NEWS FROM THE CLUBS

Pioneer editors

John Amphlett (left) and Eric Payne (right), first editors of the BATRS Tape Bulletin, have resigned because of pressure of other work. Mr. Dennis Scotney has taken over. Mr. Payne is now producing a quarterly tape magazine for the blind, about which we shall publish a full report next month.



TAPE BRIGHTENS SERVICE LIFE

THE British Round Robins Tape-sounding Circle is a smaller organisation, working closely with BATRS, linking tape enthusiasts in the Services.

At Tern Hill R.A.F. station in Shropshire, Dave Williams operates, over a Tannoy system, the "Tern Hill Forces Network."

Five days a week, he transmits programmes—a "pops" request night on Mondays, a "Down your section" feature programme with a portable recorder on Tuesdays, a jazz session on Wednesdays, classical music on Thursdays, and a disc review programme on Fridays.

At Lee-on-Solent Derek Knight does a

hi-fi programme and is planning to start up a similar network. Then it may be possible for different networks to exchange tapes.

Another member Jack Talling a N.A.A.F.I. storeman, makes good use of his opportunities while moving about the country to keep in contact with fellow enthusiasts. He, too, is helping forward the idea of a series of forces "networks" at different camps.

* * *

Sir Mark Dalrymple, Bt., has been named first President of the BATRS. He is a Scottish landowner and market gardener and a keen enthusiast, who owns three recorders.

Classified advertisements

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

ADVERTISER requires copy of February issue TAPE RECORDING MAGAZINE (now out of print) to complete file. Box A4.

REQUIRED—back numbers U.S. "Tape Recording," good condition. Write 84 Lincoln Road, Enfield, Mddx.

GRUNDIG STENORETTE with Microphone and spare Tape. Mint condition. £30.

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TAPE RECORDERS
HIRE - SALE - REPAIRS

Articles of association are being prepared so that BATRS can become a corporate organisation.

* * *

Alistair McKay, technical adviser to the Scottish Jazz Club, has been nominated by BATRS' Scottish secretary J. Baird to act as honorary representative of the Scottish Gramophone Record Information Bureau.

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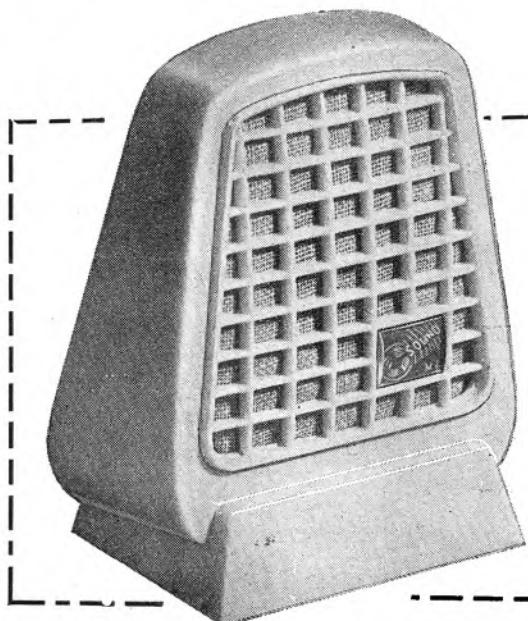
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55 GNS



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because this superb P.V.C. tape carries the superlative 'Scotch Boy' magnetic coating—acclaimed for fidelity, freedom from background noise and uniformity. *Better*, because every reel is guaranteed splice-free. *Better*, in all these important ways—yet 'Scotch Boy' P.V.C. tape costs *no more* than ordinary recording tapes!

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