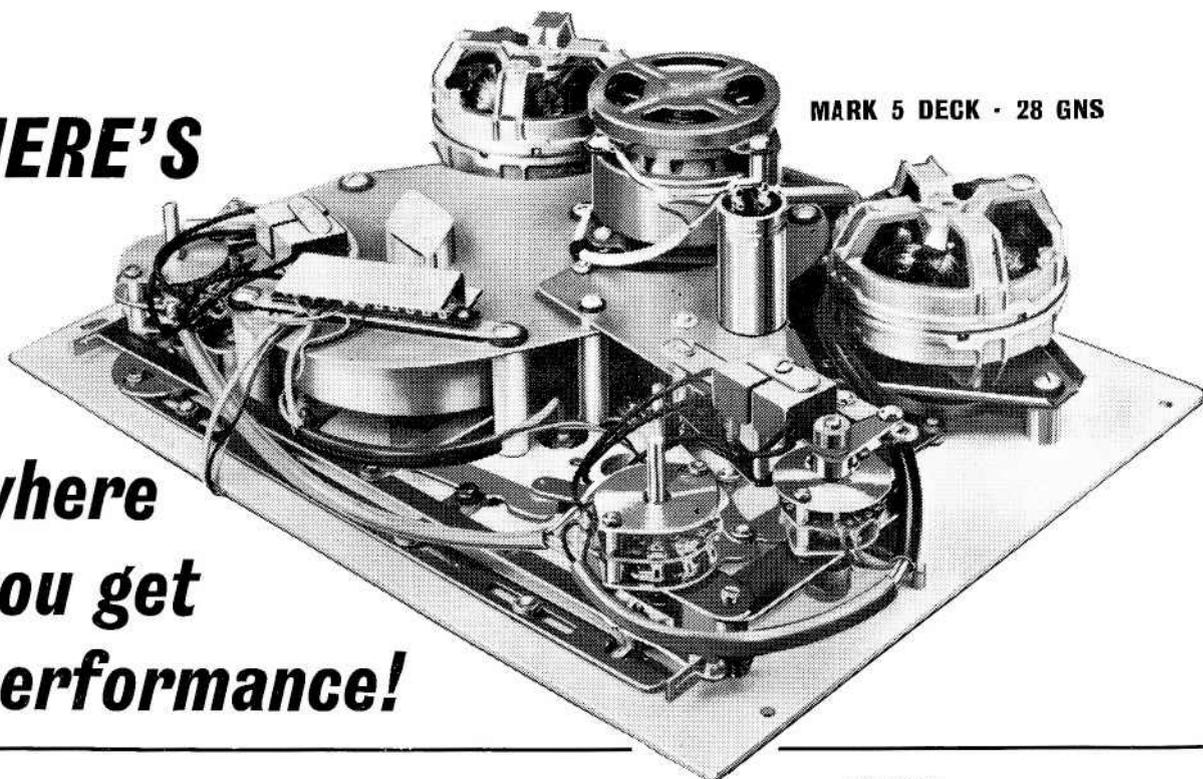


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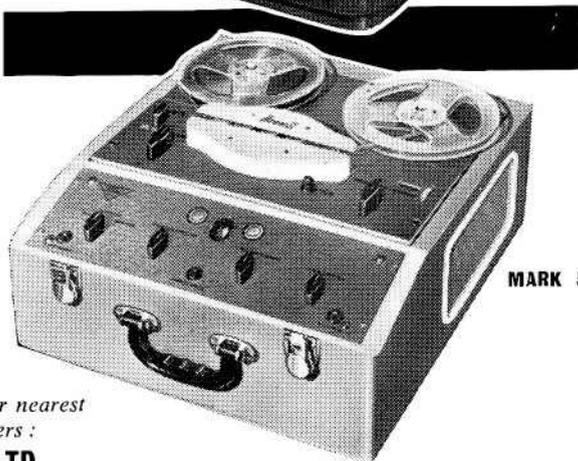
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Below .15% at 3½ i.p.s.
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4"	300	32 ..	10 0	450	48 ..	14 6	5½"	1700	3.. 0 ..	2 17 6
5"	600	1hr 4 mins	1 0 0	850	1hr 30 mins	1 8 0	7"	2400	4.. 16 ..	4 0 0
5½"	850	1.. 30' ..	1 7 6	1200	2.. 8 ..	1 15 0	SUPERGRADE			
7"	1200	2.. 8 ..	1 15 0	1800	3.. 12 ..	2 10 0				
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TAPE RECORDING & HI-FI
 magazine
 THE SOUND MONTHLY

Vol. 2 No. 7 FEBRUARY, 1961

Published by the
 British Recording Club

Club, Editorial and Advertisement
 Offices:
 145 Fleet Street, London, E.C.4

Telephones:
 Club and Editorial:
 Ludgate Circus 7918
 Advertisements:
 Fleet Street 7732/2110

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You have to look twice . .

at the tape recorder, of course, for it is a record player at the same time. The tape motor also operates the record player drive; the tape has got speeds of $3\frac{1}{2}$ and $7\frac{1}{2}$ i.p.s. and the record player has also got two speeds (45 and 33). The turntable is put on the axle which can be seen between the tape reels; direct playback is possible.

The apparatus is fitted with a double potentiometer and other technical facilities.

The Danes are the inventive people responsible for this development. They assert that it is possible to do everything with the Beocord Unitape!

This instrument is a perfect illustration of the way in which tape recording is now expanding into other fields, not only linking itself with record players, but with slide projectors and cine cameras as well.

We have combined the two magazines, *AMATEUR TAPE RECORDING & POPULAR HI-FI*, in order to keep in step with this trend and give our readers everything that is interesting, instructional and entertaining in the realm of sound.

Your letters, addressed to The Sounding Board, ATR & PHF, 145 Fleet Street, London, E.C.4, will let us know how well we are succeeding. A £1 record token will be sent to the writer of each letter published.

Big developments are taking place in the audio world—be sure to get next month's edition for an exclusive release on this.

MAKE A TAPE... FOR RADIO LUXEMBOURG!

Great new Currys Competition — ENTER NOW

Let millions hear you on the air through Currys great new competition. All you have to do is to send in a tape which you think would make good listening on Radio Luxembourg. This competition is not confined to stage or musical acts. Anything entertaining from your baby's first words to a full symphony orchestra stands a chance of being broadcast and also of winning you valuable prizes. The tapes will be presented by Macdonald Hobley and judged by leading experts in the radio and entertainment world. **FREE TAPE & SPOOL.** Currys will supply tape and spool free for use in this competition.

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Auditions with major recording companies.

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 - ★ Butlins Holiday
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CURRYS FREE OFFER

Any tape recorder on
7 DAYS FREE TRIAL

If you are thinking of buying a tape recorder, then you can have a week's free trial of the model that suits you best. Currys prices begin at 22 gns and you can choose from a wide selection of models by *Philips, Grundig, Ferguson, Cossor, Argosy, Westminster* etc. Easy terms? Of course!

PLEASE NOTE We must have quality tape for broadcasting and we advise you to record your entry on **EMITAPE** or **PHILIPS TAPE**. Both give an extremely high recording quality. Ask Currys for advice on the best tape to use with your tape recorder.

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Entry Form at your
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The

World of Sound

UNTRUE TO TAPE

The British Commission of Jurists have published a report saying that a close watch should be kept on technical developments in tape recording as a safeguard against the falsification of court testimony.

The committee stated that it had been informed by a tape recorder expert that it was easy for an experienced sound engineer to alter a recording and went on to say:

"We have considered in detail several technical safeguards against falsification, in particular imprinting the reverse side of the tape, double track recording, the use of discs rather than tape, and the use of a locked cassette. None of these devices with the possible exception of the last mentioned, is a perfect safeguard.

"Experiments might usefully be made by installing tape recorders in some police cars for the purpose of recording statements made by witnesses 'on the spot' in motoring cases."



TENDER RECORDINGS

In a written reply to a question in the House, Mr. Geoffrey Rippon, Parliamentary Secretary, Ministry of Aviation, stated that tenders for the development of recording equipment in aircraft to preserve data in the case of air accidents would be invited shortly by the Ministry of Aviation. The specification should be suitable for both civil and military aircraft.

FULL MARKS TO GRUNDIG

The front cover of 'ATR & HF' this month illustrates a few of the Press photographs which are regularly received in the Editorial office from Messrs. Grundig. It is interesting to note that the material received from Grundig is more than all the other firms put together. Little wonder then that this company leads the field when they are so obviously aware of the need to advertise and co-operate with the press and publishers in the preparation of editorial material.



Pop Hi-Fi says he knows how Grundig keeps ahead.

Illustrated by Hunt

ELECTRONIC MUSIC AT THE MERMAID

On Sunday, January 29th, at 7.30 p.m. Miss Daphne Oram will present a concert of electronic music entitled 'The Performer Banished' at the Mermaid Theatre, Puddle Dock, Blackfriars, London. Miss Oram, whose picture appeared in Part I of our 'Modern Music' series ('ATR' November, 1960), is the founder of Oramics Ltd. and was at one time with the BBC's Radiophonic Workshop.



TAPE NEWS FROM GERMANY

Last year's tape recording development in Federal Germany gives the picture of a growing interest in this new hobby. The thousands of new tape fans from all the different social levels buy a tape recorder because it is 'a la mode' and for its ability to store long pieces of music without even the few interruptions one gets with LP records. The organisation of Tape-Friends, the 'Ring der Tonbandfreunde' with about 1,000 members became a member of the FICS (Federation International des Chasseurs du Son), but has not yet the importance which the industry here would like. The most astonishing thing is the amazing laziness of the bulk of the tape recorder owners, who often do not touch their equipment for months. After the first excitement about the possibilities with a microphone interest slowly diminishes. It is a hobby which still forces the owner of a tape recorder to move and do more than for instance a philatelist. The industry does not do much to counteract this trend. Some try to awaken new interest by starting competitions and this seems to be the best—and not cheapest way—to bring tape recorders back to 'tape-life'. Last year Philips had its second successful competition within different groups for different themes. Uher started a criminal-quiz-tape competition and the only big magazine which cares also for tape fans, the 'Ton Magazin' gave three groups the opportunity to win big prizes. Under the title 'Children under the Christmas tree' three minute tapes could be sent for three different competition groups: slides with tape, cine with tape and tape alone.

The legal situation is still not clear as the government has not yet had time to consider a new copyright law to cover the new technical advancements in multiplying literary and musical works. It is, however, forbidden to copy records and to reproduce them for recompense.

The industry with Grundig on the top knows that some day in the near future the market will be filled up and new models will have to replace the older ones. I would hazard a guess that this year some new products will be shown at the Hanover Fair. In the Electrical appliance shops and also at the bigger photo dealers only German tape recorders can be recognised. The American types are too expensive, also the Swedish Tandberg, the Danish Movicorder, all French models, also the two models from Switzerland and the one from Italy. The very practical Austrian Stuzzi tape recorders are sometimes to be seen in shops but in relation to the German types they are still too expensive. British tape recorders are almost unknown.

At the photokina exhibition in Cologne for the first time two major firms showed tape recorders in connection with cine and slide projectors: the German Philips and Telefunken. The latter had crowded daily performances of how to use a tape recorder in connection with a 'noise machine' built by Telefunken. The demonstration of home made stereo effects with this noise-box was excellent. It is possible that development in this direction will bring more tape recorder producers to the next photokina in 1962.

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AND TEST EQUIPMENT.**

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ARE NOW AVAILABLE**

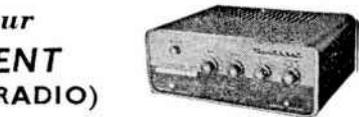
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AMPLIFIERS
6v Stereo £11. 8.0
16W Stereo £25. 5.6
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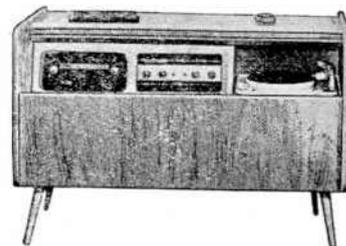
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Packed with these brilliant advanced features:

- 4 track monophonic and twin-channel stereophonic recording and play-back at 3 speeds.
- Gives up to 16 hours' recording on one reel of double-play tape at $1\frac{1}{8}$ " sec.
- Special superimposition facility.
- Sound mixing facility.
- Monitoring control—headphones for stereo, internal speaker for mono.
- Electronic magic-eye recording level indicator.
- Safety button interlocks with record button.
- Special pause button temporarily interrupts tape motion.
- Frequency response at $7\frac{1}{2}$ " sec: 50-20,000 c/s.
- Output 4 watts per channel.
- Automatic tape stop on all operations.
- Two loudspeakers: one internal, one in lid.
- Pre-recorded stereo tapes can also be played.
- Complete with stereophonic moving-coil microphone and base, reel of 7" long-play tape, screened connecting lead and empty 7" spool.

Plus many more—see it, hear it, at your dealer's now!

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TAPE RECORDER 92 gns.**
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Amateur Tape Recording & Hi-Fi

Taming the Loudspeaker

THE WEAK LINK IN THE CHAIN

by **FREDERICKS**

This article exposes the weakness of conventional loudspeaker systems using a crossover network with a 'woofer' and 'tweeter' and shows how to avoid it.

THE TWO MAIN CAUSES OF DISTORTION

Loudspeakers suffer from two congenital ailments, bass resonance and intermodulation distortion. And in any reasonably designed high fidelity equipment it will be the loudspeaker system which contributes most of the distortion. For we know how to design radio tuners, gramophone pick-ups and amplifiers with very low distortion at an economical price. The loudspeaker system, however, which is the most inefficient link in the chain, has not in the author's opinion been given sufficient consideration, and this article will discuss the fallacy of feeding an amplifier into a dividing network and then into the loudspeakers, and also give circuit details of an equipment which will improve quality without increasing the cost.

Intermodulation

The same cone is made to oscillate to and fro slowly to reproduce low frequencies and at the same time rapidly to reproduce high frequencies. Since the cone tends to be less sensitive in some of the positions in the low frequency cycle the high frequency sound gets louder and softer at the rate of the low frequency sound. (Just for the record the main reasons for this are the non-linearity of the compliance of the suspension and the variation in the total flux passing through the moving coil.)

Bass Resonance

By the nature of their construction, dynamic or moving coil loudspeakers have a bass resonance frequency at which, for little power input the cone works itself into a frenzy. This not only causes much too loud a sound at this frequency, usually in the range 50 to 200 cycles, it often causes distortion in the form of frequency doubling and trebling into the bargain.

Below the bass resonant frequency the loudspeaker does not reproduce sounds.

Just to add to the fund loudspeakers almost always have other smaller resonances at higher frequencies at which similar things happen.

THE CURE FOR LOUDSPEAKER DISTORTION

Intermodulation

Since the distortion is due to the presence of high and low frequencies at the same time the best cure is to use separate loudspeakers for each range of frequencies. Ideally the narrower the band of frequencies fed to each loudspeaker the better but the cost of all the loudspeaker and filter networks becomes prohibitive.

Anyway the use of two loudspeakers, one for frequencies above 1,000 cycles or so and one for frequencies below yields an enormous improvement. A few systems have been made with three loudspeakers but the improvement is small for the extra cost.

Bass and other resonances

We have seen that we need two loudspeakers but both these

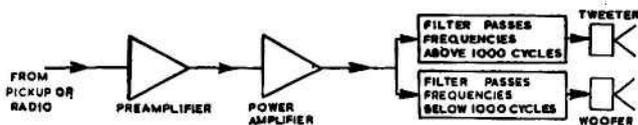


FIG. 1. CONVENTIONAL FREQUENCY DIVIDING SYSTEM GIVES POOR LOUDSPEAKER DAMPING

will have resonances. The worst will be the bass resonance of the low frequency loudspeaker or 'woofer' but the high frequency one, the 'tweeter', will also have some.

Now the easiest way to reduce resonances is by electrical damping of the voice coil of the loudspeaker by driving it from a very low impedance amplifier (probably one-tenth to one-hundredth of the loudspeaker impedance). High fidelity amplifiers always have this feature.

The trouble starts when the conventional technique of using a low impedance amplifier followed by frequency dividing networks to feed a 'tweeter' and a 'woofer' is employed (see Fig. 1). The frequency dividing networks are filters and their output impedances are comparable to the loudspeaker impedances. So the loudspeakers are no longer damped and their resonances become troublesome.

Another trouble will be the power loss and distortion introduced by the filters.

All these snags are eliminated by using two amplifiers (which is not as expensive as it sounds for reasons which will become apparent). Fig. 2 shows the frequency dividing filters put before separate power amplifiers one for each loudspeaker. Since the loudspeakers are directly connected to the amplifiers they will be well damped. Since the filters are carrying low level signals power loss and distortion cease to be troublesome design problems.

So from an engineering standpoint we have solved our problems; now let us consider the cost.

The cost of the cure

The filters, since losses are not very important and power levels are very low, will be cheaper.

The low frequency power amplifier will be smaller because no power is wasted in the filter and a cheaper output transformer can be used. This is because it only has to pass low frequencies and leakage inductance ceases to be important.

The high frequency amplifier is quite a cheap affair for three reasons:

(a) The power in the high frequencies is small and so it can have quite a small maximum power output. 'Tweeters' are usually more sensitive than 'woofers' too.

(b) The output transformer is cheap because it does not have to pass low frequencies and can have a low primary inductance.

(c) Since its power requirements are small it can draw power from the power pack of the low frequency amplifier.

A PRACTICAL SYSTEM

In the next article a practical split amplifier will be described and constructional details given together with details of suitable loudspeakers and enclosures.

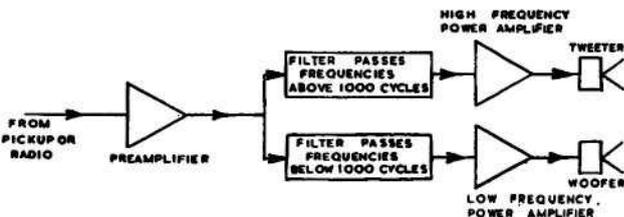
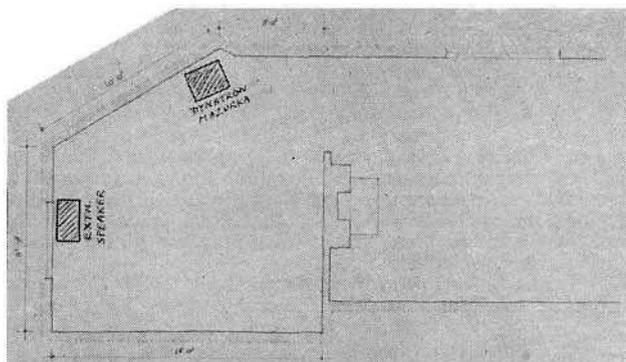


FIG. 2. SPLIT AMPLIFIER FREQUENCY DIVIDING SYSTEM GIVES GOOD LOUDSPEAKER DAMPING



IS THIS YOUR ROOM?

Furnishing by William Perring of Kensington.

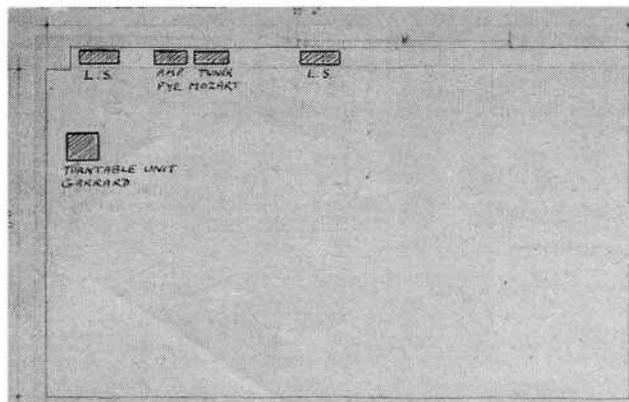


Dimensions (to dividing wall) 14ft. long, 9ft. 9in. wide, angle wall 10ft.

EXPERT ADVICE

The shelf running the full length of the room in this case lends itself ideally to separate units and here the Pye 'Mozart' amplifier, tuner and speakers together with a suitable turntable can all be conveniently accommodated on the shelf. (Amplifier Model HFS20M, 35 gns.; Tuner Model HFT108M, £24; Speakers Model HF10/BS, £21.9.0 each)

Dimensions 27ft. 6in. long, 17ft. wide.



EXPERT ADVICE

This is an awkwardly shaped room and presumably the sound is also required in the part shown on the other side of the fireplace but as there is not very much space I have suggested the Dynatron 'Mazurka' which can be stood on a small side table or on its own legs. This should be provided with its own matching extension speaker for stereo operation. (77 gns., including matching extension speaker, legs 2 gns. extra)

FURNISHING NOTE

The sitting dining room is a recurrent feature in new houses — especially where growing families restrict room space. The dining table here has folding flaps so that the table can be pushed against the wall when the room is used for sitting. Notice how the dining chairs are in soft upholstery so that they can double up for living room use. Since furniture in this room will be constantly moved, the record player equipment should be chosen, so that it too, is adaptable to the various sitting arrangements.

FURNISHING NOTE

The rich look of this room is deceptive—in fact it is achieved quite economically by the deep fur rug placed under simple modern furniture. The long line of the built-in shelf contributes to the fundamental elegance, but would not be spoilt by the Pye units which are in themselves long in line, and unobtrusive.

Photograph by Gordon Mcleish



Elizabeth Brousson of 'Home' Magazine

The problems of fitting hi-fi and stereo equipment into the lavish living room are made to seem so easy in the glossier advertisements, and in the pictures of other people's houses where expense seems to have been no object. But what about the living room which is like the one in our own home? Here are some pictures of real living rooms, furnished in a variety of styles, with expert advice on how musical sounds could best be achieved in each particular circumstance.

We shall run a similar feature on tape recorders when their styling has caught up with that now achieved by most record reproducing equipment.

NOTE.—The Fidelia and Trio Cabinets are obtainable from Larg's of Holborn. Other equipment mentioned is available from John Lewis & Co. Ltd., Oxford Street, London, W.1., where the new building includes a spacious radio showroom.

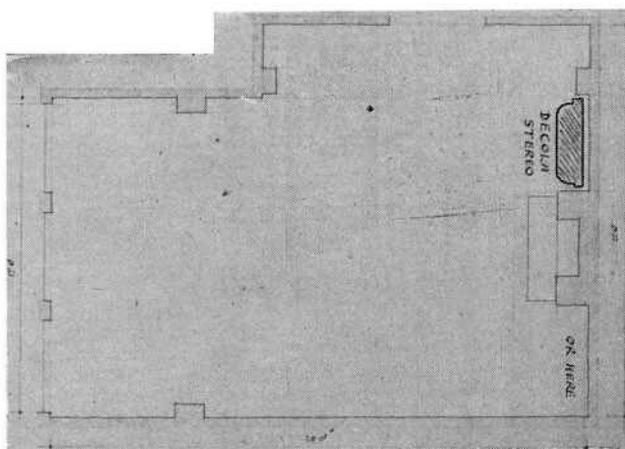


EXPERT ADVICE

As this is an expensively furnished large size room the best recommendation here is the Stereo 'Decola'. This is expensive but a wonderful performer and the design of the cabinet renders it eminent for the furnishings in a room of this type. (395 gns.)

FURNISHING NOTE

Classic furnishing, whatever its scale, is difficult to combine with modern radio equipment, which tends to stand out and lack harmony with its surroundings. The Decca 'Decola', which has been described as the best reproduction cabinet available, is a beautiful object in itself, and will look right with any form of antique furniture as its neighbour—as happy here as it could look unhappy in a thoroughly modern room.



Dimensions 28ft. long, 21ft. 6in. wide.

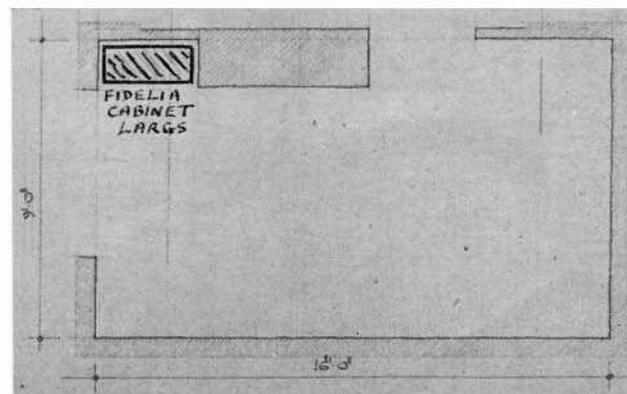
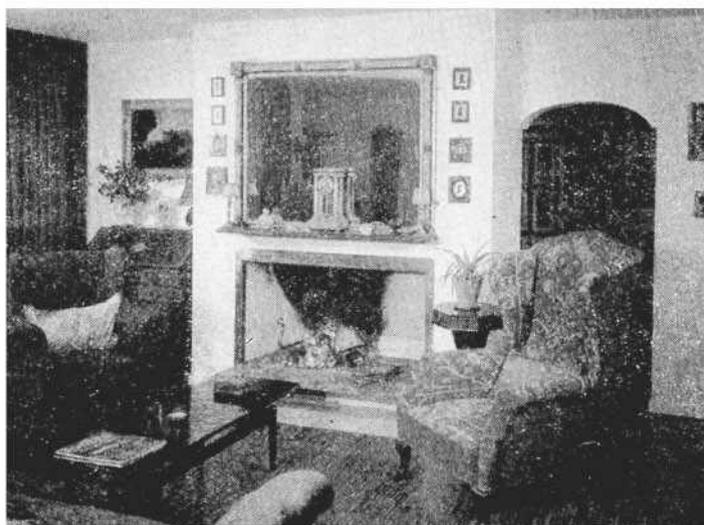
EXPERT ADVICE

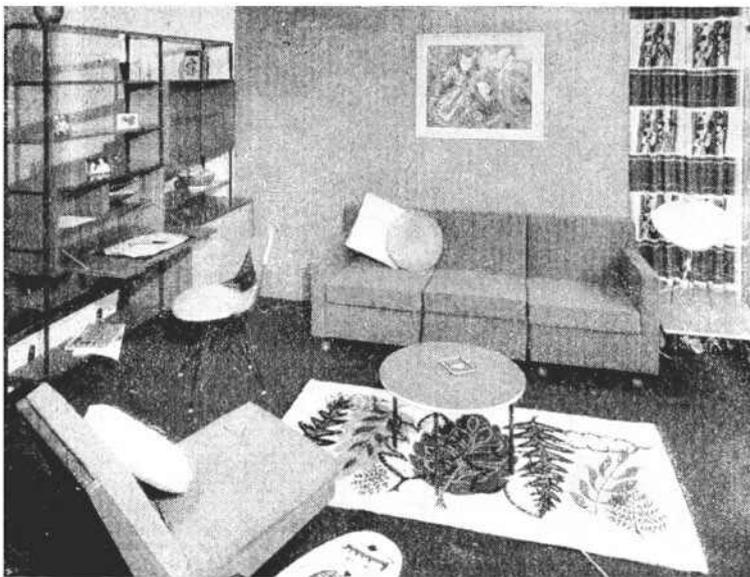
In a room which is already well-filled with furniture it is essential to sacrifice something in the arrangement for hi-fi equipment—in this case Larg's of Holborn suggest moving the bureau to make room for a 'Fidelia' cabinet (£14.14.0.). This is 2ft. 6in. wide, available in walnut—and so suited in size and appearance to the scheme. Quad monophonic equipment—control unit and amplifier—and a Decca pickup with 301 motor is suggested for fitting inside the cabinet. A speaker would fit neatly in the opposite corner of the room, at floor level or on the wall according to space.

FURNISHING NOTE

Room of a modern house furnished largely with traditional taste—but one concession to modern furniture is the coffee table which matches the clear lines of the fireplace. It is essential that radio equipment introduced here should be unobtrusive and simple. Placed in the bureau alcove, the Fidelia cabinet suggested would fit discreetly and harmoniously—its simple design in keeping with the table and fireplace.

Dimensions 16ft. long, 9ft. wide.





Furniture and furnishings from William Perring of Kensington

EXPERT ADVICE

This room and the furnishings lend itself to the KB 'Barcarolle' radiogram which can be situated for convenience of operation near the window and settee. Alternatively, shelf units of the Pye 'Mozart' type can be stood on the wall fixture shelving unit. (KB Barcarolle RG20, 63 gns.)

FURNISHING NOTE

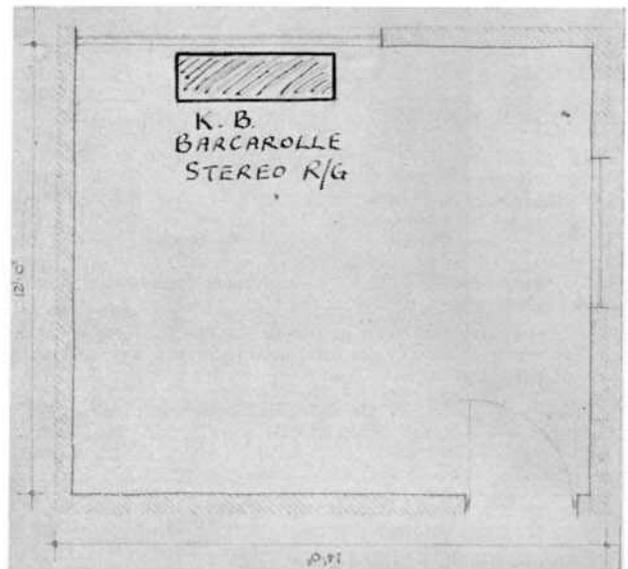
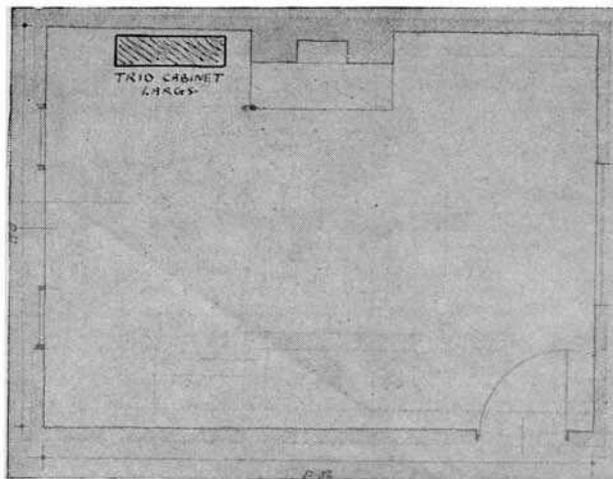
Pointedly modern, this room has a colour scheme based on a green carpet and white walls. The curtains are olive, bottle green and white design, the sofa has white upholstery, and lampshades are opaque white. The room divider and coffee table in mahogany suggest that any radio equipment chosen for this room should be in mahogany too—thus the KB Barcarolle would, furnishing-wise, be an excellent and appropriate choice. For space saving reasons, the Pye units would make a sensible alternative.

(right) KB Barcarolle radiogram (with lid open) and the Dynatron Mazurka.

EXPERT ADVICE

In this room where the influence of the furnishings is long and low, a hi-fi cabinet can be chosen in keeping. The Trio cabinet (£29.8.0) by Larg's of Holborn is 4ft. long, obtainable in dark tola which would tone with existing furniture. As equipment Larg's suggest a Leak stereo amplifier and control unit, and Decca 301 motor stereo pickup. The speaker could be built in to one of the existing cupboards.

Dimensions 24ft. long, 17ft. wide.



Dimensions 14ft. long, 12ft. wide.



To which rooms do they belong ?

FURNISHING NOTE

The living room designed by Michael Inchbald for 'Woman's Journal' 'House of the Year' 1957, had a scheme of autumn colours—olive green carpet, green, orange, yellow, and lime upholstery, against neutral walls and curtains. Features of the decoration are the long low line of cabinets against one wall, and the seats combined with coffee tables in the centre of the room which can be moved at will. Placed beside the fireplace, the Trio cabinet would continue the uninterrupted line of furniture—equally, hi-fi equipment could all be built in to existing cabinets. In either case, the seating arrangement is ideally flexible for good listening.



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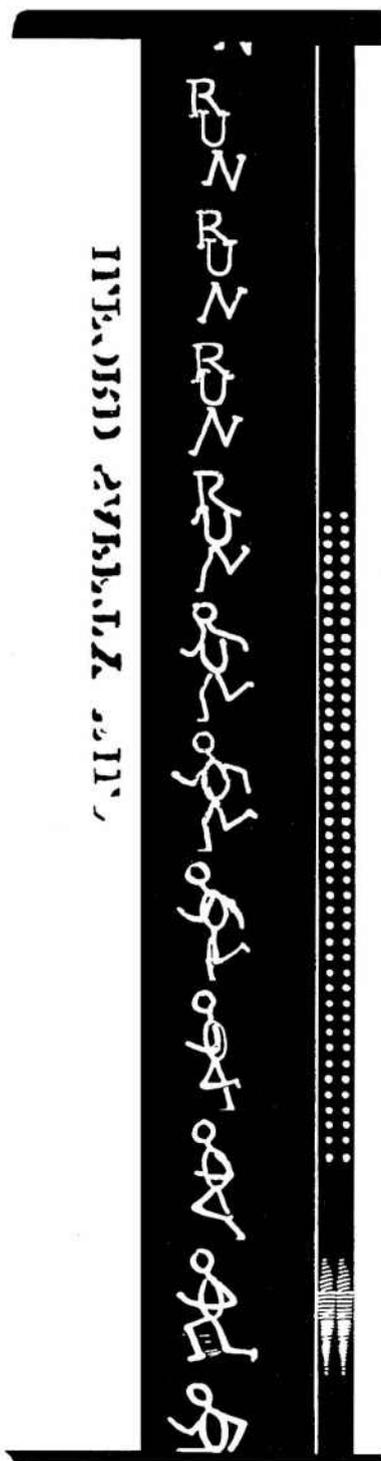


Sound & Vision Maker

by Richard Golding



Sorting tape ends



A sequence from 'Short Spell'

BY DAY, Stuart Wynn Jones is an ideas man in an advertising agency; at night, and in almost all of his leisure time he is a visualiser in a freer and uncontrolled medium, extending his virile imagination into the fantasy world of abstract film and music making.

During the last six years he has enjoyed success and recognition rarely afforded to the amateur film-maker and his films have excited admiration wherever they have been shown, for his sense of fun is quite unique. His basic visual techniques owe much to Norman McLaren of the National Film Board of Canada who was one of the first to break away from Disney type realism in cartoons and exploit the 'off-beat' drawn picture.

Wynn Jones's first notable success was with 'Short Spell', a 100ft. sound film made without a camera or recording equipment but by drawing directly on to 35 mm. clear-film stock. The film follows a straight forward formula: an animated alphabet in which each word resolves itself into a picture, providing 26 brief and amusing variations on a single theme. The visuals are explosive in their execution and it is contrived that each transition shall come as a surprise and still leave the audience wishing that there were more letters in the alphabet, but it is the painted, narrow soundtrack at the side of the film, synchronised to the action, that really commands our attention.

His calculations for drawing the sound were based on the following frequency ratios that define each note of the diatonic musical scale:

C	D	E	F	G	A	B	C
1	9/8	5/4	4/3	3/2	5/3	15/8	2

Along the edges of a sheet of paper he marked off eight equal lengths, subdividing each length into a different number of equal divisions in the order of 24, 27, 30, 32, 36, 40, 45, 48, which is the lowest series of whole numbers in the above proportions. These equal divisions, when marked off as a series of dots in the soundtrack area gave A major, and by taking certain notes of this scale as the key notes of other scales he found that it was possible to obtain all the chromatic notes. To his great surprise and pleasure he discovered he was able to write notes covering a range of three octaves. It was clear, also, from the nature of the medium, that rapid arpeggios and short staccato notes would be the most effective devices, and that it was just possible to draw three notes of differing pitch side by side so that chords would be practicable.

After much preliminary work in testing and timing the visuals to the sound he finally set to work, devoting six complete weekends to the making of the film. A long length of clear film was marked

off into 24 frame sections (24 frames represent one second in running time) and each note was drawn as a series of dots, spaced according to the measuring scale. To the completed soundtrack the pictures were matched so that the two would form a coherent whole.

The work that occupied so many weeks of research and some weekends of backbreaking effort ran for only two minutes on the screen but was an immediate success. Stuart Wynn Jones's own words, however, on receiving the first congratulations were: "It sounds like a demented one-handed musician playing a rather hoarse electric organ while being attacked by a firing squad!"

In an endeavour to gain more control over his medium he then began to experiment by painting strips of card and photographing them in the soundtrack area. To do this he had to file out a section of the camera gate so that the soundtrack area of the undeveloped film would be exposed at the same time as the normal frame area. It also meant that as all projectors must have a 26 frame time-lag between picture and sound, the background or animated picture must be retarded 26 frames so that picture and sound frame photographed together were not in actual synchronisation.

He is still very much absorbed in these experiments which he regards as a long term process but between times has managed to produce two more abstract film masterpieces, this time to musique concrète tape tracks. These two films, 'Raving Waving' and 'Billowing Bellowing', are both dazzling displays of shapes, curving and prouetting against continually changing backgrounds to impressionistic music. 'Raving Waving' was shown at the Brussels Experimental Film Festival of last year while 'Billowing Bellowing' is a development but exhibiting more continuity in both visuals and sound.

To find out just how he set about compiling the tape tracks for these two films I went along to his small studio-cum-bachelor flat in Hampstead, London. "First of all," he told me, "I re-

corded all sorts of sounds — especially those of lengthy duration: taps running, pieces of paper being torn and, incidentally, if you record the sound of a sticky tape being pulled off the roll it sounds like a jet plane going past. I also recorded sustained musical sounds; chords on the piano and long notes on a viola and various noises such as alarm clock bells and a stroke on an aluminium draining board!

The equipment in the small room included a three speed Brenell stereo tape recorder together with a standard Brenell which enabled him to record a different series of sounds on each track and then play them back together, controlling the volume of each one independently; a



Working on an idea for 'Short Spell'

method, by the way, that could be used with equal success by film-makers interested in orthodox soundtracks that combine the usual commentary with background music.

"The tape was then cut up into lengths," he continued. "Each containing one sound and these lengths were labelled and hung up with the ends trailing. Then the work of composition began. Various short lengths were cut off the long pieces and spliced together in a rhythmic pattern, joining with diagonal splices to avoid clicks over the playback head. As I spliced I kept a re-



Complete set of 'cels'

cord of the rhythm and so on in musical notation and from this score I was able to complete a camera instruction chart for shooting the visuals."

I asked him how he set about compiling a track formed of complex sounds.

"An easy way," he said, "is to superimpose additional layers of sound on to the first recording. Most recorders erase the first layer immediately the second one is made; but it is possible, by putting some thicknesses of paper between the tape and the erase head, to add one or two extra recordings to form richer sounds. These, in turn, can be cut into short lengths and arranged in new patterns.

"With one recorder, of course, you are limited to a single line of melody. You will not be able to produce contrapuntal effects, so if you borrow another machine you will enlarge your field immensely. A length of tape containing a basic sound or pattern can be made into a loop which can run continuously in the first recorder and be re-recorded in the second. This enables you to repeat notes and phrases; and repetition is an important principle in any form of musical composition. A variable speed control is useful for obvious reasons and with certain machines capstans of varying sizes may be fitted. My Brenell, for instance, allows this and I have had eight capstans made for me with diameters in the proportions of the diatonic musical scale."

He proceeded to demonstrate the efficiency of the capstan method and, after making some necessary loops, recorded the single clang of a spoon on a tin lid. He then set the two machines in motion, stopping every now and again to change the capstans and to splice some more loops. After some time he stopped the standard machine, wound back on the stereo and switched on the playback. There then issued from the speaker, not the flat sound of a spoon on tin but a rhythmic and catchy air rather similar to a West Indian steel band playing calypso style.



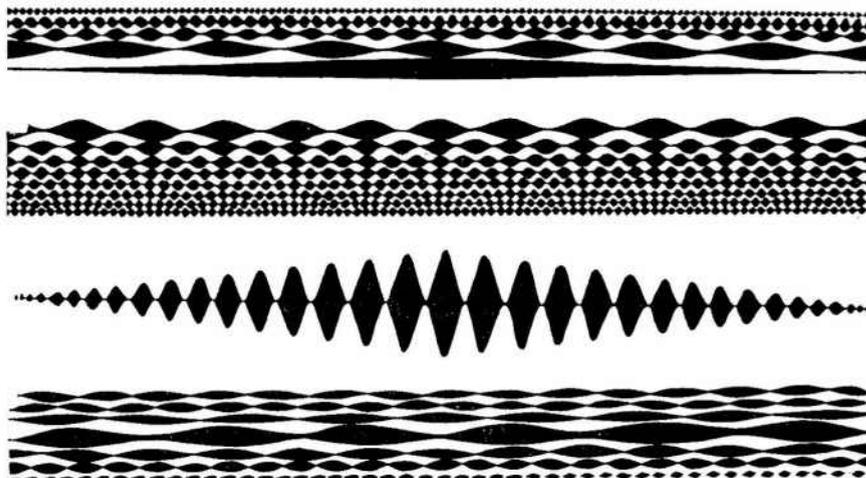
Richard Golding and S. Wynn Jones discussing capstans.



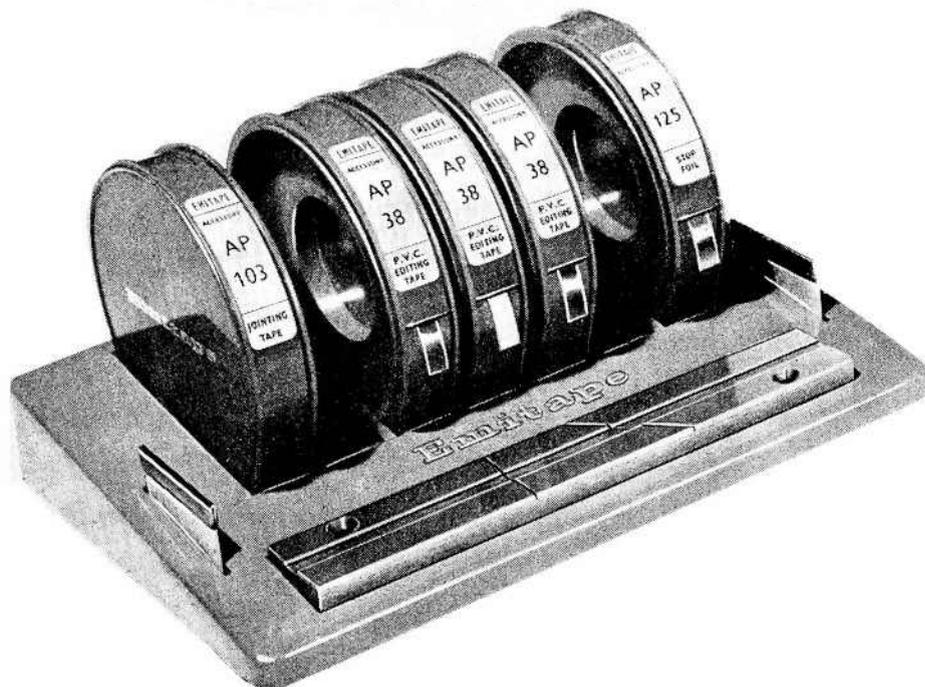
Wynn Jones making a loop on the standard Brenell recorder.

"You see there," he said. "Just one method. Perhaps your readers will dream up more ingenious things to do with sound for there is still plenty of scope for the enquiring mind. The only bar to incentive is that our lives are conducted in such crowded circumstances nowadays that neighbours do have a point when they suggest that one ought to do these experiments in a padded cell. Never mind! Close the windows, turn the volume down, hope for the best and just press on."

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Coco Walks the Tape-Rope

Quizzed by Bernard King

Here we are at Olympia, in one of the side rooms while in the main hall Bertram Mills Circus is being prepared, ready to open tomorrow. Next to me is Coco the clown and we have just started to chat together. Just a moment ago Coco, I asked you how you felt when you first appeared in public.

Well, I was nervous, but I was prepared for it you see. I was practising long enough before to face the public.

I see, and that was when you were ten years old.

Yes, that was 50 years ago.

And you were not a clown then, you were . . .

I was a trapeze worker, but I also did clowning as well.

And both your parents were in the circus?

Oh yes, my father was Coco and I was Coco Junior.

Would you mind telling us your real name?

My real name is Nicolai Poliakov. I was born in Russia and came to England in 1929. I only had a four weeks contract but I don't think my four weeks are finished yet.

You are seldom addressed by your real name today?

Very, very seldom. If Mr. Mills calls me Nicolai Poliakov I always think, aha that's trouble!

Can you recall any unusual happenings in the circus?

Yes, now I must tell you this little story as you are interviewing me. It is a very, very sad story. You know, when I was in Germany in 1928 there was an aerial act; two men working very, very high up. No net, no nothing. One morning one of the partners came down to the circus to be interviewed by a newspaper reporter, who started to ask him all sorts of questions. Naturally he answered them and everything was all right. Then the reporter turned round to him and said: "Do you know that if you fall from the very top into the ring the only thing we will have to do is collect the pieces". He said: "How right you are"; and this man went back in the dressing room and sat down there all the afternoon until his partner came. He said: "What's the matter with you, Zuss, why don't you get ready?" He replied: "Me ready? Ah, no more." He had lost his confidence, and he hasn't been up since.



That is indeed a very sad story and I shall watch what I say, from now on. Can you recall any great animal trainers?

Well you know, there are so many animal trainers in the world; there are good ones and bad ones. In the beginning they start like heroes, until one day they get mauled and they also lose their confidence. You see, I cannot tell you much about wild animal trainers because I have a son-in-law who is an animal trainer. He has a mixed group of lions, tigers and leopards all in one act. He was with us for a long time in Bertram Mills Circus but has now left.

Who would you say is the most daring performer you have worked with?

What do you mean the most daring performer?

The one who takes the biggest chances.

Well here in Olympia there is one girl I take my hat off to. I never saw one single girl to work on a high wire. It will take the breath away from the public but she does it and she does it beautifully. She is not only an artist, she is a saleswoman.

How has circus life changed over the years?

In the olden days when I was a little boy, when I used to put my make-up on, before I do anything, the public, especially the children, would laugh just to look at my face, but now when I put my make-up on and go in the ring they cheer me but they do not laugh because it is not funny for them when they know I wear a wig, false nose, and they know my hair goes up on end. They know every little thing, so I have to make them laugh now.

I believe most circus people are born into the circus?

The highest majority are, and I am going to give a secret away. You see I have six children, 15 grandchildren and three great grandchildren. I never persuade my children to become circus performers. On the contrary I told them that it is no good, everything is very, very bad but my children turn round



Coco nurses the interviewer's Stuzzi as he talks of circus life and happenings.

to me and say: "It is all right Daddy, for if it is good for you it is good for us".

What do you consider to be the essential qualifications for a good clown?

A good clown is supposed to be a clown, and to know everything else as well. He is supposed to be a good trapeze worker, a horseback rider, a tom player, he is supposed to do everything that is in the circus. If in a theatre something goes wrong they drop the curtains straight away but we have no curtains in the circus so the clown's job is to go in the ring and take over.

I have heard that you are very fond of children?

Ah ha ha, of course I am.

And you do a tremendous amount of work for the Road Safety. Is there any special reason for that?

Yes, there is. Last summer Season in 29 weeks I visited 274 schools. At every school I delivered my lecture in 25 minutes. Also two performances a day in the circus and also every Saturday to the cinemas, and it all started in 1947 when a little boy I knew was run over when playing in the street. His father worked at the circus and was going to bring him to see the show that day. I visited the boy in hospital and when I saw him it nearly broke my heart. I thought to myself something will have to be done about it. So I decided to open my own road safety campaign. And that's why I am visiting schools, hospitals and cinemas.

What was your most exciting moment as a clown?

Well, I have had some very exciting times. But one happened here in England, when Sir Winston Churchill visited the circus and I had to go to Sir Winston and shake hands with him.

On Wednesday I believe you will be performing before Prince Charles and Princess Anne again?

I will.

Do you find them different from other children?

Exactly the same. There is no difference between them at all.

And you also performed before Her Majesty when she was a little girl?

Yes, many times. I have performed for three generations of the Royal Family, and have played at Buckingham Palace 14 times. There is a special organisation called the Not Forgotten Association and I am very pleased to say I am a member there as well.

You mentioned once before about two leopards that escaped?

They were tigers actually, belonging to a fellow by the name of Tuguere, a most famous wild animal trainer. The two tigers escaped, and one went straight through the audience, out into the street and along to the railway station. Nobody was hurt because a sailor caught him there with a lasso.

As you know this interview is for the British Recording Club so perhaps I could ask if you own a tape recorder?

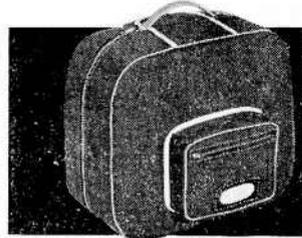
Unfortunately I do not, but I think it would be useful. I would like very much to take one with me to school and record the voices of the children. I would want a little one because I couldn't carry a big tape recorder and also my boots.

How big are your boots?

Size 24, and each boot weighs 9 lb.

Thank you very much for this interview, Coco. Perhaps one of our readers may be able to suggest a way in which you can fit a tape recorder into your boots.

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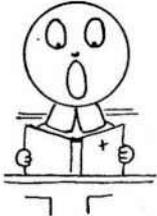
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THANKS TO THE thoughtfulness of tape recording clubs, Christmas 1960 was made much happier for many people in hospital and at old Folk's homes. A recording of the Choir of St. Peter's Church, Harrogate, made by **Harrogate Tape Recording Club's** Chairman, Bill Emmett, was used as part of a special Christmas programme for the patients at Scotton Bank Hospital, Knaresborough. The club asked local cinemas and newspapers to publicise the service and invite members of the public to telephone

the clubroom with a request or message for any of the patients, the conversations being recorded and included in the programme. Following this success, the HTRC has been invited to provide a similar programme at the Royal Bath Hospital, Harrogate.

Ellesmere Port Tape Recording Club enlisted the support of **Ilford & District Tape Recording Society, Ulster Tape Recording Society, and Bournemouth Tape Recording Club,** for its first venture in the social service sphere. No less than 20 requests for music and messages were received from the old folk at Sutton Beeches home. Credit is especially due to the Ulster Society, who travelled some 70 miles to Co. Tyrone to get their recording. Ilford club was delighted to assist and would like to provide a similar service for anyone interested.

Members of **Dover & District Tape Recording Club** recorded carols sung by the choir of Christ Church, Dover, and presented a 40-minute edited version to an old folk's home in St. Margaret's Bay, to Buckland hospital, and at a Christmas party for mentally disabled children.

Northampton Tape & 8mm. Cine Club also recorded a carol service for playback to their local old folk's homes on Christmas Day.

Four members of **Eastbourne Tape Recording Club,** led by Hospital Service Secretary Dennis Goldstraw, presented a special programme at their local hospital.

Northallerton Tape Recording Club has commenced its broadcasting service for the local hospital.

West Middlesex Tape Recording Club was able to contact relatives living in Doncaster and Belfast, of patients in Mount Pleasant Hospital, and arrange for recordings to be made that were greatly appreciated. Messages from patients' relatives in Australia and New Zealand have also been recorded, but will take a little time to reach England.

The Chairman of **Southall Tape Recording Club** (formerly Southall Sound Club) announced at their recent AGM that owing to lack of co-operation from the local blind organisations, they had been forced to terminate their Blind Service.

June Boyce of **West Herts Tape Recording Society** visited the Town Hall and recorded a Christmas message from the Lord Mayor of Watford to people in hospital and to the blind. John Grainger and Jean Stern recorded the Scout Gang Show in Hemel Hempstead, and excerpts will be used in the society's *Blind and Hospital Newsletter.* An interview with jazzman Chris Barber was also recorded for the magazine, at a performance by his band in Watford.

Three members of **Northampton Tape & 8mm. Cine Club** were able to secure an interview with film star Shirley Anne Field and get a message for the local children's home, in which she takes a great interest. Miss Field was very interested in the club; so much so that she enrolled as a member and has promised to visit them very shortly.

Urmston & District Tape Recording Club was yet another that recorded a Christmas Carol Service for playback to the



old folks. Recordings of the service, at St. Clement's Church, Urmston, were played back five days before Christmas to the Ann Challis Old Folk's Home, and the club was able to take the atmosphere of the church to their fireside . . . And last but not least, the **Dartford & District Tape Recording Club** went along to East Hill Methodist Church to record the choir for members of the Stone Veterans Club.

Following the success of an interview with Anna Neagle, Miss Dee Harris, Chairman of **Eastbourne Tape Recording Club,** travelled to Worthing to record a similar interview with Andrée Melly, who was very interested in their monthly visits to the sick and to old people's homes and sent them a special message. A few days earlier the club had visited Dr. Barnardo's Home where the 42 boys they entertained made some good recordings themselves, singing carols, and the juniors reciting nursery rhymes.

The Mayor of Cardigan, Councillor Albert Hallam, used the facilities of the **Teifside Tape & Sound Club** to make a recording of Christmas greetings from the people of Cardigan to their adopted ship: *HMS Cardigan Bay,* now stationed in the Far East.

News of the successful establishment of an American tape-spence club has reached us. The **Universal Tape Network** is the latest addition to a long list of such clubs, which already includes **World Tape Pals, Voicеспондents Club, Tape Respondents International,** and **American Tape Exchange.** There are no localised tape recording clubs as we know them in the USA, and the above five clubs, plus several others, all offer virtually identical facilities of the taping type. The Universal Tape Network has a membership subscription of 15/-, and details can be obtained from Larry Duhamel, Box 50, Main Street East, Douglas, Mass., USA.

Crawley & Sussex Tape Recording Club recently had the chance to make some recordings at the Business Men's Club, Crawley, where they met a man whom they feel is certain to be heard of on radio and TV in the near future. He's Lorenzo Tomas—a Spaniard with a style reminiscent of the late Mario Lanza—who can sing in Italian and German as well as Spanish. A copy of the tape, made by member Fred Whittingham, was to be heard by talent-spotter Hughie Green and singer Shirley Bassey.

Magno Recording Club heard an interesting lecture on the

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history of recording by local dealer J. Rose. Mr. Rose commenced his demonstration with a cylinder recording of Florrie Ford played on an old Edison 'Gem' phonograph, and concluded it with a four-track stereo tape. The club is grateful to Mr. Rose for the assistance he has given to them during the early days of their existence.



At Leicester Tape Recording & Hi-Fi Club, Committee member Malcolm Clarke devised and presented an instructive and entertaining lecture called 'Sound—its properties and effects'. Illustrated with examples, it showed how sound waves travel, and the difference between musical and discordant noises. Members recently had the pleasure of recording an interview for the Aden Forces Broadcasting Association, containing a request for a record to be played to one of the men stationed at an RAF base in Khormaksar.

At a recent meeting of the West Middlesex Tape Recording Club, members saw a very interesting film and heard an enlightening talk by Mr. Merrick of Wilmex Ltd., the 'Irish' tape distributors. Also on show were a variety of tapes and other gear including the Wilmex splicer. At the end of the talk, Mr. Merrick presented the club with two 7-inch spools of double play tape, for use in their Hospital and Message Service. The Secretary received a request from a Flying Officer Spicer, via the British Recording Club, to tape some messages from friends and relatives of Service personnel in Aden. This they did, and the recordings will be heard in due course by these boys, who are doing a very hot job in a far from pleasant station.

Brixton Tape Recording Club, formed last August, is now well established with 11 members, including a very enthusiastic committee. Regular competitions are held and tapes are judged by the members themselves, who allocate any number of points up to a maximum of ten to each entry. The member with the highest number of points at the end of the year is awarded a silver cup, which he is entitled to hold for a period of 12 months.

Albert Greenway, the man who is responsible for our Club Pictorial feature, has launched a new venture for members of the International Scout Movement. *Scouting Around* is the title of a tape magazine exclusive to the good-deed-a-day-lads, and is already being sent to scouts in Birmingham, Poole, London, Holland, and America. The magazine is quarterly and details may be obtained direct from Albert Greenway, 211 Frederick Road, Birmingham, 6.



Northallerton Tape Recording Club recently visited the studios of the Leeming Forces Network, a closed-circuit broadcasting station operated by servicemen at Leeming Airport, near Northallerton. A

Ferrograph tape recorder is used in this service.



Bill Firth, 29 Kirkstall Road, Davyhulme, Urmston, Lancs., is the new Secretary of the Urmston & District Tape Recording Club. Membership stands at 14, and permanent accommodation has been found at the 1st Davyhulme Scout Group Headquarters. The club now has its own printing press!

Almost all Derby Tape Recording Club's members attended its first dinner and social. Dancing and quizzes were arranged, and the evening was concluded with a most delightful tape/slide show produced by two of the members.

Dartford & District Tape Recording Club would be pleased to hear from anyone who has recordings of trams and trolley-buses 'of the type used in the area'.

Friern Barnet & District Tape Recording Club recently

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provided background music — previously recorded by a member who was at the time in Spain — for a Wine and Cheese Party held at the local town hall.

Finally, details of new clubs. In **Cambridge** a preliminary meeting of interested parties was arranged before Christmas between Pete Rogers (RAF Tape Recording Society and ESTRA publicity agent), Mike Renshaw (BRC member and ESTRA publicity agent), and Alan Fishpool. Ideas and plans for the 'CATS' were exchanged, and it was agreed to publish a quarterly newsletter. Fifteen people have shown interest so far. Meanwhile at Cambridge University, permission has been granted for the formation of a **Cambridge University Tape Recording Society**. Secretary is S. P. Robinson, Matina, Round Oak Road, Cheddar.

In **Birmingham**, there is news of a new club in formation to cover the South-West suburbs of Selly Oak and Norfield. Known as the **South Birmingham Tape Club**, this is being formed by Dennis Osborne, 75 Millmead Road, Birmingham, 32, who, incidentally, formed the city's main tape recording club 'B' TRAC back in 1959.

Much further afield, Don Morgan, Box 623, c/o The Motor Company, Mombasa, Kenya, East Africa, is forming a **Kenya Tape Recording Club**. Don tells us that over in Kenya, where there is no television and reception of English-transmission radio programmes is very poor, tape recorders are very popular.

Efforts are being made in **Tewkesbury** to start a club, so tapists in that area should write to Mrs. Anne G. Hill, De Montfort, Richard Place, Priors Park, Tewkesbury, Glos.

Robert J. Neu of 6023 W. Keefe Avenue, Parkway, Milwaukee 16, USA, is organising a club for the study of **Jazz Music** and the circulation of mono and stereo jazz tapes.

P. Bayne, c/o 'Greystones', Long Hanborough, Oxon, would like to contact enthusiasts interested in forming a club to cover his area (near Witney and Oxford).

CLUBMAN REQUESTS

Brian Sneller, Ward 13a, Joyce Green Hospital, Dartford, Kent, is more or less permanently in hospital and finds that he cannot hear as much jazz as he would like. He has a small collection on tape (three reels) and wonders if any BRC members would be kind enough to lend him tapes of modern jazz for dubbing and records for listening to. He would dub off any of his collection in return, take great care of tapes and records and would pay postage. He has a Saba Automatic recorder, 7½ and 3½ i.p.s. up to 7in. reels, ¼ track. 5½in. reels preferred; 7in. o.k.

Beverley J. Rice has changed his address from that shown in the November Directory to 1414 Lincoln Road, Werrington, Peterborough.

Dennis F. Riche (June Directory), says tapes up to 5in. only please.

F. A. Bryce of Stockport, reports expert service and attention given by Multimusic Ltd., to his new Reflectograph model B.4.track.

James Greenway has moved since his December Directory entry to 13 Avenue Gardens, South Norwood, Croydon, Surrey. He now has a Fi-Cord and can accept 3in. spools at 1½ i.p.s. adding "if anyone has a reasonable request for outside sound effects, I will be only too pleased to help in collecting them and sending them to the person in question on a small tape".

J. H. Langston has moved from the address shown in the November Directory to 47 Ave. des Solitaires, Ste. Genevieve des Bois, S & O, France.

Michael J. F. Ireland (October Directory) is now at 'Willow Tree Cottage', North Street, Blofield, Norwich, Norfolk. NOR 84Z.

D. J. Chatterton's address is 82 Lakonal, Sceaux Gardens, Camberwell, London, S.E.5. Tapespondents please note, and also that he has an additional interest now, youth clubs.

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TR

How to make modern music with a Tape Recorder

by F. C. Judd, A.Inst.E

PART IV

THE FIRST THREE articles have dealt with the basic rules for the composition of Electronic Music and Musique Concrete, magnetic tape splicing and simple recording techniques. (Interested new readers may obtain back copies of the magazines containing these articles.)

Those who have the necessary technical knowledge and facilities for construction, will no doubt be interested in a circuit for producing continuous tones (the multi-vibrator) and devices for controlling the 'attack' or 'decay' of sounds and for tone 'shaping'. I have also promised details of readily available tone sources. It would be as well therefore to discuss some of the electronics used for Electronic Music composition and to include, where applicable, details of pre-recorded sound sources at the same time.

THE SINE WAVE OSCILLATOR

The pure sine-wave is devoid of harmonics and sounds weird and mournful when compared with the richer tone of a square wave. Circuits for continuously variable pure tone oscillators are rather specialised and consequently a fairly intimate knowledge of oscillator fundamentals are required for the design and construction of one. A useful variable sine-wave source, however, is the 'audio signal generator' used for testing low frequency amplifiers. Alternatively a standard frequency test disc is a good substitute and one which has been used by the writer quite often as a pure tone source for electronic music. The Decca test record LXT.5346 covers a frequency range of 30 to 18,000 c.p.s. in bands and gliding tone.

THE MULTI-VIBRATOR

This is a simple primary tone source which produces a sound very rich in harmonics. It generates an almost perfect square wave and a circuit that will cover most of the audio frequency range is shown as Fig. 1.

WHITE NOISE

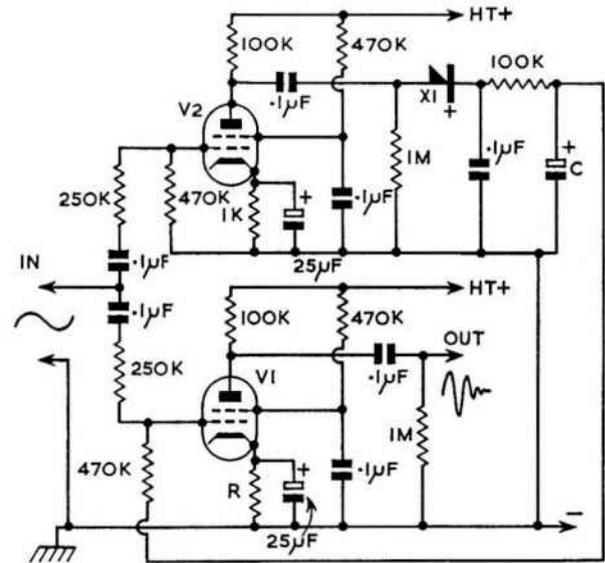
A white noise generator is an expensive device and for Electronic Music the noise must be filtered before it can be used. At the higher frequencies it sounds like a continuous 'hiss' and can in fact be used to produce a sound like a struck cymbal, but without the attack. In other words the sound produced by a cymbal *after* it has been struck.

Filtered white noise can be obtained, pre-recorded, on tape. It is available in one third octave bands, covering the major portion of the audio frequency range (Ref. 1).

GATING CIRCUITS

In order to produce certain effects from basic tones and/or concrete sounds it may be necessary to eliminate the attack or decay. This can be achieved by tape cutting as described in the previous articles or by means of electronic circuits. The AUTOMATIC BELL GATE of Fig. 2 will deprive a sound of its attack and at the same time produce a controlled decay. The action of the circuit is as follows:

The valve V1 is cut off by a suitable value of cathode bias resistor (R). For an EF91 the value of R will be approximately 4.7K.ohms. The input signal is applied to the grids of both valves but V1 will not conduct until V2 has passed the signal, which in turn, is rectified by the diode X1. The rectified signal (now +DC) charges up the capacitor C. This potential eventually becomes high enough to overcome the bias on V1 and consequently allows the valve to conduct. When the signal ceases, V1 gradually returns to the cut off condition.



THE AUTOMATIC BELL GATE FIG. 2

The KEYED BELL GATE shown in Fig. 3 is useful for providing the sound of bells from a continuously running audio oscillator. The fundamental tone is fed into the gating circuit but no signal will be passed until the gate is opened or keyed by the switch S1. The attack produced is similar to that of a struck bell and the decay time may be controlled by the setting of VR1. This circuit may also be used to pass short bursts of sound from other sources.

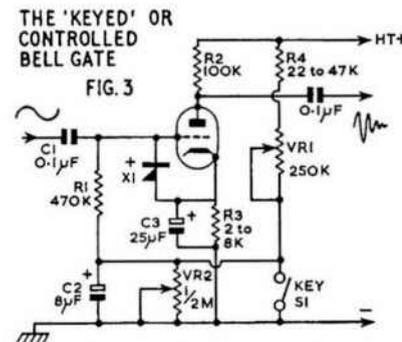


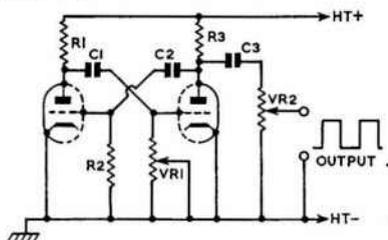
FIG. 3

An ordinary volume control may of course be used for producing effects similar to those described above and whilst a rapid turn of a volume control can deprive a tone or sound of its attack, or produce a decay effect, the method is rather cumbersome when attempting control over a rapid succession of tones or sounds.

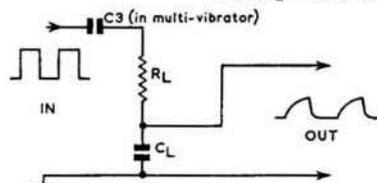
TOPE SHAPING

The output from the multi-vibrator which is an almost square wave may be modified to produce different timbre; for example the 'integrating' circuit of Fig. 4 may be used to produce a somewhat less rich tone than that given by an almost square wave. The waveform becomes more curved and consequently has a lower harmonic content.

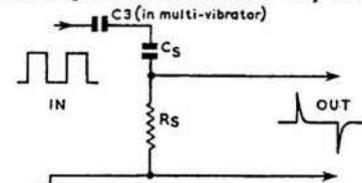
The 'differentiating' circuit of Fig. 5 can be used to provide a sharp 'thin' tone which is quite distinctive and very different



THE BASIC MULTI-VIBRATOR FIG. 1



THE INTEGRATING CIRCUIT FIG. 4



THE DIFFERENTIATING CIRCUIT FIG. 5

How to make modern music with a Tape Recorder

from the 'reedy' tone of the square wave. When using these circuits, however, great care must be taken not to overload the recording amplifier since the output from a square wave generator is quite large. The circuits of Figs. 4 and 5 will attenuate the signal somewhat but even so there is still a risk of overloading, which will further distort the signal. It is wise to employ an oscilloscope when using tone shaping circuits of this nature.

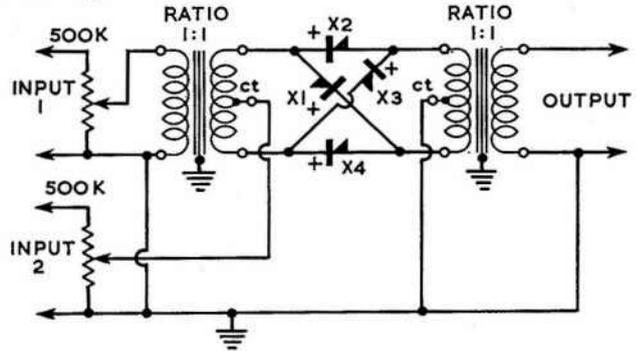
THE RING MODULATOR

This is a device frequently employed for electronic music production but is, however, an expensive one and very difficult to obtain. Audio frequency ring modulators are used in carrier telephony applications and for these and other specialised purposes, the modulator must be perfectly balanced. As a consequence it normally employs specially designed and therefore expensive transformers. For Electronic Music purposes one is only concerned with the actual modulation of one tone by another and a reasonably balanced ring modulator will suffice.

It will be seen from the circuit of Fig. 6 that two input terminals are provided. In use, a tone is fed into each input and because of the rectifiers and the special function of the circuit, one tone will be modulated by the other. As a result of this modulation, 'difference' tones will be produced at other frequencies, the audible effect being a rather peculiar one of new tones appearing to come out of those fed into the modulator. (I have demonstrated this in the pre-recorded tape 'Experiment in Sound' which is obtainable from Bi-Tapes Ltd.)

A simple but effective ring modulator can be constructed from two audio frequency intervalve transformers with centre tapped primary or secondary windings and four germanium diodes (X1, X2, X3 and X4). The circuit of Fig. 6 provides sufficient information for the technically minded. The circuit, or rather the nature of the components, will not allow complete

balance, although this is not necessary. Attenuators should be provided as shown in the circuit, for controlling the level of the input signal, since distortion can occur if the signal level is too high.



THE RING MODULATOR

FIG. 6

Ref. 1.—Pre-recorded: 25 one-third octave bands of filtered white noise: 40 to 10,000 c.p.s. (7½ i.p.s.) available from Tutchings Electronics Ltd., 14 Rock Hill Road, Friars Cliff, Christchurch, Hants.

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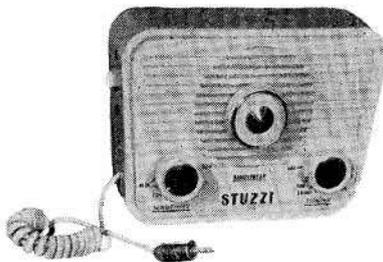
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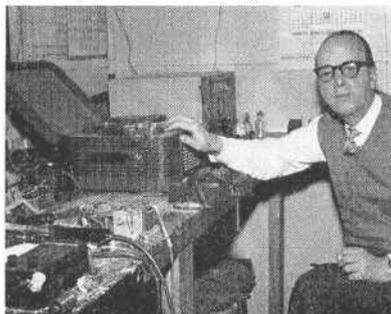
Manufactured by Recording Devices Ltd., 44, Southern Row, Kensington, W.10.



NORMAN LENDS A HAND

The children of the A.B.C. Minors' Club at the Regal Cinema, Staines, are the biggest hearted bunch of kids you could wish to meet. They heard about the Rushton Home for blind children with additional handicaps and immediately decided to organise an appeal, amongst themselves, to send the children at Rushton a Christmas present. A tape recorder, they thought, would make a marvellous gift and they decided that they would try to raise the money to buy the very latest 4-track machine—the Stuzzi Junior 4M.

To give the appeal a really flying start, 13-years-old Paul Dysart, the Appeal's Secretary, asked Norman Wisdom to lend a hand. He wrote to Norman and asked him if he would record an appeal that Paul could play to the Minors' Club. Norman agreed, and so Paul and one of his young helpers, 8-years-old Janice Stradling, came to London with the machine they hope to present to Rushton and in between rehearsals for his Palladium pantomime "Turn Again Whittington", Norman recorded a message to the children of the Regal Cinema, Staines.



SCOOP ON A TAPE RECORDER

Fame came overnight to boffin Mr. L. J. Hills, of Belvedere, Kent. It happened on December 14th last year. Tuning in his communications receiver over the shortwave amateur bands by chance, he picked up an S.O.S. message from the Amateur Radio Club in Addis Ababa announcing the attempted coup d'etat. The message was repeated several times and Mr. Hills was able to record it on his Grundig TK 9 tape recorder. Although quite unaware of its significance, he telephoned the Ethiopian Embassy, and daily press, and thus became the first man to break the news to Great Britain.



FOCUS ON SOUND

(left)

The co-operation of the Lord Mayor of Dartford, Councillor Fred Brown, J.P., was successfully sought by Dartford and District Tape Recording Club when they replied to a tape received from the Jersey Club.

(right)

Our picture shows Mrs. Sheila Wakely, who last year founded the Ware Tape Society, looking at the globe around which her tapes circulate.

Mrs. Wakely started recording local sounds and voices two years ago to send to a former Ware health visitor and has since made tape friends in a number of different countries.

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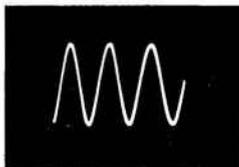
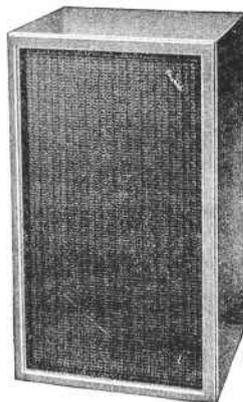
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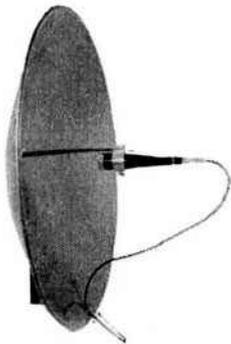
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(above)
 Grampian Reproducers Limited are now offering a Parabolic Reflector for their popular range of DP4 microphones.

It has been found that in recording a sound 100 ft. distant, over a frequency range of 500 c/s to 5,000 c/s, the sensitivity of the microphone is increased by 14 db when the reflector is used.

The Grampian Parabolic Reflector is an accurately formed 24 inch diameter aluminium spinning finished in matt green paint.

Priced at £5.15.0 the reflector is obtainable through most audio dealers or direct from the manufacturers—Grampian Reproducers Limited, Hanworth Trading Estate, Feltham, Middlesex.



(above)
 Top Luxembourg disc jockeys Jimmy Young, David Gell and Alan Freeman, at a recent reception at Thorn House, listen to the "new sound" from the Ferguson 'Reverberasonic' radiogram.

This new radiogram, by adding varying degrees of reverberation to mono or stereo records, recreates the lively, vibrant atmosphere of a concert hall or auditorium.



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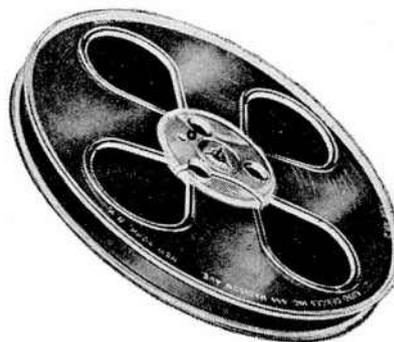
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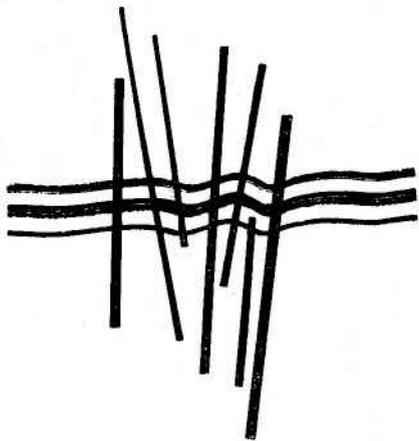
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Tape and disc review

STANLEY R. WHITE

THE GEORGE MITCHELL Minstrels are a group of talented people who have given tremendous pleasure to millions of TV viewers through the TV spectacular 'The Black and White Minstrel Show'. Now, George Mitchell has taken the whole group along to the HMV studios and put together a musical treat for followers of this popular team. **The George Mitchell Minstrels from the Black and White Minstrel Show.** HMV CSD1327 (stereo)

Tony Mercer is the first voice heard solo on the disc; he pops in and out throughout the whole record. He's the one who reminds people of Bing Crosby. Dai Francis is also heard singing solo several times, and echoes the late Al Jolson. The other featured vocalist is John Boulter, who was trained at the Royal Academy of Music. No less than 56 songs are featured on this LP, and the singing alternates between the solo voices mentioned above, and the whole choir. The effect in stereo is extremely pleasant, and re-creates the picture of the large stage setting associated with the Minstrels. The songs are split up into sections, and as the titles are far too numerous to mention here, this is the heading under which each selection goes: 'Meet The Minstrels'; 'Leslie Stuart Melodies'; 'In The Moonlight'; 'Your Requests'; 'Meet The Girls'; 'A Tribute to Al Jolson'; 'Memories of Stephen Foster'; 'Grand Finale'.

This fine record should give pleasure to thousands of people for many years to come, and I cannot overstate the very high standard which is set by this group throughout the whole record. George Mitchell must be congratulated upon the fine arrangements used, also the record company for making this great record available.

Finally this time, I am calling the collectors of old records. Most of you will be aware of the bi-monthly publication 'Vintage Jazz Mart'. For years this publication has belied its title, by offering for sale, not only jazz records, but many rare items long deleted from the catalogues of the record companies, from virtually every field of gramophone records. From the January issue, the magazine has taken on a new look, with not only the lists of records for sale and wanted, but feature articles about many of the great personalities whose records are collected by thousands of people throughout the world. The magazine is invaluable to those of you wishing to obtain records which are no longer available in the shops, plus records which were never available in this country at all.

So here is a great opportunity for all record collectors; the editor will send a copy of the magazine to any reader of this magazine free, if you forward your name and address to 'V.J.M.' c/o Trevor H. Benwell, 4 Hillcrest Gardens, Dollis Hill, London, N.W.2. Please make sure you mention this magazine so that you can obtain your free copy. Overseas readers need have no fears about applying for their copy, as the magazine is distributed throughout the world, and instructions are given in each edition about foreign subscription rates.

Many readers will recall the famous recordings made in the late thirties and early forties by the 'Bob Crosby Bob-Cats'. This celebrated band kept Dixieland style music alive at a time when the musical trends were moving away from the older styles of jazz and being taken over by the big 'swing style' bands, probably the most famous of which was led by Benny Goodman. Bob Crosby did not play all out jazz, but

combined the popular swing trend with a flavouring of Dixieland. I expect the most fabulous record of all which the band made (from the sales point of view) was 'South Rampart Street Parade'.

Recently released is a 12in. stereo Long Player on 'London' — SAH-D6105, called 'Bob Crosby's Great Hits' with the Bob-Cats. The titles are: 'South Rampart Street Parade'; 'Honky Tonk Train'; 'March Of The Bob-Cats'; 'Little Rock Getaway'; 'What's New'; 'Washington and Lee Swing'; 'Big Noise From Winnetka'; 'Yancey Special'; 'Muskrat Ramble'; 'Boogie Woogie Maxixe'; 'Gin Mill Blues'; 'Sugar Foot Stomp'.

Here again are the Bob-Cats, with just about the same personnel as 20 years ago. Billy Maxted replaces the late Bob Zurke on the piano. All the musicians are 20 years or more older than when they made the original recordings, and blow me down if they don't re-create the sounds of the great band in its prime, and even go better than the originals on some numbers. The format is the same, the big band swings along with a terrific beat, laced with the dixieland flavour. Nostalgic perhaps, but the music is as fresh today as ever. Stereo adds to the final result, and the great band is heard as never before. From the lively kick-off — 'South Rampart Street Parade' — you are in for a feast of music from Bob Crosby and his Bob-Cats.

RUSS ALLEN ON JAZZ

WITH CHRISTMAS GONE, the New Year come, our thoughts must turn to the future. What of 1961? Well mates, I dunno. One fing fur sure, they ain't like they use ter be. What, in fact would Jelly Roll have said to Monk? I don't know, but I do know that Monk has a great deal to say, pianowise that is and I've two really fabulous LPs of his to recommend this month. The first, on Carlo Krahmer's Esquire label, **THELONIOUS MONK QUINTETS 32-109**. Two groups are featured, one on each side, recorded with a six months' break between; the most recent, the A side having been made May 11th, 1954. This is also the best set.

Ray Copeland, trumpet; Frank Foster, tenor; Curly Russell, bass; Art Blakey, drums; and of course Monk himself are the main reasons for the superiority. 'Smoke Gets In Your Eyes', is another; the treatment is superb. 'Locomotion', with its vividly descriptive theme, reiterated by Monk in his solo, is (may I say?), a great vehicle for the talents of all concerned.

The B side, has Sonny Rollins, Julius Watkins, french horn; Percy Heath and Willie Jones and is fine jazz, fine Monk themes and a must for modernists.

Riverside have issued **THE THELONIOUS MONK ORCHESTRA AT TOWN HALL**. Recorded five years after the Esquire side it shows clearly the logical progression of Monk's music. The full orchestra consists of as good a group of Monk interpreters as you're likely to find: Donald Byrd, trumpet; Eddie Bert, trombone; Phil Woods, alto; Charlie Rouse, tenor; Pepper Adams, baritone; Robert Northern, French horn; Jay McAllister, tuba; Sam Jones, bass; and Art Taylor, drums. A very fair lot, as they say.

They mostly blow a storm and my only crib is that some of the ensemble passages are rough, due no doubt to lack of rehearsal time; but don't let it put you off — it's a set worth twice the money, for Monk alone.

Also from Riverside is **EVERYBODY DIGS BILL EVANS 12-291**. This was my introduction to Bill Evans and I want you to know that I dig him the most too. Bill plays piano and he's helped out by Sam Jones on bass and (no relative), Philly

(Continued on page 41)

WHAT THE CRITICS SAY

**about the Kuhnau 'BIBLICAL SONATAS'
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"To me it is one of the outstanding recordings of 1960."

W. A. Chislett (Gramophone) in 'Oxford Mail'—19.12.60.

"If its (philharmonic records) issues are anything like as good as this first, it should quickly establish itself among scholars and discriminating music lovers."

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"Philharmonic Records is to be congratulated on a most auspicious beginning to its activities."

Lionel Salter in 'The Gramophone', January, 1961

**about the 'BACH SUITES' PRL 0101/2
39/9 each.**

"Tremendous care has obviously been lavished on these performances in order to present Bach with integrity and with an orchestra of about the size of that for which he wrote, though it is highly improbable that Bach himself ever heard his music as well played as it is here."

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W. A. Chislett in the 'Oxford Mail' December, 1960

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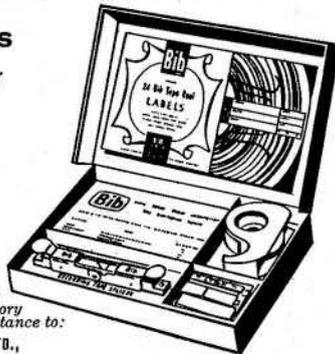
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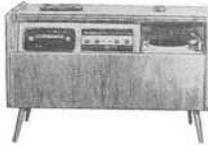


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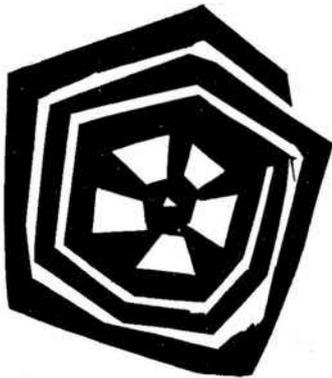
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Inter-tape directory

For ease of reading, particulars of Tapespondents are printed in the following order—name, occupation, address, interests, taste in music, type of machine and area of Tapesponding.

B.A.O.R.

Sgt. KEN SPINKS, age 23, H.M. Forces, C.P.O., B.A.O.R., B.F.P.O., 40. Photography (colour), travelling, models. Any except jazz. Grundig TK 25, up to 5½ in. 1½, 3½. Anywhere English speaking, particularly N.W. Europe.

CANADA

FRANK G. BARRATT, Government, 917 Murray Avenue, Quebec City, 6, Que., Canada. Tape recording, sound effects, high fidelity, underwater swimming, electronics, modelling, inter-tape exchange and private industry (self-owned business), photography (still colour and b. and w.). Military and brass band, classical and semi-classical, all kinds except jazz. Philips EL 3542, Korting MK 138. Essex, Ampex and Nagra, up to 7 in. 1½ to 15, single, two and four track. Worldwide except U.S.A. No need to write first. All tapes answered and any age group.

GERMANY

TERRY I. BULL, age 20, R.A.F., ASF I, Tech. Wing, R.A.F., Wildenrath, B.F.P.O., 40, Germany. Touring photography, music. Popular music, light classics. Grundig TK 35, up to 7 in. 7½, 3½, 1½. Anywhere, preferably female.
No. 1933222, S.A.C. WRIGHT, ANDREW, Ground Wireless Mechanic, Block 14 Room 1, Radio Relay Section, R.A.F. Station Goch, Germany, B.F.P.O. 43. 35 mm. photography, hi-fi, aero-modelling. Classical mainly, but I like all other. Grundig TK 60, mono or stereo, up to 7 in. 3½, 7½. World wide in English only. No need to write, all tapes will be answered promptly.

SCOTLAND

JOHN DUNIPACE, age 22, App. Blacksmith, 9 Menzies Place, Balornock, Glasgow, N.I. Pops, light classic, judo R.M.F.V.R. Anything except jazz. Korting, 7 in. 3½. U.S.A. and Germany.
KENNETH LYNCH, age 16, Junior Reporter, 34 Robertson Avenue, Leven, Fife, Scotland. Photography, taping, Rock (Elvis) pops, some jazz. Carol TR 1, up to 5½ in. 3½. U.S.A., Anywhere.

SOUTH AFRICA

PIETERMARITZBURG TAPE RECORDING CLUB, P.O. Box 40, Pietermaritzburg, Natal, South Africa. Wishes to tapespond with Clubs throughout the world.
G. H. VICKERS, age 77, wife Gwen, age 74 (we will never grow up!) City Treasurers Dept., P.O. Box 695, Pietermaritzburg, Natal, South Africa. Both spiritualists and healing mediums for over 20 years, both write short stories, I go in for 35 mm. coloured slides. Came to Africa at tail end of Boer war (West Yorkshire Regt.), served in 1st war S.W. Africa, East Africa and spent 3 years in Australia. Wife 5 years Germany, 1 year Bulgaria, 1 year Turkey. Anyone with same tastes can send tape without writing first.

U.S.A.

ROBERT J. NEU, Governmental Hospital Accountant, 6023 West Keefe Avenue Parkway,

Milwaukee 16, Wisconsin, USA. Collecting rare, unreleased private monaural and stereo jazz tape recordings. All types of jazz music. Ampex 910 and 960 Tape Decks, up to 7 in. 7½, 3½, stereo and monaural ¼ and full 2 and 4 tracks. Anyone speaking English (particularly Germany).

WALES

ALAN L. HIGGINS, age 33, Asst. Manager (Leather and Sports Shop), 64 St. Brides Road, Aberkenfig, Nr. Bridgend, Glamorgan. Amateur radio, model railway, tape recording, railway, music, photography. Any music. Ferguson 441 TR, 3 in. to 5½ in. 3½. Anywhere, English only spoken.

EDWIN JAMES, age 22, Hospital Orderly, 20 Colum Road, Cathays Park, Cardiff. Dancing, general. Pops, light classical. Philips EL 3515, up to 7 in. 3½. Anywhere English.

COLIN ROBERTS, Rayon Worker, 56 Mount Street, Flint, N. Wales. Radio, general. Any except ballet. Carousel, up to 7 in. 7½, 3½, 1½. Anywhere English speaking. No need to write, send tapes. Prefer female.

BEDFORD

H. GADSDEN, T.V. Service Engineer, 17 Drovers Way, Dunstable, Beds. Amateur radio transmitting, photography. Light and folk music. Would welcome slow simple German to improve mine. Grundig TK 5, up to 5½ in. 3½. Germany.

BUCKINGHAMSHIRE

N. J. LORING, Storekeeper, 86 Bowyer Drive, Gippenham, Slough, Bucks. Speedhand, plays. Light classical. Philips 4 track, 7 in. 1½, 3½, 7½. England, New Zealand.

CHESHIRE

ROY TAYLOR, age 20, Retail Shop Manager, 2 Gawsorth Close, Bridge Hall Estate, Stockport, Cheshire. Theatre, music, wrestling, beer. Mainly Ella and Sinatra. Fidelity Argyll, 5½ in. max. 3½. Anywhere.

CORNWALL

DAVID FREEMAN, age 50, Retired, Seacroft, Chapel Porth, St. Agnes, Cornwall. Motoring, photography. Light classical music, etc., not jazz. Brenell V, 3 in., 5 in., 7 in. 1½, 3½, 7½. Anywhere but English only, don't write—all tapes replied to promptly.

LESLIE KEITH HARRIS, Assistant (Lipton), age 18, 7 Grenville Crescent, Falmouth, Cornwall. Cycling and aeromodelling. Everything from pops to near classical. Elizabethan bandbox, 3½ in. 1½, 3½. Anywhere.

DERBY

PETER J. EYRE, Duplicating Dept., Supervisor, 48 Davenport Road, Derby. Reading, especially science fiction and anything unusual. Everything except opera and jazz. Elizabethan Princess, up to 7 in. 7½, 3½, 1½. Anywhere particularly Commonwealth and U.S.A., but only English spoken. No need to write just tape.

DEVON

Miss EVELINE M. ROE, Secretarial College Owner, Imperial Secretarial College, 10 Thurlow Park, Torquay, Devon. Tape recording, records, dancing, T.V., theatre, radio. Perry Como, Presley, etc., general, not too classical. Cossor 4 track, up to 7 in. 1½, 3½, 7½. U.S.A. mainly but any English speaking. Would prefer 25-35 age group, male or female.

BRIAN JOHN WILLIAMS, 18 Newcourt Road, Topsham, Devon Jazz, cars, recording and art. Modern and mainstream jazz. Grundig TK 30, 7 in. 7½, 3½. U.S.A. or France, girl if possible or boy. Only English speaking.

DORSET

ALBERT G. DUNCKLEY, Electrical Engineer, 17B Wharfedale Road, Parkstone, Dorset. Most subjects. General (not rock 'n' roll). Brenell, 8½ in. 3½, 7½, 15. Tapes welcome from anywhere, particularly France, Spain and Mexico. Either sex, preference over 30 age group. Little French and German spoken.

RON W. HICKSON, Projectionist, 12A Balston Road, Parkstone, Poole, Dorset. Photography. Popular classics. Telefunken KLG 5, 5 in. 1½, 3½. Anywhere English speaking.

ESSEX

D. T. BAVERSTOCK, age 29, Laboratory Technician, 45 Chestnut Close, Hockley, Essex. Photography, tape recording, music, hi-fi. Most classics, opera, trad. jazz, guitar music, classics, Segovia, John Williams. Vortexion WVB, up to 8½ in. 3½, 7½. Anywhere English is spoken, male or female.

JOHN F. BOWEN, Electrician, 48 Grenville Gardens, Woodford Green, Essex. Anything. All trad. jazz mainly. Brenell, up to 8½ in. 3½, 7½, 15. Anywhere. I will accept tapes without prior notification.

VICTOR BULL, age 18, Clerk, 21 Chippenham Road, Harold Hill, Romford, Essex. Cars, records, motor racing. Pops. Elizabethan FR 3, 7 in. 1½, 3½, 7½. U.S.A., Australia, New Zealand or G.B.

JOHN V. EMANUEL, age 20, Printer, 39 Melbourne Road, Clacton-on-Sea, Essex. Playing musical instruments, photography, dancing. Modern pops. Fidelity Argyll, up to 5½ in. 3½. England.

L. M. RICHARDS, Shipowner's Clerk, Flat 2, 35 The Leas, Westcliffe on Sea, Essex. Medieval architecture, microscope. Classic, religious. Wyndsor Victor, 7 in. 15, 7½, 3½ Colonies, U.S.A.

GLOUCESTER

A. E. GEORGE, Signaller, B.R., 206 Southgate Street, Gloucester Chess, football, stamps. Popular (no rock 'n' roll), light orchestral. Gramdeck, 5½ in. 7½, 4.3, 3.2, 1.60. Any English speaking.

HAMPSHIRE

J. DALLEY, Rep., 8 Jubilee Avenue, Paulsgrove, Portsmouth, Hants. Swing and Latin American. TK 20, 5½ in. 3½. Latin America or any English speaking.

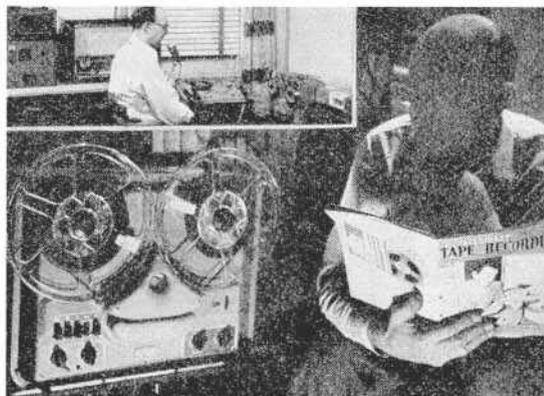
GRAEME and MARGARET GRAUNT, Nursing Attendant, R.A.F., 47 Airmen's Married Quarters, R.A.F. Odiham, Nr. Basingstoke, Hants. Tape recording, photography, general. All kinds of music in moderation. Telefunken KL 65, up to 5 in. 3½, 1½. All except U.K. English speaking only.

GRAHAM J. HAWKINS (wife Mary), Relief Porter, B.R., 20 Wharf Hill, Winchester, Hants. Railways, music, people and places. All except chamber. Philips 4 track EL 3541, 7 in. 3½. U.K. only.

ALBERT J. POORE, Agricultural Contractor, Clovelly, Martin, Fordingbridge, Hants. Recording, travel, motoring. Light classical, Continental accordion, Latin American. H.M.V. DSR1, up to 7 in. 7½, 3½. Anywhere English spoken.

BARRIE SQUIBB, age 18, Fitter's Mate, 49 Moat Close, Bramley, Basingstoke, Hants. Philately, recording. Pops. Stuzzi Mambo, 5½ in. 3½. Any English speaking.

K. Miller, 1500 Grand Concourse, New York 57, N.Y., U.S.A.



HEREFORD

VICTOR H. F. DUKES, Jeweller's Manager, Prospect Farm, Folly Lane, Hereford. Music, T.V., Bond minicars. Light classic, trad. jazz. That other piano. Fidelity Argyll and Clarion, 5½ in. max. 3½. Anywhere.

HERTFORDSHIRE

PHILIP CUCKSON, age 22, Electronics, c/o 15 Ravenscroft Park, Barnet, Herts. Photography (without a camera), recording, churches, theology, and a little philosophy and ecumenical relations. And a little humour—you name it—I like it! All enjoyable except modern jazz. Brenell V, up to 8½ in. 1½ to 15. Anywhere.

ISLE OF MAN

VALERIE CARTWRIGHT, age 15, Schoolgirl, Glenframmon, Lazeyre, Isle of Man. Horses, the violin and getting through the G.C.E.! Wish to tapespond with a French schoolgirl with a view to mutual language improvement. Everything in music. Elizabethan, 7½, 3½, 1½. France.

ISLE OF WIGHT

J. E. HANNAM, age 19, Sales Clerk, York Cottage, 16 Osborne Road, East Cowes, Isle of Wight. All sports. Popular (Craig Douglas, etc.) Philips, 5 in. 3½. Anywhere.

KENT

B. W. BUCK, age 19, R.A.F. Regt., 64 Bingham Road, Frindsbury, Nr. Rochester, Kent. Motoring, radio, travel. Pops, trad. jazz, Beethoven. Philips EL 3542, 7 in. 1½, 3½, 7½. U.S.A., Africa, Australia.

RICHARD ROBBINS, age 26, Electronics, 130 Pattens Lane, Chatham, Kent. Music, walking alone. Bach to Dame Hilda, chamber, classical jazz, electronic, birds. Cub, 3 in. 3½. Anywhere, any age, don't write.

HARRY SCASE, Postman, 67 Grove Road, Chatham, Kent. General, all round interests. Popular (not serious), fan of Russ Conway. Walter 303, up to 7 in. 3½, 7½. Anywhere. English only spoken (male or female). No need to write first, all tapes answered.

KEN SINCLAIR, age 32, Journalist, Fenham, Avalon Road, Orpington, Kent. Books, films,

people, photography, music, languages. All music (classical, trad., modern, jazz, folk). Grundig TK 20, up to 5½ in. 3½. Anywhere, particularly U.S.A. Send tapes—don't write.

LANCASHIRE

MARTIN A. BURFORD, age 16, Scholar, 26 Endfield Park, Grassendale, Liverpool, 19. Swimming, recording. Pops, rock 'n' roll. Grundig TK 5, 5½ in. or 3 in. 3½. Commonwealth, particularly New Zealand, Australia, U.K., also U.S.A. All letters and tapes answered.

DAVID CLAYTON, age 14, Schoolboy, 14 Brankome Avenue, Prestwich, Manchester. Light classical, pop, rock 'n' roll, folk songs and Israeli songs. Telefunken 3 in. or 5 in. 1½, 3½. I would like an English speaking Jewish pen friend preferably in Israel but if not anywhere in the world provided that they are Jewish and English speaking. I would like my pen friend to be a girl of my own age.

NORMAN EVERITT HEYWOOD, age 23, Salesman, 11 Cawley Terrace, Heaton Park Road, High Blackley, Manchester, 9. Would like to contact any Old Masonians. Fats Domino and pop records. Philips 4 track 3542, 3 in. to 7 in. 7½, 3½, 1½. Anywhere, particularly abroad, no letters, all tapes answered.

LEICESTERSHIRE

MICHAEL LATHAM, age 17, Trainee Work Study Engineer, Ingarsby Lane, Houghton-on-the-Hill, Leicestershire. Tape recording, travel, motor sports. Popular, trad. jazz, light classics. Regentone RT 51, up to 7 in. 7½, 3½, 1½. Anywhere English speaking. Boy or girl my age.

LINGOLNSHIRE

T. DOWDING, Electronics, Flat 52, Second Avenue, Nunsthorpe, Grimsby, Lincs. Electronics, archery. Varied, not jazz. Grundig TK 8-3D, 7 in. 3½, 7½. All.

LONDON

JOHN BARNFIELD, age 23, Clerk, 45 Chandos Road, Willesden Green, London, N.W.2. Photography, sport. All except classical. Philips 4 track, 7 in. 1½, 3½, 7½. U.S.A., Australia.

JOHN COLES, age 20, Articled Clerk, 42 Rosenthal Road, Catford, London, S.E.6. Opera,

reading, theatre. Opera, classical music. Philips stereo, up to 7 in. 1½, 3½, 7½. Anywhere.

ALAN DAVIS, age 24, Schoolboy, 33 Wykeham Road, Hendon, N.W.4. Tape recording, tennis, radio, electronics. Rock 'n' roll, Spanish classical. Grundig TK 20, 5½ in. 3½. Anywhere.

STUART DAVIS, Electrician, Chief Elect., ss. 'Patonga,' P. & O. Co., 122 Leadenhall Street, London, E.C.3. Colour photography, travel. Various. Brenell MK V, up to 7 in. 15, 7½, 3½, 1½. Anywhere.

PETER HANMER-FARMER, Working on my own, 10 Blomfield Villas, Paddington, W.2. Tapesponding with young people, 'teenagers' and 'twenties' (male), particularly pop records, films and tape recording, also talking about anything, hobbies, unusual interests, etc. Grundig Cub, 3 in. 3½. Preferably contacts in England or Eire but specially in London. Introductions on tape please outlining interests and age. Immediate replies.

R. W. JOHNSON, Newsagent, etc., 39 Oldhill Street, London, N.16. Golf, photography, records and recording. Most kinds of music. Philips stereo, Elizabethan de luxe, Trav-ler, up to 7 in. 1½, 3½, 7½, 15. All English speaking.

K. L. MANNING, Gardener, 3 Kempway Road, Hampstead, N.W.3. Photography, dancing. Light classical, modern jazz, trad. PAR, 7 in. and 5 in. 3½, 1½, 7½. Anywhere, U.S.A.

F. V. OLIVER, Electronics, 272a Cambridge Heath Road, E.2. Amateur radio (R.S.G.B. member), scootering (Lambretta owner), Signals N.C.O., Territorial Army. Classical, Glenn Miller, Ray Conniff fan. Wyndor Viscount, up to 7 in. 3½, 7½, 15. Anywhere.

BARRY PARSONS, age 15, Schoolboy, 3 Ruvigny Mansions, The Embankment, Putney, S.W.15. Cycling, rowing, model making, badge collecting. Rock 'n' roll, all popular. Elpico, up to 5½ in. 3½. Anywhere English is spoken. Will answer all tapes, no need to write first.

Miss MARGARET RICE, age 18½, Copy Typist, 64 Stapleton Road, Tooting Bec, London, S.W.17. Poetry, astronomy, travel books (especially Eastern), all plant life. Echoing, religious, organ and most well liked music (all tastes). Elizabethan Bandbox, 3½ in., 3 in. Slow and fast. Australia only.

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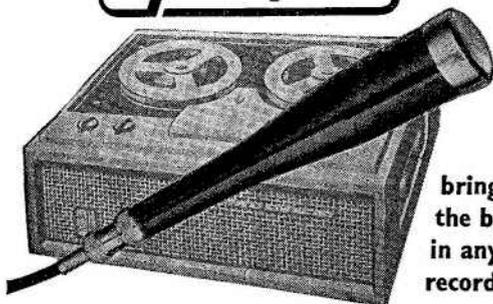
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COLIN J. FARMER, age 23, Journalist, 80 Ferryroad Avenue, Greenford, Middlesex. Sport, travel, all music, films, writing and languages. Fi-Cord with 3½ in. 7½, 1½. Telefunken 76K 4 track with 5½ in. 3½, 1½. Anyone (male and female), anywhere (overseas), but not G. Britain.
B. J. L. GREENLAND, 4 Cannonbury Avenue, Eastcote, Pinner, Middlesex. General. Catholic. Victor, up to 6 in. 1½, 3½, 7½. Anywhere, preferably Tasmania.

NORTHAMPTON

J. M. CARR, Engineering Assistant, 539 Kettering Road North, Northampton. Motor racing, model car racing (electric), 35 mm. photography, tape recording. Light classical and light music in general. Stellaphone ST 450, up to 7 in. (3 in. for tapesponding). 7½, 3½, 1½. Anywhere.
ALBERT J. LINK, Storekeeper, 23 Poplar Road, Burton Latimer, Northants. Anything, tape learner. Ballet, light, classical. Philips EL 3527, 5 in. 3½. Anywhere.

PETER PITTS, age 30, Stock Keeper, 229 Kingsley Avenue, Kettering, Northants. Languages, music. Mainly opera, orchestral. Cossor 4 track, 7 in. 1½, 3½, 7½. Denmark, Norway, Sweden, Finland, Italy, Germany, France, U.S.A. (Languages: English, Danish, Norwegian, Swedish, German, some French and Italian. Married, collect rare and historic gramophone records.)

NORTHUMBERLAND

Mrs. RITA JACKSON, age 28, Civil Servant, 30 Gordon Road, Blyth, Northumberland. Colour photography. Folk music, pops, some classical. Grundig TK 5, 5½ in. 3½. Anywhere, Australia preferred (Wollongong, N.S.W. if possible, having lived there 15 years ago).

W. STOUT, Night Patrol Approved School, 43 Olympia Gardens, Morpeth, Northumberland. Anything except sport. Anything with a tune. EAP Escort, Walter 101, up to 7 in. 1½, 3½, 7½. Any English speaking, no need to write.

ADAM THOMSON, Driver, 24 The Chesils, Longbenton, Newcastle-on-Tyne, 12. Photography, model making, wood turning. Pops, Sinatra fan. Collaro, up to 7 in. 1½, 3½, 7½. Anywhere.

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LES BALL, 73 Arleston Drive, Firnwood Estate, Woolaton, Nottingham. Modern jazz, swing, Math, Ella Fitzgerald. Ferrograph 7½ in. 3½, 7½. U.S.A. only.

G. W. GABBITAS, Salesman, 7 Cottage Place, off Holland Street, Hyson Gr., Nottingham. Youth work and general, not sport. Anything except heavy orchestra. Elpico TR 400, 3 in. to 5½ in. 3½. Any English speaking.

DON HERKES, age 39, Dispenser, 5 Hamilton Road, Long Eaton, Nr. Nottingham. Everything under the sun. Everything—pops to classics. REPS R20, 7 in. 3½, 7½, 15. Anywhere where they speak English—Timbuctoo to Tottenham. (Married with two children, boy and girl, ages 12 and 10.)

L. R. HOLMES, age 33, Self Employed, 353 St. Anns Well Road, Nottingham. Recording, theatre, travel, films, natural history. Jazz to opera. Philips AG 8108, up to 7 in. 1½, 3½, 7½. U.K., U.S.A., Japan, Pacific Islands, Spain, Denmark. No need to write, all tapes answered.

JIMMY PHIPPS, age 18, 17 Elm Grove, Blue Bell Hill, Nottingham. Rock, c. and w., match-box labels, tape tricks in sound, goon fun, painting, photos. Les Paul and Mary Ford, guitar music, in fact anything. Radio construction. Gramdeck, 3½, 7½, 15. All tapes welcome and answered. English only.

STAFFORDSHIRE

TONY PRICE, age 20, T.V. Engineer, 121 Bhylls Lane, Wolverhampton. Motoring. Anything except classical. Studio Sound, up to 7 in. 3½, 7½. Britain or U.S.A.

SURREY

DAVID BUNDOCK, age 19, Insurance Clerk, 7 Felbridge Close, Sutton, Surrey. Amateur cine photography, recording, science fiction, chess. Anything but especially Glenn Miller (G.M.A.S.). Brenell MK 5, 3 in., 8½ in. 1½, 3½, 7½, 15. Anywhere but especially England, especially Surrey. Female if possible.

RONALD LUCKING, age 39, Horologist, 62 Ember Farm Way, East Molesey, Surrey. Travel, hi-fi, mechanics, exchange 35 mm. transparencies. Grundig TK 30 and portable, up to 7½ in. 3½. Anywhere.

MICHAEL R. VIGAR, age 31, Librarian, 16 The Drive, Coulsdon, Surrey. Coins, scouting, literature. Classical, folk. Philips EL 3541, up to 7 in. 3½. Germany, Austria, Switzerland. Wish to improve my German, willing to help German speaking students with their English.

WARWICKSHIRE

LESLIE ALFRED KNIGHT, Manufacturing Jewellery, 129 Fentham Road, Ashton, Birmingham, 10. 35 mm. photography (colour). Latin American, standards, Sarah Vaughan fanatic. Grundig TK 8, up to 7 in. 3½, 7½. England, U.S.A., up to 29, my age.

BARRINGTON CHARLES WARD, Farmer/Publisher, Clayhill Farm, Shelfield, Nr. Alcester, Warwickshire. Farming, photography. Wide. Philips EL 3541/15, 7 in. 3½. Anywhere.

YORKSHIRE

NORMAN BROADHEAD, age 40, Marine Engineer, 5 Carholme Villas, Rensburgh Street, Hull. Motoring and travel, foreign people. Pops, modern. Sound De Luxe 4 track, 7 in. 1½, 3½, 7½. Germany, Italy, or anywhere abroad. Should like to contact Female age 35.

GRANVILLE CHAMBERS, Master Butcher, 9 Ray Street, Huddersfield, Yorks. Retail business, photography, cine, people. Any music. Fidelity Minor, 5½ in. 3½. North America, South America and any Commonwealth country.

ANTHONY A. FRANCIS, Sales Manager, 17a St. John Street, Rastrick, Brighouse, Yorks. Trade, music, T.V. life. Gilbert and Sullivan in mid position. Philips, 7 in. 1½, 3½, 7½. Any English speaking.

BILL KNAGGS, age 32, Motor Factor Salesman, 10 Morland Place, Sheffield, 14, Yorkshire. Tape, skiffle, foreign countries. Lonnie Donegan. Elizabethan FT 3, 4 track, 3 in. to 7 in. 7½, 3½, 1½. U.S.A., Canada.

MAXINE L. LEADBEATER, age 8½, Schoolgirl, 9 North Road, Kirkburton, Nr. Huddersfield, Yorkshire. Nature, music, art, other lands. Modern and ballet. Fidelity Minor, 5½ in. 3½. America, Africa, New Zealand.



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Dear Sir,

I wish to become a member of The British Recording Club. I enclose my membership fee of twenty-seven shillings (27/-), which includes my annual subscription to the 'Amateur Tape Recording & Hi-Fi' magazine.

Name _____

Address _____

Date _____

Type of Recorder used _____

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I hereby apply for membership of the British Recording Club on behalf of my School/University and enclose the Membership Fee of 27/-.

Name _____ Date _____

Address School _____
University _____

Number of Pupils _____ Age Groups _____
Students _____

Type of Recorder available _____

The part(s) of the world the School wishes to contact is/are _____

The membership fee includes the annual subscription to the 'Amateur Tape Recording & Hi-Fi' magazine.

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Associate Members DO NOT receive 'Amateur Tape Recording & Hi-Fi' magazine, but are entitled to participate in the Club's Tapesponding activities and any other services which become available.

MEMBERS WISHING TO 'TAPESPOND' ARE REQUESTED TO COMPLETE THE FORM BELOW

I would like to Tapespond and agree to my name and address being published. I also agree to acknowledge all replies I receive in response of my entry in the Directory.

Name _____ Age _____

Address _____

BLOCK LETTERS PLEASE

Interests _____

Club Number _____

Taste in Music _____

Type of Recorder used _____

Size of Spool _____ Tape speed(s) _____

Occupation _____

Which part of the world do you wish to contact? _____

What is your excuse?

by John Barter

"Dear Ed,

Why not more articles on Tapesponding in your 'ATR' magazine?

(Signed) John Barter"

"Dear Jay Bee,

A good idea. Send one along.

(Signed) Ed."

... And that is how this came to be written. If you are not interested in tapesponding, then turn to another page—or read this and find out why! What are my qualifications to write advice on tapesponding? Bigheadedness and the ability to make all the mistakes.

The first rule for tapesponding and the Golden rule is 'There ain't no rules' and that is the first nice thing about it. You are in charge and the way you present your tape is *your* affair. So any suggestions I make or ideas I put forward may be accepted or rejected. As one goes on taping a characteristic and individual flavour develops. It would be dreadful if everyone taped in the same way.

The next point is to say over and over again—especially in times of strain and adversity: "It is only a hobby—only a hobby—only a hobby—only a hobby . . ." Train the rest of the family to repeat it with you. It has a stabilising effect.

Do you like to keep records, files, flags on maps, notes? Taping will give you plenty of scope. Chits, forms and what have you can be made showing date of despatch, speeds, geographical site of sender, etc. If you don't like such things you will get much satisfaction throwing away the ones that are sent to you—so everyone is happy!

I used to think there was only one kind of speed a tape moved—the ipspeed, but there is also a speed at which one 'moves' on a tape. If one starts with some presto music and rattles at speech one is *fast moving* and these are the tapes I like to have personally. Some folk may prefer the cabbage non-moving tape. There are many ways of travelling slow or not moving. "Hang on while I look up the record" . . . the tape is left running for several minutes; "Nothing seems to have happened lately, I am drying up . . ."; "I have run out of matches so hang on till I find some . . ."; after two minutes running, "Ah now what was I saying? . . ."

I like gimmicks in a tape even if some are corny or overdone. For example a Canadian friend says after a cough, "Excuse me, I have a frog in my throat", and then on to the tape comes the sound of Canadian bull-frogs! Another one

that made me laugh was "My blood is boiling" and then followed bubbling sounds of water produced by blowing through a straw. Introducing ones "mother-in-law" of a lady talking at twice normal gabble can be amusing—if not to mothers-in-law!

One of the biggest boosts to tapesponding for me was buying a second recorder. I could get one sound effect tape running on one of the machines and speak into the other bringing in the sound effects as required. I can now 'ride on horseback and play and sing the guitar' ("Mercy" say my tapefriends), 'Swim in the fountains of Rome', 'jump into my saddle and ride off into the desert' (sounds of motor scooter, not horse—the modern cowboy!), 'Do lion-taming acts in the kitchen with lion roars and much cracking of whips', 'Leap into Sultan's harem', 'Go down with sinking ships and have shooting feuds with the neighbours'.

Another idea is to dub the highlights of ones friend's tape on to another friend's tape. There is one snag about this however, as the word goes round, "Be careful what you say to John as you might find your voice scattered all over the world". Friends of friends get their own voices played back to them sometimes!

The third advantage of having another recorder is that one can dub off the music or interesting talk on to ones own master tape and finally one always has one recorder to use if the other one has to go into hospital for repairs.

We are almost at the end of track two so I'll sign off now. One last point fellow tapespondents: you don't have to be crazy to do tapesponding but if you aren't, what is *your* excuse?



"I'll see if I can persuade George to show you his new recorder."

INFORMATION BUREAU

**What's new, Reviews and Illustrations of Tape
Recording and Hi-Fi Equipment**

THE VOLMAR 'DEE' AUTOCHANGE RECORD PLAYER

by P. A. Kent

THE VOLMAR 'DEE' record player is an attractive table model with a fully automatic record changer that accommodates all types of records for the standard speeds of 16 $\frac{1}{2}$, 33 $\frac{1}{2}$, 45 and 78 r.p.m. Records of the same speed can be mixed so that no setting for record size is required. The record changer is of course the famous Garrard model 210 which carries a pick-up arm that can be fitted with a monaural or stereo cartridge.

The Volmar 'Dee' player can be quickly adapted for stereo by fitting a stereo cartridge and connecting up the Volmar 'D' amplifier.

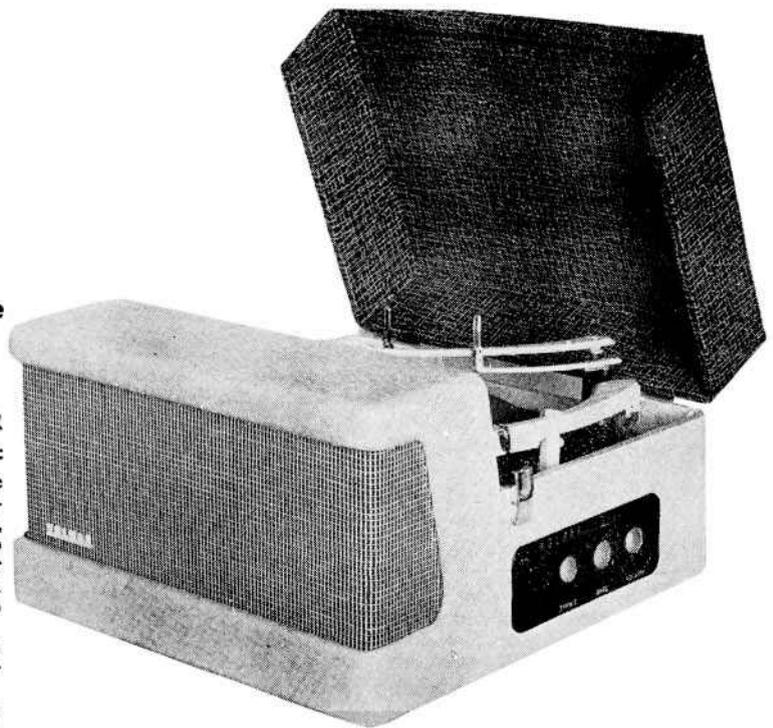
The record player is nicely presented in a red and grey case with controls readily accessible on a small panel at the side. Two tone controls are fitted for raising either treble or bass and when used for stereo the volume control takes care of both channels simultaneously. Full instructions are included for the use of the controls and the record changer.

The Volmar 'Dee' was tested with both monaural and stereo records and with the Decca LXT.3546 frequency test record. The overall performance is of a high standard, both monaurally and stereo-wise. Channel separation is adequate for the popular stereo discs and the frequency response wide enough to do full justice to all kinds of recorded music. There is no objectionable hum and noise that one often finds with low priced record players.

The Volmar 'Dee' almost reaches the hi-fi category providing excessive volume levels are not used. It is surprising how many people operate domestic reproducing equipment as though it were a public address system and then complain that the quality is poor.

Volmar Ltd. have had a good deal of experience with tape and disc reproducing. In the Volmar 'Dee' and its associated stereo amplifier I feel they have made a real attempt to produce an inexpensive quality record player that can, equally inexpensively, be converted for stereo.

The Volmar 'Dee' record player and the type 'D' amplifier are manufactured by Volmar Ltd., 145 High Street, Brentford, Middlesex. The Volmar 'Dee' player retails at 28 gns. complete. The add on stereo 'D' type amplifier is 9 gns. and is finished to match the record player complete with the necessary connecting leads. The complete outfit ready for stereo costs 37 gns.



NEW CIRCUITS FOR TAPE RECORDERS AND HI-FI AMPLIFIERS

HOME CONSTRUCTION enthusiasts may be interested in new additions to the well known Mullard circuits for tape recording and hi-fi amplifiers. One deals with a modification to the Mullard type B circuit which enables it to be used with the Wearite model 2A tape deck. The modifications involve the bias oscillator and output valve portion of the circuit.

The next is a complete set of circuit diagrams for building a 3 watt tape recording/playback amplifier for use with modern tape decks which have operating speeds of 1 $\frac{1}{2}$, 3 $\frac{1}{2}$ and 7 $\frac{1}{2}$ i.p.s. Ask for leaflet No. TP.421 and quote the title: **3W Tape Amplifier circuit for Modern Tape Decks.**

Another Mullard leaflet deals with a stereo amplifier, the TWIN 3-3 and provides a full circuit. It also describes how the popular monaural 3-3 amplifier may be adapted for stereophony. Ask for leaflet No. TP.422 and quote title: **Twin three-three Stereophonic Amplifier Circuit.**

Mullard have also recently issued a new book of transistor circuits called the **Mullard Reference Manual of Transistor Circuits** price 12/6d., plus 1/- postage. The book consists of 308 pages and 241 diagrams. It also includes more than 60 circuits for both domestic and industrial applications. More than 30 of the circuits are entirely new designs.

The leaflets dealing with amplifiers are free of charge but both these and the transistor book are obtainable from Mullard Technical Publications Department, Mullard House, Torrington Place, London, W.1.



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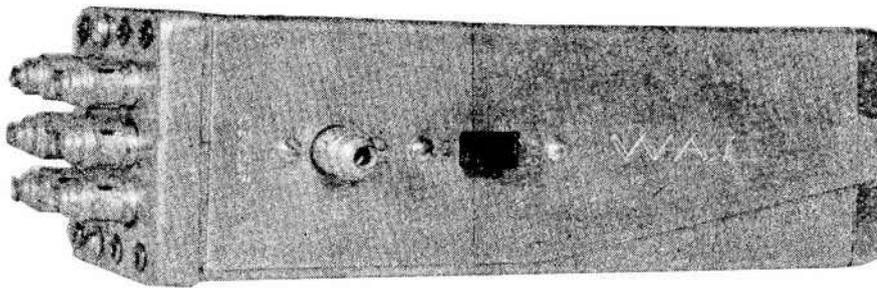
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THE 'WAL' STEREO GAIN TRANSISTOR PRE-AMPLIFIER

by F. C. JUDD, A.Inst.E.

THE 'WAL' TRANSISTORISED pre-amplifier has been designed for both stereo and monaural operation and consequently has two entirely independent channels with both high and low impedance inputs. It is eminently suitable for pre-amplification of the output from a modern moving coil pick-up and will provide the gain required to load a conventional valve pre-amplifier. This pre-amplification is obtainable with a minimum of noise and practically no crosstalk between channels when used for stereo work. The frequency response is adequate for high fidelity reproduction and being battery operated, the problem of hum, usually associated with valve amplifiers, is non-existent. The 'Wal' pre-amplifier is completely shielded against hum for external fields, is compact, has negligible current consumption, and is soundly constructed.

It has a number of applications; for example it may be used to provide extra amplification for microphones or tape heads, and might even be used as a two channel mixer by taking the twin outputs via a resistive mixing network. Very comprehensive instructions are included and these contain simple diagrams showing how the 'Wal' can be connected for the above functions. It is fitted with a socket for a remote on/off switch, although a separate switch is incorporated. The current consumption is so low, however, that it would operate for 1,000 hours continuously, even if never switched off.

For stereo operation each channel is independent of the other; for monaural operation either channel may be used and quite large signal inputs can be handled without distortion. The manufacturer's technical specification gives the following information and from this various functional tests were applied:

Frequency Response: ± 0.5 dB 25 to 25,000 c.p.s.

Amplification: low impedance input, 38 dB; high impedance input, 15 dB.

Crosstalk: -60 dB at 1,000 c.p.s.

Balance between channels: ± 1 dB.

Input Impedance: high, 50,000 ohms; low, 3,500 ohms.

Output Impedance: 100,000 ohms (may be connected to higher impedance inputs without appreciable loss).

Battery Consumption: 1.4 mA from PP4 Ever Ready 9v battery.

Recommended for use with the Ortofon 'C' Garrard, Expert, Connoisseur and Goldring 600 pick-ups or others with similar characteristics.

The 'Wal Stereo Gain' submitted for review was tested for frequency response and operated with an input signal high enough to provide an output voltage just below overload level. Referred to 1,000 c.p.s. the response was as shown by Fig. 1 from which it will be seen that the gain of the two channels is substantially the same, a dB or so being the maximum deviation from an equal level condition. Crosstalk was found to be better than -60 dB and is therefore lower than from any pick-up and all but the most expensive stereo tape heads. The gain through the two channels depends on the input impedance—the low impedance input to output being measured at 18 dB; the high impedance input to output at 35 dB.

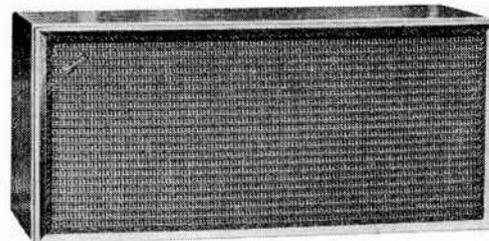
Since it uses transistors and is exceptionally well constructed and finished, it would be reasonably safe to say that a 'Wal' should last a lifetime and certainly give trouble free service. Whilst the life of transistors has not yet been proved indefinite, there is every reason to believe they will give many more years of service than valves.

The 'Wal' deserves commendation for performance its multi-use design and especially for its impedance matching facilities in conjunction with modern gramophone pick-ups. It is one of the few auxiliary hi-fi devices I have tested that functions exactly as the manufacturer claims.

The 'Wal Stereo Gain' pre-amplifier is supplied complete with all the necessary phone plugs at £7.10.0, and is manufactured by the Wellington Acoustic Laboratories Ltd. of Farnham, Surrey.

(right) Wharfedale W.2. Loudspeaker

(below) Wharfedale PST/8 Loudspeaker Cabinet



THE WHARFEDALE PST/8 LOUDSPEAKER CABINET

WE HAVE RECEIVED frequent enquiries for information concerning loudspeaker cabinets and as a result, decided to test and review one for readers' interest. We hope to present others at a later date for there are a few 'do it yourself' kits available as well.

We choose, in this instance the Wharfedale enclosure type PST/8. This was supplied for test complete with the recommended Wharfedale loudspeaker and frankly we do not think anyone could do better than use these.

The PST/8 can be used with a Wharfedale Super 8/FS/AL, 8/145 or 8in. Bronze/FS/AL units or of course with any good quality 8in. speaker. It would be an absolute waste of excellent speaker cabinet if a cheap unit were used.

The PST/8 cabinet is 24in. x 12in. x 12in. and weighs 17lb. It is available with a finish of walnut, oak or mahogany veneers and with either finish it looks very attractive. The cabinet is acoustically treated for correct performance and constructed with expanded polystyrene panels which help considerably to reduce cabinet resonance. It is in fact very hard to detect any resonance in these cabinets at all.

This particular cabinet, which was fitted with a Wharfedale speaker unit, was used for demonstration at the Radio Hobbies Exhibition and quite a large number of visitors there commented upon the excellent reproduction. We should add that the speaker was being used under very adverse conditions against a tremendous background of noise from other exhibitors and visitors. It retails at 10 gns., veneered and polished or can be obtained in the 'white wood' state for £7.10.0.

THE WHARFEDALE W.2 LOUDSPEAKER

THIS COMPACT two-speaker outfit has a remarkably wide range performance for its size. It has a full bass response and is fitted with a variable control for the high frequency unit so that ample control over the treble response is available. It can be used for floor, shelf or table mounting and the cabinet



is fully polished on all four sides. It can be used horizontally or vertically.

The W.2 is fitted with two units, one WL2/12 and one Super 5, complete with a crossover unit which provides a crossover frequency of 1,000 c.p.s. The cabinet size is 23½ in. x 14 in. x 12 in. and the complete unit weighs 37 lb. Input impedance 12 to 15 ohms only. The power handling capacity is 15 watts maximum which it achieves without stress or resonance or even chatter.

The W.2 is an excellent example of the Wharfedale range of speakers and accessories. I have tested it with several different types of amplifiers and whilst it brings out the best from a good amplifier, it also shows up the worst in the poor ones. A good amplifier deserves a good loudspeaker. I can quite safely say that any of the Wharfedale speakers will do full justice to the best amplifiers and their auxiliary equipment.

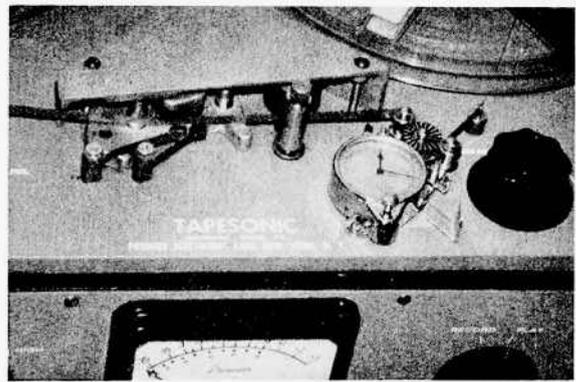
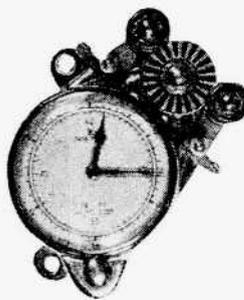
The W.2 sent for review was tested in conjunction with a Rogers Stereo amplifier and with a Daystrom (Heathkit) S.33 amplifier (also reviewed in this issue). The signal source in this instance was monaural from a Ferroglyph 808 tape recorder. In short an ideal 'tape reproduction' outfit. Before you decide on a speaker, write to Wharfedale for their leaflets. Ask for catalogue section CM which describes the PST/8 and W.2. For constructional enthusiasts, the catalogue section TS supplies full information on Wharfedale accessories; section CN covers crossover units and their correct use, whilst section SC offers a mine of information on speaker units. Cabinets are covered by section CM and a very fine cabinet construction leaflet of eight fully illustrated pages will tell you all you wish to know about the subject. This leaflet is called 'Leaflet CCS-issue 8'.

Finally the price of the Wharfedale W.2 speaker unit complete is £29.10.0 (polished) or £27.10.0 (white wood). Yes, the speakers and crossover unit are included and fitted. Tropical finish, as a protection against humidity and insects who like loudspeakers on the menu costs an extra 35/-.

The Wharfedale cabinet PST/8 and the W.2 loudspeaker are both manufactured by Wharfedale Wireless Works Ltd., Idle, Bradford, Yorkshire.

READERS of 'ATR' hardly need an introduction to the Winston Thoroughbred which has been featured many times on our front cover, usually with an attractive female owner.

The Thoroughbred is housed in a very attractive case, finished in sepia leatherette and is fitted with a gilt loudspeaker surround, matching control panel and controls. The tape deck on this recorder is the two direction Collaro Mark IV which has two sets of erase and record/playback heads. The drive mechanism runs the tape in either direction thus obviating the need for changing the spools over when track two is to be used. One can in fact play a recording back-



THE NIFUJI TAPE TIMER

THIS HANDY DEVICE is not merely another tape position indicator but a clock which measures accurately the duration of a recording at speeds of 15, 7½ and 3½ i.p.s. depending on how the clock dials are read. Two calibrations are provided for direct reading when used with tape speeds of 7½ and 3½ i.p.s.

The tape clock is simple to use and can be fitted to most tape recorders. It is a precision instrument and remarkably accurate for with it one can time a recording to within one second or less. It can, of course, be used to indicate a given position along a tape by simply

noting the time and by setting the clock to zero at the start of the tape.

It is nicely finished and has performed without fault for several months on a professional recorder. Extra brackets are provided for mounting the tape clock on the side of a recorder, in case there is insufficient room on the deck.

The clock operates in either direction of tape and returns accurately to zero when the tape is re-wound, assuming of course that it was correctly set to commence with.

The Nifuji tape clock is of Japanese manufacture and is distributed by Import Agencies Ltd., 29 Old Bond Street, London, W.1. The retail price will be between £5 and £6.

HOME VIEW THE WINSTON THOROUGHbred

by
F. C. JUDD



wards by changing over tape spools as one does for most domestic recorders.

The recorder has a monitoring outlet as well as mixing facilities and inputs for microphone and radio or pick-up. It is an excellent machine for copying as the signal output at the monitor socket is linear and therefore suitable for injection into an external amplifier or another recorder.

I should have mentioned earlier that

this deck operates at 15, 7½ and 3½ i.p.s. Whilst the slower speeds are becoming more favoured because of tape economy and whilst most of the better class recorders have an excellent frequency response at 3½ and 1½ i.p.s., the noise levels at these low speeds still needs improvement. A recording made at 15 i.p.s. on a half track machine such as the Thoroughbred is far superior to one made at slow speed on a quarter track

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machine, despite the claims for 'frequency response'. A high speed recording is noticeably cleaner and free from noise. This is one reason why professional recording studios still use 15 i.p.s. and full track recording as well.

Those whose chief interest lies in obtaining high quality recordings, and who are not concerned about the amount of tape used to achieve them, would do well to consider 15 i.p.s. as their standard recording speed, particularly if copies have to be made. However, I digress from the Winston Thoroughbred review.

The specification quoted by the makers is a fair and honest one.

The frequency response is given as: 15 i.p.s., 50-16 Kc/s; 7½ i.p.s., 50-12 Kc/s; 3½ i.p.s. 50-7 Kc/s.

What is more important is the low signal to noise ratio of this recorder. At full gain, the hum level is way below the thermal noise of the first amplifier. Recording-wise, the noise level after erase is negligible and points to a clean bias oscillator waveform. I succeeded in making some very good copy tapes with this machine, re-recording from 15 i.p.s. to 7½ i.p.s.

The mechanical performance of the deck was not quite up to standard at 3½ i.p.s. for the take-up spool occasionally decided to remain stationary. Otherwise I could find no fault with the deck. The recorder is quite strongly constructed

and would, I imagine, stand up to hard wear and handling. Reproduction from the three internal loudspeakers is a good deal better than most domestic recorders, for the Thoroughbred is fitted with a 7in. elliptical speaker and two electrostatic high frequency units. There is of course provision for an external speaker and the internal ones can be switched off.

Other features include a magic eye record level indicator prominently placed on the control panel, a tape position indicator and a pause button. 'Safety' levers are also fitted to remind users that they are about to record.

The Thoroughbred can be used purely as an amplifier and many other similar uses are described in the very comprehensive instruction book supplied with this recorder. Accessories included are a crystal microphone, a 7in. spool of tape and a spare spool.

The Winston Thoroughbred is a recorder that can be specially recommended to those who require quality recording at the higher speeds and good copying facilities. I was particularly impressed with the amplifier frequency response and low noise level which does much to enhance the true value of this recorder.

The Winston Thoroughbred retails at 59 gns. and is manufactured by Winston Electronics Ltd., Govett Avenue, Shepperton, Middlesex.

CAPTION COMPETITION

THE CAPTION Competition from our December Winter Miscellany produced a fine collection of ideas. The winning caption was sent in by Mr. H. Rosen of Gascoyne Road, London, E.9.



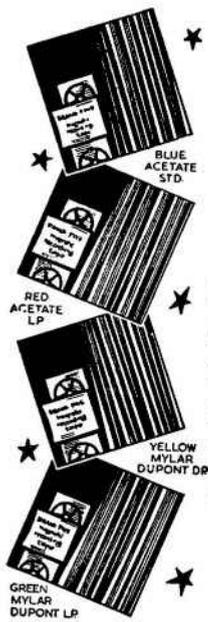
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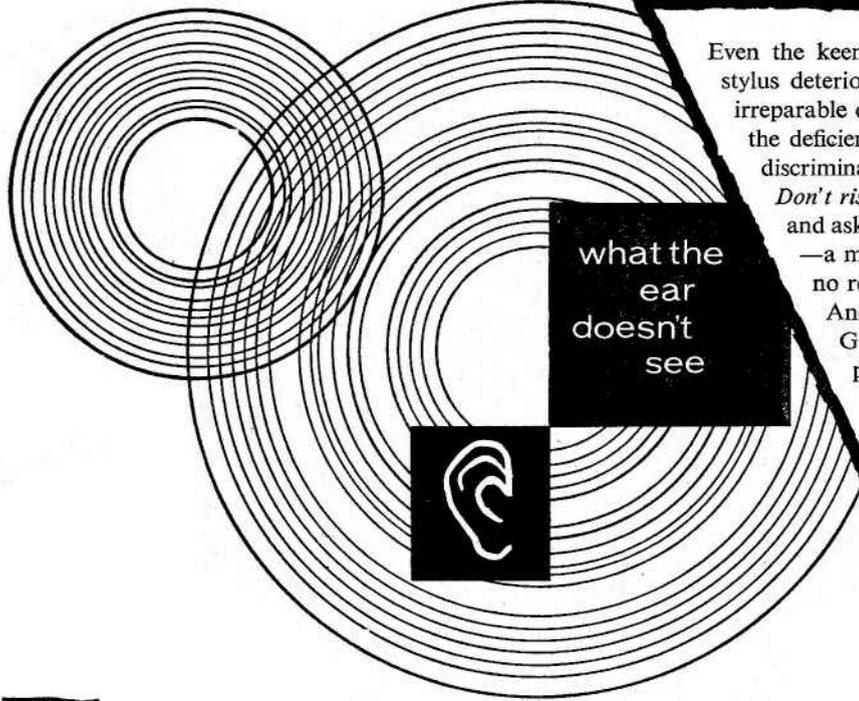
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Ben Webster meets Oscar Peterson CLP1412
CSD1336

Doctor Jazz CSD1337 CLP1413
George Lewis and his Orchestra.

The Unforgettable Lady Day CLP1414
Billie Holiday, supervised by Norman Granz.

'Pop' Concert XLP20030
Pierre Dervaux and Cologne Concert
Orchestra.

Beethoven Overtures XLP20031
André Vandernoot and Berlin Philharmonic
Orchestra.

LONDON

More Songs by Ricky HAP2290
Ricky Nelson SAHP6102
Darin at the Copa HAK2291
Bobby Darin SAHK6103
Look for a Star HAD2292
Billy Vaughan and his Orchestra SAHD6104
Bob Crosby's Great Hits HAD2293
Bob Crosby and the Bob Cats SAHD6105
Am I that Easy to Forget HAD2294
Debbie Reynolds SAHD6106
Crazy Otto Piano HAD2295
Johnny Maddox

The Original Hits HAG2308
Do you want to dance—Bobby Freeman: Mr.
Blue—The Fleetwoods; Bony Moronie—Larry
Williams; Endless sleep—Jody Reynolds; Wes-
tern movies—The Olympics; Oh Julie—The Cres-
cendos; Tequila—The Champs; Walk, don't run
—The Ventures; Look for a star—Garry Miles;
Runaround—The Fleetwoods; Dreamin'—Johnny
Burnette; National City—Joiner Arkansas Junior
High School Band; Mountain of love—Harold
Dorman.

MERCURY

Dvorák : Slavonic Dances AMS16046/7
Smetana : The Bartered Bride, excerpts.
Antal Dorati and Minneapolis Symphony
Orchestra.
Bartók : Dance Suite AMS16068
Two Portraits for Orchestra; Two excerpts from
'Mikrokosmos'. Antal Dorati and Philharmonia
Hungarica.

MGM

The Great Lehár : Gold and Silver Waltz
Robert Stolz and his Orchestra. MGM-C-806
Opening Night—Broadway Overtures
MGM-CS-6010 MGM-C-822
Starlight Symphony conducted by Cyril Ornadel.
Joni Sings Sweet : Joni James MGM-C-825
Orchestra conducted by David Terry.
Rosemary Clooney Swings Softly MGM-C-838
Yours : Vera Lynn MGM-CS-6019 MGM-C-843
With the Williams Singers and Geoff Love and
his Orchestra.

PARLOPHONE

Peter and Sophia PCS3012
Peter Sellers and Sophia Loren with Graham
Stark and the Temperance Seven.

Mister Entertainment : Bruce Forsyth PCS3013
With Alyn Ainsworth and his Orchestra.
All My Own Work : Jerry Lordan PMC1133
PCS3014

Accompaniment directed by Johnnie Spence.

PHILIPS

Stravinsky SABL111
The Rite of Spring (Le Sacre du Printemps).
New York Philharmonic conducted by Leonard
Bernstein.

Bach ABL3259
Concerto for violin and strings in E.
Concerto for violin and strings in A minor.
Concerto for two violins and strings in D minor.
Roberto Michelucci (Violin), Felix Ayo (violin).
I musici.

Debussy SABL171 ABL3328
Images for Orchestra.
New York Philharmonic conducted by Leonard
Bernstein.

Columbia Symphony Orchestra conducted by
Bruno Walter : Brahms ABL3341
Symphony No. 1 in C minor, Op. 68 SABL181
Symphony No. 2 in D, Op. 73 ABL3342
Academic Festival Overture, Op. 80 SABL182
Symphony No. 3 in F, Op. 90 SABL3343
Tragic Overture, Op. 81 SABL183
Symphony No. 4 in E minor, Op. 98 ABL3344
SABL184

Brahms SABL185 ABL3345
Double Concerto in A minor, for violin, 'cello
and orchestra, Op. 102 with Zino Francescatti
(violin), Pierre Fournier ('cello). Variations on a
Theme of Haydn, Op. 56a (St. Antoni Choral).

Beethoven SABL172 ABL3330
Piano Concerto No. 3 in C minor, Op. 37.
Clara Haskil (piano). The Lamoureux Orchestra,
Paris, conducted by Igor Markevitch.

Sir John Gielgud's presentation of 'One Man in
His Time'. Part Two of Shakespeare's 'Ages of
Man' ABL3331
GBL5522

Tchaikovsky GBL5523
Piano Concerto No. 1 in B flat minor, Op. 23.
Capriccio Italien, Op. 45. Eugene Istomin (piano).
The Philadelphia Orchestra conducted by Eugene
Ormandy.

Beethoven GBL5523
Piano Concerto No. 1 in C, Op. 15. Piano
Concerto No. 2 in B flat, Op. 19. Cor de Groot
(piano). Vienna Symphony Orchestra conducted
by Willem van Otterloo.

Heart of the Symphony GBL5530
A Twilight Concert GBL5568
Leonard Pennario (piano). Artur Rodzinski con-
ducting the Columbia Symphony Orchestra.

Masterpieces for Violin GBL5570
The Vienna Strings conducted by Kurt Richter.

Johnny Cash BBL7417
Ride This Train.

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I've Got a Right to Sing the Blues.

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Yves Montand : with Hubert Rostaing and his
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Juliette Greco with Alain Goraguer and his
Orchestra and Andre Popp and his Orchestra.

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Critics Poll 1960** BBL7430 SBL600

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Chasers BBL7433

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POLYDOR

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Hi-Fi Fiddle : Zacharias and his Magic Violins
LPHM46018

**Hi-Fi Piano : Fritz Schulz—Reichel ('Crazy
Otto')** LPHM46019

Caterina Chérie : Caterina Valente LPHM46310

**Come on and Dance : Kurt Edelhagen and
Orchestra** LPHM46314

Mediterranean Magic : Los Espanoles
SLPHM237550 LPHM46350

PYE

Los Zafiros in London NPL18057
Miki and Griff NPL18058
Gary on the Ball : Gary Miller and Kenny Ball
NPL18059

Sporting Highlights of 1960 NSPL9400 NPL28015

Pepe NPL18060

Original Sound Track Recording starring Maurice
Chevalier, Bing Crosby, Bobby Darin, Sammy
Davis Jr., Judy Garland, Shirley Jones, Andre
Previn, etc.

RCA

Berlioz : Requiem SB2096/7 RB16224/5

Charles Munch conducting the Boston Symphony
Orchestra with the New England Conservatory
Chorus. Leopold Simoneau (tenor).

Elvis Presley : G.I. Blues SF5078 RD27192
(An original sound track recording).

VOX

Berlioz ST-GBY511090 GBY11090

Symphonie Fantastique, Op. 14. Bamberger Sym-
phoniker—Jonel Perlea, conductor.

Beethoven GBY10000

Symphony No. 9 in D minor, Op. 125 'Choral'.
Wilma Lip (soprano), Elisabeth Hoegens (con-
tralto), Julius Patzak (tenor), Otto Wiener (bass),
Singverein der Gesellschaft der Musikfreunde
(Vienna), Pro Musica Symphony Orchestra
(Vienna), Jascha Horenstein (conductor).

Chopin

Piano Concerto No. 1 in E minor, Op. 11.
ST-GBY511460

Piano Concerto No. 2 in F minor, Op. 21.
ST-GBY511470

Orazio Frugoni (piano). Orchestra of the Wiener
Volksoper—Michael Gielen (conductor).

Beethoven ST-GBY511170 GBY11170

Violin Concerto, Op. 61. Westfälisches Symphonie-
orchester—Hubert Reichert conductor.

Romance in G, Op. 40 : Romance in F, Op. 50.
Badische Staatskapelle—Curt Cremer conductor,
Susanne Lauterbacher (violin).

Brahms ST-GBY510990 GBY10990

Piano Concerto No. 2 in B flat, Op. 83.
György Sandor (piano), Südwestfunkorchester,
Baden-Baden—Rolf Reinhardt conductor.

Mozart ST-GBY511110 GBY11110

Clarinet Concerto in A, K.622.

Quintet for Clarinet and Strings in A, K.581.

Jost Michaels (clarinet), Westfälisches Symphonie-
orchester—Hubert Reichert conductor, Endres
Quartet.

Beethoven ST-GBY511670 GBY11670

Symphonies No. 1 and 8.

Orchester der Wiener Musikgesellschaft, London
Symphony Orchestra; Edouard Van Remoortel
conductor.

Beethoven ST-GBY510970

Symphony No. 7.

London Symphony Orchestra—Edouard Van
Remoortel conductor.

Bach GBY10770

Harpichord Music. Helma Elsner (harpichord).

Bach GBY11440

Organ Music. Walter Kraft (organ).

Dvorak GBY11710

Symphony No. 5 in E minor, Op. 95 'From the
New World'. Vienna Symphony Orchestra—
Jascha Horenstein conductor.

WARNER BROS.

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keeping a record of your children grow-
ing up, making new friends by Tape-
spondence—are you going to miss all
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CAPITOL

Serenade : Carmen Dragon **SFP-8413 FAP4-8413**
 Capital Symphony Orchestra.
 Sea Shanties : Roger Wagner **Chorale FAP4-8462**
SFP4-8462

Rhapsody Under The Stars **FAP4-8494**
SFP4-8494

Leonard Pennario with Hollywood Bowl Sym-
 phony Orchestra.

Monty **SEG8059**
 Monty Sunshine with Chris Barber's Jazz Band.

The Shadows **ESG7834 SEG8061**
 My Concerto for You : Russ Conway (piano)
ESG7835 SEG8062

As Long as he Needs Me : Shirley Bassey
SEG8063

Wagner **ESL6283 SEL1677**
 Die Meistersinger von Nürnberg; Dance of the
 Apprentices and Entry of the Masters Götter-
 dämmerung; Siegfried's Funeral March. Otto
 Klemperer Philharmonia Orchestra.

Verdi **SEL1678**
 Il Trovatore—Excerpts No. 5. Giuseppe Di
 Stefano, Fedora Barbieri, Renato Ercolani,
 Rolando Panerai, Nicola Zaccaria. Orchestra and
 Chorus of La Scala Opera House, Milan con-
 ducted by Herbert Von Karajan.

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 Stefano, Fedora Barbieri, Renato Ercolani,
 Rolando Panerai, Nicola Zaccaria. Orchestra and
 Chorus of La Scala Opera House, Milan con-
 ducted by Herbert Von Karajan.

Louis Armstrong : My Good Old Ones—Vol. 2
TFE17302

The Dave Brubeck Quartet : Basin Street
TFE17303

Jimmy Blair and his Scottish Dance Band
 Ellwyn's Fairy Glen **TFE17309**

Johnny Mathis : Moonlight and Mathis
TFE17316

Johnny Mathis : Call Me **TFE17318**

The Miles Davis Sextet : On Green Dolphin
 Street **TFE17320**

Los Cinco Latinos **TFE17321**

HMV
 Hello Malcolm Vaughan (No. 2) **7EG8560**
GES5793

Malcolm Vaughan with Frank Cordell and his
 Orchestra. **GES5813 7EG8630**

Show Boat—Excerpts **GES5813 7EG8630**
 Shirley Bassey, Inia Wiata, Dora Bryan, The
 Williams Singers, Michael Collins Orchestra.

Land of Smiles—Excerpts (Lehár) **7EG8631**
GES5814

Charles Craig, Elizabeth Fretwell, Sadler's Wells
 Orchestra. **7EG8632**

The Alamo **7EG8632**
 Hello Malcolm Vaughan as 'Smitty'.

Duke Ellington and Johnny Hodges Play The
 Blues **7EG8633**

Rambling in High Society **7EG8634**
 Red Allen, Jack Teagarden, Kid Ory.

Oscar Peterson Plays **7EG8635**
 Oscar Peterson Trio.

La Bohème (Puccini)—Excerpts No. 3 **7ER5190**
 Victoria De Los Angeles, Jussi Björling, Robert
 Merrill, Giorgio Tozzi. R.C.A. Victor Orchestra
 conducted by Sir Thomas Beecham.

MERCURY
 Wagner **XEP9055**
 Ride of the Valkyries; Prelude to Act 1
 'Lohengrin'. Paul Paray and Detroit Symphony
 Orchestra.

Pop-Overs (No. 1) **SEX15008 XEP9056**
 Frederick Fennell and Eastman-Rochester 'Pops'
 Orchestra.

Robert Russell Bennett Works **XEP9057**
 Frederick Fennell, Eastman Symphonic Wind
 Ensemble.

MGM
 Secret Songs for Young Lovers (No. 2)
 André Previn and David Rose **MGM-EP-741**

First Lady of Record : Connie Francis
MGM-EP-742

PHILIPS
 The Vienna Boys' Choir
 Volume 4 **ABE10194**

Volume 5 **ABE10195**

Volume 6 **ABE10196**

Wagner **ABE10199**
 Siegfried Idyll. New York Philharmonic con-
 ducted by Bruno Walter.

Liszt **ABE10123**
 Harmonies du Soir. Valse Oubliée No. 2 in A
 flat. Sviatoslav Richter (piano).

Vivaldi **SABE2008 ABE10220**
 Concerto for flute, strings and continuo in D,
 Op. 10 No. 3. Gastone Tassinari (flute). I Musici.

Handel **SABE2007 ABE10227**
 Organ Concerto in B flat, Op. 4, No. 6.

E. Power Biggs (organ). London Philharmonic
 Orchestra conducted by Sir Adrian Boult.

Beethoven **ABE10228**
 Overture : Leonora No. 3, Op. 72a. New York
 Philharmonic conducted by Bruno Walter.

The Art of Lotte Lehmann **ABL10233**
 Lotte Lehmann (soprano), Paul Ulanowsky
 (piano).

Richard Tucker Sings Puccini Arias
 Volume 1 **SABE2018 ABE10272**

Volume 2 **SABE2019 ABE10273**

Dukas **SABE2020 ABE10274**
 L'Apprenti Sorcier (The Sorcerer's Apprentice).

The Concertgebouw Orchestra, Amsterdam
 conducted by Jean Fournet.

Luis Alberto Del Parana and his Trio Los
 Paraguayos **SBBE9023 BBE12391**

Paraguayan Magic.

Ray Coniff and his Orchestra **BBE12398**
 Hollywood in Rhythm, No. 2.

The Erroll Garner Trio **BBE12401**
 Garner in Paris.

Duke Ellington and his Orchestra **BBE12403**
 Ellingtonia, Vol. 1—The Twenties.

Frankie Vaughan **BBE12412**
 Frankie Vaughan Favourites.

POLYDOR
 Unter fremden Sternen, Guitar Playing Joe,
 Freddy, Du musst alles vergessen, Film,
 Rhythmen **EPH21081(Mono)**

PYE
 Viscounts Hit Parade **NEP24132**
 Lonnie Donegan Hit Parade Vol. VII **NEP24134**
 Chris Barber Jazz Parade Vol. VI **NJE1078**

TOP RANK
 Look for a Star : Garry Mills **JKP3001**
 What in the World's Come Over You : Jack
 Scott **JKP3002**

WARNER BROS.
 Kookie **WSEP2010**
 Edd Byrnes with the Big sound of Don Raikie

Tape and Disc Review

(Continued from page 26)

Joe Jones on drums, that is, on all but a couple, where Bill just runs around on his own. It's all very delightful, and it's easy to understand why he's so well dug.

Essentially a melodic player, Evans is still first and foremost a jazz man, but one that you can play for your non-hep friends without fear of their making silly remarks. His unaccompanied ballads 'Lucky To Be Me' and 'Peace Piece' are truly beautiful, the trios 'What Is There To Say' and 'Young And Foolish' close behind. Even the up tempo tracks still maintain a strong melodic line. Get this for Auntie's birthday — she'll appreciate the way you always play it when you call.

With so many jazz historians floating about in a sea of jazz literature and discographies, it comes as almost a surprise to find a record company having the temerity to issue an historical album. Riverside have done just this with **YOUNG LOUIS ARMSTRONG Jazz Archives Series 12-101**. An intriguing collection of antiquity from the dusty vaults of great jazz masters. If you dig early Louis or as some maintain, real jazz, then this is a must. What more can you want than King Oliver, the Dodds Bros., Ma Rainey, Alberta Hunter, Trixie Smith, Henderson, Bechet, Lil Hardin, etc., and Louis?

Riverside have done a great job here, and although there is a certain amount of surface noise, this is but a leftover from the crude 'steam' recording of those early days. What remains is nothing compared to the gritty hissing of some Junkshop

finds. Anyhow a little hiss is nothing when you can enjoy King Oliver's Creole Jazz Band October 1923 version, the Red Onion Jazz Babies, Fletcher Henderson (with the boy Hawkins), three great blues singers and of course, the young Louis Armstrong.

Another desirable Esquire issue is **TEO 32-113**. Teo Macero with the Prestige Jazz Quartet. Recorded 27th April, 1957, with Teddy Charles, vibes; Mal Waldron, piano; Addison Farmer, bass; Jerry Segal, drums.

Doubtless the Prestige group will be compared with the Modern Jazz Quartet, for with the same instrumentation, similarity of sound is inevitable. Luckily they stand up well to the comparison, Charles and Waldron don't have to ape anyone's style and play some excellent jazz on both sides.

Macero, who is new to me, blows with a moody vibrant tone that is not quite like any tenor tone I know and he fits in perfectly with the Quartet.

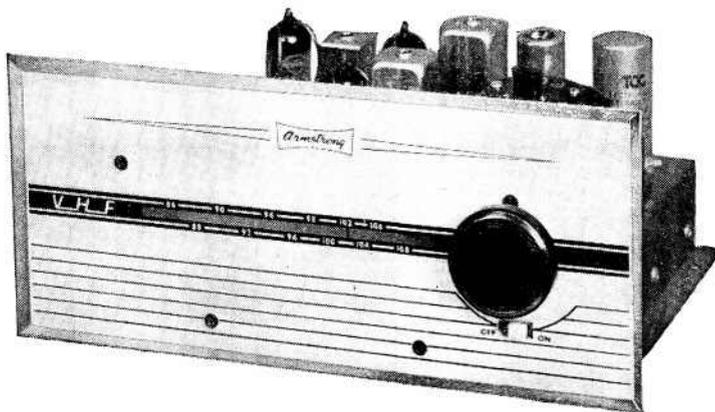
I liked this on first hearing and repeated playings have only made me like it more. From one tenor to another and we're back with my old friend Ben Webster, this time backed by the Oscar Peterson trio.

Oscar P. & Co. seem to improve on every hearing and Ben is consistently great, whether he blows fast or slow. 'Sunday' is one of his more up tempo numbers and this is swinging stuff. 'Bye, Bye Blackbird' usually associated with gig musicians and the Cavalcade of old pops at 'functions', is treated very differently by this little group and is one of my favourite tracks.

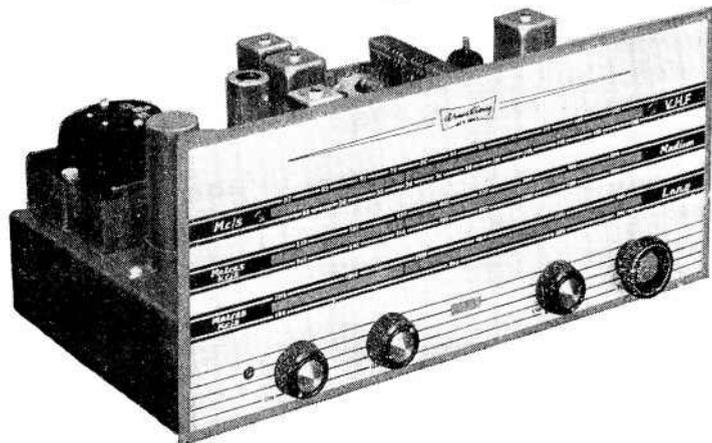
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TETE-A-TAPE

Further deliberations on frustrations imposed, and opportunities offered, by tape recording,

by David Lazell



Before you read on . . .

RECENTLY, I received a circular letter from a company in the north of England, offering to sell me low-priced tape. The gimmick was rather original, since the letter was accompanied by a (battered) cigarette. "Since this letter is a long one," the writer of the screed suggested, "You may like to smoke the cigarette attached, whilst you read of our Bargain Offer!" The idea here being that the cigarette would put the reader into a relaxed frame of mind. But the cigarette, unprotected from the various wallopings dealt by the authorities and my ferocious letter box, was in an advanced state of disrepair. In fact, fragments of tobacco dropped on to the carpet as soon as I opened the envelope. In any case, I do not smoke, since all my pocket money goes on equipment and other frivolities. But the approach has possibilities. I do like lemon meringue pie, for instance. If someone wanting to sell me Bargain Price Tape sent me their sales letter, accompanied by a lemon meringue pie, I might consider buying a reel or two. Even a pair of winter socks (size 11) would be useful . . . in fact, I might even prepare a list of suitable items that could put me in a state of mind favourable to buying tape. Manufacturers or dealers wishing to get me in the best frame of mind should arrange for me to spend a holiday in Paris (at their expense) whilst I decide whether to buy one seven-inch spool of Bargain Tape, or two five-inch spools. Paris, I'm sure, would prompt me to take advantage of the Offer. Failing that, a large jar of bath salts would be acceptable. "Since this letter offering our cut price tape is lengthy," the letter could say, "we suggest that you think it over in the bath, using the attached bath salts with our compliments!" So, watch out for those parcels from the postman. And for a letter containing a flat cigarette.

Is there a price for tape ?

There are, currently, many offers of low-priced tape, some of it guaranteed to gum up your tape recorder (marketed, maybe, by sinister TV interests?). There appears to be a kind of price uniformity for most branded, high quality tapes. But the chances are that competition in the tape industry will grow keener within the next 12 months or so, with, perhaps, substantially lower prices to the consumer. I hasten to add, however, that recorder owners, generally, are anxious that the high quality standards of recording tape should not be lowered to achieve lower prices. The question, though, is that of enquiring if there is a uniform price for tape? Members of the teaching profession are able to obtain substantial reductions (as much as 25%) when purchasing recording tape 'for educational purposes'. And the phrase 'educational purposes' can be applied to very many uses of the tape recorder, even, in my opinion, informal tape exchanges by members of the BRC. Members of recording clubs are often able to secure

reductions on the price of tape, by buying in quantity. Some dealers offer clubs substantial reductions. Now, this is all very good, especially as teachers and members of tape clubs are probably among the most important users of recording tape. But we may be approaching the situation where there are two sets of prices for tape — one for the ordinary enthusiast, and one for the fellow 'in the know'. This is, of course, a complex situation; retailers have to make a proper profit to help maintain their business, and a manufacturer is able to impose a recommended price on the retailer. Looking into my crystal ball, though, I would guess that there will be more competition among manufacturers in the near future, with favourable results for tape enthusiasts. In recent years, we have seen the development of low-priced high-quality gramophone records by the major companies; perhaps tape will follow.

I believe that one of the consumers' organisations is to test and report on tape recorders in the near future. It would be useful if recording tape were considered at the same time.



" . . . more competition among manufacturers."

Type by Tape

I noticed an advertisement indicating that we can now learn to type by tape. The tape recording consists, I believe, of general instructions on using the typewriter, and some suggestions for exercises. The only trouble for me is that my typewriter is so noisy that I can never hear anything when I'm bashing the keys. Traditionally, there have been gramophone records for typing instruction in the past. These were sometimes passages of music (in slow four/four time) accompanied by the instructor's voice. In fact, I learnt(?) how to type by this method, though I succeeded in wearing out both the gramophone and typewriter before I discovered how to put spaces between words. (This was very awkward!) Now, if you are learning to type, you can put your tape recorder to good use. Get some suitable music on tape, slow rhythm (e.g. 'Flight of the Bumble Bee' by Rimsky Korsakov), put it on the recorder, and then start typing. Make sure that you keep in rhythm with the music! That's the secret of success. Manual dexterity is also important; you do not use a typewriter like a tape recorder. I once saw a fellow looking for the quick rewind on his new portable typewriter — "This ribbon's only twin track," he remarked sadly, being a very up-to-date character. In fact, if you can learn to use the typewriter with your left hand, whilst manipulating the tape recorder with your right hand, you will find no further lessons are needed. Tranquillisers, perhaps: but lessons, no. If you are still interested in typing after this, you'd best take lessons. But, before you buy a typewriter, try recording the bell; some of 'em don't sound at all good on tape. And you will, sooner or later, want to record yourself working on that masterpiece that you are writing.

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Amateur Tape Recording & Hi-Fi

Dear Sir

Let the British Recording Club panel of experts answer your technical queries. Answers of general interest will be published.

Mr. D. Clayton of Prestwich, Manchester, wants to know:

What a "public address" system is on a tape recorder. Also, would you explain what "mixing" is, and what is meant by "monitoring", monitor "on" "off" switch?

Answer:

The reference to "Public Address" facility, applied to tape recorders is a rather misleading one and should not really be used. It simply means that the internal amplifier can be connected to the loudspeaker and microphone simultaneously thus permitting speech to be directly amplified. The available power output from the small amplifier and speaker of a tape recorder may be sufficient for a very small hall or large room, but hardly warrants the title "public address".

Mixing, simply means that two or more signal sources, viz., microphone and gramophone pick-up, may be "mixed" together during recording. This is a useful facility although few tape recorders have arrangement for it.

Monitoring means either directly listening to material being recorded or listening to the recording a fraction of a second after it has been made. The first system entails a pair of headphones or a loudspeaker connected to the recording amplifier, the second system involves the use of an additional recording head to pick up the signal from the tape immediately it has been recorded (see article by F. G. Judd—July issue of A.T.R.).

Charles Morgan signals us from H.M.S. Tiger:

I have a Grundig T.K.20 which I understand is 110 v. to 240 v. A.C. at 50 c.p.s.

The electricity supply on board H.M.S. Tiger is 115 v. A.C. at 60 cycles. Have you any suggestions as to how it can be reduced to 50 cycles please?

The point is, all recordings recorded at home play fast on board and those recorded on board play slow at home.

However, recordings made at 60 cycles play perfectly when played back at 60.

I find this awkward as I wish to start Tape-spacing but have realised it is impossible at present.

Answer:

Sorry to tell you that the only thing you can do to alter the speed when your recorder is operated from 60 c.p.s. mains is to have a special capstan fitted, which so far as we know the makers do not supply. Perhaps a reader can advise on a source of "made-to-measure" capstans.

A. Jackson of St. Leonards-on-Sea, writes:

I am going to buy an external speaker to use with my Telefunken Tape Recorder 75 K.15. I already use the speaker in my Bush V.H.F. 61 radio (which is an oval 6" x 4") for playback and this new speaker will be additional.

I had contemplated getting a "Wharfedale" 8" Bronze FS/AL as advertised in your magazine, but I wondered if this in addition to the radio speaker would be overloading the external speaker system of my tape recorder—would you please advise?

Answer:

We do not advise using the FS/AL loudspeaker together with the loudspeaker in your radio set. There would be little or nothing to be gained from doing this. The FS/AL will provide its best performance if you use it by itself.

P. T. Hartley, of Cheltenham, tells us:

I do not as yet own a tape recorder but have begun collecting pieces in anticipation of building my own recorder.

I am going to build one of Mullard's designs of amplifier as it seems a good design. The only setback is the tape deck, so I have decided to build this too. Many of my friends have told me I am daft—the only reason I want to build it is because I enjoy building this sort of thing more than an amplifier.

I have not found a book or publication on how to build a deck and wondered if you knew of any or could give me any details and advice on this subject.

Answer:

You are taking on a job which you may regret, for unless you have precision machinery for turning out the capstan and the rest of the tape drive mechanism your home built deck may well prove a failure. Very few amateurs even succeed in producing a tape deck with a good performance.

Sorry, but we do not know any publication which provides full details and drawings for building one.

SOUNDING BOARD

Mr. P. Clark of Darwen, Lancs. wins a £1 record token for the following suggestion:

May I be allowed to make some suggestions to your correspondent C. M. Humby of Bedhampton in the December issue of 'Popular Hi-Fi'.

Loudspeakers

One has to decide between column and directional types. The latter offers a greater degree of stereo information, but the listening area is more critical.

The finest value for money is undoubtedly the Heathkit 'Cotswold' speaker at approximately £20 but very good results can be obtained from the Wharfedale 'Concrete Column' which costs approximately £11

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A choice may safely be made from the following: Rogers approximately £38 to £42; Chapman £40; Jason £40; Pye £37; Cooper-Smith £31; Stern/Mullard £36.

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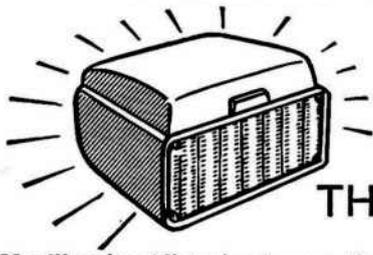
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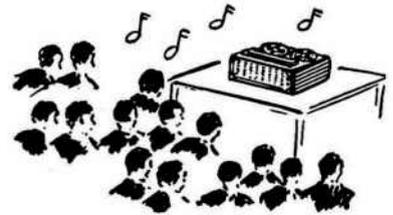
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The moment you see the styling of a Truvox Tape Recorder, you know it is the machine for you. Foolproof and simple in operation with professional facilities, a Truvox Recorder will be the centre of your home enjoyment of speech and music. See them at your dealers.

THEY **SOUND** SO GOOD

You'll enjoy 'listening' more than ever before. All the technical know-how of a decade of specialisation, to give perfect sound enjoyment, is embodied in the Truvox R6 and R7 . . . the original sound *truly* recorded and *truly* re-played through *large* loudspeakers. Hear them at your dealers.



THEY **ARE** SO GOOD



That you'll never be satisfied with any other Recorder . . . once you've seen and heard them, you'll decide for yourself . . .

THEY **MUST** BE

TRUVOX

R.7

7" spools. 10 watts output.
Records/Replays both
directions. Two speakers
(Tweeter and Woofer).
Response 30-17,000 c/s.
Retail Price 82 gns.



H.P. Facilities
available.

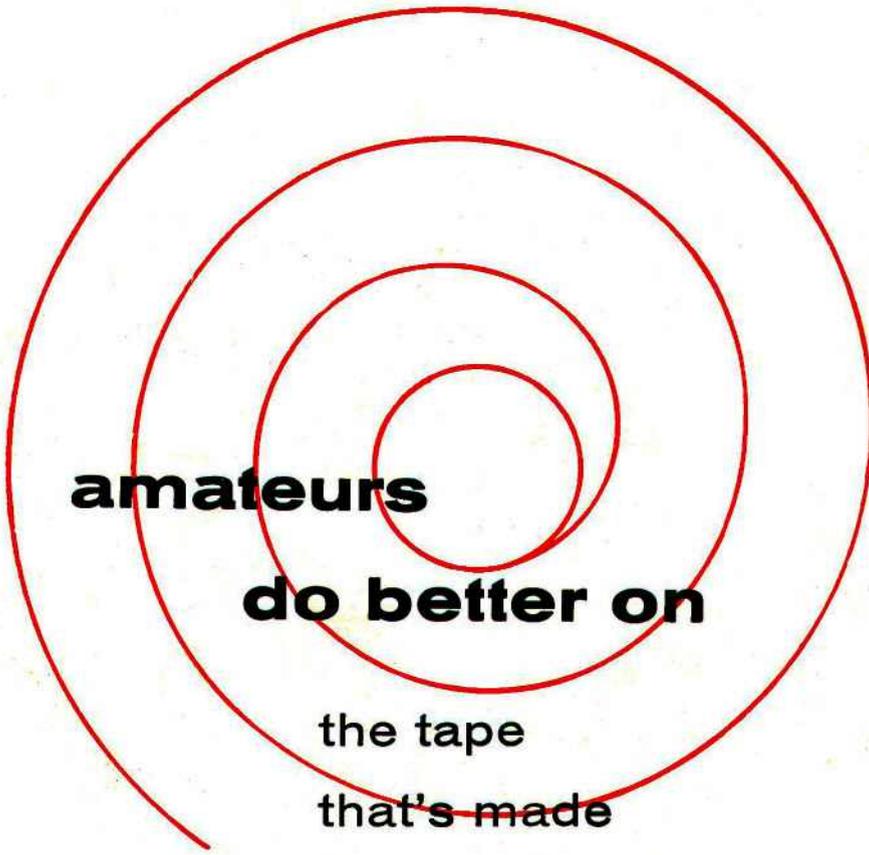
R.6

7" spools. 4 watts output
2 speeds. 8" x 6" speaker.
Response 30-15,000 c/s.
Retail Price 55 gns.



Ask your local dealer for a demonstration
or full details from :-

TRUVOX LTD. Neasden Lane, London, N.W.10. (Dollis Hill 8011).



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Authentic Sound



Magnetic Recording Tape

BASF Chemicals Limited

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