

RER

DOMESTIC APPLIANCES

LIGHTING

RADIO-TV-AUDIO

MARCH 1968

- REFRIGERATORS
- PREVIEW A.P.A.E. SHOW

THE LEADING TRADE MONTHLY

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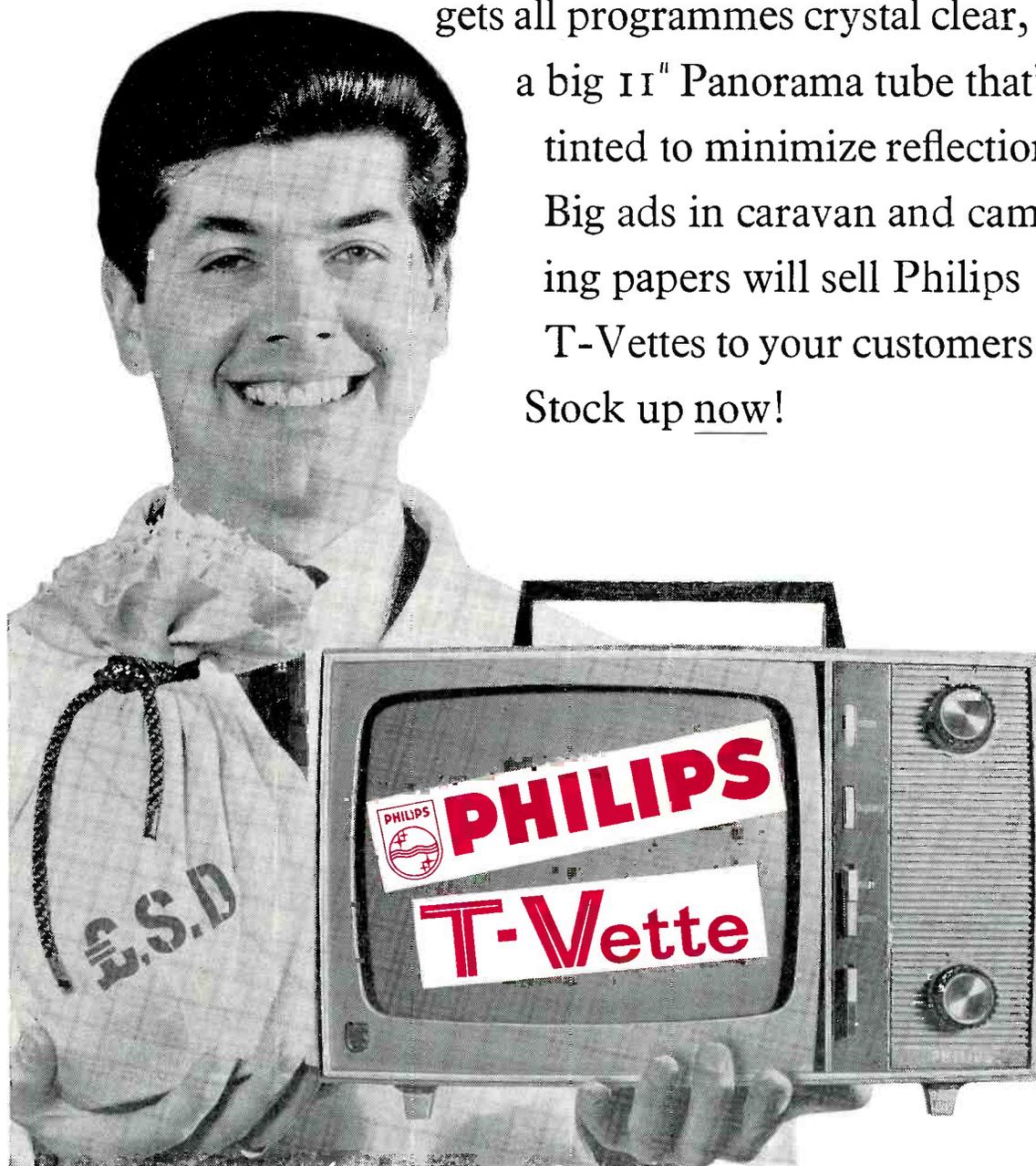
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A for aerial

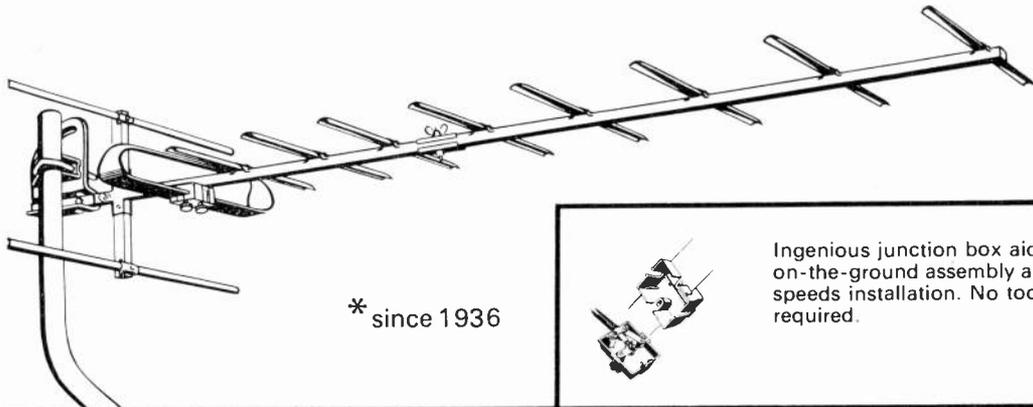
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B for Belling-Lee Aerials

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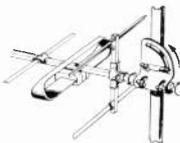
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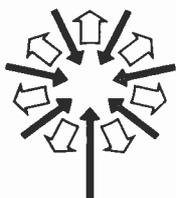
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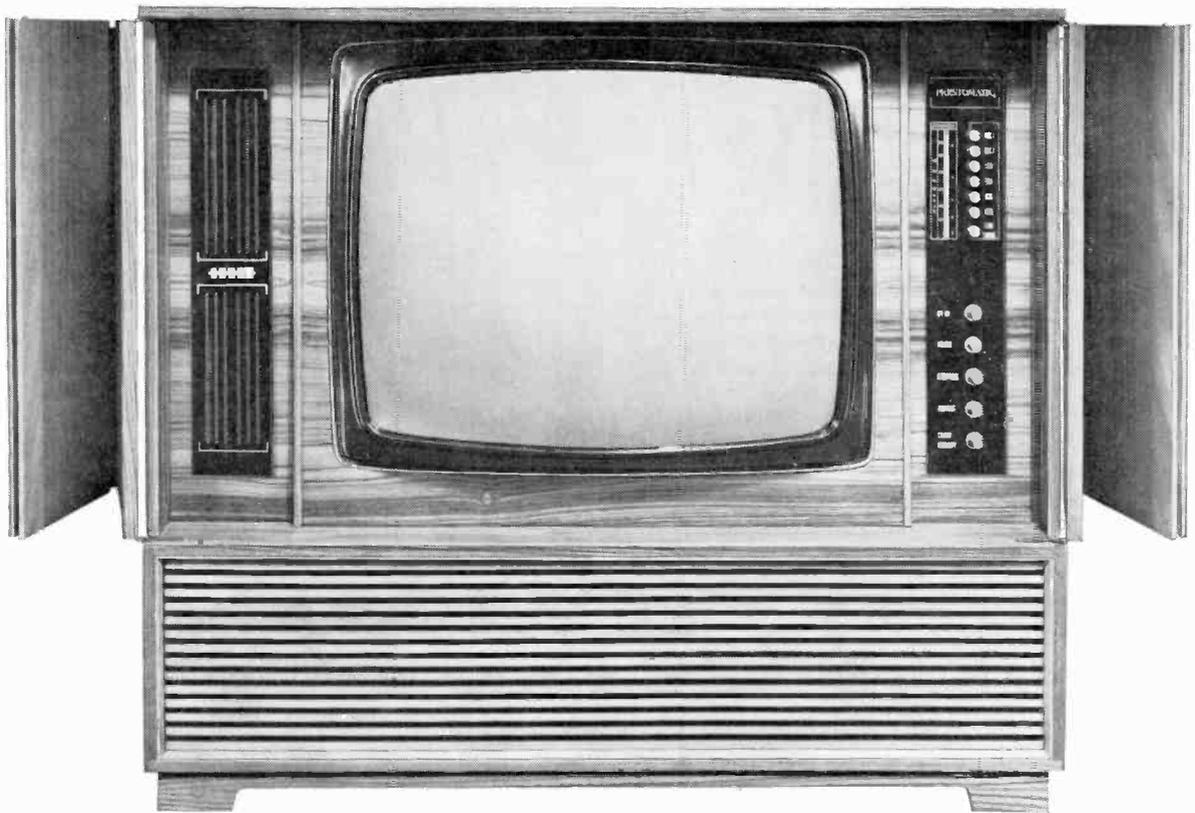
colour

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 **DUNLOP**
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Of tubeless construction, the Dunlop van tyre is being introduced in a wide range of sizes:—550-12, 590-15, 640-15, 650-14, 670-13, 670-15, 700-14, 750-14.

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RER

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Editor: REGINALD E. B. HICKMAN
 Adv. Manager: ROBERT C. CORNWALL

Editorial and Advertising Offices:
 46-47 CHANCERY LANE
 LONDON, W.C.2

Telephone: 01-242 1411

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NEXT MONTH:
 Preview Audio Fair

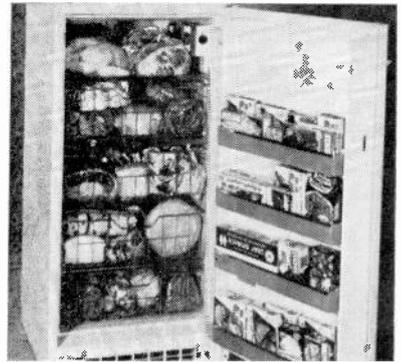
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RECENT RELEASES

Shown at the recent EDA exhibition, the new **AEG Favorit** front loading fully automatic dishwasher has a capacity of 12 place settings. Special features include built-in water softener and five automatic programmes including 2 time saving short programmes at the turn of one switch. It can be built into fitted kitchens and a model for building in at eye level is available. The fan jet washing action uses two rotating spray arms. 33½ in. high x 23½ in. wide x 23½ in. deep. Price to be announced. **E106**



From **ELECTROLUX**, two new refrigerators—model 74 (7cu ft) has 2-star storage compartment to take up to 17lb of food and retails at 65gn. The model 51 (5.1cu ft) features 2-star freezer, and push button defrosting and retails at 49gn. Also two new freezers—the model 47 (4.7cu ft taking 165lb of food at 63gn) and the model 80 (above) (8.3cu ft capacity storing 290lb of food at 115gn). Both are upright models, finished in white with silver and grey and silver colour trims. The model TF 410 chest type home freezer supersedes the model H 41b and retails at 53gn.

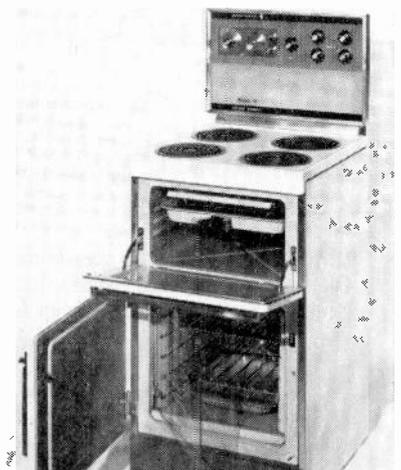
Electrolux also announce that the 4.5cu ft model 46 has been reduced from £50 3s. 5d. to £47 5s. and the 8cu ft model 100 from £118 9s. 10d. to £104 9s. 6d. Owing to devaluation, the built-in model 28 has been increased from £38 8s. 7d. to £42 11s. and the built-in model 40 from £44 16s. 8d. to £51; the H91 chest type home freezer has been increased from £90 8s. 7d. to £99 15s. **E109**



PHILIPS 1968 range of Snow Queen ▲ refrigerators includes two two-door freezer refrigerators—the Superfreeze 80 (8cu ft at 75gn) and the Superfreeze 100 (10cu ft at 85gn) each with 3 star freezer and holding 45lb and 63lb of food respectively, and featuring cabinet walls only slightly larger than a penny. The model 50 (5cu ft at 39½gn), the Super 57 (above) (5.7cu ft at 45gn) and the Super 50 (5cu ft at 46gn) also feature exceptionally thin cabinet walls and have 2-star frozen food compartments. All have white steel cabinets, except the Super 50 which is in dark rosewood laminate. Removable magnetic door seals are featured on all models.

Also included in the range are the model 70 (7cu ft at 59½gn) and the 98 (9.8cu ft at 79½gn) from the 1967 range, which have been restyled and improved. Both have 2-star freezers. **E107**

The new **ENGLISH ELECTRIC** ▶ Rapide 54 cooker, model 2014, has four 7 in radiant hotplates, full width grill in a large grill chamber and a 3,100cu in oven. Controls are housed in a toughened glass rear fascia panel of partially striped blue/grey design. An improved automatic clock/timer is incorporated. Measuring 21in wide x 25½ in deep x 51in high, it is priced at £61 10s. **E108**



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Specially designed for the P.A.L. system

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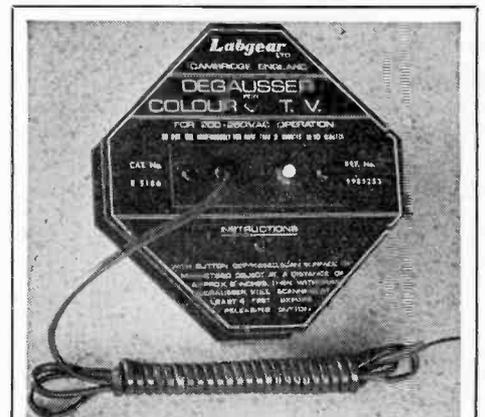
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- 4 Patterns: cross-hatch; dots; grey scale; blank raster.
- For 625 and 405 line systems.
- Compensation for mains frequency variation to receiver.
- Covers VHF Channels 6-13, UHF Channels 21-68.
- Size $10\frac{1}{2}$ ins. x $8\frac{3}{4}$ ins. x $6\frac{1}{8}$ ins. Weight 9 lbs. (including batteries and co-axial leads). Uses six HP2 batteries.
- Mains operated power unit available as optional extra.
- Width of vertical lines adjustable from front panel control.

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RECENT RELEASES

H. FROST introduced a new addition to the Sunhouse range of flame effect fires at the recent EDA exhibition — the Imperial 397 retailing at £29 10s. It includes a Burmese teak finished book-case surround. The 2½kW output is made up of three 800W infra-red silica sheathed elements. **E110**

Also new at the EDA exhibition were the 2kW and 3kW radiators from **HEATSTORE**. Known as the HCR range, they are based on the HBL model and incorporate several improvements. The HCR 2kW will retail at £21 15s. and the HCR 3kW at £25—both available in one colour finish only. A similar radiator, but incorporating a teak finish, will be made available to Electricity Boards to be sold as own brand lines. **E111**

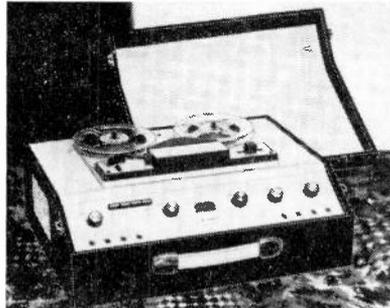
The new **HEATRAE** Lidomat shower system, first shown at the EDA exhibition, overcomes the problem of low water pressure in the bathroom. The system comprises a Lidomat 3 gallon 3kW water heater, a specially designed blending valve, a cold water flow regulator and a triple choice shower fitting. It can be used over a bath or in a separate cubicle. Price £32 4s. 8d. **E112**

The new **DREAMLAND** overblanket, which incorporates the 'Dreamatic' electronic time control switch, is BEAB approved and available in two versions — the model OD double bed size, 80 x 84in, with two individual bedside control units, and 180 W loading, priced at 19gn; and the model OS single-bed size with bedside control unit, size 80 x 64in and 130W loading, priced at £13 17s. 6d. The new Movil covering material is claimed to be colourfast, hard-wearing, have outstanding thermal insulating qualities, be non-inflammable, non-felting, quickly washed and dried, holds its shape when washed and resistant to acids, alkalis and most liquids. The new blanket was launched at the EDA exhibition. **E113**

In addition to the new washing machine and two new spin driers shown by **STOKVIS** at the EDA exhibition, the company also introduced two new refrigerators. The Fridge 'n' Freeze is a two door refrigerator with built-in deep freeze compartment. It has 8cu ft capacity incorporating a 6.5cu ft refrigerator and 1.5cu ft 3-star deep freezer. The walls are only 1in thick. Price 79gn. The new 500 De Luxe refrigerator (right) has 5cu ft storage space, and walls only ¾in thick. It has 2-star full width freezer compartment and features push-button semi-automatic defrosting. Price 44gn. Both models are finished in white laminated plastic. **E114**

SMITHS complete new range of clocks was shown at the EDA exhibition, and includes alarm clocks with such additional features as bedside lamps, electro-luminescent dials and weekend cut outs. Prices range from £2 12s. 6d. to £5 7s. 6d. Six kitchen wall clocks range in price from £2 19s. 6d. to £12 5s. 1d. for mains models and from £6 6s. to £14 15s. for battery models. There is a new sunray effect clock and a wrought iron cased lounge wall clock. Top-Time mantel clocks include both mains and battery types at prices from £4 10s. to £9 19s. 6d. Model QLR500 is a 5 hour timer costing only £1 17s. 6d. The one hour timer QLR400 sells at £1 7s. 6d. **E115**

Model STR-1 portable stereo tape recorder is available from **DAYSTROM** in kit form at £45 18s. or assembled at £59 15s. It is a 3-speed 4-track machine with 4W output per channel into two 8 x 5in. loudspeakers. A BSR TD-10 deck is used. **E116**

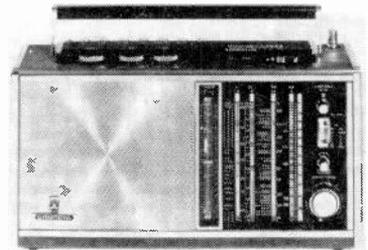


Seven new tape recorders from **GRUNDIG** include the TK120 de luxe single speed at 32½gn and a 4-track version model TK140 de luxe at 38½gn. The C200 recorder is a 1⅜in/sec battery operated model using the compact cassette system. Price 37gn. Priced at 89gn is the 2-speed 4-track automatic stereo recorder TK245 de luxe, in a polished teak cabinet. The 2-speed 4 track model TK247 de luxe recorder is designed to professional standards and is priced at 99gn. Model TS340 de luxe is a 3-speed 4-track machine with 16W output. The battery portable TK2200 is twin track 2-speed and fully transistorised. Operation is from 6 HP2 batteries. Price 75gn. **E117**



GRUNDIG introduce four new radio receivers. The Music Boy 208 covers am and fm bands and has a power output of 1½W. It uses a PP9 battery or can be operated from the mains by a TN12 power pack. Price 27gn. The Prima Boy Luxus has push button selection of am or fm bands. Operation from four U7 batteries. Simulated padded black leather case. Price 29½gn. The TR850 Marina has fm and am bands including the marine sw band. There is a battery level indicator and scale illumination. Price 37gn. The Satellit 6000 (below) features superhet operation. It has fm and am bands including 8 sw bands with bandspeed. 20 tuning scales are provided. Power output is 2W and the speaker system includes a tweeter. Operation from 6 LPU2 batteries or TN12 power pack which is supplied. Price 139gn.

Model KS715 is a compact solid state stereogram with 4 wavebands and 5W output per channel. The KS715 can be adapted for stereo radio by the addition of a decoder. In light or dark walnut, it is priced at 117gn. The KS722 stereogram also covers five wavebands and delivers 10W per channel. Price 127gn. The high fidelity KS792 stereogram incorporates the HF500 tuner/amplifier. Five wavebands include two sw bands. A transcription type record changer is fitted. Total output is 30W into 10 loudspeakers. The Bergamo stereogram covers fm and am including one sw band. Four loudspeakers handle the 6W output. Operation is by press buttons. Price 159gn. **E118**



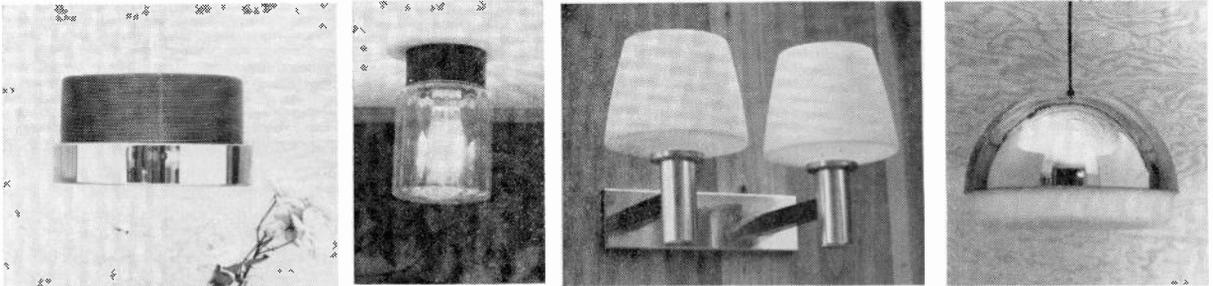
Introduced by **ELECTROLUX** at the EDA exhibition was the new Automatic 100 cleaner. This replaces the model 90, and additional features include a new, thumb operated, suction control for easy cleaning of lightweight carpets and curtains; a new clip on the hose handle which holds the dual-action dusting tool ready for use; and a new styling using a colour scheme of deep green and pale grey with touches of orange and metallic finish. Weight 15lb 3oz. Price £35 14s. 11d. turbo polisher attachment £8 9s. 3d. The model 100 is guaranteed for one year and is BEAB approved. **E119**

For further details about products mentioned on these pages use the prepaid enquiry form on page 128 quoting reference number.

DEALING WITH LIGHT

from LIGHTSHOW '68

Below, left to right: Rotaflex Zodiac pendant in aluminium and prismatic plastics; canopy fitting from the Atlas Patio outdoor amenity range; twin-unit wall bracket by Conelight for brandy glass shades; another from the Zodiac range.



LIGHTSHOW '68 has come and gone, and as indicated in our preview in January, most of the exhibits confirmed the established pattern of home lighting equipment. New designs were there in plenty, but many were variations of established themes. The visitor prepared to spend a little time searching around, however, could find some useful material for the showroom.

FLOWER POWER

Despite the popularity of "flower power" at the moment only a few lampshade manufacturers had jumped on this particular bandwagon. Some of the best floral designs were shown by Sasha Products, who also had attractive designs in brightly coloured plain fabrics. Another firm producing shades with floral patterns in exotic colours was Henk Schwimmer Studios, showing lampshades made from paper as well as fabric. In its Colorblok range these shades are matched with stands made from assemblies of wood blocks of different sizes and shapes, painted in the same bright colours. More traditional floral designs, in less flamboyant colours, were shown by Jackson and King.

Another current fashion idiom was caught by Xlon Products in a range of

pendants made from white opal acrylic in cubes and hemispheres and painted in bright colours in various geometrical and other op-art patterns to suggest a psychedelic effect. The same firm also brought out a range of louvered pendant shades in paper, in pink, orange and white, supplied folded to save space, for assembling by the user.

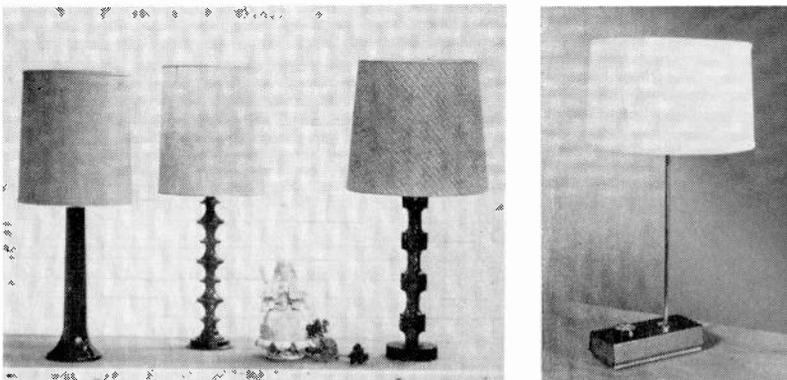
There is, in fact, a pronounced trend for folding or self-assembly shades. Anne Storm showed a prototype of a multi-segment design, made from opal acrylic film and hung together on tapes. Cosmo Designs produced various pendants built up from segments of opaline polystyrol; one design, the Twinlight, can be erected in two different ways. There were attractive Japanese wire-reinforced folded-paper shades by Yubido, plain or decorated, which must be the simplest ever lampshades to fit.

It was also noticeable that glass-fibre lampshades seem to be growing in popularity. Austin Sheerlite, which did all the pioneering, now offers a wide variety; in addition to the original design, now available in circular, square and triangular sections in several sizes and colours, the firm has introduced Cord versions, spirally wound in spun glass, and Rove designs with a gossamer texture, while there are two patterned shades—Spring and Autumn. Samols Latimer offered glass-fibre shades, used to create table lamps whose bases were made from clear-coloured resin encapsulating multi-coloured broken crystals of the same material, to give an attractive scintillating effect when lit.

NEW FITTINGS

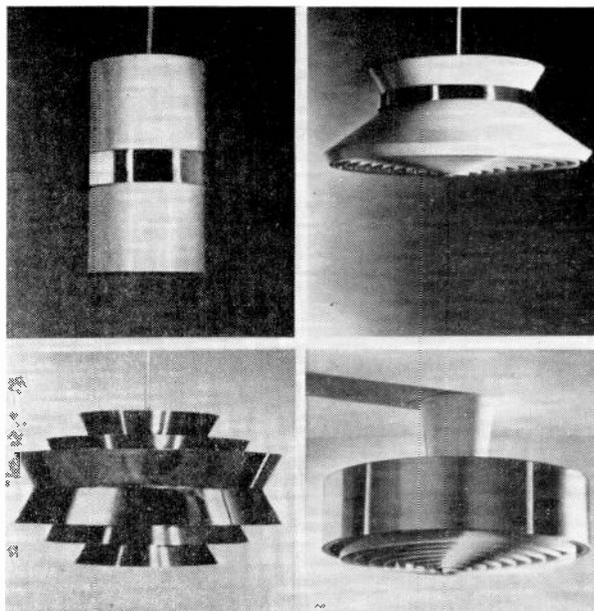
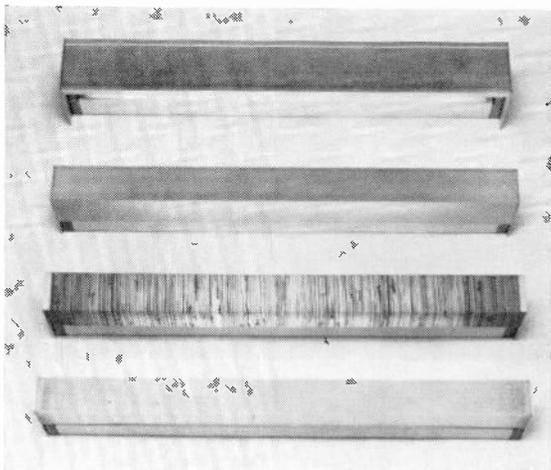
Scandinavian influence is still strong, although the style has been so widely adopted now that it can hardly be called Scandinavian any longer. Scandinavian lighting firms were strongly represented. New designs seemed to show greater pre-occupation with more complex geometrical patterns which, while giving accurate light control, have lost some of the elegant simplicity of earlier designs.

Particular pieces which caught the eye on the Nina Breddal stand included some new Hans-Agne Jakobsson designs from Sweden, using a 40W tubular filament lamp, single-ended, with the filament arranged in a zig-zag. They are particularly effective used in spherical bowls, of tinted



Left: table lamps from Xlon Products, with turned-wood bases and self-coloured shades in fabric or glass fibre; right: Vari-lamp by Superswitch Electric Appliances, the thyristor dimmer control is in the base.

Right: From the Sovereign range by Osram-GEC, models 30209 and 30203 (top) and 30206 and 36158 (bottom); below: from the Rotaflex Silverspan range of fluorescents, with reeded diffuser, plain directional shield and plain pelmet.



bubble glass to add to the sparkle of the filament. There is a new light brown glass tint—tobacco—used in the Jakobsson range, and also, in combination with white opal, in two new Fog and Mørup designs. Nina Breddal has recently added the Dutch firm Hiemstra Evolux to its representation, and showed some elegant pendants, consisting of spheres of mirror glass, with a matt interior finish.

Some very attractive coloured opal glass pendants of Swedish origin were featured by Ringway Lighting, in four shapes and five colours. Scandinavian influence was also to be seen in some of the fittings in the new Sovereign range by Osram-GEC.

A number of very distinctive designs were offered by the French firm Lita, whose products deserve to be better known in this country. Although the firm's reputation was founded largely on display, shop and commercial lighting using filament lamps, it has now brought out a range of more decorative luminaires known as Eurolita which should have a considerable impact in the quality lighting field.

No matter how strong the desire to back Britain, Lightshow confirmed that, in decorative lighting, this country does not command a leading position for design and inventiveness, outside the effort of a few pace-making firms. One of these, Rotaflex-Concord, lived up to its reputation in a number of new lines, notably the Zodiac range of pendants combining polished aluminium and plastics, either opal or clear prismatic. British Lighting Industries, which is also a pace-maker, offered very little that was new: a multi-grooved down-lighting unit turned upside down to serve as a table lamp uplighter, and a fluorescent mirror fitting, with shaver outlet. Both were sneak previews, and will not be available until April.

New fluorescent fittings for home use included the Burma range by Ringway,

with a base of teak and a diffuser in opal or prismatic material. Rotaflex-Concord introduced the Silverspan range of wall-mounting fluorescent fittings, made in extruded aluminium. These are available with patterned translucent or opaque metal front panels concealing the lamp, which can be covered by the user with paper or fabric to match the wall coverings or curtains. A similar idea was also offered by Fancy Metal Goods in a two-light wall bracket; the central circular plate of the bracket is left blank for covering by the user.

Conelight, noted for their quality design, introduced two new fittings using its brandy-glass shades. One is a twin-unit wall bracket, and the other a six-light circular pendant; metalwork is coloured anodised aluminium and shades are available in satin opal, clear smoke grey or amethyst, clear amber and translucent orange. Plus Lighting confirmed its belief in the virtue of the cylinder by offering new coloured transparent versions with a reeded surface, either unlined, or, for richer effect, lined with a smooth opal sleeve. These are made in three sizes for mounting direct to the ceiling and in four sizes as pendants.

There was a great deal of crystal on show, of course, although the impression was gained that it does not enjoy quite the same popularity as a year or two ago. Among new designs in the period style was a handsome chased-ormolu chandelier by R. J. Chelsom for close ceiling fitting in rooms whose ceiling height precludes the use of a conventional pendant. Homeshade has extended the range of crystal Brilliant glass, following its introduction at Liteshow last year, and also introduced two new ranges: Jewel glass fittings from Vienna and Bohemian chandeliers using jewellers' crystal hand-cut and hand-polished in pure crystal or Memphis finish.

Crystal fittings in the modern idiom included a new range of lead crystal from

Clarke (Electrical), known as Charentais in single- and multi-light pendants. Emess Manufacturing also introduced a range of modern single pendants in crystal, although greater interest on this stand was aroused by fittings made in various forms of a special clear resin intended to simulate crystal. The original designs—Cristallux (sintered small granules) and Duolux (spirally wound fibre on a lining cylinder) have now been augmented by two new materials, Crilux, which consists of sintered large granules, and Avalux, a solid material with a chunky outer surface texture.

LOW-VOLTAGE EQUIPMENT

From the start made some years ago with reading lamps, low-voltage is rapidly developing for home use. New designs included the egg-shaped folding reading lamp by Visual Control (illustrated in our preview). The Rotaflex Concord Superjet has a design inspired by aircraft reading lamps. It is a small rectangular unit housing the transformer at one end, the other end retaining a eye-ball rotating spotlight for a 12v, 18w motor car lamp, fitted with louvers to restrict unwanted light spill and give a concentrated beam. It can be used free-standing, while a slide-on bracket enables it to be fixed to walls, shelves and similar places, and a spring-clip bracket enables it to be mounted on the headboard of a bed. A low-voltage table lamp by Crafts Furnishings Co also uses a 12v 18w motor car lamp. The transformer is housed in the cylindrical base and in its outward appearance it is undistinguishable from a mains-voltage table lamp.

ELECTRONIC DIMMER

The device which probably aroused the greatest interest at Lightshow was not a

Continued on page 152

BBC Radio Nottingham is the fourth of the new local radio stations to be opened. Barry Lankester (extreme right) assisted with the preliminary publicity which was conducted by the BBC and the local branch of the RTRA. R. G. Pascoe, RTRA Nottingham chairman, is on the extreme left.



BUY BRITISH? SELL BRITISH!

WHAT an extraordinary affair this *I'm Backing Britain* Movement is, not least in its origins. Over the last couple of years the Union Jack and anything with patriotic British overtones was accepted with amused affection. The flag has become a decorative motif for everything from aprons to picture postcards. Anything reminiscent of the days of Empire, jingoism and so on (for example, old uniforms) has achieved a new role: it is now a fashion, like Victoriana, or the Twenties or the Thirties, or Bonnie and Clyde.

The idea of taking Britain, the flag and patriotism seriously in the old sense used to be the antithesis of fashion. Indeed, an attempt about a year ago to create a Great Britain patriotic movement was stillborn.

Then the famous typists of Surbiton had the sincere, simple but basically funny, and in realistic economic terms nonsensical, idea of working an extra half hour a day free. The press and television took it up.

A Famous Non-event

It became the starting point for one of the biggest 'non-events' of recent years.

A non-event, by definition, is one manufactured by journalists or publicists—not a real news event but something invented to make news.

The *Daily Mail*, which for years has made a point of conducting crusades whenever possible, promoted it strongly. Any news item which could be construed as being to Britain's benefit was printed under an illustration of the Union Jack adorned with the words *I'm Backing Britain*.

The thing became so big that the other papers could not ignore it; the *Express* and the *Daily Mirror* quickly adopted a similar line.

Industrial and other figures made solemn pronouncements about it. Wilson approved it. Some unions supported it

CROXLEY'S COLUMN

and some did not. A number of working people here and there offered free time to their employers. Various companies achieved publicity by offering to decrease, or at least not increase, prices. Quaintest of all, several people, including Simon Dee, gave money to the government.

Self Punishment

From the point of view of the sociologist and psychologist it obviously reveals some mass subconscious level of guilt, some strange puritan desire for self punishment. Because it is not based on sound economic sense it will no doubt simply run its course until press and television tire of it, and it will then run down.

But it could have two fairly serious consequences. First of all, although there is at present a spending boom, it could lead to a depreciation of trade—a belief that to go without is better than to buy, which obviously would have very bad consequences for retailing.

Buying British

Secondly, the doctrine of *Buy British* has again reared its head.

This doctrine can easily have pernicious effects. If it is carried out seriously it is obviously going to lead to other countries replying in kind. If they will not buy British, then devaluation is largely wasted, our export drive nullified, and we really could find ourselves in trouble.

Britain has always needed to import considerable quantities of raw materials, and nothing is going to change that. As regards buying foreign products, only if

products made abroad are equally available with British made ones are British manufacturers going to be faced with the competition that will lead them to make British products good enough to sell on their own merits. If they are not good enough to sell on their own merits at home they will not export successfully either.

Buy British is an admirable slogan—backed up by the goods—for every country except our own.

It is very dangerous to suggest that we should import less; we should export more, which is a very different thing.

Our Own Trade

In the electrical, radio and television retailing field the disadvantages and difficulties of confining ourselves to British products are obvious.

We need to ask ourselves to begin with what are British products. This point was well made in an article in the *Daily Mail* recently. The Pye Type 60 television set was taken as an example and it claimed that of the 1,418 parts in it, 1,415 were made from imported raw materials. Devaluation has put up the prices of them, and thus of the set itself.

There is also a mirror image example—the foreign car manufacturer who urges the British to buy his vehicles because so many of the parts are in fact made in Britain.

In fact, manufacturing is more and more international. For example, how many 'British' products are made in Britain by American owned companies?



With the Philips Executor and Companion microwave ovens to assist him, L. Napleton, Philips microwave group product manager, explains some of the principles of microwave cooking to members of the London branch of the Industrial Catering Association during a recent meeting held at Philips London Headquarters.

We have to accept this internationalisation. It can no more be avoided than we could avoid buying any product not made in our own home town.

Apart from all the foreign elements in 'British' products, we also sell, and can hardly help continuing to sell, many lines which are in fact imported. Our business is not in a wonderful state, nor has it been for years, and to sweep our shelves clear of everything not made in Britain might be semi-suicide.

Of course we will sell British goods, but it must be for the customer to discriminate under conditions of free competition. Give us the goods—British made and competitive, better advertised and offering better value—and naturally we will always be prepared to sell them.

The Background

The *Back Britain* movement and the *Buy British* movement, however well intentioned, are symptoms of a basic misconception of what the British economy is all about. This misconception has its roots in the so-called balance of payments crisis.

Britain is the second largest creditor nation. If Britain ran a surplus instead of a deficit it would merely mean that other countries would have their surplus turned into a deficit and in turn—if they followed the same irrational economics—fight to get us back into a condition of deficit again.

The idea of balancing payments, with some fixed exchange rate, is the root of all the evil, in my opinion. It was apparent from the moment the present government took office and declared its intention of defending the pound at all costs that it would fail, and lead the country quite unnecessarily into ever more serious difficulties.

A successful country, like the USA or Japan or Britain, should have a deficit anyway, if it is going to fuss about the balance of payments at all.

The Lost Boom

The most pitiful thing now, however, is that we may be throwing away the advantages of devaluation. We should now be in a very good situation, not a very bad one. We should have a strong internal economy. And above all we should experience a prosperous year this year and next and the one after that.

The only valid reason whatsoever for internal cuts in government expenditure and any tax or other impositions in the forthcoming budget should be to make sure the boom does not get so enormous so quickly that it leads to galloping inflation.

The stage has in effect been set for much better growth, and for conditions under which we should be much better off, but government and public have then done everything to stifle the growth and make ourselves worse off instead of better off.

Cuts in overseas expenditure, while they are largely impracticable so far as the present crisis is concerned, because they will take too long to take effect, are good for our future, although they are still not large enough. They should have been made immediately this government took office, or at least after the election which gave it a big majority.

Our internal economic policies at this time are not only virtually ruinous, but we seem to be intent on accomplishing that ruin. The public have been caught up in this fever of self punishment—which is the real significance of the *Back Britain* movement.

There is only one slogan that really matters and it is not a puritan, guilt-expiating one at all. It is BE BETTER OFF. If everyone took that slogan seriously and tried to make it come true, the tide might be turned.

Instead of facing a bleak future, we traders could look forward to a situation in which more and more people bought more and more, and we ourselves, not before time, could and would be better off.

RENTAL CHARGES

THE Prices and Incomes Board sometimes has the strangest way of selecting what it will penalise and what it will ignore. Anyway, it recently alighted on rental and relay services as a suitable subject.

In reply to its pronouncements, the Relay Services Association and the Electronic Rentals Association have been understandably somewhat cagey. The former is glad the Board recognises the charges for HF relayed signals have remained unchanged in the last few years and that since 1964 there has been an average fall in the charges for hiring relay TV sets.

The latter is pleased to comment that "the Board has concluded that the present level of charges within the television industry is about right." It also states, cautiously, that the report deals with complex matters and "to do justice to such a document will obviously need considerable study."

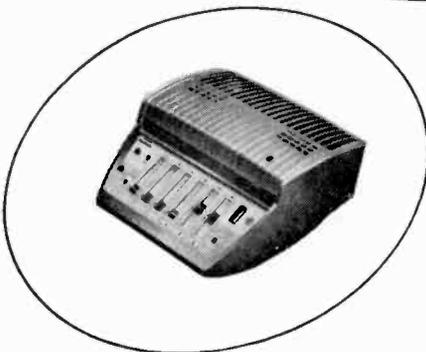
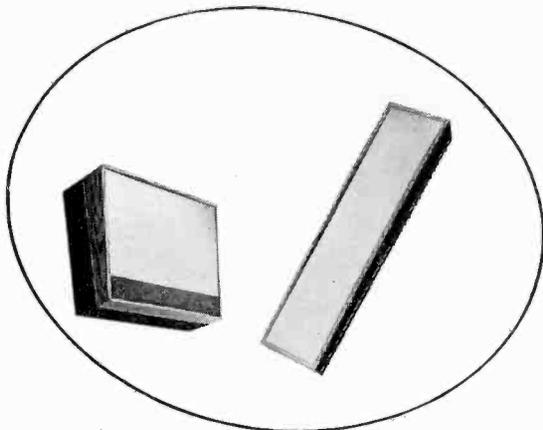
What matters fundamentally is that there should be a basic parity between the costs of renting and relay and the costs of buying. It would be unfair to either side if this were not so.

Renting and relay should never be considered in isolation but always in relation to costs of purchased sets. And what should very carefully be taken into account are the comparative situations of the independent retailers, who may not rent at all, the large chains which rent extensively, and the companies who virtually provide rental and relay services exclusively.

This is simply in the public interest. If costs ever got out of step, the public would in effect have a reduced choice.



We will be exhibiting
our latest range of products
at the
APAE Exhibition
Stand Nos. 3, 4 & 5
March 12th, 13th & 14th
Kings Head Hotel
Harrow on-the-Hill
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1968 INTERNATIONAL

Public Address Exhibition

King's Head Hotel : Harrow : March 12-14

THE 1968 INTERNATIONAL PUBLIC ADDRESS EXHIBITION organised by the Association of Public Address Engineers is being held at the Kings Head Hotel, Harrow-on-the-Hill, Middlesex, from Tuesday, March 12th, to Thursday, March 14th. Opening hours are 10 a.m. to 5.30 p.m. daily.

The Annual General Meeting of the Association will be held in the hotel at 5.30 p.m. on March 13th.

The Annual Dinner of the Association will take place at 7 p.m. in the Seymour room of the Kings Head. G. Milton, a council member, will act as Director of Ceremonies. The guest of honour will be Bob Danvers Walker, the celebrated radio personality.

One of the special features at the show is a P.A. caravan which has been designed by Bevan & Thomas, a trader member of A.P.A.E. It is specially intended for use at Horse Shows, Agricultural Shows, and the like. At the exhibition it will house the P.A. equipment as well as special equipment supplied by the BBC for the playing of Bird Recordings which is being used in conjunction with the theme of Outdoor P.A.

An innovation at this year's show will be an informal gathering to which are being invited a number of the leading organisers of the sort of big outdoor or indoor shows which normally use P.A. equipment. Members will be able to discuss with them any of the mutual problems which arise out of this kind of operation. The aim is to create a better and clearer understanding on both sides of what can be expected from these installations.

Also to be announced at the exhibition is the formation of a sub-committee to deal with the formation of a plan under the Board of Trade Joint Venture scheme to enable manufacturer members of A.P.A.E. to exhibit their products at a number of trade fairs on the Continent. To qualify for B.o.T. assistance it would be necessary for trader members to take out the equipment and man the stands. At present less than 10 per cent of British made P.A. equipment is exported. The Association believes that this figure could be lifted up to 50 per cent.

Stand by Stand Guide to Exhibits

Stands 1 & 2

DOUGLAS A LYONS & ASSOCIATES LTD

From the French Bouyer company comes the Verbaflex portable p.a. system with metal column speaker and supporting tripod, and the cardioid microphone type 709 with floor stand. The smaller Carflex equipment with hand microphone is also shown. Both models are battery operated and transistorised. The Super Megaflex is a popular power hailer in a heavy duty plastic casing. The Bouyer range of columns covers types from 20in to 78in, all-metal and with heavy duty plastic horn drivers with capacities up to 25W. The Bouyer cardioid microphone, type 709, is particularly designed for speech reproduction with minimum feedback. The new cardioid type 710 has extended response for music and can be used for close singing. Another interesting product is the Bouyer Round Table conference system. A range of LEM French-made microphones is on display and includes high quality hand and stand types, a noise cancelling model and lavalier types.

automatic music player, which gives eight hours of unrepeatable music. It has a 9W solid state amplifier, and can be connected to external speakers. A microphone input gives P.A. facilities. The EV 4139 transistorised four-way microphone mixer is suitable for operation from a.c. mains and uses silicon transistors. It has alternative outputs of 100mV or 1.2V. The EL 6015 cardioid dynamic microphone can be used in the hand or on a stand. It has an on/off switch. The similar EL 6015 has omni-directional characteristics. Microphones EL 6025 and EL 6026 are alike in design. The former is designed for speech applications. EL 6033 cardioid omni-directional microphone is suitable for both speech and music. The low impedance EL 6042 is a moving-coil microphone suitable for high quality reproduction. The EL 6035 is a high quality cardioid unit, as is EL 6036. Nine models of loudspeakers are on show in wooden cabinets for wall mounting or as line source column models. Amplifiers are to be seen in models with power outputs from 10 to 140W. The EJ 1001 battery operated loud hailer weighs only 3½lb and has a peak output of 10W.

Stands 3, 4 and 5

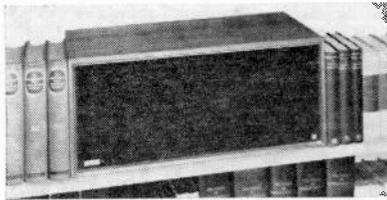
PETO SCOTT LTD

Highlight of the display is the Philips LGC 2000 cassette loaded

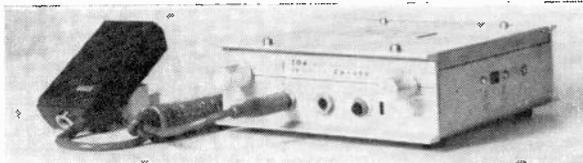
Stands 6, 7 and 8

S.N.S. COMMUNICATIONS LTD

Loudspeakers, amplifiers, radio microphones, intercom systems.

A.P.A.E. Stand by Stand continued

Left: Rola Celestion. Ditton.



Below: Toa 13W amplifier.

Stands 9 and 10 GOODMANS LOUDSPEAKERS LTD

A representative range of loudspeakers includes two sub-aqua speakers—one for wall mounting in a swimming pool and one portable unit, the Aqua-Chat, for use by divers.

Stands 11 and 12 SHURE ELECTRONICS LTD

Microphones of all types for every application.

Stands 13 and 14 RESLOSOUND LTD

A full display of their standard range of microphones and accessories, and a selection from the range of amplifiers and loudspeakers. Also microphone stands and booms. A high quality radio microphone in an artiste's vanity bag is on show, together with a special microphone and banqueting stand with base clips to hold the transmitter. Dynamic microphones to be seen for the first time include: model MPD2, an inexpensive omni-directional miniature; model UD1, an improved uni-directional hand or stand model with detachable ring for altering the polar response, and having anti-pop filter and optional bass reduction; model OD1, hand or stand omni-directional; model SL1, high quality omni-directional stick type with remote universal matching unit. Also to be seen is the APAE version of the Stenofon ST40 loudspeaking intercom with master station and provision for up to 40 sub-stations. A selection from the range of Chapman radio tuners in their improved presentation includes: FM1000 and FM1005 panel mounted versions and FM1005 in black metal cabinet.

Stands 15 and 16 F. W. O. BAUCH LTD

Tape recorders, microphones.

Stands 17 and 18 VITAVOX LTD**Stands 19 and 20 STANDARD TELEPHONES & CABLES LTD**

S.T.C.'s experience in the design of sound reinforcement systems has been applied to modular equipment. A combination of these solid state modules will meet the requirements of most systems with compact units. Separate modules, modules in standard cases and in 19in rack frames are on show. The range has been extended to include a 60W power amplifier which measures only 11 x 5 x 12in. A complementary range of loudspeakers includes cabinet and column types. A comprehensive

Below: Philips EL 6025 microphone.



Render Instruments toggle switch TS1



range of universal adaptors is available. The competitively priced cardioid microphone model 4113a can now be used on any type of stand or fixed mounting. Other PA microphones to be seen include the 4115 lip ribbon model.

Stands 21 and 22 COSMOCORD LTD

Of particular interest is the GP 91-1 SC pick-up cartridge which has been specially developed to track both mono and stereo records and reproduce in mono from them. The range of cartridges to be seen includes: GP 92 mono ceramic; GP 93 stereo crystal and GP 94 stereo ceramic. Acos microphones are on show. To check sound levels the Sound Level Meter SLM 1 is available, with new accessories including wind shield, comparator unit and calibrator.

Stands 23, 24 and 25 REDIFFUSION REDITUNE LTD

Highlight of the display is the new TP-Mini tape playback machine which brings Music Service within the reach of many smaller establishments which previously could not justify the price of current equipment. The TP-Mini is sold outright in kit form and includes playback machine, two loudspeakers, all connections and instructions for do-it-yourself installation. Price 38 gn. Also new is a playback machine designed specifically for PA, applications. It will fit into standard racks. The standard playback machine, model TP48A, is transistorised and has 10W output. Any one of four tracks can be selected manually or it will switch automatically from one to the next to provide four hours of continuous music. Price: 60 gn.

Stand 27 FI-CORD INTERNATIONAL

Eight all-British condenser microphones are released for the show. Models available are suitable for outside broadcast and film unit use as well as others for the studio. Prices range from £22 to £98. In addition, the complete range of Beyer microphones is featured, as well as the Fi-Cord induction loop system and the Astro-Sound portable P.A. system.

Stands 28 and 29 GRAMPIAN REPRODUCERS LTD

Examples from the extensive range of equipment, much of which has been specially developed to meet the needs of the practising PA engineer. There is a range of 5W to 50W mains and battery operated transistorised amplifiers, mixers and pre-amplifiers. There is a new cardioid dynamic microphone in modern styling with on/off switch and an easily replaceable

diaphragm/coil assembly. Loudspeakers on show include a 100W peak multi-driver unit with re-entrant horn.

Stands 31 and 32 **AMPLIVOX LTD**

Stands 34 and 35 **POLITECHNA
& LONDON MICROPHONE CO**

A representative selection from the A.K.G. range is on show. New is the type D.1000, a dynamic cardioid unit supplied in 24 carat gold finish, with switchable three-way frequency response specially developed for musicians. It can also be supplied in studio matt silver grey. Also to be seen is the D.12 cardioid, widely used for musical reproduction; the D.14 a low priced dynamic unit; the D.19C with table stand; the D.119CS a professional cardioid, an advanced version of the D.19C including on/off switch; the D.501 especially recommended for interviews and news work; and the lavalier type D.109.

New from London Microphone is a cardioid microphone incorporating an on/off switch. This unit otherwise has the same characteristics as the LM.200. The LM.200 is available in a choice of impedances or as a dual impedance model, and is complete with wire table stand. Model LM.100 is an omnidirectional dynamic unit with balanced output. A 500 ohm version for use with transistorised tape recorders is available.

Stand 36 **DENHAM & MORLEY LTD**

Stands 37 and 38 **VORTEXION LTD**

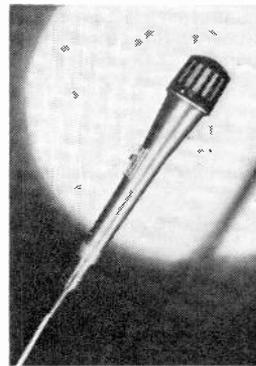
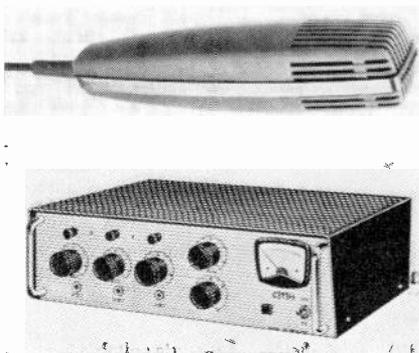
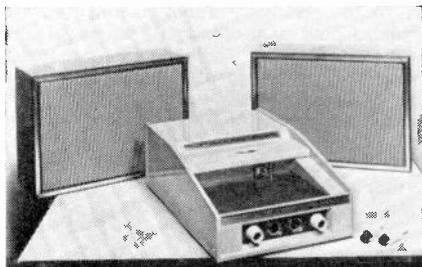
New at the show is the mixer amplifier 20/30W using silicon transistors. Full overload protection is provided and the amplifier is suitable for continuous operation. Price: £35. A 100W version is available at £70. The CP50 amplifier operates from mains or 12V battery. It has 8-15 ohm and 100V line outputs. It uses silicon transistors. Price from £84 to £92 depending on input arrangements. Also to be seen is the established range of 4-, 6-, 8- and 12-way mono mixers; 2 x 2, 3 x 3, 4 x 4 and 5 x 5 stereo mixers; 10/15W mixer/amplifiers; 30/50W mixer/amplifiers and 3-way mixer and PPM.

Stand 39 DITCHBURN ORGANISATION (SALES) LTD

Two all British type cartridge music systems on show are the Symphonair and the Symphonette. The latter is a new compact, inexpensive system with a capacity for up to three loudspeakers and is ideal for the smaller location. The Symphonair has a capacity of 12 speakers. Paging facilities and connections for radio or record input are provided. The Ditchburn Music Library provides a nation-wide service of all types of background music.

Stands 40 and 41 **AUDAC MARKETING CO LTD**

*Below left: Rediffusion Reditune Mini.
Below centre: CTH Electronics MA 50/1
mains/battery amplifier.
Right: Sennheiser MD 411 HLM super
cardioid microphone.
Far right: Grampian cardioid microphone.*



Stand 42

RER

**Tickets of admission to the Exhibition
are obtainable from RER. Send S.A.E.
to:**

**RADIO & ELECTRICAL RETAILING,
46 Chancery Lane,
LONDON, W.C.2.**

Stands 43 and 44

LUSTRAPHONE LTD

Equipment to be seen includes: LFV 59 Full Vision dynamic stand microphone; VR 64 miniature ribbon microphone with triple blast screening; VC 52 noise cancelling microphone; VC 52/HMT/700 hand microtelephone; the Radiomic system comprising crystal controlled transmitter and receiver plus Lavalier microphone for either wide band or narrow band operation; the Pelsa portable transistorised low power sound reinforcement system built into a lightweight desk unit; model 570 10W portable public address and loudhailing system with noise cancelling microphone. The display is completed by a wide range of floor and table stands.

Stands 47-54

**MICROPHONES
FOR OUTDOOR USE DISPLAY**

Stand 56

RENDAR INSTRUMENTS LTD

The new TS/1 toggle switch is designed as a medium priced single pole changeover switch combining high performance with small size. It is suitable for use up to 250V a.c., 1.5A. New also are a push-push switch and a microphone switch. The established range of jack plugs and sockets, line sockets, push button switches and rotary switches is on show.

Stands 57 and 58

MAGNETA (BVC) LTD

A central feature of the display is the newly developed modular switched f.m. tuner and 100W transistorised power amplifier in a CCA2 control cabinet assembly. Facilities are available for microphone and gramophone inputs with separate gain and tone controls, fire alarms and other signals. Loudspeakers on show include corner mounting units L1 and L2, wall mounting model L3, a portable version of the 6W wall mounting L4, together with the speech only column unit L7. Self contained amplifier/pre-amplifier models S83 (15W) and S84 (50W) are on show. Both have input mixing facilities and are mounted in robust glass fibre cases.

Stands 59 and 60

ROLA CELESTION LTD

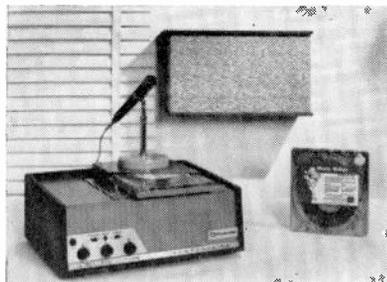
An extensive range of loudspeakers. Types specially suitable for P.A. include horns, drivers and re-entrants of various types.

A.P.A.E. [Stand by Stand continued

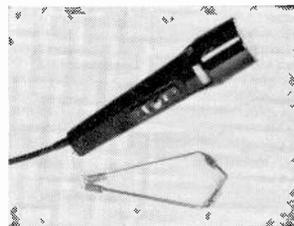
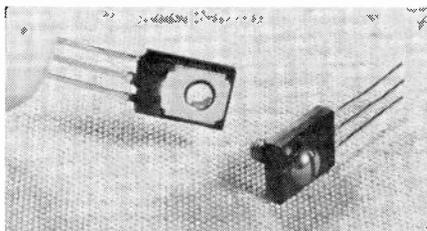
Right: London Microphone D 1000.

Lower right: Cosmocord GP91 pick-up cartridge.

Below: Ditchburn Symphonaire.



Below: Mullard BD 131 planar epitaxial transistor.



The glass fibre re-entrant loudspeaker will be shown. It will operate under extreme atmospheric conditions for long periods with complete reliability. A range of speakers suitable for high fidelity applications and for use with guitars and organs is to be seen.

Stands 61-64
TOA ELECTRIC CO LTD

Showing for the first time, Toa of Japan have over 80 different items on display. These include: 12V amplifiers; mains operated valve and transistor amplifiers; 4-channel microphone mixers; megaphones; music background machines and a wide range of horn speakers and drive units. Shown for the first time at an international exhibition is a range of solid-state amplifiers from 15W to 100W. A column speaker is shown in 5 separate models. There is a cassette tape recorder for background music. Toa equipment is distributed in the UK by Audio & Design (Sales) Ltd of Maidenhead.

Stand 65
AUDIO & DESIGN (SALES) LTD

This is the first time the company has shown p.a. equipment. They are now sole distributors for the Sennheiser range of microphones of which they are showing 14 models. In addition there is a range of condenser microphones, including the famous gun model. The company is also sole distributor in the UK for Audac microphone stands and boom arms. The unique Jordan titanium cone loudspeaker module is on show.

Stands 66 and 67
ASSOCIATED ELECTRONIC ENGINEERS LTD

The latest range of series 1700 Astronic modular amplifiers with powers of from 10W to 75W, all using silicon transistors. The range of modules includes microphone pre-amplifiers, gram/radio input units, master gain, level indicator, monitor speaker, fire alarm, paging tone, single and two tone signal, and response control filter. Also on show is a multi-input mixer embodying three modules. Ancillary units include: speaker group selector panel; G.P.O. approval line coupling unit; column and cabinet speakers and matching transformers.

Stands 68 and 69
RANK WHARFE DALE LTD

Amplifiers, loudspeakers, portable P.A. equipments.

Stands 70 and 71
AUDIX B. B. LTD

Mains and battery operated amplifiers for rack or cabinet mounting, loudspeakers.

Ballroom Entrance
EMI RECORDS LTD

A display of records suitable for outdoor use and a new series of sound effects on records.

Stands 72 and 73
C.T.H. ELECTRONICS

The complete range of transistorised public address equipment with amplifiers ranging in power from 15 to 1,000W or more, for use on mains or from batteries. Models are available with automatic change-over from mains to battery. Mixers range from the TM6M battery operated mixer to professional types. Most of the amplifiers are available to special order with up to 12 microphone inputs and as either free standing units or rack mounted. Also on show is a range of re-entrant loudspeakers with input and line matching transformers. There is also a display of low voltage fluorescent lighting equipment for use in all types of vehicles.

Stand 74
ULTRA ELECTRONICS LTD
Stands 75 and 76
SOUND COVERAGE LTD

All the company's column loudspeakers have been re-designed with a change of veneer and front baffle colouring. Newly introduced is the range of Safidel horn speakers for which the company is the sole UK agent. A simple modular system of mixers and amplifiers is being introduced.

Stand 77
MULLARD LTD

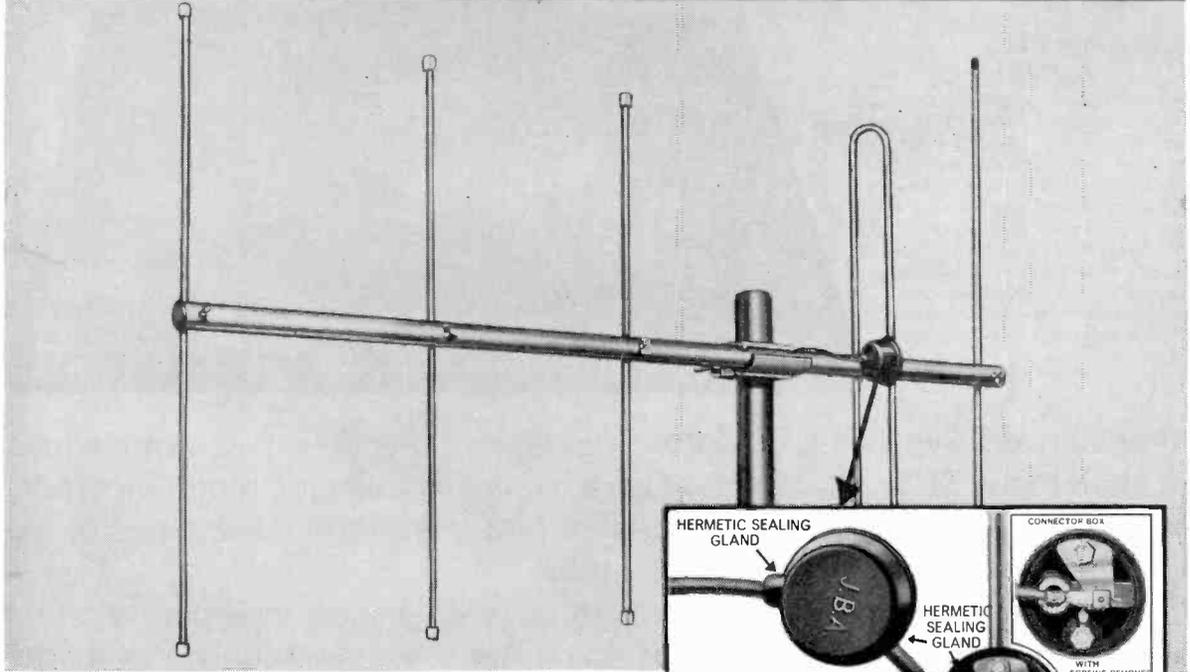
A range of semiconductor devices specifically designed for audio applications is on show. High power transistors include types BD121, BD123 and the new BDY20, an n-p-n silicon diffused 115W transistor. Two new silicon planar, epitaxial transistors, BD131 (n-p-n) and BD132 (p-n-p) form a complementary pair. Complementary drivers for the above are also on show. Information on transistor circuits for P.A. applications is available to engineers.

Stand 78
BENNETT FIELDING CO LTD

Representative products from three of the manufacturers for whom the company is the distributor. From Radon Industrial Electronics a new sophisticated range of transistorised amplifiers, with modular versions for factory tailoring to customers' requirements. A complementary range of P.A. speakers. From Wasco Electronics an economically priced transistorised electronic timer with a full range of photo-electric auxiliary equipment. From the Ditchburn Organisation the Symphonaire and Symphonette described above. All the products on show are British made throughout.

The NEW 'Astrabeam'

REGD.



All J-BEAM BAND III AERIALS

incorporate the patented 'Astrabeam' system giving multi-channel coverage

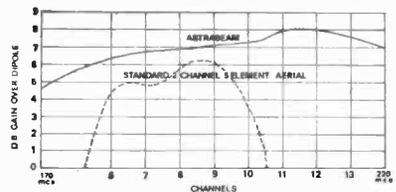
The new superbly constructed "Astrabeam" all channel TV Aerials have been developed from the long established "J-Beam" Marine Aerials designed to give complete Band III Coverage. The fully patented "ASTRABEAM" System embodies all the most advanced techniques for such exacting services and can be used anywhere throughout the Country for single or multi-channel reception.

★ **20% MORE GAIN**

The "Astrabeam" System provides peak performance on all channels throughout Band III. The illustration (right) shows the response curve and signal gain of up to 20% achieved by an "Astrabeam" 5 Element over a "Standard" 2 channel model.

★ **ELIMINATION OF CO-CHANNEL INTERFERENCE**

"Astrabeam" Aerials provide maximum directivity essential for complete protection against interference caused by Co-Channel and adjacent Channel Stations.



★ **CORRECT MATCHING**

The patented Inverse Balun built into the "Astrabeam" models provides correct matching to Feeder and balance to unbalance conversion, thus completely eliminating feeder "pick-up".

The "Astrabeam" TV Aerial is fully protected by registered design and patent Nos. 794,033 38590, and prov/pat—3079/66.



NORTHAMPTON · PHONE: NORTHAMPTON 62147 · (STD ON04) · grams: JAYBEAM

THE NEW GARRARD SL SERIES

— auto record playing units all featuring the new constant-speed Synchro-LAB motor

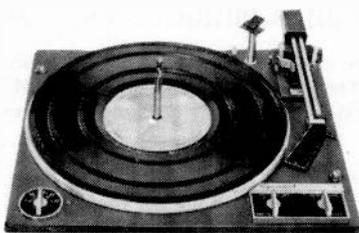
Model SL 95

An automatic transcription turntable incorporating a number of important design features including pick-up arm constructed from aluminium with wood-inset for effective low resonance damping, gimballed-type pick-up arm pivots, slide-in carrier accepting most makes of pick-up cartridges, calibrated pick-up arm bias compensation, calibrated stylus force adjustment, cue and pause facility and retractable record platform.



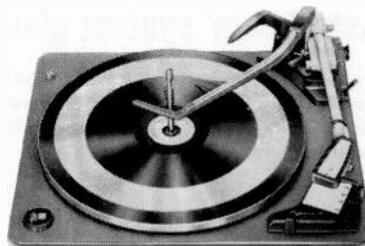
New Garrard Synchro-Lab Motor. The Garrard Synchro-Lab motor which is fitted to the SL Series is a new Garrard design of electric motor incorporating the best features of an induction motor with the advantages of the constant-speed of a synchronous motor.

This is achieved by a two-section rotor, one section providing starting torque, the other section pulling the rotor into synchronism with the frequency of the power supply when the optimum rotor speed is reached. This feature gives a true constant-speed motor with the smooth and quiet running of the well-tried induction motor.



Model SL 75

Similar to the SL 95 but features a different design of pick-up arm utilizing the same principle of a slide-in cartridge carrier.



Model SL 65

Four speed automatic record changer featuring cue and pause facility, calibrated fine stylus force adjustment, pick-up arm bias compensation and plug-in pick-up head.



Model SL 55

Four speed automatic record changer incorporating cue and pause facility, stylus force adjustment and plug-in pick-up head.



Garrard

looks after your records



Ask for illustrated leaflets on the complete Garrard range

GARRARD ENGINEERING LIMITED, NEWCASTLE STREET, SWINDON, WILTSHIRE, ENGLAND. TEL: SWINDON 5381

Ref. Ad. No. 375

Grimthorpe's People

'SO THAT'S where it all started?' 'Yes, that's where!' The dark eyes twinkled as they had done a hundred times that afternoon. A sharp, quick movement of the head in the general direction of the lighted room above the garage, and 'Come on, let's go in for a drink'. An hour or so earlier, I had stood surrounded by dual-concentric loudspeaker systems, dual-throated port enclosures, vertiliners, and omni-directional ceiling bowls. Photographs of familiar, famous exteriors, empty and silent seats of government, portraits of proud and stately ships. Empty and silent? Hardly. For the room in which I waited houses a private collection of unique achievement and enterprise. It tells the story of sound communication in high places, on land, sea, air and under the ocean. It radiates pride in being British, of making a world contribution.

It was a portrait in oils that presided however, above the study of the man I had come to see. Portrait of a young man not by Van Goch, yet with laughing eyes, handsome as a star but with character and purpose in a lean bronzed face.

Temporarily, I forgot that face. Concentration was demanded for the heat controlled presses, the delicate processes to produce the purest uni-directional microphones, and the precision necessary to provide gramophone pick-ups to meet an absolute quality standard for the world's recording studios.

Here, in several plants, the story is being continued but it goes on in every quarter of the globe. The sound of music, the spoken word in every tongue and dialect is heard in quiet conversational tones for the delegate or in the clear strident commentaries for the spectator.

Backing Britain is nothing new for this company. Today's achievements are bettered only by the days when Britain needed it most. Ask any flying type, navy man, desert rat, sub-mariner.

We had that drink. It was only when I was leaving that I remembered that oil. 'Do tell me, who is the man in the portrait, the one in your waiting room?' 'Oh, that,' replied Guy R. Fountain with the twinkle, 'that's me, before I grew my beard.'

I was glad to have good news from Archie Sutherland during the month. Welcome to the club, Archie! As Director of Public Relations for Philips Industries we shall hear and see more of him and even more of Philips as time goes on. That is a good thing for us and for them. Brian Hetherington reminded me that A. L. Sutherland had been with the company since 1933 . . . a long, long time with any organisation, but then, Philips is not any organisation, is it?

Desmond Cavanagh has taken over that office high up in Thorn House from A. K. (Ken) Edwards. As Ken Edwards receives my award as Marketing Man of the Year and leaves to sit on the board of subsidiary, Brookhirst Igranic,



Desmond Cavanagh succeeds him as Thorn group marketing manager. A good-looking, likeable 43 year old, Desmond draws on years of experience in Uganda where he was in the Department of Information, and at Metal Industries Group where he was deputy publicity controller. As a former newspaper man, he will deal lightly with the never ending stream of newsmen who are whisked up to that top floor. Just as Ken did.

Halden Evans, secretary of the Electronic Rentals Association writes to say that Sir Brian Horrocks has been re-appointed president of the Association. F. E. Hall, a director of British Relay, is now the chairman of the council, and John Parkin his deputy. John Parkin is, of course, managing director of Top Rank (Home). Mention that N. H. Chase, who is secretary of Radio Rentals, has been appointed treasurer tempts me to suggest that the rental boys should subscribe to a memorial to be built on the seafront at Brighton. Wasn't it there that P.T. started, and that John Logie Baird experimented? Those who jumped on this gigantic band wagon might consider what there is about Brighton. An annual pilgrimage perhaps?

When Colin Tayler's stint as chairman of The Radio Industries Club comes to an end shortly, he can look back on his term of office with some satisfaction. After all, he has got the Promotion Committee off the ground at last. Ideas are coming fast, too. There are, I'm informed, plans for an award scheme, presentations of 'Oscar' type statuettes to outstanding TV and radio actors, actresses and producers. A bit late, perhaps, but still good publicity for the club. Visits to TV studios (members only) also. Anything else in the pipeline, Colin?

Which brings me to the 'News' sheet published monthly by the RIC. When this first appeared, I was delighted. The third issue received this month, was, I thought a bit thin. Too many white spaces, as they say. I asked why. The reply—the well worn 'No comment'.

I see that Mr. Short is pleased with the response made by the licence dodgers. When they started to provide information to the P.M.G. about their disposals (what a word) dealers were asked not to bother about existing agreements. Wonder just how many typists raised the cry 'Now, he tells us, after it's all been done.'

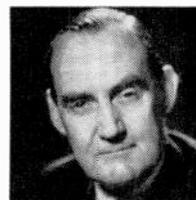
Back to the R.I.C. Rumour has it that a certain Lord much in the news at the moment will accept the Presidency next year if asked. Cannot give you a clue—you would be bound to get it.

One import in 1949 is certainly paying dividends in 1968. Sorry, Kurt to describe you so, but I still think I'm right. Kurt Vessely, M.I.E.R.E., to describe him with correct respect, came here from Prague 19 years ago. Rather, he went to that industrial development where rugby is played as it should be . . . Hirwaun. The month saw Kurt Vessely installed on the board of Radio & Allied Holdings and he now lives in Chorley



Wood. A technician, with all that implies, and with a charm of manner which is nothing if not Czechoslovakian, will add even more strength to a formidable board.

P.R. man Peter Cattle rang me to say that things are on the move for the Ekco and Ferranti sales plans for 1968. Very glad to see that W. F. Valentine is tackling the concentration of effort. 'Bill' Valentine, an old hand at the



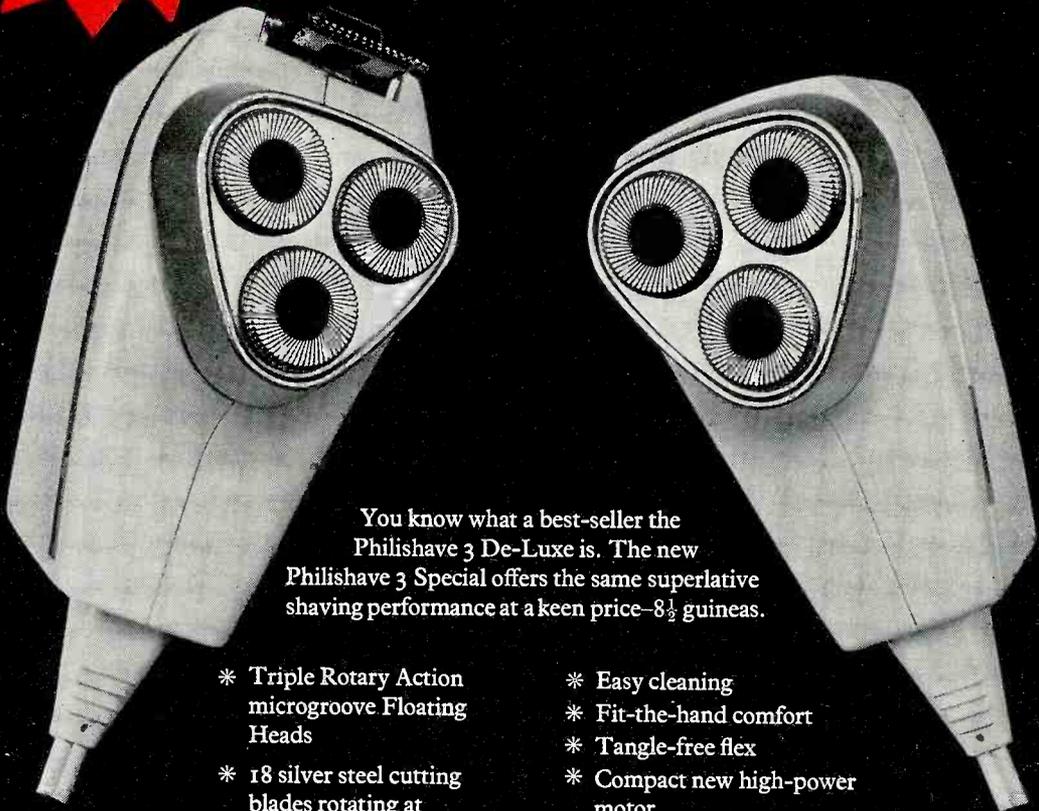
selling game, is as tough as he looks in his latest photograph. but I'm glad to see the determination still in that eye. Good hunting, Bill, and best wishes to you and your team for a great year.



Big news from the market leaders

NEW

**The Philishave-3 Special
at only 8½ gns**



You know what a best-seller the Philishave 3 De-Luxe is. The new Philishave 3 Special offers the same superlative shaving performance at a keen price—8½ guineas.

- * Triple Rotary Action microgroove Floating Heads
- * 18 silver steel cutting blades rotating at 5,000 r.p.m.
- * World-wide voltages
- * Easy cleaning
- * Fit-the-hand comfort
- * Tangle-free flex
- * Compact new high-power motor
- * Handsome travelling case
- * B.E.A.B. approved

Naturally the Philishave 3 De-Luxe, with glide-away hair trimmer and on/off switch, continues to lead the world's best-selling shaver range at ten guineas.

Release date March 1st
Big National Press Campaign breaks Mid-March,
So get your orders in early!

See it at E.D.A.

PHILISHAVE-3 for a closer, faster, smoother shave



Big news from the market leaders

NEW

Philips Mixer, Bowl & Stand for 8½ gns complete



Here's what you've been waiting for! A top-quality, competitively-priced product with the kind of appeal that made Philips brand leader in the hand mixer market.

- * Transparent 4½ pint capacity bowl
- * Full rotating action
- * Easy to use, with fingertip controls
- * Easily adaptable for use with other HM.3060 accessories
- * Attractive design
- * B.E.A.B. approved.

Also available,
Stand and Bowl £3.5.0d.

Release date Mid-March

**Big National Press Campaign breaks Mid-March,
So get your orders in early!**

See it at E.D.A.

Better electric things are PHILIPS

Only PHILCO offers you a genuine 5.4 cu. ft. table top fridge for such a low price!

The 'STARFROST' 5.4 cu. ft. incorporates these 12 great features:—

- | | |
|-------------------------------------|---|
| 1 Laminated overhanging table top | 9 Magnetic door |
| 2 Full width 2 star freezer | 10 Adjustable levelling feet |
| 3 Adjustable shelves | 11 Silent motor for 230/240V, 50 cycles |
| 4 Extra-deep door racks | 12 Five year guarantee for sealed system |
| 5 Heavy bonderised steel cabinet | If your customers don't want these refinements in a refrigerator . . . they don't want value for money. |
| 6 Acrylic paint finish | So tell them all about the new Philco 'Starfrost'. 5.4 cu. ft.—FTR5E. |
| 7 Thin wall polyurethane insulation | |
| 8 Interior light | |

Then tell them the price!

Shown below:

'STARFROST' 5.4 cu. ft. Model FTR5E.
Suggested retail price **34½** gns.
Except N. Ireland.



Philco International Ltd, 42 Leicester Sq,
London, WC2. Phone: 01-930 1627



Others in the new Philco 'Starfrost' range: Slimline 6 cu. ft. for 47½ gns. 7.25 cu. ft. for 57 gns. 10.25 cu. ft. for 85 gns. And the 2-door 11 cu. ft. for only 125 gns. (All prices include P.T.)

REFRIGERATOR DISTRIBUTORS FOR 1968

LONDON

J. J. EASTICK & SONS LTD.,
124-130, East Rd., London N.1. Tel. 253-8301 and Branches.
E. R. HARVEYSON & CO. LTD.,
Albert Place, Finchley N.3. Tel. 346-1121. Branch at
Faversham, Kent.
KENROY LTD.,
152, Upper St., London N.1. Tel. 226-6671.
KERRY'S (G.B.) LTD.,
Warton Rd., Stratford E.1. Tel. 627-6611 and Branches.
WILEC LTD.,
327-337, Commercial Rd., London E.1. Tel. 790-5221/8.

SOUTH

ROBSHAW BROS. LTD.,
Seamoor Rd., Westbourne, Bournemouth.
Tel. Westbourne 65432 and Branches.

NORTH

ALBION ELECTRIC STORES,
Albion House, Aire Bank Works, South Accommodation Rd.,
Leeds 10. Tel. 0532-20196.
J. BEAUMONT & CO. LTD.,
associated with Kerry's (G.B.) Ltd.,
Beaumont House, Trafalgar St., Newcastle on Tyne.
Tel. 0632-21083. Branch at Carlisle.
LEONARD HEYS LTD.,
Faraday House, Henry St., Blackpool. Tel. 0253-46363.
F. K. SMITH LTD.,
32-38, Fleet St., Liverpool 1, Tel. Royal 8751.
Branch at Douglas I.O.M.
TVA WHOLESALE CO. LTD.,
Wellington St., Stockport. Tel. Stockport 5487.
WHOLESALE SUPPLY (Stoke-on-Trent) LTD.,
Swift House, Bryan St., Hanley, Stoke-on-Trent.
Tel. 0782-23785.

HARDMANS OF ROCHDALE.

Proprietors: Wholesale Supply (Stoke-on-Trent) Ltd.,
Hardale House, Baillie St., Rochdale. Tel 0706-47411.

SCOTLAND

BRYTERLITE ELECTRICAL CO. (Glasgow) LTD.,
39-43, Robertson St., Glasgow, C.2.
Tel. Central 2486.

NORTHERN IRELAND

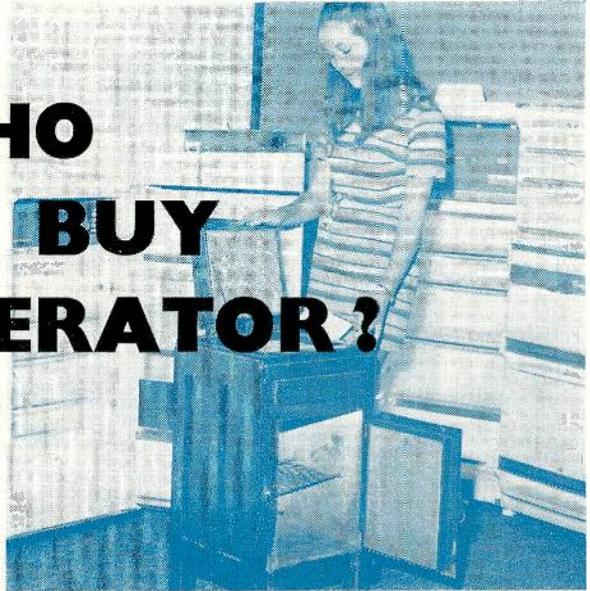
W. S. MERCER & SONS,
51-53, Linenhall St., Belfast. Tel. 0232-44011.
Branch at Portadown.

MIDLAND

R. A. POOLE LTD.,
Cox St., Coventry. Tel. 0203-27033.
Branch at Cheltenham.
E. A. WOOD LTD.,
100, Aston Rd., Birmingham 6. Tel. Aston Cross 2591.
Branch at Leicester.

On show—but not for sale—at the recent DoRDeC show in London was this 1900 ice-box. Backing it is a selection of modern cabinets.

WHO WILL BUY A REFRIGERATOR?



Forecasting the shape and extent of the domestic refrigerator market for 1968 is a particularly difficult task, with much hinging on what the Government will do in the Budget later this month. In this article, CLAUDE SIMMONDS, DoRDeC secretary, takes up the role of prophet.

THE DEMAND IS GOOD

If it could be left to find its own level the demand for refrigerators would undoubtedly be encouraging. Last year, despite too much economic gloom, deliveries to the home market came out level with the previous year—a quite considerable achievement.

It was not until July, however, that demand from retailers began to go ahead. This was because the public by then wanted to buy refrigerators, and because, for once, the weather really helped.

The lesson to be learned is that in 1968 refrigerators are likely to stand up at least as well as any other domestic appliance to Government-made economic blizzards. Inevitably, however, if further credit restrictions or additional taxes are imposed on the industry the start by retailers is likely to be equally cautious.

The public probably will also be cautious. However, past experience has shown that this is an industry which cannot be held back. The remarkable growth in saturation over the past 12 years from 8% to over 47% and in sales from under 200,000 to nearly one million, proves the buoyancy of the market, especially when it is remembered that in those years there have been 14 changes in credit restrictions and three changes in purchase tax rates.

NEW MARKETS

There is more significance, however, in the fact that half the homes in Britain still do not have a refrigerator whilst at the same time the whole standard of living is rising. The public want more and more economy and enjoyment in the home, and have a greater appreciation of the need for food and drink that are fresh and taste fresh.

Forgetting, if we can, the Government and what it may do—what are the special

DELIVERIES TO THE HOME MARKET

1956	..	..	..	..	187,960	1962	..	..	..	..	762,138
1957	..	..	..	..	256,423	1963	..	..	..	..	765,426
1958	..	..	..	..	448,646	1964	..	..	..	..	864,528
1959	..	..	..	..	949,362	1965	..	..	..	..	905,250
1960	..	..	..	..	929,362	1966	..	..	..	..	850,274
1961	..	..	..	..	824,404	1967 (to end of November)					827,176

factors likely to influence demand for refrigerators in 1968?

First of all, I would say, price. The industry has moved into the non-r.p.m. era with very little dislocation. Much more important is the fact that no other domestic appliance, and virtually no other product in general demand, has reduced its price whilst at the same time improving its quality in the same way as has the refrigerator.

Suitably emphasised by the retailer, prices are an important incentive to the would-be purchaser. No one should neglect this asset. Indeed, it should be continuously and prominently rammed home to the public.

The greater demand for refrigerators shows in the fact that people no longer buy refrigerators only in the summer months. Over one-third of total sales are now made well away from these months.

It is a short-sighted dealer who takes refrigerators out of his window or showroom when the weather gets colder. Indeed with the growth of the popularity of central heating giving indoor temperatures as high

as 70° in the winter, the need for refrigeration may be greater in winter than in summer. This is the salesman's opportunity.

FROZEN FOODS

Another useful change in our way of life is the ever growing popularity of frozen foods. Without a refrigerator these are almost a dead loss. With a refrigerator they add immeasurably to the ease of house-keeping and to variety at mealtimes. The modern trend is towards both fresh and frozen foods being kept in cool, hygienic conditions. We are living in a refrigerator world.

BIGGER AND BETTER

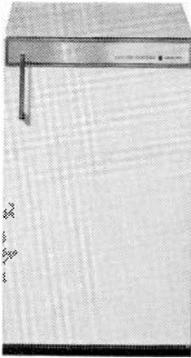
A change in the right direction is the trend towards larger refrigerators. Over the past few years the tendency has been upwards in size. The small unit is excellent for the small family, but there are few families who do not find after a short time that they could well do with a larger model. This is a point the salesman can usefully and truthfully make to his customers.

Continued on page 119

See pages 114-119 for a listing of the currently available Refrigerators and Freezers.

8 better thought-out fridges.

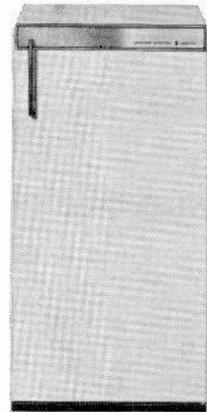
What more do you want?



Slimline Thirty
3.2 cu. ft. 6 sq. ft. all-usable shelf space. Full-width frozen-food compartment. Salad crisper in base. Push-button defrost, with auto reset.



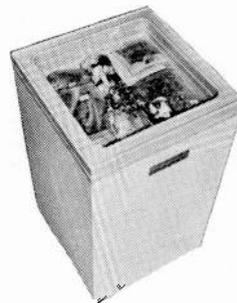
Slimline Forty
4.1 cu. ft. and 7 sq. ft. of usable shelf space. Wall-to-wall frozen-food compartment. Crisper in door. Tilts down for easy access. Push-button defrost, with auto reset. Rollers and interior light.



Slimline Fifty
5.1 cu. ft. and 8½ sq. ft. of shelf space. Full-width dairy keeper. Whopping salad crisper, Push-button defrost, with auto reset.



Fresh and Freeze
An English Electric special. Two completely separate compartments, Deep-freeze for 50lb. frozen food in the top. (Even the door's put to use.) 8 sq. ft. shelf area in refrigerator compartments. Eggs, bottles and dairy storage in door.



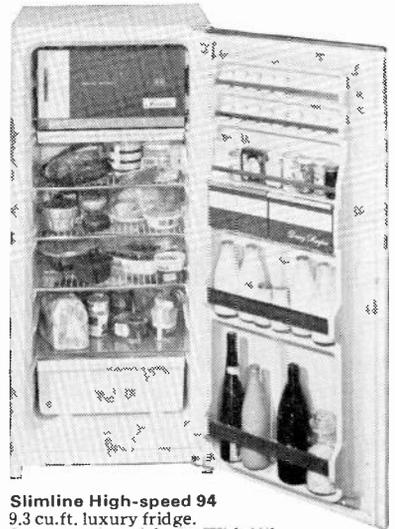
Deep Freeze
Lets your customers buy food at bulk (even bargain!) prices. Perfect for fresh fruit. Time saver for baking hours: bake in bulk, store until it's needed. Holds 124lb. of frozen food.



Slimline Sixty-Five
6.7 cu. ft. and 9 sq. ft. of shelf space. The only fridge this size with a meat safe. Designed to keep meat fresh longer. Eggs, milk and tall bottle racks. Dairy keeper. Salad crisper. Compartment keeps 18lb. frozen food fresh for 4 weeks. TWO ice trays!



Slimline High-speed 77
7.8 cu. ft. and nearly 14 sq. ft. of shelf space. With capacity for 27lb. frozen food. Two 24-cube ice trays. Full width basement crisper. Cover acts as fourth shelf. 18-egg rack. Double dairy keeper. Racks for every size of bottle. High-speed defrost.



Slimline High-speed 94
9.3 cu. ft. luxury fridge. Super version of the 77. With 32lb. capacity frozen food compartment. High-speed defrost.

We've re-designed four of our fridges. Starting with the smallest.

See where the bottles go now? We've banished bending.

In every fridge - completely usable shelf space. (Plastic coated, adjustable, non-tilt shelves.) The frozen food compartment is wall-to-wall. And it holds more, too. Push-button defrost with automatic reset.

Take a long, considering look at *your* Slimlines. Get your wife to do the same. You'll see why so many other people's wives will be wanting the better thought-out fridge.

They'll know about them because we're running strong national advertising to tell them. And there are special ads for you, too. What more could you ask for? Promotions? News about those later.

Nine?

Here's the Slimline Thirty Woodgrain - in handsome teak finish. Made to go tastefully anywhere in the house. We thought that out, too.



**ENGLISH
ELECTRIC** 

REFRIGERATORS & DEEP FREEZERS

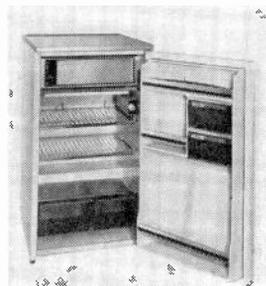
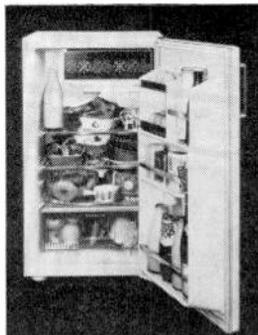
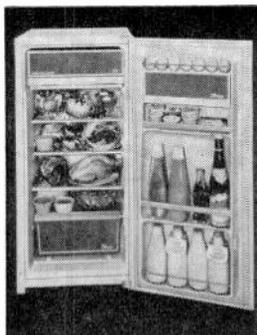
MODEL (Note 1)	GROSS CAPACITY (cu ft)	SIZE (HxWxD) (inches)	STAR RATING	FREEZER CAPACITY (cu ft)	DEFROST (Note 2)	FINISH	SPECIAL FEATURES	PRICE (inc P.T.) £ s. d.
ACE REFRIGERATION LTD.								
Linde LHT 16	5.7	33½x23½x23½	2	—	M	white enamel	automatic interior lighting; table top resistant to heat, acids and scratches	61 4 0
Linde LHS 20L	6.9	43½x19½x23½	3	—	M by magnetic plate	white enamel	as LHT 16	72 15 7
Linde LHS 24L	8.5	48½x21½x23½	3	—	M as LHS 20L	white enamel	as LHT 16	82 10 2
Linde LHS 31L	10.9	54½x23½x23½	3	—	M as LHS 20L	white enamel	as LHT 16	101 11 4
ADVANCE DOMESTIC APPLIANCES LTD.								
250/2D	8.7	23½x53½x21½	3	1.58	A	white	2 door 2 temperature continuous automatic de-frost, vitreous enamel liner	129 0 0
315/2D	11.0	26½x56½x21½	3	2.1	A	white	2 door 2 temperature continuous automatic defrost, vitreous enamel liner	154 15 0
RJH32	13.1	30½x60½x26½	3	3.0	} Frost free	white	frost free refrigerator & freezer, 10 position adjustable shelves, meat keeper	247 10 0
RJH43	14.3	30½x64½x26½	3	3.0		white	frost free refrigerator & freezer, ice cube server, adjustable cantilever shelves, roll-out castors	291 10 0
RJH45	14.3	30½x64½x26½	3	3.0		white	frost free refrigerator & freezer, ice cube server, adjustable cantilever shelves, roll-out castors	313 10 0
RJH46	14.3	30½x64½x26½	3	3.0		white	frost free refrigerator & freezer, ice cube server, adjustable cantilever shelves, roll-out castors	328 18 0
RDH67	16.2	30x64½x26½	3	4.5		white	frost free refrigerator & freezer, ice cube server, adjustable cantilever shelves, roll-out castors	423 10 0
RDH88	18.0	33x65½x27	3	5.0		white	frost free refrigerator & freezer, ice cube server, adjustable cantilever shelves, roll-out castors, french doors opening from centre	506 0 0
RSH99	19.2	32x67x27	3	8.0		white	frost free side by side refrigerator / freezer, adjustable cantilever shelves, meat tray, automatic ice cube maker	548 18 0
RSH97	19.2	32x67x27	3	8.0		white	frost free side by side refrigerator / freezer, adjustable cantilever shelves, meat tray, automatic ice tube maker	511 10 0
AEG (GREAT BRITAIN) LTD.								
Santo 15	5.25	33½x21½x23½	2	0.50	M	stove enamel	—	57 11 6
Santo 12	4.25	33½x20½x23½	2	0.25	M	stove enamel	—	47 19 7
BOSCH LTD.								
140TGA	5.0	33½x17½x23½	2	0.5	P	white	c/w table top tropic cold regulator	51 9 0
160TGA	5.7	33½x19½x23½	2	0.5	P	white	c/w table top tropic cold regulator	60 18 0
170SGA	6.0	42x18x24	2	0.5	P	white	c/w table top tropic cold regulator	61 19 0
200SGA	7.1	42x22x24	2	0.7	P	white	c/w table top tropic cold regulator	78 15 0
240SGA	8.5	48x22x24	2	0.7	P	white	c/w table top tropic cold regulator	89 5 0
155WG	5.6	34½x39½x18½	2	0.5	M	white and grey	—	82 19 0
320KG	11.3	64½x23½x23½	3	4.8	P	white and grey	—	152 5 0

Note 1: *indicates BEAB approved Note 2: M=manual P=push button A=automatic

REFRIGERATORS & DEEP FREEZERS

continued

MODEL (Note 1)	GROSS CAPACITY (cu ft)	SIZE (HxWxD) (inches)	STAR RATING	FREEZER CAPACITY (cu ft)	DEFROST (Note 2)	FINISH	SPECIAL FEATURES	PRICE (inc P.T.) £ s. d.
DENHAM & MORLEY LTD.								
Portomatic 500	0.37	13½x12½x14½	—	—	M	buff	—	24 12 1
ELECTROLUX LTD.								
*Minilux	1.0	23½x15x15½	—	—	M	ivory	foam insulation; 8 position gated shelf; wall bracket and floor stand available	26 0 0
*LA21 (also a built-in version)	1.9	23x18½x19½	1	—	M	white	fluorocarbon foam insulation; floor stand and wall bracket extra	32 11 2
*MC28 (built-in)	2.8	30½x20½x21½	1	—	A	white	fluorocarbon foam insulation	42 11 10
*Automatic 36	3.4	33½x19½x21½	2	—	A	white	rollers fitted at rear; fluorocarbon foam insulation	41 12 8
*MC40 (built-in)	4.0	34½x21½x23½	1	—	M	white	fluorocarbon foam insulation; flexible comb prevents bottle rattle	51 0 0
*46	4.5	36x20½x21	2	—	P	white	rollers fitted at rear	47 5 0
51	5.1	36x19½x20½	2	—	P	white	fluorocarbon foam insulation; bottle retainer	51 9 0
74	7.0	46½x21½x21½	2	—	M	white	fluorocarbon foam insulation; bottle retainer	68 5 0
*100	9.2	60x23½x25	3	—	A	white	rockwool and polystyrene insulation; lockable door; flexible comb prevents bottle rattle	104 9 6
Deep Freezers								
*H410	4.0	37½x21x21	—	—	—	white and grey	plastic covered wire basket extra; stores 130lb	55 13 0
*H47	4.7	42x20½x21	—	—	—	white	stores 165lb; rapid freeze operation	66 3 0
*H70	7.0	51½x23x25½	—	—	—	white	stores 232lb	110 10 0
H80	8.3	47x23½x25½	—	—	—	white	stores 290lb; lockable door; temperature indicating light	120 15 0
H91	9.0	35½x39x23½	—	—	—	white	stores 300lb; counter balanced lid	99 15 0
TR70/55 Combination	12.75	23-7/8x23-7/8x67	—	—	—	white	separate controls for both compartments; auto defrost in refrigerator cabinet; can be built-in	159 12 0
ENGLISH ELECTRIC CO. LTD.								
*Slimline 30 7518	3.2	32x19x20½	2	0.17	P	white	full width freezer, chill tray and salad crisper; optional woodgrain Melamine table top	39 9 11
*Slimline 30 7517	3.2	32½x19x20½	2	0.17	P	simulated teak door and top; sides golden/brown, enamel	full width freezer, chill tray and salad crisper; woodgrain table top	45 18 1
*Slimline 40 7519	4.1	35x21x20½	2	0.34	P	white or cream	full width freezer and chill tray; interior light; optional woodgrain table top	46 19 5
*Slimline 50 7520	5.1	42x21x20½	2	0.34	P	white or cream	full width freezer and chill tray; interior light; optional woodgrain table top	55 10 2



Left to right:

Kelvinator K44D;

Frigidaire Sheerlook 650;

Philips 5.7cu ft.

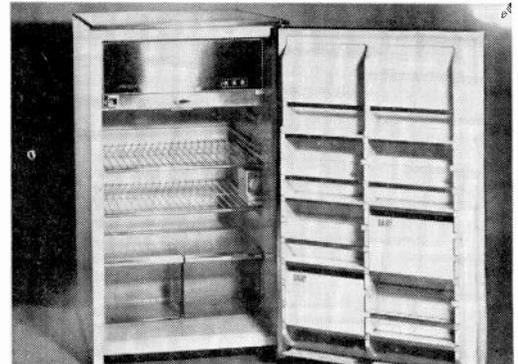
REFRIGERATORS & DEEP FREEZERS

continued

MODEL (Note 1)	GROSS CAPACITY (cu ft)	SIZE (HxWxD) (inches)	STAR RATING	FREEZER CAPACITY (cu ft)	DEFROST (Note 2)	FINISH	SPECIAL FEATURES	PRICE (inc P.T.) £ s. d.
ENGLISH ELECTRIC CO. LTD. (continued)								
*Slimline 65 7521	6-7	49x22½x20¾	2	0-54	P	white or cream	full width freezer and chill tray; interior light	66 3 8
*Slimline High Speed 77 71101H	7-8	46½x24x27½	2	0-77	P	white	full width freezer, chill tray and salad crisper interior light	87 10 8
*Slimline High Speed 94 7111H	9-3	54x24x27½	2	0-90	P	white	full width freezer, chill tray and salad crisper; interior light	98 4 2
Deep Freezer *7200	4-05	37x21x21	—	—	—	white with blue lid	—	53 7 6
FRIGIDAIRE, Division of General Motors Ltd.								
*Sheerlook 600	3-3	33½x19x21	2	—	M	white stoved enamel	hydrator; bottle storage in door	34 0 0
*Sheerlook 650	3-8	33½x19x21	2	—	M	white stoved enamel	hydrator; glideaway feet; cold control provides "overnight defrosting"	42 2 10
*Sheerlook 830	4-6	34½x20¾x21	2	—	M	white stoved enamel	hydrator; glideaway feet; cold control provides "overnight defrosting"	46 18 9
*Sheerlook 1100	6-2	45x20¾x21	2	—	P	white stoved enamel	hydrator; glideaway feet; cold control provides "overnight defrosting"	60 16 4
GEC (DOMESTIC EQUIPMENT) LTD.								
*DA4260 Cold Space 33	3-3	33½x19x21	2	0-28	M	white stoved acrylic enamel with chrome trims	full width freezer; 9½lb frozen food compressor unit	36 15 0
*DA4261 Cold Space 45	4-5	35½x21x22¾	2	0-44	M	white stoved acrylic enamel with chrome trims	full width freezer; 15½lb frozen food; deep supercold drawer; interior light	41 9 6
*DA4262 Cold Space 70	7-0	49½x21x23¾	2	0-57	P	white stoved acrylic enamel with chrome trims	full width freezer; 20lb frozen food; deep supercold drawer; interior light	51 9 0
*DA4263 Cold Space 45 Deluxe	4-5	35½x21x22¾	2	0-44	P	white stoved acrylic enamel with gold trims	full width freezer; 15½lb frozen food compressor unit plus power defrost	59 17 0
*DA4264 Cold Space 70 deluxe	7-0	49½x21x23¾	2	0-57	P	white stoved acrylic enamel with gold trims	full width freezer 20lb frozen food; deep supercold drawer; interior light plus power defrost	70 7 0
HOOVER LTD.								
*6007	2-5	19 7/8 x 21 3/8 x 23	1	0-1	M	white		41 9 6
*6012D	4-6	33 1/2 x 20 7/8 x 21 1/2	2	0-23	M	white		51 9 0
*6022	5-4	33 1/2 x 20 7/8 x 24 1/2	2	0-31	P	white	fully furnished	59 17 0
*6032	6-1	42 7/8 x 20 7/8 x 21 1/8	2	0-50	P	white	fully furnished	70 7 0
*6042	7-2	48 1/2 x 20 7/8 x 21 1/8	2	0-50	P	white	fully furnished	80 17 0
*6051	8-2	50 1/2 x 22 x 24	2	0-50	P	white	fully furnished	94 10 0
*6061	9-65	59 x 22 x 24	2	0-57	P	white	fully furnished	111 7 0
*6008	8-7	58 1/2 x 22 x 23 1/2	3	1-6	A	white	fully furnished	
Deep Freezer *6006	1-75	19 7/8 x 21 1/2 x 25 1/2	3	1-75	M	white		40 19 0



◀ Philco Starfrost 5-4
FTRSE



▶ Tricity
Polarfrost 5

REFRIGERATORS & DEEP FREEZERS

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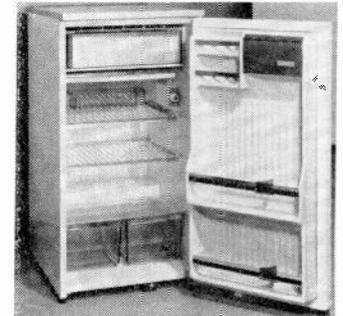
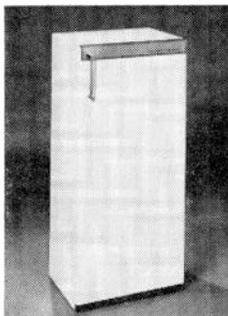
MODEL (Note 1)	GROSS CAPACITY (cu ft)	SIZE (HxWxD) (inches)	STAR RATING	FREEZER CAPACITY (cu ft)	DEFROST (Note 2)	FINISH	SPECIAL FEATURES	PRICE (inc P.T.) £ s. d
HOTPOINT LTD.								
*Iced Diamond 40	4-1	34½x20½x21½	2	0-24	M	white	interior light; rollers; left or right hand opening; optional table top; spring loaded shelves	43 11 9
*Iced Diamond 50	5-0	35½x20½x21½	3	0-37	P	white	interior light; rollers; left or right hand opening; optional table top; spring loaded shelves; full width freezer; separate cabinet and freezer controls	56 11 4
*Iced Diamond 65	6-0	44½x21x21½	3	0-42	P	white	interior light; rollers; left or right hand opening; optional table top; spring loaded shelves; full width freezer; separate cabinet and freezer controls	65 12 6
*Iced Diamond 85	8-5	52x24x21½	3	0-74	P	white	interior light; rollers; left or right hand opening; optional table top; spring loaded shelves; full width freezer; separate cabinet and freezer controls	86 9 2
*Iced Diamond 105	10-3	52x24x24½	3	0-74	P	white	interior light; rollers; left or right hand opening; optional table top; spring loaded shelves; full width freezer; separate cabinet and freezer controls; full width 2-door freezer	97 2 8
INDESIT LTD.								
140	5-0	34½x21½x20½	2	0-51	P	white stove enamel	full width freezer; interior light	30 9 0
165	6-0	43½x21½x20½	2	0-51	P	white stove enamel	full width freezer; interior light	36 15 0
190	7-0	47½x21½x20½	2	0-51	P	white stove enamel	full width freezer; interior light	41 9 6
250	9-0	53½x23½x22½	2	0-85	P	white stove enamel	full width freezer; interior light	47 5 0
KELVINATOR LTD.								
*K33D	3-1	33½x19x21½	2	0-28	M	white or cream	—	40 19 0
*K44D	4-0	41x19x21½	2	0-28	M	white or cream	—	45 3 0
*K55DD	5-1	43½x20½x24½	2	0-34	A	white or cream	—	56 14 0
*K66DD	6-05	49½x20½x24½	2	0-56	A	white or cream	—	67 4 0
*K99DD	9-3	54x24x27½	2	0-91	A	white or cream	—	93 9 0
KR104 ref/freezer	7-7	58½x20½x22½	3	1-5	A	white	2 doors	119 0 0
KR107 ref/freezer	11-0	60x25½x26½	3	2-1	A	white	2 doors	159 0 0
E179 ref/freezer	16-0	65x31x29½	3	4-96	A	white	2 doors; no frost system in freezer	319 0 0
E139 ref/freezer	25-1	65x41x23½	3	8-9	A	white	2 doors; no frost system in freezer	399 0 0
LEC REFRIGERATION LTD.								
P22 Classic	2-3	25½x20½x19½	2	0-2	M	white	optional legs	33 12 0
*P37 Eaton	3-8	35½x20½x19½	2	0-2	M	white	full width freezer; optional lock	38 7 0
*P50 Portman	5-4	38½x23½x21½	2	0-38	M	white	interior light	49 0 2
*P5 + 2 Dual Zone	7-09	56½x23½x22½	3	1-9	A	white	2 doors	82 0 11
P700 Grosvenor	7-0	47½x22½x25½	2	0-93	P	white	one piece liner	62 17 4
P44 Senator	4-4	34½x21½x22½	2	0-3	M	white	—	39 15 0
P65 Ambassador	6-5	46½x21½x22½	2	0-53	M	white	—	52 6 9

Left to right:

English Electric 65, 7521;

Hotpoint Iced Diamond 40;

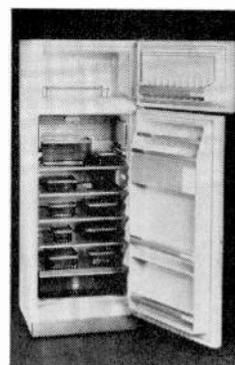
Stokvis 500 de luxe.



REFRIGERATORS & DEEP FREEZERS

continued

MODEL (Note 1)	GROSS CAPACITY (cu ft)	SIZE (HxWxD) (inches)	STAR RATING	FREEZER CAPACITY (cu ft)	DEFROST (Note 2)	FINISH	SPECIAL FEATURES	PRICE (inc P.T.) £ s. d.
MONOGRAM ELECTRIC COMPANY (Major Appliance Division)								
BT145D	5-1	33½x22½x24½	2	0-317	P	baked enamel	table top; two crispers	54 2 3
BE185D	6-5	44½x22½x24½	2	0-41	P	baked enamel	four shelves; levelling feet	67 6 9
BEC235D	8-3	57½x22½x24½	3	1-765	A	baked enamel	frost free	114 12 9
BEC275D	9-7	59½x22½x26½	3	2-47	A	baked enamel	frost free	130 11 4
MORPHY RICHARDS LTD.								
*Polar Star PLR410	4-1	34½x20½x21½	2	0-24	M	white	takes 5 pints of milk; interchangeable shelves; interior light; rollers; optional table top	43 6 11
*Polar Star PLR500	5-0	35½x20½x21½	3	0-372	P	white	takes 5 pints of milk; interchangeable shelves; interior light; rollers; optional table top; separate temperature controls for freezer and cabinet	54 17 4
*Polar Star PLR 630	6-3	44½x21x21½	3	0-421	P	white	takes 7 pints of milk; racks for 14 eggs; rollers at rear—front levelling feet; separate temperature controls for freezer and cabinet	65 11 7
NEW ERA COMMERCIAL REFRIGERATION SERVICES LTD.								
T135	4-8	33½x19½x23½	2	—	M	white	—	34 2 6
T160	5-8	33½x21½x23½	2	—	P	white	—	41 9 6
S195	6-9	42x19½x23½	2	0-6	P	white	—	47 5 0
TK180	6-4	33½x23½x23½	3	0-8	contact plate	white	genuine deep freezer	69 6 0
K240	8-6	49½x21½x23½	3	1-1	contact plate	white	genuine deep freezer	90 6 0
PC295	10-6	66x21½x23½	2	4-8	P	white	double door	108 9 6 (inc. service fee)
PHILCO INTERNATIONAL LTD.								
FTR5E	5-4	33½x21½x23½	2	0-492	M	white exterior, ice blue door liner and trim	thin wall insulation, acrylic paint finish	36 4 6
Starfrost 5-4								
FAP6D	6	43½x19½x23½	2	0-361	P	white exterior, ice blue door liner and trim	thin wall insulation, acrylic paint finish	49 17 6
Starfrost Slim 6								
FA7C	7-27	45x21½x23½	2	0-585	P	white exterior, ice blue door liner and trim	thin wall insulation, acrylic paint finish	59 17 0
Starfrost 7-25								
FA10C	10-25	53½x24½x23½	2	0-822	P	white exterior, ice blue door liner and trim	thin wall insulation, acrylic paint finish	89 5 0
Starfrost 10-25								
FBL11C	10-58	61½x24½x23½	3	1-76	A	white exterior, ice blue door liner and trim	thin wall insulation, acrylic paint finish	131 5 0
Starfrost 2 door 11								
13RS3-21B	12-5	61½x28½x29½	2	1-52	M	white exterior, pastel green door liner and trim	Dualcote paint finish, Titanium porcelain-enamel interior	167 7 3
12RD3-21B	12-2	60½x30x29½	3	2-6	A	white exterior, pastel green door liner and trim	Dualcote paint finish, Titanium porcelain-enamel interior.	190 16 4
16RD4-B	16-2	65½x30x30½	3	3-57	A	white exterior, pastel green door liner and trim	Dualcote paint finish, Titanium porcelain-enamel interior	222 16 3
19RT8-B	19-0	65½x32½x27½	3	7-0	A	white exterior, pastel green door liner and trim	Dualcote paint finish, Titanium porcelain-enamel interior	393 8 7



Left to right:

Monogram BEC235D;

Bosch 140TGA;

Electrolux 21;

Hoover 6008.

REFRIGERATORS & DEEP FREEZERS

continued

MODEL (Note 1)	GROSS CAPACITY (cu ft)	SIZE (HxWxD) (inches)	STAR RATING	FREEZER CAPACITY (cu ft)	DEFROST (Note 2)	FINISH	SPECIAL FEATURES	PRICE (inc P.T.) £ s. d.
PHILIPS ELECTRICAL LTD.								
HN2405	5-0	33½x17 ⁷ / ₁₆ x23½	2	0-35	P	white steel	—	41 9 6
HN2419	5-0	33½x17 ⁷ / ₁₆ x23½	2	0-35	P	rosewood	—	48 6 0
HN2406	5-7	33½x19 ⁷ / ₁₆ x23½	2	0-35	P	white steel	—	47 5 0
HN2128	7-0	48½x19 ⁷ / ₁₆ x23½	2	0-61	P	white steel	—	62 9 6
HN2130	9-8	50½x24x25 ⁵ / ₈	2	0-92	P	white steel	—	83 9 6
HN2307	8-0	55½x19 ⁷ / ₁₆ x23½	3	1-3	A	white steel	—	78 15 0
HN2309	10-0	59½x21 ⁷ / ₁₆ x23½	3	1-8	A	white steel	—	89 5 0
J. & T. ROBINSON								
McClary F12-56	13-1	—	—	—	—	—	—	210 5 11
McClary F14-56	15-2	—	—	—	—	—	—	223 0 1
R. S. STOKVIS & SONS LTD.								
65	2-3	20x19x24	2	0-23	M	teak laminate	vit. enamel interior	38 17 0
*460	4-6	34x19x24	2	0-44	P	stove enamel	vit. enamel interior	48 6 0
500	5-0	33x17½x23½	2	0-5	P	white laminate	lacquered aluminium interior	46 4 0
*600	6-0	42x19x26	2	0-60	P	stove enamel	vit. enamel interior	58 18 0
*700	7-0	48x19x26	2	0-61	P	stove enamel	vit. enamel interior	65 2 0
*950	9-5	50x24x26	2	0-8	P	stove enamel	vit. enamel interior	89 5 0
230	8-0	56x19x24	3	1-5	A	white laminate	needs no defrosting	82 19 0
TOTAL REFRIGERATION LTD.								
K360V	12-4	70½x23½x25	3	6-2	P	baked enamel	quick freeze switch	156 18 1
Deep Freezers								
*F130V	4-75	42x21x22½	3	4-75	M	baked enamel	quick freezing switch upright	61 5 1
HF18T	6-2	35x30x25	3	6-2	M	baked enamel	quick freeze switch; chest	83 16 5
F180H	6-2	35x30x25	3	6-2	M	baked enamel	quick freeze switch; chest	83 16 5
F270H	9-5	35x40½x25	3	9-5	M	baked enamel	quick freeze switch; chest	101 14 4
F280V	10-0	59x23½x25	3	10	M	baked enamel	quick freeze switch	117 15 11
TREMBARTH WHOLESALE LTD.								
Admiral NT1484	14	62x30x28½	3	3-8	A	white enamel	separate freezer control	215 0 0
Admiral NT1786	16-5	66½x30x28½	3	4-39	A	white enamel	separate freezer control	245 0 0
Admiral ND2084	20	64½x33x24½	3	6-44	A	white enamel	separate freezer control	310 0 0
Admiral ND2286	22	65x35½x24½	3	7-82	A	white enamel	separate freezer control	365 0 0
Admiral ND2289	22	65x35½x24½	3	7-82	A	white enamel	automatic ice maker	395 0 0
Admiral ND3089	30	65x48½x24½	3	11-55	A	white enamel	automatic ice maker	460 0 0
TRICITY COOKERS LTD.								
*Polarfrost 5 3538	5-0	34 ⁷ / ₁₆ x19 ¹ / ₁₆ x22 ³ / ₁₆	3	0-6	M	white	60 second defrost; plan-it-yourself door storage	49 7 0
*Polarfrost 6-8 3738	6-8	44 ⁷ / ₁₆ x19 ¹ / ₁₆ x22 ³ / ₁₆	3	0-6	M	white	60 second defrost; plan-it-yourself door storage	58 16 0
*Tatler 3 TW367	3-1	34½x18x18½	2	0-3	M	grained	table top	43 11 6
*Tatler 4 TW467	4-3	35½x19½x20 ⁷ / ₁₆	2	0-43	M	grained	table top	51 9 0
*Deepcold TR267	5-05	44½x19½x20 ⁷ / ₁₆	3	0-75	A	white	independent deep freeze	69 16 6
*Triumph 3548	5-0	34 ⁷ / ₁₆ x19 ¹ / ₁₆ x22 ³ / ₁₆	2	0-035	M	white	—	on application
UPO (U.K.) LTD.								
20	2-0	22½x19½x21½	1	—	M	white	—	29 19 6
52	5-2	34½x21½x23½	2	0-3	P	white	—	51 9 0
70	7-0	41½x24½x21½	2	0-7	P	white	—	59 17 0
90	9-0	48 ⁷ / ₁₆ x21½x24½	2	0-7	P	white	—	72 9 0
14RC	15-0	23½x70½x25½	2	0-7	P	white	—	124 19 0
52B	5-2	—	2	0-3	P	white	for building in	51 9 0

Note 1: * indicates BEAB approved Note 2: M=manual P=push button A=automatic

WHO WILL BUY A REFRIGERATOR?

continued

PLANNED SELLING

With less than half the households in the country having a refrigerator there is much scope for planned selling. In the Home Counties and broadly speaking south of the Trent, the main market is lower down the financial and social scale. Those folk with rising standards of life, and despite everything, rising incomes, should be the principal target. The refrigerator can be shown as part of their new status and way of life.

In other parts of the country to sell the need for a refrigerator may be a harder task. There is still a feeling that old houses, thick walls and spacious larders do away with the need for a refrigerator. There is even in many parts of the country a built-in puritanism which regards many modern domestic appliances as luxuries long after they have become necessities. The task of bringing people into the third quarter of the twentieth century is often done by the time-worn, but successful, bait of keeping up with the Joneses.

THE FRONT LINE

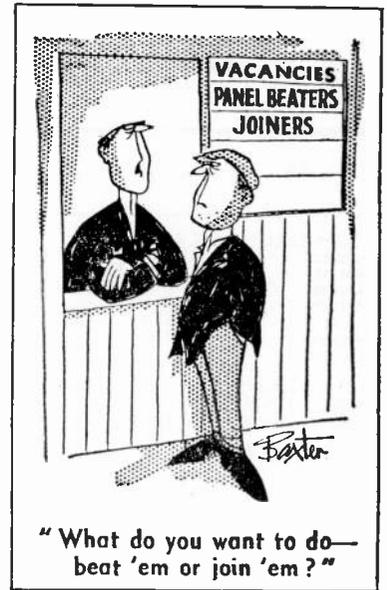
Who then is going to ensure that 1968 maintains the health of the refrigerator market? In the end, every battle is won by

the front line troops. The dealer and his sales staff who meet the public face to face must carry out the all-important task of persuasion as well as displaying the product in a sufficiently attractive manner to bring the customer into the shop.

Once the interest is aroused, no customer will be able to deny that the modern refrigerator is attractive to look at, cleverly designed to give maximum storage and with prices cut almost to the bone.

The combined efforts of retail salesmanship, skilled manufacture and publicity, and the overall work of DoRDc, which helps to keep domestic refrigeration in the news all the time, can together bring off another good year for the industry and so confound the pessimists.

Courtesy: 'Evening Standard'



A PACKAGE DEAL for RENTAL

HOW THE ROBINSON RENTALS AGENCY SCHEME WORKS FOR YOU

THE GREATEST DETERRENT to the small dealer trying to enter into the television renting field is undoubtedly the necessity to find the finance to back the operation. Other problems he has to consider include the responsibility of providing quick and reliable service, and what to do about any bad debts which he may incur.

All too often the capital outlay required to set up a renting service presents a problem which the small dealer either cannot, or is unwilling to overcome on the terms normally available to him from conventional quarters.

The advantages and the gravy of renting may seem to be all in the hands of the big rental combines, but some of them at least offer the smaller dealer schemes which mean that he can make an entry into this very popular field.

One such scheme is operated by Robinson Rentals. It is designed, as Mark Floyd, the company's marketing director told *RER* to lift from the shoulders of the dealer the main problems involved in television renting.

'Under our Package-deal Agency Scheme', said Mr Floyd, 'the dealer has no responsibility for servicing the sets, he is not involved in any financial outlay on stock, he has no debt chasing to worry about, and we even relieve him of aerial problems. All these aspects are looked after by Robinson through the local branch manager.'

A dealer who becomes a Robinson agent receives free of cost a representative range of the latest 19in and 23in sets together with point-of-sale display material. The manager and staff of the local branch visit the dealer at regular intervals, and are always available to supply whatever information is required. They will even instruct and assist your sales staff if required.

Dealers receive regular mailings of *Vision*, the company's marketing bulletin, which gives advance information of all matters pertaining to agency agreements, news of promotional schemes and details of advertising plans.

Commissions are paid to the dealer agent on all signed agreements or on

leads that mature into signed agreements.

On legislation controlled sets the commission payable is the equivalent of two months rental, or one and a half months rental for a matured lead. The corresponding rates for legislation free sets (those over three years old) is one and a half and one months rental respectively.

There are various ways in which the customer can elect to pay the rental. The so called Plan A requires an initial payment of seven months rental followed by seven months free of payment after which rentals are payable monthly in advance reducing by 1s every year for the first five years.

Plan C calls for the same initial payment, after which rentals are paid monthly in arrears at the same rate for 60 months before dropping to the final rental. The outlay over five years for the customer is the same under either plan.

Plan AP offers the customer a discount of 7½% for payments to be made annually.

Other inducements which the agent is able to offer his customer under the Robinson plan include the offer of a free u.h.f. aerial to anyone renting a legislation free set or changing to such a set.

The customer's choice of set is wide. He has the offer of receivers from Bush, Murphy, HMV, GEC, KB, Ultra and Ferguson and Philips and generous allowances are available for the customer's own set taken in part exchange.

Large advertising campaigns publicise Robinson's terms and facilities, and attractive point-of-sale material and consumer literature is available.

To quote Mr Floyd again, 'We believe that there is still a considerable way to go in the expansion of the TV rental market. Colour TV is bound to increase the interest, and we believe that by taking up a Robinson Agency the small dealer can help us and at the same time make himself a useful profit with very little extra effort and with practically no cost to himself. This is business which in all probability would not come to him except under our scheme.'

I TRIED TO DO IT ON MY OWN

Raunds is a town of some 12,000 inhabitants in Northamptonshire, busily and profitably engaged in the manufacture of boots and shoes, and S. V. Smart of 20 Hill Street is one of the three radio and television dealers in the town.

Mr Smart has been an agent for Robinson Rentals since March 1963 and now has over 150 subscribers to his credit.

'At that time I was actively considering going into the rental business under my own steam,' Mr Smart told *RER*. 'Sales were falling, and it seemed to me that rental offered a way of getting back some of the business I knew there was to be had in this town and district.'

The first hurdle to be overcome, as always, was to obtain the necessary credit to finance the operation.

'I approached my bank manager, and surprisingly perhaps, he was very sympathetic and agreed to grant me an overdraft sufficient to start an operation on a limited scale. But, as it happened, just about this time I met one or two people from Robinson and heard about their agency scheme. It seemed to offer me all that I wanted to set up in rental, and of course, it relieved me of the necessity of arranging any financial cover. I was accepted as an agent, and I have, by and large, been very satisfied with the way the agreement has been operated.'

One of the good points of the plan which particularly appealed to Mr Smart was the prompt and efficient service the company gave to customers. All service is carried out in the subscriber's home, often within hours of the notification of a fault.

'If, for any reason, the customer is deprived of the set for any prolonged period Robinson will give him credit for the time lost,' said Mr Smart, 'and this is very much appreciated.'

What other benefits did he get from the agency, we asked Mr Smart.

'For one thing,' he said, 'I do not have to do any advertising. Maybe if I operated in a larger town this would be different, but I find that the ads, which Robinson put in the local papers, which include my telephone number, bring me in sufficient enquiries.'

'It is significant that of my 150 or so rental subscribers, only about 20 of them could be classed as my regular customers, who would have come to me in any case. Many of the others are now useful customers and buy many of their other radio and electrical requirements from me.'

'In this connection the fact that they come into my shop to pay their monthly

S. V. Smart
of Raunds



instalments means that I have regular contact with them and am able to

influence them towards additional purchases.'



S. H. Hutchings
of Tadley

as just a sideline has now developed into a very useful source of additional income and, as he pointed out, one which gives him very little trouble to supervise.

'Without such a scheme,' said Mr Hutchings, 'I would certainly not be in TV renting. I would not have been able to finance my own operation, and my other activities—cycles, welding, travel agencies—take up too much of my time to enable me to give the attention necessary to supervise my own scheme.'

Mr Hutchings was generous in his praise for the service which Robinson offered to their subscribers. 'I know that I only have to ring up the manager at Newbury when a customer reports trouble, and I can then forget it. Any come-back from a customer is most unusual.'

The fact that his customers come into his shop to pay their rental instalments means that he gets an amount of traffic which he would not otherwise expect.

Mr Hutchings does a small amount of local press advertising, mostly in connection with the other sides of his business, but even a passing mention of the Robinson agency in these ads. brings in additional enquiries.

A special Christmas feature in the local paper under the banner of the Chamber of Trade in which the agency was mentioned brought in a number of new customers.

Mr Hutchings also finds that any new window display or new arrangement of the existing material is also effective in stirring up new interest.

Mr Hutchings' experience is, we believe, of considerable interest. The fact that a dealer who does not sell radio or television can make quite a worthwhile business out of renting surely means that dealers already active in radio and television retailing would do well to look into the opportunities provided by a Robinson Rentals agency.

I WANTED ONE FOR MYSELF

A reluctance to buy a new set for his own use after some years without one is the reason which led S. H. Hutchings into the television rental business.

E. Hutchings and Son has been established in the small town of Tadley in Hampshire for some 30 years. Mulford's Hill where the shop is situated is on the perimeter of the A.W.R.E., Aldermaston, and the town is largely a dormitory town for workers in Reading, Basingstoke and Newbury.

Although he does no sales of radio or television receivers nowadays—'I used to sell a few radios a few years ago,' Mr Hutchings told *RER*, 'but I made so little out of it I gave it up altogether.'—Mr Hutchings has made a considerable

success with his agency for Robinson Rentals.

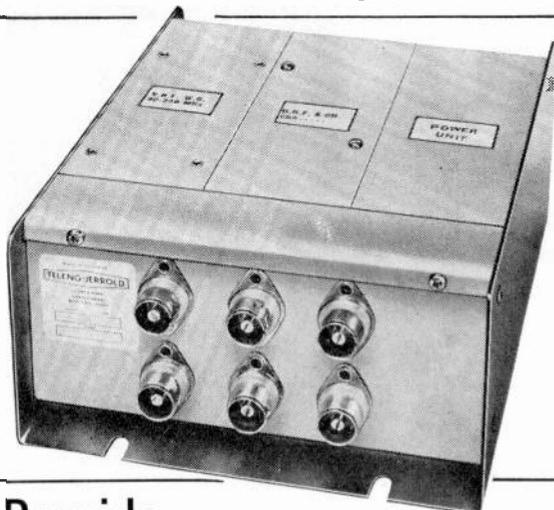
He has several times been mentioned in *Vision*, the company's journal for agents, in connection with the number of subscribers he has added.

How he got into the business is interesting. He told *RER* that three years ago he was thinking of getting a new TV set for his own use—this was long after he had given up selling them himself. He decided that he would rather rent than buy and after looking over the various offers decided to go for a Robinson set.

When the local branch manager came to supervise the installation he asked Mr Hutchings if he had considered taking up an agency for the company. Eventually, of course, he did so, and he tells us he has never regretted the decision.

In the three years he has held the agency he has added nearly 200 subscribers. What he at first looked upon

Teleng's new transistorised Mini-Essex distribution amplifiers



Provide (Up to 6 outlets)
Unbeatable value
 for small blocks of flats, retail showrooms, workshops, etc.

Designed on a simple modular basis, series comprises:

1. Power unit, complete on base tray and including output diplexer and six-way splitter.
2. Two amplifier modules—broad band VHF unit, single channel UHF unit. Available separately so unit bought for VHF, say, could easily be converted later on to a complete assembly.
3. UHF amplifier has provision for powering a Mast Head amplifier.

SPECIFICATION (complete assembly)

Gain..... Greater than unity into all six outputs
Frequency..... 40-230 MHz + one 8 MHz channel in 470-860 MHz
Output level..... 6.0mV max. into each outlet (rms on Peaks) (2VHF + FM + 1 UHF channel)
Power..... 200-250V, 1.5 watts

Post coupon now for further details.

TELENG LIMITED

Church Road, Harold Wood,
 Essex
 Tel: Ingrebourne (IL) 42976

keep in touch with Teleng



(it pays!)

*Please send me details of the MINI-ESSEX amplifiers RER 3

Name _____

Company _____

Address _____

Ref. Ad. No. 381

EARN EXTRA INCOME FROM TV RENTAL

... with NO OUTLAY
 ... NO RISK

Radio and Electrical Dealers required as AGENTS in towns or shopping centres where Robinson Rentals are not already represented.

Commission paid on all business obtained. Stock loaned free. No debt chasing; NO service problems. Free display and promotional material.

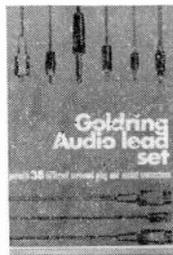
Learn how you can extend your merchandise and increase your income.

Write in confidence to:

**Marketing Director,
 Robinson Rentals Limited,
 P.O. Box 31, Amptill Road,
 BEDFORD. Tel. Bedford 55233**

Ref. Ad. No. 379

NEW! Goldring screened audio lead set



**AUDIO FAIR
 APRIL 18-21
 Booth 93
 Demonstration
 Room 402**

Here's a very neat idea for your "audio customers"—an inexpensive set of screened leads designed to provide no less than 38 different equipment-to-equipment input/output cable connections, 20', 40', or 60' long according to combinations used. No more searching for the right plugs and lengths of cable! No more soldering! The set is packed in a storage box, providing—in a matter of seconds—almost any combination of input/output lead terminations your customer is likely to want. Retail Price. **£3.6.0**

NEW! All the leads comprising the above set, together with audio plugs, sockets, etc. are available individually packed, in a new range of "audio helpfuls" now marketed by Goldring.

G Write now for full details:
Goldring Manufacturing Co. (G.B.) Ltd.
 486-488 High Rd., Leytonstone, London, E.11. LEY 8343

Ref. Ad. No. 380



THE WALL

About 18 months ago, well before BBC2 started in our area, we decided to put up a fairly tall fringe area array to get a 625-line signal. The ideal place to erect the pole was a corner of the workshop where our property abuts the high chalk wall of the adjacent butcher's garden, so without further ado our rigger nips up the ladder to fix the upper mast clamp. Without even further ado, he descends abruptly, a whiter shade of pale, and vows that he, at any rate, isn't going to fix anything up there. 'Why?' we asked. 'Go up and see for yourself.' So I did. And I, too, came down that ladder faster than I went up it. The service manager muttered something about low moral fibre of these counter types and went up to see what all the fuss was about. He too came down so fast that we thought he was an auxiliary fireman.

What, you will be wondering, did we all see up there which brought us down so rapidly? The wall had moved. This is not an uncommon thing in this district, where the chalk and flint walls bonded with quicklime, are always in relative motion. In our case, however, the wall had moved away from the end of the workshop, and more to the point, the gap it left behind showed that the main timbers supporting the roof were only leaning on just over an inch of it. Being a glutton for punishment, the service manager went up again gingerly. At the top he took out his steel tape and made some measurements, came down again, gingerly, sat on the bottom rung and did a little sum. "I predict," he said at length, "that the wall and roof will fall about Christmas 1967."

This was in the summer of 1966.

Nothing happened for a few months, while a difference of opinion as to who owned the wall was thrashed out. Our insurers claimed that the wall wasn't ours, the butchers didn't care whose wall it was because if it fell down they would only lose three months supply of cabbages anyway. Christmas 1967 came and went and apart from a few grumbings the wall remained.

Today we opened up the workshop and saw daylight at the other end. The wall had fallen. A big smile of relief spread across the service manager's face.

Not because the roof timbers had held up, not because the only damage to the sets was a thin film of dust, not because it happened when there was nobody in the building, but simply because his calculation as to when it would fall was reasonably accurate. 'With all these printed panels and modules' he explained, 'I was beginning to lose the facility of working things out for myself'.

TURNING BUSINESS AWAY

Out of the corner of my eye, I happened to see, one busy Saturday, our sales girl doing battle with a young couple who wanted a television set. This was at a time when our stocks were low and the selection was poor, but the difficulty didn't seem to be about which set to choose. The couple had settled for the 19in on legs in the window. The trouble seemed to be about how to have it. It sounded as though they wanted h.p. but the sales girl wanted them to rent it. I asked her about it when they had gone. 'Oh yes,' she said unashamedly, 'I swung it over to a rental.' 'Why, do you know something about them?' I asked. 'Oh no, it isn't that, it's the forms. You can't expect me to fill up h.p. agreements on a Saturday afternoon, when I can whip through a rental agreement in a quarter of the time.' And although she had lost a few shillings commission that way, she was quite content. Which brings me to my point. If she feels like that about filling in the unwieldy h.p. forms, so must many others. You may have one or two on your staff, and you may be losing money thereby. If you are, what are you going to do about it? My own sympathies are all with the girl. If ever there was an inducement not to sell anything it is the present h.p. agreement form. Surely there must be something simpler that will still afford the consumer the protection intended by the recent Act!

ABOUT AERIALS

Moving about the region lately, I have been fortunate in having a co-driver. During my 'passenger time' I get a chance to look about, and the thing that I notice most is the TV aerial array. I notice especially that they are erected in clumps. If one house has one on the chimney, they all do; if one house has its aerials in the loft, so do the remainder. If you think it is all to do with signal strength, microvolts, dead spots, etc., you are quite wrong. We even went to the trouble of measuring the signal in various places and found that it bore no relation to the magnitude of the aerial system. The answer must be that the standard of picture quality regarded as acceptable varies from area to area, and even with age groups. Most of our customers who are prepared to put up an outside aerial are middle-aged. The younger ones mostly don't care as long as they get the two 405-line pictures. All our BBC2 viewers are 'quality conscious' but few of them let us replace the 405-line loft arrays when we put up

their mast on the chimney for BBC2. They just complain instead. Aerials have a little 'Parkinson's Law' of their own—'Aerials remain efficient until the user tires of the programme content'.

PRE-BUDGET BLUES

It is only natural that at this time of year we get apprehensive about the effect that the Budget will have upon trade. I seem to recall that the thing we dread the most, a change of purchase tax, came originally as a wartime measure to raise the cash for tanks and planes, and that we were promised its abolition when hostilities ceased. Disillusionment caused by its persistence until the present day is reflected in the criticism that all our industry levels at all our Governments all the time. We ought by now to be getting used to it, but just as we are beginning to do so its format is changed a little and plans both on the manufacturing and retailing side of the business have to be abruptly changed. This year we half expected to know the worst when the economy measures were announced in January, but instead we learned only of the £400m cuts in Government expenditure. Our own personal sacrifices, the Chancellor threatened, were to come in March at the Budget, so we all wait three months during which trade is in the doldrums. It's almost as bad as the boss saying 'Have a good holiday, Counter Talk—I've something rather unpleasant to discuss with you when you come back'.

THORN IN THE SIDE

I used to think that the Monopolies Commission was set up to put a halt to massive takeover bids. I used to look upon it as being, as it were, on our side. So I was a bit surprised to read that they gave their blessing to the B.M.C./Leyland deal, and the merger of the National Provincial and Westminster Banks. Still, they didn't affect me personally, so why should I bother? Later developments do, however, affect me personally. No sooner had I put down *Which* after digesting some tables which proved that colour TV was better rented, than I saw that Thorn had made a bid for Radio Rentals. All the Monopolies Commission could do was mumble something about not seeing any reason to increase rental prices and that consumers should shop around. This comes at a time when the prices of monochrome TV's are going up £5 all round, and when there is such a national shortage of sets that we cannot enjoy our slice of the pre-Budget spending spree. It looks as though we are being 'got at' from all sides and that unless a miracle happens the days of the independent retailer are numbered. Perhaps they are trying to nationalise the industry. If they are, they should hurry up and get on with it and not keep us in suspense. You never know, we may get the telly repaired on the National Health Service after all.

HAVE YOU HEARD ABOUT

HOT LINE

E120

AN IMMEDIATE SUPPLY of structural materials and installation facilities at special discount terms is offered by the Handy Angle Storage Advisory Council to firms whose premises have been damaged by fires. The assistance of a storage specialist, who in turn can draw upon the full resources of the company's technical division, can be made available immediately following notification to the company's head office.

BMB-ACOS LINK UP

E121

A LINK UP between BMB (Sales) and Cosmocord has been arranged to increase efficiency of service and high quality of products. A range of BMB-Acos products will be introduced during 1968.

NEW

DEBENHAM COMPANY

E122

TECHNOMARK is the name of a new company within the Debenham group. It is a specialist organisation formed to develop the quality audio and specialised video markets. It includes the former Bang and Olufsen division under marketing manager D. Cheney, the Sony UK division under J. Wren and the Radford Marketing division under G. Smith. One of Technomark's first steps is the introduction of more streamlined terms of business, with an attractive retrospective discount scheme based on giving an increasing return for increasing support, whilst reaffirming the company's policy of support for the independent and specialised dealer.

APPROVED CALIBRATION SERVICE

E123

THE FIRST FOUR laboratories to receive British Calibration Service approval are Coventry Gauge & Tool Co, Pitter Gauge & Tool Co, and English Electric Co, Stafford, who are approved for a range of mechanical measurements. Ferranti at Wythenshawe has received approval for a range of d.c. and low frequency electrical measurements.

MANAGERS AS TRAINERS

E124

THE ONE DAY COURSE, Managers as Trainers, which has been mentioned in this column on various occasions, has been revised in content and presentation for 1968. Future courses include: March 6—Falmouth, March 13—Exeter,

March 20—Eastbourne, March 26—Newcastle, March 27—Wallsend, April 2—Birmingham and April 9—Carshalton. A following series will serve towns which have so far not been visited.

FAST BREEDER

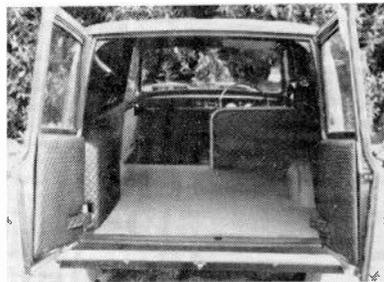
E125

A NEW TECHNIQUE in selling has been christened the 'fast breeder reactor' method by its developer, Peter J. Garrini and Associates. It is based on the unique principle that instead of a salesman visiting many scattered companies representing one firm only, a PGA salesman will spend up to a whole day with a large organisation representing the interests of several clients. He establishes exactly what the customer wants from any of the companies he represents, he establishes price levels, and he considers production schedules. The service forms an extension of traditional sales organisations.

VANS FOR TV

E126

A CONVERSION of the Bedford HA 8cw van specially for carrying TV receivers, has recently been carried out by Martin Walter's Dormobile division for a



national rental firm. The interior of the vans is lined to the waist with grey padded PVC. The floor is covered with PVC-faced felt. An external rubbing rail and robust tubular steel bumpers are fitted.

TEN A PENNY

E127

THE CHANGE to the decimal system of currency will affect all retail firms in the country. The nature of the problems likely to arise and the need for early planning by senior management will be the subject of a one-day seminar to be held by the College for the Distributive Trades, London, in conjunction with the Retail Trades Education Council on March 8th.

INTERNATIONAL BROADCASTING CONVENTION

E128

THE INTERNATIONAL BROADCASTING CONVENTION is to be held from the 9th to 13th September at Grosvenor House Hotel, London. A wide cross section of broadcasting equipment will be shown during the course of the Convention.

PHILICORDA PRESENTATIONS

E129

CONTINUING the series of presentations of the full musical potential of the range of Philips Philicordas by Dr Handel Evans and Kenneth Baker, the following concerts have been arranged for March. March 1st—Stroud, March 4th—Hove, March 7th—Westcliff-on-Sea, March 11th—Cambridge, March 12th and 14th—St Neots, March 13—St Ives, March 22—Plymouth, March 26—Bristol.

BACKING BRITAIN?

E130

THE PACKAGING DIVISION of Lamson Paragon are offering to overprint free on all normal orders for printed carrier bags or other packaging materials, a Union Jack motif with the words We're Backing Britain, for any firm participating in the campaign. They are also producing a paper Tote carrier bag with the Union Jack and slogan for the use of the general public.

ROBINSON-GRANADA MERGER

E131

A MERGER of their television rental interests has been agreed between Robinson Rentals and the Granada Group. The merger makes the combined company the third largest TV rental concern in the country, with over 660,000 subscribers. Robinson started operations 14 years ago and has 196 showrooms and 360,000 subscribers. Granada TV Rental started six years ago, and has 207 showrooms with 300,000 subscribers.

DESIGN CONFERENCE

E132

ELECTRONICS DESIGN is the subject of a conference to be held at the University of Cambridge from 23-27 September. It is sponsored by the IEE, the IERE and the IEEE. Topics to be discussed will include: planning of design projects; formation and behaviour of design teams; time, cost and technical control.

HAVE YOU HEARD ABOUT



continued

NEW SELLOTAPE

E133

A NEW double-sided self-adhesive tape — Sellotape Tissue Adhesive 2604 — is particularly suitable for making ordinary materials self-adhesive. It is thermo-setting making it ideal for laminating to metal nameplates for use on hot surfaces such as electric fires and radiators. It is available in ½in, ¾in, 1in and 1½in widths.

HEATSTORE TO MOVE

E134

THE WHOLE of the activities of Heatstore, a part of the Central Wagon Group, is to move to Wigan. The move planned to be completed by July, is part of a rationalisation scheme within the group.

SIMPLEX ACQUIRES CIRCULUME

E135

THE WHOLE of the share capital of Circulume, makers of circular discharge control gear, has been acquired by Simplex Electric. The Circulume range is complementary to the lighting equipment produced by Simplex.

BOSCH SERVICE

E136

THE SERVICING DEPARTMENT of Bosch has been transferred from 20 Carlisle Road, Hendon, to the company's new factory at Rhodes Way, Radlett Road, Watford, Herts. (Watford 44233.) Orders for spares should still be sent to Great Portland Street, the company's showrooms.

MISREPRESENTATION

E137

THE MISREPRESENTATION ACT is now law, and it directly involves everyone providing goods or services. Under it an organisation may be held liable, after a transaction has taken place, should the goods or services provided be deemed to be misrepresented in any one of a number of ways. The Act also affects advertising practice. To discuss the practical implications of the Act, a one-day seminar is being organised by the School of Business Administration, Ashford, Kent, on March 19th. It will be held at the Criterion, Regent Street, London. Fee is 16gn.

MORE BBC2

E138

TO COINCIDE with the opening of the BBC2 transmissions from Sudbury on February 10th a new edition of *BBC2 News* is now available for free distribution to customers. A new edition of the leaflet *Receiving BBC2* contains a map of the service area. The service, on Channel 44, is expected to make BBC2 available to an extra 540,000 viewers.

literature RECEIVED

E139 A RECENTLY ISSUED British standard attempts to unify specifications for miniature fuses in metric dimensions. BS 4265:1968 — *Specification for Cartridge fuse links for miniature fuses* — gives dimensions and electrical characteristics of fuse links of up to 10A at 250V. These include quick-acting large breaking capacity, quick-acting low breaking capacity, and timelag (surge proof) low breaking capacity types.

E140 BSI HAS PUBLISHED a revision of BS 3207:Part 1:1960 which takes account of current practice and now includes the 250V class of cable. The new publication — BS 3207 — *Mineral insulated cables. Part 1:1967: Copper-sheathed cables with copper conductors* — deals with copper-sheathed cables with compressed powdered-mineral insulation and copper conductors.

E141 THE WINTER 1967/8 ISSUE of *Electronics Post* from EMI Electronics, includes a special feature on sound. An eight-page section deals with magnetic tape and audio tape recorders, loudspeaker systems, miniature components and sound mixing. Other articles cover some of the diverse applications of ultrasonics; pneumatics and refrigeration, and infra-red television.

E142 A NEW BROCHURE from Balfour and Darwins describes the current range of Steadfast tools. A comprehensive range of display cartons is described and illustrated.

E143 A NEW BRITISH STANDARD — Part 3:BS 3999 — *Methods of measuring the performance of domestic electrical appliances* — covers food preparation machines. The methods are for use in the Consumer Council's Teltag scheme, and an annex gives the information necessary for the Teltag label.

E144 AN ADDENDUM has been published to BS 3934:1965: *Dimensions of semiconductor devices*. Addendum No 1 1967 gives additional drawings of outlines, with additional information on their interpretation and a revised cross index.

E145 IN ORDER TO ASSIST the change-over to ISO metric threaded fasteners in the UK, BSI has published *Supplement No 1: Tapping drills for ISO metric threads (Metric Units)* which gives recommended and alternative tapping drill sizes for ISO metric internal screw threads in accordance with BS 3643 (Parts 1, 2 and 3). It is based on the European accepted German Standard DIN 336.

E146 IT IS ESTIMATED that some 25,000 small businesses are destroyed each year by fire. To help small businesses guard against this danger, the Fire Protection Association has produced a leaflet called *Check for your fire safety*. The leaflet offers general advice on fire hazards found in such businesses, with special hints for owners of workshops and yards. Advice is given on a nightly check for fire safety, and on the action to be taken if fire breaks out.

E147 SEVEN NEW PAGES have been added to the *Products Portfolio* recently produced by Newmarket Transistors. The Proelectron and Jedec devices are listed in numerical order with ratings and characteristics, and represent most of those currently in use in this country.

DEALING WITH LIGHT

continued

lighting unit at all. It was the new Super-switch miniature electronic dimmer, made by Superswitch Electric Appliances, and relying for its operation on a thyristor. In its basic form it is mounted on a standard 3½in square switchplate for use instead of an ordinary switch. There are two versions for use with filament lamps (or other resistive loads) of up to 300w and 1000w respectively, and two for use with fluorescent lamps, of up to 160w and 500w respectively. The company has also produced a table lamp, known as the Varilamp, with the dimmer incorporated in the base.

From this basic form, however, the company has now developed an adaptor version which will of course extend its use considerably. The unit has a bayonet-cap adaptor underneath, and a bayonet lamp-holder on top, so that it can be used to convert any standard or table lamp to dimmer control.

USE THE PRE-PAID FORM ON PAGE 128 TO OBTAIN FURTHER DETAILS OF ANY OF THE ABOVE ITEMS, QUOTING THE REFERENCE NUMBER.

CLASSIFIED ADVERTISEMENTS

Rates: 1/- per word (minimum 12 words) per insertion. Box Number 2/6 extra. Series rates on application. Copy and remittance should be sent to Classified Advertisement Manager, RADIO and ELECTRICAL RETAILING, 46 Chancery Lane, W.C.2, before the 10th of each month preceding publication. Classified advertisements must be prepaid.

PROPERTY FOR SALE

OLD ESTABLISHED electrical contracting business with retail shop and house to let on lease—owner retiring. Speight, Lear & Lear, F.A.I., 16 Worcester Road, Malvern. Tel. Malvern 3232.

FOR SALE

ALUMINIUM Extension and Roof Ladders for aerial riggers, finest obtainable. Illustrated catalogue from Lyte Industries Ltd. (Dept. RE), Rogerstone, Newport, Mon. Tel: Newport 58351.

BAD DEBT Recovery Forms—100 10s. 6d. C.W.O. Service Repair Cards. Samples 6d.—Lowgate Press, Stavely, Chesterfield.

COMPONENTS galore. CRTs, valves, transistors, tools, Electrolube. All your service requirements at Willow Vale, "The Service Wholesalers", 69 Station Road, Hanwell, London, W.7. Free catalogue.

KARDEX, Roneo-Dex, Shannovue, etc., as new.—J. H. Weston Co., 9 Mountfield Toad, London, W.5.

KARDEX, Roneo-Dex. Office and domestic equipment, new reconditioned.—Bradley, 184A Landseer Avenue, Manor Park, E.12. 478-5157.

PHILIPS 625 UHF Conversion Kit. Complete panels Escutcheon Kit and Knobs, 17s. 6d., plus 2s. 6d. postage.—Willow Vale, "The Service Wholesalers", 69 Station Road, Hanwell, London, W.7.

HALSON
COLOUR TV DEGAUSSER
(As supplied to Technical Colleges
and set manufacturers)
NOW AVAILABLE C. TV2
Compact and easy to use
Measures 10in long, 1½in dia.
with hold-on button
Only £3 15s. 0d. inc. p. and p.
Trade enquiries welcome
G. D. HALL & SONS LTD.
2 Sefton Street, Blackpool 6375

UHF TUNERS 30s., brand new, exact replacements. Why bother to repair when you can buy new at 30s.—Willow Vale, "The Service Wholesalers", 69 Station Road, Hanwell, London, W.7.

WASHING MACHINE PARTS. Return of post service. Send for lists.—Washer Spares Limited, 189 Halliwell Road, Bolton. Tel: 26620.

Upright Vacuum Cleaner Paper Bags—Superb Quality

Fully porosity tested. Widely accepted in the Trade. High profit mark up. FREE sample from SOLE suppliers.

Q.W. PRODUCTS of Blackpool
53 Leamington Road, Blackpool

FOR SALE (Cont.)

**WITWORTH
TRANSFORMERS LIMITED**
Dept. R.E.R. *, 26 All Saints Road,
North Kensington, W.11.
Telephone: 01-229 9071 9 a.m. till 5.30 p.m.

LIST OF LINE OUTPUT TRANSFORMERS IN STOCK

EKCO U25 TYPE
TC208 TU209 T209/1 T221 T231 T231F T248
TC267 TC267/1 T283 T284 T293 T310 T311
TCG316 T326 T327 T330 T330F T331 TCG337.
All at £2 5s. 0d. each.

EKCO
TMB272 at £2 10s. 0d. each.
EKCO U26 TYPE
TC312 T313 T313F T344 T335.
T344F T345 T346 T348 T348F TC349 TC356.
All at £2 10s. 0d.

FERRANTI U25 TYPE
T1001 T1002 T1004 T1005 T1011. All at £2 5s. 0d. each.

FERRANTI U26 TYPE
TC1012F T1027 T1027F TC1028 T1023 T1023F
T1024 T1025. All at £2 10s. 0d. each.

FERGUSON
305 306 307T 308 315 317 406 408 416T 436 438.
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