

BUILDING AN AMATEUR COMMUNICATIONS RECEIVER

# PRACTICAL 1/3 WIRELESS

JUNE  
1957

EDITOR: F.J. GAMM



**MIRACLE**  
THEATRE

**STARCRAZY**  
PROGRAMME

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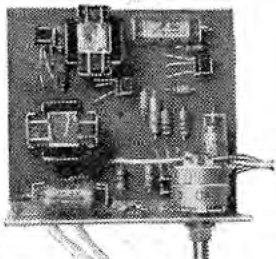
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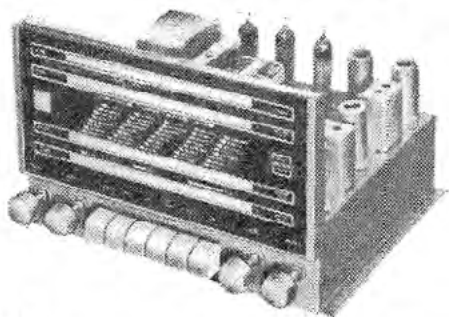
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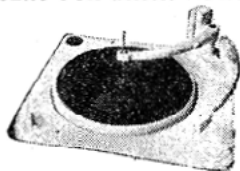
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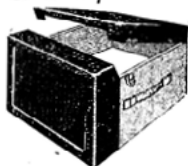
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**THIS MONTH'S SNIP**

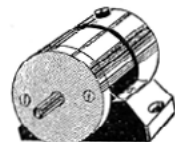
We are offering an out-of-season bargain—14 yards of waterproof electric blanket element, enough to make a full size blanket; normally we sell at 20/- but for a few weeks the price is only 15/- post free, complete with illustrated data.

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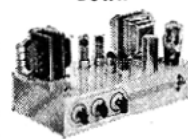
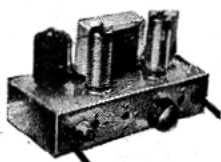
To all who purchase our "science" parcel we will give a 2 1/2 in. 30 ma meter free of charge. The science parcel consists of: (a) Vacuum delay switch, original cost 3 gns. (b) Siemens high speed relay. Price over £2 each. (c) Sniperscope (9 infra-red cell), these cost over £5. These three items and the free gift for only £1.

**MAINS MOTOR**

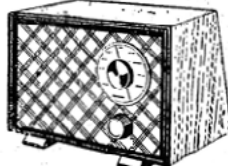
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# PRACTICAL WIRELESS

EDITOR : F. J. CANN

25th YEAR  
OF ISSUE

EVERY MONTH  
VOL XXXIII, No. 606, JUNE, 1957

COMMENTS OF THE MONTH

BY THE EDITOR

## PROGRAMME CHANGES

SIR IAN JACOB recently announced some drastic changes in BBC programme policy, mainly concerned with sound broadcasting. There was, however, an impression that Sir Ian was straining for effect and that the real motive for the change was to save money on sound, with the object of improving the TV programmes so that they could compete more equitably with I.T.V. Support for this view is provided by the statement that these changes will cost less and provide better value for money. The main change is in the Third Programme which is to be cut from five hours daily to three. This is not, nor was it intended to be, a popular programme in the true sense of the term. Some of the matter broadcast was artificial high-brow stuff, written by Chelsea poseurs with an assumed air of erudition. In so far as we are now to suffer two hours less of this sickly would-be clever type, we are in favour of lopping off two hours from the Third Programme, if other and better material cannot be found. The BBC is overcrowded with weird people dressed in the true untidy Chelsea style with dirty shirts, unshaven faces, suede shoes, the inevitable horn-rimmed glasses and vacuous expressions. They are all comparatively young, and few of them have any literary experience. One wonders how it is that they were selected for the job. There needs to be considerable change in BBC personnel. People of ripe experience in the entertainment field and in the realms of literature should be employed, and there should be an immediate enquiry into the undoubted overstaffing of the BBC and the lack of liaison between the various departments, which have become sealed water-tight departments, operating in a little world of their own. The money Sir Ian wishes to save would be promptly forthcoming by such staff reductions and rearrangements. It is true that the blame for this does not attach to Sir Ian. It was Reith who set the standard for the BBC, and it is difficult now to upset it. When Sir Ian said that in the shortened programme there will be room for all that is truly worthy of inclusion, he was making the tacit admission that two-fifths of it at present is not fit for inclusion. The Third Programme has been allowed to amble through the last 10 years as the Cinderella of broadcasting and no one at the BBC has taken very much interest in it, with the result that weird problem plays have been allowed to pollute the programme.

Another change is that the Home Service and the Light Programme are for part of the day to operate together, and will be jointly planned. Programmes must "be designed for relaxation and entertainment," a rather belated discovery.

The competition of I.T.V. has proved that competition has an improving value, and prevents sterility.

The effect has been felt not only on the television programmes but also on sound. — F. J. C.

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Our next issue, dated July, will be published on June 7th.

**Special Pull-out Section!**

# STARCRAZY

**A brand new theatrical production by Miracle Theatre**

*WRITTEN BY BILL SCOTT  
WITH MUSIC BY TOM ADAMS*

Explore the  
Wonders of  
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with Cornwall  
Sea to Stars

Come along before the show at any of these venues to grab a telescope and learn about the wonders of the universe for free with Cornwall's stargazing experts.

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Goonhilly, The Lizard

Thurs 26, Fri 27, Sat 28 Aug  
Enys Gardens, Penryn

[www.miracletheatre.co.uk/stars](http://www.miracletheatre.co.uk/stars)

## WELCOME

THANK YOU AND WELCOME TO OUR production of *Starcrazy*. It is the 56<sup>th</sup> Miracle production and the 32<sup>nd</sup> piece of new writing. We hope it's a suitable choice for our return to the stage after a rollercoaster 18 months - and a tonic for a summer of Covid recovery. Having all the ingredients of a typical Miracle summer show: a simple, robust set that can fit in a Transit van and withstand numerous get-ins and get-outs and whatever the British weather can throw at it; vintage and upcycled costumes to transport you to the 1950s; a specially composed, original musical score and a small company of resourceful, multi-talented actors. It upholds Miracle's tradition of small-scale shows, dealing with epic themes, boasting ambitious production values, yet able to tour into the nooks and crannies of the South West and bring the shared experience of living, breathing theatre to rural communities and offer an antidote to being stuck indoors and separated from one another over the last year. We hope you enjoy your time together with us under the stars this summer!



## STANLEY BURTON

### Martin Hyder

Martin is an actor and writer based in Devon. He has worked in theatre, film, TV and radio and his numerous stage credits include *My Brilliant Friend* (National Theatre), *Dead Dog In A Suitcase* (Kneehigh/UK and International Tour), *The Culture* (Hull Truck) & *The Common* (Beaford Arts). This is his first time working with Miracle.



## WOMAN

### Risha Silvera

Risha is an actor, theatre maker and dancer from London. She's a recent graduate of Fourth Monkey Actor Training Company, and, before that, from the University of East Anglia with a degree in American and English Literature. Some of her recent credits include: *Anthropocene: The Human Era* with Gym Jam at the Oxford Playhouse; *Second Home*, a one woman play at the Vault Festival 2020; '(don't) touch me', with dance theatre company State of Flux performed at the Leicester CURVE; and *When the Leaves Fall*, as part of MonoBox's PLAYS'ART! event at the Hampstead Theatre in London.

# CAST



## GWEN GARTSIDE

### Anna Munden

Born and raised in Cornwall Anna grew up watching Miracle shows and is very excited to now be in one! Anna Graduated from Bristol Old Vic Theatre School in 2018. Before drama school Anna had roles in three nationally touring Pipeline Theatre Co shows; *Transports*, *Spilikin*, and *Streaming*. Stage credits after drama school include, *Abigail in The Crucible* (Cube Theatre Co), *Eva in Youth Without God* (The Coronet Theatre), and *East in You Promised* (Theatre 503). T.V credits include; *The Nevers* (HBO), *Showtrial* (BBC), and *Father Brown* (BBC), and BIFA longlisted short film *Shoal*. Anna has also been filmed eating cereal for breakfast mogul Kelloggs.



## MAN

### Dan Richards

Daniel grew up watching Miracle and began his career with work experience on *Quasimodo* and *Hamlet*, as the technician on *Jason* and as an actor in *Cat's Cradle!* Daniel helped to found Near-ta Theatre and has previously worked for Trebiggan and Cube. He is now the co-artistic director of 'Owdyado Theatre, performing in all their productions.

THE ACTION OF THE PLAY TAKES PLACE IN  
STAN'S GARDEN IN BEXLEYHEATH IN 1957

## *CREW*

WRITER & DIRECTOR **Bill Scott**

MUSICAL DIRECTOR & COMPOSER **Tom Adams**

SONGS BY **Tom Adams & Bill Scott**

DESIGNER MAKERS **Jude & Alan Munden**

ASSISTANT DIRECTOR & CHOREOGRAPHER **Hannah Stephens**

TECHNICAL STAGE MANAGER **Esther Wilson**

SCRIPT DEVELOPMENT COLLABORATORS **Benjamin Dyson,  
Ben Kernow & Mary Woodvine**

## *MIRACLE THEATRE*

ARTISTIC DIRECTOR **Bill Scott**

MANAGING DIRECTOR **Annie Ukleja**

COMMUNICATIONS DIRECTOR (TO MARCH '21) **Emma Gibson**

RESIDENT ASSISTANT DIRECTOR **Hannah Stephens**

PRODUCTION & TOUR COORDINATOR **Esther Wilson**

KICKSTARTER PLACEMENT **Joseph Pinder**

# DIRECTOR'S NOTES



**A**FTER THE END OF WORLD WAR TWO, interest in wireless technology as a hobby blossomed. People returned to civilian life with new knowledge and experience of radio communication and had the time to pursue this new interest. In 1950s many advances in this field were made by enthusiastic amateurs, building and experimenting with transmitters and receivers in their sheds.

At the same time, science was turning its attention towards the new frontier of space.

Fiction was full of tales of exploration of the moon and beyond. 1957 saw the launch of Sputnik 1. People could look up from the Earth and see a man-made craft hurtling through space.

Mistrust of the Soviet Union and fear of nuclear weapons bred suspicion. Spies were everywhere...

Against this background our hero, Stanley, has taken refuge from the world in a shed at the bottom of his suburban back garden.

## Further Reading...

These titles had an influence on the development of Starcrazy and are highly recommended:

*John Was Trying to Contact Aliens* a short documentary by Matthew Killip NETFLIX

*All the Light We Cannot See* by Anthony Doerr FOURTH ESTATE

*The Vast of Night* a low budget film directed Andrew Patterson AMAZON





## *IS THERE ANYBODY OUT THERE?*

**T**HE IDEA OF SENDING MESSAGES into space has been around for a long time. In 1819, Joseph Littrow suggested using the Sahara Desert as a vast message board. The plan was to dig giant trenches across the sand that could be filled with paraffin and set alight, creating twenty-mile-wide shapes.

The hero of our story was ahead of his time. It was only sixty years ago that humankind made its first organised attempt to communicate with extra terrestrial life. A series of brief radio messages in Morse code were transmitted in the direction of the planet Venus from the Centre for Deep Space Communications, at Yevpatoria, Crimea in 1962.

In 1974 a radio message was broadcast into space from the giant Arecibo radio telescope in Puerto Rico. It included scientific formulae, a representation of DNA and images of a man and the solar system.

In 1984 The SETI Institute (Search for Extra Terrestrial Intelligence) was set up with a mission to explore, understand, and explain

the origin and nature of life in the universe, and to apply that knowledge to inspire and guide present and future generations.

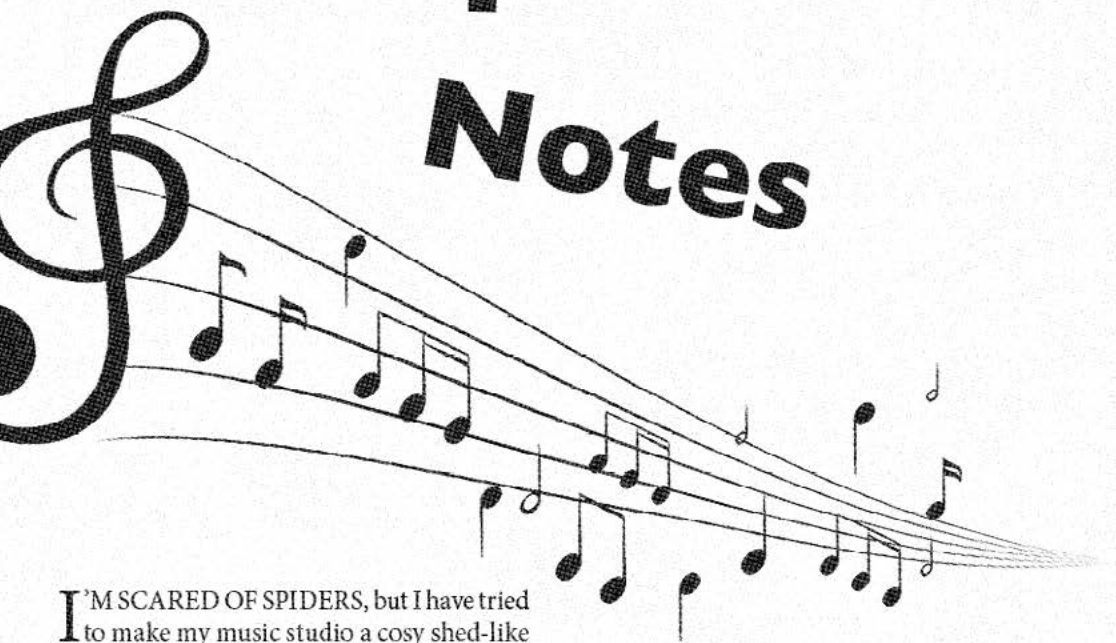
The SETI Institute's first project was to conduct a search for narrow-band radio transmissions that would betray the existence of technically competent beings elsewhere in the galaxy. Today over 100 scientists work at the SETI Institute. They use a specially designed instrument, located in the mountains of California, to survey tens of thousands of red dwarf stars, the most likely candidates as for the location of intelligent life.

The Institute is also developing a low-cost system to search for laser flashes that other societies might use to signal their presence. Early programmes were limited to examining a single pixel in the sky at any given time, but the new system will be able to monitor the entire night sky simultaneously.

If anyone's out there, it may not be long before we spot them.

# Composer's

# Notes



**I'M SCARED OF SPIDERS**, but I have tried to make my music studio a cosy shed-like environment to play with new ideas.

I made the music for this show in two parts. The first part I made during December 2020 lockdown and to be honest, it kept me sane. I ate lots of biscuits and most days, I would write space inspired score and down to earth songs. I was writing songs for Starcrazy, a future production, not yet sure if it would happen. This gave it an extra poignant edge.

Working on this show for the second part in May 2021 and being in the rehearsal room, after such a long break away from being with others, felt fantastic and challenging (have I remembered all my gear?) but did I miss my shed-like environment back home?

Yes, but I am amazed at the new way of making shows. Creative meetings can happen and feel natural via Zoom. And being in the room together is even more special.

I can take my shed with me wherever I go. A place of refuge. A cosy hideaway to build a new invention. Without the spiders.



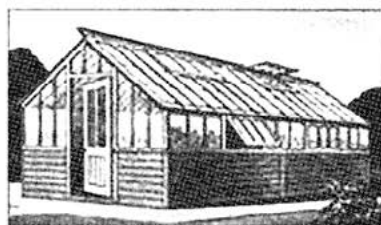
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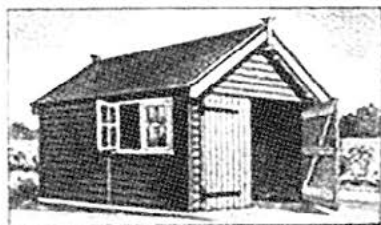
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**1957** A SUBURBAN SHED, A FENCE, and a brick outhouse. Some things design themselves. This time and place is on the edge of memory, mediated by Do it Yourself and Practical Wireless magazines, peopled by men and women who were subject to murderous bombs in recent memory and just about to swing into the sixties, and land on the moon.

There is a contemporary fondness for the look if not the diet of "mid century" and a distaste for suburbia and its perceived constraints. That's a fine tension.

What you see is a slice. Hopefully you imagine there are worlds over the fence, up the garden and into the house; roots growing into the ground and above... limitless space.

The makers of Cornwall from all their sheds salute you Stanley, dreamer of worlds.

Explore more [www.miracletheatre.co.uk/sheds](http://www.miracletheatre.co.uk/sheds)

You can return from the

## LAWN PATROL

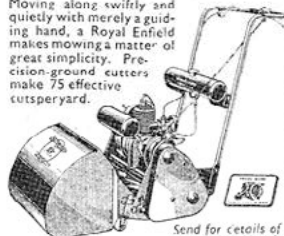
fresh as a daisy



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Cutter

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# Round the World of Wireless



## Broadcast Receiving Licences

THE following statement shows the approximate number of Broadcast Receiving Licences in force at the end of February, 1957, in respect of receiving stations situated within the various Postal Regions of England, Wales, Scotland and Northern Ireland. The numbers include licences issued to blind persons without payment.

Region	Total
London Postal ... ..	1,187,588
Home Counties ... ..	1,184,517
Midland ... ..	912,076
North Eastern ... ..	1,186,758
North Western ... ..	891,391
South Western ... ..	742,957
Wales and Border Counties ... ..	470,366
Total England and Wales ... ..	6,575,653
Scotland ... ..	847,111
Northern Ireland ... ..	194,564
Grand Total ... ..	7,617,328

## Radio and TV Sales for February

RETAILERS' sales of radio and television sets and radiograms in February, while showing a fall compared with January, were above those for February, 1956, according to the monthly survey of the British Radio Equipment Manufacturers' Association.

Television receiver sales during February were 94,000, an increase of 16 per cent. over February, 1956, but a decrease of 21 per cent. compared with January, 1957. Sales of radiograms were 24,000, which was an increase on the previous February of 60 per cent., but a decrease on January of 11 per cent. Radio receiver sales at 78,000 showed an increase of 18 per cent. on February, 1956, but a decrease of 9 per cent. by comparison with January this year.

The proportion of hire purchase and credit sales for both radiograms and television receivers rose from 51 per cent. in January to 52 per cent. in February. For radio receivers the percentage remained unchanged at 34.

## New E.M.I. Company

ELECTRIC AND MUSICAL INDUSTRIES LTD. announce that, in order to co-ordinate all their record activities in this country, a new company has been formed under the title of E.M.I. Records, Ltd., and Mr. C. H.

## By "QUESTOR"

Thomas has been appointed managing director.

The new company will be responsible for the production, manufacture, marketing and distribution in Great Britain and the export to overseas territories of E.M.I. label records: "His Master's Voice," Capitol, Columbia, M.G.M., Parlophone and Regal-Zonophone.

## New Sound System Aids Works Control

A NEW bulkhead microphone control unit, specially designed to meet the requirements of the many factories and machine plants where a high noise level makes the use of normal communication methods unsuitable, is being marketed by Communication Systems, Ltd.

The equipment has widespread applications throughout industry and is likely to prove particularly suitable where mechanical processing has to be closely controlled over a wide area. Steel rolling mills, car body factories and hard-board processing plants are but a few obvious examples.

Retiring Engineer-in-Chief, Cable and Wireless, Ltd., Joins Marconi's

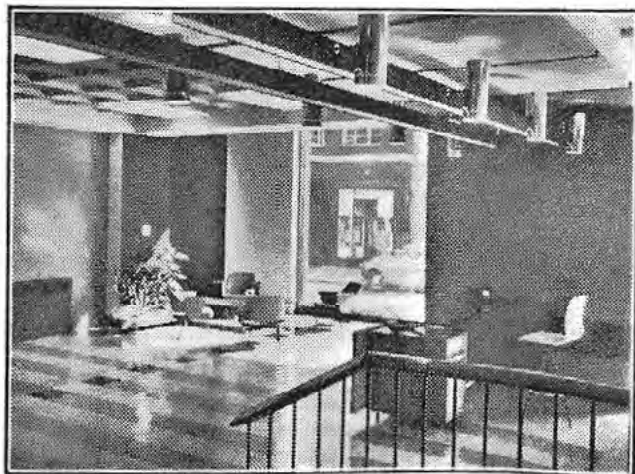
MARCONI'S WIRELESS TELEGRAPH CO., LTD., announce that Mr. J. A. Smale, C.B.E., A.F.C., B.Sc., M.I.E.E., having retired from the post of engineer-in-chief of Cable and Wireless Ltd., became technical consultant in telecom-



Mr. J. A. Smale

munications engineering to Marconi's, with effect from April 1st, 1957.

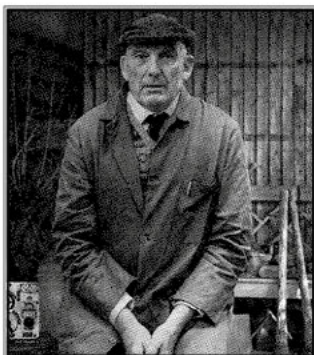
Mr. Smale's association with Marconi's began almost 40 years ago, for he joined the company in 1919. In 1921 he was responsible for the installation in the City of



A 'discussion' corner for clients at the new Mullard Electronics centre off Tottenham Court Road.

# TUNING IN

**T**HIS WEEK WE feature the Bexleyheath Wireless Society, established in 1952. The group meets on the first Monday in the month at the Cricket Club. New members are welcome. Our reporter went to visit the Secretary, Mr Stanley Burton. He found him in his potting shed, buried in a jungle of cables and valves.



**PRACTICAL WIRELESS** How long have you lived in Bexleyheath?

**STANLEY BURTON** I was born here. In the house where I live now, actually.

**PW** When did you first gain an interest in the wireless.

**SB** I was in signals during the war.

**PW** How many members does Bexleyheath Wireless Society have?

**SB** Twelve. If you mean those who have paid their subscriptions.

**PW** Do you recommend electronics as a hobby.

**SB** What people do with their spare time is entirely up to them. Personally I do enjoy building transmitters. But for me it is a means to an end.

**PW** And what is that end, if you don't mind me asking?

**SB** Some members of the club build equipment to chatter with other

members. Though to my mind they could just as well use the telephone. However, others communicate with people in different areas of the country or indeed other parts of the world. Which seems a better use of their time and expense.

**PW** And what about you, Mr Burton?

**SB** I set my sights rather higher than that.

**PW** Could you be more specific?

**SB** No.

Unfortunately at this point Mr Burton had to cut short our interview and would not be drawn on exactly what 'higher use' he had found for his equipment. We wish him well.

If you would like to tell us about your club or a new project you think might interest our readers, do drop us a line.

gan Crucible Company, Limited, whose products range from the carbon brushes used in vacuum cleaners, hair-driers and refrigerators, to the special graphite blocks which are to be used in the Dounreay atomic reactor.

Its installation follows three years' study and evaluation by the Morgan, Crucible investigation team on the particular problems which the computer would be called upon to solve.

It is estimated that the machine will pay for itself in a maximum of five years, even if present plans for its use are not expanded.

## Wireless Telegraphy Regulations

**T**HE following three sets of regulations were laid before Parliament on March 7th, 1957:

Wireless Telegraphy (Control of Interference from Ignition Apparatus) Amendment (No. 1) Regulations, 1957.

Wireless Telegraphy (Control of Interference from Electric Motors) Amendment (No. 1) Regulations, 1957.

Wireless Telegraphy (Control of Interference from Refrigerators) Amendment (No. 1) Regulations, 1957.

They extend to the Channel Islands and the Isle of Man the existing regulations giving the Postmaster-General power to control interference to radio and television reception from ignition systems, electric motors and refrigerators. They came into force on May 1st, 1957.

## Richard Arbib Elected Chairman of R.E.C.M.F.

**R**ICHARD ARBIB, Chairman and managing director of Multicore Solders, Ltd., has been elected chairman of the Radio and Electronic Component Manufacturers' Federation. He entered the radio industry in 1929 in the electrical reproducer department of H.M.V. At the age of 25 he was appointed advertising manager of that company. During the last twenty years he has been largely responsible for the development of Multicore Solders, Ltd.

Mr. Arbib has been a member of the Council of the R.E.C.M.F. for many years and has represented that Federation on the Exhibition Organising and Public Relations Committees of the R.I.C. for more than 10 years. He is also a member of the R.E.C.M.F. Exhibition Committee.

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### EXTRA SPECIAL APPRECIATION

Miracle would like to say an extra special thank you... to the wonderful Emma Gibson for her 10 amazing years as part of our team. The last decade would not have been the same without her creative energy, passionate approach and unique catch phrases! We will miss you, Emma!

### A HUGE 'HIP HIP HOORAY' TO PRODUCTION SPONSORS

Miracle is very proud to be driven by Dales Suzuki this summer. We are also ever grateful to Isles of Scilly Travel for their continued support. Thank you to Starcrazy supporters Spaceport Cornwall.

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*We would love your feedback!*



Please scan here  
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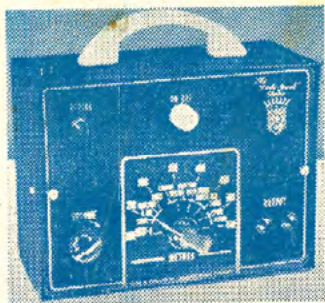
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