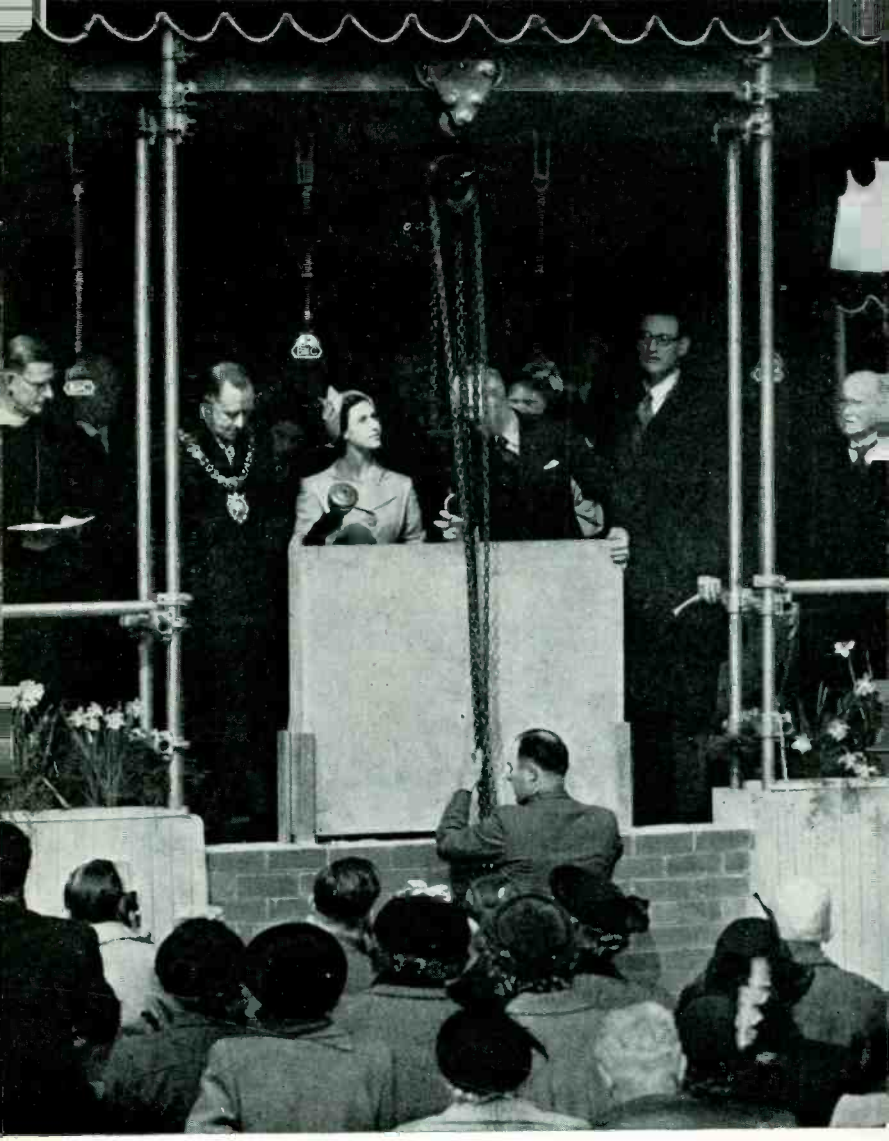
BBC YEAR BOOK 1951



H.R.H. PRINCESS MARGARET laying the foundation stone of the new FREE TRADE HALL in MANCHESTER.

BBC
YEAR BOOK
1951

BRITISH
BROADCASTING CORPORATION
BROADCASTING HOUSE
LONDON, W.1

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CONTENTS

THE WHITE CITY SITE

BY M. T. TUDSBERY, C.B.E., M.I.C.E.
The BBC's Civil Engineer

Soon after the inauguration of the BBC's television service at Alexandra Palace on 2 November 1936, the Corporation's attention was compelled to the question of providing in London permanent accommodation adequate to the requirements of a service whose expansion, exemplified by the keen public interest which transmissions had aroused, was important and urgent.

A search, vigorously pursued during the two years immediately preceding the outbreak of the war for a site *inter alia* convenient of access to artists attending rehearsals and engagements, and of a size adequate for the development of the service, was interrupted in August 1939 when, perforce, the Corporation had to concentrate attention on other matters.

The end of the war faced the BBC with an acute accommodation problem: rapid increase of activities and responsibilities challenged an intention, which had seemed adequate enough before the war, to contain the Corporation's activities in London—sound and television—on and around the island site on which stands Broadcasting House, the extension of which had already commenced, and on another site to be developed wholly for television. Requirements were accordingly reviewed, and a decision was taken that the television site should be large enough to accommodate if possible such of the BBC's central activities as it might be found impracticable to group on and around Broadcasting House island site.

After requirements had been expressed in terms of site-area, search for a site was resumed; but it quickly became clear that few sites exist in London convenient of access by public transport, of a size and shape necessary for the purpose in view. In January 1947 the Corporation learned, however, that it would probably be possible to acquire the whole or a large part of a twenty-five-acre site at Shepherd's Bush, generally known as the White City. Inspection of the site convinced the contributor of this note as to its suitability,

and rescued from oblivion for him memories of a visit he had made there on 14 May 1908, for the opening of the Franco-British Exhibition by the Prince of Wales, later His Majesty King George the Fifth.

The site appealed to the BBC as fulfilling to an extent barely to be expected the requirements of the Corporation's long-term plans. Terms for the purchase of the freehold however had hardly been ascertained and discussed when there came word to Broadcasting House from the London County Council that the entire site was to be acquired by the Council against the demands of housing. Representations by the BBC fell, happily, upon sympathetic ears at County Hall, and on 22 March 1949 the Council, at meeting that day, resolved to offer no objection to the Corporation's purpose and to permit development by the BBC of thirteen acres of the site.

The policy of accommodating in London, in not more than two groups of buildings, all the BBC's headquarter services, both sound and television, had to be re-examined as a result of a maximum of thirteen acres being available (the site was said to be the largest single undeveloped area in London that it would be possible for the BBC to acquire).

The pressing need for alternative accommodation to Alexandra Palace—the lease expires in 1956—combined with other factors decided the Corporation to give priority of development of the site to television, and to proceed as rapidly as conditions would permit with the building of television accommodation on between seven and eight acres, which was estimated to be the limit to which the BBC should plan in the prevailing conditions of restrictions upon capital investment, leaving the remainder unplanned until such time as the first development neared completion. It was felt that long-term needs of the television service would by then be more clear, and that the Corporation would be in a far better position to judge how the remainder of the site should be apportioned as between television and sound.

A sketch plan with rough schedule of floor-areas was prepared departmentally early in July 1949 to indicate the possibilities of the site. By the end of the following Sep-

tember a schedule of requirements, within the scope of the sketch scheme, had been completed.

All now was set for the appointment of an architect. The BBC gave earnest consideration to the principle of competitive selection, but came to the conclusion that as the project was so highly technical in character and would be subject to such constant variation as fresh requirements had to be met, it would be impossible to furnish a sufficiently cut-and-dried programme on which to go to competition. The President of the Royal Institute of British Architects was therefore approached and was invited by the BBC's Governors to suggest the names of half a dozen or so architects likely to satisfy a number of specified conditions. From nominations received from that source, the Corporation's choice fell on Graham Dawbarn, C.B.E., M.A., F.R.I.B.A. (Norman and Dawbarn), who, in November 1949, was appointed for the work in association with the Corporation's Civil Engineer. Announcing the appointment, the BBC also mentioned that Howard Robertson, M.C., A.R.A., F.R.I.B.A., and W. G. Holford, M.A., F.R.I.B.A., had consented to act as architectural advisers to the BBC in connection with the project.

The opportunity now presented was surely a unique and inspiring one. It fired the imagination of the architect and, too, the enthusiasm of his colleague. Early in the present year (1950) there had been evolved an architectural conception which, functional and economical for the half-site development, includes also a sketch lay-out for the future development of the whole site so that the authorities could be reassured as regards the adequacy of both the half-site scheme and its possible later development in the matter of access from the public highway, facilities for fire-fighting and escape, provision for the parking of vehicles within the curtilage of the site, and the effect of the development on light and air of adjoining properties. Each of these points could be properly considered only by examination of the project as a whole.

The Corporation's architectural advisers expressed themselves convinced of the general merits of the sketch lay-out; they considered that it provided a striking archi-

tectural solution to the problems of neighbourhood and site conditions generally, and that, possessing character and originality, it would be a kind of emblem of this new type of structure, fitting the purpose which it would be required to serve.

The design, duly developed (photographs appear facing p. 15), was accepted by the BBC's Board of Governors at their meeting on 30 March 1950 on the understanding that such acceptance would not commit the Corporation to any particular 'user' of the second half of the site and in particular to the planning and use of the accommodation shown to one side of the curvilinear 'tail-piece'.

The planning of the half-site progresses well. It consists of the circular part of the Main Block, with Utility Block, Scenery Block, and Canteen Block radiating from it. Allowing for a considerable part of the parking-space it occupies 7.47 acres of the site. Its main entrance is at the junction of the future 'tail-piece' with the multi-storey 'ring' which encircles the large open court. On the lower floors of the ring it is planned to accommodate artists' reception areas, dressing-rooms, etc., all designed to be quickly accessible to seven studios spaced round the ring, viz.:

2 studios, each 75 × 120 × 45 ft. high
2 studios, each 75 × 120 × 45 ft. high for a length of 80 ft. and 60 ft. high for a length of 40 ft., and
3 studios, each 70 × 50 × 35 ft. high.

A Presentation suite is placed centrally between Studios 1 and 2 (*vide* lay-out) where announcements, captions, telecine, and other inserted items would be televised.

Control- and Apparatus-rooms, etc., are intended to be placed in the lower part of the multi-storey ring, with observation-windows overlooking the studios. Above these, and over other technical areas, would be the administrative and other offices of the service.

The outer periphery of the studios is to be connected by a closed continuous scenery-runway of a size sufficient for the reception at each studio of assembled scenery-units which would be conveyed to the studios upon 'floats' from the Scenery Block shown lying to the south of the Main Block.

The London County Council informed the BBC on 28 June 1950 that they approved in outline the development of the White City Site under the Town and Country Planning Act, 1947. The Royal Fine Art Commission have also given their general approval to the proposal.

The BBC hopes to build and occupy the premises progressively; it is intended, subject to the limitations of capital investment, to have the Scenery Block completed by the end of 1952 so that it may serve the Corporation's temporary studios in Lime Grove—acquired against the possibility of general building progress at the White City being retarded by circumstances beyond the BBC's control—until such time as the multi-storey ring and Studios Nos. 1 and 2, and the Presentation suite and Canteen, which would form a complete 'operations unit', have been built and equipped.

THROUGH THE IRON CURTAIN

BY HUGH CARLETON GREENE

It is very difficult for anyone in this country to make the effort of imagination required to put himself or herself in the place of a listener to the BBC on the other side of the Iron Curtain.

How does it feel to be, let us say, a Rumanian or a Bulgarian who wants to hear what the BBC has to say? You must start by remembering that your daily newspaper, your own home broadcasting service, contains no news at all as it is understood in the West, only an adulterated version of events in which Soviet Russia, as the protector of peace, is constantly menaced by the corrupt and brutal minions of Wall Street. You are not actually forbidden to listen to the BBC or the Voice of America. But if it is ever discovered that you are listening, or, worse still, talking to friends about what you hear, your fate may be imprisonment and torture, even death. Before you turn the knob on your set to a BBC frequency you will lock yourself in, for a knock on the door may just as well be the Secret Police or an informer as a friendly neighbour. If, as is likely, you are only divided from your neighbours by a thin

partition, you will go to bed and put the set under your pillow so that the voice of the West comes to you as a still, small murmur.

This picture, which is true of Poland, Czechoslovakia, and Hungary, of Bulgaria and Rumania, is based on the reports of people who, by devious ways, have escaped to the West and of letters which still occasionally reach us. This letter from a Rumanian boy is typical of many:

> I am nineteen years old. I have grown up in a country and at a time in which man, as such, does not exist any more. . . . Can an outsider realize not in his mind but in his soul, can he feel with his whole being the unending terrifying pressure, the freezing of all initiative, of all ideas, produced by the consciousness of being just one atom of a mass, who matters to society less than a piece of metal in a factory? You are not allowed to think, work, or talk except what you are told and the way you are told . . . and if you resist, you have to expect the measures taken against a machine that does not work as before.

Extracts from this letter were read in the special programme in October 1949 which marked the tenth anniversary of the first BBC broadcast to Rumania. Our correspondent heard this programme, and another letter came from him describing how he had wept for joy and saluting the BBC as 'for ten years the emissary of true ideas and thinking'.

In the satellite states it is possible to have a pretty clear idea of what the BBC audience is like: millions of enemies of Communism whose faith we have to sustain, some Communists whose doubts we can foster. The Soviet Union itself faces the BBC with quite a different problem. To all the states now under Soviet domination the BBC has been broadcasting for ten years or more: it gained a faithful audience during the war, and it has kept it. The BBC broadcasts to Russia began only in March 1946, and an audience had to be created out of nothing. The best evidence that an audience, and a considerable one, was created has been provided by the Soviet authorities themselves, who, in April 1949, suddenly began to jam all BBC and American broadcasts in the Russian language. For a few days our broadcasts were entirely obliterated. Then came our answer in conjunction with the Americans: three half-hour transmissions during the day in which the

BBC and Voice of America programmes are carried simultaneously on some sixty short-wave frequencies. The Russians increased their effort and are now using upward of 300 jamming transmitters. We can claim, however, with some degree of certainty that listeners in most parts of the Soviet Union can hear the BBC or Voice of America if they take the trouble to search through the din of jamming for a clear frequency; and such eager listeners do exist.

In November 1949 Vyshinsky announced at Lake Success that jamming had become necessary to save the Russian people from being angered by the BBC's 'unbridled and slanderous lies'—the first and still the only official Soviet admission that jamming is in progress at all. And what do the Russian listeners think about it? Perhaps we can allow an anonymous listener in Moscow whose letter reached us by devious means to speak for them:

> This jamming is yet another example of the ways of those Soviet 'democrats' who have prevented people from knowing the truth about the life of Europeans and Americans. Your broadcasts, and those of the Voice of America, have been like a breath of fresh air in a prison-like atmosphere.

What is this mysterious BBC poison which at all costs must be prevented from contaminating the minds of Soviet citizens? In the first place it is the news, news in all essentials the same as the nine o'clock Home news, though, of course, selected and edited with an eye to the special interests and background of the listeners in whose language it is presented.

After the news, what? Commentaries on the events of the day, descriptions of life in Britain (often, in the case of our Russian transmissions, broadcast by former members of the Soviet armed forces who have come over to the West and look at what is obvious to an Englishman with fresh and wondering eyes), all that we can learn about what is really happening behind the Iron Curtain, accounts of what liberty really means and of the fundamental qualities of the Western way of life.

It does not sound very exciting perhaps, this BBC output, which Russians must be prevented from hearing by a costly and elaborate jamming operation, which Poles,

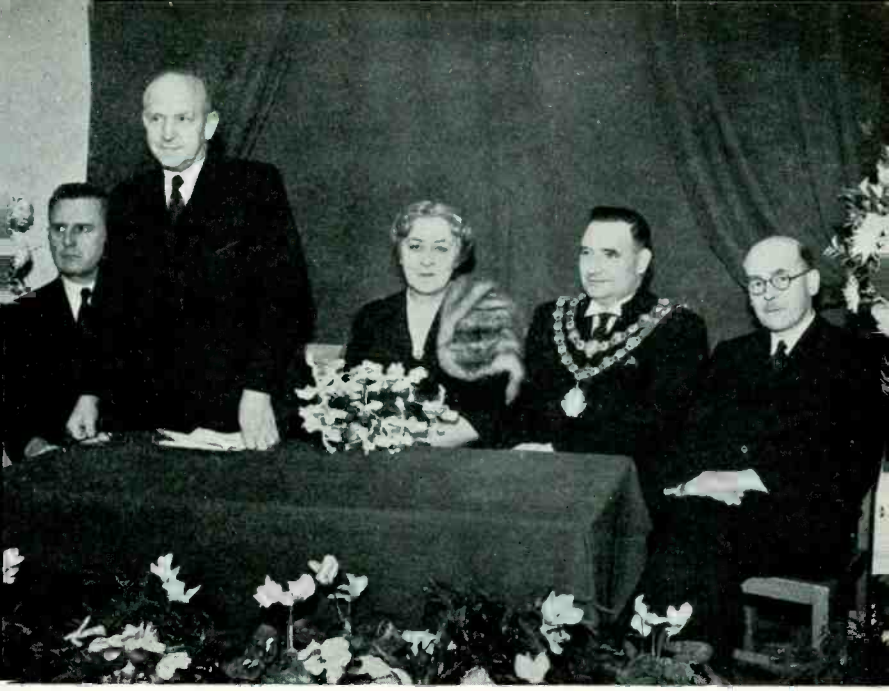
Czechs and Hungarians, Rumanians, Bulgarians, Albanians risk imprisonment and worse to hear.

A Russian private soldier brought up all his life on Soviet lies about conditions of life in the outside world, said to us, describing the effect which the first glimpse even of war-torn Eastern Germany had on him: 'The truth cuts the eyes.' That, from the point of view of the Kremlin, is the dangerous, explosive, revolutionary element in the BBC broadcasts : the truth.

QUIET SUNDAY MORNING

BY BOYD NEEL

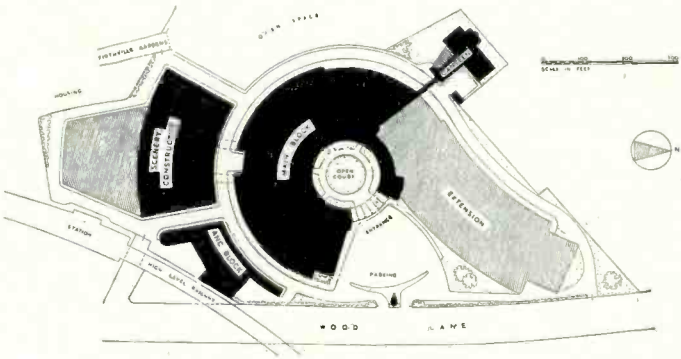
Not many Londoners know how quiet and deserted Langham Place is on a Sunday morning. I know, because I occasionally have the pleasure of taking part in Music Magazine. Broadcasting House appears dead from the outside, but when you reach Studio 3E (as it usually is), you discover feverish activity. The control cubicle is about as large as a fair-sized kitchen cupboard. On a Sunday morning it contains Julian Herbage, Anna Instone, two programme engineers, several people taking part in the programme and, every now and again, Alec Robertson, who dashes in and out from the studio. The loudspeaker is blaring anything from Frescobaldi to Schönberg, and, to the new-comer, the scene is one of utter chaos and confusion. We old-stagers, however, know better. The previous day, we have had a very thorough rehearsal and what is happening now is just the final 'cleaning up' process. This delightful programme, which sounds so informal and easy-going over the air, is the result of very intensive preparation and rehearsal, and one is lost in admiration of the work of this experienced team. The presiding genius and mistress of ceremonies is, of course, Anna Instone, whose name has been a household word, as far as record programmes go, for so many years. She directs operations from the control panel, and I don't think it is any secret that in private life she is Mrs. Herbage. Julian Herbage, who was for twenty years a member of the BBC Music Department, has done much of his editorial work before he



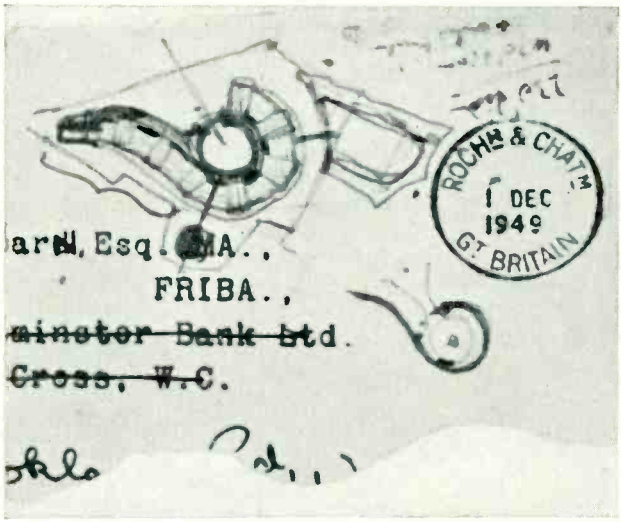
THE POSTMASTER-GENERAL, the Rt. Hon. Wilfred Paling, M.P., speaking at the opening of the SUTTON COLDFIELD TELEVISION TRANSMITTER, December 1949.

WHITE CITY

BROADCASTING CORPORATION WHITE CITY SITE PROPOSED TELEVISION DEVELOPMENT



Plan of the projected Radio Centre at WHITE CITY, London.
The new Television Headquarters is in black.



How it all began. The architect Mr. Dawbarn doodled on an envelope while talking to the BBC's Civil Engineer.

reaches the studio. He concentrates on the general balance of the programme, vetting the scripts, and helping the speakers with their music selections. Alec Robertson sits in the studio facing the contributors and with his inimitable easy charm introduces each one to listeners, very often adding amusing asides at the last minute. Those of us who know this are always on guard, but I have seen an unwary neophyte utterly convulsed with laughter just as he was supposed to be starting his talk. This then is our set-up.

What does the magazine do? Well, the name fits it perfectly. It is a series of spoken 'articles' on all aspects of music. Looking back over its last few years, one is astonished at the variety of subjects dealt with, and also at the unexpected names one encounters among the contributors. It is a policy of the magazine to concentrate more on the type of speaker who does not make a practice of giving such talks. Several well-known musicians, on being approached to give a talk in Music Magazine, have almost fainted with fright at the very thought of it, but, on being persuaded by the editors to 'have a go', have turned out to be excellent broadcasters on their own particular subject. And that is where the magazine has proved to be of such value to us musicians. We have been able to hear a great number of people talking about their own particular speciality, and we have learnt a lot through it. Talks like Maggie Teyte's on Debussy's songs, Yehudi Menuhin's on Béla Bartók, Elisabeth Schumann's on the Art of the Lied, Edmund Rubbra's on his latest symphony, and those by Robert Nicholls on 'Music and Poetry', Sydney Harrison's 'Illustrated Musical Dictionary', not to mention the great number of record reviews, special composer issues, and fascinating features, such as an interview with Schubert's great-niece, have all been of the greatest value both to professional musicians and to the ordinary listener. For the amateur performer there have been series such as 'Modern Piano Duets for All', and talks on how to train a choral society or village choir.

And that brings me to another point with regard to the atmosphere of this magazine. There is no fusty pedantry here. All the talks can be understood and enjoyed by any

height of musical brow, but, on the other hand, and even more important, there is never a suspicion of 'talking down'. A delightful part of the programme is the musical illustration with which all the talks are liberally adorned. Sometimes records are used, at others, the speaker himself, if an accomplished executive artist, often plays or sings his own illustrations, making the whole thing very informal. I think it is the general informality of this programme which is its chief charm and the clue to its continued success. It is now in its seventh year and shows every sign of increasing popularity with listeners; so much so in fact that an 'Overseas' edition has now begun. This is not merely an abridged version of the Home Service one, but a distinct programme of its own, with items thought to be of more interest to listeners abroad.

It has always been kept in mind that one of the prime functions of this magazine must be to discuss the main musical works which are being played concurrently in the Home Service, thus giving the listener hints as to how to get the most enjoyment out of the more important broadcasts of the week. Being a Sunday feature, it is able to survey the week's music in advance, and you will usually find that at least one of the items has a direct bearing on something to be heard in a few days' time. Another valuable thing it does is to remind us of important anniversaries which we might easily forget otherwise, and also to take an occasional glimpse into the past in the form of a musical 'Scrapbook'. These retrospective articles are of the greatest use in giving us an insight into musical developments of recent years.

Primarily, and above all, the editors have never forgotten that the chief object of the magazine is to *entertain* the widest possible public. No listener can ever feel that he is 'out of it' if he switches on quite by chance, and maybe has little interest in music otherwise, because he will be entertained whatever his tastes. That the magazine should have gone on so long is an indication of its affectionate hold on the listening public, and I hope that we shall hear the familiar strains of the lovely Schubert song *To Music*, used to introduce it every week, for a long long time to come.

SIR MALCOLM SARGENT
appointed
CHIEF CONDUCTOR
on the retirement of
Sir Adrian Boult.

HERBERT MURRILL
appointed
HEAD OF MUSIC
in succession to
Sir Steuart Wilson.

EASTER IN EUROPE: Young singers from the Displaced Persons secondary school at Neustadt, in national costume.
(*See article on page* 41.)

LONDON FORUM: A discussion between (*left to right*) HAROLD NICOLSON, R. H. S. CROSSMAN, CHRISTOPHER MAYHEW, and ROBERT BOOTHBY.
(*See article on page* 24.)

T.V. IN THE ENGLISHMAN'S CASTLE

BY IVOR BROWN

In my boyhood there was an advertisement headed 'Keep your Boys at Home'. No force, naturally, but a voluntary and blissful incarceration was suggested. It was to be made easy and delectable by a dining-room table which could be turned into a billiard-table. Thus was erring and straying to be checked and temptation to be killed by kindness.

Television, no doubt, is doing some of the same protective work and stabilizing the Englishman's home. But on my observation, there is no reason to think that boys and girls, once become viewers, will never more be quitters. The sharp pleasure of banging the door on one's parents and going out to sniff the air of liberty, even if that air be only the frowst of the cinema, is surely perennial. The joy, too, of being on the spot and seeing the athletic or the theatrical hero in person has survived newsreels and unseen radio, and will survive television.

Every new invention creates new panics. Won't this one be the ruin of all else? It never is. If the Wembley Stadium could hold half a million instead of 100,000, half a million would go to see the Cup Final, even though it was viewable on the television screens everywhere. Does anybody believe that Lord's and Wimbledon can be emptied by the camera-man?

People who view do not stop going to the play or the films or the cricket-match. Television, at two pounds a year for a whole household and friends, does not, after the initial purchase, seriously affect the family's allotment of cash to fun and games. And every family has its escapists for whom a good 'look' is by no means synonymous with a good time. After all, there is no glory or excitement in telling your friends that you saw it all at home.

In the suburb, television is plainly acting as a cohesive force. That friends and neighbours should come in to watch makes for better audiences, especially in the case of comedy and light shows. The constant terror and handicap of the comedian in television is the lack of audience response. The film-makers can try a new picture on the

dog and then time the laughs and cut to suit. But the television clowns face the camera with no such aid. In the same way a lonely viewer has no aid of 'present laughter'. The more viewers, in the case of comedy, the more they enjoy themselves, since to be a member of an audience is a quite different thing from sitting aloof at a dress-rehearsal, as all theatre people know. So my guess is that, as television expands, it will begin to collect little domestic group-audiences. So it will become a new factor in social life.

Another point is that it makes for concentration. It is possible, I suppose, to be a 'background viewer', i.e. to drink tea and talk or play cards while the T.V. programme is being given. But while it is very easy and lamentably common to treat broadcasting as a back-of-the-room noise or an ever-flowing tap of song and jest, and so to give it a quarter of one's attention, it is far harder to be thus discourteous to television. The latter is making a strong appeal to two senses at once; it also demands that you occupy a certain position. It can be turned off, but not 'shrugged off' with the turn of a careless shoulder. It demands real attention, and may thus have a considerable effect on listener's habits.

That I welcome, because we have now gone so very far in the direction of doing ten things at once, and none of them thoroughly. The Victorians were great concentrators: even if it was only smoking tobacco they made a job of it. Young bucks disappeared to recline in 'cigar divans' and so practise their rite with absolute devotion. Father retired to the smoking-room and actually put on the appropriate uniform, the smoking-jacket, and even the smoking-cap. So equipped, he really smoked. The pipe was an undertaking.

The coming of the light cigarette ended that. People began to smoke through meals and later to listen-in through meals: now they play cards, smoke, drink, eat sweets, and chatter through a BBC concert. They need radio in a motor car; they carry the set to a picnic lest the nightingales should lack the competition of Miss Vera Lynn. Ours is the all-at-once age, in which radio is often regarded as no more than a supply of aural cigarettes.

The television set, being less portable and altogether more imposing and consequential, cannot be treated in quite that care-free way. It provides a solid performance: it demands a real attendance. This it may not always receive, but it is certainly offering a useful challenge to the casual ways of myriads of in-and-out listeners.

Another point. Being anchored to one spot, at least so far, it should make for a valuable fixity in the home. If there is one room for viewers, then the viewers can really view, while the readers and the quietists at least know that T.V. cannot pursue them all round the house, which a couple of 'portables' can do to a maddening extent.

The BBC has long advocated, I think, selective listening to sound radio, instead of the vague tap-running which is destructive of taste and leaves its public wayward instead of critical. Television curtails the tap, and makes of viewing a planned and intelligent exercise. What I most dread for the future is television available at all hours and the coming of the portable plug-in T.V. set which will destroy the isolation and concentration now imposed by the fixing of the mechanism in one corner of the room.

So far television has been a welcome force in the home, because, involving substantial investment, it has to be taken as an important service and not as a casual amenity and a trivial free-for-all. It invites people to sit down properly and to attend. It is, therefore, the enemy of that domestic pest, the creature who can settle to nothing, turns on this tune and turns over that page: in short, the fidget.

UNATTENDED TRANSMITTERS AND 'ELECTRONIC LISTENERS'

BY R. T. B. WYNN, C.B.E.
Deputy Chief Engineer of the BBC

Those responsible for the administration of broadcasting organizations must find their own compromise between the cost of the technical system and the acceptable standard of professional engineering practice, for money saved on the technical services is money available for the production

of programmes. Sound-broadcasting technique has been developing steadily during the last thirty years, and as a result many expensive provisions of the past are no longer warranted by their present cost. Reliability of transmitting stations, for example, could at one time be obtained only by the provision of an immense amount of spares and the employment of a large maintenance and operational staff. The overall reliability of the BBC transmitting system during the past year has worked out at a breakdown percentage of 0.02 per cent, i.e. each transmitter has been off the air on account of a breakdown for an average of less than one second in every hour's transmission. This figure is probably already as good as is economically practicable, for to improve it would considerably increase capital and running costs and might well make it impossible financially to provide other improvements in the technical services.

The present-day capital cost of a specimen modern high-power (150 kW) transmitting station may be broken down somewhat as shown in the following table:

TABLE I

	PER CENT
Site, building, access roads, and services	26
Mast, aerial, feeders, and earthing system	28
Transmitter, immediate supplies, wiring, and installations	33
First-issue valves and spares	4·5
Mains-input equipment	5·5
Programme-input equipment, radio-frequency drives, and sundries	3
	100

The running costs of such a station on present-day prices are given in Table II.

TABLE II

Running costs, transmission schedule 0600 to 2400 hours.	PER CENT
Power	41
Valve Replacements	14
Plant Maintenance	4
Staff Costs	31
Rates and Taxes	5
Building and Mast Maintenance, and miscellaneous small charges	5
	100

A transmitting station of this type would provide excellent reception of one programme to an average radius of, say, sixty miles depending, of course, on the 'goodness' of the wavelength which could be allotted to it. If two or three programmes could be transmitted from the same station, then that number of separate transmitters would have to be installed, but as they could use the same building and amenities, the transmitting cost for each programme would be reduced.

The running-costs table makes it immediately clear that power costs and staff costs are the two major items of expenditure. There are, therefore, two ways in which the running costs of transmitters can best be kept down; one is by a continual drive for electrical improvements such as higher efficiency and longer lives for consumable components such as valves; the other is to design the layout of the transmitting stations so that they require less staff (though probably of a higher professional standard) to maintain and operate them.

At low-power stations, i.e. transmitters radiating powers of 10 kW or less, staff costs become an increasingly high percentage of the total running costs, for, in general, almost as many staff are required to maintain and operate a low-power station as are needed by a modern high-power station of 100 kW or over, though the other running costs of the small stations are lower. In an endeavour to reduce running costs, therefore, efforts were initially concentrated on converting the present and projected chain of low-power attended transmitters to unattended working.

One of the most manpower-consuming factors in the operation of transmitters is the need to have a man continuously listening to the output of the transmitter to ensure that the correct programme is being radiated and that the quality is kept at a high technical standard. The staff previously required for this tedious watch are now gradually being replaced by an automatic 'electronic listener' which is capable of comparing the technical quality and strength of the programme at any point in the transmission system with the same programme at any other point in the network. Thus it is possible by the use of these robot monitors to know in London that the programme

which is being sent to, say, the Scottish transmitting station at Westerglen, is being radiated by Westerglen at quality indistinguishable from that which it had when it left London. Should interference or distortion occur after the programme has left London, an alarm can be made to sound in London, at Westerglen, or anywhere else in the system which will draw the attention of staff, who are performing other duties, to the fact that a fault has come on. An alarm will also be given if the wrong programme arrives at the transmitter due, for example, to faulty switching en route. These automatic monitors do not tire, and can be adjusted so that they can detect a fault which would be audible only to the most critical operator.

The cost of a robot monitor is less than the annual salary of a trained operator and, what is more important, the robot monitors free operators from the tedious and exacting duty of quality checking.

By the use of these monitors in conjunction with other remote-control apparatus, it is possible to convert a number of small attended stations to unattended working without materially depreciating either the technical quality of the transmissions or increasing the breakdown time. Should a fault occur at an unattended station, an alarm rings and the staff at the nearest attended station switch in stand-by plant which is instantly available. The nearest attended station then sends an engineer to clear the fault, but this action need not be immediate as the service is carried by the reserve plant in the meanwhile.

Initially it was necessary to provide two sets of transmitting plant so that one complete chain of equipment would be available should a fault occur at any point in the other. This, however, was costly from the capital point of view, because it meant that a complete chain of equipment had to be provided for use only in an emergency. More recently, attention has been paid to the fact that it is now possible to run two or more transmitters continuously in parallel, all putting power into the same aerial system. For example, a 10-kW transmitter could consist of two transmitters of 5 kW each working in parallel, or five of 2 kW, or ten of 1 kW.

The advantage of having a number of transmitters working in parallel is, of course, that if any one of the transmitters fails, the probability is that the others will not have failed and that the power being radiated by the station will merely have been decreased by an amount equal to the power of one unit. Thus if there are ten units in a multi-unit transmitter, the failure of one unit represents only a decrease of one-tenth in the radiated power.

The initial cost of a multi-unit transmitter is higher than a single transmitter of the same total output power, but less than the cost of providing two separate transmitters each capable of the full power output of the station.

So far this change to unattended working has been restricted to the low-power stations, but recently it has been possible to simplify the design of high-power stations by the introduction of air-cooled valves and by the elimination of a large amount of rotating machinery such as pumps, motor generators, etc. A 200-kW station can today be designed so that it is in fact two 100-kW stations working in parallel, or four 50-kW stations working in parallel. It is thus possible to attempt an extension of the unattended working experiment to the high-power stations, and this experiment is first going to be tried at a new high-power station now under construction. This is on a transmitting site which has to be manned on a shift basis for other purposes, but no shift staff will be employed to operate the transmitter.

The attempt which is being made to exploit modern designs as a means of manpower saving is not going to result in any of the BBC's present staff becoming redundant. All the men saved from the tedious duties of quality monitoring, transmitter minding, etc., will be wanted for developments elsewhere in the service, such as the new television studios and transmitting stations. The BBC is somewhat jealous of the low breakdown percentage which it has attained and is, therefore, approaching this revolutionary change to unattended working cautiously, and with a strict watch on the breakdown record of stations where material staff reductions have been made.

These remarks do not, of course, refer to television, where

...is still high due to the

Many of the broad topics which are of such general interest that they embrace all our listeners—like the effects of the hardening ideological conflict on the western tradition of liberalism, the place of the arts in a democracy or the limits within which a free society can be planned—lend themselves admirably to this informal treatment in which three or four good talkers and clear thinkers gather around the microphone to exchange their views. The effect is that of a symposium (referring, of course, to the atmosphere of an after-dinner conversation and not to the drink which is provided for those who want it to help create the right mood). Discussions in which Bertrand Russell, Lord Samuel, and Harold Nicolson try to see our own age as it will look to the historian 200 years from now, or Compton Mackenzie and James Stephens consider the nature of literary creation, or Vernon Bartlett with a group of those who know Eastern Europe at first hand reflect on the strength of nationalistic movements in the Satellite States behind the Iron Curtain give the listener abroad the opinions, in the form of good conversation, of those best qualified to speak on these matters. In shuffling together such eminent personalities the final product is not always predictable—even amongst the most Olympian figures minor jealousies and feuds can give an unexpected twist to the development of the arguments; but it is just this unknown factor in the human alchemy of discussion programmes which makes them so fascinating to produce—and to hear.

Whenever the subject is one of international interest, like aid to South-east Asia or integration of Western Europe, it has to be remembered that the discussion will be heard by audiences in the very countries being considered. Any show of ignorance about the conditions there would be offensive to such listeners—even minor errors like referring to a people by a name they no longer wish to go by would be resented in the same way that individuals dislike being given the wrong titles or having their own names mispronounced. The best insurance against such mistakes is to let representatives from abroad speak for their compatriots on international problems. Contributors from the Com-

monwealth, the United States, and other countries are brought to the microphone in 'London Forum', so that occasionally the studio looks like the meeting place of some United Nations commission.

MAGIC FOR CHILDREN

BY NOEL STREATFEILD

I have been brooding on programmes for children. It is, of course, the arrival, in a big way, of television which has caused me to brood. It is new magic, and new magics need careful usage. Television is already losing its rarity quality, and before it is part of every home it seems a right moment to look round and try and assess what has been achieved for children over the air.

I ask myself what sort of audience of children does the wireless draw? First of all, I would suppose a rough-and-tumble audience. The child that turns on the wireless when it has nothing better to do. Secondly, the selective listeners who know exactly what is on the programme, what hour the programme starts, and settle down in good time with ears at the alert. And finally, the occasional listeners, children whose parents do not care for the wireless except on special occasions, in fact consider it a sign of an intelligent home that it is seldom turned on. Obviously there are various rings round these groups which merge into each other, but I should say that the centres are roughly where I have put them. I should think that those who shape BBC programmes can pride themselves that their efforts for the children have vastly increased the second group, drawing new blood from the first group. My experience is that not much new blood seeps out of the third group. Each Christmas I spot children whose ears have not been trained to listen. They are taken to their first theatre, and Heaven help anyone who sits near them; a constant natter goes on: 'Mummy, what is Peter Pan looking for in that drawer?' 'Ssh dear, his shadow, he's just said so.' 'Mummy, what's he want a shadow for?' 'Ssh dear, you'll see.' 'But Mummy . . .' I long to get up and say

'Serve you right, Mummy. What's the matter with your wireless set?'

Skipping the programmes to which children listen regularly which are not intended primarily for them, and the educational programmes, which presumably though they enjoy them (as well they may), they listen to by order, their fare is the new Lionel Gamlin holiday programmes, the under fives 'listen with mother', and the Children's Hour.

I should say our children's fifty-five minutes from five o'clock daily is an almost unmitigated success. It pays the children the compliment of considering them intelligent beings. Nearly always the programme is worthy of intelligent listeners, and never plays for a larger audience by pandering to the listener's possible lower tastes. Its aim is increasingly high, and where it hits trees instead of stars the fault I should guess is not with Derek McCulloch and his team, but that the material of the class they want does not always exist. Even then what bricks they make when they have to use frail straws, propping them up with first-class artists and fine music. And how often they provide giant straws which need no propping. I should guess the Children's Hour has done wonders in persuading children to prefer what is worth listening to. How rewarding it must be when for a Request Week they select such good listening as 'Nature Parliament' and leave out some serial which was supposed to be very popular, but of which the producer for all his or her efforts has never been proud. The children's requests must be worth studying, for they are their own unharried choice; there are no barkers to persuade them that an especial treat is in the offing. I have never seen an article in the *Radio Times* on 'Worzel Gummidge in his very own programme. Listen every Tuesday', or heard in the week's advance publicity a conversation piece between Larry the Lamb and Dennis the Dachshund.

I always imagine that right on top of the BBC is a closely guarded room where the 'theys' who plan our listening live. I think the 'theys' can be well and truly proud of their Children's Hour. It is a real part of the nation's life. It has built its fine reputation slowly and carefully over the years and has improved as it built. It has brought

the children of much of the world to meet each other. It has carried into homes which often have no books in them many of the children's classics. It has filled a million homes with friends who have become so well known over the air that they are part of the family circle. As well, and this I am sure the children do not know, their Children's Hour has steadily suggested a good way of living and fine codes of behaviour.

The Children's Hour makes me think of children listening round the fireside, or rushing in from playing in the garden or road, and I feel supper will follow and bed. Lionel Gamlin's programmes have a 'Let's-be-doing-something', 'for-goodness-sake-don't-let's-waste-a-minute' atmosphere, and it is when this spirit predominates and the programme is farthest from the Children's Hour that I like it best. To me holiday tours with visits to training-ships, flower farms, or a railway testing shed are proper listening for holiday mornings, and part of the 'something-different', which is the most important ingredients of a holiday. One of the not good things about children's programmes has always seemed to me to be the age group at which they are aimed. The Children's Hour takes place when it cannot often be heard by older children, who are usually at home-work or organized games at that time. It is planned cleverly so that as a rule it will appeal to older children should it chance that they can listen, but on the whole the younger children who are free at that time must be the regular listeners. The Gamlin holiday programmes, except for an odd few minutes of nursery rhymes, seem intended for older children, even for that hopelessly neglected group, the older teen-agers.

It has always been a mystery to me, though probably understood by the august and erudite 'they' at the top of the BBC, why there are no regular programmes for boys and girls who are soon leaving school. Maybe I am just plain stupid, but it seems peculiar when I think how anxious we are there should be no round pegs leaving school and going into square holes, that we do nothing but urge teen-agers into youth groups and clubs, and that we heap our young on top of one another in boarding school, that we

don't lay aside an hour each evening for them in their very own programme, with not only good orchestras and stars to tempt them to listen, but also a first-class serial of the Mrs. Dale type about people of their own ages, with their own problems. As well, every evening someone to talk amusingly and interestingly about jobs, what's going, and the type of person who ought to do well in the different careers. But mind you, the speaker would have to be good. However, such a programme does not exist, but in the holidays Lionel Gamlin does help to fill the gap.

Much as we may neglect the teen-ager, nobody can say we are not fair to the toddlers. Little children's programmes must be hard to plan, because what little children like best they presumably can't always have. Every one of us from the first moment that we took in words at all liked to hear the same story or song every day repeated in exactly the same manner, with the same inflections, and every one of us must remember raising our voices in wrath when a new singer or reader dared to give a slightly different interpretation. When first 'Listening with Mother' appeared, I was charmed with the programme because it had remembered this childhood taste. Obviously no programme can be repeated every day, but as much as possible does keep reoccurring. I was grieved, in so good a programme, to hear that voice despised by all self-respecting babies being used; the 'isn't-it-fun-to-be-a-teeny-wee' voice; however, that fault is improving, and though the announcing is still a mite let's-walk-on-tip-toe, the singer, singing *Baa Baa Black Sheep* or whatever it is, sounds healthily like anybody's uncle singing in his bath. Fancy voices apart, the programme seems well chosen, and I learn from fathers and mothers of the very small that it is immensely popular.

Now you see why I have been brooding about children's programmes and television. 'They', as I have said, seem to have done a wonderful job of listening for children, filling the air with that rare quality 'taste'. Then wouldn't you have thought, because I would, the idea was to make children listen? But evidently no. After all, except for tiny children in the early afternoons and the Lionel Gamlin programmes in the holidays there is only one children's

listening time, five to five fifty-five daily. Then why, when a new magic is given to children, choose its showing at a time which was already filled with magic? Was the idea that no good parents would allow their children two children's hours in one day? If that was the reason it was misguided; truly listening and looking should be limited, but the world abounds in parents who will let their children stare at all and any television programme, and if anyone doubts this let them take warning by learning what is happening in America. Or was five o'clock considered the only time for children? If so I fail to see why. That popular little star Muffin is only intended for small children, and he and his friends and acquaintances would have the same enthralled audiences at four o'clock, and that would mean that the children's newsreels, and such enchantments as being shown how to make Easter eggs, or seeing London with Richard Dimbleby, could be given to the older children, in fact to the despised older teen-agers. This might well encourage not only family viewing but also family discussion afterwards; a consummation devoutly to be wished when you are putting yet another means before children of watching other people doing things instead of doing them themselves.

It is probable from the good children's television programmes already to be seen, that television will play an immense part in children's lives, probably already there are brilliant plans. But I do hope the 'theys' will think before it is too late; that they will not squander the old magic to show children the new one. Maybe they will remember those awful words which have set children frowning since the dawn of time, 'You can't have both, dear, it is one or the other. You must choose which'.

NATURE BROADCASTING

BY DESMOND HAWKINS

Programmes about wild life and natural history in general have always had a place in British broadcasting, even if it were sometimes a modest one. Looking back over twenty

years I remember with pleasure the talks of Cecil Parker, followed later by a little series which Brian Vesey-FitzGerald wittily entitled 'Field Fare'; and there were the occasional features in which Stephen Potter collaborated with James Fisher, and, of course, the first recordings of British birds which Ludwig Koch made with E. M. Nicholson. No doubt there are others which should be added, but at any rate those broadcasts stand out in my mind as landmarks. From them are descended the various nature series which have been a feature of post-war broadcasting.

This type of programme has always had its faithful audience, for we are traditionally a nation of nature-lovers, but it could reasonably be said that until recent years nature broadcasts have tended to come and go without quite achieving a permanent status in the main pattern of British radio. They were an occasional ingredient only. In 1945, however, when peacetime broadcasting was resumed, it was obvious that popular interest in the subject had greatly increased. A glance at any bookshop or bookstall was proof enough of that. The growing demand, which was being catered for in books and magazines, was likely to be felt in radio too, and when I joined the West Region as a producer in that year I was delighted to be given the task of devising a new series of natural history programmes.

The plan was to break away from the older method of the short discursive solo talk and develop a dialogue-feature with three or four speakers concentrating on a single subject. The emphasis was to be on science rather than sentiment, and our speakers were to be specialists who could give the weight of authority to what they said. Put like that, I still think it sounds a bit forbidding, but the informal discussion technique has served—I hope—to keep the weightiest experts tolerably lively and easy on the ear.

And so, heralded by the call of the curlew, 'The Naturalist' went on the air for a limited run of six monthly broadcasts, starting in January 1946. The trial period was successful, and after six years the curlew continues without a break to call to its many listeners at home and overseas. It was originally recorded—needless to say—by Ludwig Koch, who has done more perhaps than anyone else to bring to millions

DESMOND HAWKINS
author of the article on
'Nature Broadcasting' (*p.* 31)
at the production panel.

Domestic animals play their part in country broadcasts.

JULIA LANG, one of the story-tellers in the 'Listen with Mother' series for children under five. (*See article on page* 27.)

NURSERY SING-SONG in the Manchester Studio.

of listeners an interest and pleasure in our native wild life. I had met him first in the early days of 'Country Magazine' to which he occasionally contributed a sound-picture, but the scope of 'Country Magazine' was too wide to make full use of his great collection of recordings. 'The Naturalist' gave us a bigger opportunity, but the public response was so striking that it was quickly evident that the sounds of birds needed yet another programme and one entirely to themselves. In January 1947, therefore, 'Bird Song of the Month' was launched, and in 1948 the BBC acquired the whole of Dr. Koch's collection of recordings. It is a matter for pride that this country now has an unrivalled permanent library of the sounds of wild life, available both for programme uses and for research and study by recognized scientific bodies. Moreover, there is a growing co-operation with other countries interested in nature recordings, and useful exchanges are made in cases where a particular species is very rare or not in song in one country but is easily recorded in another. One 'Bird Song of the Month' programme, for example, presented a BBC recording made by Dr. Koch in Shetland, a second disc made in Sweden, and a third made by Cornell University and flown over from the United States specially for the broadcast.

This use of recordings is the special contribution of broadcasting to the study of natural history, and many listeners have commented on their acquisition by radio of a form of knowledge that books cannot possibly give. The hatching of a greenshank, the singing of seals, the howl of a vixen, the booming of the bittern, the family conversation of swans at night, the angry piping of queen bees, and the gentle murmurs of eider duck—these are some of the many fascinating sounds that listeners have heard in the last four or five years. And with the sounds, expert commentaries by distinguished naturalists.

And as popular interest has become more discriminating and better informed, it has been possible to advance to a more technical and less obviously romantic treatment of bird songs and animal calls and the noises of insects. One of the outstanding nature broadcasts of 1950 was a discussion by James Fisher and Ludwig Koch on the possibility

that the songs of some species show constant geographical variations which can be classified as 'dialects'. Their discussion was illustrated with recordings of chaffinches made at various points in Great Britain and Western Europe. Similarly, in a 'Naturalist' broadcast, Edward Woods put forward theories of bee behaviour based on his study of sounds made by bees, and demonstrated them with a group of recordings which must have astonished anyone who assumed that bees have a meagre vocabulary.

Today, nature programmes are a normal and regular part of the BBC's output. In addition to those I have mentioned, others have been developed to suit the needs of particular services or to explore other aspects of the subject—'Nature Parliament' in Children's Hour, Midland Region's 'Country-lover', 'Country Questions' produced by my colleague in West Region, Bill Coysh, 'Sounds of the Countryside' in the Overseas Service, and Light Programme 'Out of Doors', which ran for two years until last June. The success of these regular series supplemented with numerous single broadcasts has made possible a settled and systematic treatment of a fascinating sphere of human knowledge and enquiry. Maybe it would take an entire broadcasting service to do justice to all the material, but at least British radio is helping to maintain a community of interest between the advanced research specialist and the great body of amateur enthusiasts who would only claim to be 'keen on nature' and who want to learn more about our native wild life.

THE IMPACT OF TELEVISION IN THE MIDLANDS

BY W. VAUGHAN REYNOLDS,
Editor of The Birmingham Post

Seventeenth December nineteen-forty-nine—the opening of the television station at Sutton Coldfield—was a date eagerly awaited in the Midlands. Not only was this a major step in the provision of a national television service; the new transmitter also brought to a large public the opportunity to share in a home entertainment hitherto reserved for more favoured areas within comfortable viewing range of London.

The impact of television in the Midlands must, then, be considered in two equally important aspects. Here was what, for most Midlanders, was still a novelty, placed within range of a public already wide, potentially vast. Here was also a new region embracing viewers at first content to be passive receivers of the programmes offered, but certain, within a short time, to become vocal in criticism. A region so conscious of its own individuality could not be expected long to remain inarticulate. Inevitably, the time would come when the Midlands felt the need for regional contributions to the national programmes, for regional influence upon their design as well as their content.

I stress the element of novelty in the impact television has made upon Midland viewers because it is an element underrated by critics more sophisticated than I can profess to be. For all the great advances of modern science, a service of home entertainment which brings to the fireside images of living events remains for most people a miracle. There was, then, in the earliest days of the Sutton Coldfield transmitter, an appreciative response to programmes *because they were being seen at all* and a correspondingly indulgent attitude towards technical faults and even breakdowns.

The number of television licence-holders in the Midlands grows steadily and, as receivers fall in price, the present stream will become a flood. In the great majority of homes, for some time to come, the television set will be welcomed as a novelty.

That time, however, is obviously limited. In the early twenties sound broadcasting was a miracle. It took several years to gain acceptance as a necessary service and longer to become commonplace. Television is unlikely to enjoy the indulgence of an uncritical public for anything like the same period—precisely because sound broadcasting has shown what can be expected of radio technicians and engineers and of the BBC policy-makers and programme directors. The public has sensed the potentialities of television more quickly than it visualized either the practical uses or the cultural value of broadcasting in sound. There are already signs in the Midlands that the indulgent mood of the earliest days of television is passing.

On the day the Sutton Coldfield station was opened, the future of the BBC Television Service was outlined by the Postmaster-General and Lord Simon of Wythenshawe. The plan for a seventy per cent 'national coverage' at the end of three years, and eighty per cent at the end of five, was accepted as reasonable. The statement that regional television broadcasting was regarded as impracticable during the five years of the plan was, however, received with dismay and, as its implications became more widely realized, misgiving deepened.

This brings us to the point at which the purely regional reaction to television must be considered. An essential point in the constructive criticism offered by Midland viewers is that the programmes are not national in the fullest sense. Experience with sound broadcasting showed that achievement of a truly national service had to wait until a healthy regionalism ensured that all parts of the country contributed not only to the content, but also to the shaping, of programmes.

The Midlands, in spite of—perhaps, because of—their proximity to London, have regional consciousness intensely developed. Moreover, Midland listeners know their region has made deeply significant contributions to the tradition the BBC has established so firmly in so short a time. They remember that influences which have done much to shape broadcasting policy and features now accepted as essential to the building of balanced programmes had their origin in the Midlands. It is not surprising, therefore, that many regard a plan which postpones the development of regional television at least until 1954 not merely as a local grievance but as a national disaster.

This criticism expresses no short-sighted 'regional patriotism'. It is a recognition that 'canned' programmes must be inadequate to meet demands which will vary more and more as coverage of the country extends farther and farther. In brief, regional tastes differ as widely as the contribution each region has to make to national culture. As the Midland Home Service expresses values essentially national yet peculiarly regional, so Midland television could, and eventually must, offer *for*, as well as *to*, the region's

viewers a service reflecting their part in the nation's affairs.

Hence the demand, given public expression as early as six weeks after the Sutton Coldfield transmitter opened, for television broadcasts of regional events. Hence the importance rightly attached by Midland viewers to the first 'outside TV broadcast' in the region, on 8 May 1950. The subject, a boxing match, while commanding a very large 'audience', may, perhaps, not have appealed to all viewers. But the fact of the programme, rather than its content, was the important thing. Midland viewers realize as keenly as the Midland regional authorities of the BBC that at England's heart lies a virtually unlimited field of television material.

In agriculture, industry, and horticulture; in drama, music, and painting; in views, news, and entertainment; the Midlands have achievements to record and a culture to disseminate which cannot stand excluded from any national broadcasting service. In television broadcasting as in sound, they see not only a medium of amusement, but also a channel of information and a means of enlightenment. What television can mean to the Midlands must, for a time, depend on the recommendations of committees and the decisions of policy-makers; but public opinion will eventually have a decisive influence. And public opinion will not be satisfied until 'Midland region' is as great a reality in television as it is a progressive influence in sound broadcasting.

THE ODD JOBS OF THE RESEARCH ENGINEERS

BY E. C. DREWE, M.I.E.E.

It is fashionable nowdays to look for glamour and excitement even in the most humdrum of occupations. BBC research, though seldom humdrum, can certainly provide unusual activities. To name a few at random—flying a barrage balloon in the middle of the Yorkshire moors, in the Lowlands of Scotland, and in fierce gales in the West Country—

climbing the seven hundred and fifty feet of the Sutton Coldfield television aerial, there to carry out precise electrical measurements—installing apparatus in a helicopter to hover above a transmitter to find out what is really happening up there, and thus check the theoretical predictions—solving the problem of how to produce a television picture in colour. These are only a small number of the things which the research engineers are called upon to do, in carrying out their role of being the Engineering Division's technical consultants. Their scope is far wider than that of the four engineers who, in 1925, formed the Research and Development Section in two rooms at Savoy Hill.

The present staff of the department numbers just under 200, with its laboratories and workshops in the new headquarters at Kingswood Warren, Surrey. The building is an old manor house constructed early in Queen Victoria's reign, and in its time has been the home of many famous families. At the beginning of the twentieth century it became first a girls' school, then a hotel, and during World War II, the offices of a well-known insurance company. Inevitably, perhaps, the building is too small for the Research Department, and the construction of special accommodation is now in progress in the grounds. When this is completed it will be possible to move the remainder of the staff from the old premises in south London.

Broadly speaking, the work divides itself under three headings: ELECTRO-ACOUSTICS, RADIO, TELEVISION.

ELECTRO-ACOUSTICS is the term applied to all that goes on between, say, the reading of the news, or the playing of an orchestral item, and its actual transmission from the broadcasting station. One of the most important problems is the design of good studios, and this is a job which is as difficult to do as it is to describe a good studio. It is no use just saying that in a good studio everything sounds right, the research engineer must know what it is that makes it sound right, and with this knowledge plan the acoustics of new studios in advance.

New programme activities mean new microphones—special ones for cricket matches so that the noise of the

ball against the bat can be clearly heard—inconspicuous ones for commentators at the ring-side—and the time may come when the demand arises for invisible microphones for television! The development of microphones calls for special techniques, and even for special buildings with a thickness of several feet of glass wool upon the walls, floor, and ceiling. Similar apparatus and accommodation is needed for the testing of loudspeakers in which more modern methods have replaced the comparatively simple tests which, a few years ago, sufficed to separate the good from the mediocre. It is not possible in this short review to tell how new materials for the acoustic treatment of studios are measured to assess their performance, how more satisfactory means for measuring the volume of the programme are being developed, how a group of engineers is studying just exactly what goes on inside a magnetic recording tape, nor of many other subjects which go to form electro-acoustics.

RADIO as a heading covers all the problems which arise in getting the programme from the transmitting station to the listener's aerial, or, in other words, in the provision of a satisfactory service. The recipe is simply that of putting a first-class transmitting aerial on a first-class site. But first-class sites have first to be found and have to be most carefully chosen, not only with respect to the location of the population to be served, but also with respect to other transmitters carrying the same service for other districts. Such planning has to be done on a national scale, and it is the job of Research Department to do it, first on paper with the aid of mathematics, geological maps, relief maps, population maps, and maps of the areas to be avoided, such as the proposed National Parks! After this comes the actual testing of the sites, which is done by a mobile transmitter and an aerial, which, in the case of television station sites, is suspended 750 feet in the air from the barrage balloon mentioned in the first paragraph. Hundreds of measurements are taken at each site and at all ranges within the service area, and no site is accepted until it has undergone this practical test.

The aerials which are used nowadays at transmitting

stations are of a highly specialized nature, designed to give the maximum possible signal where it is wanted and to throw as little as possible wastefully upwards to come down again embarrassingly just where it is unwelcome. A modern television aerial, for example, is a complicated affair whose erection was not just a flash of genius occurring to the story-book inventor. Instead, it is the result of months or even years of patient slogging, involving first a mathematical approach, then the construction of scale models which are subjected to rigorous tests, the further development of the more hopeful ideas, followed in due course by the full-scale building of the essential elements, and finally the construction of the actual aerial itself on the top of its lofty supporting mast. It is then that the research engineer may find himself many hundreds of feet above the ground, satisfying himself that the results of his work are all that he has intended them to be.

While the design of an aerial may be regarded as spectacular, there also falls under the heading of radio much that is equally important, but to the layman far from interesting. For example, the ever-increasing attention which has to be paid to the possibility of broadcasting on ultra-short wavelengths to escape the congestion of the medium waveband has meant that a careful study has had to be made of the behaviour of such transmissions. The vagaries of medium waves, such as fading after nightfall and their relative freedom from motor-car interference, are well known. Little was known about these very short wavelengths as regards their suitability for broadcasting, and the collection of data has been a long-term job. The Research Department has maintained a number of receiving posts, automatically operated, to record the reception of special transmissions. These posts are frequently visited, when the recordings are taken away for inspection and analysis, so that by now a great deal of knowledge has been obtained: routine work, perhaps, but new information, and who can tell the use to which it may be put?

TELEVISION—the latest job for research. There is much work to be done under this heading. The techniques employed are new, and improvements to them are con-

tinually being produced in this country and elsewhere. It is the duty of Research Department to keep abreast of all developments, to examine the likely looking ones, and where practicable, to recommend their adoption for the improvement of the national 405-line service. Equipment has been constructed for the production of television pictures of improved definition through the use of a greater number of lines, and a study is being made of the magnitude of the problem of transmitting and receiving them. The statement so often heard that 'the more lines the better the picture' has been shown to be a myth in practice, if television is to remain within the reach of all. Should it ever be necessary to consider a change from the present standards, Research Department will be in a position to advise and to demonstrate.

Work is going on upon such diverse subjects as picture flicker, the best screen size, and common wavelength working of television transmitters. Developments in colour television now taking place abroad are being studied, and experience has been obtained by constructing laboratory equipment to produce a coloured picture.

EASTER IN EUROPE

BY MICHAEL BARSLEY

'Easter in Europe', the story and music of Holy Week and Easter Day in the traditional European setting, was first broadcast two years ago. The intention was to include choirs, great and small, representing as many denominations as possible. After the programme, a factory-worker wrote, 'Thank heavens some things can rise above national ideologies'.

It is true that, in 1948, we received a telegram from Radio Centre, Moscow, refusing our request for Russian Orthodox music, but St. Stephen's Cathedral, Budapest, joined in the celebration, and part of Dvořák's *Stabat Mater* was recorded direct from Prague a week after the Communist coup. But for the 1950 'Easter in Europe' fifteen choirs

from eight countries took part, and we in the studio felt, as the last Alleluia died away, that the original intention had been justified once more. I remember how all through the day there had been, not the usual anxiety and hurly-burly of production, but a feeling almost of serenity which I think everyone present would recall.

'Easter in Europe' engendered its own atmosphere with its blend of Gospel, verse, and song, a diverse pattern in which the haunting, personal, and sometimes surprising verse-sequence of W. R. Rodgers contrasted with the simplicity of the Authorized Version, the gorgeous sonority of the choirs in St. John Lateran and St. Paul's Cathedral, the heartfelt voices of D.P. schoolchildren from Germany, singing hymns in English, the village choir in Oxfordshire, the radio choir in Copenhagen, the carillon in Belgium. It was an attempt to represent, as we said at the time, a sense of spiritual unity in a Europe full of material anxiety and yet to do this without unduly pointing the moral, to build up the programme without making it either a musical lecture or a religious service.

The fact that every choir taking part was specially recorded for 'Easter in Europe' made, I think, the essential difference. It is not possible to say how many of the hundreds of choristers taking part heard the broadcast, but they were in our minds as we set to work to edit the recordings. Several of the choirs had been contacted personally. Peggy Miller of European Service paid a brief visit to Rome for discussions with Papal authorities, and it was interesting to find that Vatican Radio (already presented with television) was employing tape-recorders and not discs! Miss Miller was received in private audience by His Holiness the Pope. W. R. Rodgers went north to Kinlochleven, in the heart of the Scottish Highlands, where with Robin Richardson he arranged for some of the psalms to be sung in Gaelic. We were anxious for something to represent the scene where the disciples 'sang an hymn' before they went out into the Mount of Olives, and the voices of these farmers and fishermen had just the quality we sought.

But my own most vivid memory of 'Easter in Europe'

remains the choir of the D.P. Secondary School at Neustadt, in Schleswig-Holstein. This choir had been recommended by Edwin Robertson, Assistant Head of Religious Broadcasting, and had, in fact, broadcast only a few months before. But as luck would have it, I arrived in Neustadt during the last week of the school's existence. At first no one wanted to sing: the future of these Lithuanian, Latvian, and Polish children was in the balance. But the cheerfulness of the Manchester commandant and the zest of the Polish music master prevailed. The children possessed only one old copy of *Hymns Ancient and Modern* among them, so the words of *There is a Green Hill* and other hymns were written out on the blackboard. There in the school gymnasium, standing on benches, with the windows looking out over the sparkling Baltic Sea towards the Soviet Zone, they sang for hours—their own native carols as well as the English hymns. And the fact that they were being recorded by direct line to Broadcasting House, London, aroused enormous enthusiasm.

This was just one example of the spirit which seemed to make this programme so worth while, from the point of view of those closely connected with it during the eight or nine weeks of its preparation. The architectural diversity of the background is a remarkable picture in itself: the Russian Cathedral in Paris, with its 'onion' domes, tucked away behind the Champs Élysées; the glories of the Royal Chapel, St. George's, Windsor; Kidlington church with its graceful spire, the Franciscan church in Salzburg, again with a spire, of green bronze, shining above the grey stone tower; St. John Lateran with its mighty echo, St. Catherine's, Utrecht, with its elaborate façade; the carillon set in the lofty tower of St. Rombout at Malines. When we came to the Iron Curtain we repeated the recording made by the Kuhn Choir in Prague in 1948: it was, after all, about the last recording to come from there to London, and I well remember the thanks of the Czech engineer over the telephone, and his good wishes to us.

It was impossible to 'signpost' every choir and every item of music in such a sequence, but a large number of listeners inquired about two works sung by the Nederlands

Kamerkoor, the Dutch chamber choir of Amsterdam. These two, the *Alleluia* of Clemens, a fourteenth-century work, and the *Sanctus* of Poulenc, were suggested by Felix de Nobel, the choir's young and gifted conductor. As for the sequence of poetry, let us hope it will soon be published. There is space only to quote the last two verses.

> Lord of the open tomb
> Resume and reimburse our silent wood
> This Easter Day, elaborate its saps,
> Bid the bare tree burst into bloom, and fill
> With leaf the hungry gaps
> And in its head set the heart's singing birds.
>
> And you who sang this day
> With such divine consent
> Employing every play
> Of art and instrument
> May all your ways be blessed and all your
> hearts content
> In Him.

'A GREAT DEAL OF THINGS INTO POOR LIVES'

BY J. GRENFELL WILLIAMS, *Head of the BBC Colonial Service*

'My brother have bought a new model wireless. I and my brother have learnt a great deal of things that we never knew before during our poor life, through it.' That is a letter from an African to the Broadcasting Station at Lusaka, Northern Rhodesia. That kind of letter is a compensation for all the work, all the disappointments of colonial broadcasting. At times it seems that the broadcasts are going out into an unresponsive void, and then, suddenly, a letter like that comes and one realizes not only that someone has been listening, but also that the impact of broadcasting on people who have known nothing but their immediate surroundings and the hard struggle for mere existence, is something fresh and exciting, something which we who accept with indifference the wonders of our civilization, very rarely feel.

Here is an extract from another letter, this time from the father of a family. 'Indeed, for the first time I brought my

set home my family thought I had only wasted money on something like a toy. I told them to wait and see what the little thing was going to bring into our house. I read the instructions and understood them, put the set up as instructed, and switched to Lusaka. At 12.0 noon there was nothing coming through. My little daughter began looking at me with a rather unusual eye and I too was getting a bit vexed. Then my wife suggested I try other stations; fortunate enough we were cheered up with music and my daughter's anxiety was getting down. I switched off until 5 p.m. when we got on to Lusaka. Here we got just to the conclusive satisfaction; everything went on very nicely as my children kept on jumping in our small house . . . we can listen to the music from Lusaka, Lorenzo Marques, BBC, etc. . . .'

Could any response be more satisfying than that? It represents, in essence, the achievement of one of the main objectives of all broadcasting to the colonies to bring 'a great deal of things' into the 'little houses' and the 'poor lives'.

A very significant experiment is going on in Northern Rhodesia, and these letters are only two among hundreds which have poured into Lusaka since the experiment began. Briefly, a British firm has designed, and is now selling in the territory, a battery receiving-set which is within the reach of Africans who, until now, had never dreamed of possessing a radio set. And the Lusaka station is broadcasting to them in as many of their own languages as possible.

How is the BBC concerned in an experiment like that? The BBC has nothing directly to do with the Lusaka station, but, on the invitation of the Northern Rhodesia Government, BBC engineers gave advice on the design and equipment of the station, examined and tested the new receiver and made suggestions, and, finally, released an engineer to the Northern Rhodesia Broadcasting Service. The BBC is also ready to give such advice as may be needed on technical and programme matters, and it supplies, without charge, recorded transcriptions of programmes selected by Northern Rhodesia.

This service to Northern Rhodesia is typical of the relationship between the BBC and colonial broadcasting organizations. It is, in fact, a kind of unwritten partnership from which all the partners benefit enormously. The BBC can and does offer to the colonies the skill and experience of its engineers and its programme staff, and it offers its programmes, whether broadcast direct over the air, or sent on records; while the members of its staff who go out to the colonies bring back to the BBC a new and wider experience.

In many colonies there is a growing awareness of the need to develop their own broadcasting services. Some, until recently, have been content with very small organizations which could broadcast a few local programmes, and, for the rest, rebroadcast the BBC's Overseas Services for most of the day and the evening. This is a thoroughly unsatisfactory position, not only because the Overseas Services are designed to serve several audiences according to the best listening times all over the world, and therefore must repeat programmes from time to time, but also because some of the programmes must be completely unintelligible to the many listeners who do not understand English, or appreciate Western music. I remember standing in the square of an African town while some thousands of women were making a demonstration against their chief. They were singing the 'Death Songs', and, mingling with their wild chanting, from loudspeakers in the square, 'Up the Pole' was blaring. Broadcasting at that moment was, in fact, only another, and an unintelligible, noise added to the noises of Africa.

But things are changing rapidly. That colony, and others, are at the point of developing their own broadcasting systems on the widest possible scale. The BBC has made surveys and drafted plans, and will be ready when the time comes to help in every possible way.

There are great difficulties to be overcome, difficulties of organization, difficulties caused by the lack of trained staff and by the many languages which may have to be used in a single colony, difficulties of finance. But I have no doubt that the partnership will solve these problems.

And quite soon the organizers of broadcasting in the colonies will be getting letters from people who have never heard a broadcast before, like those Africans in Northern Rhodesia. They may even have a listener as enthusiastic as the man I came across in the Bahamas. He was in charge of a community-receiver, and, in the damp weather, he would take his wife's only blanket to wrap round the set. That is the sort of listener any broadcaster would take to his heart.

STEVENSON'S CENTENARY: A BROADCASTING TREASURE ISLAND

BY ROBERT DUNNETT

A few days after I had read *Kidnapped* for the first time my great uncle—the one who believed that the presentation clock on the mantelpiece in the best room in his country manse was made of pure gold—revealed to me that he had been at Edinburgh University with Robert Louis Stevenson. I had been taught to look up to this uncle, who was a clever man with a lot of gold and silver medals, prize books, and certificates from his studies at the university, and it was a blow when to my enthusiastic questioning his determined old face became more set than usual. The thought of Stevenson saddened him. The books of Stevenson were not for serious reading: my enthusiasm was out of place. Why, he remembered one summer day as he was walking along the promenade at Portobello seeing Stevenson lying on the sands with a couple of girls 'when', said my uncle, looking quite fierce above his dog collar, 'he ought to have been at his classes, instead of dreaming of *Treasure Island* and things like that'. For him, as for many people then and now, Stevenson was the writer of light romances and little poems for children. He saw nothing more to him than that. He thought of all Stevenson's work as a sort of escape like his own fancy about the clock. But if Stevenson had been aware of the prim young divinity student regarding him and his fair companions over the sea-rail he would certainly have understood his disapproving glance. He sprang from the sort of people my great-uncle came from with a thoroughly Scottish

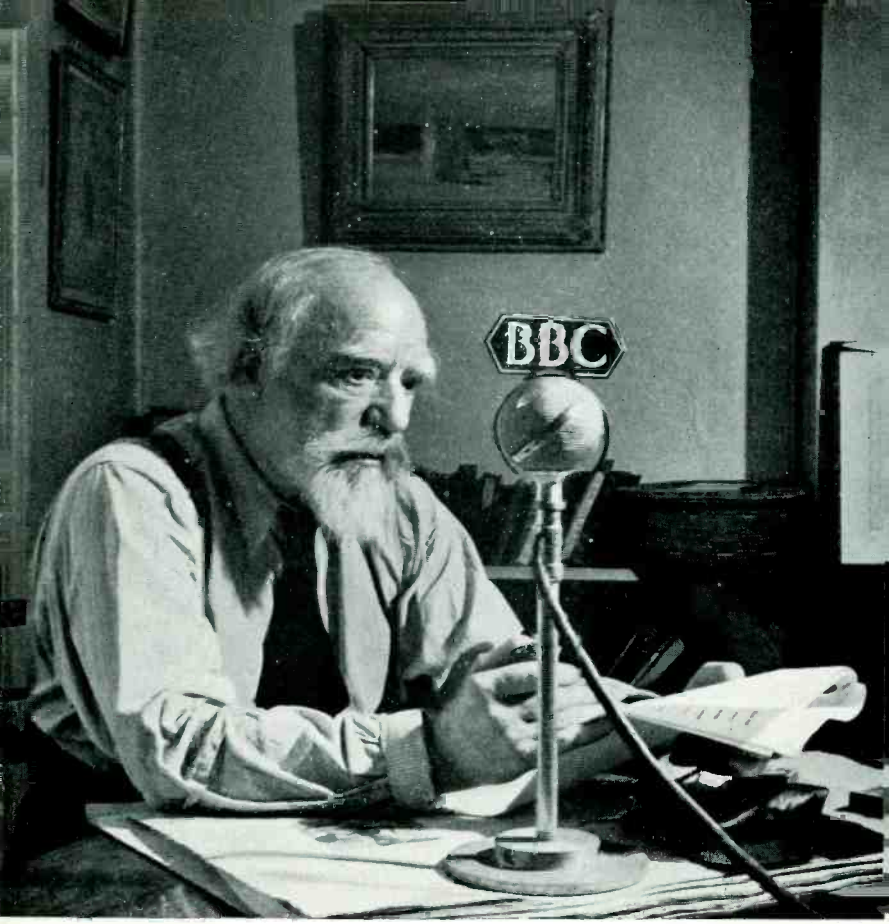
inheritance of a wildness of fancy that it seemed best should be controlled or diverted into channels that at least appeared safe, like retaining a belief in a gold clock as a harmless luxury of the soul. But the writing of romances was a more serious surrender, and one that in the opinion of many could have been avoided by a more sedulous attention to formal studies. There are Scots, however, who have really no choice in the matter, and Stevenson was one of them. He projected himself early, and not always blithely, into much more dangerous studies, without any possibilities of escape. The light shadows cast by the profiles of Long John Silver and the devil in *Alan Breck*, in *Treasure Island*, and *Kidnapped* darkened into the 'hanging face' of 'My Lord' of Hermiston seen in full. 'Fate played his game artfully' not only with 'the poor pair of children' whose unfinished romance last occupied his pen, but with the hand that held it too. 'The generations were prepared, the pangs were made ready', and the curtain rose, but the play was never finished. Hanging in the air, the last words that Stevenson wrote show him, his eyes set, with far greater bravery than that possessed by any of his earlier romantic characters, upon a world where human conversation suddenly reveals an 'unprovoked, a wilful convulsion of brute nature. . . .'

That is what can happen to people who refuse to console themselves with golden time-pieces.

On one of his last journeys, on board ship between Sydney and his South Sea Island home, Stevenson made friends with the Scottish missionary, Chalmers, and wrote to his mother to remark how different his life might have been had he met such a man earlier. The same deep nostalgia carried to him across the world the sound of church bells ringing in the keen sea wind of Edinburgh, but the course of his life, physical and spiritual, was inexorably set towards new landfalls. His vision always 'intent on my own race and place' gained in penetration and power because distance and unrest never allowed him the compromises lesser men among his own people could make more easily for themselves within their own country and community. Scott (not lesser but different) had to see the heather every

TELEVISING THE BOAT RACE: One of the twelve shore cameras. The floating camera can be seen on the *Consuta*, third launch from the left.

PETER DIMMOCK has a final check with engineers and commentators at Putney before the start.



AUGUSTUS JOHN, R.A., broadcasting to overseas listeners.

year or die. Stevenson, expressing the same sentiment on many occasions, nevertheless grew in exile. His mind never ceased to travel. Only sudden and early death brought the sailor reluctantly home from the sea.

A number of broadcasts in the radio celebration of the centenary of his birth drew attention to those aspects of his personality which I have touched on. There may be a danger these days that we tend to over-complicate our analyses of character, but it is a fact that the longer Stevenson's reputation endures the more fascinating become the complexities of his personality, and broadcasting is peculiarly equipped to convey such subtleties. The skilful radio-writer and producer can take great leaps through time and space. They can also explore and present different facets of character in a way not possible in any other medium, helped, one must admit, by a readier 'suspension of disbelief' than an audience accords to workers in other forms of communication. You can, after all, do practically anything with a man who is prepared to sit in an arm-chair by a good fire and listen—so long as you keep him awake. John Keir Cross in his biographical feature conveyed the substance of Stevenson as our age sees him by the device of making him take practically no part in the proceedings. It was talk about Stevenson that did the trick, and yet his presence, revealed at the end, was felt throughout, much indeed as the reader is conscious of it in all Stevenson's work. It is one of the qualities of radio that it is pervasive, and Stevenson is pervasive. People who know little enough about him and less of his works get the impression from hearing his name of a romantic figure.

Our celebrations, we hope, deepened their appreciation of the nature of his romanticism, of what lay behind it and what it cost him. That was an essential duty of remembrance. Radio probably can never create for any given audience a whole character. Every listener forms his own pictures from the sounds he hears, and all vary, but if this is a limitation in the medium, in Stevenson's case it is a rewarding one. No such spirit could ever be imprisoned, set in a mould, and defined for ever. Its riches exist to be explored, and in broadcasting they can be widely explored.

We did not exhaust the possibilities with the centenary programmes, but we tried to show something of their range. There were the straightforward presentations as serials of *The Master of Ballantrae* and *Treasure Island*. There was an adaptation of *Weir of Hermiston*. Television found exciting possibilities in *Jekyll and Hyde*. For the schools, *Kidnapped* and the short stories of *The Pavilion on the Links* and *Tod Lapraik* revealed the clear style, strong characterization, and narrative skill that make Stevenson, all metaphysical complications set aside, such a sound, enduring craftsman.

Spreading these programmes over several weeks before 13 November, the actual anniversary of his birth, should have achieved a certain cumulative effect. That was the purpose, anyway. Perhaps one can hope that in presenting these works and impressions of the man, broadcasting has been able, not to add to what was already there for the discovering, but to give a rather fuller interpretation to those creations which could not be conveyed so widely in any other way, and to send people with heightened interest exploring Stevenson more fully for themselves.

And even beyond Stevenson himself. The centenary of a great man is more than an opportunity to examine his work. In the case of Stevenson much of Scotland and the Scottish character is reflected, and that is one of the perennial functions of broadcasting in Scotland. By implication when we think of famous men in their time we think of what they have contributed to our day and age. It is the basic reason why we wish to celebrate their survival in our memory. Stevenson's novels satisfied an appetite for romantic fiction in the Scot about his own people, which is still very much alive today, as the popularity of broadcast Sunday serials of Scottish classics shows. The modern school of Scottish poets—far more numerous and articulate than in his time—like to speak of the language they use as 'Lallans' and acknowledge that Stevenson first applied it in that way. The interest in the world outside Scotland, less the urge to travel with a donkey in the Cevennes than the acute appreciation of other people and places which

broadcasting seeks to cultivate by regular talks from countries overseas, was an essential part of Stevenson's character as it is of his own people today.

TELEVISION OUT AND ABOUT

BY PETER DIMMOCK,
Assistant Head of BBC Outside Broadcasts, Television

The job of the Television Outside Broadcasting Department —colloquially termed O.B.—is to bring to viewers' screens as many as possible of the interesting public and sporting events at the very moment that they are taking place. It is this spontaneity which makes a television outside broadcast more exciting that either a studio item or film. The sense of immediacy and intense realism of an outside broadcast cannot fail to grip viewers, who, although perhaps many hundreds of miles from the event itself, may find themselves clutching the side of their arm-chairs with almost as much excitement as if they were actually present.

In television, outside broadcasts present very much greater problems than their counterparts in sound broadcasting. There is the added complexity of matching both sound and picture, together with the difficulty of securing advantageous camera and commentary positions. The routing of microphone and camera cables, the lens turrets and focal lengths to be used, the availability of sound and vision lines or radio-link facilities, an adequate electric-power supply, parking space for the mobile unit; these are just some of the many problems which have to be resolved before a television broadcast can be achieved. The equipment for a sound outside broadcast often weighs only about 2 cwt., whereas a television O.B. requires sixty times as much gear, weighing anything up to 350 cwt. All this equipment has to be mobile, and a fleet of vans has been specially designed for the purpose. Each unit consists of a control van, a transmitter, and a mobile fire-escape aerial which can be raised hydraulically to a height of ninety feet. In addition, there is a mobile generator which, in the

absence of a mains electricity supply, can be used to operate the equipment and any lighting that may be necessary.

The nerve centre of the unit is the control van, from which emanate the cables to the three television cameras. These may be operating in positions up to several hundred yards away from the control van and, in the same way as the commentators, the camera operators wear headphones through which they receive instructions during the programme from the O.B. producer. Also in this van work sound and vision engineers controlling the complicated technical equipment. It is on the ability of these highly specialized engineers to produce crisp and clear pictures of good quality that much of the success of an O.B. depends.

The O.B. producer works from a control desk, and stretched across in front of him are three pre-view screens showing the pictures being obtained by each camera at the moment. Each camera is fitted with a lens turret so that the angles of view can be altered as required. Generally speaking there are three types of picture; the wide angle, which shows, say, the whole of a cricket field; the mid-shot, which will just show the two wickets together with the batsmen and any fielders close in; then there is the close-up, which would just show the batsman in the same way as if a pair of high-powered binoculars had been focused on him. A new development in camera lenses is zoom, by which the angle of view can be altered as one watches the screen. This will eventually be developed to a ratio of at least fifteen to one. It will then be possible to show, say, the whole of a football pitch one moment followed by a gradual zoom in until one particular player alone fills the screen.

An important part of an O.B. is the commentary, and here television technique is very different from sound radio, where the commentator must describe in detail everything that takes place. In television he should speak only when he can add to the picture, and even then his comments should be crisp, informative, and avoid all reference to the obvious. This is a trap into which even the most experienced television commentator can fall. I shall always remember one day at Lord's when during the tele-

vision outside broadcast the producer cautioned the commentator on his headphones for describing the obvious. Not to be outdone, the commentator replied quickly over the air '. . . For the benefit of the short-sighted. . .!'

THE BIGGEST OF ALL O.Bs

BY T. H. BRIDGEWATER,
Engineer-in-Charge, Television Outside Broadcasts

The televising of the 1950 Boat Race was the biggest outside broadcast ever attempted in this country, and probably anywhere in the world. Practically all the BBC's resources in equipment and personnel were mobilized, some of the apparatus being specially built for the occasion and delivered only just in time; this included microwave radio-transmission links, 200 Mc/s portable radio links, a V.H.F. two-way communication link, and a mobile central control room.

In several respects this 1950 transmission was an enlargement of that of 1949. A camera was mounted in the bows of a launch following the boats as before, but the number of cameras along the shore was increased to twelve. In addition, a central control point was provided for controlling the switching of pictures from point to point as the race progressed. Another innovation this year was the provision of a separate television sound commentary, given from the launch carrying the camera.

One of the main problems was the conveying of both pictures and commentary from the launch to the shore and thence into the main network. This was finally resolved by the use of the 200 Mc/s short-range radio links already referred to. The pictures transmitted from the launch were picked up in succession by four receivers located at roughly one-mile intervals along the course. These receiving points coincided with camera sites so that it became possible to select the picture either from the launch or the shore as desired and to pass the output on to the central control point. The sound commentary was transmitted direct from the launch to the central control point by means of the

V.H.F. communication link. Cameras were grouped at the following points along the course: Putney Boat House, Harrods Depository, Metropolitan Water Board (Hammersmith), Church Wharf (Chiswick), The Queen's Head (Mortlake), and Chiswick Bridge. Between one and three cameras were used at each of these points, the total number including the launch being thirteen.

At each point the cameras were spread out as advantageously as possible within the limits of the thousand feet of cable permitted between a camera and the mobile control room. For example, at Putney two cameras were mounted on the balcony of the Midland Bank Rowing Club and the third was roving the towpath taking close-ups of the crews entering the water and interviewing celebrities. At Harrods one camera was over seventy feet up on the roof of the building, the other low down on the wharf near the foot of the building. At Chiswick Bridge one camera was mounted on the centre of the bridge facing downstream for a head-on view of the finish of the race, while a second camera was waiting on the foreshore opposite the Polytechnic Boat House, 100 yards or so above the bridge, to catch the crews coming ashore.

The central control point was located, with the co-operation of the Post Office, at the Riverside Telephone Exchange, Hammersmith, whence a special television cable runs via Broadcasting House to Alexandra Palace. To this cable was connected the output of the mobile central control room parked beside the Exchange. Suitable cables were not in all cases available for linking the six camera points to this central control position; microwave radio links were, therefore, used from the Chiswick Bridge and Queen's Head points.

Despite the extreme complexity of the operation, this programme went through comparatively smoothly with only one or two minor anxieties, but its success was possible only by long hours of work and enthusiasm on the part of the staff. These numbered over 100, including members of other Engineering Departments, who teamed up with the Television Outside Broadcast Department for this special occasion.

PLANNING A TELEVISION STUDIO

BY H. W. BAKER,
Assistant Superintendent Engineer, Television

How does a television studio come into being? Clearly it is either designed and built up from ground level or developed from an existing large room or hall. In both cases planning is essential, and before planning can be started the user's full requirements must be known. The building of a new studio is undoubtedly the more satisfactory alternative, as all the requirements which are peculiar to television can be catered for in the structural design. This course is being adopted by the BBC in their decision to build a permanent Television Studio Centre at the White City.

The two studios at Alexandra Palace were developed in 1936 from two ballrooms. Until recently they were the only sources of television studio programmes, and they have given good service both before and since the war. Their size, each 70 × 30 × 27 feet high, is completely inadequate for large-scale productions, a fact which was realized even before the war. During the past three years five different areas in the Alexandra Palace and five buildings elsewhere have been planned for television studios, but they have not been developed, mainly because the spacial requirements could not be met without extensive building alterations involving considerable time and expense.

The acquisition by the BBC in November 1949 of the Rank Film Studios at Lime Grove, Shepherds Bush, has provided a very satisfactory immediate solution to the urgent need for studio expansion. Of the five studios at Lime Grove, one measuring 84 × 65 × 24 feet high was brought into service in May 1950 for the Children's Hour Programme, and another, 114 × 56 × 33 feet high, towards the end of 1950, mainly for Light Entertainment programmes. Two other studios will be equipped and brought into use at a later stage. In many respects the special requirements for a television studio are similar to those of a film studio, consequently only limited planning and building work are required if a conversion from one to the other is made.

A studio is completely dependent upon ancillary services, both technical and production, which ideally are accommodated in adjoining areas. The requirements for the studio and for these services can be divided into two main groups—space and equipment. Let us examine briefly what the requirements would be for a large light-entertainment studio of, say, 120 × 75 feet, and its directly associated ancillary services at a television studio centre. It must be assumed that a large number of other important ancillary services common to all the studios will also be available. These will be detailed later.

The studio should be at ground level to facilitate the service of scenery and large and heavy properties, for example, a motor car or an elephant, thus avoiding the installation of an expensive scene hoist. The floor should have a firm and level surface to provide for the silent and smooth tracking of mobile cameras, which, with the cameraman, may weigh three-quarters of a ton each. Also it should be slightly resilient to the movement of dancers. The height of the studio should be sufficient to fly scenery—at least 45 feet assuming that scenery is 20 feet in height.

The studio should be perfectly sound-proof to extraneous noises, and acoustic treatment of the walls and ceiling must be provided to produce a nearly 'dead' effect. The introduction of scenery and flats will inevitably result in a 'livening' of the sound quality. The problem of producing consistently good sound quality from a television studio where the scenery is changed with each production, is a major one.

A lighting gallery must be provided around the studio walls at least 25 feet above floor level to support the illuminators. Skid rails will be required over a large part of the studio at a height of about 35 feet from which to hang large-area frontal light sources, scenery and tab rails, etc.

A pit or tank, 25 × 15 × 8 feet deep, will be required in the studio floor to provide, for example, camera shots of artists descending or ascending stairways. The tank will also be required to be filled with water for aquatic scenes. Gas and water supplies and drainage have to be provided for production purposes.

Adequate ventilation of the studio is essential. This is one of the main problems in a television studio, where a heat emission of 300 kW due to the studio lighting, plus 15 kW resulting from 100 persons being in the studio (one person is reckoned to emit 150 watts of heat), may be expected for periods of up to six hours at a stretch during rehearsal. The conditions in a film studio are not so severe, as lights are on for relatively short periods only, hence the ventilation plant is smaller and simpler.

The ancillary accommodation will include the control room—a room 30 × 20 feet is needed 20 feet above ground level adjoining the end wall of the studio, opposite to the main stage, with a window in the studio–control-room wall to give the producer, sound engineer, and vision mixer in the control room an unobstructed view of the greater part of the studio floor. This room must be sound insulated from the studio and other areas, and be given simple acoustic treatment. An apparatus room 35 × 20 feet ought to be hard by the control room. Ventilation must this time be ready to deal with a heat emission of approximately 20 kW from the vision and sound technical equipment and personnel. Dressing-rooms—two for star artists, two single rooms, two double rooms, two rooms for four persons, two rooms for six persons, two rooms for twelve persons, one crowd room for twenty-five persons, one crowd room for twenty-five persons and band instruments, one make-up room and some offices—must be provided.

Reference was made earlier to the important ancillary services which are common to all studios—they include technical maintenance and mechanical workshops, test room, studio lighting equipment workshop, power intake and electrical power plant, central studio telecine room, technical store, lamp store, camera tube and valve store, experimental room, central apparatus room and echo room; scenery design, machine shop, carpenter's shop, scenic and caption artists' studios, papier-maché shop, areas for scenery erection and storage, wardrobe, hairdressing, laundry, surgery, music and gramophone library, restaurant, and last, but not least, administration. The location of all these common ancillary services must

be carefully planned in relation to the studios they serve.

The technical equipment requirements for the Light Entertainment studio under consideration would probably be as follows: six studio mobile television cameras, one caption camera, two spare cameras. Each camera will have its own channel of electronic equipment which will be installed in the apparatus room, with other auxiliary equipment. A ten-channel vision-mixing unit in the control room will provide fading, mixing, and cutting facilities for six studio cameras, one caption camera, and a telecine camera, the latter being located in the central studio telecine room. Twelve television-picture monitors must be set up in the control room and studio for production and engineering purposes. One sound equipment for eight studio microphone channels, gramophone channel, and telecine film sound reproducing head, and a four-turntable gramophone desk, two large microphone booms, one small microphone boom, microphone stands will be wanted. 'Talk-back' facilities must exist between the control room and studio so that producers and the senior operational engineer can talk to studio operating personnel, e.g. cameramen, studio manager, etc., during a transmission.

The amount of studio-lighting equipment required will depend on the sensitivity of the television camera tubes used. Assuming a tube of average sensitivity, such as is used in the Light Entertainment studio at Lime Grove, 250 kW of assorted equipment would probably be called for. This would include large area-light sources and spotlights ranging from 5,000 to 500 watts. Mainly tungsten-filament lamps would be used, but some mercury cadmium light sources would be included. The lighting supply would be at 115 volts D.C.

To plan, design, and build such a studio with ancillaries —to specify, produce, and install the technical equipment, inevitably brings in a large number of people, from architect and physicist, to bricklayer and wireman.

THERE'S PLENTY OF DRAMA IN THE NORTH

BY PATRICK CAMPBELL, *Drama Producer, North Region*

One might well imagine circumstances in which four years would seem a very long time. It is not so very long a time in which to develop a new school of post-war regional drama. The start of the war put an end for a time to regional broadcasting, but it did more than that. Even under wartime conditions, the popularity of broadcast drama (in 1939 one of the most remarkable listener tendencies) continued to increase, so that in 1946 regional producers were serving an audience, not only far greater in size but also far more critical than ever before. Each of the regions has its own contribution to make on a national basis to broadcast drama. The North of England has, perhaps, a rather particular duty in this field, due not only to its large circle of listeners (almost one-third of the national total) but also the wealth of literary talent within its borders. Phyllis Bentley, A. J. Cronin, J. L. Hodson, Storm Jameson, J. B. Priestley, Howard Spring, and Graham Sutton are but a few of our Northern writers today, while both Winifred Holtby and Hugh Walpole are among those who lived in and wrote about the North.

For four years, then, broadcast drama in the North has, under the guidance of its several producers, developed slowly but methodically along lines peculiarly its own, a development that is now showing as a clear pattern. As in other regions, plays produced in the North Region are normally written by Northern authors or reflect the life and character of the North. As such, they can serve the special requirements of regional listeners and at the same time provide an addition to the cosmopolitan and international drama originating in London.

Broadcast drama in the North Region is interpreted fairly broadly. The dramatized feature, for example, may be included under the drama heading, and the same writers and producers may work on feature programmes as are employed on plays. As is only right, for it would take a pedantic mind to indicate the exact point where sometimes

one ends and the other begins. And in this field the Region can certainly show to listeners within and outside the nine counties a rich harvest. The fells of Cumberland and Westmorland, the peaks of Derbyshire, the fens of Lincolnshire, no less than the great industrial centres of Yorkshire, Lancashire, and Tyneside, have a rich story that can be told in dramatic form, and some of it, at least, will be told during 1951.

Yet perhaps the most valuable achievement is seen in the strenuous effort to discover new and, for choice, young playwrights and to encourage them to write for radio. The fact that play production in the North is slightly more leisurely than in the hurly-burly of London makes it possible to spend more time in searching for talent and in giving it encouragement and training when found.

A further contribution from the North has been the 'three-decker' play, a three-part serial adaptation from some well-known Northern novel. Originated by James R. Gregson, the most successful of a long line have been *South Riding* and *Wuthering Heights*, and more recently *Ivanhoe* was given the same treatment for Sunday afternoon audiences. There are objections to such radio adaptations. Not a few listeners maintain, and I believe there is much to be said for this view, that a novel is intended for reading and that to present it as a broadcast play is not only to remove it from its natural medium but also to lose much of its value. Nevertheless, the result is often so much closer to pure radio than the adapted stage play that I am convinced it must keep its place—a place undoubtedly earned.

The training of radio actors is yet another factor on which the Region has concentrated. In four years, more than two hundred plays have been produced, most of them from the drama studios in Leeds, and this average will be maintained during 1951. The plays have ranged in mood from the verse drama of Webber, well exemplified in *Emilio and the Bull* and *The Gift*, to the pure Northern drama and rugged humour of Harold Brighouse's *Zack*. Dialect plays have, naturally, found their place in the total, although I am happy to notice that the strange and once widely credited myth that a play from the North must

invariably be in broad Lancashire dialect is now almost exploded. While dialect plays and, indeed, most plays interpreting the Northern character are best cast from Northern actors, our producers still have their casting problems. With the majority of the talent of stage, films, and broadcasting concentrated upon London and with so many Northern actors fully employed in repertory theatres, it is not possible for a purely regional actor to be found for every part. The aim of the Northern producer, indeed of every radio producer, must always be the best possible casting for his play. But wherever it is possible, Northern actors are used in Northern plays, with the almost inevitable result that many have taken advantage of the experience gained in the Region to move themselves and their voices to London! And perhaps we can find solace in the thought that our loss has, invariably, become London's gain. There remains, however, a strong nucleus of Northern actors, many of them experts in one or more regional dialects, whose voices and personalities are fast becoming well known and as well loved.

One final duty that broadcast drama in the North owes to its listeners is to reflect in its programmes the contemporary trend of regional dramatic endeavour. During the past year, for instance, a number of the leading amateur Little Theatres were invited to send companies to Manchester, Leeds, and Newcastle, where they presented short plays of their own choosing under studio conditions. In addition to providing entertainment of an unusual kind, these visits were of acknowledged value to many thousands of amateur drama enthusiasts by giving opportunity for a comparison of standards.

So long as one play in 'Saturday Night Theatre' can command, as it does today, a listening audience of twelve millions (sufficient, by the way, to fill every seat of every theatre in London at every performance for eighteen months!) broadcast drama will continue to be a truly important factor in radio. Working along its own clearly defined lines, the North Region has a definite and a useful function to perform as its contribution to the broadcast drama of the nation.

LAND OF THEIR FATHERS

BY TOM RICHARDS

Nothing makes a man more aware of his nationality than leaving his country. The Welsh people have an old saying, 'Gorau Cymru, Cymro Oddicartref', which asserts that the best Welshman is he who leaves his native land. There are Welsh communities in every part of the world. Naturally, this affects the Welsh Home Service, as will be explained later, and many other Welsh activities. One of the highlights of the National Eisteddfod every year is the ceremony at which representatives of those communities, who fill the enormous stage, are asked to stand when the names of their adopted countries are called out. Every year the largest contingent comes from the United States, but it is surprising how many folk of Welsh descent will come from Australia, New Zealand, and even China, to be present at this great Welsh festival. There are well-organized Welsh societies in all the larger cities of the Dominions and America, and they are eager to know all that goes on in the 'Old Country' even though many of their members may be Americans or Canadians of the second or third generation.

A Welsh magazine, *Yr Enfys* (*The Rainbow*), is now published which keeps all overseas Welsh communities in touch with one another, and a recent article in it stated that the percentage of Welsh people in the population of the large American cities varied from 0·15 in some areas up to 21 in such places as Scranton, Pennsylvania. In Philadelphia there are estimated to be 50,000 Welsh people, 30,000 in Scranton, 15,000 in Utica, 6,000 in Chicago, 5,000 in New York, and 5,000 in Los Angeles.

The largest single Welsh colony, of course, is to be found in Patagonia in the Argentine. This was intended literally to be a Welsh colony when a shipload of emigrants left Wales in 1865 to start a newer and freer life. They made the almost fatal error of not including any farmers among their number —they were chiefly craftsmen—so that when they landed in Patagonia they had very little idea of how to support themselves. They survived their early hardships, however, and when they had become well established they were annexed

into the Argentine State and are probably the only bilingual community in the world today who combine Spanish and Welsh.

Listeners to the Welsh Home Service are now long familiar with the contemporary doings of their compatriots, for the Welsh programme carries regular news-letters from all the Dominions recorded in Welsh by various correspondents on the spot with the unfailing co-operation of the different broadcasting authorities. The doyen of this corps of spare-time reporters is Professor John Hughes of McGill University, Montreal, and what the academic world gained in a brilliant professor, the journalistic world undoubtedly lost in a gifted observer and recorder of the human scene. Professor Hughes's contributions to the 'Galw Cymru' ('Calling Wales') series combine an intimacy and a breadth of reference which make Welsh listeners feel that they know life in Canada and the part their fellow-countrymen are playing in that life, as never before. The doings of Welsh-Americans are chronicled vividly by J. Williams-Hughes, formerly of Marian Glâs, Angelsey, who seems to be in Hollywood one week and New York the next, having taken in Seattle and Milwaukee en route. Levi D. Jones, former headmaster of Forest High School, Johannesburg, keeps Welsh listeners informed about their compatriots' activities in South Africa, and regular letters are also received from Australia and New Zealand.

There are special bonds between the Patagonia Welsh and the homeland. In that little-known part of the Argentine the Welsh folk are not a scattered few in a city or region in which another nationality predominates, but form a compact community preserving the Welsh language and way of life and looking to Wales for inspiration and help in maintaining its individuality against the ever-mounting pressure of Latin-American civilization. Their isolation has been partially broken down by the BBC, for four times a year a religious service in Welsh is broadcast specially to listeners in Patagonia in the Latin-American service, and the many letters received, all written in excellent Welsh, testify in the warmest terms to the eagerness with which those services are awaited. A year or two ago many of the Patagonia Welsh

wrote asking if they could hear once again the voice of the Rev. D. D. Walters, who had come to Wales after many years as a minister in Patagonia. A service was immediately arranged from the little Nonconformist chapel in North Wales of which Mr. Walters was pastor, and reports from Patagonia later told of excellent reception.

For most of the year a programme called 'Welsh Magazine' is broadcast three times a month in the General Overseas Service of the BBC. This consists of half an hour of choral music and songs, short talks and news letters, and there is hardly any part of the world from which letters of thanks have not come. It is an experience to read these letters. They have in them a quality of excitement missing from the staider letters of home listeners, and they are obviously written out of a deep emotion. These programmes from what the Welshmen call 'Yr Hen Wlad' (a term which, incidentally, means much more in the original than in its literal equivalent 'the Old Country'), clearly touch levels at which the sentiment of patriotism is at its purest. Perhaps that is what the old Welsh saying quoted at the beginning really means.

THE McCOOEY FAMILY

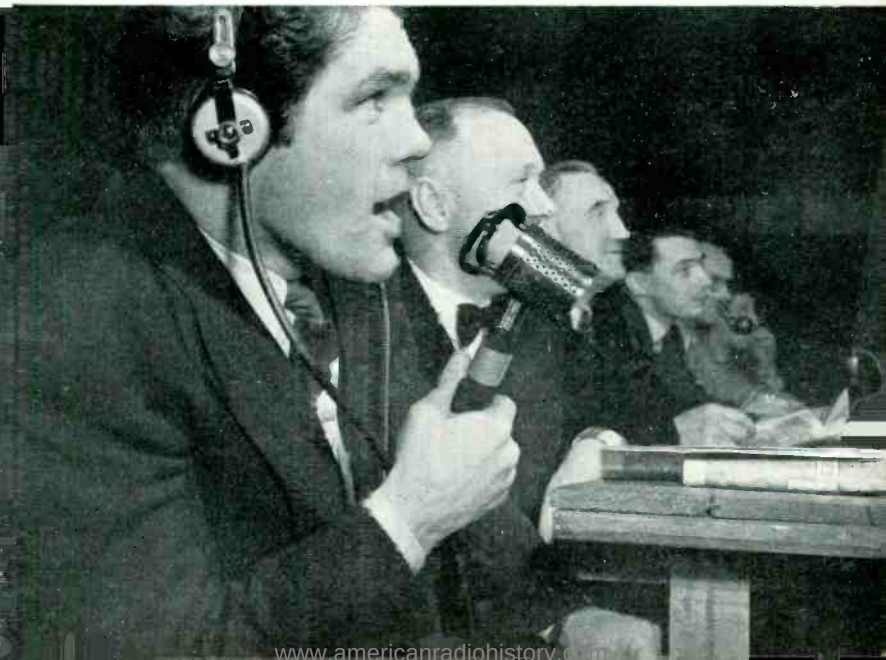
BY HENRY MCMULLAN, *Head of Northern Ireland Programmes*

In May 1949 a small billing in the *Radio Times* announced the first instalment of a new serial by Joseph Tomelty, the Ulster playwright and actor. It was a simple programme, called 'The McCooeys', about a Belfast family, and it was played in the accent and dialect of the city. It ran for two months, was 'rested' during the high summer, and came back to the air in October. Within a month of its return it had proved the most popular and most discussed programme ever broadcast in Northern Ireland, and for seven months the McCooey family were listened to and quoted in thousands of homes all over Ulster. Their temporary departure from programmes to allow everyone, including the author, to draw breath, has been greatly deplored.

What is the secret of 'The McCooeys'? Probably the

NORTHERN IRELAND
On Rathlin Island:
SAM HANNA BELL (*centre*)
author and producer,
and the interviewer
GRAEME ROBERTS (*right*)
talking to an islander.

The first television outside broadcast from the MIDLANDS: a boxing commentary by FREDDIE MILLS at Birmingham.



A sing-song DOWN AT THE MAINS, most popular programme in the last SCOTTISH CHILDREN'S HOUR request week.

WELSH RAREBIT: 'The Girls in Harmony' rehearse a new number.

answer is their normality. The author knows and loves the people he is writing about. The cast find his lines 'read themselves', and the problems and anxieties to which he exposes them are largely the ordinary problems and anxieties which afflict us all. There is a warmth and humanity in the 'McCooey' home which has reached the listener and brought him back week after week to his loudspeaker.

Attendance at a performance of 'The McCooeys' is an odd experience. The artists taking part have found that the characters they play have become part of them. They are not, as some listeners believe, an actual family with blood ties; but in the months of work they have become a family by adoption, each adopting the other. When one member of the cast married, the rest of the McCooeys were there; at the end of the Christmas programme the McCooeys' Christmas Tree was borne into the studio and its many parcels distributed; when Mina Dornan, who plays the Mother, had her appendix taken out at short notice the 'family' saw to it that she lacked neither flowers nor visitors.

Listener reaction to the programme is constant and invigorating. The McCooeys have become a sort of personal property of the listener, and their friends and visitors are subject to careful scrutiny. On some occasions when it has been felt that the author has neglected the family in favour of some new character, immediate attention has been drawn to the fact. During one episode in which the parlour of the McCooey home was redecorated, the price paid for the job was not fixed in advance, and worried listeners telephoned and wrote for information or offered advice on the fair rate.

Naturally a programme of this kind has produced catch phrases. 'Oh now' . . . 'You're a comeejan' . . . and 'shloup with vegabittles' are now part of the current speech of the country. The story of the small boy who translated 'O tempora! O mores!' as 'Oh now' in a Latin examination is by no means improbable.

Curiously, the Belfast accent, which, though full of vitality, strikes harshly in the ear of people outside the city,

has in this series found favour all over the country. 'The McCooeys' are as well known outside Belfast as they are in the city itself. Possibly this is because, on public demand, 'The McCooeys' was given a second hearing just before the programme for Northern Ireland Farmers on Monday evenings. Whatever the reason, it is certain that the voices of Belfast are enjoyed all over the country and beyond its borders, judging from the quite flattering amount of space devoted to it by publications outside Northern Ireland.

The family's surname has aroused interest. It is in fact a Northern Ireland name, and though the author chose it because it did not appear in the Telephone Directory, it was not long after the programme went on the air before a real McCooey family was discovered among its listeners.

The establishment of a new success is invigorating for everyone and the future for the programme looks bright. It came back into the Northern Ireland Home Service in September, and, once again, the problem of Aunt Sarah's future is up for examination by Granda and the rest of the family. Prior information on what the author intends is not available. 'The McCooeys', as he says himself, 'are apt to go their own way. You never know what they'll be up to next'.

THE SECRET OF BROADCASTING
A SYMPOSIUM

The Year Book *invited a number of people celebrated in broadcasting to say in a few words what they thought was the secret of success at the microphone. Those who were chosen were all veterans —professionals in the true sense—some with specialist approach, others known for their versatility. What was asked of them was not easy to put briefly; their brave shots may prove useful as well as entertaining to others.*

The first point of view given is SANDY MACPHERSON'S, because his own broadcasting style in its direct simpleness derives from the pioneers.

There are so many different types of broadcasting and so many different styles and techniques that I do not believe it is possible to formulate a set of rules to fit them all. But if you want to know what I consider to be the first and foremost requirement, I can tell you in one word—*sincerity*. This is something that radiates like pure sunshine through all the work of my own favourite radio personalities—those few broadcasters whom I most admire and whom I hold up as shining examples to all the rest of us. I shan't name them all, but my list is headed by Wilfred Pickles, the Radio Doctor and—among those who, alas, are no longer with us—the late John Hilton and Tommy Handley.

The second most important attribute I believe to be the gift of being able to play or speak to a vast radio audience as though you were addressing *one* person only. A radio audience doesn't listen in a crowd. It listens one at a time or, at the most, in groups of two or three, and if you can convince each listener that you are performing for him only —that he alone is the only one who matters—well, the chances are that you'll please quite a lot of people.

What is the Secret of Broadcasting? I wish I knew all the other answers because there must be a lot of them. But then, I'm only a beginner and I'm still learning.

SANDY is always himself. LAIDMAN BROWNE, on the other hand, is anything but that. No actor probably has played in so wide a range of parts as he, and his note, naturally enough, while

it underlines the need for sincerity of which Sandy wrote, is based on that unique experience.

There are no secrets. The microphone makes one demand which is inexorable and paramount—Sincerity.

There are, however, one or two points which the young radio actor must learn. The first is that the art of radio acting is far and away the most difficult form of acting that we know of today; the second, that what goes into the microphone is not necessarily what comes out of the loudspeaker. If an actor can once grasp the significance of these two facts he may begin to realize the responsibility that he owes to the millions of people who will be listening to him, and will give the needful minute and painstaking care to the preparation of his part. Sooner or later he must realize the appalling fact that he gets only one chance, one only—he cannot 'do better next time'. One final hint is to remember that the 'imagination' must control the whole. The actor must actually see himself in whatever situation he is supposed to be; he must feel that he is 'made up' as the character he represents; that he is dressed and deports himself as that character. If the actor can visualize the scene to himself, the microphone, curiously enough, can convey that picture to the listener.

MAY JENKIN, better known to children and grown-ups everywhere as 'Elizabeth', stresses the intuitive nature of what she calls the 'spell' cast by the best broadcasters.

It is indeed a secret, revealed intuitively to the lucky few, laboriously acquired by a certain number, and never learned by the rank and file of broadcasters.

The great broadcasters of the War, Winston Churchill, Anthony Kimmins, and others, had something supremely worth saying, and said it supremely well. But lesser folk on occasion spoke straight to the hearts of the public. One of the best broadcasts I ever heard was given by a woman street-cleaner from the Tottenham Court Road. Her robust personality, rich Cockney humour, and rollicking laugh epitomized the whole spirit of wartime London.

Many a popular broadcaster is gifted with a beautiful voice and the actor's skill in using it, but success does not

necessarily depend on beauty of tone and utterance. A. J. Alan, that prince of story-tellers, had a voice of no particular quality, and in cold print his stories lost much of their magic. But over the air he stood alone as a raconteur. Vera Lynn is not a great singer, nor did she broadcast great music, but she sang herself into the hearts of the lonely men in Burma as many a better singer failed to do.

The successful broadcaster exercises a spell, a spell that works on individual men and women in the intimacy of their own homes. Simplicity, sincerity, a sense of humour, friendliness, all these are a help, but in the end it is charm that succeeds, a touch of magic, even sometimes of Black Magic. How else can one account for the sinister attraction of Lord Haw Haw?

DOUGLAS HOUGHTON of 'Can I help you' fame, now a Member of Parliament, is concerned with the script itself and its mechanics.

What makes listeners listen? Answer that and we have the secret. They listen mainly I suppose to what the broadcaster has to say. And what he has to say is in his script. How he is going to say it is mostly in the script too.

A story is made interesting, complicated rules and regulations are made simple, economics easy, and politics tolerable—all in the script. There we have nine-tenths of the secret of broadcasting. Master the script and conquer the microphone: it is as simple—or as difficult—as that.

The listener can neither gaze into the crystal nor read the book. He can only listen. There's a limit to what he can take in. Short, simple sentences, one leading to another in steady sequence, will hold his attention. One cannot put brackets and footnotes on the air. The script should be more concise yet more expressive than ordinary speech, and more colloquial yet less diffuse and certainly less flowery than ordinary writing. It should be what we want to say and how we want to say it, specially adapted for broadcasting.

And the mechanics of it all? I do not dictate scripts myself: I write them, listen to them, and alter them, and try to strike the right note as I go along. Like tuning a piano?

By the time I come to the microphone the script is as much in my head as on the paper. The typed copy is the speaker's notes: the script is being spoken rather than read. The microphone loses its terrors for the broadcaster who knows exactly what he is going to say. It fascinates all who discover this medium for winning the hearts of the people.

A radio personality may belong only to the radio, but he is none the less real for that.

With Houghton's views compare now WILLIAM HOLT'S. He is the one-time Yorkshire weaver whose warm urgent tones have for years commanded a vast audience overseas.

In a broadcast talk I think that what you say matters far more than how you say it; providing, of course, that you say it clearly and put it in a way that can be easily understood. While you're talking, concentrate entirely on what you are saying, and if you're describing something visual try to picture it to yourself in your own mind while you're describing it. If what you're saying is genuinely interesting to you, or important, or in some way rather significant, or urgent, this will get into your voice and you don't need to concern yourself about how you're saying it—Nature will see to that.

Don't worry about whether what you're saying is grammatical, so long as the meaning is clear.

Be implicit rather than explicit. A good broadcast must have a good listener—otherwise it's not a successful broadcast—and a good listener listens not only with his ear but also with his imagination. A good broadcast stirs something up inside the listener, and he contributes something creative to the broadcast.

Some broadcasters give me the impression that they are listening to their own voice while they are talking and that I am listening to a voice display. At such times I find that I am paying so much attention to the voice and manner of the speaker that I am neglecting to listen to what he is saying. A good voice and an artistic 'natural' manner at the mike may make a successful broadcast in the sense that it is remembered by the listener as a performance; but don't you think it's rather ironic if you can remember how

wonderfully the speaker said it although you can't remember exactly what he said?

I would rather be understood and know that what I say is appreciated than be admired.

FRANK PHILLIPS, for so long a news-reader, believes, on the other hand, that it is hardly possible to pay too much attention to how the thing is said.

The microphone is a friend. Keep your proper distance from it, talk to it straightforwardly; and it will reproduce faithfully everything you say and never let you down.

But—acquire a mannerism, or some artificial vocal trick, and 'mike' raises his eyebrows and shows his disapproval by exaggerating your peculiarities almost to the point of absurdity.

One of the magic qualities of the microphone is that of linking you with your audience; not just technically, but artistically, emotionally. So your method of broadcasting must include, not only all the vocal skill you can acquire in the way of clear diction, good phrasing, easy control of breath, and all the other things which go to make up 'technique', but also an attitude of mind.

This attitude is one of constant self-questioning. 'In this talk, what am I trying to say, and to whom particularly am I speaking?' 'In this news bulletin, the subs, chief-sub, and duty-editor have all tried accurately to report the news. Am I giving listeners an accurate interpretation of their work?'

Broadcasting is the art of being in two places at once. Physically, on one side of the microphone only, but mentally on both.

LIONEL GAMLIN, who has been a schoolmaster as well as a successful broadcaster in many fields, feels, despite the versatility of his own performance, that the answer is always the same: 'Be Yourself'.

'Young man,' I remember George Bernard Shaw saying to me in the studio many years ago, stroking the microphone with long, delicate fingers, 'this is a devilish contraption.

You can never deceive it—so don't try!' How right he was! The microphone, mechanical child of man's brain though it may be, undoubtedly has the uncanny knack of revealing the broadcaster's true self, willy-nilly, to the unseen listener. Frankly, that's all there is to this so-called 'secret': be yourself. One of the pioneers of broadcasting in this country, the late Hilda Matheson, summed it all up some years ago when she wrote that 'the broadcaster must above everything else possess, along with the right credentials, *the kind of personality which compels attention and response . . .*' The italics are mine.

Of the hundreds of different types of broadcast in which I have taken part myself, I should say that the most difficult, even though they may also be the most delightful, have been the 'Top of the Form' series. I know only too well that any attempt to approach that assignment without a healthy respect for the intelligence and humanity of these youngsters would have been absolutely fatal, the merest hint of 'putting on an act' would have been enough to wreck the programme. Luckily, I like children, and equally luckily I have had considerable experience of working with them in other walks of life. It's an experience for which I am perpetually thankful, for it has taught me the importance of respecting the young and their changing points of view.

The microphone is quite ruthless. Either you must be yourself or you must stop broadcasting.

And finally BARBARA MCFADYEAN, who was a wartime 'forces sweetheart' and has now taken on other jobs, has discovered a rather cunning secret of her own, the secret of not being perfect.

When I was an announcer I had many duties that I would not have picked as being at all suitable for myself. For instance, I am not devoted to military bands or talks on fishing, but if I had to announce something of that kind I would find in some miraculous and inexplicable way that I really believed fly-fishing was a fascinating subject and my enthusiasm for the speaker as I announced him would be genuine. Nobody can be a success at the microphone unless they like the work. The microphone picks up even the

These well-known broadcasters write on THE SECRET OF BROADCASTING on page 67.

MAY JENKIN

WILLIAM HOLT

LIONEL GAMLIN

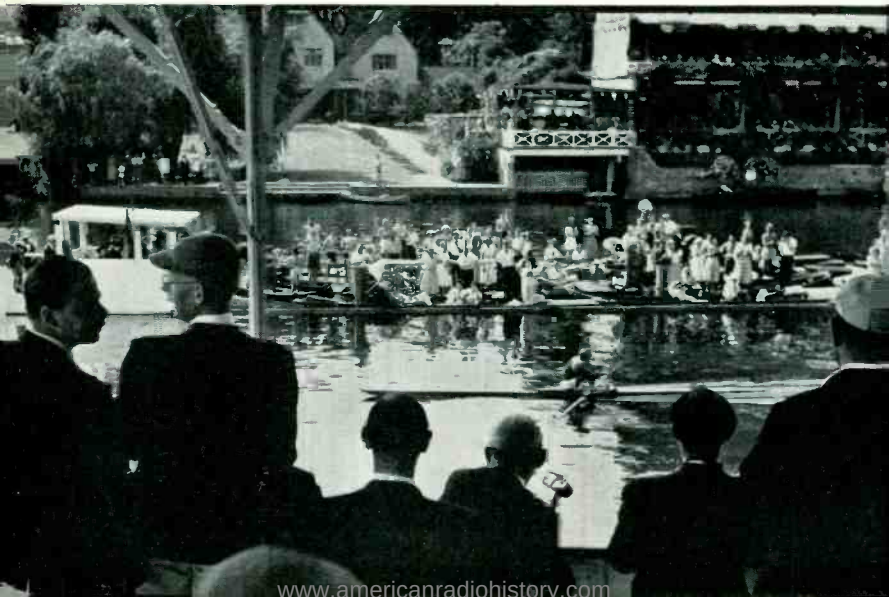
BARBARA MCFADYEAN

Right, top to bottom
SANDY MACPHERSON
LAIDMAN BROWNE
DOUGLAS HOUGHTON
FRANK PHILLIPS

H.M.S. AMETHYST

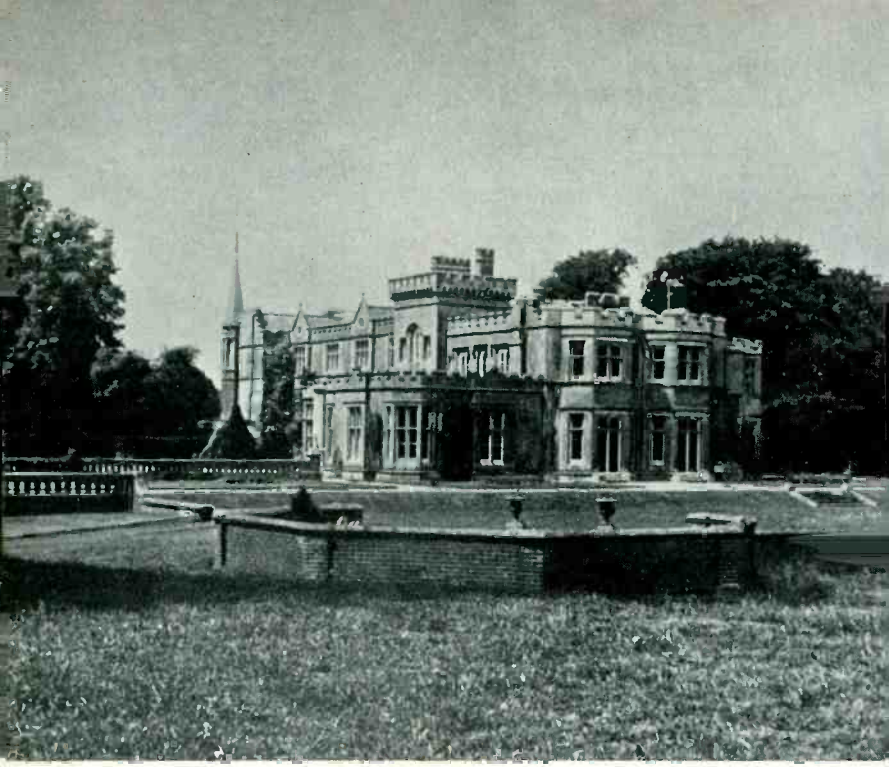
FRANK GILLARD interviews two of th ship's company at Gibraltar.

ROYAL HENLEY: JOHN SNAGGE (*centre*) uses a lip microphone for his commentary.



CHILDREN'S HOUR records the musical ride of the ROYAL HOUSEHOLD CAVALRY: WYNFORD VAUGHAN THOMAS is in the foreground left.

THE GERUNUK is a very rare animal. Here it is being fed by GERALD ILES, keeper at Belle Vue Zoo, Manchester, who is a well-known contributor to Northern Children's Hour.



KINGSWOOD WARREN, the new headquarters of the BBC RESEARCH DEPARTMENT.

(*See article on page* 37.)

tiniest hint of boredom or indifference, and the listener, quite rightly, feels insulted.

The reason I have been asked to contribute to this symposium is partly because of some broadcasts in which I have been taking part in the BBC's European Service. For over a year I took part in an international Quiz programme between London and Frankfurt, and the German listeners seemed to consider me a success. I can say this without feeling embarrassed or conceited; it was all due to a combination of circumstances beyond my control. And the secret of what success I had was almost entirely due to the mistakes I made with the German language. I never minded making the mistakes (I couldn't help them, anyway)—they merely served to put the listeners in a sympathetic mood towards me. And that is perhaps the real secret of broadcasting: to get the listener on your side. But precisely how one does that is something that each broadcaster has to manage in his own way—through their talent, their wisdom, their personal charm, or, as in my case, by being lucky enough to be in a programme which serves the right purpose at the right time.

PERSONALITIES OF 1950 IN SOUND AND VISION

SIR ADRIAN BOULT

Sir Adrian Boult has played a unique part in BBC history, and occupies a proud position in the musical annals of our day. Within a very short time after the formation of the BBC Symphony Orchestra he had taken and moulded it into an ensemble which the leading conductors of the world were pleased to acknowledge as one of the finest in existence, and with which they were proud to be associated in their visits to this country. That in itself was a most honourable achievement. To have reached and maintained this technical mastery whilst engaging in a vast and ever-widening musical repertoire is a feat of virtuosity probably unequalled in orchestral history. It may be confidently asserted that no other orchestra, no other conductor, can ever have been required to prepare such a tremendous variety of music, and to play it under such searching conditions before so large an audience. Their acknowledged success is now the measure of our gratitude to Sir Adrian, and his retirement from BBC service has given us the opportunity of expressing our gratitude in the warmest terms.

Throughout his twenty years, and more, of broadcasting, Sir Adrian has been remarkable again for his catholicity of taste and his personal modesty. All compliments to him he has regarded as tributes to his orchestra—and there have been many such, from both sides of the Channel and both sides of the Atlantic. He has often had to play music to which he was not temperamentally sympathetic, and here his performances have been sincere and convincing. As the years went by, however, he could not quite conceal from careful listeners his personal joy in certain types of music, and he has made some works of Bach, of Schubert, of Elgar and Vaughan Williams, of Debussy and Ravel, peculiarly his own. Indeed, Vaughan Williams's Masque for Dancing, *Job*, is Sir Adrian's by dedication, as are

several other compositions of importance. It has been a joy and privilege to watch the ease and grace with which Sir Adrian has guided his forces through the intricacies of a difficult modern score such as Stravinsky's *Sacre du Printemps* or Berg's *Wozzeck*. Happily, the breaking of an official tie does not mean that Sir Adrian is to be lost to the orchestral world or to broadcasting. His countless friends, on either side of the microphone, will wish him all success and happiness in his new sphere, and will welcome his frequent appearances in broadcast programmes. And the world at large will surely be interested to meet more often in the concert hall one whose work has in the past so often been brought to their own fireside. H. M.

GLADYS YOUNG

The fifth of May, nineteen-twenty-six. So far as Radio Drama is concerned the date is now historic, for on that day Gladys Young first stood in front of a microphone. The line of parts she has since played may not, like Macbeth's spectres, stretch out to the crack of doom, but they are surely as impressive to us as his visions were to him. Think of the range of her accomplishment. Care-free youth, disillusioned age, the spring of life, its summer, autumn, and winter have all come within her scope. She has given scores, indeed hundreds of examples. Who that heard her will ever forget her in Philip Wade's *Oranges and Lemons*, the first specially written radio play telling the story of a family through its lifetime? Think of her Sally in *Mild and Bitter*; her enchanting comedy in *The First Mrs. Fraser*; the despair, the pathos of her Mrs. Alving in *Ghosts*; her development of character as Florence Nightingale grew up from girlhood; her death scene in *Peer Gynt*, and so on and so on! In 1947, *The Silver Cord* was chosen by listeners to celebrate the two hundredth performance of 'Saturday Night Theatre' because they wanted to hear Miss Young again as Mrs. Phelps. Not without good reason has she always headed the polls when votes have been taken as to who was the favourite actress of the year. It is safe to say that no one else will ever be associated with so many landmarks of Radio Drama.

It has sometimes been asked, and by those who should know better, if she would be equally effective on the stage. She herself supplied the answer, and a most convincing one, when she made her triumphant appearance in the televised production of *Corinth House* in February 1950. In this connection it is interesting to remember that in point of fact she was televised on 14 February 1928 in the first play ever so projected, *The Man with the Flower in his Mouth.* It was produced by Lance Sieveking at the Baird premises in Long Acre in an improvised studio on the roof before a distinguished audience. Amazing progress has been made since then, for though the screen used at the time was about three feet square, it was practically impossible to recognize any of the performers. What a change in 1950! There was no difficulty in following the subtle acting of Miss Young, and it was obvious that the medium made no difference whatever to her skill and integrity. That master critic, C. E. Montague, has written that it is the possession of a great and available reserve of sheer intensity—intensity of perception and emotion—that distinguishes a great artist most deeply from his fellows. There we have it. Never was nail more truly hit. Gladys Young, having those qualities available, has proved by her use of them that she is one of that rare band of supreme artists. H. R.

FRED HOYLE

Fred Hoyle is plain Fred Hoyle. No formal and extended Christian name, no title like Doctor or Professor, just the Cambridge M.A. degree. He is one of the lecturers in mathematics at Cambridge, and a Fellow of St. John's College, but he is also perhaps the most successful talker that the Third Programme has had so far. It is one of his attractions that a Yorkshire lad, with a simple name and a homely accent, should be able to talk about the Universe itself with such authority in his voice. And not simply with authority but also with such verve, such a racy, bouncing, vigorous style.

He is young—only thirty-five—and exceedingly clever. Those who know him realize that it is not rashness which

makes him seem so dogmatic. It is being quite certain about what he knows and being confident that he could defend it against all comers. He is modest too for all his apparent dogmatism. It was impossible to get him to admit how much his own original work contributed to the amazing results reported in his lectures on 'The Nature of the Universe'. He is also a disinterested controversialist. The sharp reaction to the observations which he made on religion in his talks aroused in him no emolient reaction. If an error should have been found in his astrophysics, however, it would have been a very different story.

There is an important difference between the methods of presenting the new cosmology of Eddington and Jeans, and the newer cosmology of Lyttleton, Hoyle, and their companions. The older men only communicated their results to those outside their subject field late in their lives. Now we hear of such work *as it is being done* from the mouth of a man who is actually doing it. Hoyle's broadcasts have been a triumph in the use of radio for the communication of new, difficult, and highly important ideas.

They have also been a personal triumph for the man who gave them. Will it ever happen again that an academic lecturer with a difficult subject will be rated by his listeners as a better broadcaster than anybody else whose popularity has been investigated by the BBC Audience Research Service, more popular than Bertrand Russell, than Dr. Joad, than Tommy Handley even, or Wilfred Pickles? This stocky Yorkshireman, with his curly black hair and his genial smile, seems certain to become one of the important broadcasting figures of our generation. P. L.

STEPHEN MURRAY

Stephen Murray in *Faust*, *Hippolytus*, *The Late Edwina Black*, *Othello*, *Musical Chairs*; a list of 'star' billings will give an idea of the range and scale of the parts he has played for radio in sound or on vision during the year, but they tell us little or nothing of the man himself. Evidently he is not one of those actors who 'remain themselves' no matter what role or costume they assume, for only the mysterious art of great acting

can enable the same man to become for the time being Faust or Iago, Theseus King of Athens or Gregory Black Esqre.

What then is Stephen Murray like off stage or microphone? Oddly enough for so distinguished and successful an actor, *diffident* is one word that comes to mind when you first meet him. It is impossible to identify his tall slender figure and almost faun-like look with the villainous person of Iago on the television screen, or his quiet enquiring conversation with the ringing tones of Faust cursing the lot of man through the loudspeaker. Indeed of all 'big' actors who work in the studios he is perhaps the most unobtrusive. Always 'there' for an entrance cue, rarely 'absent' for a note, he never calls attention to himself during the hours of waiting to 'come on' by asserting his personality, let alone by indulging his temperament. He is in fact essentially a studious 'type', and were it not for his great gifts as an actor might have become a political journalist like his brother, or even a school teacher or a don. As it is, this approach probably accounts in some part for his special success in the medium of radio. His only idiosyncrasy at the microphone exemplifies it: the hand wandering up to the forehead, sometimes almost masking one eye in the effort to achieve the intense concentration and focusing of performance that radio acting requires.

And now lest too sober a 'professional portrait' is emerging, let it be revealed that he possesses an almost secret sense of humour that darts out suddenly like some schoolboy's prank. It will enable him to appreciate in all its implications perhaps the greatest compliment ever paid him: when a producer on being asked why he did not cast Stephen Murray for some leading part, replied: 'Oh no, it would be making things too easy for myself. I feel it my duty to try someone else.' That is what comes of being richly endowed as an artist, taking infinite pains, and doing nearly all the work oneself!

A. E. H.

JAMES MONAHAN

When James Monahan became Director of the West European Services soon after the war he had in front of him

one of the most difficult situations which a broadcaster has had to face. It seemed possible that a fragment of the great wartime audience to BBC broadcasts in French might be held for a while. But how long would it be before this fragment finally dispersed? What attractions could be offered at the London microphone to supplement a free and truly national French Radio and Press? Could a team of Frenchmen and Englishmen hold together in succession to the brilliant and exclusively French *équipe* which had returned to France when their wartime mission had been accomplished? We may be forgiven for shelving these questions while we look at the man who answered them.

James Monahan, who is thirty-seven years old, grew up in County Dublin with a sense of poetry and in the Roman Catholic faith; surrounded by cousins, sisters, and a brother, he developed an easy give and take in human relations. His father was a distinguished Indian Civil Servant, and it can be deduced here and there from his son's poetry that James found it easier to see the wisdom of advice from adults on scrupulously correct behaviour than to follow it in detail. Sturdy, impulsive, generous, he strode through childhood on a zig-zag course between the good and not so good.

It cannot be said that higher education at Stonyhurst and Christ Church, Oxford, entirely purged Monahan of contradictory tendencies: his passionate love of athletics was equalled by his love of poetry; his Roman Catholic background did not preclude an unusually liberal foreground and a deep appreciation of varying points of view. While his drive on the tennis courts was perfectly disciplined, there was perhaps some remnant of the wild life of Ireland in his attack when mounting a horse.

He came through the Honours School of Politics, Philosophy, and Economics with credit, and became a junior light on the London staff of *The Manchester Guardian*. At the beginning of the war his BBC career began with a flow of political commentaries and responsibility for a daily programme to Germany; but as the fighting developed Monahan declined to be kept out of it. He was trained as a Commando and dropped by parachute in France, where he

joined a group of the Resistance. At this period and afterwards his output of poetry grew considerably, and two volumes were published within three years. Scrupulous, intense, and at their best as alive with colour as an impressionist picture, these poems have earned high praise from Siegfried Sassoon and Charles Morgan.

So this was the strong but complex personality who took over the post-war task of broadcasting to Western Europe. His tolerance and vitality could be guaranteed to win him the affectionate respect of his colleagues; his devotion to England coupled with his sympathy for European ways of thought promised the allegiance of many listeners. It was nevertheless something of a surprise that the post-war audience on the continent instead of continuing to drop away after he took office, first steadied itself and then slowly increased in numbers and enthusiasm until more than a million Frenchmen have come to pay the French service and James Monahan the nightly compliment of suggesting that they can do no wrong. T. L.

ROBERT STIMSON

Some journalists are unlucky enough to bring off one great scoop, and to be remembered on that account—and for no other reason. Robert Stimson might have suffered in just this way. He saw Gandhi shot, and his story, broadcast within the hour, was printed in newspapers all over the world. But Stimson's reputation as a prompt and accurate correspondent rests upon firmer ground than his handling of this one story; it rests on fifteen years of shrewd observation and hard, painstaking work in three continents and a wide variety of climates and civilizations.

Yet his reporting of the death of Gandhi gives more than one clue to his character and the way in which he does his work. It was accurate in its fact and in its descriptive detail: and it was quick.

Gandhi's death came towards the end of Stimson's ten years in India, the first eight with the *Times of India*, and the last two as BBC Correspondent. Many people will remember his despatches at that time, and the earlier series of

Sunday programmes, contributed to by Edward Ward, Wynford Vaughan Thomas, and the late Richard Sharp, under Stimson's direction, which marked the transfer of power to India and Pakistan and the beginnings of these new national lives.

It was not long afterwards that Stimson's doctor told him that his constitution had had about as much of life in India as it could stand, and he was transferred to his present post in South Africa.

Stimson's first staff job was with *Time* magazine in New York; before that he had found time to edit *The Cambridge Review* in the intervals of preparing for an academic career, which he never pursued, though he taught History for a year at Jesus. His American wife, Kay Austin, wrote a syndicated column which used to appear alongside Mrs. Roosevelt's 'My Day'. But Stimson himself is not everyone's idea of a journalist. He dresses almost formally, and with meticulous neatness. His tastes are catholic . . . shop is a topic of conversation only when it is the choice of his companions. His good fellowship overflows, and is tempered with sensibility. His job is extremely important to him, and his first reaction to the idea that he should to go South Africa as BBC correspondent was one of pleasure at the thought that he would be able to know at first hand a great deal more than he could get from books about life in a vigorous member of the Commonwealth. Since then, he has been tackling his assignment with care and enthusiasm, learning Afrikaans as he goes along.

It has been said that to know all is to understand all; Stimson's job is to report the facts, and the facts behind the facts, with no other object in mind but this. Like all good correspondents everywhere he believes it is a satisfying job, wherever you do it. A. W.

RICHARD HEARNE

A little, excited, eager, pathetic figure with a drooping, undisciplined moustache, sad slipping steel-rimmed spectacles, eyes that gleam with a light of joyous insanity and intense but wildly misplaced optimism; an old crazy cut-

away coat and unbelievably uncontrolled trousers; a head of explosive white curls and a giggle of sheer lunatic delight —this is 'Mr. Pastry', the uncrowned clown of British television, the character whose incredible antics cause thousands of viewers to moan painfully in helpless hilarity as misfortune upon cataclysmic misfortune hits the poor zany. Many comedians can reduce audiences to this state of 'laughing till it hurts' in the theatre, but so far only Mr. Pastry has been able to do it to one or two people alone in their own home. The secret?—perhaps not even Richard Hearne himself can define it. His creation of Mr. Pastry has been a gradual process of learning his job the hard way—and the job of making people laugh is one of the hardest of all.

Now forty-two years old, Richard Hearne has been in 'show business' for all of those forty-two years less exactly six weeks. It was at this age that he made his first professional appearance at the Theatre Royal, Norwich, and even then nothing but the title role (in a melodrama called 'For a Child's Sake') would satisfy him. Born into a family already well established in the theatre (his mother was an actress and his father a famous international clown, acrobat, and circus artist) he spent twenty years playing in variety, pantomime, revue, circus, concert-party, in fact everything that could teach him anything before he finally starred in the London theatre. His first appearance in television took place during the closing stages of the period of the Baird-system transmission, and ever since then he has been an enthusiastic student of the new technique that television demands.

He lives in a fifteenth-century farm-house in Kent, where he runs a small farm and indulges in his hobbies of landscape-gardening, brick-laying, reading, and collecting old glass paper-weights and walking-sticks. He has two small daughters and a white cat called Peter, and it is quite safe to assume that not a single one of Mr. Pastry's fervent and faithful admirers would ever recognize him when he is not in make-up and costume. He is a slim, good-looking, well-dressed man and one of the most careful and painstaking workers in the world of entertainment. His regard for detail and his intense concentration on his job are a constant

surprise to anyone who does not know him well. He always writes his own scripts—'I can't find anyone mad enough to write them for me'—and his advice to budding television comedians is simple and sound—'Don't forget you've been invited into somebody's drawing-room'.

'Mr. Pastry' started almost as a cartoon of a character; the fact that he is now developing a warmth, a reality, and a believeable humanity is a proof that Richard Hearne's comedy is blessed with the touch of true greatness. R. W.

TED RAY

Even today, when one musters the comedians who can make the best of two worlds—broadcasting and the theatre—the list is lamentably short.

Radio bestows its laurels only on the comic artists who can be funny when they are heard and not seen. This discovery still comes with a shock to otherwise eminent performers.

Ted Ray, triumphantly, has brought off the double. For years he has been a star of the Music Hall—sauntering on to the stage wearing a well-cut lounge suit and equipped with a violin and a seemingly endless flow of wisecracks. Now, in a comparatively brief space of time, he has become a skilled and immensely popular man of radio. To embark on a series is a highly speculative undertaking even for a comedian of Ray's standing. Reputations and a great deal of money can be made in these ventures, but on the other hand, much can be lost. George Inns had faith in Ted Ray: Ray himself was prepared to take the gamble, and the show was discussed, planned, shaped, reshaped, and shaped again, until one evening 'Ray's a Laugh' was launched into space.

It is beyond dispute that a series is more likely to succeed if its star is prepared to play down his other interests and make broadcasting, if not a complete career, at least a primary concern. That is what the irreplaceable Handley did, and what, as far as circumstances would allow, Ted Ray did too. Radio was allowed to become more than a lucrative sideline. The result is that by sheer ability, hard work, and, it is fair to add, first-rate direction, Ted Ray

found himself no longer a 'possible' but an 'indispensable'. Like Tommy Handley, he is a Liverpool man, and it certainly does not require great imagination to discover other qualities common to both. Of these the most striking is the crisp and rapid delivery—in other words, the precision attack. Nor is that fond regard for the topical gag and for the pun (the more outrageous the better) to be overlooked.

Making Ted Ray the Master of Ceremonies in 'Music Hall' (which always flourished with a resident 'character'—Charles Shadwell, for instance and Norman Wooland) was a successful experiment. Ray himself would be the first to admit that in his programmes he has been lucky in his producer and in the members of the 'Ray's a Laugh' company. His domestic 'spot' with the vivacious Australian, Kitty Bluett, is probably the best and most consistent comedy of its kind.

To sum up, Ted Ray is a natural humorist, not just a reader of comic lines. He is respected in the profession, is modest to a degree, and has never forgotten when his mother paid eighteen pence a lesson to have him taught the violin. Ted Ray will tell you, 'I am happy—I have my wife, my two sons, my stage work, and the radio. In fact I am so contented that if I were a cow I would give cream!' G. P.

SOLOMON

Every year the vast audience for the more serious sort of music broadcast by the BBC is undergoing a change.

There is always the solid core of confirmed and experienced music-lovers, but there are others who, having once thought perhaps that serious music is 'not in their line', are now in increasing numbers exploring the treasure-house. And there are the frowning youngsters, many of them embarking on a comprehensive study of the subject.

Thus, while presenting a proper proportion of new and interesting works, the BBC has to see that the standard repertoire is substantially *and faithfully* represented on the air. To such an artist as Solomon—sound, technically brilliant and conscientious—the listener therefore owes a great debt. Whether he should be playing solo piano works of the

masters or joining with a great orchestra in the performance of a concerto, we may be sure that Solomon will give us colour and technical excellence—but always within the proper limits of the composer's intention. He is not one who, for the sake of a flashy success, will take liberties with the work he is performing. With all the technique and feeling of the great artist, Solomon conveys to us what the composer wanted us to hear.

Solomon looks what he is—solid and reliable, yet possessed of a lively imagination; faithful, yet incapable of dullness.

Seated at the piano—and in more recent times we have had the opportunity of studying him at very close hand on the television screen—he gives the impression of complete command, with his firm back and those hands of his which are at once strong and delicately mobile.

Off parade, Solomon is unpompous, easy to approach, and the possessor of a pleasant wit that often finds its outlet in the telling of stories against himself.

In one such story he tells how, crossing the Atlantic on one of his many tours abroad, he took the opportunity of practising in the liner's empty drawing-room.

In came an elderly lady who inquired: 'Why don't you take up the piano as a career?'

'Oh, I couldn't,' replied Solomon. 'It would interfere with my lawn tennis'.

L. A.

CYNTHIA PUGHE

The words 'adapted by Cynthia Pughe' have been announced after the title of a play nearly a hundred and fifty times, and now to listeners, authors, and critics they come as a guarantee of good workmanship.

Producers know that Cynthia Pughe can be relied on to make a clear-cut version of anything from a stage classic to a short story. They know there will be no loose ends to be tidied up at rehearsal, that all stage 'business' will be adapted for the ear alone without obviousness, and they know that she has a quick sense of matching dialogue for many periods and styles. She can do a great many other things, not usually thrown in with an adaptation, for thanks

to a wide musical education, she can, if necessary, suggest the right incidental music, or in an emergency set a lyric for an actor to sing, or play a harpsichord and sing herself for an actress who cannot.

Cynthia Pughe's early training in Drama Department as Val Gielgud's secretary had accustomed her to all the emergencies of studio rehearsals. As she was herself in charge of the stop-watch she realized the psychological importance at the first read-through of giving actors a script of approximately the right length. 'What the eye doesn't see the heart doesn't grieve for' might be the producer's proverb, and an adaptor who is experienced enough to time a play correctly is invaluable.

In 1940 the Drama Department was evacuated to Manchester, and it was during those years of improvisation, inspired initiative, and sudden changes of staff that Cynthia Pughe got her chance to use her abilities. With limited studio accommodation, simple adaptations of short stories became practical radio. Some of them were from the French; she turned out several of these successfully, and by 1942 became officially a play-adaptor.

The Master Builder and *John Gabriel Borkman*, two of her adaptations most praised by the critics, were repeated in the Third Programme Ibsen series of 1949–50. She did sensitive and imaginative work on these two plays, unobtrusively softening the wooden contours of the Archer translation.

Cynthia Pughe herself says that the fascinating and voluminous stage directions written by Granville-Barker for his plays give an adaptor of them great scope to be creative, and that therefore of all the 150 plays to her credit she most enjoyed her labours on *The Madras House*, *Waste*, and *The Voysey Inheritance*. M. H. A.

RICHARD DIMBLEBY

'His manner is pleasant, in appearance he has an agreeable well-fed air. He leans forward eagerly towards the microphone and camera as if he were really interested in what he is saying, and his voice is well tuned and fluent. It flows on and on, inexhaustibly, as if he were never at a loss for words.'

Thus Harold Hobson on Richard Dimbleby after a recent television transmission. He went on to say that such perfection can be intimidating. Thomas Hardy deliberately split his infinitives because too uniform a perfection is bad art. There must be relief, contrast, and variation of tension. Nature certainly provided the variation of tension on this particular occasion, for Richard Dimbleby, at a critical moment, was afflicted by 'a tremendous, an uncontrollable, an annihilating cough'. But after it, Richard faced the camera with his accustomed assurance, and the critic—and the viewers—were once more under the spell of his genial charm.

How long has it taken this conscientious, skilful, and withal modest broadcaster to perfect his microphone and camera technique? The answer is fourteen years.

He covered the first foreign news reporting assignments of the BBC between 1936 and the outbreak of the war, including the bombing of Barcelona in the Spanish War, the State visit to France, and the Royal Tour of Canada. He went to France as the BBC's first war correspondent in October 1939, and was transferred to the Middle East in the spring of 1940. By the time he returned to England in the autumn of 1942 he had travelled nearly 100,000 miles in fourteen countries. He was the first BBC observer to fly on a night bombing raid to Berlin in January 1942, and the O.B.E. came to him for his services as a war correspondent.

He has lost count of the distances he has travelled since the war—'Down your Way' itself having taken him to a hundred cities and towns from Land's End to John O'Groats. 'Twenty Questions', television outside broadcasts, and 'London Town', his own television programme, keep him busy in London. Not every sound radio star has made the journey from Broadcasting House to Alexandra Palace so effortlessly. Now his seventeen-stone figure is as familiar almost as his voice.

Away from radio he is an author and the editor-in-chief of a group of three suburban newspapers. His busy life leaves him little time to spend with his wife and their four children, but his voice at least is seldom absent from their pleasant Surrey home. S. McC.

DENNIS WINTHER

There is something of Peter Pan about Dennis Winther—an intermingled gaiety and gravity of youth. His easy charm and his disarming smile are boyish. But behind that smile and those twinkling eyes are an unexpected strength of mind that is at times almost stubborn, a shrewdness in his assessments of people that would be disconcerting if it were not for the quiet charm of his manner, and an unshakable calm. In fact, the head of the BBC's Scandinavian Service combines what we like to think are the good characteristics of the Scandinavian and British peoples.

Dennis Winther was born in London in 1904, but he is of pure Norwegian stock. His father was Norwegian born, settled in England as a young man, and founded the family timber business of Winther and Co., becoming a British subject. His mother, although born in Britain, was of Norwegian parentage. Dennis Winther was brought up in this country and in the traditional English way, spending holidays in Norway. After Charterhouse, he went up to Oxford, but his career there was cut short when he became managing director of the family business on the death of his father. Then came the war. When he found the army had no use for him, he offered his services to the BBC, and he was appointed Norwegian Editor.

Remarkably quickly he adapted himself to the changed work and the new surroundings in which he was no longer 'the managing director', but one man in a great organization engaged in an enormous wartime task demanding co-operation and team work. When the Scandinavian Service staff was reorganized on a basis of two editors for the four languages, Dennis Winther was one of these two editors. It meant working twelve hours a day or more, but he was always cheerful, always ready with the little remark, light and airy, that relieves tension; this quality stood him in good stead in his relations with the Norwegian Government, then domiciled in London.

As the years passed, he seemed more and more to become a part of the BBC, growing roots naturally and unself-consciously. He was appointed Head of Scandinavian

SIR ADRIAN BOULT
with Paul Beard

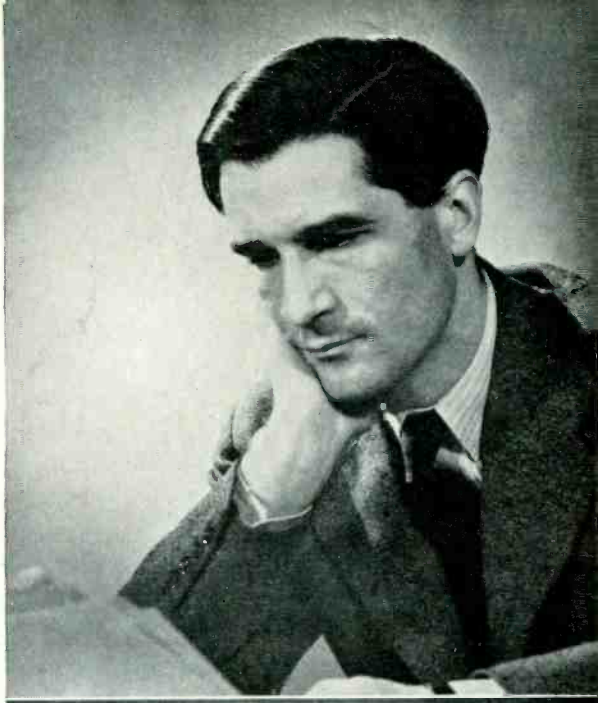
PERSONALITIES OF 1950

GLADYS YOUNG

STEPHEN MURRAY

FRED HOYLE

JAMES MONAHAN



ROBERT STIMSON

Left
RICHARD HEARNE

Below left
TED RAY

Below right
SOLOMON

DENIS WINTHER

CYNTHIA PUGHE

KAY HAMMOND

RICHARD DIMBLEBY

PATRICK O'DONOVAN

TERRY-THOMAS, with Adèle Dixon, in 'How do you View?'

THE WEST INDIES CRICKET TEAM, 1950

BERNARD BRADEN

THE KEYNOTES

Service after the war. The wartime stimulus has gone from broadcasting to the Scandinavian countries, but Winther's quiet enthusiasm, his calm interest in people and things, preserve him from falling into the quagmire of mere routine. His Scandinavian origins play a useful part in his work, just as they did during the war when he became a close friend of all the Norwegians who came into contact with him. To this day the friend of the war days is remembered in Norway, and the friendship still grows, and is rapidly extending in the other Scandinavian countries, where he has travelled much since the war. It could hardly be otherwise; friendliness is the very essence of Dennis Winther. R. J.

KAY HAMMOND

For almost three years of her distinguished career in the London theatre Kay Hammond played Elvira, the only partly materialized deceased wife of Charles Condamine, in Noel Coward's comedy, *Blithe Spirit*. Afterwards she played the same part in the film version.

It may be a case of associating an actress with one of her best-known roles, but in watching Miss Hammond at a recording of 'We beg to differ', one is inclined to have that same impression that she is not wholly with us.

To begin with, she appears to be paying no attention at all to what is going on, or being said, around her. She casually examines a finger-nail, or explores the depths of her handbag, looking for nothing in particular, or, elbows on table, directs her wide blue eyes at the ceiling, or beyond, while her fingers twist the curling ends of her blond hair. While the chairman is reading out the next question for discussion she may bend her gaze absently upon him, but seemingly only to count the hairs on his head (a task which is becoming increasingly easy), and no reaction to what is being said disturbs the bland beauty of her face.

The other members of the teams take up the question. One says one thing; another contradicts. The tempo quickens, voices are raised, controversy rages; and then, having bided her time and judged her moment to perfection, Kay Hammond adds her contribution—always wittily, some-

times devastatingly, and invariably in that quiet, vague manner which, with that distinctive drawling voice, has quickly established her as a favourite radio personality.

How can one describe that voice? The tones are honey even when the sentiments are gall. It is a delicious, pouting, cajoling voice, casual, youthful, it is town; it is all that ever went with evening dress. But its owner is a countrywoman at heart, and comes to London only to work. R. P.

PATRICK O'DONOVAN

Patrick O'Donovan has not done many broadcasts, but he has shown in them talents of a very high order. At his best he is capable of producing that rare electrifying effect in which a broadcast talk transcends the medium and becomes an intense and unforgettable experience for the listener.

Such moments in broadcasting, which once heard are never forgotten, come sometimes from deep levels of character and feeling glimpsed in an interview or a Christmas programme, but are less often heard when the speaker is a practised writer and reporter. The poet, the artist in words —and O'Donovan is certainly that—is today rarely able to establish this effect in person.

O'Donovan is a product of Ampleforth and Christ Church, Oxford, where he read law, and is the son of a Harley Street specialist. A week before the war broke out, he joined the Irish Guards, and in his five years of service was wounded, mentioned in despatches, and promoted to the rank of major. On leaving the army, and without benefit of experience, he promoted a job for himself as a reporter for *The Observer*, and has worked for that newspaper in Germany, the Middle East, the Far East, and in Africa.

At thirty-one, his background and training give him an easy, genial, and modest air guaranteed to disarm even the stuffiest official in remote outposts where a 'newspaperman' may be a suspect intruder. O'Donovan has a humorous and engaging manner which shows no sign of the intentness of observation evident in his reporting. But his eye catches the gesture, as it were, of people, places, and events, and he

can evoke these later in words of great economy and precision.

Take, for example, a tropical scene: 'The plain was wet green and steamed like a pudding in the sun'; or this vignette of houses in a Yorkshire town: 'Their doors are locked, their windows tightly curtained with lace, and smoke streams horizontal from their chimneys as if they were express trains.' It is of this same town of Thirsk that he wrote: 'But when I am abroad, which is too often, and when I think of England, which I do too frequently for contentment, it is Thirsk, this plain and forbidding town, with its name like a harsh northern curse, that comes back.'

O'Donovan does more than describe what a place is like—he gives the very feel of it, and conveys an intensely realized emotion about its character, so that ever afterwards you think of it, even if you have never been there, as a place you know and remember with a mixture of pleasurable and painful emotions. And of course, no one can write or broadcast to produce this effect, unless his 'reporting' comes from an intensity of personal experience beyond the bounds of reporting as usually understood. His is imbued above all with a deep sense of the brotherhood of mankind, of whatever colour or creed. In the world of today, where this feeling strikes deeper roots the more it is outraged by events, this is perhaps the essential quality of a real as distinct from a spurious objectivity in a great reporter. W. M. N. and E. R.

TERRY-THOMAS

Terry-Thomas is a funny chap, and something of a character. After all—he should be—that's his business. And it is just as much a business being funny and portraying characters as it is being a doctor or a lawyer. It is a business which calls first of all for a natural ability to make people laugh. Then a great deal of hard work and attention to detail are needed. This makes all the difference between a laugh here and there and the continuous bubble of mirth that comes from an audience which is listening to a good performer—such as Terry-Thomas.

Terry-Thomas dabbled a bit in films before the war, but got nowhere, and then turned to sophisticated cabaret comedy with a certain success. Sometime in 1940 he received a 'cunningly worded letter inviting me to join the army' and shortly afterwards found himself campaigning in 'Stars in Battledress'. After the war he began to make a name—various radio broadcasts—with the late Sid Field in 'Piccadilly Hayride'—a Royal Command performance—and then into television.

Each medium he tackles not only with the gusto which is characteristic of himself, but with an underlying thought: 'This is new to me and, being new, demands a different approach.' And it is this principle of attack that has enabled him to survive and conquer that graveyard of comedians—television.

His own reason for his success at Alexandra Palace is that as he can master his lines rapidly he has plenty of time to learn the intricacies of movement which the medium demands, and having done that he concentrates on intimate approach to an audience of about two or three people.

He finds the medium more difficult than any others, and also most exhausting. Mind and body must both be constantly at work.

His producer, however, believes that the real secret of Terry-Thomas is that he first approached the medium as a viewer, and as a viewer decided on the things that he liked and disliked, and also took notice of the likes and dislikes of other viewers. Getting to the other side of the screen was, therefore, for him like going through the looking-glass was for Alice. Once there it seemed the most natural place in the world to be.

Yes, Terry-Thomas is a funny chap. He is also an extremely clever one. It is an irresistible combination. B. W.

BERNARD BRADEN

One of the more mobile, quick-firing units in the current Canadian invasion of British entertainment is a one-man blitz named Bernard Braden. Contrary to popular opinion, there is only one Bernard Braden, but he is as ubiquitous as

laughter and as likely as not responsible for it. For instance, while one audience is watching Braden's Mitch in *Streetcar named Desire*, in which he plays the benevolent bohunk to the bewildered Blanche, another audience is listening to his ain't-life-blunderful progress on 'Leave your Name and Number', while in a cinema a third may be hearing his voice soundtracking a film. And probably all these audiences will get up the next morning to have 'Breakfast with Braden', the star of which certainly isn't Bernard Shaw.

Recording in advance explains the technical side of this lay miracle, but so far nobody has explained whence Braden derives the energy that has rocketed him to stardom in only a year.

In his hometown of Vancouver, British Columbia, he was already at eighteen factotum for a local radio station and ready to do anything for the love of mike. One of his more successful engagements during this period was to Barbara Kelly, the seventeen-year-old actress who as Mrs. Braden has since matched her husband's torrid pace and co-produced their three most important ventures, Chris, Kelly, and Kim.

After plucking all the local radio laurels, the Bradens headed east and have never changed direction. In Toronto they romped off with every choice part of Canada's major radio dramatic series, and Bernard changed relationships with Barbara to become her 'Uncle Gabby', the garrulous old-timer whose mighty 'Hellooo there!' has echoed across the Atlantic and penetrated into the corners of homes all over the British Isles.

Uncle Gabby stowed away in the back of Braden's voice-box when Barbara and Bernard came to England to study film methods and to grapple with those two giants, the BBC and the West End theatre. They passed with flying colours their BBC dramatic audition in spite of the irrepressible Uncle Gabby, who popped up like a genie sandwiched between impeccably portrayed extracts from Shakespeare, Strindberg, and Shaw. From there they followed the old gentleman through the staider corridors of Broadcasting House into Variety. It would be rash to suppose this was the end of the story.

E. N.

THE KEYNOTES

The Keynotes are without doubt one of the most popular close-harmony teams in the country, and their success is due in no small degree to the happy way in which individual talent has been blended to form a combination of melody and harmony. They came into being in January 1948, at a time when a vocal group was needed to feature in 'Take it from Here', then about to start. Their appeal was immediate, and they have appeared ever since.

It was something of a new venture in close harmony. Each member of the quartet was also an accomplished solo performer who could read music at sight, and the team knitted together perfectly right from the start. Much of the credit for their success must go to Johnny Johnston, who is leader of the group, and responsible for all their vocal and orchestral arrangements. Johnny is also their business manager, and his experience is invaluable; he has over a thousand broadcasts to his credit. He began in radio in 1935 at the age of fifteen, and was recently heard as solo vocalist in 'Music from the Movies'.

The present group is composed of Pearl Carr, Irene King, Harry (Miff) King, and Johnny Johnston. Pearl, an attractive brunette of twenty-seven, sings lead, or melody, for the team; she was the featured vocalist with Cyril Stapleton's and Lew Stone's bands. She is now playing both as actress and vocalist in 'Breakfast with Braden'.

Irene King has sung with many well-known bands, but now spends most of her time in looking after her small daughter, Penny, and her husband, drummer Johnny Wise. Irene is twenty-six, and sings second voice for the group.

Harry (Miff) King (who is not related to Irene) joined the Keynotes in January 1950, when Alan Dean left to concentrate on solo work. Harry's greatest asset is his perfect pitch, acquired no doubt from his musical experience with Geraldo. Apart from Alan Dean, the only other change in the original team was when Terry Devon left to join her husband, band-leader Tito Burns, and Pearl Carr stepped into the breach.

The success which has attended this vocal group since its

inception has been tremendous. They have broadcast in many programmes and sung all types of songs, ranging from nursery rhymes to be-bop, although they admit a preference for soft, melodious tunes of the nineteen-twenties.

C. M.

THE WEST INDIES CRICKET TEAM 1950

Of the touring cricket team which is to be his company and topic all through an English summer, a commentator asks three things—first of all, an imaginative quality of their own, then playing ability and then good company—and, in each of these directions, John Goddard's 1950 West Indians were a complete delight to this broadcaster.

Even their names stir the imagination: Pierre—French: Gomez—Spanish: Christiani—Italian: Ramadhin—East Indian: Stollmeyer—German: and, of course, a majority British—a variety not surprising from the two-thousand-mile-long string of colonies.

And a West Indian innings moved with a matching variety—the studious care of Allan Rae, the easy, but virtually impregnable elegance of Jeff Stollmeyer, the silkily veiled ferocity of Worrell's strokes, the coiled-spring dynamism of Everton Weekes, the controlled but weighty might of Clyde Walcott, the eager alertness of Gomez, the dry, polished coolness of Christiani, the jaunty vivacity of Trestrail, the delicate reactions of Marshall. In the field, too, Goddard—himself paralysingly fast close to the bat—welded together ten men as different in manner as in character. Hines Johnson would stalk to the wicket to bowl with a hostile edge of speed and close control of pitch and swing, or Jones, breasting the air, would revel in his labours, however long. Lance Pierre was never happy, even in the nets, unless he was 'doing something' with the ball, and Alfred Valentine opened his eyes wider, daily learning something fresh about the craft of slow left-arm bowling with every match of the tour—and he had it in operation the match after. Sonny Ramadhin would almost hug himself with delight when he baffled a batsman of experience and reputation, while C. B. Williams, at the other end, perpetually strove to control the

WHAT THE VIEWER SEES

The selection of photographs which begins on the facing page will give those who have no television some idea of the beauty and variety of the images which, by day and night, appear on the screen, and will remind those who have, of some notable camera occasions.

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rebellious medium of the leg-break and googly, with anxious rubbings of his shock of fair hair—and enough success to keep his smile as frequent as his frown. Watching them in the field, you could never be sure but that Everton Weekes or John Goddard, the busy Gomez or the intent Allan Rae would suddenly catch the practically uncatchable. By the same token, you could never be sure in their dressing-room who would be the cheerful victim of the next joke or what the theme of the next song. By night, Lance Pierre would be at the piano and Jeff Stollmeyer's repertoire of calypsos proved as long as his technique is sympathetic—despite the occasional variation of a startling falsetto from Gerry Gomez.

Cricket, horses, cricket, porcelain, cricket, clothes, cricket, gramophone records, cricket, argument, cricket, books, cricket, golf—so the mosaic built up—Worcester, Lord's, Newcastle, The Oval, Sunderland, Old Trafford, Swansea, Trent Bridge, Norwich, Hastings—the pieces fell into place —Goddard, Stollmeyer, Gomez, Christiani, Rae, Worrell, Weekes, Walcott, Johnson, Jones, Pierre, Trestrail, Williams, Marshall, Valentine, Ramadhin—the pattern of a touring summer, 1950. J. A.

THE BURMESE DANCER: Ram Gopal

BALLET AND CABARET: ROMEO ET JULIETTE from Paris, and ROOFTOP RENDEZVOUS, (*below*).

THE CLASSICAL DANCE: Ballet Rambert in the NUTCRACKER SUITE, and (*below*) an international cast in LES SYLPHIDES.

OTHELLO IN FRENCH

A visit from the COMÉDIE FRANÇAISE . . .

. . . and (*opposite*)

NAPOLEON IN ENGLISH

Hugh Burden and Valerie Hobson

in THE MAN OF DESTINY.

AT THE PLAY

(*opposite*) CHEAPSIDE, tragedy of seventeenth-century London . . .

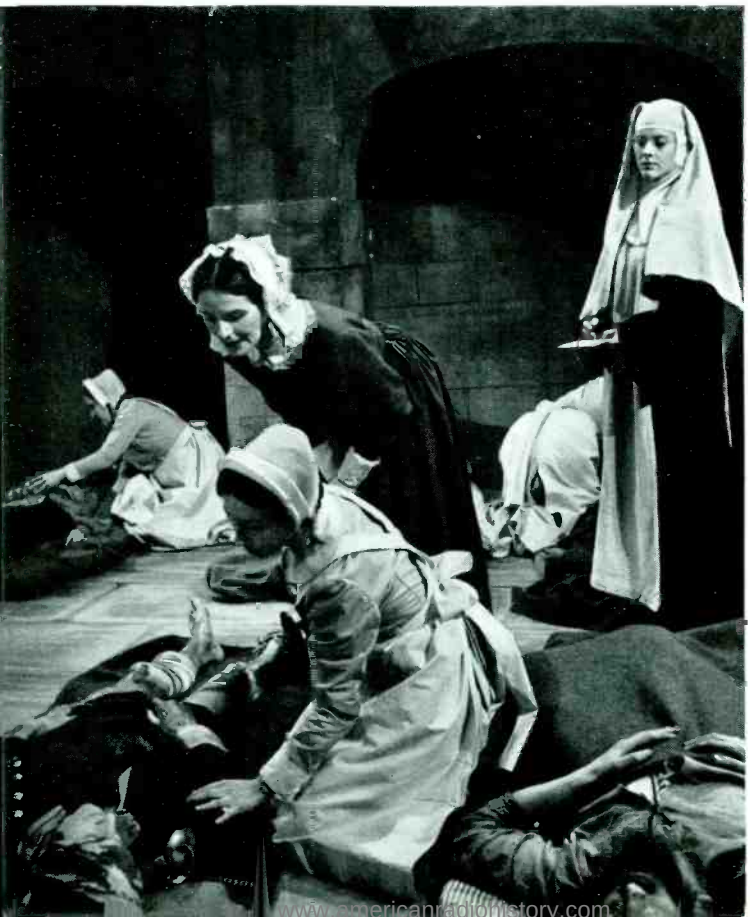
(*above*) HAIL NERO, comedy of ancient Rome . . .

and (*right*) THE QUEEN'S MARIE, drama of sixteenth-century Scotland.

NEW PLAYS AND NEW VERSIONS

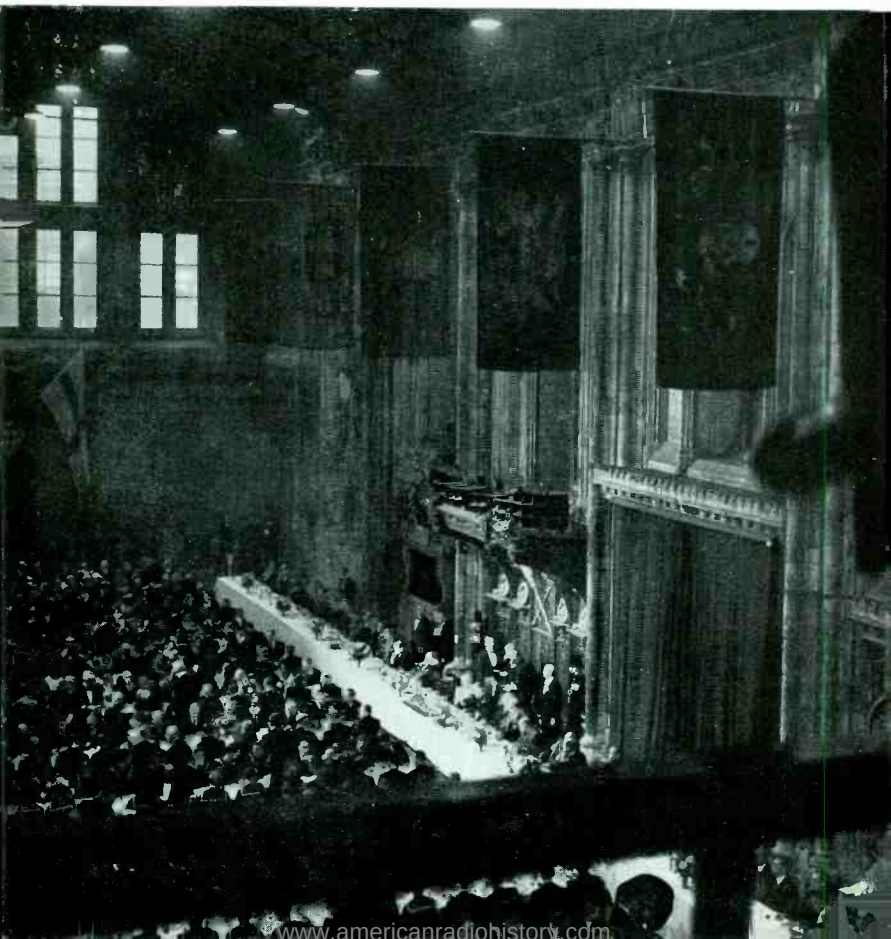
THE PASSIONATE PILGRIM, a story of the Crimean War, was written for television (*below*) . . .

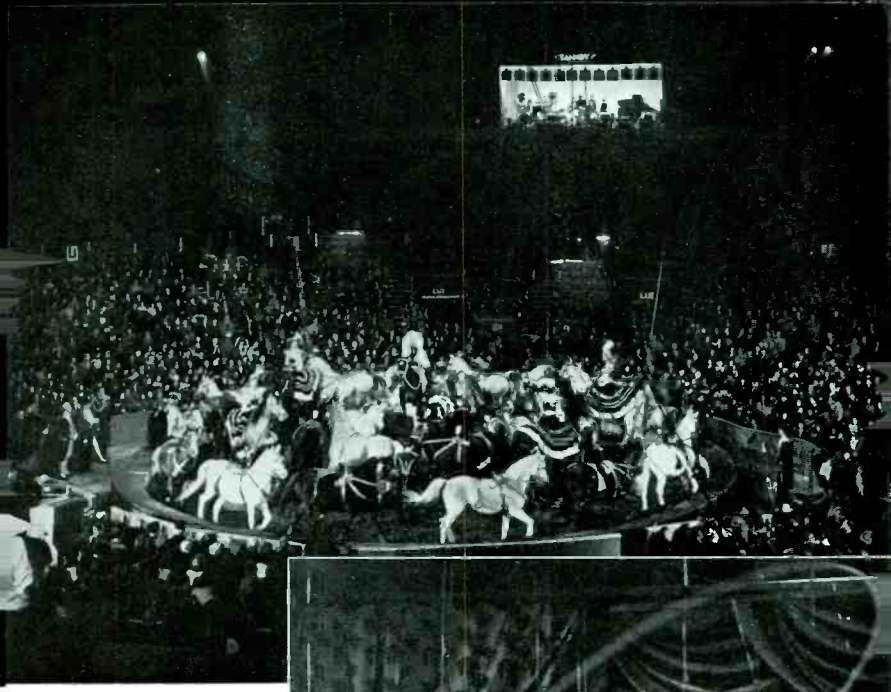
THE KINGDOM OF GOD, with Barbara Mullen, was specially arranged (*opposite*).

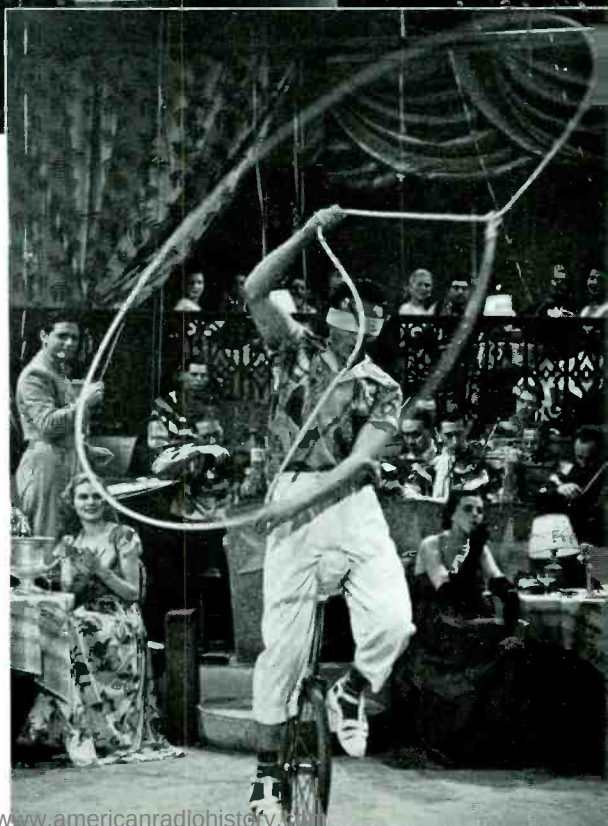


THE CAMERA GOES OUT

To GUILDHALL for the *Amethyst* luncheon (*below*) . . .
and to OLYMPIA for the Circus (*top right*).







CAFÉ CONTINENTAL

The camera introduces new artists from abroad.

FAMOUS PLAYS
AND
FAMOUS PLAYER
Jack Hulbert
as Thomas Freeman
in SMITH.
(Somerset Maugham

and George Hayes
as Sartorius
in a production of
WIDOWERS' HOUSES
(Bernard Shaw).

MELODRAMA
AND
ROMANCE:

Victorian England in
PINK STRING AND
SEALING WAX . .

. . . and Revolutionary
France in
THE SCARLET PIMPERNEL.

MODERN COMEDY

'MIRANDA' the mermaid (Peggy Simpson).

REPORT OF THE YEAR'S BROADCASTING

At Home

The Home Service: Outstanding in importance in the early part of the year were the election addresses broadcast by representatives of the various political parties. The General Election results were given out as they became available, from about 11 p.m. on Polling Day, 23 February, until 4.10 the following morning. And then from 6.30 a.m. throughout 24 February until 8.35 p.m., when an overall Labour majority became clear.

In 'Taking Stock', 'Questions of the Hour', and 'Report to the People', matters of urgent importance to the individual citizen were dealt with in talks and discussions. The success of the two series, 'The Undefeated' and 'Now it can be told', reflected the listeners' interest in dramatic reconstructions of contemporary history.

The microphone took listeners to events of importance such as the opening of Parliament, the State Visit of the French President, the Lord Mayor's Banquet, and the Royal Academy Dinner. Many important sporting events were also broadcast—International Rugby Football, Lawn Tennis and Golf Championships.

'Saturday Night Theatre' maintained its enormous popularity. The 'European Theatre' and 'World Theatre' series have kept the listener in touch with the best plays of our time. Symphony Concerts, Recitals, and programmes of Chamber Music presented the great works of the Masters, conducted and played by such outstanding musicians as Menuhin and Koussevitsky.

On the lighter side of Home Service broadcasting, 'Twenty Questions' and 'Ray's a Laugh' continued to provide gaiety and relaxation and a new-comer, 'We beg to differ', had a great success.

The Light Programme: The pattern of family favourites and new acquaintances is now an established one for this programme. Among the innovations, one of the most successful was the poetry series, 'The Pleasure's Mine', in which Wilfred Pickles with his particular mastery of the microphone succeeded in drawing a vaster audience for the pleasures of poetry than has ever before been reported. For the first time, broadcasting is offering to children under five a programme of their own, and they have shown themselves eager to 'Listen with Mother'. Also for our younger listeners we have continued the 'Hullo Children' programmes, now called 'Hullo There', which are broadcast during school holidays, and 'Jamboree', the programme for Boy Scouts. Serious music has been given in the familiar framework of 'Concert Hour' and 'Music of the Masters', but the programmes have been given a more direct purpose by the selection of a 'Composer of the Month'. 'Music in Miniature' has returned to the air. 'Come to the Opera' and 'Stanford Robinson presents' are among the other features of what is by now a large output of serious and not so serious music. The development of popular music has been consistently encouraged in such programmes as 'Band Parade', 'Top Score', 'Rainbow Room', and the Donald Peers show. 'Variety Bandbox', 'Take it from Here', and 'Have a Go' have maintained their positions as the most popular ingredients in our supply of variety. 'Curtain Up' has once again drawn consistently large audiences for drama, and 'Focus' has illuminated a wide range of topical subjects.

The Third Programme has devoted much time in the past year to groups and series of programmes in all three main categories of serious broadcasting: drama, talks, and music. Examples of this method of dealing with a subject, which gives the listener greater opportunities for appreciation and study than are provided by any other broadcasting service in the world, have been the sequence of eleven plays by Ibsen; the two series of lectures on 'The New Cosmology', by Fred Hoyle, and on 'Religion and the Decline of

Capitalism', by Canon Demant; six talks on 'The Idea of a University'; the group of programmes connected with James Joyce; Wagner's *The Ring* from Covent Garden, broadcast for the first time in its entirety in Britain; and the series of recitals and concerts to commemorate the centenary and bicentenary of the deaths of Chopin and Bach. The policy of repeating the majority of programmes once or twice has been extended, and some musical works are now retained in the repertory for a period up to six months and given several performances, often by different executants. Two operas, Verdi's *Falstaff* and Vaughan Williams's *Hugh the Drover*, were each given six times between October 1949 and May 1950. *The Resurrection* of Heinrich Schütz was given five times in the course of a considerable exploration of that composer's work, and there were several broadcasts of Bach's *The Art of Fugue* in various forms. Rimsky-Korsakov's *Kitesh* and Puccini's *Turandot* have been selected for similar repetition during the 1950–1 season. Relays from music festivals in this country and on the Continent, at Aix-en-Provence, Aldeburgh, Cambridge, Cheltenham, Edinburgh, Florence, Glyndebourne, Leeds, Lucerne, and Salzburg, included the first production at Salzburg of Strauss's opera *Capriccio*.

News: The News Division in its second year since its reorganization on 12 June 1948 has been reaping the results of the amalgamation of the Home and Overseas news services. The staffs of the former two departments now have become so completely integrated, that each man has a knowledge of the requirements of both transmissions. The service is continuous throughout every twenty-four hours, during which there are fifty-three broadcasts to audiences at home and overseas and seven editions of Radio Newsreel.

The General Election tested the new organization thoroughly. With the combined staff, it was possible not only to give audiences in the United Kingdom comprehensive reports, but also to provide special bulletins every half-hour for overseas audiences, with notes on the personalities involved. Congratulations were received by the Corpora-

tion from many parts of the United Kingdom and from countries overseas.

Thirteen divisional correspondents are now posted abroad—two in France and one each in Berlin, West Germany, Austria, Italy, the Balkans, the Middle East, South Africa, India and Pakistan, the U.S.A., and at United Nations' headquarters. The Warsaw correspondent is fulfilling a temporary assignment in Malaya. During the past year staff men have also been sent to report on such events as the Council of Europe meetings in Strasbourg, the United Nations Assembly, the Belgian referendum, and the Trusteeship Council in Geneva.

Religious Broadcasting: The wide range of subjects covered by sermons and addresses broadcast during the year can be illustrated by this sequence of sermons: 'Christians and Politics' (three addresses by Christian laymen broadcast before the General Election), 'Worship and Life' (three sermons on the relevance of what is done in church to what happens outside), 'How to pray' (instructions on the spiritual life including answers to listeners' questions), and 'Search the Scriptures' (expository sermons following which the preacher replied to questions from members of the congregation). All these Home Service broadcasts have to attempt to meet simultaneously the very different needs of the three main groups of listeners to religious programmes: the majority 'who could go to church if they would', invalids and others 'who would go to church if they could', and 'regular church-goers'. In the Light Programme the broadcaster's task is somewhat simplified by the fact that the overwhelming majority of the audience belongs to the first group. In a concentrated attempt to help such listeners to form a coherent picture of the Ministry, Passion, and Resurrection of Jesus Christ, the People's Services during the first five months of the year were linked to form a continuous 'People's Life of Christ'. In the Third Programme the most notable event was the broadcast of eight lectures on 'Religion and the Decline of Capitalism', by Canon V. A. Demant.

Music: Programmes in the Home, Light, and Third Services, continued to show a balance, according to taste, between the familiar, the not-so-well-known, and the new. Crowded audiences at the Summer and Winter Promenade Concerts, from which many and representative broadcasts were given, attested the vitality of these concerts over a total period of ten weeks. In the 1950 Summer Proms the Opera Orchestra made its Promenade début under its permanent conductor, Stanford Robinson. Herbert Murrill has now succeeded Sir Steuart Wilson as Head of Music, and Sir Malcolm Sargent was appointed chief conductor of the BBC Symphony Orchestra.

As Sir Malcolm was unable to take up his new position at once, more guest conductors than usual were introduced in the 1950–1 season, including such distinguished musicians as Issay Dobrowen, Vittorio Gui, Albert Wolff, interpreting works with which they are specially associated. Before Sir Adrian Boult left to become Chief Conductor of the London Philharmonic Orchestra he took the BBC Symphony Orchestra on a provincial tour, his last tour with them as permanent conductor. Most successful concerts were given at Leeds, Harrogate, Bradford, Liverpool, and Belfast. Operatically, as well as symphonically, there has been much to enjoy in studio performances and in broadcasts from opera houses at home and abroad.

Drama: The event of the year most likely to be remembered in the annals of radio drama was the production in six programmes of Louis MacNeice's translation of Goethe's *Faust*, Parts I and II, with Stephen Murray as Faust and Howard Marion Crawford as Mephistopheles. Other major classics broadcast on Home Service in the World Theatre series or on Third Programme have been the sequence of eleven of Ibsen's plays including *Brand* with Sir Ralph Richardson, and a full quota of Shakespeare ranging from the Stratford-on-Avon Memorial Theatre Company's production, with John Gielgud, of *Measure for Measure*, to a new radio version of *Antony and Cleopatra* with Pamela Brown and Godfrey Tearle. Plays from the Continent have continued to be well represented on Monday nights in Home Service or on Third,

and have included several produced for the first time in this country, e.g. Anouilh's *Eurydice*, Paul Claudel's *Partage de Midi*, and Stig Dagerman's *Shadow of Death*. Outstanding among new works written or adapted for the microphone have been two plays by James Forsyth, *Héloïse* and *The other Heart*, a new Villon drama. The 'Saturday Night Theatre' and 'Curtain Up' series have continued to draw massive audiences, topping the ten million mark for Gregory Peck, with a starry cast, in a radio version of *Twelve o'clock High*, and for *It always rains on Sundays* with Googie Withers. The serial output continues undiminished with Dale, Barton, Odell, and the Victorians with a space found on Sunday afternoons in Home Service for three-decker dramatizations beginning with *Ivanhoe* produced by North Region.

The year has been notable for brilliant microphone performances by many of the leading players in the country, whose increasing readiness to come to the studios is in itself a tribute to the consistent standard of production found there.

Features: A special obligation is laid on Features Department to advance the frontiers of broadcasting by experiment in new radio forms, by applying its proved techniques to new subjects, by encouraging new writers to the radio medium, and by attracting new listeners to original radio work. How far have the obligations been met in the past year? Nesta Pain with her new science series, 'Searchlight', can claim a clear advance. A growing Light Programme audience was pleased to follow her and her eminent collaborators as they used radio-feature technique to throw light on the increasingly complex work of contemporary scientists. Light Programme saw another experiment in the technique of popular exposition without distorting simplification in the series of historical reconstructions, 'News from Yesterday', in which modern radio reporters were used to give authentic accounts of such landmarks as the Battle of Waterloo and the Fire of London. The outstanding experiment of the year was the 'Portrait of James Joyce', by W. R. Rodgers. In this, and in his earlier portrait of W. B. Yeats, Rodgers demonstrated the possibility of a new form of radio biography, valid as a unique creation in

radio terms, with untold value to the future historian and biographer who seeks to answer the question, 'What was this man like?'

Christopher Sykes, Henry Reed, Terence Tiller, and J. Bronowski were among the well-known writers who worked out new advances in feature-writing during the year.

Variety: The success in an always unpredictable market of a high proportion of the new programmes launched during the year was an encouraging feature. Ted Ray established himself in 'Ray's a Laugh' in the forefront of radio comedians. Bernard Braden, a versatile and accomplished young Canadian, achieved considerable popularity in 'Breakfast with Braden' and (with his wife Barbara Kelly) in 'Leave your Name and Number'. Cicely Courtneidge made a successful return to the microphone in 'The House next Door'. The all-women casts of 'Ladies Night' and its successor 'Ladies Please' won a big following, and the light entertainment exchange programmes between Britain and various continental countries also proved to listeners' liking. In other fields, 'Riders of the Range' became something like a schoolboys' classic, and the Piddingtons stirred up much controversy.

Revivals included 'Take it from Here', which gained a reputation probably second only to ITMA as the leading comedy show, 'Twenty Questions' with Kenneth Horne succeeding Stewart MacPherson in the chair, 'Much-Binding-in-the-Marsh', 'Henry Hall's Guest Night', 'Starlight Hour', 'Palace of Varieties', and Donald Peers's half-hour of songs. 'Variety Bandbox' entered the eighth year of its unbroken run. Gracie Fields gave several broadcasts during the year.

'John Bull's Band' played popular and characteristic British music unadulterated by imported rhythms.

Talks: Individual talks, series of talks, discussions, lectures . . . all these variants of the spoken word produced notable broadcasts. Outstanding were Fred Hoyle's lectures in the Third Programme on 'The Nature of the Universe', which he

repeated in the Home Service later. The celebrations associated with Goethe and Wordsworth were fully reflected in the talks output. The Home Service discussions, 'Taking Stock', covered many aspects of the state of the nation: and, apart from the party political broadcasts, the General Election produced stimulating talk and debate. In the Light Programme the short comments on current events, 'Topic for Tonight', have proved a successful experiment. The Third Programme has paid increased attention to scientific matters, and to architecture and problems of town planning: series on 'Aspects of Art in England', 'The United States and Europe', 'William of Occam', 'The Idea of a University', 'How Mathematicians think', indicate the scope of the Third Programme's talks. J. B. Priestley reported on an English journey in his Home Service series, 'Bicker to Blue Anchor', and another traveller, Peter Fleming, caused much interest with his 'Three Journeys'.

Outside Broadcasts (Sound): The State Visit of the President of the French Republic provided an occasion for many elaborate broadcasts. The visit was covered for listeners in this country by commentaries on the more important events. The General Election was fully covered throughout the country. The first Bradfield Greek Play to be held since the war was recorded and broadcast with descriptive commentary in the Third Programme. Several debates from the University Union Societies were relayed in the Light and Third Programmes. More visits to London theatres and provincial music halls were made, following agreement with the Musicians' Union for such broadcasts. As usual, the major sporting events of the year were reported on the spot. Interest in the recommencement of international motor races and rallies has been reflected in outside broadcasts.

Broadcasts for Schools: Audience figures reached a new peak in 1950, and in March 19,867 schools were registered against 18,245 in March 1949. One of the year's more ambitious projects was a group of sixteen Talks for Sixth Forms by leading authorities on the History of Science. Another

RICHARD SHARP, BBC NEWS REPORTER and ex-war correspondent, died on board H.M.S. *Nepal* 1 May 1950, while on his way to cover the visit of the First Sea Lord to Scandinavia.

THE BBC NEWS ROOM works day and night round the clock. As one news bulletin is broadcast, the next is being prepared.

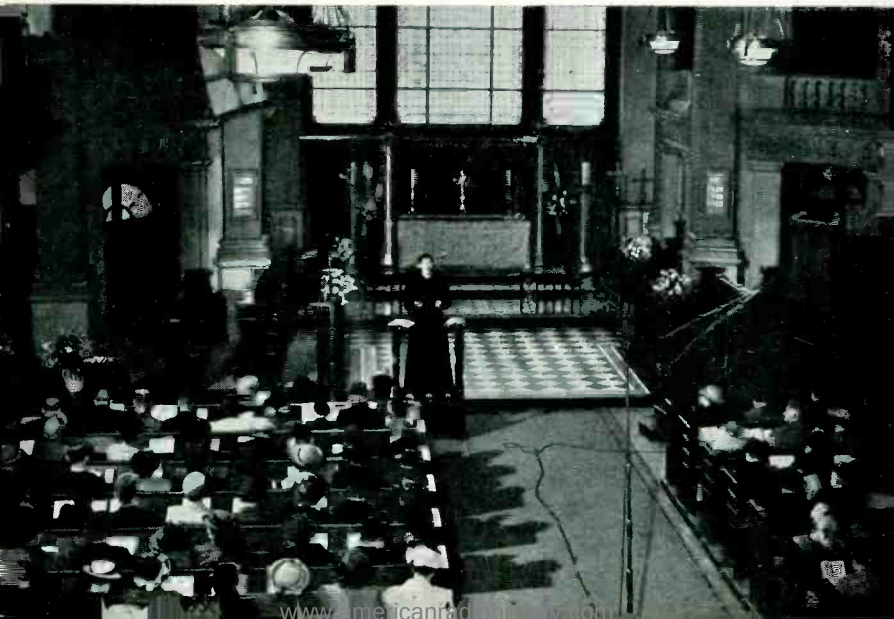
THE BBC MUSIC LIBRARY houses one of the largest collections of music in the world. The indices ensure that any one of thousands of titles is quickly found.

TWENTY QUESTIONS

(*below*) The team which amuses millions at home and overseas: (*left to right*) JACK TRAIN, JOY ADAMSON, ANONA WINN, and RICHARD DIMBLEBY, and (*above*) a specially invited audience hears a Pakistan team in an Urdu version.

THE SCHOOL BROADCASTING COUNCIL FOR THE UNITED KINGDOM
in session in the Council Chamber, Broadcasting House.

The organist of ST. MARTIN-IN-THE-FIELDS rehearses the congregation before a broadcast evening service.



was the series, 'Looking at Things', which was supported by a generously illustrated pamphlet, and which brought to the microphone designers, planners, craftsmen, and architects in an attempt to awaken the interest of children in the shape and colour of everyday things. As a result of a survey by the School Broadcasting Council of the needs of children in their last year at the Secondary Modern School, two new series were introduced in September. One of them, 'The World of Work', was planned to show children the interest and importance both of the occupations they might themselves take up, and of 'the other man's job'. The second was an off-the-syllabus radio miscellany 'For the Fourteens'.

Children's Hour: In supplying some concise comments on the main programme output of Children's Hour throughout the past year, reference ought to be made at once to the response of young listeners to their own Request Week. By analysing the selected items sent on postcards, the Children's Hour staff builds up a week's programmes virtually 'requested' by the children. The last Request Week was an all-time record, and more than 14,000 cards were received in London alone. 'Toytown', now more than twenty-one years old, is as popular as ever, high up the poll with 'Said the Cat to the Dog'. Listening tastes of children may be remarked upon in that they voted heavily for 'Nature Parliament' and 'Cowleaze Farm', nature and countryside material respectively. Serial plays never fail to be a success, but children of today still incline towards the well-tried books: *The Treasure Seekers*, *Rebecca of Sunnybrook Farm*, and *Winnie-the-Pooh*. Nevertheless, Children's Hour continues to attract distinguished modern authors to write specially for this medium. Thus, Noel Streatfeild's *The Bell Family*, Mary Dunn's *Mossy Green Theatre*, Aubrey Feist's *Spread-eagle*, and Anthony Buckeridge's *Jennings at School*. The latter is to be published in book form. Of the many first-rate speakers employed, popularity of late has rested with Bernard Newman who writes with such facility about Secret Service matters, and Peter Scott, recently returned from an expedition to the

Canadian Arctic with some wonderful birds and fascinating stories.

Gramophone Department: Despite severe restrictions placed on the broadcasting of records, the Gramophone Department has had fairly wide scope in broadcasting music that normally can be heard only on records, and in using records to illustrate talks or debates or other programmes regulated by a definite pattern. The most obvious of these programmes is the daily 'Housewives' Choice' (Light) which has now run for five years and receives more than 3,000 postcard requests each week. In mid-afternoon and late evening there have been programmes in which distinguished personalities in the entertainment world have played and discussed their favourite music. These broadcasters have included Bing Crosby, Godfrey Winn, Richard Attenborough, Boyd Neel, and Jack Jackson. There has also been a series of Sunday lunch-time programmes, 'Opera at Home', in which various aspects of the art or history of opera have been presented with gramophone records by Philip Hope-Wallace, Norman Del Mar, Dennis Arundell, and Stephen Williams. 'Sunday Morning Prom' is one of the department's most popular programmes of standard orchestral music, and during the summer the very popular series, 'This Week's Composer', was revived. Perhaps the most eagerly followed programme on the General Overseas Service is 'Listeners' Choice'. Five of these programmes are broadcast each week, and requests are received from listeners in almost every country of the world.

The Regions:—Scotland: Nineteen fifty was a full and vigorous year.

The implications of the National Covenant Movement were discussed in talks and debates. The Scottish News Bulletin was increased by five minutes, and a weekly news magazine was broadcast on Sundays in winter. Feature programmes on the activities of Scottish industrial and cultural life were many and various, pursuing a policy of getting out and about to present the contrasted char-

acters and characteristics of towns, villages, and districts all over the country. Big sporting events, like the Open and the Amateur Open Golf Championships, were given full daily coverage. Adaptations of Scottish literary classics in the form of serialized radio plays were highly popular.

The series 'Scotland sings' showed how successful the revival of interest in choral singing has been. The enormous popularity of the 'Learning Gaelic' talks was another instance of Scottish people's interest in the life and tradition of their land. In religious broadcasting, 'This is the Way' consisted of seventy broadcasts within a period of five weeks, designed as a concentrated effort in radio evangelism. Special programmes for the important anniversaries of Hogmanay, Burns's Night, and St. Andrew's Day were broadcast; the St. Andrew's Day feature contained personal messages from Scots all over the world emphasizing the widely spread community of the nation and the bonds which hold it together.

Wales: The output of Welsh radio drama during the year was increased with the appointment of an additional producer, and the productions ranged from a new Welsh translation of *Antigone* to a survey of the growth of the native drama. There were two new series of humorous programmes in Welsh, while *Sut Hwyl* continued as freshly as ever. Wales had its voice in the Light Programme in the unflaggingly popular 'Welsh Rarebit'. Music Department marked the Bach bicentenary with new Welsh librettos for radio performances of some of the best-known cantatas. The BBC Welsh Orchestra toured West Wales in the summer. Welsh feature programmes dealt with a wide variety of themes, scrap-books, biographies, poetic experiments, and so on. Public discussion programmes in Welsh and English ventilated many subjects of controversial interest to Wales. Wales's year of triumph on the international rugby field was marked with a special programme entitled 'Triple Crown', for which the captain and members of the winning team recorded their comments.

Northern Ireland: During the year visits from Her Majesty

the Queen and from the BBC Symphony Orchestra (with Sir Adrian Boult) were among the events which called for special coverage within the Province. In programmes generally, the appointment of a producer with special responsibilities towards agriculture enabled programmes for farmers to be focused more sharply on their needs. Among the important series of talks were four by Professor F. H. Newark of Queen's University on the constitution of Northern Ireland and six by Lieutenant-Colonel H. Montgomery Hyde, M.P., on Belfast's representation in Parliament in the last three centuries. The fortnightly play was in most cases written by an Ulster author, and Joseph Tomelty's tragedy, *All Soul's Night*, was broadcast in all Home Services. A more remote operation in 1950 was the visit of the Recording Unit to Rathlin Island. Music programmes were enriched by the generosity of Queen's University, which allowed the BBC to borrow freely from its collection of Sir Hamilton Harty manuscripts and scores.

North : Features on six northern rivers, 'We work in Steel', 'The Story of Don Robins', and journeys through Yorkshire, Derbyshire, and the Lake District illustrated again the wealth and variety of material in the Region. Church services, sports, factory, and seaside shows made up a weekly output of thirty outside broadcasts. In drama, productions of *Wuthering Heights* and *Ivanhoe* were outstanding, as also was a series on the Little Theatres of the North. Several of the popular series in the Light Programme were productions of the Region: 'Have a Go', 'Variety Fanfare', 'Over the Garden Wall', and the film series, 'From a Seat in the Circle'. Concerts by the Hallé, Liverpool Philharmonic, and Yorkshire Symphony Orchestras were broadcast. The BBC Northern Orchestra joined with Northern choirs in Britten's St. Nicolas Cantata, Bach's Magnificat, and Bloch's 'Sacred Service'. 'Sounding Brass and Voices', 'Children singing', and 'Where they sing' underlined the strength of the North in choral and brass band resources. In Variety, a competitive element was introduced in 'Top Town'. The family

series, 'At the Willows', ran for most of the year, followed by six programmes on Fred Karno's life. Work in the News Room reached a climax of activity at the General Election. In addition to two-nightly bulletins, this department presented a weekly magazine, 'Up to Date'. 'Let's talk it over' settled down as a successor to 'Public Enquiry'. Service talks for farmers and gardeners, series on local government, talks on dialect origins and the topography of the North country were broadcast. The North-east contributed nine radio revues—'The Air's the Limit', revivals of 'Barn Dance' and 'Wot Cheor Geordie', and several country programmes. Discussions on industrial problems balanced the picture.

West : Among the most important events of this year have been the formation of the West of England Light Orchestra and the arrival of Frank Cantell as its conductor. He is already well known to listeners, and this combination of talent promises well for the future of West Country broadcast music.

'Any Questions?', which began in the West, now comes on other Home Services as well, joining three other West Country programmes—'Country Questions', 'Bird Song of the Month', and 'The Naturalist'. Regular Regional items have increased in popularity including 'Air Space', 'Melody for Late Evening', 'As Prescribed', and, above all, 'At the Luscombes', and the last has become almost a part of listeners' home lives.

New drama material included Eden Phillpotts's West Country comedy, *The Orange Orchard.* From Features Department the Bath Festival was celebrated by 'To Bath, for the Season', a presentation of Bath's gay eighteenth-century life, while 'Railway to America' told the story of how the *Great Western* won the Blue Riband of the Atlantic.

In country broadcasting, 'County Mixture', 'Pictures of a Road', and 'Walks in the West Country' are steadily covering the Region, while, in more serious country matters, Ralph Wightman's weekly bulletins give a much appreciated service to farmers. Bee-keepers have also had special broadcasts this year.

Midland : Television O.Bs from central England began in May. In sound, the power of the Midland Home Service Transmitter at Droitwich was increased from 60 kW to 150 kW, to the benefit of the reception in the fringe of the region; and a talks studio and offices to serve the East Midlands are being opened in Nottingham.

A notable number of programmes won a national hearing. With broadcasts in Continental cities and teams of foreigners in this country, 'Town Forum' has gained an international reputation; in the same genre, 'Now's your Chance' went into the Light programme. The two science series, 'The Animal World' and 'The World of Movement', and the survey of Colwall, Herefordshire, in 'An English Village', were memorable contributions from the Features Department: *The Mill on the Floss* as a radio serial was warmly praised. In music, too, the year has added fresh laurels to the BBC Midland Chorus and the Midland Light Orchestra. Children's interest in their own programme, 'Midland Magazine', shows no falling off, and well over three thousand contributions of original work have been submitted. Amateur talent has been encouraged in Variety, and industry, agriculture, and sport have found their place in series of regular periods.

TELEVISION

The speed of television's progress in 1950 may well prompt the question whether by the end of the century there will be any worlds left for it to conquer. In the last twelve months BBC cameras have sought out the sun and moon, explored life in the air, on land, on the water, in it, and under it. Freshness and novelty have been the mark of many of the past year's programmes. In drama, for instance, there has been an increase of new plays written specially for the medium. In O.Bs cameras have ranged farther afield. A great belt of new country was opened to television when the Sutton Coldfield transmitter came on the air. Now the populous industrial North is waiting expectantly as the scheduled Holme Moss station draws near. New studios at Lime Grove, Shepherds Bush, involved new ways of

presentation and stimulated new ideas. Television newsreels reached beyond even the orbit of the mobile units to cover events overseas as well as at home. New transmission hours —5 to 6 p.m.—became a daily date for the children; to the grown-ups the new evening starting time of eight o'clock is now established custom.

Plays New and Old: With the BBC newsreel holding the lead in popularity, drama and outside broadcasts also made substantial advances. New plays included J. B. Priestley's Civil Service frolic, *Whitehall Wonders*; Frank Tilsley's domestic comedy, *The Canvas Rainbow*; John Pudney's *Luck of the Graces*; and an important dramatic experiment, *Promise of Tomorrow*, written and produced by Michael Barry. Shakespeare and Shaw, Ibsen, Tchekov, T. S. Eliot, and Barrie were all represented in the year's repertoire. (*The Fight for Mr. Lapraik* was taken from a Barrie manuscript discovered after the author's death.) Old plays and new, melodrama, comedy and high tragedy, proved adaptable to television in varying degrees. Bransby Williams in *Trelawney* and *The Bells*, Alec Clunes and Pamela Brown in Christopher Fry's *The Lady's not for Burning*, Nancy Price and Sonia Dresdel in *Thérèse Raquin*, Luise Rainer and Jeanne de Casalis in *The Seagull*, Wilfred Pickles in Lancashire comedy, Gordon Harker in Cockney, Margaretta Scott in *The Scarlet Pimpernel*—these were only some of the famous names in the casts of television drama. Richard Attenborough and Kathleen Michael in Galsworthy's *Justice*, Tod Slaughter in *Spring-heeled Jack*, Raymond Huntley in *The Admirable Crichton*, Valerie Hobson in *The Man of Destiny*, and Bernard Miles in *The Insect Play* had personal triumphs. From France came members of the Comédie Française to perform the last act of *Othello*, and the American Club Theatre in Paris presented William Saroyan's *Hello—Out There!*

The programmes included variety, music hall, ballet, opera, documentaries, and discussions, sometimes in the studios, sometimes in public halls. In all these fields, new ground was broken, most emphatically perhaps in the free discussion of controversial issues. 'Café Continental' and 'Rooftop Rendezvous', the two popular Saturday night

cabarets, continued their merry career, and artists new to Britain joined old favourites before the cameras. 'Music Hall' came from Poplar and the Players' Theatre at Charing Cross. There were new series too. 'Vic Oliver presents', for instance, which managed to combine comedy, ballet, opera, and knockabout in a way only possible perhaps under the direction of that versatile comedian-conductor, Terry-Thomas, a real television discovery, in 'How do you view?'; Bobby Howes in 'Such is Life'; Alfred Marks ('Don't look now'), 'Lucky Dip' (inaugurated by Gracie Fields), and 'Kaleidoscope', with Ronnie Waldman not only producing but appearing in his own 'Puzzle Corner' as well.

A Cluster of Stars: The stars of light entertainment were clustered more thickly in the studios than in any previous year; Jack Hulbert in 'Dick Whittington', Cecily Courtneidge in 'Song and Dance', Jack Buchanan in 'Gay Rosalinda', Hildegarde, Frances Day, Duggie Wakefield in their own programmes, and the 'Starlight' guests—Kenneth Spencer, Phyllis Robins, Vicki Autier, Vera Lynn, Petula Clark.

Ballet and dance, which from the earliest days have proved so suited to television, are now being designed specially for the medium. 'The Dance of Salome', a new form of dance drama to the choreography of Celia Franca, who took the title role, was one landmark; so were 'The Eve of St. Agnes' and, in another genre, 'The Story of the Waltz' with Boyer and Ravel. Visiting companies included the Metropolitan at Christmas in 'Coppelia', the Three Arts in 'Paradise Row', and the Ballet Nègres in Negro dance dramas. 'Ballet for Beginners' may have helped to create a new generation of balletomanes. On the lighter side, 'Television Dancing Club' held the floor through the winter, and one-night viewers were transported by degrees from 'Lancers to Bebop' at the Wimbledon Palais de Danse.

Music and television, once doubtful companions, are coming to terms. Chopin and Tchaikovsky pianoforte concertos, orchestral demonstrations by Sir Malcom Sargent and Sir Adrian Boult, piano recitals by virtuosi like Pouishnoff, even piano lessons—all provided proof of this. A modern dress

A STUDIO AT LIME GROVE: Autumn 1950.
The Television Service gets room to grow.

TELEFILM RECORDING: Programmes can now be permanently recorded from the screen.

SUMMER 1950: MRS. ATTLEE, opening the Television Children's Hour Studio at LIME GROVE, joins in the house-warming party with JENNIFER GAY (standing, *centre*), and WILFRED PICKLES.

Pagliacci, afterwards taken over to Paris studios, was an outstanding event in the history of television opera, not only in itself, but in the opportunities it opened up. Benjamin Britten's 'Let's make an Opera' was televised direct from the Theatre Royal, Stratford.

In and out of the Studios: The spoken word, too, found an ally in television. Feature and documentary ranged from stories of wool and cotton to modern medicine—sometimes with the television microscope—political discussion, and foreign travel. 'London Town', like the rest, combined film and studio actuality. More complicated was the combination of O.B. and studio presentation, best exemplified in the handling of the General Election, in which polling returns flashed to the crowds in Trafalgar Square alternated on the television screens with expert analysis in the studio. 'Picture Page', the world's oldest regular television programme, had its first breathing-space—a three months' break—in the summer.

Outside the studios the world was shared by the O.B. units and the BBC Television Newsreel.

The mobile units, concentrating on national, ceremonial, and military occasions, and on sport, ventured to new places, and consolidated past successes. Transmissions from Calais En Fête and Trent Bridge by micro-wave vied as technical achievements with the University boat race broadcast, in which four mobile units were spread from Putney to Mortlake, with twelve bankside cameras and one on a following launch. From the Midlands came professional boxing—Powell *v.* Brown at the Embassy Skating Rink, Birmingham; London returned the compliment with such items as the West Ham *v.* Birmingham Speedway championships at West Ham. Cameras paid their first visit to Hurst Park racecourse, and professional basket ball from Wembley was another first occasion. Test and county cricket, lawn tennis from Wimbledon, international soccer and rugger from Wembley Stadium, racing at Ascot and Kempton, and ice hockey helped to fill the sportsman's television calendar.

Royalty on the Screen: Some of the most pleasing and most informal pictures of Royalty ever taken were transmitted

when the King and Queen entertained the French President and Mme. Auriol. Trooping the Colour and the presentation of Colours to the Coldstream Guards were other pageants imaginatively presented on the screen. Divine service was televised first on Christmas Day from the Royal Hospital, Chelsea, and again on Easter Day from the Tower of London. The children's ward of St. Thomas's Hospital on New Year's Eve, the Peckham Health Centre, Cruft's Dog Show, the Bath and West Show, and the British Museum were among the new places and events to be visited.

Children's Hour from the newly opened studios at Lime Grove began on 21 May, the intention being to provide a daily 'Hour' by the end of the year. The Children's Newsreel added notably to the increasing output of the BBC Film Unit.

Telefilming was used more and more often to repeat important daytime O.Bs in the evening; and rounding off each day was the service of weather charts and forecasts supplied by the Meteorological Office.

EXTERNAL SERVICES

Programmes for audiences outside the United Kingdom amounted in 1950 to over ninety-five hours' broadcasting a day. The introduction of the service in Hebrew, in the autumn of 1949, brought to forty-four the number of languages regularly used in these programmes. With Welsh and Gaelic added, the total number of languages used by the BBC is forty-six.

The external services continued to be grouped under two main headings: the Overseas Services and the European Services.

Overseas Services beyond Europe

The year was notable for increased collaboration between the BBC and other broadcasting organizations, particularly, but not only, with the other nations of the Commonwealth

and with British Colonies. A large number of broadcasting officials, at all levels, visited the BBC, attended its Staff Training School, and were attached to various BBC departments. Visitors from Canada studied television, and an unusual number of officials from Australia and from various Colonies were made welcome. The Australians came both from the Australian Broadcasting Commission and from commercial stations.

Many countries overseas are now showing great interest in the development locally of educational broadcasting. The advice and co-operation of the BBC, with its long experience in the field, were much in demand. Canada, Australia, and Britain worked out a scheme for the inclusion of recordings of some of the BBC's school broadcasting programmes in the Canadian and Australian schedules, and the three countries have also helped each other with special contributions. These transcription recordings were used as well in a number of British Colonies. Countries all over the world are now making selections from the numerous school broadcasting scripts which a newly established educational-script service has made available to them for perusal and study and, where suitable to local circumstances, for broadcasting as they stand, in English or in translation.

Valuable exchanges of staff took place with the Australian Broadcasting Commission, and of information with a great many overseas broadcasting organizations. The BBC's programmes have been enriched by contributions, among others, of orchestral music from the Canadian Broadcasting Corporation and the South African Broadcasting Corporation (it is anticipated that other Dominions will shortly follow suit), and of recordings made by the United States Air Force Band. Extensive facilities provided by the New Zealand Broadcasting Service enabled the BBC to report fully the British Empire Games held at Auckland, and Radio Ceylon gave assistance in reporting the Commonwealth Foreign Ministers' Conference at Colombo. All India Radio collaborated in a series of important two-way discussion programmes between India and Britain, and the Canadian Broadcasting Corporation, the South African

Broadcasting Corporation, and Radio Pakistan, together with all the other Dominions, contributed as usual to the big Christmas programme. Radio Eireann was as helpful as ever, and BBC producers visiting many of the colonial territories were invariably made to feel at home by the local stations, whose resources were put at their disposal. This community of interest between radio organizations the world over, and the practical expression of it, are significant and encouraging developments.

General Overseas Service

This twenty-four-hours-a-day world service—still the only one of its kind in existence—probably had bigger audiences during Britain's election year than ever before. No exact calculation of the number of listeners is possible, but the number of letters received and the reports of rebroadcasting by hundreds of overseas radio stations showed a remarkable interest in British affairs.

The news, as always, was the most widely listened-to of the General Overseas Service broadcasts. Here the policy was maintained of giving objective bulletins and up-to-the-minute newsreels of the same general pattern as those heard in the United Kingdom, but taking into account the particular interests of the various overseas audiences. The special arrangements made for reporting the elections were greatly appreciated. Many congratulatory telegrams and letters were received from listeners and colleagues overseas.

Regular talks on political and economic subjects were broadcast by such speakers as Vernon Bartlett, Harold Nicolson, A. P. Ryan, and Gerald Barry, all of whom are well known and well liked by overseas audiences. Perhaps the most successful programme in this field was the weekly discussion programme 'London Forum', which was regularly and widely rebroadcast. In the United States alone, seventeen radio stations carried it. Special attention was paid during 1950 to two subjects of great importance in Britain's recovery programme—tourism and exports. 'Glad to meet you' was the title of a series of feature programmes in which Wynford Vaughan Thomas with infectious enthusiasm took listeners to beautiful and his-

toric places in Great Britain. The music and art festivals, the theatre, the opera and the ballet, and the great sporting events which bring thousands of visitors to our shores each year were fully reported.

Britain's export drive was the subject of a series of programmes called 'Export Jigsaw'. In this the warm Yorkshire voice of William Holt told the listener of our most important export industries and introduced some of the men and women who help to maintain our high reputation for quality. Holt also did another regular series under the title 'On the Job'.

Besides these and many other programmes specially prepared for overseas audiences, the General Overseas Service included a cross-section of all types of programmes heard in the BBC's Home, Light, and Third programmes, so that Britons abroad, who constitute a good proportion of listeners, could still hear their favourite variety artists and musicians.

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Transcription Service

The Canterbury Tales have been told again in a way that might have delighted Geoffrey Chaucer, but the size of the audience would have most certainly amazed him. Nevill Coghill's notable adaptation for the Third Programme was transcribed; that is, recorded on large, slow-speed disks and distributed to radio stations and networks throughout the English-speaking world.

The BBC Transcription Service has again reflected the midsummer Edinburgh International Festival of Music and Drama by installing special recording equipment in Edinburgh and transcribing concerts and events which were built into programmes in six different languages.

Historical subjects have also been covered, ranging from a feature on Cromwell to a series which marked the tenth anniversary of the outbreak of the Second World War. These were specially produced before the broadcast date in this country to enable their broadcasts overseas to coincide with the commemorating dates of the events they covered. 'Prelude to War', 'Battle for Britain', and 'The Battle of Leyte Gulf' were heard over Dominion networks

and United States stations at the same time as home listeners were receiving them in this country. Special programmes were flown out to the main broadcasting centres of Latin America.

Pacific Service

Programmes in the daily service to Australia, New Zealand, and the South Pacific Islands ranged from reports on the New Zealand Rugby Union tour of South Africa (arranged through the South African Broadcasting Corporation) and boxing commentaries, to two-way conversations between people from 'namesake' towns in Britain and Australia and a special message from the Secretary of State for the Colonies on the seventy-fifth anniversary of the Cession of Fiji. A new series of programmes was started during the year, 'This is Britain', rebroadcast by the Australian Broadcasting Commission, in which a wide variety of subjects reflecting life in this country was tackled each week.

Eastern Services

INDIA: Listening to programmes to India in Hindi, Bengali, Marathi, and Tamil increased. Letters received in the year went up to more than 4,000. On 26 January, the name of the Hindustani Service, which began ten years ago, was changed to Hindi; the service in Hindi amounts to $4\frac{1}{4}$ hours a week. The half-hour weekly programmes in regional languages remain popular in such places as Calcutta, Bombay, and Southern India.

PAKISTAN: The service in Urdu amounts to $4\frac{3}{4}$ hours a week. Since it was started on 3 April 1949, its popularity has mounted. Letters during the year from Pakistan exceeded 2,000. 'Twenty Questions' in Urdu and a Brains Trust were particularly well liked. A special half-hour Magazine Programme in Bengali for East Pakistan was inaugurated on 2 November 1949.

CEYLON: There is a weekly half-hour programme in Sinhalese and the half-hour in Tamil is also listened to widely. Both programmes have grown steadily in favour since they were started in April 1949.

ENGLISH PROGRAMMES: For five days a week there is an English programme for the citizens of India, Pakistan, and Ceylon. It consists of programmes such as 'Book of Verse', 'Brains Trust', and 'Radio Roundabout' for women and children. During the West Indian cricket tour a special broadcast for India went direct from the ground once a week. The 'Two-way Programme' of conversations between experts in London and Delhi was broadcast in the Eastern Service as well as General Overseas Service, and by the end of the year a similar exchange between London and Karachi will, it is hoped, be taking place.

ARABIC: The Arabic programme is heard in sixteen Arab countries of the Middle East, and listeners' letters which came in at the rate of about 900 annually in 1947 now amount to between 5,000 and 6,000. The service of $2\frac{3}{4}$ hours daily is also listened to in such places as South America, North America, and West Africa where there are large Arab populations.

HEBREW: The BBC was the first radio organization outside Israel to start regular broadcasts in Hebrew. The half-hour daily service began on 30 October 1949 with inaugural messages from the Director-General of the BBC and the late Dr. Mordecai Eliash, then Israeli Minister in London.

PERSIA: There are $5\frac{1}{4}$ hours a week in Persian, and over the last three years the listening has shown itself in the number of letters received. Arrangements were made in March for the relaying of some BBC Persian programmes by Radio Tehran.

Latin American Service

An important part of the output of the Latin American Service is its radio theatre and features. Programmes are broadcast direct and are also available on disks for the use of radio stations throughout Latin America, where they are very popular. In this way they reach a wide audience. Versions of British classics were produced in Spanish, such as *School for Scandal*, *Lady Windermere's Fan*, and examples of British radio plays such as the prize-winning play *Rumpel-*

stiltskin. Sartre's *Crime Passionnel* and *Animal Farm* were representative of the contemporary drama.

The Independence Day of the various countries is often celebrated by a feature on some aspect of national history, and anniversaries such as that of the Battle of the River Plate, the Battle of Britain, or the sinking of the *Bismarck* give opportunities for dramatizing important events in our own recent past. The attack on Buenos Aires in 1807 by General Whitelock and his subsequent capitulation were also the theme of a dramatic feature. Many of these programmes were rebroadcast by local stations in Latin America, in particular the anniversary of the Battle of the River Plate.

This has been a year of centenaries in South America. A special programme was broadcast to celebrate that of the death of the picturesque Uruguayan gaucho hero, Artigas, and another for the centenary of the death of General San Martin, whose crossing of the Andes with an army at Mendoza is comparable to Napoleon's crossing of the Alps. The Venezuelan hero, General Francisco Miranda, the 'Precursor' of Simon Bolivar, Marshal of France and a favourite of Catherine of Russia, who planned the liberation of Spanish America while living in London, was also the subject of an anniversary programme. Plans are in hand for a major production in 1951 to celebrate the 500th anniversary of the birth of Christopher Columbus.

North American Service

A high level of rebroadcasting in the United States and Canada was maintained. In spite of staff reductions in the New York office and the need for stringent economy owing to devaluation, the total amount of BBC material carried on United States radio stations remained at virtually the same level as last year, some 2,800 rebroadcasting station hours. These included fewer magazine programmes but more discussion and drama.

In Canada there was an average increase in rebroadcasting of BBC material of thirty per cent over last year; the total was 7,600 hours. Material included increased news, features, and talks, and considerable contributions to the

CBC 'Wednesday Night', run on Third Programmes lines. The outstanding development was the acceptance by the CBC Trans-Canada Network of a daily five-minute commentary from London on current affairs.

Unprecedented interest was shown, both in Canada and in the United States, in the British General Election in February 1950. The BBC provided full facilities for the large team of United States analysts and commentators who came over to report, but the BBC programmes covering the election were also widely used. Election speeches by Mr. Attlee, Mr. Churchill, Mr. Bevin, and other political leaders were extensively rebroadcast, as well as the BBC feature 'Focus on General Elections'.

In Canada the CBC monitored the BBC short-wave results and issued half-hourly statements 'as announced by the BBC', and the Canadian Press News Agency also circulated BBC announcements. Altogether, rebroadcasting of election material in Canada amounted to over sixty station hours.

Afrikaans Service

Productions of Chekhov and of various Afrikaans dramatists and talks by well-known South Africans were broadcast this year in the Afrikaans Service. Reports of events like the arrival in Britain of the first Constellation air-liner, specially built for the service between Johannesburg and London, and impressions by members of the South African team at the Empire Games in Auckland, New Zealand, were also broadcast (with the help of the N.Z.B.S.). There was a daily report covering tennis at Wimbledon. South African artists were heard in the music broadcasts, and the women's programmes were enlivened by descriptions of fashion parades in London. The service in Afrikaans included a daily news bulletin and news commentaries. The weekly magazine programme, 'Across the Line', included material of particular interest to English-speaking South Africans.

Colonial Service

The Colonial Service has three aspects, programmes broadcast to the Colonies, programmes about the Colonies

broadcast in the domestic services, and the development of broadcasting in the Colonies.

In the first field, the general pattern of broadcasting was maintained, an outstanding example being the cricket broadcasts during the tour of the West Indies team. To cover the tour the BBC arranged special commentaries and eye-witness accounts for all the major county matches, and broadcast 'ball-by-ball' commentaries on the four Test Matches. Special transmitters carried many of the commentaries to the West Indies during the day, in order to give the best possible signal.

In the second field there was close co-operation between the Colonial Service and producers in such programmes as the Christmas Colonial Journey, the series of talks on West Africa by Colin Wills, and the discussions on the 'colour' question.

In the matter of broadcasting development in the Colonies progress has for various reasons been slower than had been hoped at the beginning of the year. The BBC has, however, been called upon to help in carrying out broadcasting plans for West Africa, Tanganyika, and Uganda. The Head of the Colonial Service visited the British West Indies at the end of 1949, and found that the governments of many of the colonies were having great difficulty in making use of the time reserved to them on the local broadcasting stations, for public service and educational broadcasts. Certain recommendations made by the BBC will, it is hoped, contribute towards a solution of that problem.

Far Eastern Service

Broadcasts in English, Kuoyü, Cantonese, Japanese, Burmese, Siamese, and Malay continued daily. The service also beamed programmes in French and Dutch prepared by the European Service. News bulletins were supplemented by talks and commentaries, most of them dealing with social, industrial, cultural, and other developments in Britain and the Commonwealth.

The 'English Half-hour', which is not directed to any particular country but is heard all over the Far East, has continued to be the mainstay of the Far Eastern Service.

The results of a Listeners' Competition held in the spring of 1950 suggested that the number of listeners is now not only greater than previously suspected, but is growing fast. Large numbers of entries were received from India, Pakistan, Ceylon, and even Mauritius, all of them countries outside the area for which the programme is primarily designed.

Owing largely to the present unsettled condition of the greater part of the Far East, it has been impossible to make any progress towards securing relays of Far Eastern Service broadcasts, but this important aim is constantly in mind.

The Indonesian programme, formerly broadcast from Singapore, now originates in London. The daily Siamese transmission has been increased in length from a quarter to half an hour.

The Monitoring Service

With the constant expansion of radio systems throughout the world, the Monitoring Service is ever faced with an increasingly complex and exacting task. Its function of intercepting and transcribing foreign voice and other transmissions has thus been governed by the joint problems of coverage of broadcasts and selection of material, so that little of importance may be missed from the tremendous volume of news and comment which continuously overcrowds the ether. The problem has been further complicated by the re-allocation of wavelengths under the Copenhagen agreement.

The listening orbit now extends to forty-six countries, which are monitored in thirty different languages.

English by Radio

Every week the Overseas Services broadcast more than two hundred English lessons in twenty-four languages.

'L'Anglais par la Radio' and 'Lernt Englisch im Londoner Rundfunk' are the most popular of the bilingual series, and each has a daily broadcast.

Every day there is a lesson entirely in English for European listeners who have passed the beginner's stage and are ready for more intensive practice in the language. These lessons are graded from elementary to advanced, and are repeated twelve times during the day for listeners in

different parts of the Continent. News summaries are given at dictation speed four times daily and talks written in simple English and read at slow speed are broadcast on one day a week.

In January 1950 a special 'English by Radio' version of 'Twenty Questions' was begun. This programme is broadcast three times on alternate Sundays.

The relays and local rebroadcasts of the BBC's English lessons were considerably extended during the year and are now to be heard throughout the Middle East, South-east Asia, and Latin America.

Books containing the texts of the lessons and vernacular commentaries are published by the BBC, or under licence from the BBC, in many parts of the world. During the year Turkey, Burma, Siam, Indonesia, and Indo-China were added to the list of countries where these books are published or distributed.

The European Services

The year under review began, roughly, with the jamming of the Russian Service's broadcasts. It included, moreover, the introduction of the Copenhagen Plan, which has had such complicating effects on the medium waves used by the European Services. These twelve months also spanned the first meetings in Strasbourg of the Consultative Assembly of the Council of Europe. So it was an eventful year. It was a year, too, of tenth anniversaries; in the course of it no less than fifteen 'language sections' celebrated their tenth birthdays, and these were honoured by the grateful acknowledgments of listeners, many of whom recalled the black days of 1940 when the sections had first gone on the air; and other listeners, on the 'popular democratic' side of the Iron Curtain, expressed their gratitude to the BBC for being now, as in 1940, their link with the free world. Needless to say, these listeners in Eastern Europe could take no official part in the birthday celebrations. But from the countries of Western Europe the official testimonials were numerous. The Dutch Ambassador, for instance, at the Dutch Section's birthday party in Bush House, presented

the Director-General with the Grand Cross of Oranje Nassau; the Danish Section's commemoration programme was relayed by the Danish Home Service; the National Radio of Norway joined in a 'hook-up' in which their Director-General took part; and the commemorative programmes of the Finnish and Swedish Services both received considerable publicity in the countries concerned. But it was the Greek Minister of Information who paid the most moving tribute: 'During the German occupation,' he said, 'the Greek broadcasts from London were the only voice of encouragement and hope that the Greek people could hear. Now, in peace, they have become a feature of the daily life of the Greek people.'

News the Vital Element

The number of languages in which the European Services broadcast increased by one during the year, when the Turkish Section—itself a ten-year-old and formerly grouped with the Services for the Middle East—joined the East European Service. Thus the BBC now broadcasts to Europe in twenty-five languages. Of these broadcasts it is the news bulletins, eighty-three of them each day, which have remained the vital element—the element which is at once the most important in itself and most desired by European listeners. And in these days of 'the cold war' and of the cynicism born of a surfeit of propaganda, the importance of accuracy and objectivity in BBC bulletins has been re-emphasized—the more so since reliable news has become so rare and valuable a commodity in such large areas of Europe.

Second only in importance to the news have remained the news-commentaries. Such regional commentators as Sir Robert Bruce Lockhart, Lindley Fraser, Andrew Martin, Ruggero Orlando, John Marus, Jacques Duchesne (the 'radio name' still used by Michel St. Denis, the well-known play producer), Jean Paul de Dadelsen, and William Pickles have either maintained the high reputations of their war-time broadcasts or have entirely established their fame in this post-war period. Incidentally, the critical views about the internal policy of the Tito régime expressed by Desmond

Clarke, the new commentator in the Yugoslav programmes, are now much discussed in Yugoslavia.

At the same time the Central Talks Department has continued to supply those analyses of British opinion on current affairs which have been the mainstay of the Services' vast output of political comment. Perhaps the most notable among these have been the 'Sunday Surveys' of 'Londoner'.

Both Sides of the Curtain

News apart, there has been an obvious dividing-line in the Services' output, separating the kind of broadcasts suitable for Western Europe (including, in this instance, Western Germany) from those intended for Russia and her satellites. The first meeting of the Council of Europe at Strasbourg has already been mentioned; this was perhaps the biggest occasion so far for demonstrating (and urging) co-operation among the powers of Western Europe. The conference was covered by many representatives of the European Services (notably by those of the Italian Section) and by a team from the Central Productions Department, who, in the English Service, gave a daily round-up of the proceedings. No other broadcasting organization dealt with this big event on a comparable scale. So, again, the Productions Department's chief undertaking during the year was its weekly series of features, 'Western Outlook', in which the common heritage of the countries of Western Europe and their need to find a common solution to their present problems were discussed and illustrated.

This theme of European co-operation was also dominant, in one way or another, in the work of various sections. For instance, the German Service's very popular 'quiz' programme, which ran through fifty weeks, was shared with Radio Frankfurt. From September 1949 a daily quarter of an hour from the Austrian Service was rebroadcast by Sender gruppe Alpenland in the British Zone of Austria. The French Service and Radiodiffusion Française shared their reports (and their reporters) during President Auriol's visit to London in March 1950. The French Service, moreover, made a series of features, 'A deux côtés de la manche', about British and French towns, villages, or industries with

common interests; it also produced 'quizzes' between, for instance, the Lycée Henri IV and Eton and between Oxford University and the Sorbonne. The Dutch Service produced a monthly programme on the British Forces as a contribution to Hilversum's new Forces' Programme. And part of the Greek Service's programmes was relayed daily by the Greek National Radio.

The Truth for the East

On the other hand, in the programmes to Eastern Europe, the emphasis has been on the positive exposition of the principles and politics of Britain and the Western Powers; but, at the same time, these programmes countered the defamation and the 'doctored' information so regularly propagated by Russia and her satellites. Such have been the characteristics of, for instance, the broadcasts to Eastern Germany. The Service for Rumania introduced a monthly broadcast course of Rumanian history to offset the typical revisions of history which are being made in that country. When the Czech Press and radio, on the occasion of the hundredth anniversary of Thomas Masaryk's birth, tried to minimize the importance of the modern founder of their state, the Czech Service gave a series of talks attempting to re-establish the right perspective. The event of the year in Hungary was the trial of Laszlo Rajk, the former Foreign Minister; the Hungarian Service, with the help of extracts from the trial which had been broadcast by Budapest Radio itself, was able to give a true picture of the trial's methods and significance. One of the most assiduous lines of Polish Communist propaganda has been about Poles and, especially, Polish children in Britain; the Polish Service, with its own version of the Home Service's 'Top of the Form' programmes, was able to show the true condition of Polish children here and the care and goodwill which are going to their upbringing. And in the Bulgarian as in the Albanian Service, regular broadcasts about the march of Communist 'progress' in the two countries concerned were particularly effective. As for the Russian Service, the story of the jamming of its programmes and of the vigorous counter-measures to that Soviet outburst is told elsewhere

in this *Year Book*. Here it need only be noted that, during the year, Russian listeners could hear the opinions of Soviet citizens about life in Britain and in Western Europe; these broadcasts—mostly by deserters from the Russian Forces in Eastern Germany—have been of great interest and importance.

The Size of the Audience

It was said, a year ago, that the daily audience for the European Services of the BBC was about 5,000,000 and that the occasional (that is at least 'once a fortnight') audience was about 20,000,000. Those figures still stand. Their regional details were confirmed during the year by radio surveys in Germany, Italy, France, Holland, Sweden, Finland, and Denmark.

THE ENGINEERING DIVISION

In sound broadcasting the most important development has been the introduction of the Copenhagen Wavelength Plan on 15 March 1950. The main object of the Plan was to stop the steady deterioration in reception due to interference from foreign stations which has been building up for some years. The Home and Light Programmes can now be received satisfactorily by ninety-five per cent of the population approximately, while coverage of the Third Programme has been brought up to about seventy per cent by the installation at Daventry of a new high-power transmitter and the latest type of anti-fading aerial.

The achievement of full 100 per cent coverage of these programmes is hardly possible with the limited number of frequencies available in the long and medium wave-bands. Furthermore, the growing requirements of other countries may make it progressively more difficult to maintain the present coverage. Added importance is, therefore, given to the tests being carried out as a long-term project by the Research Department with broadcasting at Very High Frequency (V.H.F.), using high-power transmitters at Wrotham, Kent, with both Amplitude Modulation (AM) and Frequency Modulation (FM).

MAJOR-GENERAL SIR IAN JACOB, K.B.E., C.B.,
DIRECTOR OF BBC OVERSEAS SERVICES,
who in February was elected
President of the new
European Broadcasting Union.

THE EUROPEAN BROADCASTING CONFERENCE which founded the new Union was held at Torquay. Delegates and secretariat seen here include Sir Noel Ashbridge, Director of BBC Technical Services (*right*).

THE GENERAL ELECTION: The PRIME MINISTER and the RT. HON. WINSTON CHURCHILL addressing large crowds at their constituencies (Walthamstow, and Woodford, Essex) after re-election in February 1950.

A number of technical developments is being introduced, such as the unattended transmitting stations and automatic monitors described by the Deputy Chief Engineer on page 19.

Television development is proceeding rapidly. Good progress has been made with the third high-power television transmitter at Holme Moss near Huddersfield, which is due to come into service in the autumn of 1951. Work has already begun at the Scottish transmitting station at Kirk o'Shotts, between Glasgow and Edinburgh, and a site for the fifth high-power station, serving the Bristol Channel area, has been selected at St. Nicholas, near Cardiff.

On the studio side, the first of the new studios at Lime Grove was brought into operation in May. This studio is equipped with four camera channels using C.P.S. Emitron cameras and has relieved the growing congestion at Alexandra Palace by providing much-needed additional transmission and rehearsal space.

The need has been felt for some time of a means of recording television programmes, both picture and sound. Apparatus for this purpose, which has been developed by BBC engineers, has now been installed at Alexandra Palace, and the process has been named 'telefilm recording'.

All pre-war television outside broadcast cameras and associated equipment, other than the mobile radio transmitters, have now been replaced by the most modern equipment. The quantity of equipment available has been increased, enabling more outside broadcasts to be undertaken, and the addition of a new mobile control room has increased the scope of such transmissions by providing for the control and switching of a large number of cameras. Additional mobile radio transmitters are, therefore, being brought into use, and as a result of experience gained with microwave transmitters, more of these are being ordered from the manufacturers.

REFERENCE SECTION

THE BBC: WHAT IT IS AND HOW IT WORKS

The BBC is not a Government Department. Nor is it a commercial company working for profit. It is a public corporation, created by Royal Charter. The Charter lays upon the Corporation the duty of carrying on a public service of broadcasting as a means of information, education, and entertainment, and of developing the service to the best advantage and in the national interest.

The BBC's legal powers to maintain broadcasting stations are derived from its Licence and Agreement with the Postmaster-General, which also contain certain general provisions as to the manner in which the broadcasting service shall be operated.

HOW THE BBC GETS ITS MONEY

The BBC has no share capital. Both its capital and current expenditure are met out of revenue. This revenue is derived for home and television services from two sources—most of it from wireless licences, but an important part from the BBC's printed publications. Everyone in Great Britain using a wireless set (with the exception of registered blind persons) must pay an annual licence fee of £1, which is collected by the Post Office. This charge was increased from 10s. in June 1946, and at the same time a new licence covering the reception of television and sound programmes for domestic use at an annual rate of £2 was introduced.

Six per cent of the gross licence revenue was retained by the Post Office up to 31 December 1949, and thereafter seven and a half per cent, to cover the cost of collection, etc. Eighty-five per cent of the net licence revenue was payable to the Corporation up to 31 March 1950, after which date one hundred per cent of net licence revenue was payable to the BBC.

The Corporation pays income tax on the excess of its income over its revenue expenditure. In the last two years the BBC's annual net profits from its printed publications

have amounted to about a million pounds. This money is devoted entirely to the needs of the broadcasting service.

The Overseas Services are financed by a grant-in-aid from the Broadcasting Vote. To determine the amount to be provided in the annual Parliamentary Estimate, the BBC sends to the Postmaster-General in December each year an estimate of its expenditure for the following financial year and a revised estimate of its expenditure for the current financial year. These estimates are examined and the BBC is informed by the Post Office of the sum approved.

WHO CONTROLS THE BBC?

Ultimate control of the broadcasting service is reserved through Parliament, as the body granting its monies, and the Government, to the nation. But the BBC enjoys a wide constitutional independence, and an even wider independence in practice. It has a virtually free hand in the conduct of its day-to-day operations, both in its Home and in its Overseas Services. It studies the needs and the likes of its listeners, through its Audience Research system and in other ways.

Parliament has regular opportunities for discussing BBC affairs. Home policy and programmes are reviewed when the Postmaster-General presents his Annual Estimate for broadcasting, overseas policy and programmes when Overseas Information Services generally come up for examination. Questions on technical subjects are answered by the Postmaster-General, on general topics by the Lord President of the Council.

The BBC is assisted in its general and specific conduct of the service by thirty-two advisory councils and committees. Outside assessors are invited to join the BBC's professional staff when music artists are being given an audition. The BBC seeks the widest range of help it can. Its decisions are its own.

HOW IS THE BBC ORGANIZED?

The Board of Governors, who are the members of the Corporation, control BBC policy. To them the Director-General, as chief executive officer, is immediately responsible

for the efficient working of the organization in all its aspects, in accordance with their policy decisions. Under the Director-General, all executive responsibilities are grouped to form five spheres of management. Each is in the charge of a Director, as follows: Home Broadcasting, Overseas Services, The Spoken Word, Technical Services, Administration. The Director-General and the five directors form a Board of Management. Authority in working is delegated by directors to controllers and other senior officials, and through them to heads of departments and sections. The fullest possible responsibility is given to executive officers within their defined spheres. Major problems are brought forward by directors for discussion by the Board of Management, or when necessary, by the Governors.

A Programme Controller has an editor's right over his output. For its contents he indents on the supply departments, music, drama, variety, talks, etc. He may ask for what he wants, or he may be offered by a department something which he likes. The traffic in ideas is therefore a two-way one.

All administrative matters come within the purview of the Director of Administration. Organization, manpower, staff, and office administration are included in his sphere of interest. However, much of the day-to-day administration is decentralized. The BBC is divided into twenty-four establishments, each with a head who is responsible for the general efficiency of operations in his field, for administering his staff in the light of regulations laid down by the Management, and for controlling expenditure within rates authorized personally by the Director-General.

BBC HOME WAVELENGTHS AND FREQUENCIES

The wavelengths allotted under the Copenhagen Plan were brought into use in March 1950.

The Home Services

WAVELENGTH	FREQUENCY	MAIN AREAS SERVED
434 metres	692 kc/s	Lancashire Yorkshire, Cheshire, Flint, Nottinghamshire Derbyshire, Lincolnshire.
371 metres	809 kc/s	Scotland.
341 metres	881 kc/s	Wales.
330 metres	908 kc/s	London, South-east England, Home Counties.
285 metres	1,052 kc/s	Cornwall, South Devon, Dorset, Isle of Wight, South Coast.
276 metres	1,088 kc/s	Midland Counties, Norwich area.
261 metres	1,151 kc/s	Northern Ireland, North-east England, Scottish Border.
206 metres	1,457 kc/s	Somerset, South Gloucestershire, South Hampshire, South Wiltshire

The Light Programme

The main transmission is on long waves, 1,500 metres (200 kc/s) and is audible throughout the British Isles. In addition, there is an auxiliary service on medium waves, 247 metres (1,214 kc/s) having a restricted range, and serving:

Moray Firth area of Scotland.	South Lancashire and South-west Yorkshire.
Aberdeen.	London.
Edinburgh and Glasgow.	Plymouth.
Parts of Northern Ireland.	Redruth, Cornwall.
Tyneside.	

The Third Programme

WAVELENGTH	FREQUENCY	AREAS SERVED
464 metres	647 kc/s	Within about 100 miles of Daventry. Northamptonshire, including London; also local services in Edinburgh, Glasgow, Aberdeen, and Newcastle-upon-Tyne.
194 metres	1,546 kc/s	Local services in: Belfast, Bournemouth, Brighton, Cardiff, Dundee, Exeter, Hull, Leeds, Liverpool, Manchester, Middlesbrough, Portsmouth, Preston (Lancs.), Plymouth, Redruth, Sheffield, Southampton.

The number of services is governed primarily by the number of wavelengths available, which in turn is governed by international agreement: the wavelengths allotted by the Copenhagen Conference were put into use by the BBC on 15 March 1950. For twenty years the BBC offered two alternative programmes and gradually improved the coverage, until both programmes were available in nearly every part of the United Kingdom. Since the war, the coverage of the Home Service, which was regionalized in July 1945, and of the Light Programme introduced at the same time on a national basis, has further improved to ninety-seven per cent. In September 1946, the BBC offered for the first time a third service to the home listener, the coverage of which has increased during 1950 to almost seventy per cent. By 'coverage' is meant the availability of a service at a reasonably good standard of reception both during the day and at night.

The Home Service

This programme, with its regional variants, is planned to make the widest possible appeal. Culturally, it is designed for the ordinary listener. It reflects the life of the nation in all aspects. Its fixed points, round which the programme items are grouped, are the six news bulletins of the day, and, when Parliament is in session, the nightly report of its proceedings. During school terms the Home Service also carries the school broadcasts, both in the morning and in the afternoon, which have an appreciative adult audience as well. Outside broadcasts take the listener to the scene of national occasions and the great sporting fixtures. World affairs are reflected in a number of regular series, and controversial topics freely discussed in such programmes as 'Taking Stock' and 'The Critics'. History, the law, and scientific progress are often presented by using the technique of the feature programme. The 'Service' aspect of the Home Service is carried into the field of agriculture, social legislation, and medicine, by means of straightforward talks and

discussions. Symphony concerts, including the 'Proms', are broadcast every week; variety programmes, including the evergreen 'Music Hall', attract large audiences. The broadcast play and the dramatized serial versions of the classics are increasingly popular.

The Light Programme

This Service, which flanks the Home Service on the one side, is devoted to entertainment in the widest sense. It maintains the standards of integrity and taste which the BBC has set for itself over the whole range of its output, but is tailored to meet the needs of those who turn to broadcasting chiefly for relaxation and amusement. Variety, light music, dance music, and sport are the foundation of its highly successful appeal, but they serve as a support for more serious things. The Light Programme aims at interesting its listeners in the world around them, not only through its news bulletins and newsreel, but through 'Woman's Hour', now a staple feature in the lives of millions of housewives, such frank and outspoken documentaries as 'Focus', book reviews, short stories, concerts of light classical music and operatic selections.

The Third Programme

The Third Programme, flanking the Home Service on the other side, is designed for listeners of cultivated tastes and interests. The aim is to include only items of artistic value or serious purpose. Fifty-two per cent of the time is devoted to music, twenty per cent to talks, fifteen per cent to drama, and thirteen per cent to feature programmes, readings, etc. News bulletins, sports commentaries, and the lighter forms of entertainment are not provided. There are no fixed points, and many programmes tend to be longer than in other services because plays and operas, for example, are usually presented unabridged, and writers and speakers are given time to deal with their subjects comprehensively. While the Third Programme gives many opportunities for study, it is a programme for the educated rather than an educational programme.

News

Every day, all over the world, people listen to BBC news bulletins which are broadcast in English and foreign languages. At home more than fifty per cent of the adult population hears one or more of the ten main news broadcasts of each day. Overseas, news is the kernel of the BBC's services. The daily total of news broadcasts, addressed in forty-four languages to overseas listeners, is between 130 and 140. Many countries hear BBC news by rebroadcast through their own radio organizations. In order that the latest news shall be heard by the countries to whom it is directed, whether in the Commonwealth, the Colonies, America, Europe, or the East, at the time which is most suitable to them, the BBC maintains its news services throughout the twenty-four hours. Although international broadcasting is one of the phenomenal developments of the post-war world, there is no parallel to this never-ending stream of news from London.

The ideal of every news bulletin is 'a fair selection of items impartially presented'. That was the phrase used by the Ullswater Committee, and it has survived the test of war. The treatment of an item in an Overseas bulletin does not materially differ from its treatment in domestic bulletins. The principal difference, perhaps, is length. Consistency is achieved by a constant striving after accuracy in the facts and their objective treatment. For its resources the BBC relies upon the leading news agencies, monitored material based on the broadcasts of other countries, and its own correspondents abroad and reporters at home. The Corporation has correspondents in twelve foreign capitals and diplomatic, parliamentary, industrial, and air affairs are covered by special correspondents. News magazines, including short talks, recorded extracts from speeches and interviews with people in the news, have now been added to the straightforward news bulletins in some cases. Regional news, based on information supplied by local correspondents and by public bodies, is a regular commitment in the Home services outside London, and includes bulletins in Gaelic and in Welsh.

MONA BAPTISTE,
from Trinidad,
who sings in the
Overseas programmes.

ANA NEVADA,
of the Monte Carlo Ballet,
broadcast in the
European Service.

(above)
DONALD STEPHENSON appointed CONTROLLER, NORTH REGION. He was previously Assistant Controller, Overseas Service.

JOHN SNAGGE and STUART HIBBERD have both completed twenty-five years' service with the BBC.

(*above*)
WOMAN'S HOUR: MONTANDO JABAVUL explains 'make-up for coloured women' to OLIVE SHAPLEY.

LIAN-SHIN YANG, Chinese soprano who sings in many languages, is heard by both home and overseas listeners.

MULTI-UNIT TRANSMITTER, BRIGHTON, designed for unattended operation and remote control.

(*See article on page* 19.)

Time-checking equipment at the RECEIVING STATION, TATSFIELD. The equipment on the right receives time signals from Rugby and Abinger.

Outside Broadcasting (Sound)

More than a thousand times in any year listeners are taken by broadcast to the scene while the event is in progress. The event may be a great national occasion, a sporting engagement, a Prom Concert from the Albert Hall, or some small and specialized item in the national calendar. Taken together, these things, reported on or reporting themselves as they happen, help to bring to every home in Britain with a wireless set a sense of community, of sharing in a family life. Some of them have become familiar annual occurrences to millions of people; others are unique events. The Cup Final, the Lord Mayor's Banquet in Guildhall, and the Derby are examples in the first category; the Wedding of Princess Elizabeth, the Olympic Games at Wembley, and the State Visit of President and Mme. Auriol are typical of the second class.

It is when a national, or international, occasion arrives that the BBC Outside Broadcasts Department, with its teams of commentators trained in what is perhaps the most exacting of all broadcasting techniques, moves into action as a single unit, drawing upon all the resources of British broadcasting to present a planned and detailed coverage of the operation.

Talks

Programmes for the home listener include some twenty-five hours of talks, discussions, and readings each week. This output covers the wide range of the BBC's functions as laid down in its first Charter; it informs, it educates, and entertains by turns or at one and the same time. The forms adopted after more than a quarter century of experiment are many; there are the unscripted discussions, the record of personal experience, the critical symposium, the formal lecture, and the idiosyncratic conversation. In all of these the objective is to stimulate interest at the loudspeaker, and to preserve and expand the freedom of the microphone. Since the end of the war, the BBC has pursued a policy of encouraging wider and more vigorous controversial broadcasting while refraining as scrupulously as ever from editorial comment of its own.

In the field of politics the BBC has a special responsibility. Its services, and in particular the Home Service, are recognized as a suitable medium for pronouncements of national policy by Ministers of the Crown. For many years now during General Elections, in Budget week, and at other times, the BBC has handed over its microphone to the spokesmen of political parties, in consultation with the parties themselves. In 1947 a new agreement with the leaders of the three political parties was reached which had four main provisions. The first was that the Government of the day had the right to use the wireless from time to time to explain legislation approved by Parliament, for purely factual broadcasts, or to appeal to the nation to co-operate in national policies. These are termed Ministerial Broadcasts. The second was that a limited number of controversial broadcasts should be allocated each year to the leading parties in accordance with their polls at the last Election. (At present the number is twelve a year—Labour six, Conservative five, Liberal one.) Subjects and speeches are chosen by the parties. These are known as Party Political Broadcasts.

The third is that Members of Parliament may be invited by the BBC to take part in round-table discussions on controversial political matters, but not while they are the subject of legislation. The fourth is that there should be no discussions on issues within a fortnight of debate in either House.

The appearances of M.P.s in any type of broadcast are regulated broadly over quarterly periods to accord with the party ratio adopted for Party Political Broadcasts. This policy applies, *inter alia*, to the long-established 'Week in Westminster' series, when Members, on Saturday nights, give a personal narrative of the previous week's proceedings.

In choosing other controversial issues for discussion, the BBC takes account of prevailing public opinion. An important development took place in 1947 when the Board of Governors decided that controversial broadcasting on religious subjects should be permitted.

Religious Broadcasts

Religious broadcasts are to be found in all the BBC's services, Home and Overseas, in English. From the earliest

days of broadcasting in Great Britain they have been a distinctive feature of the sound programme. Experience has taught that there are three distinct kinds of listener whose needs should be met, the church-goers, the 'shut-ins', as the Americans picturesquely describe the old, the infirm, and the sick, and the large numbers of the public who do not go to church but who like to hear religious broadcasts. At the present time, the home audience is offered fifteen religious services each week, not counting talks on religious subjects or programmes of hymns. These services may come from churches or from the studio. Preachers, choirs, and congregations are heard from all parts of the country and from the great towns. Short morning services throughout the week on the Home Service are widely listened to. The Light Programme's 'People's Service' on Sunday mornings is heard by four or five million people, and 'Sunday Half-hour' in the evenings, consisting of community hymn-singing, is popular with all ages and all classes. In the Third Programme, religious themes are usually confined to discussions, lectures, or broadcasts of choral music.

For twenty-six years the BBC has been guided by a Central Religious Advisory Committee, on which leading members of the Anglican Church, the Church of Scotland, the Free Churches, and the Roman Catholic Church have served. Broadcasts of services are usually confined to churches in the main stream of historic Christianity, it being considered that the message given by preachers from any of those churches is likely to be acceptable to the overwhelming majority of listeners.

Music

The responsibility of the BBC in respect of music is threefold: it admits first a duty to the art itself, secondly a duty to the national manifestation of the art, and finally a duty to the practitioners of the art. In its programmes, the range of music represented is immense, and much expenditure on research and rehearsal is necessarily involved. Music Advisory committees scrutinize the work of the Music Department; expert panels assist it by reading and listening; long-term surveys of musical output are commissioned from

time to time. Thus the professionalism of the BBC's music staff is reinforced from outside. Great importance is attached to the holding of auditions for new talent. Somewhere about 2,000 artists may be given trial hearings in a year, of which a fifth may subsequently be given engagements. In the same period, some 10,000 engagements will be offered to British solo musicians, and about 700 to foreigners. The BBC accepts willingly the obligation of helping and encouraging the British artist, both the executant and the composer. In light music, at least one British item in each programme is encouraged. In the Third Programme contemporary works by British composers find their opportunity.

Over a hundred separate musical programmes are broadcast every week, and in a year over a thousand orchestral concerts of serious music are heard. These concerts, the most important part of the BBC's musical life, may be given by the BBC Symphony Orchestra of ninety-six players, the BBC Opera Orchestra of sixty-three players, the BBC Scottish Orchestra of fifty-seven players, the BBC Northern Orchestra of fifty-one players, the BBC Midland Light Orchestra or the BBC Welsh Orchestra, both of thirty-one players, or by other orchestras engaged to play in the studio or relayed from outside halls.

Chamber music, in its clear texture and intimate manner, may be considered especially suited to the medium. Six concerts are given in a week, occupying six hours, and 'Music in Miniature', in which chamber music is presented in an informal way in the Light Programme, has proved a highly successful experiment. Nineteen recitals, occupying ten hours, are given each week.

Brass- and military-band music finds a faithful audience, and about fifteen concerts are given weekly. Other light music occupies in the week some twenty-four hours of broadcasting time.

Drama

Every year the BBC produces 1,200 plays. The listener at home gets some twenty-three hours of dramatic broadcasting each week: the listener overseas hears many shortened or

special versions of plays in English. Plays may, occasionally, occupy a whole evening's broadcasting, or they may be quarter-hour episodes of series which are heard daily and which last for months. In between these extremes are to be found the enormously popular 'middle reaches' of 'Saturday Night Theatre' and 'Curtain Up', which regularly attract audiences of nine or ten million people. Clearly an entirely new audience is being created for the dramatist, one which normally enters the theatre only on special occasions, or not at all. Even 'World Theatre', the Monday night programme in which the masterpieces of the world's dramatic literature are presented, has an audience which is numbered in millions.

No resources can be overlooked if over a thousand productions are to be undertaken in twelve months. The contemporary theatre provides many of the most popular programmes. Public demand is at its highest for adaptation of stage successes. The classical repertoire ranges from Euripides to Shaw, and 'World Theatre' naturally includes translations of great plays of other nations in its programmes. Novels and short stories susceptible of microphone treatment are also a source of raw material, as are the poetic dramas, such as Shelley's *Prometheus Unbound*, which, though seldom performed in public, make radio entertainment. Finally, and only in this category does the producer find his material ready made, there are the plays written especially for broadcasting.

For some years past the BBC has recruited from the theatre a repertory company now numbering about thirty-five artists who form the backbone of the casts. But visitors to the microphone include the most eminent men and women in the profession, and producers from the stage and from the film studios are invited as well as actors.

Variety

The criterion of by far the greater number of the hundred variety programmes from which the home listener can take his choice every week is that they should appeal to big, popular audiences. But the range of the output is not so simply described, for it includes comedy shows ('Much-

Binding-in-the-Marsh' and 'Take it from Here'), 'act' shows ('Music Hall' and 'Variety Bandbox'), quizzes, 'Scrapbooks', and 'plot' shows (Basil Radford–Naunton Wayne series), all these coming under the heading of 'scripted' programmes, and also mainly musical programmes of many kinds, from Geraldo's Concert Orchestra to Sandy Macpherson on the theatre organ, to quote extremes of large-scale and intimate performance. Scripted programmes make up about thirty-five per cent, musical programmes about sixty-five per cent, of the total. But the peak-hours output of the department is largely radio comedy in its various forms. Here the pattern has changed considerably in the last few years. Instead of a preponderance of shows arranged singly as in 1939, the majority of the programmes is planned in series, which may last six weeks or nine months. The advantages of the series are several. Artists become established in the public's favour quickly and firmly. Since twice as many programmes are now called for as before the war, the most economical use of resources is necessary, and the series helps to this end. Finally, artists and writers alike are readier to make a career in radio because the series system, with its repeats, offers more attractive rewards. Writers are still hard to find who can stand the inventive demands of a half-hour show week in and week out.

Feature Programmes

Feature programmes are radio documentaries; a wide field of historical and contemporary subjects is covered, in dramatic form, with the intention of presenting even the most complex matters in a way which a popular audience will both understand and enjoy, but which will not forfeit the respect of the expert. They involve the collaboration of specialists in writing and producing in this technique, usually, but by no means always, on the staff of the BBC or on contract to it, with outside specialists in individual subjects acting as advisers. Feature programmes have opened up for many contemporary writers a new medium of expression, and composers, too, have contributed largely in

recent years to specially written backgrounds and interpretations of the widely ranging themes. The BBC's reputation for feature writing and production is internationally high. Outstanding developments since the war have been 'Progress Report', a series which applied intensive wartime methods to the collection and presentation of news and views about national reconstruction; 'Focus', in which more than fifty topics of prime importance to the country, including coal, housing, the Marshall Plan, Palestine, India, and Germany have been examined; 'Window on Europe', which from time to time offers first-hand evidence of the current continental scene; and reconstructions of recent history, which have won praise from general public and authorities alike. The progress of science has also been tackled in a number of programmes where again the confidence of the expert that distortion will not accompany popularization has grown *pari passu* with the appreciation of the audience.

School Broadcasting

This highly specialized form of broadcasting, in which the BBC was a pioneer, has now been in existence for over twenty years, and the number of schools making use of the service increases year by year, so that at the present time 20,000 schools are on the list to receive the full programme schedule and the teachers' leaflets which are issued to registered listening schools. The programmes, which go out both morning and afternoon during the school terms, are in a position of full equality with the rest of the BBC's output.

School broadcasts are designed to be an aid to teaching, not a substitute for it, and as they are normally listened to under supervision, study of the audience is more practicable than with other forms of broadcasting. The broadcasts are prepared by the School Broadcasting Department, staffed mainly by professional teachers with special qualifications and with knowledge of microphone technique acquired in the BBC. Advice on the educational policy of the broadcasts is committed to the School Broadcasting Council of the United Kingdom, an independent body of fifty members drawn from the major professional and educational asso-

ciations, Local Education Authorities, and the Ministry of Education. The Council specifies the aims and scope of the various series, and ascertains their effectiveness in the schools. There are separate Councils for Scotland and Wales.

Thirty-two series, and a daily news commentary, are broadcast throughout the United Kingdom. Scotland has seven series of its own, and Wales six. In all, fifty-five programmes are broadcast each week, in which the main forms of broadcasting technique are employed. Pamphlets, fully illustrated, are issued for the use of pupils each term.

Children's Hour

From the beginning, the BBC has had a Children's Hour, but its nature and scope have developed greatly in recent years. The aim now is to present in the fifty-five-minute period at five o'clock each day a microcosm of BBC output in all fields. Remembering that its young listeners have, for the majority, been at school all day and have homework ahead, Children's Hour does not set out primarily to educate, but rather to entertain with music, talks, drama, variety, stories, competitions, running commentaries, and 'quizzes'. Religious services of a short and simple kind have their place, and the co-operation of children in such causes as the preservation of natural beauty and road safety is enlisted. Children's Hour, like the school broadcasts, has many adult listeners. Regional interest in the local Children's Hour is strong, and the Overseas Children's Hour on Sundays brings letters from Europe as well as from the Commonwealth.

Audience Research

The BBC maintains an Audience Research Department to advise it on the habits, tastes, and opinions both of listeners and of viewers. The basis for estimates of the size of audiences for sound broadcasts is a continuous survey, in which a cross-section of the public is interviewed each day about their listening.

Information on the relative size of television audiences is derived from the weekly returns of a continually changing panel of some hundreds of viewers. Their comments on the programmes they see, together with those from several thousand listeners organized in a Listening Panel who report regularly on programmes they hear, enable the BBC to learn the reactions of the audiences both to television and to sound broadcasts.

TELEVISION

Historically, the BBC introduced the first public service of high-definition television in the world when Alexandra Palace went on the air in November 1936. The Hankey Committee, reporting in 1943, said that by the time the service was suspended at the outbreak of war, 'programme technique had made great progress, and the result was a service of considerable entertainment value'. At that time, when the service was suspended for six years, the number of receivers was just over 20,000. The Hankey Committee reaffirmed that development after the war, in the best interests of both television and sound services, should be the responsibility of one body, and recommended that the BBC should be that body. It also recommended the pre-war standard of definition of 405 lines, for the extension of the service to the provinces. In June 1946, in spite of great difficulties, Alexandra Palace resumed transmission with a highly successful relay of the Victory Parade in the Mall. Owing to wartime improvements in the cathode-ray tubes and the redesigning of the transmission aerial, the picture broadcast was technically better than before the war, and programmes soon passed their pre-war peak. A special combined sound and vision licence was introduced at £2. By the middle of 1949, the number of viewers had increased to 150,000: this figure soon almost doubled itself following the opening of the first provincial relay station at Sutton Coldfield, near Birmingham, in December 1949.

Towards the end of 1950, programmes went out every weekday morning, every afternoon, and every evening,

beginning at 8 p.m. Outside broadcasts often extended the normal hours. Television contributed to BBC news output with its own newsreel, produced several times a week. Studio programmes included an average of two or three plays weekly, varying from the world's masterpieces to the lightest of comedies, magazine features and personality interviews, documentaries and illustrated talks, variety shows and revues, ballet, and special 'hours' for women and children, the children's programme being the first to come from the Lime Grove Studios referred to below.

The opening of the Sutton Coldfield station—which from the first gave a good signal beyond the forecast range of fifty miles—was the first visible result of the BBC five-year plan to extend television coverage to eighty per cent of the population. The building of the second relay station at Holme Moss, near Huddersfield, is well advanced, and it is hoped that this station, with its 750-foot mast, 35-kilowatt vision transmitter, and 12-kilowatt sound transmitter, will be completed by the middle of 1951. Similar stations planned for completion during the next four years will cover the main centres of population in Scotland, Wales, and the West Country. When this has been achieved, smaller stations will be built until only the final problem remains—that of remote areas and, especially, remote and mountainous areas.

Steady progress to deal with coverage is therefore being made. The other acute problem—studio space—has also been tackled. Five large film studios in Lime Grove, London, were purchased, and conversion to television purposes—a considerable undertaking—was immediately put in hand. In addition to the studio for Children's Hour, the BBC Television Children's Newsreel was produced at Lime Grove from the spring of 1950. A second studio there was planned to come into operation by the end of the year.

Behind this progress loomed the greater plan for a new Television Centre, the first of its kind in any country, described in the first article in this *Year Book*.

So the complete picture emerges: of a centre worthy of the new medium; of a chain of stations which will give

coverage to almost the entire population. Developing programme skills and techniques, including the recording of items direct from the screen for future use, will ensure to the BBC's Television Service in the future, it is hoped, the lead which it early established in the range and variety of its offerings, and to which, despite the war and economic difficulties since the war, it has held fast.

OVERSEAS SERVICES

What they are: What they do

The Overseas Services of the BBC include all transmissions for audiences outside Great Britain. The Services, under unified direction, are divided into two main groups—non-European and European. They broadcast in English, and in foreign languages. The Services are financed by a Treasury Grant-in-aid. However, the responsibility for the contents of the programmes is delegated by the Government to the BBC.

In addition, the Transcription Service and the Monitoring Service form part of the BBC Overseas Services.

The main aims of the Overseas Services are to make available to as wide an audience as possible an accurate, comprehensive, and objective news service: to illustrate the British point of view on current affairs; to describe and give evidence of the British way of life, and to do all this in a language the listener can understand.

'English by Radio', planned series of programmes to assist foreign listeners in their study of the English language, now forms a regular part of both European and non-European transmissions, and is welcomed by a rapidly growing audience.

Overseas Service—non-European

The main service, the General Overseas Service, is on the air twenty-four hours a day. It is in English, and is the descendant of the Empire Service started by the BBC in 1932. It is primarily intended for British communities all

over the world, but has a large secondary audience of English-speaking foreign listeners. The programme offered is complete—from news to light entertainment, and Home, Light, and Third Programmes are drawn upon for material in addition to the output of Overseas Production Departments, in which special attention is, of course, paid to matters of Commonwealth or Colonial interest. The focus of coverage moves westward throughout the day, following the sun, and programmes are planned to arrive at their successive destinations during the popular listening hours in each part of the world.

Within this main framework, special attention can be paid to the eight principal regions into which, for planning purposes, the world has been divided. For example, programmes in English for the Pacific Area are transmitted from 0600 a.m. to 1200 noon, and during this period special broadcasts could be arranged if an Australian or New Zealand team were touring Britain. Similarly, the programmes are elastic enough to permit of special treatment for items of particular interest to the Far East and South-east Asia, South Asia, Middle East and Africa, the Mediterranean–African Area, the Western Hemisphere, West Indies and Central America, or South America, at times when transmission is directed to the region concerned.

Superimposed are the special Regional programmes, which are broadcast simultaneously with the General Overseas Programmes, and addressed particularly to the Regional audience. Twenty-four languages, including English, are employed. These services vary considerably: some are confined to news and talks; others, as the Arabic Service or the Spanish and Portuguese Services for Latin America, give several news bulletins, talks, discussions, features, drama, and music—an almost complete broadcasting service of several hours a day.

BBC OVERSEAS SERVICES

NON-EUROPEAN

	G.M.T.	*Languages Employed*	*Principal Destinations*
1. GENERAL OVERSEAS SERVICE	0100–1715	English.	India, Pakistan, Ceylon.
	0400–2300	,,	Africa, Mediterranean area, Middle East.
	0400–1715	,,	Far East, South-east Asia.
	0600–1200	,,	Australia, New Zealand, South-west Pacific.
	1100–1300 2115–0415	,,	Canada, United States of America, Mexico.
	1100–1115 1600–0300	,,	West Indies, Latin America.
2. PACIFIC SERVICE	0600–0745	,,	Australia, New Zealand, Pacific Islands.
3. FAR EASTERN SERVICE	1030–1415	English, Malay, Japanese, French, Thai, Dutch, Kuoyü, Burmese, Cantonese.	China, Japan, South-east Asia.
4. EASTERN SERVICE	1400–1545	English, Urdu for Pakistan, Hindi for India, Sinhalese, Tamil, Bengali, Marathi.	India, Pakistan, Ceylon.
5. AFRIKAANS SERVICE	1615–1700	Afrikaans.	South Africa.
6. COLONIAL SERVICE	1730–1745 *	Greek.	Cyprus.
	1730–1745 †	English, Maltese.	Malta.
	1815–1830 ‡	English.	East Africa.
	2015–2100	English.	West Africa.
	2315–2345	English.	West Indies.
	1615–1645 ‡	English.	Falkland Islands.
7. NORTH AMERICAN SERVICE	1415–1615 1700–2115	English, French.	Canada, United States of America, Mexico.
8. LATIN AMERICAN SERVICE	2300–0345	Spanish.	Mexico and Central and South America (except Brazil), Carribean.
	2200–0130	Portuguese.	Brazil.
9. EASTERN SERVICE	0445–0515 1700–1815 1930–2030	Arabic.	Egypt, Iraq, Israel, Jordan, Levant States.
	1545–1630	Persian.	Persia.
	1830–1900	Hebrew.	Israel, Jordan, Levant States.

* Sun., Wed., Fri. † Mon., Tues., Thurs., Sat. ‡ Sundays only.

The European Service

BBC broadcasts to the continent of Europe were started in 1938, and increased and developed during the war. Fifteen language services celebrated their tenth anniversary during 1950, and broadcasts are now going out in twenty-five languages for a total of over forty hours a day. Every language section has to include people whose knowledge of the country to which they are broadcasting is recent, and whose knowledge of its language is perfect. The news stories flowing into the Central News Desk from agencies, correspondents, and broadcast transmissions all over the world, are built by sub-editors and translators into well-balanced bulletins, properly adapted to the needs of the listeners. Talks and programme assistants are responsible for the production of talks, features, and other programmes. Some of the material is written (and may be spoken) by outside contributors; some is written by members of the section; and some is supplied in English by the European Talks Department, or by a central department known as European Productions, and is translated and arranged for broadcasting to the country concerned.

THE 'REGIONS' OF EUROPE

To economize in man-power and to ensure the co-ordination of output, the various language services have been regionally grouped. The French, Dutch, Belgian, and Luxembourg transmissions together form the West European Service; the Italian, Spanish, and Portuguese form the South European Service; the Czechoslovak, Hungarian, and Polish transmissions are included in the Central European; the Albanian, Bulgarian, Greek, Rumanian, Russian, Turkish, and Yugoslav in the East European Service; the Danish, Finnish, Norwegian, and Swedish sections form the Scandinavian Service; and German and Austrian transmissions come under the Head of the German Service. In addition to these, there are programmes in English addressed to the whole of the European continent, and 'English by Radio'.

The European Presentation Department is responsible

for planning the schedule of broadcasts to Europe so as to ensure that as far as possible each of the countries to which the BBC broadcasts, receives at least one transmission at an optimum listening time, and that all transmissions go out on wavelengths which give good reception at their particular time of day, and are varied to suit the changing seasons of the year.

European Presentation arranges for the operation of studios during rehearsals and broadcasts, in order to ensure that properly balanced sound is fed to the Control Room for transmission. It also undertakes all English announcing; it provides the language sections with full particulars of schedules for microphone announcements; it handles relays on behalf of other organizations, such as the Voice of America; it passes operational information to remote transmitting stations which relay the European Service; and it organizes studio facilities for some of the special contributors to continental broadcasting organizations.

The BBC Transcription Service

This service supplies overseas broadcasters with a selection of BBC programmes in English and other languages—in recorded form. By this means programmes from Britain are heard by overseas listeners, on their own home stations, often on medium-wave sets, thus increasing considerably the size of the audience.

The Monitoring Service

At Caversham, the Monitoring Service maintains a twenty-four-hour watch. Language experts listen to the programmes of the world's main broadcasting systems. Important items are recorded—others are edited, and a daily digest prepared which feeds the BBC's own news organization and circulates to various Government Departments.

BBC OVERSEAS SERVICES

EUROPEAN

WEST EUROPEAN SERVICE

In Dutch	0645–0700	1315–1330	1730–1800
In French	0630–0645	0700–0715	0800–0830
	1130–1145	1230–1245	1600–1615
	1830–2100		
In French and Flemish (for Belgium)	1700–1730		
Luxembourgish	*0830–0845		

GERMAN SERVICE

For Germany	0500–0515	0600–0645	0800–0815
	1300–1330	1600–1615	1645–1715
	1815–1830	1900–2115	2300–2315
For Austria	1230–1245	1715–1730	1745–1800

EAST EUROPEAN SERVICE

In Albanian	1630–1645	1915–1930	
In Bulgarian	0445–0500	†1145–1200	1800–1830
	2030–2045		
In Greek	0500–0515	1830–1900	2100–2115
In Rumanian	0430–0445	†1600–1615	1900–1930
	2145–2200		
In Russian	0315–0345	1415–1445	2115–2145
In Serbo-Croat	0545–0600	1345–1400	†1615–1630
	1715–1730	1945–2015	2145–2200
In Slovene	2015–2030		
In Turkish	0430–0445	1630–1700	2100–2115

* Sundays only. † Monday and Wednesday only.

SOUTHERN EUROPEAN SERVICE

In Italian	0630–0645	1230–1245	1830–1900
	2100–2145		
In Portuguese	1230–1245	1930–2000	
In Spanish	1315–1330	2015–2100	

SCANDINAVIAN

In Danish	1115–1130	1700–1730	
In Finnish	*1500–1545	1600–1630	1900–1915
In Norwegian	1100–1115	1730–1800	
In Swedish	1830–1900		

CENTRAL EUROPEAN

In Czech and Slovak (for Czechoslovakia)	0515–0530	‡0600–0615	1300–1315
	1700–1715	2030–2100	
In Hungarian	0615–0630	1615–1630	1930–2000
	2200–2215		
In Polish	0530–0545	1330–1345	1830–1900
	2130–2200		

BROADCASTS IN ENGLISH

London Calling Europe	0615–0630	0700–0730	*0830–0915
	§0915–0930	1245–1300	1800–1830
	2000–2015	2100–2300	
English by Radio (Lessons entirely in English)	0515–0530	0545–0600	0745–0800
	1030–1100	1115–1145	1200–1230
	1300–1315	1545–1600	1645–1700
	1730–1745	1930–1945	2115–2130

‡ Tuesday and Thursday only. § Week-days only.

Transmissions, Home Services

The BBC provides three alternative sound programmes for listeners in the United Kingdom. Fourteen wavelengths are available for transmitting these programmes under the internationally agreed Copenhagen Wavelength Plan of 1948. (See page 133.)

Transmissions, Television

The BBC also provides a television service which is at present available only in the south-east of England and in the Midlands, but is being extended as rapidly as possible to other areas. The two transmitting stations at present in use are as follows:

Station		*Frequency*	*Wavelength*	*Power*
Alexandra Palace	Vision	45 Mc/s	6·66 metres	17 kW
	Sound	41·5 Mc/s	7·2 metres	3 kW
Sutton Coldfield	Vision	61·75 Mc/s	4·86 metres	35 kW
	Sound	58·25 Mc/s	5·15 metres	12 kW

Transmissions Overseas

In addition to the three sound services and the television service for the home listener, the BBC provides a world-wide broadcasting service on the short wavelengths, and also a separate service to Europe for which wavelengths in the short, medium, and long wave-bands are used.

Whereas in domestic broadcasting the same wavelength remains in use at a station for several years, for the short-wave services the wavelength used must be changed several times in the twenty-four hours, and it must also be changed according to seasonal conditions, and the eleven-year cycle of solar activity. To meet these many variable factors in short-wave broadcasting it is necessary to use a large number of wavelengths, or channels, in the seven short-wave bands available for international broadcasting. Some eighty-five such wavelengths are notified for use by the Corporation, of which, more than fifty are in use in any one period.

In the comprehensive coverage provided by the Overseas and European Services, in which as many as ten programmes may be radiated simultaneously, a considerable

number of short-wave transmitters are obviously required. A total of thirty-seven high-power (50–100 kW) short-wave transmitters is available, and they are installed in four stations at Daventry, Northants; Rampisham, Dorset; Skelton, Cumberland; and Woofferton, Shropshire.

One of the salient features of short-wave broadcasting is the use of directional aerials, often referred to as 'beam' aerials, which enable much stronger signals to be provided in the target area than would be the case if a single wire aerial were used. These aerials have the disadvantage that not only is a separate aerial required for each wave-band, but also for each direction, that is a 19-metre aerial directed to South Asia on a bearing of 80° east of north, cannot be used to serve South Africa, which lies on a bearing of 160° east of north. Therefore, a large number of aerials is required in order to serve the major countries of the world from the United Kingdom. This number is further increased because at certain times it is necessary to serve a given country with more than one programme at the same time, each programme needing one or more wavelengths and each wavelength a separate aerial. To meet all the requirements of the different characteristics of circuits, and the different programmes to the same areas (the BBC broadcasts in forty-four languages including English) no less than 145 short-wave aerials are available at the four transmitting stations.

The European Service developed during the war when the maximum effort was required to reach listeners in the occupied countries of Europe, and also to overcome enemy jamming. The times during which the European programmes are radiated have been reduced since 1945, but it is still a most comprehensive service, and includes broadcasts in some twenty-five languages including English. The present transmission schedule between 0400 and 2300 GMT requires eighteen short-wave transmitters, while in addition two medium-wave transmitters are used for those listeners whose receivers may not include the short wave-bands. At certain times of the day other medium- and long-wavelength transmitters are also employed when they are not being used for their normal programmes.

Whereas no changes are required in the transmitter whether it is used to carry the Overseas Service or the European Service, there is a marked difference in the aerials employed. Those used for the Overseas Service are designed so as to project their energy at a very low angle to the earth's surface, so that when they are reflected by the reflecting layers surrounding the earth (ionosphere), the point of their return to earth is at as great a distance as possible. By this means the distant countries are reached with the minimum number of 'hops' or reflections. In the case of Europe, however, the countries to be served are relatively near to the United Kingdom, and consequently the aerials must be designed to project their energy at a much higher angle to the earth's surface, so that on reflection it will arrive back on the earth's surface at distances of from 400 miles onwards. Some forty aerials of this type are available at the Skelton station in Cumberland, which carried the bulk of the European transmissions. In order to provide the large number of programmes radiated by the Overseas Service and the European Service some seventeen studios, and appropriate recording facilities, are used.

Transmitter Output

Programme Hours

Transmitter programme hours for 1949 were as follows:

Home, Light, and Third	206,533
Television	3,267
Overseas	165,989
Total	375,789

Power

The total output power of all transmitters was:

Home	923,500 Watts
Light	661,550 Watts
Third	78,450 Watts
Television	67,000 Watts
Overseas	3,140,000 Watts
Total	4,870,500 Watts

Studios

The total number of studios in use for the sound programmes is 177 plus 22 specially constructed rooms for the production of artificial echo. The largest studio is at Maida Vale,

London, with a floor area of 7,776 square feet, and the smallest, which is a continuity suite, also in London, has a floor area of seventy-five square feet. The total floor area of all the studios is approximately 129,300 square feet, nearly three acres.

The Television Service has two studios at Alexandra Palace, of which the dimensions are 2,100 square feet each. Five additional studios at Lime Grove, Shepherds Bush, are being developed and equipped with the most modern apparatus, and one of these has so far been brought into full operation. The dimensions of these studios are:

Studio D—5,400 square feet
" E—4,800 "
" F—9,600 "
" G—5,650 "
" H—2,650 "

Outside Broadcasts

Outside broadcasts have a prominent place in the programmes. During the year ended 31 March 1950, they totalled 5,387, of which 1,571 were in the London area, and 3,816 in the six other regions into which the country is divided. In carrying out these outside broadcasts, teams of engineers travelled a total distance of more than 196,000 miles.

Owing to the shortage of studio space and restrictions on building, considerable use is made of public halls, theatres, etc., which have been converted into broadcasting studios. These are permanently equipped with the necessary technical apparatus, and a total of 4,630 broadcasts were transmitted from them in the year ended 31 March 1950.

Recording Department

This is a technical department serving the requirements of the BBC Programme Departments and also the BBC Transcription Service. Approximately ninety per cent of all BBC recordings are made on disks. The number of recordings made during the year was approximately 55,000, using 249,000 disks. The type of disk used has an aluminium base coated with cellulose lacquer and disks of 12 inches, 13 inches, 16 inches, and 17¼ inches are used. The number

of recorders installed at studio centres is twenty-five, and there are more than 900 play-back turntables. Recordings are made either at 78 r.p.m. or at 33⅓ r.p.m. as required. Considerable use is made of mobile recording units consisting of cars equipped with disk recording machines, and during the past year these units covered approximately 203,000 miles.

During the year 1,590 programmes were recorded for the Transcription Service,* and 75,000 pressings were despatched to all parts of the world.

Lines Department

The network of music circuits connecting BBC studios and transmitting stations is rented by the BBC from the Post Office. Some 10,000 miles of these circuits are in use, and although general supervision of their quality is undertaken by the Post Office, the Lines Department is responsible for routine tests and 'equalization' in order to achieve the high standard of performance required. Lines for outside broadcasts are provided by the Post Office as required, but here again, testing and equalization is the responsibility of the BBC Lines Department.

Specialist Departments

In addition to the operational departments so far mentioned which are directly concerned in the day-to-day transmission of BBC programmes, there are many other engineering activities which are divided among what are known as Specialist Departments.

Broadly speaking, the job of the Specialist Departments is to furnish the Operations and Maintenance Group with the means to broadcast the programmes. In the main they have grown up as a result of the BBC's policy of developing, designing, and to some extent also manufacturing, much of the equipment which it wants, instead of depending entirely on the products of the commercial firms.

Research Department

The Research Department is really more concerned with development work than with pure research. Its activities

* See page 117.

embrace every aspect of sound broadcasting and television. The other departments in the Engineering Division look to Research Department for information and guidance on such matters as the design of aerials, the siting of new transmitting stations, studio acoustics, recording methods, television developments, and measuring techniques.

Designs Department

The Designs Department also is engaged on development work, but its products have a more specific application than those of Research Department. Its task is to design apparatus that fulfils a particular purpose, rather than to evolve new techniques of wide application. To some extent the Designs Department stands in the same relationship to the Operations and Maintenance Department as does the manufacturer to the customer; Operations and Maintenance state their needs, and Designs Department set about designing equipment to supply them. Except for transmitters and receivers, much of the apparatus used by the BBC is designed in the laboratories of this department.

Planning and Installation Department

Though much of the BBC's engineering equipment is designed by the Corporation's own engineers, and some of it is manufactured in its own workshops, a good deal is put out to contract. This work is handled by the Planning and Installation Department, which prepares the specifications and conducts all the negotiations with the manufacturers. This department is responsible for the overall planning of new stations and for the installation of the plant and equipment. Where the installation is done by a contractor, Planning and Installation Department supervises the work.

Building Department

Working in close touch with the Planning and Installation Department is the Building Department, whose architects and engineers are responsible for the buildings and masts at new stations. In the same way that Planning and Installation Department prepares the specifications for the plant and equipment, Building Department draws up the

specifications for buildings and masts, and supervises their construction and erection.

Equipment Department

As has already been mentioned, the Engineering Division not only designs much of its equipment but also manufactures some of it. The manufacturing is done by Equipment Department. As a rule, manufacture is restricted to apparatus that is required only in small quantities, orders for large quantities being placed with outside firms. In addition to this work, the Equipment Department runs the engineering stores, tests new apparatus to see that it complies with the specification before being put into service, and operates the BBC's motor transport fleet which numbers over 300 vehicles.

Establishment Department

Engineering Establishment, as its name implies, looks after the human side of the Engineering Division. It recruits new engineers, decides in conjunction with the department concerned who shall fill posts that become vacant, and generally keeps an eye on the progress of every engineer in the Division.

Training Department

Of the three departments that make up the Engineering Services Group, Engineering Training deals with both new recruits and with refresher courses for more senior staff. It has also assumed responsibility for the BBC's Engineering Museum in which examples of equipment of particular interest dating from the earliest days of broadcasting at Savoy Hill are preserved.

Overseas and Engineering Information Department

The Overseas and Engineering Information Department has the longest title of all the departments, which is not inappropriate because its functions are very diverse. They include the technical planning of the short-wave services for overseas listeners, which entails choosing the best wavelength for each transmission in the light of the diurnal and

seasonal changes that occur in the ionosphere; the operation of the BBC receiving station at Tatsfield, where the carrier frequencies of BBC and foreign stations are checked, and where relays from abroad are picked up for rebroadcasting in this country; the running of the engineering side of the monitoring station at Caversham, which has over forty aerials and more than eighty receivers; and representation of the BBC's technical interests at all international wavelength conferences. O. and E.I.D. is also the information department of the Engineering Division, writing or editing all technical publicity and pamphlets, dealing with listeners' queries, and giving advice on the reception of the BBC's programmes.

Secretariat

Lastly, there is the Engineering Secretariat. This may perhaps best be described as the custodian of the Engineering Division's finances: it prepares the estimates for all new schemes, and is responsible for seeing that the other departments do not overspend. The Engineering Secretariat also deals with the patenting of inventions by BBC engineers and investigates suggestions put forward by engineering staff. In the past year seventeen new patent applications were made, and thirty-eight suggestions were sent in by members of staff to whom awards were made in twelve cases.

Electrical Interference

Electrical interference to sound broadcasting is usually heard as a more or less continuous crackling or buzzing noise with clicks when the interfering apparatus is switched on or off. Many kinds of industrial equipment and domestic electrical appliances may cause interference, some common offenders being refrigerators, bed-warmers, lifts, miscellaneous electric motors, sewing machines, vacuum cleaners, and fluorescent lighting tubes. Interference to television reception may take the form of patterns or white flashes on the screen, and may be caused by some types of equipment already mentioned, by the ignition systems of motor cars or by electro-medical apparatus. The services of the Radio Branch of the General Post Office

are given, free of charge, when available, to all wireless licence holders in tracing the course of interference and advising on its suppression. Listeners requiring assistance should complete the Electrical Interference Questionnaire, which can be obtained from any Head Office, or write, giving the fullest particulars, to the Telephone Manager in their area.

The precaution which a listener should take against electrical interference is to erect an efficient outdoor aerial, if necessary one of the 'anti-interference' type, now manufactured by several firms. Such an aerial if properly installed is often all that is needed to ensure interference-free reception.

PUBLICATIONS

The BBC Publications Department has two primary functions. The first is to provide the listener with information about what he can hear, in time for the broadcast. The second is to provide a background to broadcasting by recording facts and opinions arising from the Corporation's activities.

The details of the programmes that on any one day are going out through the BBC's transmitters must be available to the lonely shepherd in his own regional edition of *Radio Times*, to the Devon-born housewife in Australia with *London Calling* beside her set, to the student in Austria following the broadcast English lessons with *Hier Spricht London*, to the teacher in an Egyptian school, whose BBC programmes are set out for him in *The Arabic Listener*, and to all sorts and conditions of men and women all over the world.

For the background of fact and opinion, the Publications Department provides *The Listener* to give each week to the spoken word the permanence of print, *The BBC Quarterly* to discuss broadcasting as an art and a science, and *The BBC Year Book* to tell the year's achievements. The *Schools Pamphlets* attract many an older listener who wishes there had been such pictures to look at when he or she was at school.

In March 1950 Publications Department was able to return to its pre-war headquarters at 35 Marylebone High Street, after being scattered between Wembley and various offices adjoining Broadcasting House.

During the year the sales of *Radio Times* continued to rise, reaching a peak with a circulation of over eight and a half million copies of the Christmas Number. *London Calling* enlarged its programme detail and speeded its despatch service by dividing into an Eastern and a Western Edition, an arrangement which is proving to the liking of an increasing number of listeners.

The list that follows outlines the main publications: if you would like any further information, please write to BBC PUBLICATIONS DEPARTMENT, 35 MARYLEBONE HIGH STREET, LONDON, W.1.

RADIO TIMES, with the week's full BBC programmes, appears at all newsagents every Friday, at 2*d.*, in eight editions. Available in Europe through principal newsvendors at local currency rates. Annual subscription, including postage: inland 15*s.* 6*d.*, overseas 13*s.* 0*d.*

THE LISTENER, with selected broadcast talks, costs 3*d.* every Thursday at newsagents and booksellers. Annual subscription (home and overseas) including postage: £1.

LONDON CALLING, a weekly magazine with programmes for overseas listeners, is for overseas distribution only. There are separate editions for the Eastern and Western hemispheres. A subscription for your friend costs 25*s.* 0*d.* a year; overseas subscriptions can be sent in local currency through agents.

THE ARABIC LISTENER, an illustrated magazine in Arabic including details of BBC Arabic programmes, now appears monthly, price 2*s.*; annual subscription 21*s.* 0*d.* or local currency equivalent.

BBC QUARTERLY contains expert opinion on radio production, administration, and engineering: 2*s.* 6*d.* a copy, including postage; annual subscription 10*s.* 0*d.*

BBC YEAR BOOK, a record of work and progress: 3*s.* 6*d.*

BBC DIARIES, published for the BBC by Charles Letts and Co., Ltd., in various styles and colours: price 2*s.* 5½*d.* and 4*s.* 3½*d.* including Purchase Tax (postage 2½*d.*).

NEW EVERY MORNING, a revised edition (1948) of the book of Daily Services for broadcasting. Stiff covers 3*s.* 0*d.*, paper covers 1*s.* 6*d.* (postage 3*d.*).

HIER SPRICHT LONDON, a weekly magazine in German containing BBC European programmes. In Germany 10 pfennigs (quarterly 1 mark through State Post Office); Austria 30 groschen; Switzerland 25 centimes.

SCHOOLS PAMPHLETS. For use in conjunction with Schools Broadcasts, booklets are issued for the autumn, spring, and summer terms; the majority are 6*d.* each, with discount to registered listening schools.

BBC TELEVISION SERVICE, a technical description. Illustrated. Price 2*s.*

TELEVISION PICTURE BOOK, a pictorial history of television. Price 2*s.* 6*d.*

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H. E. Wright.

The School Broadcasting Council for the United Kingdom

Sir George Gater, G.C.M.G., K.C.B., D.S.O. (*Chairman*).

Members have been appointed by the organizations named, as follows:

Ministry of Education	G. C. Allen. Sir Martin Roseveare. P. Wilson.
Association of Education Committees	H. M. Spink, M.C.
County Councils Association	W. R. Watkin.
Association of Municipal Corporations	Norman Whatley.
London County Council	Dr. A. G. Hughes.
Association of Education Officers	J. Compton. Stanley Moffett.
Association of Teachers in Colleges and Departments of Education	Dr. E. H. Walters.
National Union of Teachers	Miss S. C. Bertie. Ronald Gould. W. Griffith. C. A. Roberts.
National Association of Head Teachers	W. English.
Headmasters' Conference	G. H. Gilkes.
Incorporated Association of Headmistresses	Miss A. M. Ashley.
Incorporated Association of Headmasters	H. Raymond King.
Incorporated Association of Assistant Masters	A. W. S. Hutchings.
Association of Assistant Mistresses	Miss O. M. Hastings.
Independent Schools Association	Miss E. M. Billham.
Incorporated Association of Preparatory Schools	The Rev. P. C. Underhill.
Joint Committee for the Technical and Art Associations	A. E. Evans.

The School Broadcasting Council for the United Kingdom—continued

Ministry of Education for Northern Ireland	A. C. Williams.
Association of Northern Ireland Education Committees	Dr. J. Stuart Hawnt.
Federal Council of Teachers, Northern Ireland	A. C. Stanley.
The School Broadcasting Council for Scotland	John Crawford, O.B.E. George Gunn. J. L. Hardie. G. T. Pringle. Professor A. F. Skinner.
The School Broadcasting Council for Wales	T. Glyn Davies. Professor E. J. Jones. Dr. W. Thomas. Sir Wynn Wheldon, D.S.O., LL.D. Ffowc Williams.
British Broadcasting Corporation	Miss M. Blackman. Dr. P. A. Browne. H. F. Collins. W. J. Deacon. J. W. P. Garrett. Miss D. M. Hammonds, C.B.E. J. L. Longland. Miss A. E. Mendoza. Professor A. V. Murray. W. H. Perkins, O.B.E. Miss M. E. Reeves. G. A. Riding. Professor W. O. Lester Smith, C.B.E. Professor Brian Stanley. Dr. C. F. Strong, O.B.E.

The School Broadcasting Council for Scotland

Vacancy (*Chairman*).
J. L. Hardie (*Vice-Chairman*).

Members have been appointed by the organizations named, as follows:

Scottish Education Department	G. T. Pringle.
Association of County Councils in Scotland	F. R. Blair. A. S. Lawson.
Scottish Counties of Cities Association	Edwin J. Donaldson. William Fife.
Association of Directors of Education in Scotland	W. J. Goldie. J. A. Maclean, Ph.D.
National Committee for the Training of Teachers	The Rev. J. M. Hunter, O.B.E., D.D. Professor A. F. Skinner, Ph.D.
Educational Institute of Scotland	George Gunn. Miss Pearl Kettles. G. D. Montgomerie. A. B. Simpson.

[*Continued overleaf*

The School Broadcasting Council for Scotland—continued

Scottish Council for Research in Education	N. T. Walker, O.B.E., Ph.D.
British Broadcasting Corporation	Dr. W. Barry. Professor A. M. Boase, Ph.D. John Crawford, O.B.E. Professor Rex Knight. R. Macintyre. Professor A. G. Ogilvie, O.B.E. W. D. Ritchie, O.B.E. Dr. John Wishart, C.B.E., LL.D.

The School Broadcasting Council for Wales

Sir Wynn Wheldon, D.S.O., LL.D. (*Chairman*)
T. Glyn Davies (*Vice-Chairman*).

Members have been appointed by the organizations named, as follows:

Welsh Department, Ministry of Education	R. W. Evans. Dr. W. Thomas.
Joint Education Committee for Wales	C. E. Gittins. D. T. Jones. E. Rees.
University of Wales	Professor E. J. Jones.
University of Wales, School of Education	T. J. Webley. Professor Idwal Jones.
National Union of Teachers	Griffith Davies. Miss C. Gruffydd. J. Gwynne Rees. D. Ll. Thomas. Miss L. Walters.
Welsh Secondary Schools Association	H. J. Davies.
Welsh Joint Secondary Committee	Gwilym Davies.
National Union of Teachers of Wales	Miss Huldah Bassett.
British Broadcasting Corporation	Professor E. G. Bowen. E. O. Humphreys. Professor Henry Lewis. B. B. Thomas. Ffowc Williams.

Agricultural Broadcasting Advisory Committee

W. S. Mansfield, C.B.E. (*Chairman*).
Denys G. Bullard.
E. G. Gooch, M.P.
A. W. Knee, O.B.E.
W. T. Price, M.C.
Professor E. J. Roberts.
W. R. Trehane.
Giles Tuker.
Sir J. A. Scott Watson, C.B.E.

Scottish Agricultural Advisory Committee

Robert Howie (*Chairman*).
John R. Allan.
Professor T. L. Bywater.
Colonel A. S. Fortune, T.D.
William Graham.
W. Coutts Hunter.
Michael McDiarmid.
John Mackie.
A. D. C. Main.
James B. Miller.
W. H. Senior.
R. H. U. Stevenson.
Alexander Sutherland.
R. Chalmers Watson.

Northern Ireland Agricultural Advisory Committee

A. A. McGuckian (*Chairman*).
A. G. Algeo, C.B.E.
Robert C. Allen.
Mrs. J. Brown.
James J. Falconer.
John Getty.
W. Hamill.
Dr. P. A. Linehan.
F. M. B. Loane.
Professor J. Morrison.
Professor A. E. Muskett, D.Sc., M.R.I.A.
Thomas Wilson.

Scientific Advisory Committee

Sir Edward Appleton, G.B.E., K.C.B., D.Sc., LL.D., F.R.S. (*Chairman*).
Sir John Cockcroft, C.B.E., Ph.D., M.I.E.E., F.R.S. (*Vice-Chairman*).
Sir Charles Darwin, K.B.E., M.C., Sc.D., F.R.S.
Professor Willis Jackson, D.Sc., D.Phil., M.I.E.E., F.Inst.P.
R. L. Smith-Rose, D.Sc., Ph.D., M.I.E.E.
Professor F. C. Williams, O.B.E., D.Phil., D.Sc., A.M.I.E.E.

BBC Addresses

LONDON

Head Office: Broadcasting House, London, W.1. *Telephone:* Langham 4468. *Telegrams:* Broadcasts, Telex, London. *Cables:* Broadcasts, London.

Publications: 35 Marylebone High Street, London, W.1. *Telephone:* Welbeck 5577. *Telegrams:* Broadcasts, Telex, London.

MIDLAND REGION

	Telephones:
Broadcasting House, Broad Street, Birmingham	Birmingham Midland 3761

NORTH REGION

Broadcasting House, Piccadilly, Manchester	Manchester Central 2931
Newcastle Representative: E. WILKINSON. Broadcasting House, New Bridge Street, Newcastle	Newcastle 20961
Leeds Representative: G. P. FOX Broadcasting House, Woodhouse Lane, Leeds	Leeds 31516

WEST REGION

Broadcasting House, Whiteladies Road, Clifton, Bristol	Bristol 33052
Plymouth Representative: R. S. STAFFORD, D.S.O., M.C. Broadcasting House, Seymour Road, Mannamead, Plymouth	Plymouth 2283

SCOTLAND

Broadcasting House, Queen Margaret Drive, Glasgow	Glasgow Western 8844
Edinburgh Office: Broadcasting House, Queen Street, Edinburgh	Edinburgh 30111
Aberdeen Representative: A. H. S. PATERSON, M.B.E. Broadcasting House, Beechgrove Terrace, Aberdeen	Aberdeen 25233

NORTHERN IRELAND

Broadcasting House, Ormeau Avenue, Belfast	Belfast 27411

WALES

Broadcasting House, Park Place, Cardiff	Cardiff 3207
North Wales Representative: S. JONES Bron Castell, High Street, Bangor	Bangor 214
West Wales Representative: T. J. PICKERING The Grove Schoolrooms, Uplands, Swansea	Swansea 56451

BBC Representatives Overseas

U.S.A.

N. G. LUKER 630 Fifth Avenue, New York 20, N.Y., U.S.A. *Cables:* Broadcasts, New York	Circle 7–0656

CANADA

F. B. THORNTON 354 Jarvis Street, Toronto 5, Ontario, Canada *Cables:* Thornton, Broadcasts, Toronto	Midway 5481

MIDDLE EAST

J. H. WHITEHEAD 11 Sharia Ahmed Pasha, Garden City, Cairo, Egypt *Cables:* BBC, Cairo	Cairo 48244 49357 58857

INDIA AND PAKISTAN

L. V. DEANE Prem House, Connaught Place, Delhi, India *Cables:* Loncalling, Delhi	Delhi 8009

CEYLON

BBC Programme Unit, Radio Ceylon *Programme Organizer:* J. F. MUDIE P.O. Box 194, Colombo, Ceylon *Cables:* Loncalling, Colombo	Colombo 9269

SINGAPORE

British Far Eastern Broadcasting Service *Head of Service:* W. R. BAKER Thomson Road Studios, P.O. Box 434, Singapore *Cables:* Febrocast, Singapore	Singapore 3925

AUSTRALIA AND NEW ZEALAND

C. P. JUBB
National Building, 250 Pitt Street, Sydney, Australia — M6991
Cables: Jubb, Abcom, Sydney — M3894

ARGENTINE

N. PELHAM WRIGHT
La BBC de Londres
Corrientes 485, Piso 4, Buenos Aires, Argentina — 31-Retiro 4903
Cables: Broadcasts Baires

MEXICO

C. A. GRAHAM
La BBC de Londres — Mex. 35.82–12
Madero 55, Mexico D.F., Mexico
Cables: Broadcasts Mexicocity — Eric. 12.36–17

COLOMBIA

J. E. C. LOPEZ
La BBC de Londres
Calle 11-B No. 9–32, Bogotá, Colombia
Box Offices: (Airmail) Apartados Aereo 42–47 — 65–04
Cables: Broadcasts Bogotá

BRAZIL

J. C. L. R. BRITTAN
A BBC de Londres
Avenida Rio Branco, 251–14 Andar, Rio de Janeiro, Brazil — Rio de Janeiro 42–6170
Cables: Broadcasts Rio de Janeiro

FRANCE

BBC Representative in Paris: MISS C. G. H. REEVES
116 bis Avenue des Champs Elysées, Paris 8 — Elysées 0695
Cables: Broadbrit, Paris

GERMANY

BBC Liaison Officer, Berlin — Berlin 865742
c/o I.S.D., Lancaster House, Berlin

Some BBC Staff changes since July 1949

ARMFELT, R. N., *Secretary, School Broadcasting Council*	resigned NOVEMBER 1949
BOULT, SIR ADRIAN, *Chief Conductor*	retired APRIL 1950
CHADDER, E. G., *Superintendent Engineer, Studios*	appointed SENIOR SUPERINTENDENT ENGINEER, SOUND
CLARKE, J. C., *Newcastle Representative*	retired NOVEMBER 1950
DEANE, L. V., *Pakistan Programme Organizer*	appointed INDIA AND PAKISTAN REPRESENTATIVE
GIELGUD, V. H., *Head of Drama*	appointed HEAD OF DRAMA, SOUND AND TELEVISION
GEORGE, R. V. A., *Head of Recorded Programmes*	appointed HEAD OF CENTRAL PROGRAMME OPERATIONS
HOTINE, L., *Senior Superintendent Engineer*	resigned FEBRUARY 1950
KIRKE, H. L., *Head of Research Department*	appointed to ASSISTANT CHIEF ENGINEER
LAWSON-REECE, C., *Head of Overseas Presentation*	appointed HEAD OF OVERSEAS PROGRAMME OPERATIONS
LEAN, E. TANGYE, *Editor, European Services*	appointed CONTROLLER, EUROPEAN SERVICES
LOOKER, G. G., *Senior Assistant, Overseas Programmes*	appointed PACIFIC AND SOUTH AFRICAN SERVICE ORGANIZER
LOPEZ, J. E. C.	appointed COLOMBIAN REPRESENTATIVE
MACALPINE, J. W., *Head of North American Service*	appointed ASSISTANT CONTROLLER OVERSEAS ENGLISH SERVICES
MACKENZIE-BELL, E. A., *Editor, London Calling*	retired AUGUST 1950
MCCULLOCH, D. I. B., *Head of Children's Hour*	resigned SEPTEMBER 1950
MONSON, A. P., *Assistant Superintendent Engineer, Recording*	appointed SUPERINTENDENT ENGINEER, RECORDING
MURRILL, H. H. J., *Assistant Head of Music*	appointed HEAD OF MUSIC
PULLING, J. L., *Superintendent Engineer, Recording*	appointed SENIOR SUPERINTENDENT ENGINEER, TELEVISION

RANTZEN, H. B., *Head of Designs Department*	resigned MARCH 1950
RENDALL, A. R. A., *Assistant Head of Designs Department*	appointed HEAD OF DESIGNS DEPARTMENT
RENDALL, R. A., *Controller, Talks*	appointed to SPECIAL DUTIES
RIDLEY, J. H. D., *Assistant Head of Engineering Secretariat*	appointed HEAD OF ENGINEERING SECRETARIAT (ACTING)
RITCHIE, D. E., *Seconded to Foreign Office*	appointed GENERAL OVERSEAS SERVICE ORGANIZER
SARGENT, SIR MALCOLM	appointed CHIEF CONDUCTOR
SOMERVILLE, MISS M., *Assistant Controller, Talks*	appointed CONTROLLER, TALKS
SPICER, S. D., *Administrative Officer, Talks*	appointed to be ACTING ASSISTANT CONTROLLER, TALKS
STEELE, R. C., *Senior Education Officer*	appointed SECRETARY, SCHOOL BROADCASTING COUNCIL
THORNTON, F. B., *Latin American Programme Adviser*	appointed CANADIAN REPRESENTATIVE
VENABLES, H. G., *Head of European Presentation*	appointed HEAD OF EUROPEAN PROGRAMME OPERATION
WARR, E. H., *Assistant, Music Department*	appointed ASSISTANT HEAD OF MUSIC
WHITEHEAD, J. H., *Senior Assistant, Arabic Section*	appointed MIDDLE EAST REPRESENTATIVE
WILKINSON, E., *Assistant Head of North Regional Programmes*	appointed NEWCASTLE REPRESENTATIVE
WILLIAMS, D. G., *Art Editor and Deputy Editor*, Radio Times	appointed EDITOR, 'LONDON CALLING'
WILLIAMS, F., *Head of Engineering Secretariat*	appointed SUPERINTENDENT ENGINEER, STUDIOS
WILSON, SIR STEUART, *Head of Music*	resigned AUGUST 1950
WILSON, W. P., *Assistant Head of Research Department*	appointed HEAD OF RESEARCH DEPARTMENT
WRIGHT, N. PELHAM, *Colombian Representative*	appointed ARGENTINE REPRESENTATIVE
WYNN, R. T. B., *Assistant Chief Engineer*	appointed DEPUTY CHIEF ENGINEER

CAPITAL, RESERVES AND LIABILITIES

31 March 1949 £		31 March 1950 £	£
	HOME AND TELEVISION SERVICES		
	CAPITAL ACCOUNT :		
	Balance of Appropriation for Capital Expenditure as at 31 March 1949	5,500,000	
	Appropriation for the year to 31 March 1950 for future Capital Expenditure	1,000,000	
5,500,000			6,500,000
	REVENUE APPROPRIATION ACCOUNT :		
359,463	Balance (unappropriated Net Revenue) at 31 March 1950 carried forward—per account annexed		458,975
5,859,463	Carried forward		6,958,975

AT 31 MARCH 1950

ASSETS

31 March 1949 £		£	31 March 1950 £	£
	HOME AND TELEVISION SERVICES			
	Fixed Assets:			
	FREEHOLD AND LEASEHOLD LAND AND BUILDINGS:			
	As at 31 March 1949—at Cost	3,365,641		
	Additions during the year (less items discarded)—at Cost	439,673		
3,365,641		3,805,314		
1,612,805	*Deduct:* Depreciation accrued to date	1,752,805		
1,752,836			2,052,509	
	PLANT:			
	As at 31 March 1949—at Cost	2,775,768		
	Additions during the year (less items discarded)—at Cost	622,981		
2,775,768		3,398,749		
1,875,907	*Deduct:* Depreciation accrued to date	2,021,907		
899,861			1,376,842	
	FURNITURE AND FITTINGS:			
	As at 31 March 1949—at Cost	419,363		
	Additions during the year (less items discarded)—at Cost	56,444		
419,363		475,807		
304,214	*Deduct:* Depreciation accrued to date	323,214		
115,149			152,593	
	MUSICAL INSTRUMENTS, MUSIC AND BOOKS:			
	As at 31 March 1949—at Cost	140,801		
	Additions during the year (less items discarded)—at Cost	18,978		
140,801		159,779		
110,983	*Deduct:* Depreciation accrued to date	115,983		
29,818			43,796	
2,797,664			3,625,740	
	Current Assets:			
	Unexpended Balance on Capital Account represented by:			
	£2,000,000 2½% National War Bonds—at Cost less amount written off (Market Value 31 March 1949 £2,056,250; 31 March 1950 £2,026,250)	2,030,960		
2,046,938				
661,398	Deposit with Bankers	843,300		
			2,874,260	
5,500,000	Carried forward			6,500,000

CAPITAL, RESERVES AND LIABILITIES

31 March 1949			31 March 1950	
	OVERSEAS SERVICES	£	£	£
£5,859,463	Brought forward			6,958,975
	CAPITAL ACCOUNT:			
	Balance of Appropriation for Capital Expenditure as at 31 March 1949	3,686,220		
	Appropriation from Grant-in-Aid Account for the year to 31 March 1950	161,914		
		3,848,134		
	Less: Plant, etc., discarded during the year to 31 March 1950—at Cost	27,344		
3,686,220			3,820,790	
	GRANT-IN-AID ACCOUNT:			
	Balance of Receipts over expenditure at 31 March 1950, carried forward—per account annexed		68,007	
132,232				
3,818,452				3,888,797
	GENERAL			
	Reserve for contingent contractual payments to Staff	250,000		
250,000				
	Reserve for estimated future Income Tax assessable 1950–51	860,000		
1,050,000			1,110,000	
1,233,197	Creditors		1,626,302	
2,533,197				2,736,302
£12,211,112				£13,584,074

(*Signed*) SIMON OF WYTHENSHAWE } *Governors*
(*Signed*) JOHN ADAMSON }
(*Signed*) W. J. HALEY, *Director-General*

Notes: 1. No provision has been made for Depreciation of Overseas Services Fixed Assets. Payments from Grant-in-Aid do not include any such provision but only the cost of the renewal of these assets.

2. No provision has been made in the above accounts for dilapidations and deferred maintenance of premises and equipment still to be carried out.

3. The balance of uncompleted work on contracts for Capital Expenditure amounted at 31 March 1950 approximately to £765,000 (1949—£470,000).

ASSETS

31 March 1949			31 March 1950	
£	*OVERSEAS SERVICES*	£	£	£
5,500,000	Brought forward			6,500,000
	Fixed Assets (see Note 1) :			
	FREEHOLD AND LEASEHOLD LAND AND BUILDINGS :			
	As at 31 March 1949—at Cost	1,090,167		
	Additions during the year (less items discarded)—at Cost	85,236		
1,090,167			1,175,403	
	PLANT :			
	As at 31 March 1949—at Cost	2,495,289		
	Additions during the year (less items discarded)—at Cost	42,893		
2,495,289			2,538,182	
	FURNITURE AND FITTINGS :			
	As at 31 March 1949—at Cost	100,764		
	Additions during the year (less items discarded)—at Cost	6,441		
100,764			107,205	
3,686,220				3,820,790
	GENERAL			
	Current Assets :			
	STORES ON HAND :			
621,817	At Cost or under		606,351	
	DEBTORS AND UNEXPIRED CHARGES :			
748,070	Sundry Debtors	1,046,105		
212,898	War Damage Claim Part II as agreed without interest, and reinstatement costs recoverable Part I	198,862		
116,652	Unexpired Charges	143,208		
			1,388,175	
1,000,000	TAX RESERVE CERTIFICATES		1,000,000	
325,455	BALANCES WITH BANKERS AND CASH IN HAND ON GENERAL ACCOUNT		268,758	
3,024,892				3,263,284
£12,211,112				£13,584,074

REPORT OF THE AUDITORS TO THE MEMBERS OF THE BRITISH BROADCASTING CORPORATION

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit. In our opinion proper books of account have been kept by the Corporation so far as appears from our examination of those books. We have examined the above Balance Sheet and annexed Net Revenue and Appropriation Account and Grant-in-Aid Account which are in agreement with the books of account. In our opinion and to the best of our information and according to the explanations given us the Balance Sheet with the notes thereon gives a true and fair view of the state of the Corporation's affairs as at 31 March 1950, and the Net Revenue and Appropriation and Grant-in-Aid Accounts give a true and fair view of the income, expenditure and appropriations for the year ended that date.

(*Signed*) DELOITTE, PLENDER, GRIFFITHS & CO., *Auditors.*
Chartered Accountants.

5 LONDON WALL BUILDINGS,
LONDON, E.C.2.
23 *June* 1950.

HOME AND

NET REVENUE AND APPROPRIATION ACCOUNT

31 March 1949				31 March 1950	
£	£			£	£
	7,980,568	Revenue Expenditure for the year as per Statement attached			8,671,502
		Depreciation :			
105,500		Freehold and Leasehold Buildings		140,000	
103,000		Plant		146,000	
14,000		Furniture and Fittings		19,000	
3,500		Musical Instruments, etc.		5,000	
		Amount written off for discarded assets :			
		Amount of assets discarded, at Cost	71,276		
		Less : Receipts from sales of discarded assets	42,999		
14,718				28,277	
	240,718				338,277
	200,000	Special Contribution to New Staff Pension Scheme			100,000
		Income Tax :			
1,050,000		On surplus for year (Assessable 1950–51)		900,000	
12,628		Deducted from Investment Interest		22,500	
	1,062,628			922,500	
		Less : Adjustment for previous years		100,000	
					822,500
	9,483,914				9,932,279
	986,943	Balance carried down			1,099,512
	£10,470,857				£11,031,791
	50,000	Additional Reserve for contingent contractual payments to Staff			—
	620,141	Transfer to Capital Account for future Capital Expenditure			1,000,000
	359,463	Balance (unappropriated Net Revenue) carried forward			458,975
	£1,029,604				£1,458,975

OVERSEAS

GRANT-IN-AID ACCOUNT FOR THE

31 March 1949				31 March 1950	
£	£			£	£
3,865,248		Revenue Expenditure for the year as per Statement attached			4,220,553
		Special Contribution to New Staff Pension Scheme			50,000
		Income Tax :			
		Estimated net amount accrued for the period up to 31 March 1949		45,000	
		Less : Estimated credit in respect of the year to 31 March 1950 (applicable against Income Tax Assessable 1950–51)		40,000	
					5,000
266,744		Transfer to Capital Account representing Capital Expenditure for the year			161,914
4,131,992					4,437,467
132,232		Balance, being excess of Grant-in-Aid Receipts over Net Expenditure to date carried forward			68,007
£4,264,224					£4,505,474

TELEVISION SERVICES

FOR THE YEAR ENDED 31 MARCH 1950

31 March 1949			31 March 1950	
£	£		£	£
9,444,472		Licence Income		9,938,917
989,544		Net Revenue from Publications		1,039,464
	11,465	Interest on Bank Deposit, Tax Reserve Certificates, etc.		13,388
31,266		Interest on Investment	50,000	
5,890		*Less :* Provision towards redemption of Premium	9,978	
	25,376			40,022
£10,470,857				£11,031,791
986,943		Balance brought down		1,099,512
42,661		Balance brought forward as at 31 March 1949		359,463
£1,029,604				£1,458,975

SERVICES

YEAR ENDED 31 MARCH 1950

31 March 1949			31 March 1950	
£	£		£	£
	201,498	Balance of Grant-in-Aid brought forward as at 31 March 1949		132,232
4,050,000		Grant-in-Aid Receipts for the year	4,365,000	
1,850		Interest on Bank deposit	1,000	
10,876		Receipts from sales of discarded assets, etc.	7,242	
	4,062,726			4,373,242
£4,264,224				£4,505,474

STATEMENT OF REVENUE EXPENDITURE FOR THE YEAR ENDED 31 MARCH 1950

HOME AND TELEVISION SERVICES

31 March 1949 Amount	31 March 1949 Percentage of Total		31 March 1950 Amount	31 March 1950 Percentage of Total
£	%		£	%
		PROGRAMMES:		
2,268,946	28·43	Artists, Speakers, etc.	2,562,865	29·56
293,296	3·68	Permanent Orchestras	308,003	3·55
523,548	6·56	Performing Rights	547,927	6·32
91,958	1·15	News Royalties	96,625	1·11
54,456	0·68	Publicity and Intelligence	57,748	0·67
1,073,790	13·46	Salaries and Wages	1,141,143	13·16
138,101	1·73	Sundry Expenses including Travelling, Stationery, Postage, Cables, etc.	122,086	1·41
4,444,095	55·69		4,836,397	55·78
		ENGINEERING:		
207,075	2·59	S.B. and Intercommunication Lines	199,661	2·30
213,865	2·68	Power, Lighting and Heating	223,259	2·57
180,045	2·26	Plant Maintenance	285,105	3·29
104,520	1·31	Transport	107,624	1·24
1,218,357	15·27	Salaries and Wages	1,273,840	14·69
114,403	1·43	Sundry Expenses including Travelling, Stationery, Postage, Cables, etc.	123,709	1·43
2,038,265	25·54		2,213,198	25·52
		PREMISES:		
245,257	3·07	Rent, Rates and Taxes	294,716	3·40
42,165	0·53	Telephones	45,528	0·53
26,239	0·33	Insurance	29,279	0·33
41,321	0·51	Household Maintenance	47,788	0·55
221,718	2·78	Alterations to and Maintenance of Buildings, Services and Masts, etc.	197,156	2·27
576,700	7·22		614,467	7·08
		REGIONAL AND AREA ESTABLISHMENTS:		
70,669	0·88	Billeting, Hostels and Catering	68,135	0·79
344,006	4·31	Salaries and Wages	361,939	4·17
33,206	0·42	Sundry Expenses including Travelling, Stationery, Postage, etc.	29,785	0·34
447,881	5·61		459,859	5·30
		MANAGEMENT AND CENTRAL SERVICES:		
268,894	3·37	Salaries and Wages	293,790	3·39
39,085	0·49	Sundry Expenses including Travelling, Stationery, Postage, etc.	49,013	0·56
307,979	3·86		342,803	3·95
160,898	2·02	CONTRIBUTIONS TO STAFF PENSION SCHEMES AND BENEVOLENT FUND	200,778	2·32
4,750	0·06	GOVERNORS' FEES	4,000	0·05
7,980,568	100·00		8,671,502	100·00

STATEMENT OF REVENUE EXPENDITURE FOR THE YEAR ENDED 31 MARCH 1950

OVERSEAS SERVICES

31 March 1949 Amount £	Percentage of Total %		31 March 1950 Amount £	Percentage of Total %
		PROGRAMMES:		
698,616	18·07	Artists, Speakers, etc.	760,236	18·01
40,758	1·06	Permanent Orchestras	41,232	0·98
120,834	3·13	Performing Rights	127,103	3·01
525	0·01	News Royalties	525	0·01
61,565	1·59	Publicity and Intelligence	54,555	1·29
1,206,774	31·22	Salaries and Wages	1,306,424	30·95
102,898	2·66	Sundry Expenses including Travelling, Stationery, Postage, Cables, etc.	130,400	3·09
2,231,970	57·74		2,420,475	57·34
		ENGINEERING:		
84,243	2·18	S.B. and Intercommunication Lines	92,675	2·20
256,922	6·65	Power, Lighting and Heating	280,563	6·65
122,570	3·17	Plant Maintenance	153,724	3·64
43,140	1·11	Transport	45,077	1·07
482,358	12·48	Salaries and Wages	511,784	12·13
27,338	0·71	Sundry Expenses including Travelling, Stationery, Postage, Cables, etc.	30,112	0·71
1,016,571	26·30		1,113,935	26·40
		PREMISES:		
201,624	5·21	Rent, Rates and Taxes	233,842	5·54
15,323	0·40	Telephones	16,981	0·40
12,009	0·31	Insurance	15,052	0·36
10,869	0·28	Household Maintenance	13,007	0·31
51,409	1·33	Alterations to and Maintenance of Buildings, Services and Masts, etc.	49,195	1·17
291,234	7·53		328,077	7·78
		REGIONAL AND AREA ESTABLISHMENTS:		
34,538	0·90	Billeting, Hostels and Catering	30,764	0·73
121,415	3·14	Salaries and Wages	119,997	2·84
7,013	0·18	Sundry Expenses including Travelling, Stationery, Postage, etc.	7,842	0·19
162,966	4·22		158,603	3·76
		MANAGEMENT AND CENTRAL SERVICES:		
90,017	2·33	Salaries and Wages	93,723	2·22
10,668	0·28	Sundry Expenses including Travelling, Stationery, Postage, etc.	15,291	0·36
100,685	2·61		109,014	2·58
61,822	1·60	CONTRIBUTIONS TO STAFF PENSION SCHEMES AND BENEVOLENT FUND	90,449	2·14
3,865,248	100·00		4,220,553	100·00

INDEX

This issue of the BBC Year Book contains many articles and photographs of the year's broadcasting, and a description of

the proposed scheme for a new Television Centre in London. Views of the model of the project are illustrated here.