

BBC
HANDBOOK
1938



THE BRITISH BROADCASTING
CORPORATION
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FOREWORD

This Handbook records the most notable events and developments in the fifteenth year of the British Broadcasting service. It also contains much standard and up-to-date information, nowhere else assembled, about the BBC itself.

We hope that it will be of practical use to those many members of the great listening public who are interested in what the BBC is and does and has yet to do.



NOTES OF THE YEAR 1937

Output

The BBC's transmitters in different parts of the country sent out in 1937 programmes for an aggregate of just over a hundred thousand hours. The corresponding figure for 1936 was eighty-seven thousand. The transmitters for the home country accounted in 1937 for 77,714 hours, 46 minutes, as compared with 71,123 hours, 1 minute in 1936. The total period of breakdown was 0.023 per cent, as compared with 0.031 per cent in 1936. The Empire transmitters at Daventry worked for 23,779 hours, 18 minutes, as compared with 16,577 hours, 19 minutes in 1936. The television sound and vision transmitters worked for 1,619 hours, 6 minutes.

Licence Growth

The number of wireless licences in force in the United Kingdom increased from 7,960,573 at December 31 1936 to 8,479,600 at December 31 1937.

New Charter and Licence

On January 1 1937 a new Royal Charter came into force, continuing the Corporation for another ten years. A new 'Licence and Agreement' was made between the Postmaster General and the BBC at the same time. These new documents followed in the main the provisions of the first Charter and Licence of January 1 1927. But the new Charter expressly charged the BBC with the duty of developing its Empire Service and made it responsible for the conduct of the new Television Service. It embodied certain other changes, including the provision that the membership of the BBC's Board of Governors should be raised from five to seven.

Board of Governors

The two additional places on the Board of Governors were filled in January by Sir Ian Fraser and Dr. J. J. Mallon. Dr. Mallon is the Warden of Toynbee Hall. Sir Ian Fraser served on Lord Crawford's Broadcasting Committee of 1925, and gave up his seat in Parliament as Conservative Member for North St. Pancras on becoming a Governor. In June Mr. C. H. G. Millis, Managing Director of Baring Brothers, became Vice-Chairman of the Corporation, in succession to Mr. Harold Brown, who had completed his five-year term as a Governor. Mrs. M. A. Hamilton completed her term at the end of 1937, and was succeeded by Miss Margery Fry, sometime Principal of Somerville College, Oxford. A complete list of the Board of Governors will be found on page 58.

Sir Charles Carpendale's Retirement

By the retirement of Sir Charles Carpendale at the end of March 1938, British broadcasting loses one of its most distinguished figures. Vice-Admiral C. D. Carpendale, as he then was, joined the British Broadcasting Company, Ltd., in the summer of 1923 as Assistant General Manager. Later, with the establishment of the Corporation, he became responsible for all the administrative side of its work; as from 1935, he held the post of Deputy Director-General. Thus, throughout his career with the BBC he was Sir John Reith's right hand. But his influence extended beyond the borders of this country. In 1925 he became the first President of the International Broadcasting Union, and during the ten years of his Presidency he did much to foster a mutual understanding between nations on the complicated subject of wireless communications. Sir Charles is succeeded as Deputy Director-General by Mr. C. G. Graves, who has been Controller of Programmes since 1935.

The BBC's Four Services

1937 was the fifteenth year of the sound broadcasting service, the fifth of the Empire Service, and the first of the Television Service. During the last month or two of the year the BBC was busily preparing for the advent of its latest-born, a news service in foreign languages, of which the first programme, in Arabic, was broadcast to listeners in the Near East on January 3 1938. Spanish and Portuguese broadcasts were started in March. Special articles in this Handbook are devoted to the television and foreign language services, and will be found on pages 40 and 49.

Transmitters

The BBC's network of transmitters was substantially extended in 1937. Here are the main developments as they occurred. A new medium-power transmitter at Penmon in Anglesey was opened on February 1, and, using the same wavelength as the Regional transmitter at Washford, Somerset, radiated the same programme for the benefit of listeners in North Wales. The separation of the Regional services for Wales and the West of England was completed on July 4. As from that date separate programmes for these Regions were radiated from the two transmitters at Washford. The wavelength of 285.7 metres was made available for the West of England Regional transmitter by synchronizing the Scottish National transmitter with the London and North National transmitters on 261.1 metres. On October 1 new studio premises, replacing those used by the BBC since 1924, were opened at Swansea. On October 19 a new high-power transmitter was opened at Stagshaw, in the Roman Wall country of Northumberland, some 16 miles west of Newcastle, and gave a much improved Regional programme service to listeners in Northumberland, Durham, Cumberland, and

Westmorland. Extensions to the Empire Station at Daventry included the installation of three new high-power transmitters, which were first brought into service during the Coronation period. The number of transmitters normally in use for the Empire Service was increased from three to four, and this, combined with a new aerial system composed of twenty-five arrays, resulted in greatly improved reception in most parts of the world.

Tribute to Marconi

On July 21, following the death of Marconi on July 20, a two-minutes' silence was observed on all British wavelengths. In the course of a broadcast tribute, Professor E. V. Appleton said: 'For over forty years Marconi has worked as a radio experimenter, with unflagging energy and enthusiasm. He has never been content to rest. For him we were always at the beginning of things. . . . If difficulties seemed to be ahead he tackled them with the zeal of a young experimenter beginning his first research. He was like this to the end. . . . Great as his scientific and technical achievements have been, the man has been as great as his work.'

The King's Christmas Broadcast

The King, following the tradition established by his father, came to the microphone on Christmas Day to send a message to his people throughout the Empire. A Canadian Press comment—'His Majesty spoke briefly and feelingly, but it was a greeting in every sense worthy of the man and of the occasion'—was typical of the views expressed by newspapers and individuals throughout the Empire and far beyond it. Reports on the technical reception of the broadcast were uniformly good. 'Good' was in fact the least enthusiastic word used. Reception in parts of the Empire as far distant from each other as Sierra Leone, Barbados, and

Melbourne was described as 'perfect'. The King's message was re-broadcast extensively in North and South America. The text will be found on page 30.

Toscanini

Returning to this country after an absence of two years, Arturo Toscanini conducted the BBC Symphony Orchestra in six concerts, the like of which had certainly not been heard since his previous appearance at Queen's Hall. Every seat in the Hall was booked weeks in advance for the whole series, and, thanks to broadcasting, the concerts were enjoyed by music lovers in all parts of the country. The Maestro came to London again in the autumn to conduct two more BBC concerts at Queen's Hall. At these concerts the BBC Chorus and the amateur BBC Choral Society provided Toscanini with his first experience of British choirs, a happy one, as he subsequently intimated.

Choral Music

On March 17, at a BBC Symphony Concert in Queen's Hall, Sir Adrian Boult conducted the first performance in England of a concert version of Busoni's opera, 'Doktor Faust'. Professor Edward Dent provided an English translation of the libretto. 'Doktor Faust' was performed for the first time in Dresden in 1925, a year after Busoni's death. The opera is generally considered to be not only Busoni's masterpiece, but also one of the most original creations in the field of opera since Wagner. Fifteen soloists took part in the performance at Queen's Hall, as well as the BBC Symphony Orchestra and the BBC Choral Society. The composer's widow was present. The BBC Choral Society appeared also in the concert of choral music by two British composers, John Ireland and William Walton, which Sir Adrian Boult conducted on December 1, at Queen's Hall, in the

presence of *The Queen*. Each composer was represented by two works: John Ireland by his 'London Overture' and by 'These Things shall be'; William Walton by 'Belshazzar's Feast' and 'In Honour of the City of London', the latter being a musical setting of an ode by the fifteenth-century Scottish poet, William Dunbar. After the performance, the two composers and Sir Adrian Boult were received by Her Majesty.

Music Productions Unit

After an intensive study of opera on the Continent for eighteen months, Stanford Robinson returned in the autumn to direct the BBC's new 'Music Productions Unit'. The unit specializes in studio productions which are not exclusively musical, but in which music predominates; its range extends from Grand Opera through operetta to musical feature programmes and certain types of musical comedy. It comprises the BBC Theatre Orchestra, which, of course, in addition gives several straight concerts every week. The work of the M.P.U. came into full swing in 1938, with the production on January 21 of Massenet's opera 'Manon'.

International Music

The BBC has always appreciated the need for international reciprocity in music, and, while its programmes include a fair proportion of works by foreign composers, it strives consistently to popularize British music at home and abroad. During 1937 a number of distinguished foreign artists gave broadcast performances in this country of works by British composers. In some cases artists were so delighted with the music that they spontaneously included it in subsequent concerts abroad. Another aspect of the same matter was the friendly exchange between Clarence Raybould, a BBC conductor, and Adolf Winter, Music Director at Munich Radio.

Winter conducted a programme including British music here in August; and Raybould included works by Elgar, Delius, and Ethel Smyth at Munich in October. This music, mostly unfamiliar in Germany, has made such an impression that it will remain permanently in the Munich orchestral repertoire. Raybould conducted other concerts of British music during the year at Stockholm, Copenhagen and Oslo, and Sir Adrian Boult, at the invitation of the Belgian broadcasting authorities, conducted the first performance of Vaughan Williams's 'Job' in Brussels on September 29.

Radio Drama

Perhaps the most important development of radio drama in 1937 was the introduction of the 'Experimental Hour', modelled on the 'Workshop' of the Columbia Broadcasting System of America. 'Experimental Hour' provides a platform for unusual and adventurous forms of writing. It has given BBC producers opportunities of trying out new technique. The first production in the series was 'The Fall of the City', a verse play by the American poet, Archibald McLeish. Then came 'Words upon the Window Pane' by W. B. Yeats, and a scene from 'Twelfth Night', presented first in modern English and then in Elizabethan pronunciation. These items were all put in late at night, since it was realized that they might not be to the taste of a large public. All the same, the BBC has had an enthusiastic mailbag about them. Another new departure was 'World Theatre', a series designed to include works by world-famous dramatists. Bernard Shaw's 'Candida', the 'Alcestis' of Euripides, and Sean O'Casey's 'Juno and the Paycock' came into this series.

Children's Hour

Modifications to the Children's Hour, effected early in the year, came in for a good deal of public criticism—

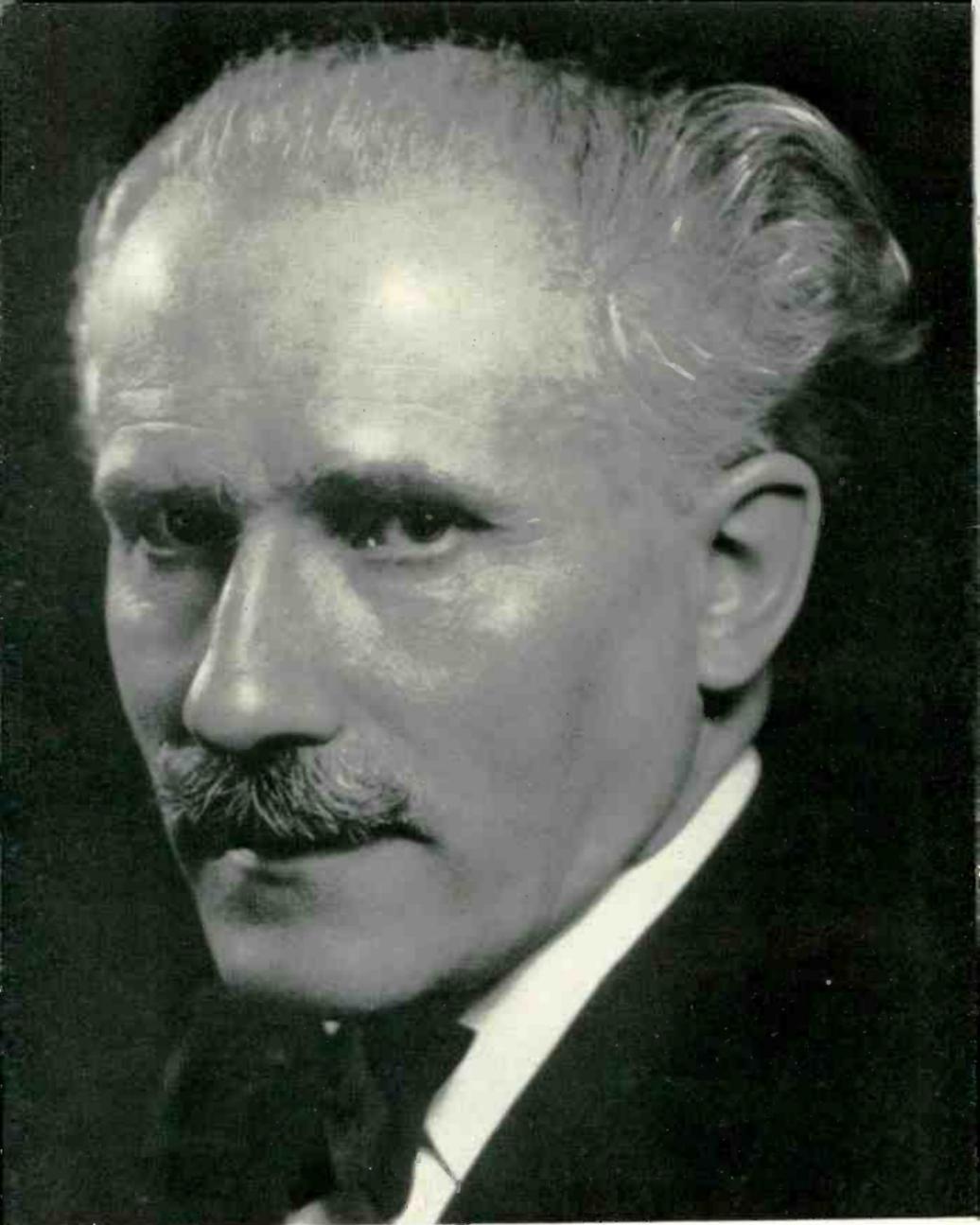
particularly in the provinces. The new arrangement, involving more frequent and regular interchange of material between London and the various Regions, undoubtedly resulted in an all-round improvement in the standard of production, but there were those who felt that much of the intimacy associated with the old-time Children's Hour had been lost in the process. How widespread this feeling was it is difficult to judge; it has been suggested that the critics included more grown-up listeners than children. At all events, striking testimony of the popularity of the new Children's Hour was given towards the end of the year by the results of a General Knowledge Competition and of a Request Week. There were 7,000 entries for the General Knowledge Competition, which is more than double the number of entries for any previous competition, and the 10,000 cards and letters for the Request Week were 2,000 more than the previous best.

Henry Hall

After five and a half year's service as Director of the BBC Dance Orchestra, Henry Hall gave his farewell broadcast on September 25. Many listeners will recall with pleasure the Orchestra's first broadcast on March 15 1932—the first programme, incidentally, to go out from Broadcasting House. The Orchestra as such was disbanded on August 7, but Henry Hall then formed a band of his own, which was employed by the BBC in a regular capacity until his resignation took effect seven weeks later. The new band is still heard by listeners from time to time, but only as one of a number of outside bands. The BBC is not proposing to form another dance orchestra of its own. This policy has been adopted with a view to introducing more variety into the dance music broadcasts. The regular broadcasts by the BBC Dance Orchestra, under Henry Hall, will remain a pleasant memory in the minds of many listeners, both in this country and abroad.



The King at the Microphone



Arturo Toscanini

The BBC Theatre Organ

The BBC Theatre Organ in St. George's Hall celebrated its first anniversary on October 20. Since its opening Reginald Foort, as official BBC organist, has broadcast on the organ several times weekly. His recitals were the subject of over 4,000 enthusiastic letters from listeners during the year. The BBC organ itself has been greatly admired. It is not the biggest organ in the world by any means, but for modern resources and luxurious equipment it can have few rivals. Its range is remarkably wide. As a theatre organ of the accepted kind it is said to have more tonal variety and a more complete percussion department than any of its predecessors. It can be used for the playing of true organ music, particularly of the lighter kind, and it will blend with various instruments and vocal combinations, both dance and 'straight'. Its 260 stops are arranged in logical, accessible positions, and they can be controlled in combination by 54 thumb pistons, each of which can be instantly adjusted for its particular combination. This console is in fact a mighty switchboard, every contact made by a key, piston or pedal working the appropriate section of the relay mechanism in one of the chambers. There are four of these chambers, arranged at the sides of the hall, containing 2,000 to 3,000 pipes, a grand piano, all the effects, and an electrone.

'Scrapbooks'

The 'Scrapbook' programmes have become such an institution that it is surprising to recall how recently they began. In fact it was only four years ago—on December 11 1933—that the first of the series was broadcast. Since then Leslie Baily and Charles Brewer have produced fourteen more 'Scrapbooks', culminating in December last with a revival of the pioneer effort—'Scrapbook for 1913'. 'Revival' is perhaps a misleading term, for the

programme, as broadcast on December 17 and 18, included a number of new incidents and personalities. Listeners heard, among others, Robert Hale in a sketch from an Alhambra revue of 1913, Ethel Levy recalling 'Hullo Ragtime' at the London Hippodrome, Walford Hyden giving reminiscences of Pavlova, and C. J. Pennington recalling the tragedy of the *Volturno*, in which he was wireless operator. The programme was announced by Frederick Grisewood, who was compère the first time it was produced, and Patric Curwen, who has been compère of most of its successors.

Sports Commentaries

Women's sporting events, including cricket, hockey, billiards and figure skating, were described to listeners for the first time in 1937. Other new sporting items were commentaries on bridge, basket-ball, sculling and 'real' tennis. The BBC's aim was to cover representative activities as well as the important national events. An example of this was the inclusion of club rugby football matches and more county cricket. Darts and snooker matches were covered once more. With a view to making each commentary a success from the listener's point of view, the BBC tried more and more to train its own staff commentators for all-round work, so as not to be dependent on the outside specialist, unless he was also a good broadcaster.

Farr-Louis Fight

Through the courtesy of the National Broadcasting Company of America, British listeners were able to hear during the small hours of August 31 a running commentary on the Farr-Louis Heavyweight Championship fight in New York. Bob Bowman's commentary, delivered from the ringside at the Yankee Stadium, reached England, and was broadcast, at 2.50 a.m.

It was recorded and subsequently re-broadcast three times. There must have been a very large audience for the broadcast in the middle of the night. The London electricity authorities stated that the light and power used while the commentary was in progress threw an additional load of 106,000 kilowatts on the generators; this is more than the output capacity of the largest single generating set in the country. From this and other data it has been very roughly estimated that as many as 2,000,000 people may have listened to the broadcast.

Arguments

'What we want is a right good argument!' said a Yorkshire pitman critic of BBC programmes; and, indeed, a number of listeners have complained in the past that controversy played too small a part in British broadcasting and that wireless discussions were too mild and amicable. Such criticism would not apply, however, to some of the programmes of 1937. In particular, the two Regional series, 'Northern Cockpit' and 'Midland Parliament', provided platforms for the frank and outspoken discussion of topical subjects, such as Sunday games, higher wages and shorter hours, school examinations, advertising and industry, and equal pay for men and women. From London also came some 'right good arguments' about the hire-purchase system, tipping, prison reform, international travel restrictions, and other vexed questions; and Scottish listeners are not likely to forget the lively exchange between two Glasgow professors which brought the series 'Scotland and the Empire' to a successful close.

The Spoken Word

In May, after four years of regular broadcasting, Professor John Hilton said good-bye—or, rather, *au revoir*—to listeners. His talks, in the series 'This and That',

had been outstandingly popular. No attempt was made to replace him, although another informal speaker, Lord Elton, scored a marked success in the series 'It Occurs to Me'. A distinguished new-comer to the microphone was H. Granville-Barker, who delighted listeners early in the year with his contribution to a series about Shakespeare and with his National Lecture on 'The Perennial Shakespeare' in October. The other National Lecture for 1937 was Sir Alexander Gibb's 'Confessions of an Engineer'. W. B. Yeats gave a new lease of life to broadcast recitals of poetry by arranging and taking part in several special features, including 'In the Poet's Pub' and 'In the Poet's Parlour'. Another noteworthy feature of the year was the marked increase in the number of stories specially written for broadcasting; contributions by J. D. Beresford, James Bridie, Gerald Bullett, Lord Dunsany, J. Jefferson Farjeon, Desmond McCarthy, Walter de la Mare, L. A. G. Strong and others showed that authors of established reputation were taking an interest in the spoken story and beginning to exploit its peculiar characteristics.

News

There was certainly no dearth of material for inclusion in the BBC's news bulletins in 1937, an eventful year at home and abroad. Politics apart, and leaving aside sport, which the BBC treated in greater detail than ever before, there were several events of great interest which tested the peculiar resources of broadcasting to the full. The floods in the Fen district not only lent themselves to broadcast description by special observers on the spot, but also gave the BBC the opportunity of performing a public service by warning the inhabitants of the areas threatened, and by guiding working parties to danger points. The great floods in the United States were the occasion for a number of special broadcasts from the Mississippi Valley itself; the crossing of the Atlantic by

mail-planes was fully covered by special descriptions from Foynes, and the listening public was able to follow the fortunes of the yacht *Endeavour* from the time she was sighted, after being missing for days, until her captain himself broadcast on arrival in this country.

School Broadcasting

The BBC's broadcasts for schools were heard by scores of thousands of schoolchildren in 1937. The number of schools recorded as listening rose during the year from 5,000 to 6,890 in England and Wales, and from 750 to 881 in Scotland. The programmes are planned with the help of the Central Council for School Broadcasting,* which represents all the major educational bodies, both of administrators and teachers, throughout the country. There is a separate Council for Scotland. The Central Council suffered a loss early in 1938 through the death of Dr. W. W. Vaughan, who had been its Chairman since June 1935. His place has been filled by Sir Henry Richards, late Chief Inspector of the Board of Education.

'Dick' Sheppard

The Very Rev. H. R. L. Sheppard—'Dick' Sheppard—who died on October 31, was England's pioneer 'radio parson'. The first religious broadcasts in this country were studio addresses. Dick Sheppard first gave such an address on July 1 1923—seven months after the establishment of the original British Broadcasting Company—and on Armistice Day of the same year he broadcast a 'National Call to Righteousness' from Trafalgar Square. He was one of the original members of the BBC's Central Religious Advisory Committee, and remained a member till his death. It was at the request of the Committee that on January 6 1924 he conducted the first service ever broadcast from a church—St. Martin-in-the-Fields.

* List of Members, page 68

This service was designed to appeal to as large a number of listeners as possible by avoiding denominational emphasis; so successful was it that a service from St. Martin's has been broadcast once a month since April 1924. Dick Sheppard gave up his Vicarage of St. Martin's in 1927, handing over the tradition to the Rev. 'Pat' McCormick; but it so happened that St. Martin's was the scene of his last, and very memorable, broadcast on November 8 1936.

Appeals

Over £150,000 was subscribed to various good causes as a result of charitable appeals at the microphone. The highest figure for any one appeal was £22,100, which is the second highest so far recorded. A complete list of results from 'Appeals' is given on page 110.

Empire Exchange

To England, heart of the British Empire, come travellers from its periphery in the remotest corners of the globe. The BBC keeps a friendly look-out for all such visitors. Here are a few of those who were asked, while in England in 1937, to broadcast from Daventry to the Empire: a prince from the Shan States in Burma; an Australian farm-hand; a Chinese woman journalist from Singapore; the Governor of an African Colony; a schoolgirl from Assam; a sheik from the Gambia; the Bishop of the Arctic; a police officer from the West Indies; and a South African professor of music. The series of talks to which these visitors contributed was fitly called 'Empire Exchange', a title which describes one of the chief aims of the BBC's Empire Service.

Advisers to the BBC

In January, Lord Macmillan succeeded the Archbishop of York as Chairman of the BBC's General Advisory

Council, and Mr. L. S. Amery, Major the Hon. J. J. Astor, Sir William Bragg, Mr. Harold Brown, Lord Elgin, Mr. J. J. Lawson, the Dowager Lady Reading, Mr. George Robey and Sir Josiah Stamp became members of the Council during the year. Professor George Gordon also became a member of the Council, in his capacity as Chairman of the BBC's Spoken English Committee. The Council lost two valued members by the deaths of Lord Rutherford and Lord Peel. Early in the year a Talks Advisory Committee was formed, under the Chairmanship of Sir Walter Moberly. The Advisory Committee for Adult Education, which came to the end of its term in 1936, was replaced by a new Central Committee for Group Listening. Principal John Nicholson, who had been Chairman of the old Committee, accepted the Chairmanship of the new one. A list of the members of the advisory bodies to the BBC is printed on pages 62 to 71.

The Post Bag

'It is becoming more and more palpable that you take sides against anything that tends towards the Left.'

'For some time past (together with many other listeners) I have been alarmed and annoyed by the attitude, almost amounting to Communist propaganda, of the BBC.'

'Just a few lines to let you know that I think the BBC is alright if only they would let the dance bands play every night at 6.0 instead of at 5.0.'

'I have now been a regular listener for ten years, that is from the age of twelve, and I should like to take this opportunity of thanking the BBC for the part it has played in my education, pleasures, and formation of my tastes and opinions.'

'I was glad of the Test accounts and had great difficulty in prolonging my illness so as to have breakfast in bed and listen in the height of comfort.'

This is a small sample of extracts from letters received at Broadcasting House in 1937. Of the many thousands of listeners who wrote expressing opinions about the programmes, over 75 per cent were appreciative. Compared with 1936, there was a considerable increase in the number of letters dealing with light music, talks, and outside broadcasts. On the other hand, only half as many letters dealt with problems of programme timing and announcing. Letters contained also requests and queries, sometimes of a surprising nature. The BBC was asked, for instance, whether it was interested in photographing a dream by means of television apparatus; it was urged to reprimand, on religious grounds, the commentator on a football match who used the expression 'hell for leather'; one correspondent sought information about the state of the weather on August 29 1934, 'for purposes of a tapestry'; another correspondent required a Chinese translation of 'O Golden Sun of Oblivion'; and another wanted to know whether 'the world-famous piantest Padarwishie' was dead.

Listeners in Conference

In the spring of 1936 the BBC, seeking closer contact with its public, held a successful conference with women listeners at Broadcasting House in London. During 1937 conferences with other representative sections of the public were held at Edinburgh, Leeds, Birmingham, Swansea and Belfast. A typical conference was that held at Broadcasting House, Leeds, on March 13, the subject under discussion being 'BBC Talks'. It was attended by about 150 men and women, drawn from every walk of life and coming from all parts of the North Region. There was considerable divergence in the views expressed, but a number of outstanding points emerged. For example, there was evidently a keen demand for broadcast discussions. Miner delegates in particular asked for 'arguments' about contentious

subjects, in preference to 'straight' talks. One speaker wanted more exchange of invective. The question 'What subjects interest you?' produced evidence of the popularity of international affairs. Answers to 'Who are your favourite speakers?' showed that Professor John Hilton and C. H. Middleton were outstandingly popular. 'What would you do if you were in charge of BBC Talks Programmes?' evoked no revolutionary rejoinder. Considerable importance was attached to the personality and manner of the broadcaster; women speakers came in for some criticism on the score of their 'superior, condescending' voices! It was agreed that a good broadcaster must give listeners the impression that he was talking to them personally. One delegate applied to 'the BBC voice', without criticizing its suitability for news bulletins, the quotation from Tennyson—'icily faultless, splendidly null'!

'Listener Research'

During 1937 a series of experiments in 'Listener Research' was carried out by the special unit formed by the BBC for this purpose towards the end of the previous year. In the spring a four months' study of public taste in radio drama was undertaken. Four hundred listeners answered questionnaires about the merits of forty-seven separate productions as well as about such matters as the best length for radio plays and the times at which they should be broadcast. Later in the year over a thousand listeners joined a panel to criticize cinema talks and to select the most suitable speaker for a forthcoming series; their choice was F. Andrew Rice, whose fortnightly film review subsequently became a popular feature of the year. During the summer the problem of the best time for C. H. Middleton's gardening talks was solved by putting it to the popular vote. In the autumn a thousand listeners were constituted into another panel to register listener opinion on

R. W. Jepson's series of talks on 'Clear Thinking'. An experiment of a different kind was also launched in October. In an endeavour to provide the Variety Department with a substitute for the 'box office' index of public taste, a thousand listeners were invited to apply for log sheets on which they could record their light entertainment listening over a period of twelve weeks. No less than 47,000 asked to be included in this scheme. The number enrolled was raised to two thousand, chosen at random from the applicants. At the end of the year it was announced that over 90 per cent of these had regularly carried out the voluntary duties which they had undertaken to perform. The key to the success of this first year's work in 'Listener Research' was the readiness of the public to help the BBC by telling it 'What every listener knows'.

Publications

The Coronation number of *Radio Times*, issued on May 7, had a sale of 3,540,547 copies, which is understood to be the largest ever recorded by a weekly magazine in any country. *World-Radio* appeared with a new dress and new features on November 19, the improvements including a clearer lay-out of all programmes and a two-page 'spread' for the classified principal events. The chief innovation in *The Listener* was a weekly critical article on the television programmes. Forty-nine descriptive pamphlets were published as an adjunct to the broadcasts for schools and over 2,000,000 copies were sold. These pamphlets, with their pictures and maps and gaily decorated covers, have had a great success with their youthful clientèle all over the country.

Post Office Collaboration

Do listeners realize the part played by the Post Office in helping to bring the broadcast programmes to their homes? The BBC's work touches that of the Post Office

at many points. For example, the Post Office owns and maintains the elaborate network of special telephone lines by which the BBC's transmitters and studios are linked throughout the country. BBC and Post Office engineers work side by side in making the technical arrangements for outside broadcasts and for relays from overseas. In its campaign against the various forms of interference with wireless reception, the Post Office does a service of practical value to listeners, and one in which it has the BBC's whole-hearted support and assistance. The BBC to-day looks back, beyond 1937, on fifteen years of a close and friendly collaboration, without which the daily business of broadcasting could not have been carried on.

Radiolympia

Some 5,000 radio and television sets were displayed at the annual exhibition of the Radio Manufacturers' Association, which opened at Olympia, Hammersmith, on August 25. Besides having two stands of its own, the BBC broadcast three performances from the Exhibition variety theatre, and provided special television transmissions from Alexandra Palace. It also, as in previous years, installed and operated the public address system in the theatre and the central amplifier for the supply of music to the loudspeakers on exhibitors' stands. The Exhibition showed a remarkable advance in the manufacture of television receivers during the previous 12 months. In 1936 there were only 12 sets on view; in 1937 there were some 30 different models, at prices varying from 130 guineas to £35. Fourteen manufacturers each equipped a miniature television theatre, capable of accommodating about 30 people, and there was a constant demand for seats. As one daily newspaper put it: 'The lesson of the Exhibition is that television has come to stay.'

CORONATION SPEECH

by The King

BROADCAST ON MAY 12 1937

It is with a very full heart I speak to you to-night. Never before has a newly crowned King been able to talk to all his peoples in their own homes on the day of his Coronation. Never has the ceremony itself had so wide a significance, for the Dominions are now free and equal partners with this ancient Kingdom, and I felt this morning that the whole Empire was in very truth gathered within the walls of Westminster Abbey.

I rejoice that I can now speak to you all, wherever you may be, greeting old friends in distant lands and, as I hope, new friends in those parts where it has not yet been my good fortune to go. In this personal way the Queen and I wish health and happiness to you all, and we do not forget at this time of celebration those who are living under the shadow of sickness or distress. Their example of courage and good citizenship is always before us, and to them I would send a special message of sympathy and good cheer.

I cannot find words with which to thank you for your love and loyalty to the Queen and myself. Your good will in the streets of to-day, your countless messages from overseas and from every quarter of these islands, have filled our hearts to overflowing. I will only say this, that if, in the coming years, I can show my gratitude in service to you, that is the way above all others that I should choose.

To many millions the Crown is the symbol of unity. By the grace of God and by the will of the free peoples of the British Commonwealth, I have assumed that Crown. In me, as your King, is vested for a time the duty of maintaining its honour and integrity.

This is, indeed, a grave and constant responsibility, but it gave me confidence to see your representatives

around me in the Abbey and to know that you, too, were enabled to join in that infinitely beautiful ceremonial. Its outward forms come down from distant times, but its inner meaning and message are always new; for the highest of distinctions is the service of others, and to the ministry of kingship I have in your hearing dedicated myself, with the Queen at my side, in words of the deepest solemnity. We will, God helping us, faithfully discharge our trust.

Those of you who are children now will, I hope, retain memories of a day of carefree happiness such as I still have of the day of my grandfather's Coronation. In the years to come some of you will travel from one part of the Commonwealth to another, and moving thus within the family circle will meet many whose thoughts are coloured by the same memories, whose hearts unite in devotion to our common heritage.

You will learn, I hope, how much our free association means to us, how much our friendship with each other and with all other nations on earth can help the cause of peace and progress.

The Queen and I will always keep in our hearts the inspiration of this day. May we ever be worthy of the good will, which, I am proud to think, surrounds us at the outset of my reign. I thank you from my heart, and may God bless you all.

CHRISTMAS MESSAGE 1937

by The King

BROADCAST ON CHRISTMAS DAY

Many of you will remember the Christmas broadcasts of former years, when my father spoke to his peoples at home and overseas as the revered head of a great family. His words brought happiness into the homes and into the hearts of listeners all over the world.

I cannot aspire to take his place, nor do I think that you would wish me to carry on unvaried a tradition so personal to him. But as this is the first Christmas since our Coronation, the Queen and I feel that we want to send to you all a further word of gratitude for the love and loyalty you gave us from every quarter of the Empire during this unforgettable year now drawing to its end.

We have promised to try and be worthy of your trust, and this is a pledge that we shall always keep.

As we look back on the year now closing, we see over parts of the world the shadows of enmity and fear. But let us turn to the message that Christmas brings of peace and good will. Let us see to it that this spirit shall in the end prevail, and every one of us can help by making that immortal message the keystone of our daily lives.

And so to all of you, whether at home among your families, as we are, or in hospital, or at your posts carrying out duties that cannot be left undone, we send our Christmas greetings and wish you, under God's blessing, health and prosperity in the years that lie ahead.

THE CORONATION BROADCASTS

To review broadcasting in 1937 is at once to recall the historic part it played at the Coronation, on May 12, of King George VI. For then, by the wonder of radio, every one of The King's subjects at home and in the remotest outposts of the Empire was able to see, with the inner eye of the mind, the pomp, the pageantry, the solemn ritual of the ceremony at which the Sovereign dedicated his life to them. They could follow, too, the outward and return journeys of the triumphal cavalcade, and at night hear The King himself speak to them. That day's broadcasting was the most elaborate and complicated of the kind ever undertaken by the BBC. It was the climax of months of planning and organization by the Outside Broadcasts Department and the Engineering Division; the success of the transmissions was the result of co-operation between programme and technical experts.

Service and Procession

Arrangements made by S. Joly de Lotbinière, Director of Outside Broadcasts, included the allocation of seven commentators to vantage points along the processional routes and in Westminster Abbey. Broadcasting began at 10.15 a.m. with a description, from an observation post in Green Park, overlooking Buckingham Palace, of the procession as it began to move down the Mall. At the same time, peers, commoners, Dominions representatives, foreign royalty and other important personages were arriving at the Abbey, and listeners next heard a description of the scene there from an observer above the stands outside Middlesex Guildhall. Then, as King George and Queen Elizabeth stepped into the ancient, gilded State coach within the precincts of the Palace, the story was continued by another observer. His words were emphasized by the superimposition of

sounds picked up by an 'effects' microphone over the archway through which the coach passed. Next, the Green Park commentator resumed his narrative as the procession made its way down a Mall flanked with multitudes of spectators.

For a few minutes listeners were then taken over to the triforium in Westminster Abbey to 'see', through the voice of an observer there, the magnificent assembly that awaited the coming of The King and Queen. Then, over to the annexe at the Abbey for a brief view of last-minute happenings and, with a few moments to spare, to a stand near the Ministry of Labour in Whitehall, as The King and Queen passed the Cenotaph and, to the pealing of bells, a crescendo of cheers, drew into Parliament Square. When at last the State coach halted at the Abbey, one local observer after another detailed the memorable sight, as The King and Queen joined the Great Proceeding up the aisle to their Chairs of State.

Of fifty-eight microphones used during the day, thirty-two were installed in the Abbey. Concealed in many unlikely places—beneath chairs and faldstools, in chandeliers and lecterns—they made it possible for listeners to hear practically the entire ceremony—a ceremony, by the way, in which there was considerable movement. From time to time, during parts of the service that were not broadcast, the BBC Director of Religion, the Reverend F. A. Iremonger, Chaplain to The King, read, and when necessary explained, the rubrics; and he offered guidance for the thoughts and prayers of listeners during the administration of the Sacrament to The King and Queen.

As the service ended, the observer in the triforium pictured the procession from St. Edward's Chapel to the West Door, explaining how the return procession was reformed, and co-operating with other nearby observers in describing the final scene as The King and Queen, acclaimed by the waiting throng, set out on the



Sir Adrian Boult (*conducting*) and the Archbishop of Canterbury (*in foreground*) at the Service in preparation for the Coronation in the Concert Hall, Broadcasting House, on May 9 1937 (see *page 39*).

A close-up of the Coronation Coach as seen by a television camera.





THE CORONATION

(above) A Commentator describing the Procession.

(below) At the panel of controls in Westminster Abbey.



homeward journey. As the procession made its way from Parliament Square, an important change took place in the plan of the broadcast. In place of the voices of onlookers, four special 'atmosphere' microphones told their own story as the splendid pageant passed along the Embankment, across Trafalgar Square, through West End's clubland, past St. James's Palace to Piccadilly Circus and on to Constitution Hill. The first of these microphones was at the Victoria Embankment end of Horse Guards Avenue; the second near the King Charles I statue in Trafalgar Square; the third on the roof of St. James's Palace; the fourth on the balcony of a great block of buildings in Piccadilly Circus. As the cavalcade neared Constitution Hill, the only BBC observer who had the opportunity of describing it from beginning to end looked upon the scene from a post near the Quadriga, above the Wellington Arch. With him, an 'effects' microphone helped to re-create the spectacle for radio. Finally, the Green Park observer told the last chapter of the story as The King and Queen drove into the Palace courtyard, stepped from their coach, and a little later appeared on the balcony.

The Technical Task

Provision of facilities for fourteen foreign observers, each of whom broadcast a commentary in his own language direct to his own country, complicated a technical task already unprecedented. Even when plans for the Coronation Day broadcast were tentative, it was obvious that either the equipment of the Control Room at Broadcasting House would have to be considerably augmented or a completely different scheme of operation devised. Eventually the second course was decided upon; for rehearsals and transmissions of other important programmes, including the 'Empire's Homage' broadcast on Coronation Night, promised to throw a volume of work far exceeding normal upon the Control Room.

This decision meant the construction of two special control rooms: one, on the south-west side of the nave in Westminster Abbey, which became the focal point of the broadcast from all Home and Empire transmitters; the other, in Middlesex Guildhall, for handling the direct broadcasts to foreign countries.

Only 275 square feet of space were available for the Abbey Control Room. Yet the three compartments into which the room was divided accommodated all the necessary apparatus. In one of these compartments—the nerve centre of the broadcast—R. H. Wood, Engineer-in-Charge, London Outside Broadcasts Section, sat at a panel of controls by means of which he mixed the output of the microphones both in the Abbey and, through sub-control points, along the processional routes. Part of his 'preparation' included a detailed study of the whole of the Coronation Service, and his copy of it included essential marginal notes as to which combination of microphones would be in circuit at each stage of the Service. Seated by his side, de Lotbinière could hear the effect of the microphone mixing, and was able by asking for it to secure any change in 'atmosphere' almost instantaneously. Upon him fell the initial onus of deciding such things as the best moment to leave one observation point for another. The Control Room, by the way, afforded no visual command of the proceedings in the Abbey.

The wiring between the microphones and the mixing panel was installed by General Post Office engineers. The total length of wire used during the entire broadcast was nearly 500 miles, while the equipment, including 7 tons of batteries, weighed 12 tons.

In the Foreign Control Room, the engineers chosen for the mixing of effects at each position were, in most cases, capable of understanding the language being spoken; thus, they were able to vary the ratio of effects to description. Interpreters were also available. The engineer-in-charge, H. H. Thompson, Superintendent Engineer of Outside Broadcasting, has, like Wood,

been responsible for the technical arrangements of many notable outside broadcasts, dating back to King George V's speech at the opening of the Empire Exhibition at Wembley in 1924.

The fourteen foreign observers were accommodated in a series of sound-proof cubicles, forming a structure 100 ft. long and weighing 15 tons, erected on top of a public stand outside Middlesex Guildhall, facing the Abbey. Each observer was able to hear, through headphones, not only his own commentary, but also the superimposition of 'effects'. Special telephone kiosks, built nearby, gave each foreign observer immediate contact with his own broadcasting organization.

Each foreign commentary was fed direct to the Post Office International Trunks Exchange; sound effects picked up along the route were passed from the Home Control Room to the Foreign Control Room for use as a background for the commentaries; the broadcast of the Abbey service itself was fed to foreign broadcasting systems in the same way.

It has long been the BBC's practice, in dealing with important outside broadcasts, to install every piece of equipment in duplicate. That principle, in spite of the enormous amount of apparatus involved, was maintained at the Coronation. A large number of telephone lines was taken over from the Post Office, and each one terminated in such a way that instant change-over could be made in event of emergency. A complete breakdown of the Abbey Control Room would have stopped transmission not only of the Service but of the procession commentary; that, certainly, was an extremely remote possibility, but not sufficiently remote for the Engineering Division to ignore it. A radio link transmitter was accordingly installed on the roof of the Abbey, by means of which the whole of the broadcast would have continued even if the worst had happened!

The BBC provided output for the sound tracks of news films, both of the Abbey ceremony and of the procession;

and in order to obtain a permanent sound picture of the procession, apparatus which normally equips one of the BBC's mobile recording units was temporarily installed in an office overlooking Admiralty Arch. As the procession passed by, hidden microphones picked up the sounds, which were recorded on a series of disks.

The Empire's Homage

In countless homes throughout the world wireless receivers were 'over to London' from 10.15 a.m. till 11.0 p.m. on Coronation Day. Indeed, the climax of the day's programmes was the talk which The King himself broadcast from Buckingham Palace that night, only a few hours after his Coronation.

The simple, intimate style in which the new Monarch gave his message to the Empire must have recalled to many those memorable Christmas Day broadcasts by his father. Moreover, as in the Christmas Day broadcasts, the Royal message came at the end of a 'microphone tour' of the Empire, during which, for 40 minutes, listeners were taken by radio westwards round the world. Those contributing to this programme included the Prime Minister, Mr. Stanley Baldwin (as he then was), the Viceroy of India, and Governmental spokesmen of the Dominions and Colonies, together with a number of representative citizens of the Empire. Among the latter were miners from the South Wales coalfields and the gold mines of the Transvaal; a 70-year-old Cockney; an Australian 'jackaroo'; a French-Canadian girl; a Maori; a New Zealand sailor; and (from Scotland) a fellow-countrywoman of the new Queen. Added to the official homage of the Empire, their simple, less formal words of loyal greeting constituted a fitting prelude to His Majesty's first broadcast as King-Emperor.

World Listening

In order to ensure world reception of the Coronation broadcasts, extensions to the BBC's Empire Station at

Daventry were hastened, with the result that six short-wave transmitters were in use there on May 12. They were then linked with the National and Regional Home transmitters, and for the greater part of the day radiated the same programme simultaneously. In addition, the day's programmes were electrically recorded and re-broadcast from Daventry throughout the night until 8.20 the next morning. Thus, as far as possible, the BBC saw to it that listeners in any part of the world could hear the broadcasts, either 'live' or recorded, at some convenient time during their day.

The Coronation ceremony itself was broadcast, by a relay of either British Home or Empire transmissions, in more than twenty foreign countries. The United States and most European countries also joined British listeners in hearing the 'Empire's Homage' programme and The King's speech on Coronation night.

There can be little doubt that the broadcast of the Coronation ceremony was heard by a greater number of people throughout the world than any other programme in the history of radio. While it was in progress the streets of many villages and provincial towns in this country were practically deserted, the inhabitants being indoors intent upon their wireless sets. In other places people gathered in the open air to hear the programme radiated by the public address system. It was so heard, for instance, by crowds outside the Parliament buildings in Auckland, New Zealand, and in the parks and gardens of Nairobi; by groups of Indians, Malays, and Chinese in the streets of Singapore; by aborigines in the streets of Bathurst, Gambia. Every incident of the ceremony in London was followed by British soldiers and their families stationed on the North-West frontier of India. Factory hands in the United States were allowed to stop work so as to listen to the broadcast.

During the weeks that followed, the BBC received generous praise from many quarters. Particular tribute

was paid to what one London newspaper epitomized as 'the quiet, unemotional manner of the British announcers'. An American visitor conveyed the same thing rather differently. 'Your BBC boys,' he said, 'certainly know how to beat the big drum without making a nasty noise.'

A listener from Southern Rhodesia wrote: 'The Coronation broadcast has brought home to me the fact that I am proud to be a Britisher.'

'You cannot realize what it means to us, to be able to be at the heart of the Empire on these great family occasions through the medium of the BBC,' wrote a Dublin listener.

'It was the most soul-stirring experience we have ever had': from New Zealand.

'The Canadian people feel they are really part of the Crown now, and not just on the outside edge': from Toronto.

'The unforgettable experience was all the more precious because, as you know, we had been deprived of our English newspapers for some days beforehand': from Rome.

'Your broadcast did much to enlighten the average American as to just what our British Monarchy stands for': from California, U.S.A.

'It made me feel that your King was my King': from Pennsylvania, U.S.A.

Televising the Coronation Procession

Coronation Day was an important point in the history of the British Television Service. The BBC's mobile television unit, making the first outside broadcast of television, enabled viewers to enjoy, in the comfort of their own homes, the spectacle of the Royal procession as it passed Apsley Gate, Hyde Park Corner, on the return journey from Westminster Abbey. First the crowd scenes; then the two-mile pageant as it approached

and as it went by, until the last horseman had passed beneath Wellington Arch.

On Coronation night John Masefield, the Poet-Laureate, read his Coronation Ode in the television programme.

Other Coronation Programmes

After the Coronation, commentaries were broadcast on Their Majesties' visits to Scotland, Wales, and Northern Ireland; on His Majesty's review of Ex-Service Men and Women in Hyde Park; and on the Naval Review at Spithead.

Coronation Day itself was, in fact, the hub on which a whole fortnight of special programmes rested. On the previous Sunday, May 9, a Service in preparation for the Coronation, with an address by the Archbishop of Canterbury, was broadcast partly from the Concert Hall in Broadcasting House and partly from St. Paul's Cathedral, where members of the Coronation Choir and delegate singers from the Dominions were assembled. The history of the Coronation ceremony, and its constitutional and religious meaning, were described in special programmes. Musical works, written in honour of the Coronation by leading British composers, were broadcast. They included Granville Bantock's choral work 'King Solomon', William Walton's march 'Crown Imperial', and John Ireland's choral and orchestral setting of the poem by John Addington Symonds, 'These Things shall be'. The last two works were commissioned by the BBC. Finally, a special effort was made, during the period of national rejoicing, to broadcast performances of general entertainment that could be ranked as the best that British talent could provide.

TELEVISION TO-DAY

When The King and Queen neared Hyde Park Corner in their Coronation Coach on May 12, they were seen not only by the throng of sightseers lining the route, but by an army of people scattered over the Home Counties, from Cambridge in the north to Brighton in the south.

This was television, a phenomenon which would have been hailed in any other age either as a miracle or as a piece of witchcraft. The twentieth century, sated with inventions of all kinds, is not easily impressed, but the arrival of high-definition television has made an impression on everybody, from owners of broadcasting receivers to owners of racecourses. Trains were an improvement upon stage coaches; mechanized flight, on ballooning; but television is an improvement on nothing. It is something new under the sun.

Development of the Service

Although 1936 saw the start of the world's first high-definition television service, with Great Britain as its sponsor, it was not until well into 1937 that the public became 'television-conscious'. The BBC's London Television Station at Alexandra Palace transmitted test programmes for the first time in August 1936, to coincide with the radio exhibition at Olympia, but two systems were then in use, and, since the authorities were themselves undecided as to which method should be taken into regular use, it was perhaps too much to expect the general public to make up its own mind in the matter. But on February 5 1937, the Postmaster General announced that, as a result of experience gained by the transmissions from Alexandra Palace, the Television Advisory Committee recommended the termination of the experimental period and the adoption of a single set of standards for transmissions from the London station. These standards—known as the London Television

Standards—provide for a picture composed of 405 lines, interlaced, with a frequency of 50 frames a second. These are the standards employed in the Marconi-E.M.I. system, which is now in regular use.

The adoption of a single standard enormously simplified the task of programme production at Alexandra Palace. Whereas, formerly, the entire routine of the station had to be changed each week to allow of alternate transmissions by the two systems, it now became possible to concentrate on the development of one. Almost at once the programmes improved; they became more 'professional', the rough edges were trimmed off, more careful study could be given to the development of studio lighting, multi-camera work, and general presentation; and, imperceptibly at first, there developed a new technique which owed more to television than to theatre or cinema.

What does the BBC television service offer to-day?

The aim is 'something for everybody'. Approximately two and a half hours of 'live' material, as distinct from film, is available on home screens every week-day, as well as one hour on Sunday evenings. On week-day mornings there is an hour of demonstration films transmitted for trade purposes. The studio programmes range from tap-dancing and the lightest type of variety act to grand opera and drama. They include illustrated talks, music, ballet, revue, art exhibitions, fashion parades and frequent appearances in person of people in the news. Current news-reels are shown daily, and Mickey Mouse and other cartoon films are frequently included.

Outside Broadcasts

But studio and film transmissions are only half the story. In the spring of 1937 a new field was opened up with the purchase by the BBC of a mobile television unit, constructed by the Marconi-E.M.I. Television Company, Ltd., which made television possible from practically

any point within 20 miles or so of the transmitting station. Mobile television was gloriously inaugurated on Coronation Day. Despite bad weather conditions, the whole of the Coronation Procession was televised from Apsley Gate, Hyde Park Corner, and it is estimated that more than 10,000 people found an opportunity to see the picture on a television screen. Three Emitron cameras were used: two on the plinth gave general views of the procession, and a third, at pavement level, showed the procession in close-up with clear glimpses of The King and Queen.

In the first year of its existence the mobile unit has added success to success, and the failures have been few. Viewers in their homes have watched at the moment of happening Wimbledon tennis, the Lord Mayor's Show, the Cenotaph Ceremony on Armistice Day, film-making at Pinewood, Denham and Elstree, Pets' Corner at the Zoo and an Omnibus Pageant at Chiswick.

When in central London, the mobile unit is linked to the transmitting station by a special television cable, installed by the Post Office, which conveys the pictures to the Alexandra Palace control room for re-transmission to viewers. Outside the central area the unit employs its own radio transmitter, the signals being picked up on a radio receiver at the television station and re-radiated.

In addition to the outside broadcasts from the mobile unit, the television programmes include what are known as 'local O.B.s' from Alexandra Park. In effect the Park, with its grassy slopes, woodland and lake, becomes an outdoor 'studio'. The studio cameras are taken into the open, but in all other respects these features are controlled and produced as indoor shows. The park 'studio' has made it possible to show model yacht-racing on the lake, sheep-dog trials, fire-fighting demonstrations, car parades, lessons in horse riding, archery and golf, and the Television Garden tended and described by C. H. Middleton.

Home Viewing

The viewer at home can watch these animated and changing scenes by operating two or three switches. The pictures are small (10 × 8 in.), but regular viewers know how satisfying such a picture can be when seen under home viewing conditions. It is nearly double the size of the full-plate photographs published in the illustrated weeklies; the definition at a distance of four or five feet leaves nothing to be desired, and, perhaps the most important point of all, there is no flicker. Add to this the fact that, owing to the use of ultra-short waves for transmission, the sound reproduction is, if anything, superior to that of ordinary broadcasting, and it will be realized that the owner of a television set is a person to be envied.

The BBC Television Service is highly organized. Only thus is it possible to keep the screen animated with new and varied material for sixteen hours a week.

Comparison with conditions governing stage and film production is inevitable. It suggests that the problems confronting the television personnel are formidable and even, perhaps, frightening. In the theatre the minimum time devoted to the rehearsal of a play is three weeks, and once the production is staged its sponsors have hopes, at least, of a run during which the play will look after itself. Film studios have problems of their own, but even a high-speed schedule does not usually entail the production of more than two or three minutes of actual screen time in a day's work. But the present television service at Alexandra Palace involves ceaseless effort to keep the screen alive for 150 minutes each day and every day. There can be no halts to review the position, no 'cutting' and starting again. Every morning is zero hour, and yesterday must be forgotten. In a sense, television is to the stage and screen what journalism is to literature. The fever of Fleet Street pervades Alexandra Palace from the moment the commissionaires unlock

the doors to the piano-tuner at 7 a.m. until the time when the announcer rehearses her closing announcement at about 10.30 p.m. Every hour of screen time involves at least six or seven at rehearsal, so rehearsals go on from morning till night—in studios at Broadcasting House and Maida Vale, in music rooms, odd corners of Alexandra Palace, and even in the homes of producers. Camera rehearsals, which are the only dress rehearsals, are just possible for an hour or two immediately preceding transmission, only four camera channels being available; so the earlier rehearsals call for much imagination on the part of the producer, who must visualize his camera positions and communicate his intentions to the artists in an environment which would often be more suitable for a séance or an afternoon tea-party!

Organization

The organization falls under two main departments: engineering and programmes. Only the briefest glance can be taken at the engineering side here. Two transmitters are employed, one for vision and one for sound, operating on wavelengths of 6.7 and 7.23 metres respectively. These wavelengths come within the 'ultra short-wave' band, the only one which embraces a wide enough band of frequencies necessary for transmitting the elements of a picture. Unfortunately these waves have a range limited to about 20 or 30 miles under average conditions. To obtain this service area a high transmitting aerial is necessary; hence the 300 ft. mast which surmounts the south-east corner of Alexandra Palace. This mast supports two separate aerials, the upper being for vision and the lower for sound.

The paths of the engineering and programme departments run parallel but separate until the studio control room is reached. Here they converge, for it is here that the programme producer and the productions manager

or his deputy rub shoulders with a team of sound and vision-controlling engineers in the hot and noisy cubicle which overlooks the studio.

The programme side, under Gerald Cock, Director of Television, is divided into two groups: Programmes Organization and Productions Management. The Programmes Organizer allocates duties to the team of producers now numbering fourteen, and is also responsible for securing a right balance in the building of programmes. The Productions Manager is in charge of all the elaborate machinery of presentation. The announcers, stage managers and studio staff are under his control, and his responsibilities range from the building of an elaborate 'set' to the design of a caption card, from the preparation of each day's 'running order' to the allocation of dressing-rooms to artists.

During a transmission the studio control room is the station's nerve centre. From his desk overlooking the studio, the producer of any particular show is temporarily in the position of an organist at the console of a huge instrument which yields pictures as well as sound.

Six feet in front of him are two receiver screens, or 'monitor' tubes, one showing the picture which is being radiated, and the other a choice of pictures from other cameras in the studio. On this second screen a picture can be prepared in advance which can be substituted for the other at a predetermined moment, the transition being effected by the vision-mixing engineer seated just behind the producer. To the front of the producer are the engineers who control sound mixing from the studio microphones, Big Ben, the gramophone turntable, and other sources. To the right and below the producer is the studio itself, seen through a sound-proof plate-glass window. The main studio measures 70 ft. × 30 ft. × 25 ft. high, and here the bulk of the television programmes are performed. Use is also made of a second studio, formerly used for transmissions by the Baird

system, at the other end of the BBC wing. It is not yet fully equipped for Marconi-E.M.I. transmissions.

Televising a Cabaret Show

Let us imagine that we are to be allowed to sit beside the producer during the production of a cabaret programme. Before we climb to the control cubicle we are invited to look round the studio itself, and the first thing that strikes us is the torrent of white light, perhaps running to 60 kilowatts, which pours down upon the stage from every angle. There are lights on the gantry across the centre of the studio, lights in the roof and wings, lights behind the cyclorama at the rear of the stage, lights in corners, lights everywhere. All are controlled from a switchboard which enables any combination of lamps to be used to suit the producer's requirements.

Grouped in the centre of the studio are three Emitron cameras which act as 'electric eyes'. The optical image is focused by a lens upon a photo-sensitive plate to produce upon it a faithful electrical picture of the original scene. This is 'scanned' line by line by an 'electron gun' to produce an electric current, the amplitude of which varies according to the light and shade of the picture. These variations are eventually applied to the cathode-ray tube in the home receiver, enabling an image of the scene to be reconstructed.

No. 1 camera is mounted on a 'dolly' truck similar to those used in film studios and can thus move backwards and forwards to provide medium shots or close-ups. Flanking it are cameras 2 and 3, also movable, and for the show we are about to witness they are trained on side sets which will be used for comedy sketches or announcements by the compère.

Poised overhead like a giant fishing rod is the microphone boom, which can swing the 'mike' noiselessly and inconspicuously in pursuit of the most nimble artist. Camera men and microphone men all wear headphones

so that the producer can talk to them while the show is in progress.

The Television Orchestra

Basking in comparative shade at the producer's end of the studio is the BBC Television Orchestra, 22 strong, which is probably one of the most versatile musical combinations in the world. In the course of an hour they may be called upon to play accompaniments for 'hot Momma' songs, ballet, a sensational skating act, and perhaps a movement from a pianoforte concerto.

To the right of the studio, as we see it from the producer's desk, are two small cubicles, the size of telephone booths. One is a quick-change room for artists who, when the 'show is on', have no time to reach their dressing-rooms on the other side of the studio corridor. The other booth houses a television set which is used for various purposes and is invaluable to the make-up staff, who are able to study the appearance of artists during rehearsal and decide what kind of make-up is required for each individual. Being made up for television is not the terrifying ordeal that it was a year or so ago, when artists looked more like mandrills than anything else. It was then necessary to emphasize the cheek-bones and jaw-bones with lines, and all the hollows had to be filled in. Bright blue lips were necessary, and George Robey eyebrows.

Nowadays, the aim is to achieve a healthy sun-tan. Women use normal lip-stick with the addition of delicate shading to bring out the beauty of the eyes. A little light powder is added with a finishing touch of mascara for the eyelashes. For men a liquid foundation is used to bring up the sun-tan shade. Dark complexions have to be lightened, fair darkened.

'Two Minutes to go!'

And now the studio manager, on instructions from the producer, has blown the warning whistle: 'Two

minutes to go!' Talk drops to a whisper; a perspiring artist receives a last dab of face-powder from one of the ubiquitous make-up assistants; an announcer smiles before Camera 2 . . . and it is time to join the producer upstairs. Sitting in his uneasy chair, and surrounded by faithful engineers, he has one eye on the studio and the other on the left-hand monitor tube, which shows a cartoon film, transmitted from the tele-ciné room next door, nearing its breathless conclusion. The right-hand monitor already gives a picture of the announcer as seen by Camera 2, and, as the film runs out, our producer takes charge. 'Over to Camera 2!' . . . and, as the vision mixer obeys, the announcer is given the cue light to begin.

Announcements are short, and within twenty seconds we are ready to 'fade over' to the Cabaret Chorus on Camera 1. The picture is already prepared on the alternative monitor tube and, fifteen seconds after the opening of the announcement, the orchestral conductor is given his green cue light to strike up. Simultaneously the studio manager signals the Cabaret Chorus to begin dancing and, two seconds later, the producer—performing the surprising feat of watching at the same time his script, the monitor tubes and the show in the studio—gives the order: 'Over to Camera 1!'

The Show is on

Now he talks through his desk microphone to No. 1 cameraman. 'Track up slightly . . . Pan left . . . that's better. Hold it!' . . . and the show is 'on'.

Of all this hectic endeavour the viewer at home knows nothing. He is watching a pleasant, intimate cabaret by his own fireside, an apparently effortless piece of entertainment which ends too soon.



C. H. Middleton (*second from right*) being televised in his garden in the grounds of Alexandra Palace (see page 42).

Televising the Vic-Wells ballet 'Les Patineurs' in the studio at Alexandra Palace.





The Inauguration of the Foreign Language Broadcasts

(Left to right): Sir Bernard Reilly, Governor of Aden; Sheik Hafiz Wahba, Minister for Saudi Arabia; Emir Seif-El-Islam Hussein of Yemen; Seyyid Rauf Bey El Chadirji, Minister for Iraq; and Abd al-Rahman Hakki Bey, Egyptian Ambassador in London, in the Board Room at Broadcasting House.

FOREIGN LANGUAGE BROADCASTS

On Monday, January 3 1938 the BBC broadcast its first Arabic programme. In his palace at Sana'a the King of the Yemen listened to the voice of his son, the Emir Seif-El-Islam Hussein, inaugurating the new service from London. In his broadcast, the Emir said that his country welcomed this new effort to cement good understanding and mutual friendship between Great Britain and the Arabic-speaking countries. Messages of good will were broadcast also by the Egyptian Ambassador in London, the Ministers for Iraq and Saudi Arabia and the Governor of Aden. A news bulletin in Arabic followed. This was the first time that Britain had broadcast to the world in any other language but her own.

Nearly three years ago, when the Ullswater Committee was considering the problems of the broadcasting service, the question whether the BBC should use foreign languages had already arisen. Certain foreign stations were then including in their programmes news and other items in English directed to listeners both in this country and in the British Empire overseas. In their report, published early in 1936, the Committee gave their considered opinion: 'In the interest of British prestige and influence in world affairs, we think that the appropriate use of languages other than English should be encouraged.'

Short-wave Development

After the publication of the Ullswater Report the question became one of rapidly increasing importance. Great strides were made in the technique of broadcasting on the short waves which carry messages over world distances. A few years ago the quality of short-wave programmes was always uncertain, there was much distortion and atmospheric interference; but with increasing knowledge good reception was becoming possible in most parts of the world. And so, powerful

transmitters were built and more efficient types of aerial arrays constructed. Short-wave and all-wave receivers became cheaper. Short-wave listening was no longer only a hobby for the enthusiast; it had become a means of world communication and exchange.

While Britain employed this powerful new instrument for the purpose of speaking to her own Empire in her own language, other countries had begun to use it to put their views before the world. The U.S.S.R. was one of the first countries to send out programmes in a number of different languages. France followed suit. Holland began by broadcasting to her colonies, but later became interested also in foreign language broadcasts. From her powerful station at Zeesen, Germany radiated programmes in many different languages all over the world. Italy, too, entered the field, and her daily transmissions directed to Palestine and the Near East aroused a good deal of interest in this country and elsewhere. Japan and latterly the United States were among the countries outside Europe to send out news daily in several different languages. In one country after another a polyglot service was launched, until Britain was nearly alone among the nations in her policy of broadcasting to the world only in her own tongue.

Meanwhile the problem as it affected this country had not been lost sight of or shelved. The BBC had early consulted the Government Departments concerned and had placed before them the advantages and disadvantages, as seen, of adding languages other than English to its overseas service. Representatives abroad were widely consulted. The arguments for and against were carefully weighed, and, as a result, the Postmaster General announced in the House of Commons on October 29 1937 that the Government had decided in favour of foreign language broadcasts. He made it clear that when news was broadcast it would be 'straight' news and not propaganda.

On November 1, Sir John Simon, Chancellor of the

Exchequer, speaking for the Prime Minister, made a fuller statement. He said that the Government had come to the conclusion that 'broadcasts from this country in Spanish and Portuguese would be welcomed, particularly by listeners in South American countries, and in Arabic by listeners in the Near East', and that the Government had requested the BBC to provide a service accordingly.

The Chancellor of the Exchequer made three points of special importance. First, nothing was to be done which might interfere with the BBC's existing Empire Service. Secondly, new transmitters were needed and, until they were constructed and brought into use, only a limited service could be available. Lastly, in working the new service, the BBC was to have 'the same full responsibilities and duties' as were laid down in its Charter in respect of the existing services.

Start of the British Service

The BBC set to work at once to get the new service under way. Since January 3, Arabic news bulletins have been broadcast from Daventry every evening from 6.0 to 6.15 p.m. They are directed towards the Near East so as to be clearly heard in Aden, Egypt, Hadramaut, Iraq, Palestine, the Persian Gulf, Saudi Arabia, the Anglo-Egyptian Sudan, Transjordan and Yemen. These countries comprise a great part of the Arabic-speaking world and their total population is probably not far short of 40,000,000. Transmissions to the Latin American countries started in March. The area covered stretches for over 6,000 miles, from Mexico to Magallanes. It contains some 70,000,000 people whose language is Spanish, and 40,000,000, in Brazil, who speak Portuguese. Two news bulletins of 15 minutes each, one in Spanish and the other in Portuguese, are broadcast daily. They are radiated in succession, beginning at 1.30 a.m. G.M.T., which means, when

allowances have been made for differences in time reckoning, that they reach the countries of Central and South America on the previous evening at times varying from 7.30-10.30 p.m.

This is a beginning only. Transmitters are needed. Two, of high power, have been ordered for the new service, and it is hoped that they will be in use at Daventry early in 1939. Meanwhile, the service must depend on the spare-time use of existing equipment, since it has been accepted as an axiom from the start that listeners in the Empire overseas should not suffer any curtailment of the programmes broadcast from Daventry for their benefit.

The launching of even the limited service of daily news broadcasts in Arabic, Spanish, and Portuguese was no small task. Apart from all technical requirements, the BBC's needs included news editors and public relations officers with a thorough knowledge of the foreign countries concerned, and translators and announcers capable of speaking Arabic so as to be understood from Syria to the Sudan, or in the special forms of Spanish and Portuguese which would be acceptable in the countries of Central and South America. In addition to preparing its programmes, the BBC had to make known their coming in the countries of reception and to make arrangements for ascertaining how they were received there.

In deciding to speak to other countries in their own tongue, Britain is a late-comer in the field. But her arrival has been widely welcomed in the Press of the world, and especially in the Empire Press. The aim of the new service is not to meet propaganda with counter-propaganda, but to secure a wider audience for a broadcast news service which has, in English, won a high reputation in all parts of the world for fairness and impartiality.

MISCELLANEOUS INFORMATION

WHAT IS THE BBC?

The BBC is neither a Government Department nor a commercial company. It is a public corporation, created by Royal Charter, and not working for profit. Its legal powers to maintain broadcasting stations are derived from an agreement made between the Postmaster General and the BBC, which also contains certain general provisions as to the manner in which the broadcasting service shall be operated.*

Its Origin and Growth

The first programme to be broadcast to the public in this country was a concert transmitted by the Marconi Company from Chelmsford on February 23, 1920. By 1922 a number of firms were applying separately to the Postmaster General for licences to broadcast. These firms were persuaded to combine as the British Broadcasting Company, which sent out the first daily broadcast in the United Kingdom from its London Station in the Strand on November 14. By the end of 1922 there were 35,774 wireless licence-holders in the country.

The first 'BBC' was a limited liability company, licensed under the Wireless Telegraphy Acts to conduct a broadcasting service 'to the reasonable satisfaction of the Postmaster General', with three-fifths of its £100,000 of authorized capital guaranteed by six large wireless manufacturing firms, dividends limited to 7½ per cent, and revenue derived both from a half share of the ten-shilling licences and from certain royalties from manufacturers on sets sold. The system of revenue from royalties soon proved unworkable, and the Company became entirely dependent for its revenue on wireless licences and the sale of printed publications. Its share

* See page 123.

in the licence fees was, however, raised from 50 per cent to 75 per cent, following a recommendation to this effect by the 'Sykes Committee' in 1923.* Further developments at about this time were the admission of daytime programmes, hitherto prohibited on the ground of possible interference with other wireless services, and the extension of the network of transmitting stations. By the end of 1924 the number of licences was 1,130,264, and the BBC had virtually assumed a responsibility for providing a complete national system accessible to the owner of the cheapest form of set in any part of the country.

In 1925 a Committee, with Lord Crawford as Chairman, recommended that the service should be 'conducted by a public corporation acting as Trustee for the national interest'.* There followed the creation by Royal Charter on January 1 1927 of the British Broadcasting Corporation. The Charter provided that the Corporation should be established for a term of ten years, that its members, or 'Governors', appointed by The King in Council, should number five, and that a Director-General should be its chief executive officer. The first Director-General was nominated in the Charter, but the Governors were to be responsible for the appointment of future Directors-General and all other members of the staff. The shareholders were paid off and the Company Directors retired. But the Corporation retained the sources of revenue, and the staff, studios and transmitters previously held by the Company. Even the general policy was little affected, for the Company had administered the broadcasting service as a public trust rather than as a commercial undertaking. There was in fact little visible evidence of the important constitutional change that had taken place. By this time there were 2,178,259 licences.

In 1935 the Postmaster General appointed a Committee, under the Chairmanship of Lord Ullswater, to

* See page 123.

report on the broadcasting service and on the conditions under which it should be conducted when the BBC's first Charter expired at the end of 1936.* The Committee, the recommendations of which were later adopted by the Government with few changes, expressed appreciation of the 'prudence and idealism' which had characterized the operations of the BBC, and advised 'the further strengthening and securing of the position which the broadcasting service in Great Britain has happily attained in the few years of its history'. A new Royal Charter accordingly came into force on January 1 1937 continuing the Corporation for a further ten years. It followed in the main the provisions of the original Charter; but expressly charged the BBC with the duty of carrying on the Empire Service, which it had started at the end of 1932, and made it responsible for the conduct of the new Television Service, inaugurated in November 1936. On December 31 1936, when the first Charter came to an end, licences numbered 7,960,573.

In November 1937 the BBC was invited by the Government to provide broadcast news services to the Near East in Arabic, and to South and Central America in Spanish and Portuguese. These were begun early in 1938.

How the BBC gets its Money

The BBC has no share capital. Both its capital and its current expenditure are met out of revenue. This revenue is derived from two sources—most of it from wireless licences, but an important part of it from the BBC's printed publications.

Everyone in Great Britain using a wireless set (registered blind persons excepted) must pay an annual licence fee of 10s., which is collected by the Post Office. Of each 10s. so collected, the Post Office retains a

* See page 123.

percentage, at present fixed at 9 per cent, to cover cost of collection and certain other services. Of the sum remaining after this deduction has been made, 75 per cent in 1937 went to the BBC, while the balance was retained by the Treasury. This meant that in that year the Post Office got approximately $10\frac{3}{4}d.$ of the 10s. The BBC had about 6s. 10d. and the Treasury about 2s. $3\frac{1}{4}d.$ After provision had been made for payment of income tax, the BBC had approximately 6s. 5d. left to spend for the capital and current requirements of the broadcasting service. In 1937 some 8,431,000 paid licences were issued, from which the BBC obtained a clear revenue of about £2,700,000.

The BBC is entitled, if the needs of the broadcasting service require it, to apply for a further share of the balance of licence revenue retained by the Treasury. It applied during 1937 for a further allocation to cover the costs of television, and satisfied the Treasury that an increase would be necessary under this head. The Treasury also agreed to make provision for the cost of broadcasts in foreign languages. By a Supplementary Estimate, presented to Parliament in February, 1938, the revenue for the fifteen months ending March 31 1938 was increased by £310,000 under these two heads.

In 1937 the BBC made a net profit of £480,527 from its printed publications—*Radio Times*, *World-Radio*, *The Listener*, and supplementary publications—which was devoted entirely to the needs of the broadcasting service.

Who controls the BBC?

The short answer to the question 'Who controls the BBC?' is that, while an ultimate control of the broadcasting service is reserved through Parliament and the Government to the nation, the BBC enjoys a wide constitutional independence, and a yet wider independence in practice. It has a virtually free hand in the conduct of its day-to-day operations: and it is at pains to study the needs and tastes of its listeners.

Parliament has regular opportunities for discussing BBC affairs, for example when the Annual Estimate for broadcasting is presented by the Postmaster General. Questions about broadcasting policy may be asked of the Postmaster General in Parliament; but the Speaker does not admit questions about details of BBC administration, such as are commonly asked about the work of Government Departments.

The Postmaster General has the right, 'in case of emergency', to take over the BBC's stations. No Postmaster General has ever yet exercised this power. He is further authorized to require the Corporation to refrain from sending any broadcast matter, either particular or general, that he may specify by a notice in writing. The only general restriction in force to-day upon the matter that may be broadcast is a veto upon the broadcasting by the BBC of its own opinions upon current affairs. Matters of controversy were at one time excluded, but are now left to the BBC's own discretion. No Postmaster General has ever yet imposed a veto on any particular item in the programmes. Government Departments can, on request, secure that their special announcements are broadcast.

The Board of Governors, to whom the Director-General is immediately responsible, controls BBC policy. For administrative purposes the work of the BBC is organized, under the Director-General and his Deputy, in four Divisions—Administration, Engineering, Programme, and Public Relations—each under its own Controller. The Control Board, which prepares questions of policy for consideration by the Board of Governors, and decides important questions of administration, consists of the Director-General, his Deputy, and the four Controllers. Geographically the country is divided into six regions, exclusive of the London and Home Counties area, each under its own Regional Director and with its own regional staff and headquarters.

BOARD OF GOVERNORS

R. C. Norman (*Chairman*)

C. H. G. Millis, D.S.O., M.C. (*Vice-Chairman*)

The Rt. Hon. H. A. L. Fisher, O.M., D.C.L., F.R.S.

Caroline Viscountess Bridgeman, D.B.E.

Captain Sir Ian Fraser, C.B.E.

J. J. Mallon, LL.D.

Miss Margery Fry

DIRECTOR-GENERAL

Sir J. C. W. Reith, G.B.E., D.C.L.

DEPUTY DIRECTOR-GENERAL

C. G. Graves, M.C.

CONTROLLERS

Sir Noel Ashbridge, M.I.E.E. (*Engineering*)

B. E. Nicolls (*Programmes*)

Sir Stephen Tallents, K.C.M.G., C.B., C.B.E.

(*Public Relations*)

T. Lochhead, C.B.E. (*Administration*)

THE BBC REGIONS

The alternative programme service consists of a National and a Regional programme.* The National programme, transmitted by the high-power, long-wave station at Droitwich and by three auxiliary medium-wave stations, is intended for reception throughout Great Britain and Northern Ireland. There is one main programme alternative to the National programme, known simply as the 'Regional' programme, which originates largely in London, but to which Regions contribute. This 'Regional' programme is always transmitted by the London Regional station. Parts of it are included in the programmes of other Regions, and broadcast simultaneously by their transmitting stations. The programmes of the individual Regions are planned so as to contrast as far as possible with the National programme, and contain items of particular interest to listeners in various local areas. Each Region can work independently or in conjunction with any other Region as required. Each includes a studio centre (in some cases also subsidiary studio premises) and one or more transmitting stations. All the studio premises are connected with each other by special telephone lines, and each transmitting station is connected similarly to its studio centre. Thus any studio in any Region may be the originating point of a programme, which may be transmitted as desired, either by the broadcasting station of that Region only, or by the stations of any or all of the other Regions. Programmes which originate from points outside the studios ('outside broadcasts') are passed by telephone line to the nearest studio premises, and thence distributed in the same way.

The areas included in the various Regions are given on the next page; but it should be understood that for technical reasons they do not coincide absolutely with the service areas of the various Regional transmitters.

* See Maps on pages 86 and 87.

LONDON REGION

the Counties of

Bedfordshire, Berkshire, Buckinghamshire, Cambridge-
shire, Essex, Hampshire, Hertfordshire, Huntingdonshire,
Kent, Middlesex, Norfolk, Oxfordshire (South), Suffolk,
Surrey, Sussex, Channel Isles, and London County Area

MIDLAND REGION

Regional Director: P. F. EDGAR, O.B.E.

the Counties of

Derbyshire (South), Gloucestershire (North), Hereford-
shire, Leicestershire, Northamptonshire, Nottingham-
shire (South), Oxfordshire (North), Rutland, Shropshire,
Staffordshire, Warwickshire, and Worcestershire

NORTH REGION

Regional Director: J. COATMAN, C.I.E.

the Counties of

Cheshire, Cumberland, Derbyshire (North), Durham,
Lancashire, Lincolnshire, Nottinghamshire (North),
Northumberland, Westmorland, Yorkshire, and the
Isle of Man

NORTHERN IRELAND REGION

Regional Director: G. L. MARSHALL, O.B.E.

the six Counties of Northern Ireland

SCOTTISH REGION

Regional Director: M. DINWIDDIE, D.S.O., O.B.E., M.C.

Scotland

WELSH REGION

Regional Director: R. HOPKIN MORRIS

Wales and Monmouthshire

WEST OF ENGLAND REGION

Regional Director: G. C. BEADLE

the Counties of

Cornwall, Devonshire, Dorset, Gloucestershire (South),
Somerset, and Wiltshire

ADVISORY COUNCILS AND COMMITTEES OF THE BBC

The BBC is specifically vested by Charter with power to appoint advisory committees. In the framing and execution of its policy it consults at regular intervals a specially appointed General Advisory Council of distinguished and widely representative membership. On special subjects, such as religious broadcasts, music, talks, charitable appeals, school broadcasts, group listening, and the pronunciation of English, it is advised continuously by a chain of advisory committees. The General Advisory Council includes in its membership the chairmen of all the central advisory committees. Similarly the Regional committees are generally represented by their chairmen, or other delegates, at meetings of their respective central committees.

The function of these committees is to advise. Executive power and responsibility remain with the BBC. To this, however, there are two exceptions. The Central Council for School Broadcasting and the Central Committee for Group Listening, with their associated Regional councils, have definite executive work entrusted to them. They operate by means of grants from the BBC and have their own staff. The functions of the Central Council for School Broadcasting include the supervision of programme arrangements, the organization of research and experiment, and the control of the listening end of the broadcasts to schools. The Central Committee for Group Listening supervises the organization of Discussion Groups.

The membership of these advisory bodies, as at January 1 1938, is given in the succeeding pages.

GENERAL ADVISORY COUNCIL

<p>The Rt. Hon. the Lord Macmillan (<i>Chairman</i>) The Warden of All Souls Sir Hugh P. Allen The Rt. Hon. L. S. Amery, M.P. Professor Ernest Barker Sir William H. Beveridge The Rt. Hon. Margaret Bondfield Sir William Bragg Harold G. Brown The Rt. Hon. the Viscount Charlemont Sir Walter M. Citrine The Rt. Hon. the Earl of Crawford and Balcarres Joseph F. Duncan The Rt. Hon. the Earl of Elgin and Kincardine Professor George Gordon Miss Grace E. Hadow</p>	<p>The Rt. Hon. David Lloyd George, M.P. J. J. Lawson, M.P. The Most Hon. the Marquess of Lothian Sir Walter H. Moberly Dr. John Murray Sir George Newman Principal J. H. Nicholson The Dowager Marchioness of Reading George Robey Professor Sir Arthur Salter, M.P. Professor J. A. Scott Watson Sir Josiah Stamp Dame Meriel Talbot Dame Sybil Thorndike Dr. W. W. Vaughan The Rt. Rev. the Lord Bishop of Winchester</p>
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APPEALS ADVISORY COMMITTEES

Central

<p>Dame Meriel Talbot (<i>Chairman</i>) B. E. Astbury The Lady Emmott</p>	<p>Sir Frederick Menzies Brigadier-General R. H. More A. H. Norris L. Shoeten Sack</p>
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Midland

<p>Sir Charles Hyde, Bt. (<i>Chairman</i>) Alderman A. E. Ager The Lady Sibell Argles The Rev. Canon S. Blofeld</p>	<p>Richard Clements Alderman Sir Fred Hayward The Rev. Canon Stuart D. Morris Mrs. T. H. Ryland Sydney Vernon</p>
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North

<p>Mrs. Temple (<i>Chairman</i>) The Lord Mayor of Bradford The Lord Mayor of Sheffield The Lord Mayor of Hull J. H. S. Aitken Edwin C. Barnes</p>	<p>Alderman J. Binns Michael P. Cryer H. Leigh Groves The Ven. Archdeacon H. Larken Alderman F. T. Richardson Alderman Charles Vivian Walker</p>
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North-Eastern Section

<p>Alderman T. Peacock (<i>Chairman</i>) J. W. L. Adams</p>	<p>Dr. G. C. M. McGonigle The Hon. Mrs. Guy Stopford Miss C. Walker</p>
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Northern Ireland

Lord Chief Justice Andrews Miss H. Hartford
(*Chairman*) Captain D. C. Lindsay
Miss A. A. Campbell Captain J. Maynard Sinclair
Mrs. Oscar Henderson

Scottish

Sir David Wallace (*Chairman*) The Hon. Lord Provost of
The Rt. Hon. the Lord Pro- Aberdeen
 vost of Edinburgh Miss Helen H. Story
The Rt. Hon. the Lord Pro- Miss Grace Drysdale
 vost of Glasgow William Glen
The Hon. Lord Provost of G. E. Troup
 Dundee

Welsh

The Rev. J. Dyfnallt Owen Mrs. Henry Folland
(*Chairman*) Mrs. E. Louis Jones
Miss M. A. Brodie Miss Menai Rowlands
Miss Ellen Evans

West of England

Graham H. Castle (*Chairman*) Brigadier-General E. Harding-
Sir Francis Cowlin Newman
Major J. A. Garton Miss K. J. Stephenson

CENTRAL COMMITTEE FOR GROUP LISTENING

Principal J. H. Nicholson *The Universities Extra-Mural*
(*Chairman*) *Consultative Committee*
 Scottish Area Council Professor R. Peers
W. D. Ritchie *Workers' Educational Association*
 North-Eastern Area Council Ernest Green
Professor T. H. Searls *British Institute of Adult Education*
 North-Western Area Council W. E. Williams
Sir Percy Meadon *The Association of Education*
 Midland Area Council *Committees*
B. I. Macalpine Sir Percival Sharp
 Welsh Area Council *Representing the Interests of Women*
The Rev. Principal J. Morgan- Mrs. M. Stocks
 Jones *Representing Rural Interests*
 Western Area Council H. M. Spink
The Rt. Hon. Sir Francis D. *Representing Tutors Engaged in*
 Acland, Bt., M.P. *Adult Education*
 Home Counties Area Council H. A. Silverman
Professor F. A. Cavenagh

Home Counties Area Council

Professor F. A. Cavenagh (<i>Chairman</i>)	H. M. Burton
G. F. Hickson	J. W. Bispham
Edward Sydney	W. F. Herbert
Dr. P. Ford	F. M. Jacques
A. L. Hutchinson	J. H. Matthews
C. R. Morris	L. R. Missen
John Trevelyan	S. Peel
R. Beloe	H. Plaskitt
Mrs. Neville Smith	Dr. R. W. Revans

Midland Area Council

Dr. P. D. Innes (<i>Chairman</i>)	B. I. Macalpine
W. A. Brockington	Professor R. Peers
H. M. Cashmore	The Rev. Walter Pitchford
Professor W. Cramp	Mrs. A. W. Priestley
Sir Henry Fowler	H. A. Silverman
Mrs. Minnie G. Gamble	W. H. Rawle
R. J. Howrie	Alderman Mrs. Petty
E. W. Jones	H. W. Crane
G. H. Jones	Lawrence Ramsbottom
Sir Charles A. Mander, Bt.	E. J. Studd

North-Eastern Area Council

Principal J. H. Nicholson (<i>Chairman</i>)	Miss J. B. Kitson
B. W. Abraham	Stanley Moffett
A. L. Binns	Major W. North Coates
H. B. Dakin	Stanley Price
R. J. Gordie	J. W. Scholefield
Ernest Hermon	Professor T. H. Searls
H. E. R. Highton	H. M. Spink
E. C. Studdert Homes	E. R. Thomas
Miss Lettice Jowitt	G. H. Thompson
	Thomas B. Tilley

North-Western Area Council

Sir Percy Meadon (<i>Chairman</i>)	A. R. Pickles
W. O. Lester-Smith	H. Pilkington Turner
Dr. G. B. Brown	The Rev. F. Heming Vaughan
Eli Bibby	T. Wilkinson
F. S. Milligan	J. F. Carr
C. Nowell	F. Garstang
W. J. Tuckett	William Merrick
Mrs. W. J. Bridge	A. M. Watson



The Rt. Hon. the Lord Macmillan
Chairman of the General Advisory Council

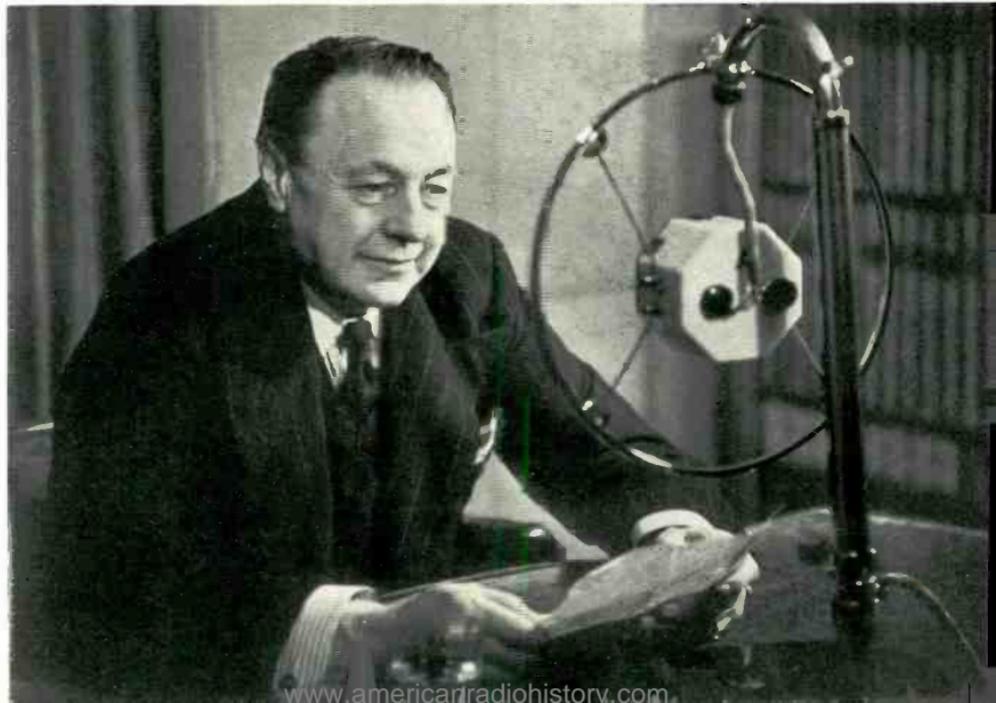


(left)

H. Granville Barker broadcast in the 'National Lecture' Series on October 13 1937. His subject was 'The Perennial Shakespeare' (see page 20).

(below)

The Very Rev. H. R. L. Sheppard, whose death occurred on October 31 1937 (see page 21).



Scottish Area Council

Dr. J. R. Peddie (<i>Chairman</i>)	John MacLeod
Sir Charles Cleland	The Rev. Professor J. H. Baxter
W. D. Ritchie	Colonel J. M. Mitchell
R. Bennett Miller	George P. Laidlaw
Sir W. W. McKechnie	Dr. Henry Hamilton
Edgar H. Parsons	Dr. T. R. Burnett
Mrs. A. I. Douglas	L. E. Laughton

Welsh Area Council

The Rev. Principal J. Morgan Jones (<i>Chairman</i>)	T. J. Rees
Principal Ifor L. Evans	Elfan Rees
The Rev. Herbert Morgan	Edward Jones
Professor E. Ernest Hughes	W. J. Pate
Professor W. J. Roberts	E. J. Jones
Mrs. M. Silyn Roberts	Mrs. Mostyn
Ifor Davies	John Owen
B. B. Thomas	D. T. Jones
	Professor J. Morgan Rees

Western Area Council

The Rt. Hon. Sir Francis D. Acland, Bt., M.P. (<i>Chairman</i>)	T. S. Attlee
James Ross	Professor S. H. Watkins
A. W. Hoyle	W. A. Clegg
Dr. W. Ludford Freeman	Miss M. R. Dacombe
E. H. Littlecott	Miss M. W. Pedder
W. E. Salt	F. G. Thomas
R. N. Armfelt	W. R. Watkin
S. P. Heath	Dr. J. R. West
	B. de Bunsen

MUSIC ADVISORY COMMITTEES

Central

Sir Hugh P. Allen (<i>Chairman</i>)	The Viscountess Snowden
Sir Edward Tindal Atkinson	Dr. George Dyson
Professor W. H. Bell	Colonel J. C. Somerville
Sir Percy Buck	Colonel R. H. R. Parminter
Lieut.-Gen. Sir Sidney Clive	Wilfrid E. Senior (<i>Scottish Region</i>)
Dr. Stanley Marchant	Dr. Percy C. Hull (<i>Midland Region</i>)
Sir Landon Ronald	
Dr. G. T. Shaw	R. J. Forbes (<i>North Region</i>)

Midland

Dr. Percy C. Hull (<i>Chairman</i>)	H. H. Hardy
Dr. Henry Coleman	Professor V. Hely-Hutchinson
Arthur Cranmer	K. A. Stubbs

MUSIC ADVISORY COMMITTEES *(continued)*

North

R. J. Forbes (<i>Chairman</i>)	Ainslie J. Robertson
Sir Edward Bairstow	Dr. Leslie Russell
Edward Isaacs	Professor F. H. Shera
R. Noel Middleton	Cyril Winn

Scottish

Wilfrid E. Senior (<i>Chairman</i>)	Thomas Henderson
Herbert Bennett	Sir Hugh S. Robertson
John Douglas H. Dickson	David Stephen
Dr. Henry G. Farmer	Sir Donald F. Tovey
Percy Gordon	Professor W. G. Whittaker
J. Francis Harford	Harry M. Willsher

RELIGIOUS ADVISORY COMMITTEES

Central

The Rt. Rev. the Lord Bishop of Winchester (<i>Chairman</i>)	The Rev. Professor Archibald Main (<i>Scottish Region</i>)
The Rt. Rev. the Lord Bishop of Bristol (<i>West of England Region</i>)	The Rev. W. P. G. McCormick
The Rt. Rev. the Lord Bishop of Llandaff (<i>Welsh Region</i>)	The Rev. Father T. L. Parker (<i>North Region</i>)
The Rev. M. E. Aubrey	The Rev. Canon T. Guy Rogers (<i>Midland Region</i>)
The Rev. Canon F. R. Barry	The Rev. Archdeacon P. W. N. Shirley (<i>Northern Ireland Region</i>)
The Rev. Dr. S. M. Berry	The Very Rev. the Provost of Guildford
The Rev. Father M. C. D'Arcy	The Very Rev. the Dean of Manchester (<i>North Region</i>)
The Rev. W. T. Elmslie	
The Rev. Dr. S. W. Hughes	
The Rev. Dr. J. Scott Lidgett	

Midland

The Rev. Leyton Richards (<i>Chairman</i>)	The Rev. Canon Stuart D. Morris
The Rt. Rev. the Bishop of Stafford	The Ven. J. H. Richards
The Rev. F. H. Benson	The Rev. Canon T. Guy Rogers
The Rev. Canon S. Blofeld	The Rev. Canon J. Roskell
The Rev. J. Ivory Cripps	The Rt. Rev. Dr. Neville S. Talbot
The Very Rev. the Provost of Derby	Dr. Basil A. Yeaxlee
The Rev. Dr. Bernard W. Griffin	

RELIGIOUS ADVISORY COMMITTEES (continued)

North

The Rt. Rev. the Lord Bishop of Wakefield (<i>Chairman</i>)	The Rev. N. Grieve
The Rt. Rev. the Bishop of Grantham	The Rev. Father M. Harty
The Very Rev. the Dean of Manchester	The Rev. Father J. I. Lane
The Very Rev. the Provost of Newcastle	The Rev. Father T. L. Parker
The Very Rev. Canon G. Brunner	The Rev. Canon J. E. Roberts
J. Curry	The Rev. W. E. Sangster
The Rev. Canon T. A. E. Davey	The Rev. G. W. Seager
The Rev. Dr. A. J. Grieve	The Rev. Canon A. E. Smallwood
	The Rev. J. Wallace
	The Rev. W. R. Weeks
	The Rev. Canon W. E. Wilkinson

(North-Eastern Section)

The Right Rev. the Bishop of Jarrow (<i>Chairman</i>)	The Rev. J. C. Bacon
The Very Rev. the Provost of Newcastle	The Rev. A. H. Creed
	The Rev. R. A. Davenport
	Alderman J. G. Nixon

Northern Ireland

The Rt. Rev. Dr. J. Waddell (<i>Chairman</i>)	The Rev. R. A. Deane
The Rev. J. T. Armstrong	The Rev. D. Henderson
The Rev. W. J. Calvin	A. C. Marshall
The Very Rev. Dr. William Corkey	The Ven. Archdeacon P. W. N. Shirley
The Rev. J. Glynn Davies	The Rev. W. H. Smyth

Scottish

The Rev. Professor Archibald Main (<i>Chairman</i>)	The Rev. Dr. George Macaulay
The Very Rev. the Dean of Edinburgh	The Rev. Dr. Charles Richardson
The Rev. M. V. Bruce	The Rev. T. B. Stewart Thomson
The Rev. H. G. Fiddick	The Rev. Dr. James Scott
The Rev. Dr. W. H. Harrowes	The Rev. S. W. Wilson
H. Lightbody	

RELIGIOUS ADVISORY COMMITTEES (*continued*)

Welsh

The Rt. Hon. David Lloyd George, M.P. (<i>Chairman</i>)	The Rev. Dr. H. Elvet Lewis
The Rt. Rev. the Lord Bishop of Llandaff	The Rev. W. J. Nicholson
The Rt. Rev. the Lord Bishop of St. Davids	The Rev. John Roberts
The Rt. Rev. the Lord Bishop of Menevia	The Rev. R. S. Rogers
The Rt. Hon. Sir J. Eldon Bankes	The Rev. J. Penry Thomas
The Rev. Canon Benjamin Davies	W. P. Wheldon
The Rev. D. Tecwyn Evans	Dr. J. Lloyd Williams
The Very Rev. Canon D. J. Hannon	(<i>Sub-Committee of Laymen</i>)
The Rev. Ernest D. Green	Dr. J. Lloyd Williams
A. G. Howell	(<i>Chairman</i>)
Alderman Sir William Jenkins, M.P.	Tom Carrington
	S. J. Evans
	Professor Ernest Hughes
	D. B. Jones
	Evan J. Jones
	Alderman John Lewis
	Alderman Sir William Jenkins, M.P.

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The Rt. Rev. the Lord Bishop of Bristol (<i>Chairman</i>)	Dr. Hubert W. Hunt
The Rev. C. D. Barriball	The Rev. K. L. Parry
The Rev. F. C. Bryan	The Rev. Prebendary G. L. Porcher
The Rev. Dr. R. C. Gillie	The Rev. J. M. D. Stancomb
The Very Rev. Canon Patrick V. Hackett	F. A. Wilshire

CENTRAL COUNCIL FOR SCHOOL
BROADCASTING

Dr. W. W. Vaughan (<i>Chairman</i>)	<i>Scottish Education Department</i>
Sir Henry Richards (<i>Vice-Chairman</i>)	Sir James Peck
	<i>Ministry of Education for Northern Ireland</i>
<i>Board of Education</i>	A. N. Bonaparte Wyse
Miss D. M. Hammonds	<i>Association of Education Committees</i>
F. R. G. Duckworth	Sir Percival Sharp
W. P. Wheldon	

COUNCIL FOR SCHOOL BROADCASTING (continued)

- Association of Directors and Secretaries for Education*
 A. L. Binns
 F. Herbert Toyne
County Councils Association
 E. Salter Davies
Association of Municipal Corporations
 H. R. B. Wood
London County Council
 John Brown
Association of Directors of Education in Scotland
 J. Coutts Morrison
Association of Councils of Counties and Cities in Scotland
 Sir Charles Cleland
Association of County Councils in Scotland
 Not yet appointed
Federation of Education Committees (Wales and Monmouth)
 T. J. Rees
Association of Education Committees in Northern Ireland
 Dr. Rupert Stanley
National Union of Teachers
 H. H. Cartwright
 W. W. Hill
 W. Lloyd Pierce
 Mrs. E. V. Parker
Incorporated Association of Head Masters
 H. Raymond King
Association of Head Mistresses Incorporated
 Miss E. A. Jones
Incorporated Association of Assistant Mistresses
 Miss D. W. Wright
Incorporated Association of Assistant Masters
 C. M. Macleod
- Joint Committee of the Three Technical and Art Associations: Association of Teachers in Technical Institutes, Association of Principals in Technical Institutes, National Society of Art Masters*
 J. Wickham Murray
Independent Schools' Association
 S. Maxwell
Incorporated Association of Preparatory Schools
 The Rev. P. C. Underhill
Educational Institute of Scotland
 Harry Blackwood
Training Colleges Association
 Miss H. J. Hartle
Councils of Principals of Training Colleges
 E. R. Hamilton
Scottish Council for School Broadcasting
 Sir Charles Cleland (Chairman)
 George A. Burnett (Chairman of Scottish Executive)
Nominated Members
 Dr. W. W. Vaughan
 Sir Henry Richards
 R. N. Armfelt
 C. W. Baty
 O. F. Brown
 J. W. Catlow
 Professor F. Clarke
 Dame Rachel Crowdy
 Professor W. J. Gruffydd
 G. T. Hankin
 W. A. F. Hepburn
 W. H. Perkins
 Dr. Geoffrey Shaw
 H. G. Strauss, M.P.
 W. J. Williams
 H. A. S. Wortley
Secretary:
 A. C. Cameron

SCOTTISH COUNCIL FOR SCHOOL BROADCASTING

<p>Sir Charles Cleland (<i>Chairman</i>) George A. Burnett (<i>Vice-Chairman</i>)</p>	<p><i>Association of Directors of Education in Scotland</i> Dr. T. R. Burnett</p>
<p><i>Representative Members on Central Council and Scottish Council</i> <i>Scottish Education Department</i> Sir James Peck</p>	<p><i>Association of County Councils</i> Not yet appointed</p>
<p><i>Association of Directors of Education in Scotland</i> J. Coutts Morrison</p>	<p><i>Association of Councils of Counties and Cities</i> Peter H. Allan</p>
<p><i>Association of County Councils</i> Not yet appointed</p>	<p><i>National Committee for the Training of Teachers</i> George A. Burnett</p>
<p><i>Association of Councils of Counties and Cities</i> Sir Charles Cleland</p>	<p><i>Educational Institute of Scotland</i> George A. Lawrence A. J. Merson</p>
<p><i>Education Institute of Scotland</i> Harry Blackwood</p>	<p><i>Nominated Members:</i> The Rev. Dr. A. Andrew W. F. Arbuckle J. T. Ewen Sir Robert Greig Thomas Henderson Sir Hector Hetherington Sir William McKechnie Professor J. D. Mackie Professor A. G. Ogilvie Dr. J. C. Smith Neil S. Snodgrass</p>
<p><i>Nominated Member on Central Council and Scottish Council</i> W. A. F. Hepburn</p>	<p><i>Secretary:</i> A. D. Adam</p>
<p><i>Representative Members on Scottish Council</i> <i>Scottish Education Department</i> J. Mackay Thomson</p>	

SCOTTISH AGRICULTURAL ADVISORY COMMITTEE

<p>Joseph F. Duncan (<i>Chairman</i>) Professor F. A. E. Crew Sir Robert Greig Robert Howie P. R. Laird W. K. Leggat</p>	<p>R. L. Scarlett William MacKay A. D. Buchanan Smith J. P. Ross Taylor A. R. Wannop</p>
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SPOKEN ENGLISH COMMITTEE

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Dr. Lascelles Abercrombie	Logan Pearsall Smith
The Lady Cynthia Asquith	S. K. Ratcliffe
The Lord David Cecil	Dr. I. A. Richards
Kenneth Clark	Professor H. C. K. Wyld
Alistair Cooke	<i>Representing British Academy</i>
Professor Julian S. Huxley	Dr. W. W. Greg
Professor Daniel Jones	<i>Representing English Association</i>
Professor A. Lloyd James	The Rev. Dr. H. Costley-White
F. L. Lucas	<i>Representing the Royal Academy of</i>
P. H. B. Lyon	<i>Dramatic Art</i>
Miss Rose Macaulay	Kenneth R. Barnes
Sir Edward Marsh	<i>Representing Royal Society of</i>
Harold Orton	<i>Literature</i>
Professor Sir H. J. C. Grierson	W. B. Maxwell

TALKS ADVISORY COMMITTEE

Sir Walter H. Moberly (<i>Chairman</i>)	Professor George Gordon
The Rt. Hon. Sir Francis D. Acland, Bt., M.P.	Sir Robert Greig
Arthur Bryant	A. P. Herbert, M.P.
The Hon. Sir Evan Charteris	Professor Julian S. Huxley
H. R. Cummings	G. Isaacs
Bernard Darwin	A. T. Lennox-Boyd, M.P.
The Hon. Frances Farrer	Principal J. H. Nicholson
Miss Megan Lloyd George, M.P.	Professor Robert Richards, M.P.

LICENCE FIGURES

The total number of licences current at the end of 1937 was nearly 8,500,000. This is the highest total yet recorded, being more than fourteen times as great as that at the end of 1923, and nearly twice as great as the total number current only six years ago. 68.3 families in every 100 in Great Britain and Northern Ireland now hold wireless licences. This ratio is only exceeded in two other countries: the United States (where the latest estimate is 71.5) and Denmark.

The density of wireless licences is greatest in the Midland and West Regions, where there are as many as 76 licences per 100 families. The London Region, with 73 per 100 families, is also above the average for the country as a whole. The North Region, with 66, is slightly below the average. Scotland and Wales have 59 and 58 licences per 100 families respectively, and Northern Ireland has 37.

Will the number of licences go on rising? Two factors suggest that they will. First, although the population of this country is almost stationary, the number of families will continue to increase for some time. More families will be likely to mean more licences, even if there is no increase in the ratio of licences to families. Secondly, there are still many parts of the country where the density of licences lags behind the national average. When every region has as high a density as the highest region to-day another million licences will have been issued. Saturation point is not yet.

Licences, 1923-1937

	Licences current on Dec. 31	Percentage increase on previous year.	Approx. number of licences per 100 families.
1923	595,496	—	5·8
1924	1,129,578	89·7	10·7
1925	1,645,207	45·6	15·4
1926	2,178,259	32·4	20·0
1927	2,395,183	10·0	21·7
1928	2,628,392	9·7	23·4
1929	2,956,736	12·5	26·0
1930	3,411,910	15·4	29·6
1931	4,330,735	26·9	37·1
1932	5,263,017	21·5	44·5
1933	5,973,758	13·5	50·0
1934	6,780,569	13·5	56·1
1935	7,403,109	9·2	60·7
1936	7,960,573	7·5	64·4
1937	8,479,600	6·5	68·3

Distribution of Licences
on December 31 1937

COUNTIES	Estd. pop. (1936)	Estd. No. of families (1936)	Licences 31 Dec. 1937	Licences per 100 families
<i>LONDON REGION</i>				
Bedford	247,700	68,100	51,200	75
Berkshire and S. Oxford	462,100	122,100	99,100	81
Buckingham	294,900	79,700	57,100	72
Cambridge and Huntingdon	285,000	78,900	60,200	76
Channel Islands	94,000	25,800	19,400	75
Hampshire (without Bournemouth)	999,800	257,500	193,400	75
London and Home Counties (Essex, Hertford, Kent, Middlesex and Surrey)	11,151,900	3,023,800	2,179,300	72
Norfolk	501,700	137,800	103,400	75
Suffolk	403,200	109,800	76,700	70
Sussex	813,000	218,500	168,400	77
	15,253,300	4,122,000	3,008,200	73

COUNTIES	Estd. pop. (1936)	Estd. No. of families (1936)	Licences 31st Dec. 1937	Licences per 100 families
<i>WEST REGION</i>				
Cornwall and Devon	1,047,200	286,800	216,700	76
Dorset and Wiltshire (with Bournemouth)	690,700	182,900	150,100	82
Somerset and S. Gloucester	994,100	272,200	200,500	74
	<hr/> 2,732,000	<hr/> 741,900	<hr/> 567,300	<hr/> 76
<i>MIDLAND REGION</i>				
Hereford	109,800	28,800	18,300	64
Leicester and Rutland	577,100	156,700	112,600	72
Northampton	368,600	102,900	84,100	82
N. Gloucester and N. Oxford	369,000	99,300	78,100	79
Shropshire	241,800	62,300	46,000	74
S. Derby and Nottingham	1,058,100	277,100	220,100	79
Stafford and Warwick	3,059,000	774,300	585,600	76
Worcester	440,900	115,700	91,100	79
	<hr/> 6,224,300	<hr/> 1,617,100	<hr/> 1,235,900	<hr/> 76
<i>NORTH REGION</i>				
Cheshire, Lancashire, and Isle of Man	6,211,500	1,621,800	1,087,000	67
Cumberland and West- morland	322,700	81,700	50,900	62
Durham and Northumber- land	2,222,300	560,200	270,200	48
Lincoln	634,300	167,000	123,000	74
Yorkshire and N. Derby	4,865,900	1,289,400	912,900	71
	<hr/> 14,256,700	<hr/> 3,720,100	<hr/> 2,444,000	<hr/> 66
<i>WALES</i>				
Mid-Wales (Cardigan, Merioneth, Montgomery and Radnor)	160,800	43,100	19,200	45
North Wales (Anglesey, Caernarvon, Denbigh and Flint)	441,700	114,900	65,300	57
South Wales (Brecon, Carmarthen, Glamorgan, Monmouth and Pembroke)	1,914,400	482,400	289,400	60
	<hr/> 2,516,900	<hr/> 640,400	<hr/> 373,900	<hr/> 58

COUNTIES	Estd. pop. (1936)	Estd. No. of families (1936)	Licences 31 Dec. 1937	Licences per 100 families
SCOTLAND				
Aberdeen and Kincardine .	350,600	86,100	49,600	58
Argyll and Bute .	79,100	20,600	10,100	49
Ayr, Dumbarton, Lanark and Renfrew	2,377,500	563,700	324,300	58
Banff, Inverness, Moray and Nairn	186,300	44,800	22,900	51
East Central Scotland (Clackmannan, Edin - burgh, Fife, Haddington, Kinross, Linlithgow, and Stirling)	1,179,300	287,900	196,000	68
Forfar and Perth	394,300	107,600	67,000	62
North Scotland (Caithness, Cromarty, Orkney, Ross, Shetland, and Sutherland)	146,500	37,900	12,100	32
West Central Scotland (Berwick, Dumfries, Kir- cudbright, Peebles, Rox- burgh, and Wigtown)	252,900	66,400	38,300	58
	4,966,500	1,215,000	720,300	59
NORTHERN IRELAND				
Antrim and Down	846,100	192,400	83,300	43
Armagh	108,800	22,500	7,500	33
Fermanagh and Tyrone	182,100	46,900	9,300	20
Londonderry	142,700	32,400	9,300	29
	1,279,700	294,200	109,400	37
GREAT BRITAIN and NORTHERN IRELAND	47,229,400	12,350,700	8,459,000	68

Notes

1. Statistics of wireless licences are tabulated by the Post Office. Every licence is credited to the area in which the set is normally operated. But the areas used are not those of local authorities, hence any attempt to relate licences to counties cannot claim complete accuracy. In order to avoid anomalies which arise when important postal areas spread over more than two counties, certain counties have been grouped together in the figures given above.
2. Population figures used for England, Wales and Scotland are for mid-1936, being the latest available estimates of the Registrar-General. For Northern Ireland the population figures are derived from the Census of 1937. The numbers of families are estimates based upon the mid-1936 populations.
3. The grand total of licences shown in the table above is slightly smaller than that given elsewhere in the Handbook, the figures for the geographical distribution of licences being based on an earlier count.

FINANCE IN 1937

The Balance Sheet and Revenue Account for 1937 are given on pages 78-81.

In 1937 the BBC's income was £3,356,074. This included £2,875,044 from licence revenue, i.e. £365,294 more than in 1936, and £480,527 from publications, an increase of £38,518. Owing to a general rise in the price of paper and other costs, it may not in future be possible, in spite of increasing circulations, to secure an equally favourable result from publications.

Revenue expenditure amounted to £3,205,779. This includes expenditure on all the BBC's services, including sound broadcasting in this country, television, Empire and foreign language broadcasts. (The amount spent on foreign language broadcasts was very small, as the service did not actually begin until January, 1938.) The increase in total expenditure over the previous year was £626,182, of which Depreciation and Income Tax required £104,000, leaving £522,182 for direct expenditure. 75 per cent of this increase was used for programmes and 21 per cent for engineering costs. Under Programmes there was an exceptionally large increase, £157,797, in the charge for performing rights etc., of which over £140,000 was due to the higher rates paid to the Performing Right Society as the result of an arbitration award. Other increases were due to the development of the sound broadcasting and television services. The provision for Depreciation at appropriate rates is affected by the high obsolescence rate of television plant and equipment. £174,000 was provided for Income Tax.

The amount available for transfer from revenue to Capital Account was restricted in 1937 to £200,000, owing to the Corporation's having to bear temporarily the cost of television.

With regard to the Balance Sheet, £328,700 was spent during the year on Fixed Assets, bringing the total to

£3,721,978. On the other side, the transfer of £200,000 from revenue brought the total of Capital Account to £2,550,000. Fixed Assets therefore exceeded Capital Account by £1,171,978. This deficiency was covered for the time being by the use of the funds representing the Depreciation provision and the balance of revenue carried forward. In addition to restricting the amount available for transfer to Capital Account from revenue, as explained above, television was further responsible for £137,485 of the net capital expenditure on Fixed Assets. Considerable capital expenditure is still necessary: foreign language broadcasting, for example, will require the construction and equipment of two new high-power short-wave transmitters in 1938.

The use of reserves to finance new capital expenditure is a temporary expedient. The Depreciation Reserve is intended for the replacement of assets as required, and the funds that have thus been used for the acquisition of new assets will have to be replaced. Again, the development of the services has made it impossible so far to retain any reserves for future capital expenditure. Unless the funds representing Depreciation Reserve can be restored and a capital reserve fund built up, there is the danger that the Corporation might find it necessary at some future time to reduce expenditure on programmes to meet heavy calls on current income for capital purposes. As explained on page 56, these difficulties have been recognized by the Treasury and the approval of Parliament sought for an additional allocation of income to the BBC in order to finance television and foreign language broadcasts.

BALANCE SHEET AS AT

Capital, Reserves and Liabilities (adjusted to nearest £)

	£	£
CAPITAL ACCOUNT—		
Value placed upon Freehold Land and Buildings, Plant, Furniture and Fittings, Musical Instruments, Music and Books, etc., taken over (without payment) from the British Broadcasting Co., Ltd., on 1st January 1927	174,938	
Appropriated from Revenue towards meeting Capital Expenditure—		
Appropriated to 31st December 1936 (per last Balance Sheet)	2,175,062	
Appropriated at 31st December 1937	200,000	
		2,550,000
PROVISION FOR DEPRECIATION AND RENEWAL OF PREMISES, PLANT, FURNITURE AND FITTINGS, ETC.		
Balance at 31st December 1936 (per last Balance Sheet)	894,180	
Add: Further provision during 1937 per Revenue Account	305,000	
	1,199,180	
Less: Book Value (net) of Plant, Furniture and Musical Instruments discarded during 1937	41,417	
		1,157,763
REVENUE ACCOUNT—		
Balance (unappropriated Net Revenue) at 31st December 1937, carried forward as per Account		15,084
		3,722,847
CREDITORS AND RESERVE FOR CONTINGENCIES—		
Sundry Creditors (including Reserve for Income Tax)	484,986	
Reserve for Contingencies	20,000	
		504,986
(Signed) R. C. NORMAN C. H. G. MILLIS } <i>Governors</i>		
J. C. W. REITH, <i>Director-General</i>		
		£4,227,833

REPORT OF THE AUDITORS TO THE MEMBERS OF THE

We have examined the above Balance Sheet dated 31st December 1937 with the all the information and explanations we have required. The Balance Sheet is, state of the Corporation's affairs at 31st December 1937 according to the best of the Corporation.

5, LONDON WALL BUILDINGS, LONDON, E.C.2 17th January 1938

31 DECEMBER 1937

Assets (adjusted to nearest £)

	£	£
FREEHOLD AND LONG LEASEHOLD LAND AND BUILDINGS—		
Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31st December 1936, at cost, per last Balance Sheet	2,005,392	
Additions during 1937, at cost	199,048	
	<hr/>	2,204,440
PLANT—		
Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31st December, 1936, at cost, per last Balance Sheet	1,177,031	
Additions during 1937 at cost (<i>less</i> Book Value of Plant discarded during the year)	112,394	
	<hr/>	1,289,425
FURNITURE AND FITTINGS—		
Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31st December, 1936 at cost, per last Balance Sheet	136,401	
Additions during 1937, at cost (<i>less</i> Book Value of items discarded during the year)	13,097	
	<hr/>	149,498
MUSICAL INSTRUMENTS, MUSIC & BOOKS		
Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31st December, 1936, at cost, per last Balance Sheet	74,454	
Additions during 1937, at cost (<i>less</i> Book Value of instruments discarded during the year)	4,161	
	<hr/>	78,615
STORES ON HAND & WORK IN PROGRESS		3,721,978
At cost or under		27,137
DEBTORS AND UNEXPIRED CHARGES—		
Sundry Debtors (<i>less</i> provision for Doubtful Debts)	287,684	
Unexpired Charges	22,859	
	<hr/>	310,543
CASH AT BANK AND IN HAND—		
At Banks (<i>less</i> Balance on Secured Loan Account)	164,072	
In Hand	4,103	
	<hr/>	168,175
		<hr/> <u>£4,227,833</u>

BRITISH BROADCASTING CORPORATION

books and vouchers of the British Broadcasting Corporation and have obtained in our opinion, properly drawn up so as to exhibit a true and correct view of the of our information and the explanations given to us and as shown by the Books

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

REVENUE
FOR THE YEAR ENDED

Expenditure (adjusted to nearest £)

	Amount £	Percentage of Total Income %
To PROGRAMMES—		
Artists, Speakers, etc.	644,197	19'19
Permanent Orchestras	226,292	6'74
Performing Rights, Copyright Fees and News Royalties	363,286	10'83
Simultaneous Broadcast Telephone System	68,704	2'05
Programme Staff Salaries	366,701	10'93
Expenses (including Travelling, Stationery, Post- ages and Miscellaneous Expenses)	60,435	1'80
	1,729,615	51'54
„ ENGINEERING—		
Power and Plant Maintenance Costs, Research Materials and Transmitting Patents	168,639	5'02
Engineering Staff Salaries	382,667	11'40
Expenses (including Travelling, Stationery, Postages and Miscellaneous Expenses)	47,486	1'42
	598,792	17'84
„ PREMISES MAINTENANCE AND OVER- HEAD CHARGES—		
Rents, Rates, Taxes and Insurance	71,925	2'14
Heating, Lighting and Telephones	44,739	1'34
Alterations to and Maintenance of Premises, Exten- sion of Studios, Maintenance of Furniture, etc.	61,052	1'82
	177,716	5'30
„ ADMINISTRATION—		
Administration Staff Salaries	127,932	3'81
Expenses (including Travelling, Legal, Audit, Station- ery, Postages and Miscellaneous Expenses)	17,980	0'54
„ Contributions to Staff Pension Scheme and Benevolent Fund	145,912	4'35
„ Governors' Fees	66,181	1'97
„ Provision for Depreciation and Renewal of Premises, Plant, Furniture and Fittings, etc.	8,563	0'26
„ Provision for Income Tax	305,000	9'08
„ Balance, being Net Revenue for Year	174,000	5'18
	150,295	4'48
	£3,356,074	100'00

REVENUE APPROPRIATION ACCOUNT

To Transfer to Capital Account as a provision towards meeting Capital Expenditure	£ 200,000
„ Balance (unappropriated Net Revenue) carried forward at 31st December, 1937, as per Balance Sheet	15,084

ACCOUNT
31 DECEMBER 1937

Income (adjusted to nearest £)

	Amount £	Percentage of Total Income %
By Licence Income (Net)	2,875,044	85.67
„ Net Revenue from Publications, after providing for Bad and Doubtful Debts	480,527	14.32
„ Interest on Bank Deposit and Current Accounts, less Interest on Bank Loan and Charges	503	0.01

£3,356,074 100.00

FOR THE YEAR ENDED 31 DECEMBER 1937

By Balance (unappropriated Net Revenue) brought forward from 31st December, 1936	£	64,789
„ Net Revenue for year per Revenue Account (above)		150,295

THE EUROPEAN WAVELENGTH PROBLEM

Most listeners probably realize that there are many other users of radio as well as broadcasting stations. In fact, the majority of the services using radio as a means of communication, such as the National Defence Services and Shipping and Telegraph Companies, were well established in this field before broadcasting began. With the advent of broadcasting the ether, already full, became uncomfortably crowded. The existing services compressed themselves sufficiently to give certain bands of wavelengths for the use of broadcasting, so that listeners could be reasonably certain of receiving their local stations without interference. In the fifteen years of broadcasting the problem has been made steadily more difficult by the increase in the number of broadcasting stations and by expansion in the other radio services.

The bands of waves which the various users of radio are permitted to use were first determined by an international conference held in Washington in 1927. The allocation was revised at another international conference in Madrid in 1932, and the position has been considered again at a recent conference in Cairo. Within these bands there is a definite limit to the number of wavelengths available, because each wavelength must be separated from those in use on either side of it by an amount sufficient to enable the listener to receive the station he requires without appreciable interference from the stations using the adjacent wavelengths. The total number of wavelengths that can be used in the medium-wave band allotted to broadcasting is only a little over 100, while in the long-wave broadcasting band it is only about 12. With these comparatively few wavelengths broadcasting services have to be provided for every country in Europe. This can only be done through a system whereby the same wavelengths are shared by a number of stations, which, to avoid

interference with each other, must be about 1,000 miles apart and use restricted power.

The distribution of the wavelengths within the bands is also settled by International agreement. Under the last European Convention, drawn up at Lucerne in 1933, Great Britain's share is one long wave and eleven medium waves.

DEVELOPMENT OF THE BBC'S PROGRAMME DISTRIBUTION SCHEME

The scheme of programme distribution in Great Britain and Northern Ireland is intended to give, as far as possible, a choice of two programmes to the listener who possesses a reasonably sensitive and selective receiver, wherever he lives. That the choice is not larger is due to two main factors. First, although broadcasting stations can be heard at great distances, the range within which reception is entirely reliable at all times is limited by physical causes, however great the power of the transmitting station. Second, the number of wavelengths available is, as explained on the previous page, strictly limited. Only from a broadcasting station fairly near to him can a listener at all times expect entirely reliable reception. Wavelengths in the long-wave band are capable of giving such reception at much greater distances than those in the medium-wave band; but unfortunately only one of these valuable long waves is allotted to Great Britain. The listener must be much closer to a medium-wave station to obtain consistently reliable reception, and, as the whole country has to be served with eleven medium waves, it is not possible to have such a large number of stations that, wherever he is placed, he can have several stations close enough to him to enable him to obtain perfectly reliable reception of them all. Had the BBC been able to build stations without thought of wavelength restriction, the resulting

distribution scheme would no doubt have been very different.

Between 1922 and 1924, before the wavelength difficulty became acute, the BBC built twenty-one low-power stations. High-power technique was not known in those days, and since the low-power stations gave a useful range of only about 20 miles or less, they had to be placed in cities in order that as large a part of the population as possible might be served.

When in 1926 the first international allocation of wavelengths for broadcasting was made, the BBC was faced with the necessity of reducing by half the number of waves which it used. Clearly, the best possible use had to be made of those that remained. When high-power technique emerged from the experimental stage, it became practicable to build a transmitter which could be heard satisfactorily over a radius of some 40 to 70 miles. In the next phase, therefore, it was decided to build a number of high-power stations to serve not single cities, but large regions. The first of these was erected, experimentally, at Daventry in 1927 to serve the Midland area. As a result of this experimental work, other stations followed: one in London to serve the metropolitan area, one in the North to cover the industrial districts of Lancashire and Yorkshire, one in Scotland for Glasgow and Edinburgh, and one in the West to serve South Wales and the more populous parts of the West Country. Each of these stations was equipped with two transmitters, so that alternative programmes were available in the areas covered.

The whole of the country, however, was not served by this means; for large rural districts were outside the range of any of the Regional stations. This situation had been anticipated. The erection at Daventry in 1925 of what was then considered to be a high-power station (25 kW), working on a long wavelength, was a partial solution. This transmitter could, in fact, be heard over the whole of the country, if reception conditions were

reasonably favourable. In 1934, after nine years' service, this transmitter was closed down and replaced by a new one of six times the power at Droitwich in Worcestershire. The intensity of the signal received being proportionate to the square root of the power of the transmitter, Droitwich gives a little over twice the field strength of the old long-wave transmitter at Daventry. In 1935 the Midland Regional transmitter at Daventry was also replaced by a modern one of increased power at Droitwich, which is in a good geographical position for serving the Midland area.

In March 1936, the low-power transmitter at Belfast was replaced by a modern high-power station at Lisnargarvey, some 9 miles away, which extended the Regional programme service to almost the whole of Northern Ireland. This was followed in October of the same year by the opening of a high-power station at Burghead, in the north of Scotland. The problem of finding a wavelength for this transmitter was solved by working it on the same wavelength as the Scottish Regional transmitter at Westerglen, as described on pages 89 to 91. Similarly, a medium-wave transmitter at Penmon, in Anglesey, was put into service in February 1937, using the same wavelength as the Regional transmitter at Washford. An important step was taken in July 1937, when the separation of the Welsh and West of England Regions was completed. Up to this time these Regions had shared a composite programme, radiated from the Regional transmitter at Washford and from Penmon. From July onwards these two transmitters were used entirely for the Welsh service and a separate West of England programme was radiated temporarily from the other Washford transmitter instead of the National programme as formerly. The wavelength on which the West of England transmitter operates was made available by synchronizing the Scottish National transmitter with the London and North National transmitters, which supplement the long-wave service from



THE NATIONAL PROGRAMME SERVICE



THE ALTERNATIVE PROGRAMME SERVICE

* *Medium-power station in construction at Clevedon, near Bristol.*

Droitwich in areas where interference from electrical machinery is particularly severe. Also in 1937, the old Newcastle transmitter was replaced by a high-power transmitter at Stagshaw, near Hexham.

The following is a list of the BBC's long and medium-wave transmitting stations, with their frequencies, wavelengths, and power:

	<i>Frequency</i> Kc/s	<i>Wavelength</i> metres	<i>Power</i> kW.
DROITWICH, National	200	1500	150
MOORSIDE EDGE . . . North Regional.	668	449·1	70
WESTERGLEN Scottish Regional.	767	391·1	70
BURGHEAD	767	391·1	60
WASHFORD Welsh Regional.	804	373·1	70
PENMON	804	373·1	5
BROOKMAN'S PARK . . London Regional.	877	342·1	70
LISNAGARVEY, Northern Ireland Regional.	977	307·1	100
DROITWICH Midland Regional.	1013	296·2	70
WASHFORD West of England Regional.	1050	285·7	50
STAGSHAW	1122	267·4	60
BROOKMAN'S PARK . . National.	1149	261·1	20
MOORSIDE EDGE . . . National.	1149	261·1	20
WESTERGLEN National.	1149	261·1	50
ABERDEEN	1285	233·5	1
PLYMOUTH	1474	203·5	0·3
BOURNEMOUTH	1474	203·5	1

There are at present three further transmitting stations under construction. The transmitter at Aberdeen will be replaced by one of higher power outside the city in the summer of 1938. The wavelength will be the same as that of the present transmitter. Early in 1939, the Washford West of England Regional transmitter and the Plymouth and Bournemouth transmitters will be replaced by a high-power transmitter at Start Point in South Devon, using a wavelength of 285.7 metres, and a medium-power transmitter at Clevedon, near Bristol, which will use a wavelength of 203.5 metres.

SYNCHRONIZATION OF TRANSMITTERS

The limited number of wavelengths available for broadcasting in this country severely restricts the building of new transmitting stations which would be necessary to improve the alternative programme service in areas at present poorly served. Since it is not possible to provide a separate wavelength for each new transmitter, a system has been developed whereby two or more high-power transmitters can work on exactly the same wavelength. In this country three groups of transmitters are operating in this way, namely, the London, North and Scottish National programme transmitters, the Scottish Regional and Burghead transmitters, and the Welsh Regional and Penmon transmitters. An essential requirement of this system is that the transmitters which share a common wave must radiate the same programme. This restricts the choice of stations to be operated in this way.

It is also essential that each transmitter in a group maintains the common frequency within very close limits. One method of ensuring this is to select a driving station for each group, which generates a master frequency by means of an electrically maintained tuning fork or crystal oscillator. Constancy of frequency is ensured by enclosing the oscillator in an oven, the

temperature of which is automatically controlled within close limits by electrical means. In this way it is possible to keep the oscillator frequency constant to within 1 part in 1,000,000.

The oscillator frequency is usually a small fraction of the carrier frequency and a number of frequency multipliers are therefore required. The output of the oscillator is passed over telephone cables to each of the driven stations, either at its fundamental frequency or at some multiple of it suitable for transmission over such circuits. Frequency multipliers at each station produce the required carrier frequency which is used to drive the transmitter. Thus all the stations in each group are driven from a single master oscillator.

Precautions are taken at each station to ensure that the programme is not interrupted in case of failure of the master oscillator or the intervening line. For this purpose a local fork or crystal is provided which comes into operation automatically if the incoming synchronizing tone should fail. A serious difficulty encountered at first was that slight noises or cross-talk on the telephone circuit carrying the synchronizing tone produced a particular type of noise which was heard on receivers in the common wave service area. This difficulty has been overcome by using an additional tuning fork as a highly selective filter at the driven stations.

Another method to which considerable attention has been given is to use independent quartz crystal drives of very high stability. One of these crystals is used to drive the transmitter at each of the synchronized stations. A modern quartz crystal can maintain constant its frequency of oscillation within extremely fine limits over considerable periods so that the line link can be dispensed with, except for frequency checking and occasionally pulling the crystals into synchronization. This system of working is at present in use for one of the synchronized groups mentioned above.

The most recent example of synchronization is that of

the Scottish National transmitter with the London and North National transmitters on a wave of 261.1 metres. The wave formerly used for the Scottish National service (285.7 metres) has thus become available to give a separate programme to listeners in the West of England in place of the former composite Welsh and West programme. A list of wavelengths of BBC stations is given on page 88.

THE EMPIRE SERVICE

The BBC established an experimental short-wave transmitter at Chelmsford towards the end of 1927 by arrangement with Marconi's Wireless Telegraph Company. On December 19 1932, a regular broadcasting service for all the Empire was inaugurated by the BBC from two new short-wave transmitters installed at Daventry. When the service began there were ten hours of transmission daily spread, at suitable intervals, over the twenty-four. Since then new high-power transmitters and a complete new aerial system have been added to the station, and the hours of transmission have been increased to over eighteen in the twenty-four.

The Empire programmes are divided up into a number of transmissions, each of which is designed to coincide with an evening period in some part of the Empire and is radiated from aerials which favour the country or countries in which local time is most convenient for listening. At the same time it is possible for listeners to hear transmissions from Daventry at times of the day when they are not primarily intended for their particular area: at breakfast time in India, for example, listeners can hear the transmission which is primarily intended for evening reception in Western Canada. The Empire Service is not generally receivable in, nor is it intended for, the Home Country.

There are six periods of transmission.

Transmission I is radiated during the early morning hours in England for late afternoon or evening reception in the Antipodes; but it is also heard at correspondingly earlier hours in countries between England and Australasia in an easterly direction, and is picked up occasionally, especially in late spring and early summer, in Western Canada.

Transmission II takes place normally from about 11. a.m. to 2.0 p.m. G.M.T.* and is primarily intended for evening reception in Malaya, the Far East, and Western Australia.

Transmission III, covering approximately the 2.0 to 5.0 p.m. period, provides an evening programme for India, Ceylon and Burma, but is also received in the afternoon in Africa, the Mediterranean and Near East.

Transmission IV lasts from about 5.15 to 11.0 p.m. The first part (IV_A) is intended for evening reception in Africa, the Near East, and, by special arrangement, in the afternoon in Canada for part of the period: the latter part (IV_B) for Africa, the South Atlantic Islands, the West Indies, North America and British communities in South America. Parts of this transmission are heard also in New Zealand and Australia.

Transmission V, from 11.20 p.m. to 1.30 a.m., serves North America, the West Indies, and British listeners generally in South America.

Transmission VI, from 2.20 a.m. to 4.20 a.m., is intended primarily for evening reception in Western Canada, but can also be received in Eastern Canada, the West Indies, and, in their morning, in East Africa and India.

The transmissions from Daventry are made within the short-wave bands, which lie between 6 and 22 megacycles per second, that is, between 50 and 13 metres. Six short-wave bands within these limits are available for broadcasting, and the actual waves which have been notified for use by the Empire Station, together with their

* All times quoted are G.M.T.

call-signs and the words used to facilitate identification over the microphone, are given below. As a general rule at least four transmitters—usually on different wavelengths—are in operation throughout each Empire transmission, thus giving a choice of wavelengths or aerial directions to facilitate receptions.

GSA	A for Aerial	6.05	Mc/s	49.59	metres.
GSB	B for Broadcasting	9.51	„	31.54	„
GSC	C for Corporation	9.58	„	31.31	„
GSD	D for Daventry	11.75	„	25.53	„
GSE	E for Empire	11.86	„	25.28	„
GSF	F for Fortune	15.14	„	19.81	„
GSG	G for Greeting	17.79	„	16.86	„
GSH	H for Home	21.47	„	13.97	„
GSI	I for Island	15.26	„	19.66	„
GSJ	J for Justice	21.53	„	13.93	„
GSL	L for Liberty	6.11	„	49.10	„
GSN	N for Nation	11.82	„	25.38	„
GSO	O for Ocean	15.18	„	19.76	„
GSP	P for Progress	15.31	„	19.60	„

THE FOREIGN LANGUAGE SERVICES

There are also daily news services in Arabic, Spanish, and Portuguese, established early in 1938 at the invitation of the Government. The Arabic news service is radiated from 6.0 to 6.15 p.m. by a transmitter directed to the Near East, which also radiates a special programme with announcements in Arabic. The Spanish and Portuguese news bulletins are read in succession and radiated by two transmitters simultaneously, one for Central, and the other for South, America, from 1.30 to 2.0 a.m., during the interval between Transmissions V and VI. The latter part of Transmission V in the Empire Service includes announcements in Spanish and Portuguese for the benefit of Latin American listeners. The wavelengths used in the Foreign Language Services are selected from those given above in the Empire Service list.

THE TELEVISION SERVICE

The transmission of still pictures was accomplished as long ago as 1881; but it was not until after the War that moving shadows and simple outlines were successfully transmitted. In 1929 the BBC decided to give Baird Television, Ltd., facilities for experimental 'low-definition' vision transmissions, with 30 scanning lines and $12\frac{1}{2}$ pictures per second, through the medium-wave London Station transmitter in Oxford Street. In 1930 the transmissions were continued from the new London Regional Station at Brookman's Park, with the addition of sound, and in 1932 a studio in Broadcasting House was equipped with Baird apparatus.

Meanwhile development of improved standards of definition was proceeding rapidly, and the question arose whether a public service of 'high-definition' television was possible, using ultra-short waves in order to accommodate the large band-width necessary for the transmission of such systems. Accordingly, in May 1934, the Postmaster General appointed a committee under the chairmanship of Lord Selsdon to report on the relative merits of the several systems and on the conditions under which a public service might be provided.

The main recommendations of the Committee, whose report was issued in January 1935, were:

- (a) that a high-definition public service should be established at an early date, ultra-short waves to be used;
- (b) that the BBC should be responsible for television as for sound broadcasting;
- (c) that a standing Advisory Committee approved by the Postmaster General should be formed;
- (d) that the first station should be in London and that the two selected systems, Baird and Marconi-E.M.I., should each supply their own apparatus for alternative operation; and

(e) that the cost should be borne by the revenue obtained from the existing 10s. licence fee.

These recommendations were accepted by the Government, and a Television Advisory Committee appointed, on which the BBC was represented. The Advisory Committee recommended Alexandra Palace as the site of the London Television Station. Ultra-short wavelengths of approximately 6.7 metres for vision and 7.2 metres for sound were to be used, and the standards of picture transmission proposed by the two companies were accepted—namely,

- (a) *Baird System*: 240 lines, 25 pictures per second, sequential scanning;
- (b) *Marconi-E.M.I. System*: 405 lines, 25 pictures per second with interlaced scanning giving 50 frames per second.

An ultra-short wave sound transmitter, manufactured by Marconi's Wireless Telegraph Company, Ltd., was provided by the BBC for use with either system. The Alexandra Palace Station was formally opened by the Postmaster General on November 2 1936, and a public service for two hours daily at 3 p.m. and 9 p.m., came into being on this date, the two systems being used during alternate weeks. Thus Great Britain was the first country to establish a public television service, and is still the only one where television can be received in the home. The development of the television service during the year 1937 is described in a separate article on pages 40 to 48.

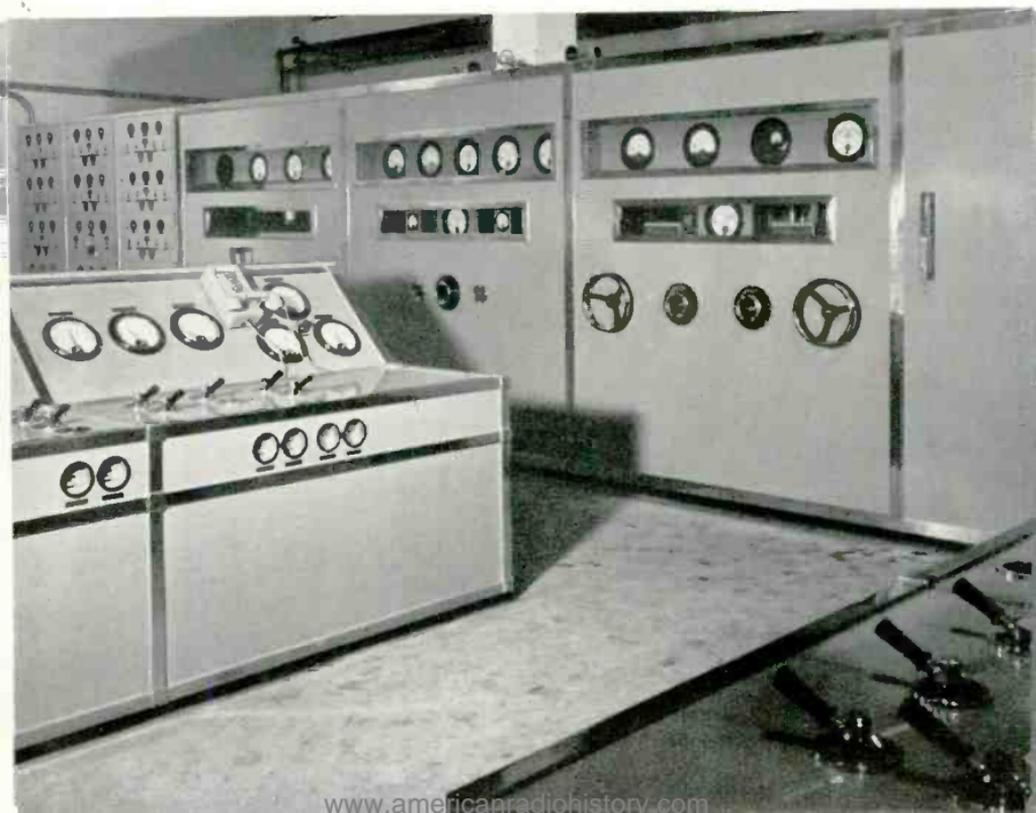
ADVICE ON GOOD RECEPTION

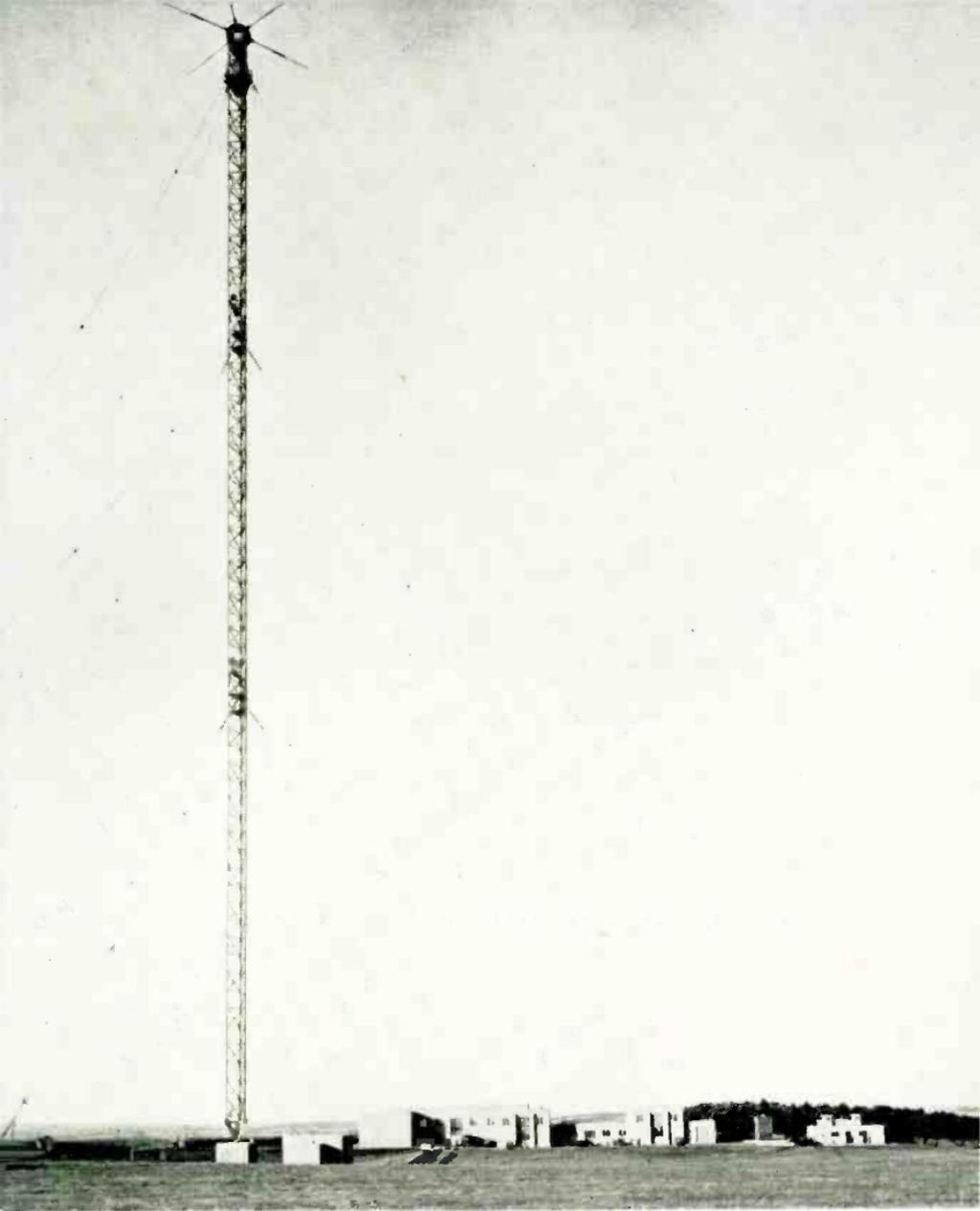
Installation

All types of receivers should be given the best chance to work efficiently by the provision of a really good aerial and earth system: a point that is often overlooked since most modern receivers will give as *loud* reception as the listener requires with only a few feet of wire for an aerial and no earth at all. But this means that the receiver is then working all the time near its most sensitive condition, and noises due to atmospherics and electrical interference are therefore likely to be prominent. It may also upset the tuning of the receiver or even cause instability, with consequent bad quality. The aerial should be such as to allow the programme to be received at as great strength as possible compared with these noises. An outside aerial is highly advisable, and it should be as high and as long as possible within the limits stated on the back of the wireless receiving licence. The down-lead from the aerial should be kept away from neighbouring objects. The receiver should be near to the point where the down-lead enters the house; so that, if reception is required in another room in the house, it is much more satisfactory to use a separate loudspeaker than to extend the aerial lead to this room. The earth connexion should be both short and direct and may be taken either to a copper-plate buried in the earth or to a main water pipe. Gas pipes should not be used since the joints are usually poor electrical conductors. If it is necessary to use an indoor aerial, care should be taken that it does not run parallel to electric lighting or telephone wiring, which may be embedded in the walls. An easy test, if interference is experienced, is to alter the direction of the aerial and see in which position the interference is least.



The BBC Short-wave Transmitting Station at Daventry: *(above)* the outside of the new building; *(below)* part of one of the transmitters and control table.





The BBC Transmitting Station at Stagshaw

Maintenance

When a receiver has been in use for some time the listener has usually become so accustomed to it that he does not notice that a gradual deterioration in performance and quality of reproduction has occurred. A periodical overhaul should therefore be carried out, say, every year or eighteen months so that any necessary re-adjustments or renewals can be made. This work should be entrusted to a reputable local radio dealer, who should be asked to furnish an estimate before the work is actually put in hand.

Interference

There are three main causes of interference: atmospheric disturbances, electrical interference from apparatus in the listener's neighbourhood, and the transmissions of other stations.

Atmospheric disturbances are not as a rule very severe in this country except during local thunderstorms. There is no way in which a listener can prevent this kind of interference.

Electrical interference is usually heard as a more or less continuous crackling or buzzing noise with loud clicks when the interfering apparatus is switched on or off. It may be caused by trams, trolley-buses, motors, fans, vacuum cleaners, lifts, etc. The most satisfactory method of dealing with this kind of interference is to suppress it at the source, although complete suppression may be impracticable on the score of expense. The services of the Engineering Branch of the General Post Office are available free of charge to all wireless licence holders in tracing the source of interference and advising on its suppression. Assistance can be obtained by completing an electrical interference questionnaire which can be obtained from any head Post Office. There is at present no legislation whereby the owners of the offending apparatus can be compelled to fit suppressors; but

it is hoped that a Bill incorporating such legislation will be introduced into Parliament by the Postmaster General in the near future. The most important precaution which a listener can take against electrical interference is to install an efficient outdoor aerial, preferably one of the 'anti-interference' type, now manufactured by several firms. Particulars of the various types available and advice on their installation can be obtained from the manufacturers whose advertisements appear in the technical Press and elsewhere. Where an all-mains receiver is used, interference may be introduced through the mains connexion, in which case a suppressor should be fitted in this lead.

Interference from other transmitting stations should not as a rule be experienced, provided that a modern and reasonably selective receiver is used, and that the listener does not live close to a high-power transmitter. But, if the receiver is deficient in the property of selectivity (which enables it to discriminate between the wanted station and unwanted stations working on other wavelengths), other programmes may be heard as well as the wanted programme. Unless the receiver has gone out of adjustment since it was first installed there is little that can be done to overcome this type of interference, because the selectivity of a receiver depends on its fundamental design. The medium- and long-wave broadcasting stations in Europe work on wavelengths which were agreed at an international conference in Lucerne in 1933. The Lucerne Plan was designed so that the programmes of each broadcasting station should be received as free as possible from interference within the area which the station was intended to serve. From this point of view the plan is relatively satisfactory; but some interference may be heard when listening to distant stations. The effect of distance on reliable broadcast reception is explained in a booklet, entitled *A Guide to Reliable Broadcast Reception*, which can be obtained from any of the offices of the BBC, price 2d.

THE TIME SIGNAL SERVICE

Time	Signals on Droitwich National Pro- gramme	Signals on Regional Pro- grammes	Notes
<i>W'kdays</i>			
a.m.			<p>The official broadcasting Time Signal is that which is received from Greenwich Observatory. It consists of six dot seconds, the last dot indicating the point of time to a normal accuracy of one-twentieth of a second. The signal is normally radiated at the times shown on the accompanying chart. Any signal, however, with the exception of those at 10.30 a.m. and 6.0 p.m., is liable to suppression if superimposition on a current programme is strongly inadvisable on artistic grounds. The signals at 10.30 a.m. and 6.0 p.m. are suppressed only in exceptional circumstances, and advance notification is given if such a case arises. If they (the signals at 10.30 a.m. and 6.0 p.m.) are suppressed on artistic grounds or through any error or technical difficulty, they are radiated at the next available quarter.</p> <p>Big Ben is broadcast in accordance with the chart when possible.</p>
10.15	Big Ben	Big Ben	
10.30	G.T.S.	G.T.S.	
p.m.			
2.00	G.T.S.	—	
5.00	Big Ben	Big Ben	
6.00	G.T.S.	—	
	(1st News)		
7.00	—	G.T.S. (2nd News)	
9.00	G.T.S. (3rd News)	—	
10.00	—	G.T.S. (News Sum.)	
11.30	G.T.S.	G.T.S.	
midn.			
12.00	Big Ben	Big Ben	
<i>Sundays</i>			
a.m.			
10.30	G.T.S.	—	
p.m.			
12.30	Big Ben	Big Ben	
4.00	G.T.S.	G.T.S.	
9.00	G.T.S.	G.T.S.	
11.00	G.T.S.	—	

SOS AND POLICE MESSAGES

Results in 1937

Through the willing co-operation of listeners in all parts of the country, more than half (50.79 per cent) the total number of SOS and Police Messages broadcast from all BBC transmitters during 1937 were successful. The biggest of the four general sections into which these broadcasts are divided was that for relatives of persons dangerously ill, and of the 823 broadcasts of this kind 472 (57.36 per cent) are known to have been successful. The significance of so large a proportion of successes is emphasized by the fact that these broadcasts are made only when all other means of communication have failed. Of the 318 appeals for witnesses of accidents, 121 (38.05 per cent) were answered. Six (23.08 per cent) of the 26 broadcast messages designed to assist the police in the investigation of crime are known to have been successful. Of the 46 'special' Police Messages, 17 (36.96 per cent) met with success. In helping to trace witnesses, criminals, or missing drugs, etc., the co-operation of the BBC with police authorities is only part of the general investigation, and it is not easy to assess in any particular case what success was due to the broadcast.

The following are the tabulated statistics for 1937:

	Suc- cessful	Unsuc- cessful	Not known	Total
Illness	472	285	66	823
Police Messages (a) <i>Witnesses</i>	121	197	—	318
(b) <i>Crime</i> ..	6	20	—	26
(c) <i>Special</i>	17	29	—	46
TOTALS ..	616	531	66	1,213

Rules for SOS Messages

1. FOR RELATIVES OF SICK PERSONS

The BBC will broadcast messages requesting relatives to go to a sick person only when the Hospital Authority or the Medical Attendant certifies that the patient is *dangerously* ill, and if all other means of communication have failed. In the normal course of events messages will be broadcast only when the full name of the person wanted is available.

When the person sought is known to be on board a ship at sea, a message can only be broadcast if the ship is not equipped with apparatus for the reception of messages by wireless telegraphy. Further, there must be a possibility that the return of the person sought can be hastened by the reception of such a message. This is not considered to be the case where the ship is on its way to a known port. In such cases, inquirers are advised to communicate with the owners or agents of the ship or with the port authorities.

In no case can an SOS be broadcast requesting the attendance of relatives after death has occurred.

2. FOR MISSING PERSONS

Apart from official messages originated by the Police, the BBC does not broadcast messages concerning other missing persons.

3. FOR WITNESSES OF ACCIDENTS

Requests for witnesses of accidents are not broadcast except when contained in official messages originated by the Police.

N.B.—No message can be broadcast regarding lost animals or property. There is no charge for broadcasting SOS messages.

WEATHER FORECASTS

WEEKDAYS

- 10.30 a.m. Weather Forecast for Farmers and Shipping read twice; first at natural speed and second time at longhand dictation speed. (Droitwich National and all Regional and Local transmitters)
- 6.00 p.m. General Weather Forecast with the first News. (National Programme)
- 7.00 p.m. General Weather Forecast with the second News. Except on Saturdays. (Regional Programme)
- 9.00 p.m. General Weather Forecast, followed by Shipping Forecast, with the third News. (National Programme)
- 10.00 p.m. General Weather Forecast with News Summary. (Regional Programme)
- 11.30 p.m. General Weather Forecast with late News Summary. (Regional Programme)

SUNDAYS

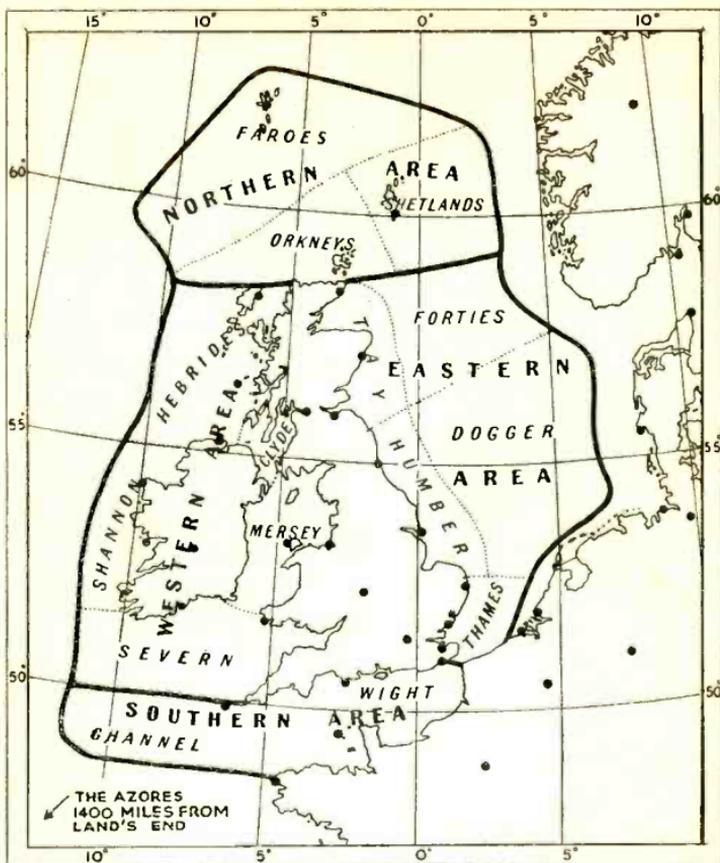
- 10.30 a.m. Weather Forecast for Farmers and Shipping. (Droitwich National only)
- 8.50 p.m. General Weather Forecast with the News. (From all National, Regional and Local transmitters)
- 11.00 p.m. Shipping Forecast. (Droitwich National only)

Gale Warnings

Gale Warnings are received from the Meteorological Office and are broadcast at :

WEEKDAYS

- 10.30 a.m. With the Shipping Forecast. (Droitwich National and all transmitters except medium-wave National transmitters)
- 2.00 p.m. Droitwich and medium-wave National transmitters



A MAP OF THE AREAS REFERRED TO IN THE DAILY SHIPPING FORECASTS

- 5.15 p.m. Droitwich and medium-wave National transmitters.
- 6.00 p.m. With the first News. (Droitwich and medium-wave National transmitters)
- 9.00 p.m. With the third News. (Droitwich and medium wave National transmitters)
- 11.30 p.m. Droitwich and medium-wave National transmitters.



LANDMARKS ALLUDED TO IN THE 'NAVIGATIONAL WARNINGS'
TO SEAMEN

SUNDAYS

- 10.30 a.m. With the Shipping Forecast. (Droitwich National only)
- 12.30 p.m. Droitwich National and all transmitters except medium-wave National.
- 4.00 p.m. Droitwich National and medium-wave National transmitters.
- 8.50 p.m. With the News. (All transmitters)
- 11.00 p.m. With the Shipping Forecast. (Droitwich National only)

Navigational Warnings

Navigational warnings are received from the Admiralty and are broadcast at any time set apart for Gale Warnings.

MARKET BULLETINS, ETC.

Market prices for farmers and fisheries and foreign exchange bulletins are broadcast at regular intervals. The agricultural market prices in summary form are broadcast every Friday in the National Programme. The Regional Programmes have their own market prices, which are included four or five times a week and cover a wide selection of the principal markets throughout the country. These market prices and the herring bulletins are supplied by the Ministry of Agriculture and Fisheries. The foreign exchange bulletin, which is supplied by Reuter, is broadcast daily in the six o'clock news.

PUBLIC REDIFFUSION OF BBC PROGRAMMES

The News Bulletins and Running Commentaries in BBC programmes are strictly copyright. The information they contain is intended for the private enjoyment of licence holders and should not be communicated to the public by loudspeakers, written notices, or other means. Care should be taken in shops and other open spaces to prevent the News Bulletins and Running Commentaries being made audible to the public.

Apart from such items, the Corporation has no objection, so far as it is concerned, to the rediffusion of programme material to the public, but it should be borne in mind that a great deal of such material is subject to the control of other copyright owners.

The Meteorological Office permits the copying and exhibition for public information of the weather forecasts supplied for broadcasting, on condition that the date and times are shown.

ORCHESTRAS AND CHORUSES

The BBC maintains certain permanent Orchestras and Choruses. The numbers of instruments and voices, subject to variation according to the type of work to be performed, are as follows:

The Symphony Orchestra (119 players) can be divided into four smaller orchestras, each complete in itself and suited in numbers and balance to the types of music entrusted to it, as follows:

INSTRUMENTS	A	B	C	D	E
First Violins	20	14	6	12	8
Second Violins	16	12	4	10	6
Violas	14	10	4	8	6
Cellos	12	8	4	8	4
Double Basses	10	8	2	6	4
Flutes	5	3	2	3	2
Oboes	5	3	2	3	2
Clarinets	5	3	2	3	2
Bassoons	5	3	2	3	2
Horns	8	4	4	4	4
Trumpets	5	3	2	3	2
Trombones	6	3	3	3	3
Tuba	1	1	-	1	-
Timpani	2	1	1	1	1
Percussion	3	3	-	2	1
Harps	2	1	1	1	1
	119	80	39	71	48
		} 119		} 119	

Except that A is called the BBC Symphony Orchestra, the appropriate letters B, C, D, or E appear in the programmes to denote which orchestra is playing.

Other orchestras are the Northern Orchestra (35 players); the Midland Orchestra (35 players); the Scottish Orchestra (35 players); the Welsh Orchestra (20 players); the Northern Ireland Orchestra (35 players); the Theatre Orchestra (30 players); the

Variety Orchestra (16 players); the Empire Orchestra (22 players); the Television Orchestra (22 players); and the Military Band (37 players).

The BBC Choruses are as follows: The Choral Society* (228 voices); the Chorus (A, 42 voices), (B, 28 voices), (C, 20 voices); the Singers (A and B, 8 voices each); the Men's Chorus (42 voices); the Women's Chorus (20 voices); the Revue Chorus (16 voices); the Midland Singers (9 voices); the West of England Singers (8 voices); the Welsh Singers (32 voices); the Scottish Singers (24 voices); the Northern Ireland Chorus (23 voices).

LETTERS TO THE BBC

Comments or suggestions about BBC programmes are always welcome. Every letter sent to the BBC is read carefully and acknowledged individually. Every point, whether a suggestion, criticism or appreciation, is seen by a responsible official, and points of special interest are brought to the notice of those in the highest positions of control. Correspondents should put their points as clearly and concisely as possible. Requests for information about matter which has been broadcast should always be accompanied by stamps to cover the return postage. (Stamps are preferred to stamped envelopes.) Copies of broadcast programmes are not available for distribution, but many talks are reproduced in *The Listener*. Letters should be addressed to the BBC, Broadcasting House, London, W.1, or to the appropriate Regional centre (see pages 124 and 125).

* This is an amateur body, and membership is open to amateur singers. Application should be made to the Chorus Master, Broadcasting House, London, W.1.

STAFF RECRUITMENT

Non-technical Staff

Nearly all vacancies in the staff of the BBC are advertised, both inside the organization and publicly. Appointments, except those of minor staff, are made on the recommendation of Appointment Boards, consisting of members of the BBC Staff, together with a representative of the Civil Service Commissioners. A Training School, started in 1936, provides facilities for giving to newly-joined non-technical staff an adequate knowledge of the organization of the BBC and of the technique and practice of broadcasting, before they settle down into one particular department or section. Staff vacancies are not, however, normally filled from young people straight from schools or universities. Broadcasting is not a profession in the same way as, for example, the Law. It is an amalgamation of a large number of professions. The BBC has its musical experts, conductors, dramatic producers, Press officers, editorial staffs, accountants, and so on. Their knowledge and experience are applied in a common purpose; but their training is almost invariably acquired in their respective professions before they join the BBC. Very few vacancies, and then only minor ones, are therefore open to applicants who have no such previous experience.

Technical Staff

The normal means of entry to the Maintenance Department is by appointment as Junior Maintenance Engineer. The qualifying ages for this grade of engineer are 19 to 22. Possession of a technical college diploma or proof of study for accepted theoretical qualifications, together with some practical electrical engineering experience in a wage-earning capacity, are regarded as suitable qualifications.

For the specialist departments, that is the Research, Station Design and Installation, Overseas and Engineering Information, Lines, and Equipment Departments, appointments are made into all grades according to vacancies. In all cases, specialist engineers must be properly qualified as electrical engineers and have experience of the particular type of specialist work carried out by the departments for which they wish to be considered as candidates.

Women Clerical Staff

Girls of over twenty years of age, who have gained experience in a previous post, are preferred to girls of eighteen or nineteen straight from their training colleges, with little or no practical experience. Practical training is given by the BBC only to a very few, specially selected, juniors. A good education and secretarial training are essential for all shorthand-typists and secretaries. Appropriate training and experience are nearly always required for the other posts such as copying-typists, filing clerks, telephonists, and duplicating machine operators.

APPEALS

Rules

'The Week's Good Cause' appeals are allocated on the advice of advisory committees, the members of which are chosen for their wide knowledge of social work and conditions. National and London Regional appeals are arranged by the Central Committee and other Regional and local appeals by Regional Committees. Applications should be addressed to the Secretary of the Appeals Advisory Committee at the Head Office or at one of the Regional offices.* The committees usually

* See page 124.

meet in the spring and autumn and arrange appeals for periods of six months at a time: at the spring meeting 'Good Causes' are chosen for the second half of the year, and at the autumn meeting, for the first half of the following year. Appeals in the Children's Hour are generally limited to two a year, one in the summer for Children's Country Holidays, and one in the winter to provide Christmas presents for needy children.

The results during 1937 show that the appeal by Christopher Stone for the British Wireless for the Blind Fund on Christmas Day brought in the largest amount—£22,100, not far from the record response of £27,408 to the late Canon Sheppard's appeal in 1936 for Red Cross work in Abyssinia. The 1937 Christmas Appeal in the London Children's Hour brought in £2,000, a Children's Hour record.

Results in 1937

(A) National and London Regional Appeals

DATE	APEAL	SPEAKER	RESULT
1937			
Jan. 3	* Church of England Homes for Waifs and Strays † Hospital for Epilepsy and Paralysis, Maida Vale	Bishop of Kingston	£595
10	‡ Workington Infirmary † Bermondsey Settlement	Eric Dunstan Mayor of Workington	385 523
17	§ Royal National Hospital for Rheumatic Diseases, Bath	Dr. J. Scott Lidgett	282
24	* Destitute Sailors' Fund † North Kensington Community Centre	Rt. Hon. Sir John Simon Capt. P. N. Layton	1,865 3,286
31	* Royal Eye Hospital, Southwark † Over Thirty Association	T. S. Eliot Christopher Stone	97 5,831
Feb. 7	* Federation of Girls' Clubs † Personal Service Work in Kent	Dorothy Sayers Margaret, Lady Grant	194 807
14	‡ Lady Chichester Hospital, Hove † Institute of Ray Therapy and Electro-Therapy	Mrs. Granville Streatfeild Elspeth Douglas Reid	79 1,019
21	* Institute for the Scientific Treatment of Delinquency † Princess Elizabeth of York Hospital for Children, Shadwell	Lord Sempill	114
28	§ Society for the Protection of Science and Learning	St. John Hutchinson	365
Mar. 7	* Royal National Orthopædic Hospital † Feathers Clubs Association	Rev. W. H. Elliott	2,176
14	‡ Norwich Institution for the Blind † Diabetic Association	Sir William Beveridge Lord William Scott	1,078 2,307
21	* St. Bartholomew's Hospital	Rt. Hon. Winston Churchill Matheson Lang	500 2,193
		H. G. Wells Lord Horder	148 1,747

§ denotes all stations; * National programme only; † Regional programme; ‡ Droitwich National only.

DATE	APPEAL	SPEAKER	RESULT
1937			
Mar. 28	† Southwark Catholic Rescue Society	Sheila Kaye-Smith	£663
	§ National Association of Boys' Clubs	Lord Aberdare	971
Apr. 4	* League of Remembrance	Mrs. E. H. Gibson	271
	† Royal Hospital, Richmond, Surrey	Jane Carr	100
11	‡ Worthing Hospital	Mayor of Worthing	630
	† Downham Community Association	F. Manners	32
18	* Girls' Friendly Society in North and Central Europe	Rev. W. Marshall Selwyn	553
	† Bishop Creighton House	Sir Boyd Merriman	36
25	§ Birmingham Hospitals Centre	Rt. Hon. Neville Chamberlain	421
May 2	* British Social Hygiene Council	John Hilton	755
	† King's Roll Clerks Association	Sir Seymour Hicks	1,102
9	§ Joint Appeal: British Legion Pension Fund and King George's Jubilee Trust	Rt. Hon. Stanley Baldwin	10,278
16	* Children's Aid Society	Preb. T. Wellard	691
	† Royal Buckinghamshire Hospital, Aylesbury	Countess of Rosebery	474
23	* King's College Hospital	Sir Malcolm Campbell	513
	† Kingsley Hall, Bow	Elsie & Doris Waters	234
30	* Artists' General Benevolent Institution	Dame Laura Knight	377
	† Wireless for the Blind Local Maintenance Appeal	Howard Marshall	519
June 6	* Cardiff Royal Infirmary	Lord Dawson	1,590
	† Jewish Lads Brigade	Dowager Lady Swaythling	470
13	‡ Royal Victoria and West Hants. Hospital, Bournemouth	Col. Sir Charles Gordon-Watson	920
	† School Journey Fund	Sir Edward T. Campbell	146
20	* Shaftesbury Society	Sir Charles Sanders	2,031
	† Queen Victoria Memorial Cottage Hospital, Herne Bay	Richard Goolden	146
27	§ Ivory Cross National Dental Aid Fund	Leon M. Lion	176
July 4	* Training Ship 'Stork'	Dame Sybil Thorndike	303
	† Clacton and District Hospital	Irene Vanbrugh	40
11	†† St. Martin's Summer Appeal	Rev. W. P. G. McCormick	5,916
18	* St. Vincent's Orthopaedic Hospital, Pinner	Robert Speaight	479
	† Children's Country Holidays Fund	Christopher Stone	1,208
25	§ R.S.P.C.A. Clinics for Sick Animals	Sir Robert Gower	1,325
Aug. 1	* Soldiers', Sailors' and Airmen's Families Association	Admiral Sir William James	659
	† Margate and District General Hospital	Sir Charles A. Batho	112
8	‡ 'Frank James' Hospital, Cowes	Sir Godfrey Baring	295
	† Hostels for Crippled Women Workers	H. Brough-Robertson	391
15	* Save the Children Fund Nursery Schools Committee	Flora Robson	702
	† West Suffolk General Hospital	Sir Cedric Hardwicke	160
22	* Royal Northern Hospital	Christopher Stone	2,076
	† Incorporated Homes for Ladies with Limited Incomes	Canon H. Anson	671
29	* St. Joseph's Nursing Home, Edmonton	Evelyn Waugh	1,634
	† Harrow and Wealdstone Hospital	Sydney Walton	292
Sept. 5	§ National Children's Home and Orphanage	Sir Harold Bellman	2,349
12	† St. Edmundsbury and Ipswich Diocesan Moral Welfare Association	Bishop of St. Edmundsbury and Ipswich	222
	† Council for the Promotion of Occupational Industries among the Physically Handicapped	Vernon Bartlett	544
19	* Westminster Hospital	Lord Wigram	2,408
	† Katharine Low Settlement	Bishop of Bristol	323
26	* Royal Alfred Aged Merchant Seamen's Institution	Sir Philip Devitt	2,020

§ denotes all stations; * National programme only; † Regional programme; ‡ Droitwich National only.

DATE	APPEAL	SPEAKER	RESULT
1937			
Sept. 26	† Wayfarers' Sunday Association	Maurice M. Bear	£76
Oct. 3	§ Royal Victoria Hospital, Belfast	Marquess of Londonderry	430
10	‡ Brighton and Hove Social Service Centre	Countess Buxton	138
	† St. Albans and Mid. Herts Hospital	Mayor of St. Albans	1,134
17	* Metropolitan Hospital	Sir George Broadbridge	442
	† Greater London Fund for the Blind	W. J. Sharp	942
24	§ Professional Classes Aid Council	Lord Hewart	2,834
31	* West End Hospital for Nervous Diseases	Violet Loraine	1,670
	† London Federation of Boys' Clubs	Geoffrey Gilbey	91
Nov. 7	§ British Legion	Major-General Sir Frederick Maurice	4,300
14	‡ Lowestoft and North Suffolk Hospital	Christopher Stone	653
	† Tait Home, Broadstairs	Dame Sybil Thorndike	144
21	* National Council of Girls' Clubs	Lord Aberdare	482
	† British Red Cross Society's Clinic for Rheumatism	Lord Ebbisham	301
28	* Royal Cancer Hospital (Free)	Lord Russell of Killowen	4,400
	† After Care Association (Physically Defective Children)	S. P. B. Mais	119
Dec. 5	§ Musicians' Benevolent Fund	Sir Hugh Walpole	5,002
12	‡ St. Martin's Christmas Appeal	Rev. W. P. G. McCormick	13,130
19	* Reedham Orphanage, Surrey	Sophie Stewart	311
	† Bromley and District Hospital, Kent	Lord Stanley	60
25	§ British Wireless for the Blind Fund	Christopher Stone	22,100
26	* Sussex Maternity and Women's Hospital	A. J. Cronin	1,410
	† St. Francis House Settlement, Woolwich	Bishop of Woolwich	65
		TOTAL ..	134,058

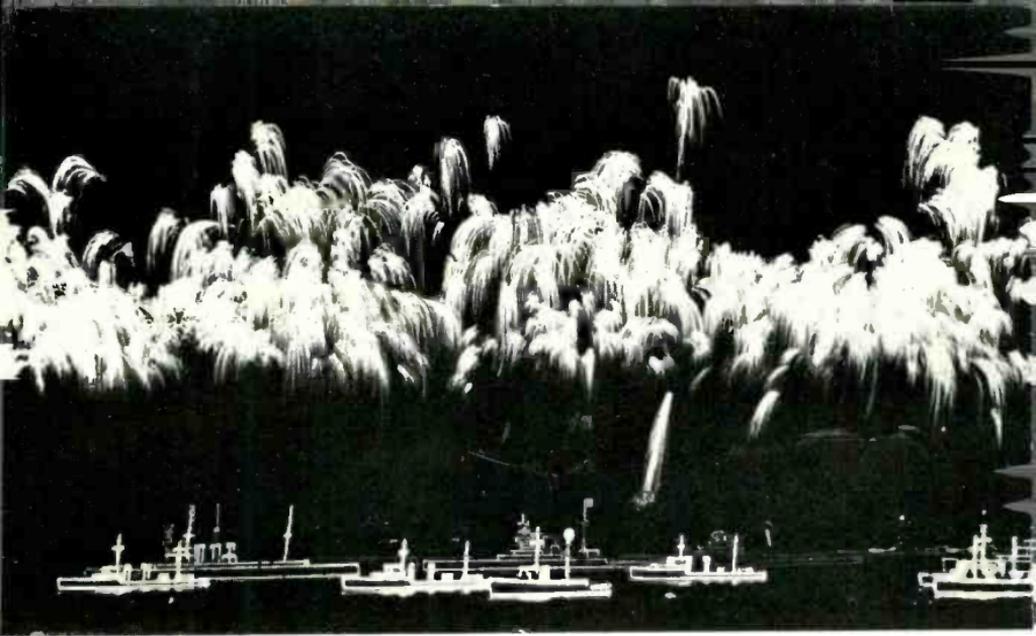
(B) Other Regional Appeals

TOTAL .. 22,132

(C) Appeals in 'Children's Hours'

May and June	Children's Country Holidays		
	London Regional	Derek McCulloch	
	Midland Regional	Alderman George H. Jones	
	North Regional	George Formby	
	West Regional	Lady Mayoress of Bristol	
	N. Ireland Regional	Jimmy Warnock	
September	Blind Children		
	Scottish Regional	Christine Orr with children from the Royal Blind School, Edinburgh	
November	Crippled Children		
	Midland Regional,	Percy Edgar	
December	Christmas Presents for Poor Children		
	London Regional (for London's Housing Estates)	Derek McCulloch	
	Midland Regional	Binnie Hale	
	North Regional	Harry Korris	
	Welsh Regional	Bronwen Davies and Elwyn Evans	
	Scottish Regional	Christine Orr and an unemployed man's widow	
	N. Ireland Regional	T. O. Corrin	
		TOTAL ..	3,083
		GRAND TOTAL	£159,273

§ denotes all stations; * National programme only; † Regional programme; ‡ Droitwich National only.



The Naval Review, Spithead, May 20 1937

The Farr-Louis Heavyweight Championship, Yankee Stadium,
New York City, August 31 1937





The 'Empire Service' Section of the BBC Display at Radiolympia 1937

AUDITIONS

Nothing is ever more welcome to the BBC than good new talent, and, since broadcasting began, a great deal of time and trouble has been spent in looking for it. But this does not mean that anyone who thinks, or is told, that he or she can sing, act, play an instrument, or tell stories, can be given an audition. The staff, studio accommodation, and expense involved in such an undertaking would, as experience has proved, be disproportionate to the results. Practice must, however, differ according to the various kinds of performance and even according to different parts of the country.

Take Musical Auditions for example. In London, where the supply of good musicians exceeds the demand, amateurs and semi-professionals are not given engagements. An applicant must fill in a form, which requires among other things, the signature of two well-known musicians, not including the applicant's teachers, before even getting on to the waiting list for an audition, for it is felt to be unfair to give so many auditions that even those who pass have little chance of an engagement. Applicants must also give particulars of their last three important public appearances. Entry to the BBC's music programmes must, therefore, be regarded as being made through the profession of music, not, as is sometimes thought, *vice versa*. In the Regions the position is not quite the same. The demand for good artists exceeds the supply, and in most of them auditions are therefore open to all applicants with reasonable qualifications.

Auditions for Variety, on the other hand, are generally given, both in London and the Regions, to anyone with definite professional experience, except when, from time to time, there is no further opening for a particular kind of performer. In Drama, again, there are in London already so many competent professionals for whom there is little or no room 'on the air', that no amateurs are given auditions: indeed, applications from professionals

are accepted only in special circumstances. In the Regions, as with music, there is not an abundant supply of professional talent, and amateurs are therefore not excluded. Open poetry-reading auditions have been tried in London with very poor results, and special auditions for readers with definite experience in reading aloud have been found more satisfactory. Auditions are given for the Schools programmes, where authoritative knowledge, directness and personality are all essential. Auditions are sometimes given to young performers for the Children's Hour, but not to any younger than twelve, for they are prohibited by law from broadcasting. Tests are sometimes arranged for would-be commentators on broadcast outside events, in order to find out if they have any special aptitude for that very difficult and exacting art.

Artists desiring an audition should apply either direct to the BBC or through their agents and should support their application, in addition to such special recommendations as are mentioned above, with full details of previous performances similar to those for which they are offering their services. Artists would often rather be heard in London than at one of the Regional headquarters. Except in a few special cases this is allowed only for those residing in the London Regional area. Others must apply to their own Regional office.* This rule prevents long and costly journeys by those who may after all not succeed in their audition, and an artist whose work for a Region proves outstanding will soon become known at Headquarters.

* See page 124.

SUBMISSION OF SCRIPTS AND SCORES

New scripts and scores of real quality are as welcome as new artists—and as rare! The following points should be carefully noted by anyone who has anything of this kind to offer to the BBC:

It is not advisable to spend a great deal of time in working on a full script until the department concerned has said that the *idea* is acceptable. Listening to the programmes is the best way to get to know what is likely to be acceptable. Suggestions for series already running are not generally of any use, as a series is usually planned as a whole beforehand. Interviews are not given for reading over a script before it has been thoroughly examined. If a script has been accepted, the author will be invited to discuss it at the appropriate stage. All scripts, whatever the length or form, should be typed, accompanied by a stamped, addressed envelope, and registered.

The following notes may help contributors to avoid addressing material to the wrong department or sending to a department material of a kind that it can never use. The Music Department handles manuscript scores of serious music, including symphonies, choral works, concertos and chamber music for a number of players. These should be submitted during February and are put before a reading committee of experienced musicians. With the reports from this committee before them the Director of Music and his staff decide which of the works submitted can be included in the programmes when there are opportunities to do so. The BBC is always in touch with the music publishers, and new works by established composers are considered as soon as they are available. The Variety Department is always ready to consider comic songs (but lyrics without music or *vice versa* are not accepted), funny sketches, revue material, musical comedies, ideas for a series (like 'Mr. Penny' or 'Muddlecome, J.P.'). for dance

band presentations or light entertainment in general. But dance music, ballads, marches, fox-trots, waltzes are supplied in ample quantity from the publishers and are not accepted in manuscript.

Plays, as distinct from musical comedies and musical plays, are in the province of the Features and Drama Department, whether straight plays, farces, comedies or tragedies. Comedies are especially welcome. The best length is 30-45 minutes: the outside limits are 20 and 75 minutes. Feature programmes are also handled by this department: but it is generally advisable to submit ideas or synopses, rather than full scripts. Plays suitable for the Children's Hour, to last not longer than 40 minutes, and stories of about 1,500 words may be submitted to the Children's Hour Organiser. The Talks Department is always on the look out for good new short stories, specially written for the microphone, and personal reminiscences, suitable for such series as 'I Was There'; but here again it is better to submit the idea, with some explanation of the suggested treatment, before embarking on a script.

Contributions should be submitted to the BBC's Head Office in London, if the writer lives in London or the Home Counties, and to the nearest Regional Office, if the writer lives in the provinces, or in Scotland, Wales or Northern Ireland.* If an offer is not accepted at one of the BBC offices, it is of no avail to submit it to another.

Prospective writers for broadcasting may find useful the following publications on the subject: 'How to Write Broadcast Plays' (with three examples), by Val Gielgud (*Hurst and Blackett (1932), 2s. 6d.*), 'Learn to Write for Broadcasting', by Claude Hulbert (*Denis Archer (1932), 2s. 6d.*), and 'Writing for the BBC' by Max Kester and Edwin Collier (*Pitman (1937) 2s.*).

* See page 124.

VISITS TO BBC PREMISES

The BBC's aim is to arrange visits* for as many interested listeners as possible without interfering with the broadcasting service. Visits are normally of two kinds: (i) conducted tours round studios, transmitting stations, etc.; (ii) attendance at a broadcast performance in the studio. Facilities for either kind of visit are necessarily restricted, owing to the constant use of studios for rehearsals or transmissions and to the limited accommodation available for visitors.

Tours

LONDON—Tours of Broadcasting House, London, take place daily between 1.30 and 2.30 p.m., when the pressure on the studios is relaxed. They normally consist of visitors, from the home country and from overseas, with whom the BBC has been brought into special contact in the course of its work. Special tours are arranged from time to time for parties having a technical interest in broadcasting. It is not possible at present to include other members of the general public.

The Television Station at Alexandra Palace is not at present open to visitors.

REGIONAL OFFICES—Tours of the BBC studios can be arranged, on application at the following centres: Bangor, Belfast, Bristol, Cardiff, Edinburgh, Glasgow, Leeds, Manchester, Newcastle, and Swansea. Tours of the Birmingham studios are restricted to visitors having a technical interest in broadcasting.

TRANSMITTING STATIONS—Arrangements can be made for limited parties to visit the following transmitting stations: Brookman's Park (*London Region*), Droitwich (*Midland Region*), Moorside Edge and Stagshaw (*North Region*), Lisnagarvey (*Northern Ireland Region*), Burghead and Westerglen (*Scottish Region*), Penmon (*Welsh Region*), Washford (*West of England Region*).

*Addresses for all applications for visits to BBC premises will be found on page 124.

Audiences

LONDON—A number of selected variety programmes are given before limited audiences in St. George's Hall. Applications for tickets are dealt with in order of their receipt; there are at present many thousands of names on the waiting list.

A very limited number of seats are available, on application, for the Concerts of Contemporary Music in the Concert Hall, Broadcasting House, and for the Sunday evening Symphony Concerts in the studios at Maida Vale. A series of organ recitals in the Concert Hall, Broadcasting House, has recently been thrown open to special audiences of organ music lovers; particulars of each recital, with a form of application for seats, appear in *The Listener** from time to time.

There are at present no facilities for audiences at the Television Station, Alexandra Palace.

REGIONAL STUDIOS—Small audiences are admitted to selected orchestral concerts or variety programmes in the following studios: Bristol, Cardiff, Edinburgh, Glasgow, Leeds and Manchester. Owing to limitations of space it is not possible to make similar arrangements at Aberdeen, Bangor, Belfast, Birmingham or Swansea.

BBC PUBLICATIONS

A selected list of the BBC's numerous publications is issued free on application. All enquiries and subscriptions should be addressed to BBC Publications, 35 Marylebone High Street, London, W.1. The following are the main publications:

Radio Times contains full details of the programmes to be broadcast during the week from each of the BBC's transmitters, together with articles on current programmes, news of future arrangements, letters from

* See page 119.

listeners, and illustrations. It first appeared in September 1923 and now has a weekly circulation of 3,000,000 copies. At the factory built in 1936 specially for printing *Radio Times* the high-speed rotary machines can turn out 24,000 copies an hour. About 40,000 tons of paper are used annually. It is published every Friday at 2d.

SUBSCRIPTION RATES, INCLUDING POSTAGE

Great Britain, Northern Ireland, and Canada	1 Year	6 Months	3 Months
Empire and Foreign	15 6	7 9	3 11
	17 10	8 11	4 6

World-Radio gives the programmes of foreign stations all over the world. Weekly features include 'The Pick of the Programmes,' a double-page classified list of the most interesting broadcasts of the following week, and 'Stations in Order of Frequencies and Wavelengths.' Special attention is given to authoritative articles on short-wave broadcasting and the technical side of wireless, including television. *World-Radio* was first published as a separate journal in 1926 and net sales now exceed 100,000 a week. It is published on Fridays at 2d.

SUBSCRIPTION RATES, INCLUDING POSTAGE

Great Britain, Northern Ireland, and Canada	1 Year	6 Months	3 Months
Empire and Foreign	13 0	6 6	3 3
	15 0	7 6	3 9

The Listener prints, either in full or in part, the best of current broadcast talks, with illustrations. It also contains a four-page pictorial record of the week, based on broadcast news, a weekly feature, book reviews, regular articles on television and broadcast drama and music, and letters from readers. Started in 1929, *The Listener* now has a weekly circulation of about 50,000. It is published every Wednesday at 3d. A single specimen copy is sent free on application.

SUBSCRIPTION RATES, INCLUDING POSTAGE

	1 Year	6 Months	3 Months
Great Britain, Northern Ireland, and Canada	18 8	9 4	4 8
Empire and Foreign	21 0	10 6	5 3

Back Numbers of these BBC journals can be supplied, subject to the issues required being still in print, at the following rates:

<i>Radio Times</i>	(issues at 2d.)	Price 3d. (by post 4½d.)
	(" 6d.)	" 8d. (" 10d.)
<i>World-Radio</i>	(" 2d.)	" 3d. (" 4½d.)
	(" 3d.)	" 4d. (" 5½d.)
<i>The Listener</i>	(" 3d.)	" 4d. (" 5½d.)

BBC Empire Broadcasting gives full details, week by week, of the programmes to be transmitted by short-wave from the BBC's Empire Station at Daventry, with notes and authoritative articles about them. It is despatched four-and-a-half weeks in advance, and thus by ordinary mail reaches listeners in practically every part of the world before the programmes which it describes are broadcast. The annual subscription is 10s. (postage included); by air mail 15s. 6d. (on the Empire air route), or 9s. plus postage.

Broadcasts to Schools Pamphlets are designed for the use of teachers and children during the broadcasts and for study afterwards. They are published at 2d. each, post free, about a month before each of the three school terms. The number distributed is at present about 2,500,000 a year.

Miscellaneous Publications include *New Every Morning*, a prayer book for the daily religious service at 10.15 a.m. (1s. 3d. paper cover; 1s. 9d. cloth cover; 5s. 3d. de luxe; (post free)); *Broadcasting House*, an illustrated souvenir (5s. 6d., post free.) *Broadcasting House*, a technical description (5s. 6d., post free), and a number of technical pamphlets. With one or two exceptions all the *National Lectures* have been published in booklet form (1s., post free 1s. 1d.).

BOOKS FOUNDED ON BROADCAST MATERIAL

(published during 1937)

The BBC normally only acquires the broadcasting rights in its programmes, and, in the case of talks, the right to publish within 28 days of the broadcast, after which time all publication rights revert to the speaker. The BBC does not publish any of its programme material in book form.* It frequently happens, however, that publishers negotiate direct with authors for the publication of such material, and the following is a list of books published during 1937:

POLITICS, ECONOMICS, SOCIOLOGY

- 'Responsibilities of Empire' by Earl Baldwin and others
(*Allen & Unwin, 3s. 6d.*).
'This Freedom of Ours' by Frank Birch (*Cambridge University Press, 6s.*)

RELIGION AND PHILOSOPHY

- 'Christianity: Right or Left?' by Kenneth Ingram
(*Allen & Unwin, 6s.*).
'The Spiritual Life' by Evelyn Underhill (*Hodder & Stoughton, 2s. 6d.*).
'Plato To-day' by R. H. S. Crossman (*Allen & Unwin, 7s. 6d.*).
'Christian Morals' by M. C. D'Arcy (*Longmans, 5s.*).

LANGUAGE, LITERATURE, DRAMA

- 'Plays for Young Players' by L. du Garde Peach (*Pitman, 1s. 6d.*)
'The Fun of Writing' by S. P. B. Mais (*Routledge & Kegan Paul, 5s.*).
'The BBC Scrapbooks' by Leslie Baily and Charles Brewer (*Hutchinson, 8s. 6d.*).
'Tracing History Backwards' by Stephen King Hall and K. C. Boswell (*Evans Bros., 3s. 6d.*).

* The National Lectures are, however, published separately in booklet form—see previous page.

TRAVEL

'The Green Edge of Asia' by Richard Pyke (*Allen & Unwin, 6s.*).

NATURE, GARDENING

'Britain through Gipsy Eyes' by Gipsy Petulengro (*Methuen, 3s. 6d.*).

'Design in Nature' by Professor J. Ritchie (*Country Life, 5s.*).

'From Garden to Kitchen' by C. H. Middleton and A. Heath (*Cassell, 3s. 6d.*).

CHILDREN'S BOOKS

'The Island in the Mist' by Franklyn Kelsey (*Harrap, 7s. 6d.*).

'Wireless in Toytown' by S. G. Hulme Beaman (*Collins, 1s.*).

'The Zoo Man Speaking' by David Seth Smith (*Nelson, 5s.*).

'Eppie Helps in the Garden' by Constance Egan (*Collins, 2s.*).

'Eppie Tries to be Brave' by Constance Egan (*Collins, 2s.*).

'Mary Plain on Holiday' by G. Rae (*Cobden Sanderson, 3s. 6d.*).

'Professor Branestawm's Treasure Hunt and other Incredible Adventures' by Norman Hunter (*Lane, 6s.*).

'Wurzel Gummidge again' by Barbara Euphan Todd (*Burns Oates, 3s. 6d.*).

'The Muddle-headed Postman' by Garry Hogg (*Burns Oates, 3s. 6d.*).

MISCELLANEOUS

'My Laugh Story' by Leonard Henry (*Stanley Paul, 2s. 6d.*).

'Your Home and Mine' by Geoffrey Boumphrey (*BBC., 2s.*).

'Adventure Book of Cookery for Boys and Girls' by Moira Meighn (*Oxford University Press, 3s. 6d.*).

'Under Big Ben' by Howard Marshall (*Longmans, 5s.*).

OFFICIAL REPORTS AND PAPERS

The following Command Papers are obtainable from H.M. Stationery Office, Adastral House, Kingsway, W.C.2.

Report of the 'Sykes' Committee on Broadcasting, 1923, Cmd. 1951, *9d.*

Report of the 'Crawford' Committee on Broadcasting, 1925, Cmd. 2599, *6d.*

Report of the 'Ullswater' Committee on Broadcasting, 1935, Cmd. 5091, *1s. 3d.*

Report of the 'Selsdon' Committee on Television, 1935, Cmd. 4793, *6d.*

Royal Charter for the Continuance of the BBC and the Licence and Agreement between the Postmaster General and the BBC, 1936-7, Cmd. 5329, *4d.*

Annual Reports presented by the Postmaster General to Parliament: 1927-37. Report for 1937—Cmd. 5663, *6d.*

BBC ADDRESSES

Head Office

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Broadcasts,
London.
Telephone:
Welbeck 4468

Regional Offices

MIDLAND REGION

*Telegrams and
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Leeds Representative: G. P. Fox
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Headquarters

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Aberdeen Office

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North Wales Office

North Wales Representative : S. Jones Bangor 561.
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West Wales Office

West Wales Representative : T. J. Swansea 3107
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Headquarters

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Plymouth Office

Engineer-in-Charge : A. S. Barnes Plymouth 2283
Athenæum Chambers.

U.S.A.

North American Representative : Circle 7-0630.
F. Greene. Cables : Broad-
British Empire Building, 620 Fifth casts, New
Avenue, New York City. York.

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