B·B·C
ANNUAL 1936

THE PROGRAMME PERIOD COVERED BY THIS BOOK IS FROM 1 JANUARY TO 31 DECEMBER 1935

THE BRITISH BROADCASTING CORPORATION
BROADCASTING HOUSE
LONDON. WI
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Readers unfamiliar with broadcasting will find it easier to understand the articles in this book if they bear in mind the following:

(i) The words 'Simultaneous(ly) Broadcast' or 'S.B.' refer to the linking of two or more transmitters by telephone lines for the purpose of broadcasting the same programme; e.g. the News Bulletins are S.B. from all B.B.C. Stations.

(ii) The words 'Outside Broadcast' or 'O.B.' refer to a broadcast outside the B.B.C. studios, not necessarily out-of-doors; e.g. a concert in the Queen's Hall or the commentary on the Derby are equally outside broadcasts.

(3) The B.B.C. organization consists, roughly speaking, of a Head Office and six provincial Regions—Midland Region, North Region, Scottish Region, West Region, Welsh Region, and Northern Ireland Region. The Head Office includes the administration of the National programmes, wherever they originate, and also the London Regional programmes. The provincial centres supply the bulk of the Regional programmes broadcast from their respective Regional transmitters, although there is a considerable interchange of material between the various Regional services. The words 'Region' or 'Regional' refer throughout the book to this system of organization.
BROADCASTS BY

KING GEORGE V

April 23, 1924  Opening of the Wembley Exhibition.
May 9, 1925    Re-opening of Wembley Exhibition.
April 21, 1927 Opening of the National Museum of Wales, Cardiff.
July 12, 1927  Opening of Kelvin Hall of Industries, Glasgow
July 19, 1927  Opening of Gladstone Docks, Liverpool.
July 10, 1928  Opening of Nottingham University College Buildings.
July 8, 1930   Opening of India House.
Nov. 12, 1930  The Round Table Conference, House of Lords.
July 10, 1931  Opening of the New Dock at Shieldhall, Govan, Glasgow.
July 18, 1931  Opening of King George Hospital, Ilford
Dec. 25, 1932  Christmas Message to the Empire from Sandringham.
June 12, 1933  Opening of World Economic Conference at the Geological Museum.
June 22, 1933  Opening of South Africa House *(Empire programme)*.
July 26, 1933  Opening of New Graving Dock, Southampton.
Dec. 25, 1933  Christmas Message to the Empire from Sandringham.
July 18, 1934  Opening of the Mersey Tunnel.
Sept. 26, 1934 Speech at the Launching of the ‘Cunarder 534’ and the Naming of the Ship Queen Mary by H.M. The Queen.
Dec. 25, 1934  Christmas Message to the Empire from Sandringham.
May 6, 1935   Speech from Buckingham Palace *(Jubilee Day)*.
May 9, 1935   Westminster Hall. Reply to Addresses presented by the Lord Chancellor on behalf of the House of Lords and by the Speaker on behalf of the House of Commons.
Dec. 25, 1935  Christmas Message to the Empire from Sandringham.
King George V opening the Five Power Naval Conference
(The First World Broadcast, 21 January 1930)
King George V and Queen Mary visiting Broadcasting House
(7 July 1932)
[ 12 ]
At the close of this memorable day I must speak to my people everywhere. Yet how can I express what is in my heart? As I passed this morning through cheering multitudes to and from St. Paul’s Cathedral, as I thought there of all that these twenty-five years have brought to me and to my country and my Empire, how could I fail to be most deeply moved? Words cannot express my thoughts and feelings. I can only say to you, my very dear people, that the Queen and I thank you from the depth of our hearts for all the loyalty and—may I say?—the love with which this day and always you have surrounded us. I dedicate myself anew to your service for the years that may still be given to me.

I look back on the past with thankfulness to God. My people and I have come through great trials and difficulties together. They are not over. In the midst of this day’s rejoicing I grieve to think of the numbers of my people who are still without work. We owe to them, and not least to those who are suffering from any form of disablement, all the sympathy and help that we can give. I hope that during this Jubilee Year all who can will do their utmost to find them work and bring them hope.

Other anxieties may be in store. But I am persuaded that with God’s help they may all be overcome, if we meet them with confidence, courage, and unity. So I look forward to the future with faith and hope.

It is to the young that the future belongs. I trust that through the Fund inaugurated by my dear son the Prince of Wales to commemorate this year many of them throughout this country may be helped in body, mind, and character to become useful citizens.

To the children I would like to send a special message. Let me say this to each of them whom my words may reach: the King is speaking to you. I ask you to remember that in days to come you will be the citizens of a great Empire. As you grow up always keep this thought before you.
and when the time comes be ready and proud to give to your country the service of your work, your mind, and your heart.

I have been greatly touched by all the greetings which have come to me to-day from my Dominions and Colonies, from India, and from this Home Country. My heart goes out to all who may be listening to me now wherever you may be—here at home in town or village, or in some far-off corner of the Empire, or it may be on the high seas.

Let me end my words to you with those which Queen Victoria used after her Diamond Jubilee, thirty-eight years ago. No words could more truly or simply express my own deep feeling now: 'From my heart I thank my beloved people. May God bless them.'
The Silver Jubilee Thanksgiving Service, St. Paul's Cathedral
King George V replying to Addresses presented by the Lords and Commons at Westminster Hall
I wish you all, my dear friends, a happy Christmas. I have been deeply touched by the greetings which in the last few minutes have reached me from all parts of the Empire. Let me in response send to each of you a greeting from myself. My words will be very simple but spoken from the heart on this family festival of Christmas.

The year that is passing—the twenty-fifth since my Accession—has been to me most memorable. It called forth a spontaneous offering of loyalty—and I may say of love—which the Queen and I can never forget. How could I fail to note in all the rejoicings not merely respect for the Throne but a warm and generous remembrance of the man himself who, may God help him, has been placed upon it.

It is this personal link between me and my people which I value more than I can say. It binds us together in all our common joys and sorrows, as when this year you showed your happiness in the marriage of my son, and your sympathy in the death of my beloved sister. I feel this link now as I speak to you. For I am thinking not so much of the Empire itself as of the individual men, women, and children who live within it, whether they are dwelling here at home or in some distant outpost of the Empire.

In Europe and many parts of the world anxieties surround us. It is good to think that our own family of peoples is at peace in itself and united in one desire to be at peace with other nations—the friend of all, the enemy of none. May the spirit of good will and mutual helpfulness grow and spread. Then it will bring not only the blessing of peace but a solution of the economic troubles which still beset us.

To those who are suffering or in distress, whether in this country or in any part of the Empire, I offer my deepest sympathy. But I would also give a Christmas message of hope and cheer. United by the bond of willing service, let us prove ourselves both strong to endure and resolute to overcome.

Once again as I close I send to you all, and not least to the children who may be listening to me, my truest Christmas wishes, and those of my dear wife, my children, and grandchildren who are with me to-day. I add a heartfelt prayer that, wherever you are, God may bless and keep you always.
'In some true sense the head of this great family'
(25 December 1934)
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Board of Governors

R. C. NORMAN (Chairman)
HAROLD G. BROWN (Vice-Chairman)
MRS. M. A. HAMILTON
THE RT. HON. H. A. L. FISHER, D.C.L., F.R.S.
CAROLINE, VISCOUNTESS BRIDGEMAN, D.B.E.

Director-General

SIR J. C. W. REITH, G.B.E., D.C.L., LL.D.

Deputy Director-General

VICE-ADmiral SIR C. D. CARPENDALE, C.B.

Controllers

SIR NOEL ASHBRIDGE, B.SC., M.I.E.E. (Engineering)
B. E. NICOLLS (Administration)
C. G. GRAVES, M.C. (Programmes)
SIR STEPHEN TALLENTS, K.C.M.G., C.B., C.B.E.
(Public Relations and Publications)
The late Viscount Bridgeman
By the death in August of Viscount Bridgeman, the Corporation lost its Chairman for the second time within a year. Viscount Bridgeman was seventy-one, but his robust general health seemed to give promise that he would for a number of years preside over the Board of Governors.

He came to the Chairmanship late in a life which had been spent in many exacting fields of public work. At Eton he had been an all-round man, winning distinctions alike in games and study, but never becoming submerged in his own achievements. The boy proved father to the man, and all through his varied life he was never lost in his offices or oppressed by them. He remained first and foremost a man, and his rich humanity made him well liked even by his political opponents and party rivals. He radiated a fundamental good nature, and because this was so inescapable, he could hit hard in controversy and leave no festering and embittering wounds. He did hit hard, for he cared deeply for much in the national life that he saw assailed and often overcome. But he was endowed with all the essential gifts that make a good colleague. He did not expect to have his own way in all matters. He could and did express himself in private with a delightful pungency, and he never forgot that peace towards men of good will involves war towards men of ill will. He hated what the late Lord Oxford once called 'a flabby and insipid geniality', for he had too much real good nature not to care intensely about what happened. But he had too good a sense of proportion not to recognize that other people, also, were entitled to contend for what they considered right, and when he lost after a hard fight he lost without rancour. He did not begin his parliamentary life until 1906, when he was past forty. His earlier experiences, as a private secretary and in smaller legislative bodies, had trained him in public affairs, but his start was slow and gave him plenty of scope for displaying, amid a number of disappointments, that philosophic imperturbability which never forsook him. His even temper and his steady judgment made him a man who was increasingly recognized as fit for very large responsibilities. He left each public position—he was Minister for Mines, Home Secretary, First Lord of the Admiralty—with his reputation the higher for his occupation of it, and when he went to the House of Lords in 1929 it was to continue to fulfil a succession of important tasks, notably the re-organization of the General Post Office. His public career is as good an example as could be asked for of the pre-eminence which attaches in English public life not to showy and spectacular endowments, but to the solid and homespun qualities: here was a man in whom the four Cardinal Virtues of prudence, justice, fortitude, and temperance were all pre-eminent and whose life was an increasing witness to the trust he inspired in his fellow men.
Toscanini rehearsing with the B.B.C. Symphony Orchestra
BRITISH
BROADCASTING IN 1935
INTRODUCTORY

An altogether novel instrument for creating unity of thought and emotion between scattered individuals has been evolved by broadcasting. Never before in history has it been possible to appeal simultaneously and orally to people divided in space and in mood and unaffected by the influences of crowd psychology. Yet it will be agreed that this truth, become trite, returned not only in its original clarity but with a grave and enhanced intensity on the night of the 20th of January, 1936. The record dealt with in this Annual closes on the 31st of December, 1935, and it therefore contains no account of the part that broadcasting played in assisting King George's own subjects, and those other hundreds of thousands in foreign countries whose respect and regard he had won, to participate in the last honours paid to a great King. Yet since, in the year dealt with, this same power of broadcasting to unite people with King and with each other had been twice displayed—at the Silver Jubilee and on Christmas Day—and as King George V's last public utterance was his Christmas broadcast to the Empire, it is fitting to be said here, and it will not be misunderstood, that the solemn evening of January 20th, while it dimmed the remembrance of the happier events, brought up afresh their inward meaning.

To the Crown the Corporation tenders its allegiance. To His present Majesty, King Edward VIII, its Governors and personnel would respectfully offer their tribute. He has shown his appreciation of the value of broadcasting in the scheme of society, and his personal qualities as a broadcaster have already been abundantly proved.

* * *

Quietly, behind the peaks and levels of the daily programmes, the constitution and organization of British broadcasting has been subjected during the year to the searching examination of the Committee presided over by Lord Ullswater, who, as Mr. Speaker Lowther, was Mr. Whitley's predecessor in the Chair of the House of Commons. Exhaustive evidence was taken both from the Corporation and from the many interests—artistic, political, and other—that now affect and are affected by broadcasting. Various partial and unconvincing forecasts of its conclusions have appeared from time to time in the Press, and it was hoped that the long awaited document would be available in time for a summary to appear in these pages. Unfortunately the date of going to Press has precluded this, although it is possible that the Ullswater Report may be in the hands of the public as soon as, or sooner than, the Annual. Another important committee, concerned with the future of Television and presided over by Lord Selsdon, concluded its labours in the Spring. An account of its work and conclusions will be found elsewhere. Here it will suffice to say that its recommendations, as implemented by the Government, imposed a new and heavy responsibility upon the Corporation, which is entrusted with the development of a public television service that in its earlier years must combine the energy of an experimental service plunging into the unknown with the caution imposed by the fact that—unlike sound broadcasting at the corresponding stage—television is exceedingly costly, alike in programme production, in transmission, and in reception.

From the point of view of internal administration, the year has witnessed the development of a general reorganization initiated two years before, of which the central feature is the separation, from top to bottom of the hierarchy, of the functions broadly called 'creative' from those of an administrative and executive character. This
also is dealt with in another part of the Annual.

In the autumn of 1935 came the appointment of a special officer to deal with Regional relations as such, and some account may appropriately be given here of these relations. Broadly, they are of two sorts—the business relation between a co-ordinating centre and the outlying members of a system, and the cultural and economic relation of the various places scattered about the country from which programmes emanate. There is a wide difference between these two sides of the duties of the new Regional Officer. Centralization on the business side is to a large extent inevitable and desirable. It is in harmony with the common trend towards rationalization as an aid to business efficiency. Two reasons make this process necessary in the case of broadcasting. First, economy is plainly desirable in the getting of full programme and technical value from given resources (which are never excessive), and secondly, wavelengths (as explained elsewhere) are severely restricted in number.

Once, however, these reasons of organization have been allowed for, there still remains ample scope for diversity and individuality of programmes between the Regions. Some gloomy prophets have in recent years foretold the flattening-out of regional characteristics under the steam roller of London tastes and London ideas. All manner of arguments, from the decay of dialect to the southward trend of industry, have been mobilized in defence of this dismal line of thought. It would be a poor thing for all citizens, on whichever side of the Trent or Tweed, or Welsh Border or Irish Channel they may have their homes, if they lost their regional individualism.

Happily, despite all warring forces, local life in the fullest sense of the word still flourishes up and down these islands. The old parrot cry that culture cannot breathe a day's march north of Charing Cross has never been more than a cheap gibe. The Corporation aims through its network of Regional Stations at reflecting local life and local loyalties, and at strengthening associations and traditions which have their roots in the soil and history of our native countryside. This policy is based upon the simple, realistic view that man's imagination works primarily on its environment and within its opportunities; and that his interests are associated with the people and events in his home town or district. It does not, of course, preclude concern with national and international affairs, nor appreciation of the harvest of talent and performance which the Corporation can provide from other sources. It merely satisfies a complementary need.

Technical limitations, unfortunately, prevent nation-wide appreciation of the variety of output through which the Regions, each in its own way, express themselves. But it is to be hoped that this state of things is transitory, that the cultural interpenetration of Region and Region will become possible; that listeners in the West will become acquainted with the characteristics of the North, and Scotland with the voice of Wales. For it is the special privilege of broadcasting to attempt to achieve, through its quality of transcending space, such a general interchange of experience and sympathy.

Over and above this, regional broadcasting attempts a service of a different kind, namely to enrich national life as a whole by the maintenance of activities which, without the aid of broadcasting, might, perhaps, either disappear or never even see the light of day. Obviously, talent and personality may and do arise in any part of the country. There is no single seed-bed. Everything must, therefore, be done to make sure that talent finds a kindly soil wherever it may chance to take root. It would, for instance, be disastrous for the musical talent of Britain if any of the great cities outside London grew unaccustomed to performances of the highest quality. It is for this reason that B.B.C. regional orchestras have been created in Birmingham and Manchester, in Edinburgh and elsewhere on a special basis of co-operation with the local societies and that the musical life of these and other centres is supplemented and sustained in all practicable ways. The same is true of other programme categories.

How far regional listeners are as yet generally aware of the efforts made by the B.B.C. to employ and foster the characteristic resources of each part of the country, is hard to say. In each appropriate place on the following pages some account will be found of the services provided on Regional wavelengths during the past year. But if a groundwork only has been planned, and if existing
VISCOUNT ULLSWATER
Chairman of the B.B.C. Inquiry Committee

conditions limit achievement, the purpose to achieve is firmly set. As immediate evidences of it may be quoted the strengthening of the position in Northern Ireland and the separation of the old 'West Region' into two, 'Welsh' and 'West of England', through which each of these three becomes as distinctive a constituent of British Broadcasting as history has made it of the British Nation.

* * *

In the programme field 1935 has been a vivid and vigorous year. Broadcasting has played its part in the recording of events,
in enabling a scattered Empire to share with vast crowds in and out of London the pageantry and the emotion of a Silver Jubilee; it has enabled a nation to hear the views and pledges of its politicians before voting in a General Election; it has reported with as much accuracy and as little sensationalism as possible the progress of a major international crisis; and it has made its own contribution to entertainment and education by providing a constant stream of programmes of all kinds. The general success and failure of these programmes, the confirmation or modification of the theories upon which they rest are to be analysed in the pages which follow. Here we are concerned with the general programme policy which embraces and conditions the individual programmes. Two points emerge which seem to deserve special consideration.

If it is true to say that broadcasting touches the life of the modern community at most points, it is obviously true that a Broadcasting Corporation must attempt to fulfil the needs of men and women of widely varying tastes and requirements. The musician is called upon to remember those who are physically or spiritually deaf to music before he assesses broadcasting as a whole. The intellectual will ignore the true nature of the problem if he fails to attach great importance to the provision of straightforward recreation and entertainment to millions whose tastes are more simple than his own. The B.B.C. tries to ensure that each programme shall be good of its kind, and it earnestly invites responsible criticism—both technical analysis of individual programmes and the guidance of those who will look beyond the individual programme to its place in broadcasting as a whole, bearing in mind that it is the general conception of the purpose and quality of broadcasting, and not the sum of broadcast programmes at a given moment, which determines whether and in what direction it is to progress.

Secondly it is desirable to emphasize once more the essential part played in broadcasting by the individual listener. From time to time it is pointed out that broadcast programmes could be made better if there were fewer of them. This is true in the abstract, but it represents an ideal which is unrealizable if broadcasting is to serve a large modern community. Broadcasting must and will struggle continually to offer to its listeners the great works of art performed by the great artists of the day, but it must serve listeners and groups of listeners of different tastes, different social backgrounds and domestic habits, listeners who can only listen attentively at certain times or on certain days. Its programmes, then, are bound to be catholic and numerous and spread over many hours of every day, and the conception of broadcasting as an eclectic activity is one which can only find support among leisured people, for whom, incidentally, broadcasting is not the necessity it has become for the great majority. Absent-minded or half-attentive listening, and the translation of programmes into an almost endless stream of noise, not only prevent the growth of a listening art; they discourage also the arts of good broadcasting. But this is a problem whose solution depends, in reality, on the listener and not on the B.B.C. The B.B.C. provides a service of which intelligent or stupid use can be made, and it is for each listener to use or abuse it.

If members of the intelligent public will give the B.B.C. the assistance of their informed criticism, and their help in making known the destructiveness of indiscriminate listening, the efforts of the B.B.C. to devise and maintain a programme policy of which they will approve will have an infinitely greater chance of success.

* * *

In the following pages the activities, national and regional, of the year 1935 are dealt with under the main headings of:

- Programmes
- Organization
- Finance
- Engineering
- Public and Foreign Relations
- The Empire Service
- Television

Of the ‘Home’ Service
MUSIC

It has long been recognized that the backbone of a comprehensive policy of music-giving must be an adequate orchestral establishment. The most important step, therefore, ever taken by the Corporation for the consolidation and extension of its musical programme policy was the formation in 1930 of its Symphony Orchestra of 119 players. The principle of its organization, by which it may play as a single unit or be sub-divided into self-contained orchestras of varying sizes, so that it is able to cover the widest range of music, is familiar to most listeners. The orchestra and its sections provide upward of 400 programmes during the year, and inasmuch as few choral, operatic, or contemporary music activities can dispense with its aid, there is justification for considering the orchestral side of the work first in this annual review.

The third London Music Festival, in the Spring of 1935, was an historic occasion, not only for the B.B.C. Symphony Orchestra but also for British music as a whole, for in it Toscanini, everywhere acknowledged the foremost conductor of our time, directed the Orchestra in four concerts in Queen’s Hall. This was the first time Toscanini had ever directed an English orchestra; and it is gratifying to be able to record that he was very happy with it. The remainder of the eight Festival concerts were shared by Serge Koussevitzky, who repeated his success of two years earlier, and Adrian Boult.

The other public appearances of the orchestra included twelve Symphony Concerts occurring in the normal ‘Series’, in Queen’s Hall, under Felix Weingartner, Sir Henry Wood, Sir Hamilton Harty, Albert Coates, and Adrian Boult. On March 12th the Orchestra made its first appearance abroad under its conductor, Adrian Boult, at Brussels, including two British works in its programme; the concert was relayed to British listeners. Its reception was such that it intimately links it with the City of Birmingham Orchestra (see 1935 Annual, page 54). Many of the important concerts of the latter Orchestra, and of leading instrumental and choral societies in the region, were broadcast. An outstanding feature was the first provincial performance of the Walton Symphony by the City of Birmingham Orchestra.

In the West, a great effort has been made to develop outlying and hitherto untapped musical sources. A great deal of Cornish musical material, for example, has been used this year by arranging concerts at a central point, namely the Foster Hall, Bodmin. Use has been made of local choral activities, varying from large town choral societies to small but effective bodies like the Looe Fishermen’s Choir.

In the Welsh programmes, a large percentage of hours was devoted to music, and the visit of the B.B.C. Symphony Orchestra to Swansea on October 31st created great enthusiasm in South Wales. This year has introduced the formation here of yet another B.B.C. Regional Orchestra. Concerts given by the London Symphony Orchestra at the National Eisteddfod were also broadcast.

In the Scottish Region the most important development has been the appointment of a B.B.C. Scottish Orchestra comprising 35 carefully selected players. Research work into little-known or entirely forgotten Scottish music has been undertaken by H. M. Willsher of Dundee, while Ian White, Music Director, arranged the results of it for presentation at the microphone by a choir and small orchestra. The Music Department, as in previous years, has drawn freely on outside resources such as the Scottish Orchestra, the Reid Symphony Orchestra, the Glasgow Orpheus and other choirs.

The North Regional programme during the winter and autumn seasons of 1935 has included regular broadcasts of symphony concerts provided by the Hallé, Liverpool Philharmonic, Leeds Symphony (now Northern Philharmonic) Orchestras and other bodies. These concerts have been conducted by famous conductors such as Carl Schuricht, George Szell, Nikolai Malko, Vincenzo Bellezza, Sir Thomas Beecham, Sir Henry Wood, and Sir Hamilton Harty, while the soloists have included artists of international
repute such as Elena Gerhardt, Egon Petri, and Emmanuel Feuerrnann.

The B.B.C. Northern Orchestra (for which reference should again be made to last year's Annual) has been responsible for various feature concerts, notably those covered by the 'Contemporary Composers of the North' series, while in the autumn was started a series of 'Musical Oddities'. On May 12th the Orchestra co-operated with the Leeds University Music Society in performing Purcell's 'Yorkshire Feast Song'—the first performance of this great work in perhaps a hundred years. Mention must also be made of the 'Anatomy of Music' recitals in which works by great composers have been discussed phrase by phrase, with gramophone illustrations by Professor F. H. Shera and Dr. J. E. Wallace.

In Scotland and at Cardiff the small Studio Orchestras have been replaced by larger organizations, the B.B.C. Scottish Orchestra, and the B.B.C. Welsh Orchestra of 35 and 21 players respectively. In addition small augmentations were made in some other B.B.C. Orchestras.

During the year 1935 the musical policy adopted in Northern Ireland of holding a certain number of popular orchestral concerts in public halls, and at the same time having a regular series of musical programmes—symphonic, light classical, musical comedy, and so forth—in the studios, was maintained as in the past few years. At the same time a number of important musical events in the Province were broadcast, including concerts given by the Belfast Philharmonic Society, and Musical Festivals. Godfrey Brown, Music Director, was in charge of the large majority of these concerts, both public and private, but several distinguished musicians from other parts of the British Isles were invited to conduct the orchestra, among whom may be mentioned Sir Hamilton Harty, Sir Donald Tovey, Roger Quilter, and Colonel Fritz Brase. The musical season was also noteworthy for the first visit to Northern Ireland of Alexander Kipnis, the world-famous bass singer, and the pianoforte recital by Johanne Stockmarr on November 1st. The year was fittingly brought to a close by the broadcast of Handel's 'Messiah' performed by the Belfast Philharmonic Society in the Ulster Hall, which was filled to capacity.

As far as public concerts were concerned, there has been a gratifying response on the part of the musical public in the Province, and although on some occasions the audiences might have been larger, the attendances gradually increased and the average was satisfactory, justifying the belief that the musical policy in the Region was on sound lines.

At the end of the year the Corporation maintained the following:

**LONDON:**
- B.B.C. Symphony Orchestra 119 players
- B.B.C. Theatre Orchestra see pages 45 and 46.
- B.B.C. Variety Orchestra
- B.B.C. Dance Orchestra
- B.B.C. Empire Orchestra 22 players
- B.B.C. Military Band 37 players
- B.B.C. Choral Society 250 voices
- B.B.C. Singers 'A' and 'B' 16 voices

**BELFAST:**
- B.B.C. Northern Ireland Orchestra 35 players

**BIRMINGHAM:**
- B.B.C. Midland Orchestra 35 players

**EDINBURGH:**
- B.B.C. Scottish Orchestra 35 players

**MANCHESTER:**
- B.B.C. Northern Orchestra 35 players

**CARDIFF:**
- B.B.C. Welsh Orchestra 20 players

**The B.B.C. and the Composer**

The autumn of 1935 has seen the Corporation entering on its tenth successive season of Contemporary Concerts, and a reference to them, and to its policy in general towards the living composer, is appropriate. With changing social conditions the serious composer has found himself, especially in this country, with few opportunities of practical encouragement. The International Society for Contemporary Music (formed in 1922), with its annual festivals of new music and its non-political organization, has done splendid work, and the B.B.C. has actively collaborated with it on many occasions, as when the Festival came to London four years ago. But
the Corporation itself has always opened its doors to composers of any pretensions, and the manuscripts considered by its panel of readers annually number several hundreds. Similarly all published works, British and foreign, of any consequence, reach Broadcasting House, and the Corporation's representatives visit all important festivals, the Patron's Fund performances of the Royal College of Music, London, etc., in order to preserve this comprehensive view of contemporary musical activity. In one way and another accommodation is found for interesting works which cannot readily find performance elsewhere, whether because of their experimental nature or because their composers have yet to establish their reputations. But the listener is nowadays much more ready to accept new music in his general programmes than formerly, thanks partly to the general advance in musical culture in the country and partly to the passing of the hectic post-War period, with its startling musical manifestations, and the establishment of a British school of composition which is steadily gaining international recognition. Thus, such works as the new Symphonies of Vaughan Williams and Walton, the String Suite of Bliss, and the Choral Work of Constant Lambert scheduled for January 1936 are now placed appropriately and without question in the Queen's Hall Concerts. By the application of the policy of repetition, devised in the interests both of the composer's music and of the listener, such music reappears within a reasonable period in the Sunday Evening Symphony Concerts and passes ultimately into the general orchestral and choral repertoire.

Turning to the great music of the past, the Corporation has this year joined in celebrating the tercentenary of John Sebastian Bach, Handel, and Domenico Scarlatti.
Brangwyn Hall, Swansea, at which a Concert was given by the B.B.C. Symphony Orchestra

(31 October 1935)
Bach’s B Minor Mass opened the London Music Festival in May; Handel’s ‘Messiah’ was given complete and with its original instrumentation, as suggested by research at the Foundling Hospital; ‘Acis and Galatea’ and other works comprised a Queen’s Hall Concert on February 20th; the unknown ballet ‘Terpsichore’ was revived, and the opera ‘Perseus and Andromeda’ received its first recorded performance in history. The ‘Foundations of Music’ programmes served to present much delightful unknown music by Handel and Scarlatti, to the provision of which the collaboration of Professor E. J. Dent happily contributed. Seventy superb examples of Elizabethan madrigal written by Peter Philips, discovered recently by Sir Richard Terry, were broadcast over two weeks of ‘Foundations’ under his personal direction.

As usual, a considerable amount of opera has been relayed from theatres in London and the Provinces, notably from the International Season at Covent Garden in the Spring, when the experiment of devoting a complete evening’s listening to one opera—Rossini’s ‘La Cenerentola’—as is often done on the Continent, was tried.

The B.B.C. has further collaborated with the Brass Band movement, both by the broadcasting of the winning bands of its principal national festivals, and by introducing a general policy of giving regular broadcasts by the best bands. By encouraging better original and other light music, and the standard of performance already realized by such pioneers as Callender’s in the South, Munn & Felton’s in the Midlands, and several famous bands in the North and in Scotland, the Corporation hopes to assist the whole movement. The regular broadcasting of Military Band music, both by its own organization and by Service bands, has continued as formerly.

As yet nothing has been said of the Promenade Concerts, which continued under Sir Henry J. Wood at Queen’s Hall throughout August and September with unabated support from the public, while the programmes themselves, assisted by the general repertoire-building policy of repetition, to which reference has been made earlier, were probably the most interesting since the beginning of these concerts forty-one years ago. The more recently instituted fortnight of ‘Winter Proms’ in January catered for those who are anxious to take advantage of such concerts in the Christmas holiday period.

The Corporation continued to co-operate with other concert-giving organizations. These included the Royal Philharmonic Society, the London Symphony Orchestra, the Hallé Society, the City of Birmingham Orchestra, the Belfast Philharmonic Society, the Liverpool and Leeds Philharmonic Societies, the Scottish Orchestra, the Choral and Orchestral Union of Glasgow, the Reid Symphony Orchestra in Edinburgh, the National Eisteddfod of Wales, the Three Valleys Festival, the Canterbury Music Festival, and others. In addition, concerts by the Czech Philharmonic Orchestra and the Vienna Philharmonic Orchestra were broadcast; and this review may appropriately close with an acknowledgment of the assistance the Corporation receives from its Programme Advisory Panel in London, which affords it an increasingly inspiring contact with the outside world of professional music.
‘Hassan’
(11 and 12 July 1935)

[ 34 ]
While there has been nothing particularly revolutionary in the development of radio drama in 1935, the year has nevertheless been one of considerable interest and even advance, particularly as far as material is concerned. With regard to this material, a certain amount of criticism has lately been launched to the effect that the radio dramatist pure and simple is insufficiently encouraged, and that the dramatic schedules have tended to include too many adaptations of pieces purely theatrical. The comparative absence of original radio work is, of course, to be deplored; at the same time, it is clearly impossible for it to be created synthetically. While the absence of any representative work from L. du Garde Peach and Tyrone Guthrie is regrettable, there have nevertheless been one or two discoveries made—notably that of Horton Giddy, whose ‘In the Shadow’ and ‘Congo Landing’ are admirable examples of the short and competently written radio play. Norman Edwards followed up the success of ‘Quarrel Island’ with ‘The Mystery of the Temple’; Philip Wade enhanced with ‘Wedding Group’ a reputation previously made with ‘Oranges and Lemons’, and Francis Dillon’s adaptations of Hans Andersen’s stories ‘The Nightingale’ and ‘The Snow Queen’ were such remarkable examples of technical radio skill that they come far nearer the category of original work than that of adaptation in the normal sense of the word. But on the whole it is true to say that most dramatic work of the year came from material basically theatrical. For the first time Somerset Maugham was represented, with two plays, ‘The Breadwinner’ and ‘The Circle’, and other authors whose work was broadcast during the twelve months included Bernard Shaw, Tchehov, Schnitzler, R. C. Sherriff (with ‘Badger’s Green’ which achieved on the air a success that circumstances denied it on the stage), Masefield, Flecker (with ‘Hassan’, performed for the first time in its entirety in a single evening, and by its success disproving to some extent the hypothesis that plays must be limited to an arbitrarily agreed length), Priestley, Edgar Wallace, ‘Sapper’, Clemence Dane, and Walter Hackett.

Adaptations from stories and films included ‘The Purple Pileus’, by Wells, ‘Goodbye, Mr. Chips’, by James Hilton, and ‘Charlemagne’; by Mirande, though neither the latter nor the adaptation of the Gaumont-British film ‘Friday, the Thirteenth’ can be considered as altogether satisfactory.


A new feature of the year was the series of fortnightly excerpts ‘From the London Theatre’. This was introduced partly to give radio-dramatic work a certain topicality, partly to enable distinguished artists, who in normal circumstances were almost barred to the microphone by other commitments, to be made known to the listening audience, and partly to improve liaison between the B.B.C. and the theatrical profession as a whole. The series included excerpts from such successes as ‘The Shining Hour’, ‘The Dominant Sex’, ‘The Wind and the Rain’, ‘Night Must Fall’, ‘Love on the Dole’, and ‘The Inside Stand’, and, further, included foreign actors of the standing and reputation of Sacha Guitry and Maurice Schwartz.


The Famous Trials Series was continued, those represented being Dame Alice Lisle, William Penn, and Madeleine Smith. Of these three, the last, ably adapted and handled by the Scottish Region, was certainly the best.

As far as production methods have been concerned, there has been a definite and valuable tendency towards general simplification, and there is no longer any belief
in the use of complicated studio grouping and panel work for their own sake; it has been proved that for most radio plays the energies of the producer should probably be concentrated more upon his actors, their intonations and their timing than upon what may be considered any radio equivalent of montage in films. Changes in technical production methods may result from the introduction of the highly sensitive 'ribbon' microphone; in any radio work, underacting is the rule, and the necessity and indeed inevitability thereof cannot but be finally confirmed by this technical advance.

Most of the better-known members of the English theatrical profession have faced the microphone at one time or another during the year, but perhaps the outstanding microphone performance was that given by Edna Best in her first appearance in the studio in 'A Bill of Divorcement', a remarkably successful play in which, besides Miss Best, two other new-comers to broadcast drama—Martin Lewis and Doris Lytton—played important parts. In spite of certain opinions to the contrary, there can be little doubt that the stage actor of ability is, and will remain, the backbone of the broadcast play. Fay Compton, Carol Goodner, Joyce Kennedy, Sophie Stewart, Thea Holme, Godfrey Tearle, Malcolm Keen, Ronald Squire, Austin Trevor, Ion Swinley, Leon Quartermaine, and Lewis Casson, to mention only a few, have all in the course of 1935 done microphone work in every way worthy of their theatrical reputations.

Midland radio drama included Sunday plays from the Repertory Companies in the Region—first as relays, but later as studio productions—a notable relay of the whole of '1066 and All That' from the Malvern Festival, and studio reconstructions of Midland legend and history—as in a dramatization of Scott's 'Kenilworth' and a dialect play written by a Black Country author on a Black Country subject and acted by amateurs from that district. Midland associations with the escape of Charles II after Worcester and the Gunpowder Plot were also treated in drama.

Studio plays in Northern Ireland, though reduced in number, contained some work of outstanding authors, such as representative pieces by George Shiels, T. C. Murray, Richard Rowley, Lennox Robinson, St. John Ervine, and others. The tendency to confuse the studio with the stage still persists in the work of most authors who submitted plays. Outstanding feature programmes of the year included 'St. Patrick's Day', an experimental programme in co-operation with Scotland, built around Larne and Stranraer, a programme in connexion with the inauguration of the automatic telephone service in Belfast, and a dramatization of the visits of literary celebrities to Belfast under the title 'Visitors' Book'.

The North Regional dramatic output has included a fair proportion of dialect plays, but the emphasis has been laid on the play rather than on the dialect—a policy which has tended, perhaps, to restrict the supply of suitable material and so a contributory cause for the starting, towards the end of the year, of a series of revivals of Lancashire 'classics' by such authors as James Gregson and Harold Brighouse. An experiment was made in the inclusion of a series of short Sunday performances by members of Northern Repertory companies, broadcast from the regional studios and presented somewhat on the lines of 'From the London Theatre'. In the field of documentary reconstruction should be mentioned D. G. Bridson's 'William Cobbett' and 'The Death of Bede', Michael Reynolds's 'Famine in Lancashire' and 'Peterloo', and A. R. Parker and G. H. Dayne's reconstruction of the history of the Chester Cup Race. Perhaps the year's most significant development has been in the realm of actuality, in particular the 'Harry Hopeful' programmes, which have not only brought to the microphone peasants from remote northern districts, but aimed at imparting to actuality material the rhythm and quality of good studio work.

The peak of Scottish dramatic work during the year was the festival in October, when six of the best plays broadcast over a period of years were presented. Outstanding among innovations was Madeleine Smith's trial, alluded to above. On Sunday the 15th December was broadcast the tragedy 'Douglas' by the Rev. John Home, the play which, when originally staged in Edinburgh in 1756, aroused an almost fantastic intensity of passion. Various anniversary dates gave occasion for programmes
Edna Best in 'A Bill of Divorcement'
(2 and 4 December 1935)
dealing with the lives of eminent Scotsmen—Burns, Livingstone, Andrew Carnegie, James Hogg; and the Scottish contribution to the special Jubilee programmes was 'The Line of Kings', constructed to show King George V's descent from the old Kings of Scots. A St. Andrew's Day programme was broadcast on the 30th November.

In the West, a great deal of field work has been done by auditions to form panels of actors in different parts of the Region speaking the authentic dialect of their part. There has been an extension of the policy of presenting the works of well-known local dramatists like Eden Phillpotts, and an increase in the number of famous West Country novels which have been adapted for broadcasting and produced; Blackmore's 'Lorna Doone' is a good example. It has been found in several cases that it has not been possible to produce these in one period, but production in two periods, though undertaken with some misgivings, has proved satisfactory.

The Welsh Region broadcasts English plays of Welsh interest, as well as plays in the Welsh language, but perhaps the outstanding point of interest is the influence of the pioneer work that is being done in Welsh drama. While the conventional dramatic play is still the usual type to be found on the Welsh stage, radio drama has set itself to put on plays of wider outlook and greater variety—religious plays, dramatizations of history and legend, a thriller, a poetic Eastern drama, plays of the supernatural, and straight plays with a foreign setting.
CHILDREN’S HOUR

It was explained in last year’s Annual (page 68) that considerable changes had recently been made in the Children’s Hour, including the creation of Regional Hours. The present issue will, therefore, deal briefly with these, as well as with the London Hour.

Another change of 1933-34 was in the character of the programmes. In former years, these had been somewhat on the lines of a ‘Now children, what shall we do next?’ affair—almost a party aimed at children, but conducted under adult supervision. The present policy is to endeavour to widen the scope of the programme, so far as is compatible with the varying ages and tastes of the younger listeners, and yet not overlook the quite considerable group of children who revel in adventure plays or Mickey Mouse.

In January 1935, an interesting experiment was begun which, as considerable correspondence has proved, was successful. This was a series of word pictures emanating from the more important European capitals. These talks were in no sense a combination of history and geography lessons, but just straightforward talks about the capital concerned. In each case, broadcasters of the nationality in question, able to speak fairly good English, talked about life in general in the capital which was his or her home. Politics did not enter into the scheme, and the descriptions and comparisons concerned such things as recreations; policemen and their uniforms; traffic, schools, lessons, and vacations; streets, important buildings, bridges, and rivers. The main idea behind these broadcasts was to stimulate a friendly interest in the countries of other children. In this way, the Children’s Hour listeners toured Paris, Vienna, The Hague, Oslo, Budapest, Warsaw, and other capitals.

The semi-instructive entertaining talk is highly popular, and among the broadcasters in specialized subjects, who are now firmly established, were Commander Stephen King-Hall, David Seth-Smith (‘The Zoo Man’), and Commander R. T. Gould (‘The Star Gazer’). ‘Zoo’ subjects, it may be mentioned here, have figured in several of the Regional Hours also.

In plays, those of the adventure or historical type are most appreciated, the most successful being the serial ‘The Children of the Sun’, an adventure written by Franklyn Kelsey, whose plays were mentioned in last year’s issue. Mention must also be made of the widely appreciated ‘Toy Town Dialogue’ stories.

The choice of music in the light of young listeners’ reaction to it is still a problem, though many experiments have been tried. Moderate success has been achieved by gramophone recitals composed of various types of music and song—such as (to quote an instance) a pot-pouri of Elisabeth Schumann’s songs, Silly Symphony records, polka from ‘Schwanda’ and ‘The Teddy Bear’s Picnic’. Interest was stimulated also by the inclusion of interludes and incidental musical records in plays, and notably in serial plays, during which a ‘signature’ and like repetitions become familiar.

Turning now to the Regional Hours, most of what has been said above about the different genres of programme matter applies to these also; here, therefore, it suffices to mention a few special features.

Midland Region presented contributions by boys and girls in groups, and a series ‘Did you know about this?’ on Midland fairs and customs. North Region is similarly developing its resources in child artists. Noteworthy features in its programmes were the ‘Country Walks’ series by ‘Romany’; the plays, particularly historical; and the programmes for the ‘Tinies’ of three years of age and upward. In Scotland, outstanding programmes included ‘The Talk of the Tongues’, presenting to the children the dialects of three different parts of the country, feature programmes of older and contemporary history, and some thrillers. Northern Ireland has appreciated the ‘Animals’ Flying Squad’ and the group of schoolboys designated ‘Maggots & Co.’, besides broadcasts from and about the interesting spots of Ulster. In Wales and the West, the year has been one of reorganization in this as in other branches of programme activity; it must suffice to remark of these Regional Hours that the separation of the two regions has enabled each to give more appropriate service, both as to content and as to organization, to its own children. Indeed, not only here but elsewhere, regional character is the particular quality that it is sought to
bring into the programmes, since it is, in fact, their raison d'être. But the Regional Hours have, nevertheless, their place in the National scheme, in that last year's experiment of a rota has become normal practice, each Region taking its turn in providing a programme for the rest on Saturdays.

Contact with the young listeners themselves has always in one form or another been an outstanding feature in Children's Hour programme work. This year's competitions have evoked an unmistakably increased interest, and the correspondence, through which so personal a touch is maintained with the children and their likes and dislikes, continues to be voluminous; in the case of London 'request' week votes vary from 50,000 to 60,000.

Finally must be mentioned the quarterly charitable 'Appeals', with which appropriate programmes (such as an outside broadcast from a hospital ward) are often associated. These too are useful forms of contact and measures of the interest taken by the children in their 'Hours'. But they have a deeper value to the community which it would be superfluous to labour here.
With all other departments of the B.B.C., Variety shared in the Silver Jubilee celebrations. Its share consisted of three musical comedy productions, five special ‘Music Hall’ programmes, two ‘Gala’ programmes by international stars, and a Jubilee version of ‘Songs from the Shows’.

The musical plays chosen for Jubilee production were all British. The pre-War theatre was represented by ‘The Geisha’—perhaps the most famous English operetta of its day and more often played on the Continent than even Gilbert and Sullivan. To the radio version of this, a spoken foreword was contributed by Marie Tempest, whose great stage career began with that very play. Noel Coward’s ‘Bitter Sweet’ was chosen as representative of post-War musical comedy. A cast of stars, including Evelyn Laye and Norah Howard, took part in the play, which ran for two hours, with a musical interlude for the interval—the longest and most elaborate musical play production yet attempted by microphone. The third play production, ‘The Music of Men’s Lives’, was specially written for the microphone and the occasion by Compton Mackenzie. It traced the life stories of an actor and an actress through the years of the King’s reign, introducing en route much music of the times. The author’s sister, Fay Compton, played the leading part. Finally, the ‘Music Hall’ and ‘Gala’ programmes during May, June, and July brought a number of international stage and music hall figures to the British microphone for the first time—among them George Robey, Gitta Alpar, Maurice Chevalier, Noel Coward, Erna Sack, Larry Adler, Charlotte Greenwood, the Street Singer, and Anna May Wong.

Programmes controlled by the department increased from 61 (44 hours) per month in January 1935 to 87 (59 hours) per month for January 1936, these figures not including studio dance music or dance music broadcast from outside the studio, the control of which was transferred to the Variety Department in October 1935, following a re-organization of outside broadcasting in general. The contrast of these figures with those for January 1933, viz., 28 programmes (29 hours) per month, indicates the two tendencies of recent years, the increased all-over time allotted to lighter programmes and the shortening of the individual programme.

The policy of adapting popular musical successes for broadcasting was continued during 1935. Besides ‘The Geisha’ and ‘Bitter Sweet’, ‘Véronique’, ‘The Cat and the Fiddle’, ‘Countess Maritza’, ‘The Desert Song’, ‘The Dairy Maids’, ‘Hit the Deck!’ and ‘The Chocolate Soldier’ were heard by listeners for the first time, and there was a revival of ‘A Waltz Dream’.

Several authors, notably Gordon McConnel and Henrik Ege, have specialized in the difficult art of compressing a 150-minute theatre show within the 75-minute limits of broadcasting, simplifying the action and reducing the number of speaking parts while doing so, the accepted formula for these adaptations being 50 minutes of music to 25 minutes of dialogue. This work of adaptation has been proceeding steadily for three years, with the result that there is now a repertory of more than fifty popular musical plays which can be revived at any time. This type of programme draws most response from older listeners who have leisure to listen carefully and remember the original theatre productions of the plays, but the general appeal is believed to be good.

Side by side with theatre-adaptations went a number of operettas that were specially contrived for broadcasting. Radio’s leading operetta ‘team’, James Dyrenforth and Kenneth Leslie-Smith, produced only one new play during the year, ‘Inquest on Columbine’, an operetta version of Compton Mackenzie’s famous novel ‘Carnival’ that was almost operatic in that it was sung throughout. ‘Love Needs a Waltz’ and ‘Puritan Lullaby’, by the same authors were revived during the year. C. Denis Freeman and Mark Lubbock were responsible for ‘Week-End Return’, ‘For a Twelve-month and a Day’, and a revival of ‘The Castle on the Hill’. Ashley Sterne wrote ‘Zoo-oliday’ as a vehicle for Elsie and Doris Waters. Henrik Ege wrote ‘The Silver Spoon’, Herbert and Eleanor Farjeon ‘The Wrong Bouquet’, and Peter Mendoza ‘A Marriage has been Arranged’.

Perhaps the most significant departure in musical plays was two productions by
Evelyn Laye in 'Bitter Sweet'
(31 May 1935)
John Watt and Harry Pepper, entitled 'It Seems only Yesterday' and 'It Was in the Papers'. These were purely 'radioge~c' in technique, the greater part of the story being told by an informal narrator with occasional lapses into dialogue-scenes. This treatment was most effective in that it lent an interest and a realism which are not usually associated with musical comedy. There is probably a great future for this combination of the arts of the dramatist and the storyteller.

Though in no sense a 'musical play', Sydney Horler's Secret Service thriller, 'The Mystery of the Seven Cafés', should be mentioned next. The 'mystery' was broadcast fortnightly in a prologue and seven episodes. The fact that each episode was set in a café in a different European capital enabled the producer to introduce popular music as a background. This experiment in serialization was followed up later in the year by the introduction of a serial thriller into 'The Saturday Magazine'.

The last-named was an amplification of 'In Town To-night'. The latter programme (which reached almost its eightieth edition by the end of the year) became thus the final and most important feature in a mixed programme, including an outside-broadcast visit to some place of interest and amusement, a serial story ('The Crimson Orchid' and 'Death on the Range' were the first of these) and a burlesque news of the week. Some listeners have deplored the embodiment of 'In Town To-night' in a larger programme, but there can be no real doubt that this lent new life and interest to a feature which was tending to become a little too familiar.

As far as vaudeville is concerned, very little, too little, that was new happened during the year. Vaudeville remains the most pressing problem of broadcasting. It depends essentially upon the supply of outstanding personalities, which radio must either create for itself or borrow from the music halls. Several new 'stars' were discovered through both sources, but the search for talent, and the 'grooming' of it when found, must continue strenuously if vaudeville, always the most popular of light entertainment features, is not to languish. Three new forms of vaudeville programme emerged during 1935: 'Variety of Music' (a series of short vocal and instrumental acts in quick succession); 'Gala' (a non-audience programme in which vaudeville, music and drama alternated); and 'Happy Week-end' (an experiment in providing vaudeville after 11 p.m. on Saturday evenings).

As has been often said, and may be well said again, the shortage of personality artists can only be met by the creation of programme features which, if repeated sufficiently often, may become in their way as popular and looked-for as any single celebrity. The first feature of this kind ever created was 'Songs from the Shows' which was quickly followed by 'White Coons' and 'Kentucky Minstrels'. The next batch of script-features (as they are called) included 'Café Colette', 'In Town To-night', 'Soft Lights and Sweet Music', and 'Dancing Through'. 1935 added considerably to the list of established features. The advantage of such programmes over straight vaudeville is that, whereas in the case of the latter the producer can only depend upon single artists and the material they themselves provide, the producer of a script-programme has his ideas and material shaped up for him by a writer and need only call upon first-rate actors to interpret them for him.

Other script-features of 1935 were 'The Rocky Mountaineers' (hill-billy songs in a Canadian prairie setting), 'The Red Sarafan' (Russian music in a Parisian night-club setting), 'Meet Mickey Mouse' (songs and characters from the Walt Disney classics), 'Tunes of the Town' (an illustrated critique of current stage and film successes), 'The Old Ballad Concerts' (revival of Victorian ballads with a spoken commentary), and 'The Table Under the Tree' (light classical music with dialogue). Apart from these, certain old favourites were revived or continued, including besides those already mentioned, 'Château de Madrid', 'The Air-do-Well', and 'The Fol-de-Rols'.


On the musical side an interesting development of recent years is the pot-pourri, an hour's programme of music specially devised and orchestrated to tell a story or illustrate an idea. The chief exponents of this are both visitors from abroad—Julius Bürger and
G. Walter. Walter has so far only given ‘The Story of the Waltz’; but in 1935 Bürger followed up the success of his ‘Vienna’ and ‘Holiday Abroad’ with ‘City of Music’, ‘The Life of Offenbach’ and ‘World Tour’, all of which met with considerable response from listeners.

An important departure during 1935 was the broadcasting, at a late hour in the evening, of two series of programmes designed to appeal to more sophisticated types of listener. First and foremost was the series of Monthly Revues, of which Nelson Keys was the bulwark. There were nine of these shows during the year, composed mainly by Jack Strachey with the assistance of a number of well-known authors including Benn Levy, Ronald Jeans, Maurice Lane-Norcott, and Desmond Carter. Their common factor may be described as gay satire of a type previously unknown in broadcasting. Side by side with these revues has gone a fairly sophisticated form of cabaret entertainment known as ‘The Little Show’.

So far National and London programmes have been reviewed, but there are, of course, other flourishing centres of Variety. In the North Region, according to a now established tradition, most of the year’s variety was broadcast from the stage of popular music halls, although towards the end of the year auditions for talent were held and a number of new artists broadcast from the studio. Several revues were broadcast during 1935 the most outstanding being ‘Half a Mo’ and ‘Merry-go-round’. A popular light series was that entitled ‘Music Shop’, and there were two editions of ‘Tyneside Calling!’, the first variety programme to be broadcast from Newcastle for a number of years.

Midland Region specialized in revues and musical comedies, with a certain number of productions of the concert party type. Two monthly topical features, ‘At the Langley’s’ and ‘Cocktail’, were well received, and there were outside broadcasts from music halls and pantomimes. An interesting departure was the broadcasting of important variety programmes twice, once in the evening and once for the benefit of afternoon listeners.

West Region launched an energetic search for talent and broadcast its discoveries in a series of programmes entitled ‘Microphone Bows’. Outside broadcasting was represented by many relays from music halls and pantomimes and by ‘You Pays Your Money’, a series devoted to various towns in turn, in which a sound-picture was evolved from the townspeople themselves on the one hand and the entertainment-life of the town on the other.

In Northern Ireland the studio output included eight original musical plays and revues, and a regular series of variety programmes in which local talent predominated. Perhaps most notable were the ‘light feature’ programmes, including ‘Oul’ Belfast’, the various ‘Excursions and Alarums’ in which Mrs. Rooney, Jamie, and Rabbie all took part, and Mat Mulcaghey’s various ‘parties’.

As Wales has no variety tradition, the Welsh Region has the problem of evolving a type which will take the place of the corresponding English programme element. During 1935 several light features were broadcast and a good deal of ‘laboratory work’ done towards the future development of light entertainment in this Region.


In sum, as reference to the corresponding section of last year’s Annual will show, the record is encouraging, in that difficulties there set forth have been, if not removed, at any rate brought nearer solution, and lines of programme building there described as tentative and future have developed practicably, to lead in their turn to further developments, as those concerned advance—with the aid of the listener—in the course of self-education they have set themselves.

Within the field of activity of the Variety Department there comes also the work of the B.B.C. Theatre Orchestra, the B.B.C. Variety Orchestra and (since the beginning of the autumn) the conduct of the Dance Music programme.

The Theatre Orchestra (30 players)
specializes in light concert work and in providing the accompaniment to musical plays and feature programmes. During the year it has given a regular Sunday concert and from one to three concerts on weekdays. The musical plays and operettas in which it has taken part are mentioned elsewhere; its feature programmes include 'Victorian Memories', 'The Old Ballad Concerts', and 'Old-time Dance Music', as well as various *pol-pourris* and other script-features. Its programme field is that of the best light and light classical music, while that of the Variety Orchestra (16 players) covers all vaudeville, cabaret and concert party programmes. The latter's occasional concert-programmes, however, have included much light classical music and it is by no means to be considered as a music-hall 'pit orchestra'. On several occasions, notably in 'The Life of Verdi', it was combined with the Theatre Orchestra, with excellent results.

As has been indicated above, the Variety Department, formerly responsible only for the B.B.C. Dance Orchestra's work, has now taken over the control of dance music programmes relayed from outside places of entertainment. The whole of dance music policy is thus, for the first time, under the same direction, a move which should show appreciable results in dealing with a type of programme which has its special difficulties.

During the year, the B.B.C. Dance Orchestra (17 players) under Henry Hall contributed on the average seven programmes weekly, a total of rather more than 9,000 single tunes. In September Mr. Hall visited New York in order to study new tendencies in American radio and dance music. He found that, as far as broadcasting was
concerned, most of the outstanding American bands were concentrating upon entertainment programmes rather than upon 'straight' dance music, and with this in mind were employing glee-clubs (chorus vocalists) and guest-artists, as well as regular compères, and even venturing into the field of symphonic playing. In October, therefore, a new programme feature, 'Henry Hall's Hour', based upon the American model, was launched as the successor to 'Henry Hall's Guest Night'. There can be no doubt that to-day only a minority of listeners dance to the strains of broadcasting. A recent ballot carried out by a Northern newspaper showed that, in that Region, non-dancers outnumber dancers by four to one. The majority prefer to listen, and for this reason a greater part than heretofore of the programmes based upon dance music must have entertainment, as well as rhythmic value. At the same time, there are parties in the home circle in which dancing is the main purpose of, or at any rate, an occasional variant in, the evening's enjoyment, and good rhythmic playing must, therefore, be developed side by side with entertainment programmes.

Among the bands included in the year's programmes were those of Ambrose, Lew Stone, Roy Fox, Billy Cotton, Maurice Winnick, Harry Roy, Jack Payne, Jack Hylton, Jack McCormick, Teddy Dobbs, Brian Lawrence, Geraldo, Carroll Gibbons, Syd Lipton, Jack Jackson, and Sydney Kyte. In November and December special auditions were held for bands which had not hitherto broadcast, it being the B.B.C.'s intention to widen the scope of dance music and introduce new blood.
TALKS

That branch of programme activity in which the spoken word is the principal (though not necessarily the only) vehicle forms a natural unit in any bird's-eye view of broadcasting. Religious broadcasts, Children's Hour, Variety, and Drama are differentiated from it by the fact that in these the word is only one of several more or less co-equal constituents. Even poetry readings, therefore, are not a marginal case but come within the spoken-word field; nor does the use of dramatizations and sound effects as ancillaries in informative broadcasts remove these from the category.

Save in the earliest stages of development, this natural unit has always been reproduced in the organization of the B.B.C., even though particular functions have been divided, combined, and redivided, according to changing circumstances.

The first basis of differentiation within the total field is that into (1) material intended for adults and adolescents, and (2) material directed to school children. Secondly, for the purposes of organization, the first category is divided into (1a) talks which form part of the news of the day, being descriptive or explanatory of its events, or else short-period summaries of events, and (1b) descriptive, informative, and educational talks which are planned at longer range. The organization, therefore, provides for three departments, Talks, News, and School Broadcasts, to deal with these different aspects of the spoken word—departments whose interdependence springs from their major unity, but whose independence of each other reflects the fact that the conditions and technique of each differ—often very widely—from those of others.

The inquirer who wishes to know what the 'Talks Department' does, and why, would find it difficult to construct a complete answer to these questions from a study of the weekly programmes in the Radio Times or even from reading the advance outline of the 'Talks Programme', which is issued each quarter. To answer the first question by saying that it endeavours to provide a wide range of informative, stimulating, and entertaining talks or discussions is bald, and, unless accompanied by concrete evidence, unconvincing. A review of what has been done in the past year is the best method of supplying that evidence, and of answering the second question as well as the first; for while the purpose of some of the series of talks is obvious, the relation of the various series to each other, and the pattern which they make, can only be seen when a long view is taken.

One of the first points revealed by such a review is that it is regarded as important to present to the home listener the lives and problems of those who live outside the United Kingdom. In the forefront stand the problems of the British Commonwealth of Nations, and in fact the year opened with a series on a subject of vital importance to the Commonwealth—India. Listeners had an opportunity of hearing authoritative expositions of the widely divergent opinions which were held about the Government of India Bill—then on the point of being discussed in Parliament—expressed by personalities such as Sir Samuel Hoare, Mr. Winston Churchill, Lord Lloyd, Mr. Lansbury, and the Rev. C. F. Andrews. Apart from this, first-hand descriptions of life in the Dominions and Colonies were provided in the series—'The Empire at Work' and 'From the Four Corners'.

To turn to foreign countries, an outline of the political structure of Russia, Italy, Germany, and the United States, was given in a series on 'Freedom and Authority in the Modern World', also in another series by Captain Balfour and Miss Agnes Headlam Morley, who compared the constitutions of these countries with the British Constitution. Against this background, a number of more purely pictorial series introduced listeners to the outlook of the inhabitants of various countries. 'American Half-hours' presented, partly in dramatized form, the American scene and the American outlook from coast to coast, whilst current American affairs were dealt with by Mr. Raymond Swing, speaking from Washington or New York. In 'European Exchange' young men and women from England, Scotland, Germany, Denmark, Czechoslovakia, Turkey, and France, in frank discussions compared and contrasted the social and political outlooks of the youth of their various countries; whilst in 'Great Experiments' eye-witnesses gave accounts of striking new
ventures in foreign countries, such as the new type of German Public School, the treatment of criminals in the Russian prison at Bolshevo, the industrial experiment of the Bata firm in Czechoslovakia, and the activities of the Tennessee Valley Authority in America.

Two other series dealt with International Affairs from a slightly different angle. Under the title of 'Danubian Clues to European Peace', experts on Central European and Balkan problems, such as Professor Arnold Toynbee, Professor R. W. Seton-Watson, Sir Arthur Salter, Mr. George Glasgow, and Mr. D. Mitrany, described the origins of the countries that were formed out of the Austrian and Turkish Empires, their minority and frontier problems, and the effect on them of the policies of the Great Powers. In the field of international economics, under the heading of 'Markets and Men', the close inter-relation between the problems of producing and consuming countries was discussed by Mr. J. W. F. Rowe and Mr. J. Jewkes, who spoke in particular of the conditions of production and marketing of coffee, sugar, tin, cotton, wool, oil, and wheat, and the complications produced by restrictions of the output and importation of these commodities.

However interesting and important to the average citizen international problems may be, there are at home all too many topics which call urgently for inquiry and discussion. Not only the London staff, but those of the various Regions were constantly occupied with the arrangement of talks and discussions on these. There were two national series of special importance. In 'The Citizen and his Government' Captain Balfour and Miss Headlam Morley described the British
Constitution (the comparison in this series with the Constitutions of other countries has been referred to above), whilst in ‘Ways and Means’ Mr. Geoffrey Crowther explained how the National Income is produced and spent.

But though modern communications steadily widen the field of attentive interest, it is the local bearing of the policy and problems that forms the basis of conversation in the clubs, the inns, the railway-carriages, up and down the country. From this angle, the ‘Midland Parliament’ and the ‘Northern Cockpit’; in the Midland and North Regional programmes respectively, brought representative speakers to discuss questions such as ‘Can New Industries Cure Mass Unemployment?’, ‘Blind Alley Employment and Monotony’, ‘Cotton’, ‘Housing in Industrial Areas’, and ‘The Freedom of the Moors’. The Midland Regional series ‘Looking to the Air’ presented in detail the current position of civil aviation, and ‘Back to the Land’ dealt with the practice and problems of Land Settlement, whilst the North Region described the evolution of Local Government in the North of England. In the West (Welsh) Region, the position and problems of industries in South Wales were discussed by Professor H. A. Marquand, and in a series called ‘Changing Wales’, listeners were provided with a more detailed study of the coal and heavy industries, transport, agriculture, and local government. Scotland, looking to the future, heard the views of speakers such as Mr. James Maxton, Miss Elizabeth Haldane, the Rev. George MacLeod, and Sir Robert Greig, on the life and problems of the next generation.

Apart from political, economic, and social matters, there was much else to be covered, and a brief selection must suffice for the purposes of this review. In the series on ‘Freedom’ the listener heard interpretations of the word by (amongst others) Sir Ernest Benn, the Bishop of Durham, Sir William Jowett, Mr. Herbert Morrison, Mr. George Bernard Shaw, and Dr. Erwin Schrödinger. ‘Faith and Freedom’ was the subject of a National Lecture by the Archbishop of York. ‘Custom and Conduct’ by Dr. H. A. Miles dealt with the factors underlying individual conduct, and in ‘The Dangers of being Human’ a psycho-analyst discussed the views of his profession on social problems. Recent scientific discoveries were described by Dr. John Baker and Dr. A. S. Russell; Mr. Eric Newton spoke of ‘The Artist and his Public’, Sir Walford Davies on ‘Chords that Matter’, and Mr. E. Martin Browne on amateur dramatics, while sports and pastimes found a weekly place. For quiet enjoyment there were readings from the English classics, short stories written for the microphone, and poetry spoken in a setting of chamber music. Reconstruction of the past found a special place in the Regional programmes—Ulster in the eighteenth century, eminent Northerners, and Northern historical episodes.

Specialized sections of the listening public had, as usual, their own series. Farmers, gardeners, film enthusiasts, language students, had a weekly talk, and housewives were provided with entertainment as well as practical advice in the morning talks each weekday. Special provision was made for Unemployed Clubs and Social Service Centres during the daytime, and one series furnished answers to inquiries about the (not always easily understood) statutory regulations and rules that govern the citizen’s daily life.

Though this summary gives a general answer to the inquirer’s question, it does not, of course, distinguish between the successes and the failures. No one would be so misguided as to suggest that there were no mistakes, no failures, but whether the responsibility for these lies, with speakers or B.B.C. officials, or both, this is not the place to analyse them. Let it suffice, therefore, to say that in this field as in others the debit page is kept at least as accurately as the credit side.

In the case of new developments and experiments, it is often difficult to decide on which side of the ledger the entry should be made, but the Annual offers an opportunity for opening out some of the preliminary conclusions for discussion.

The chief experiments of 1935 have been ‘Unrehearsed Debates’, programmes for young people, and the stimulation of the countryman’s interest in his own village history.

Hand in hand with the increasing emphasis laid on the need for careful writing of manuscripts of talks, and for thorough rehearsal,
went a dissatisfaction with the general results of debates or discussions. In this sphere the carefully written script and the thorough rehearsal tended to produce artificiality, and unless the participants had something of the actor's ability to play a part, the lack of a visible audience was a check on the best exponent of dialectics. After a preliminary test, a series of debates was arranged, in which the two selected speakers, with a chairman, argued their points without scripts, without notes, and, if they wished, without preliminary meeting, before an audience. There were failures owing to difficulties in selecting speakers with real skill in debate, but it is felt that the experiment was worth while, as it produced a more natural atmosphere, though it provided a loophole for the introduction of irrelevancies. On the other hand, an allied experiment in talks without prepared scripts, aimed at discovering those who can simply 'talk' in an interesting manner, without a set text, was only partially successful.

For some time past it had been suggested by those specially concerned with the care of young people between 14 and 18, that as the Children's Hour and the Evening Talks catered for those below 14 and over 20, some special provision might be attempted for those who fell between these limits. A good deal of research was undertaken and various interested persons were consulted, and in the autumn, an experimental half-hour programme was presented weekly at 7.30 p.m., under the title of 'Young Ideas'. This consisted of short and lively talks and stories, with a light linkage of music, and in it men and women such as Sir Malcolm Campbell, the driver of the Silver Link, the sole survivor of a famous wreck, an explorer, told of their interesting lives or adventures; boys and girls—an office boy, a boy from a South Wales coal mine, a ballet dancer—spoke of their careers and ambitions, and interspersed with these were talks on astronomy, keeping fit, current affairs, and sometimes a two-minute 'thriller'.

From those to whom this programme was directed there was little response, but it was certainly listened to and enjoyed by many people long ago past the age of 20. More evidence may be obtained during the continuance of the experiment; but even if it is true that most young people do not like to be openly classed as a separate category, but prefer to associate themselves with the pursuits and pleasures of their elders, the experiment is not worthless, and may well form a model for programmes for the general audience, in fact for people with Young Ideas of all ages.

The experiment in interesting the countryman in the recent history of his own village was made in the West Region. In 'The Changing Village', speakers described what they felt to be the recent trend of village life and its problems, and stimulated inquiry amongst country listeners. The authorities of the University College of the South-West, Exeter, who undertook the collection of the information thus elicited, reported that there was no doubt that an interest in local history was awakened, though it is yet too early to review the final results.

The Regional services of 'Talks for Farmers', supplementing the National service, have been considerably developed, particularly in the predominantly agricultural South-West, and both the National and Regional services are now well-known to farmers, and appreciated by them.

It will have been noticed in the course of the year that the label 'Adult Education Talks' for a certain section of the programme has disappeared. The distinction between 'General' and 'Adult Education' talks conveyed the false implication that only one form of broadcast talk served the end of true Adult Education. In planning talks for listeners who have reached years of discretion, there remains, for reasons of technique, a distinction between those talks which are devised for Discussion Groups and those which may be expected to appeal to the individual listener, but the title of 'For Discussion Groups' does not imply that those talks are, in any way, unsuitable for the general listener. The disappearance of the label does not mean that there is a change in the arrangements for co-operation with the official organizations for formal Adult Education. Their advice on the planning of series for the listener who is willing to practise group listening and discussion, as well as their help in the stimulation of the Discussion Group Movement, is still provided by the new machinery (the Adult Education Advisory Committee with its seven Area Councils) set up last year. A good deal of consideration
has been given during the year to the problem of the future of the Wireless Discussion Group Movement, and arrangements have been made for experiments in local co-operation on the part of the Extra-Mural Departments of the Universities of Nottingham, Bristol, and the South-West (Exeter).

Two main problems continue to confront those who arrange broadcast talks: firstly, simplification of the approach, and of the language used by speakers; secondly, the choice of suitable times for the various types of talk. Every investigation of the first leads back to the fact that real success depends upon the general broadcasting ability of the speaker; if his natural style is academic, he had better be kept away from the microphone. The greatest expert on a subject, whose books are generally regarded as the final word, may yet be unable to produce a sound, simple, and interesting broadcast talk. This has often been said before, but it may be classed as one of the eternal verities to be graven in bronze on the wall of the room of everyone who has to handle a broadcast speaker. The second problem was discussed in this section of the Annual a year ago, with reference to the effect of the recently introduced changes in programme timing, in particular, the transfer of the late evening talks to 10 p.m. It cannot be said that, after the passage of twelve months, much has been discovered about the feelings of listeners on this subject. The talks at this time have tended to deal with subjects of comparatively minority interest, although now and again the period has been filled with something of wider appeal. On the other hand, there is some evidence, though not much, that there is an audience for something more than purely sectional service talks at 7 p.m., and it seems worth while experimenting with talks of general appeal at this time. For other evening timings, the ideal compromise between general flexibility of the programmes and the desirability of regular timings for even the shortest series of talks, has yet to be found.
An 'Unrehearsed Debate' by Mr. A. G. Street, Mr. Gerald Heard, and Professor J. A. Scott Watson
NEWS

The past year has been an eventful one for the News Service which, as noted in the 1935 Annual, had recently expanded considerably and become responsible for a greater proportion of programme time. One of the most crowded years since the Great War, it has included the whole range of the Italo-Abyssinian dispute, the General Elections at home and abroad, and the Silver Jubilee, and such a year, with these events and a train of others only less outstanding, was naturally a severe test for a service which was still in the process of its new development.

In the treatment of major events, there has been virtually a reorganization of methods and presentation. It has involved, for instance, the maintenance of an observer at Geneva, and the provision of expert commentaries from places as far apart as New York, Paris, Montreal, and Auckland. Moreover, it has given opportunities to statesmen, including Mr. Baldwin, Sir John Simon, Sir Samuel Hoare, Mr. Anthony Eden, and others to make in the 'News' exclusive pronouncements of great public importance, and these not only on questions of international interest but also on questions of public policy at home. In this way, the Minister of Transport has established direct contact with the citizen body, and talks on achievements and developments have been given by other Ministers and representatives of such varied bodies as the London County Council, the National Trust, the Royal Academy, the National Savings Movement, and the Jubilee Trust. Special attention has been paid to the work of Parliament and of religious and political organizations, where the news item, as such, has been amplified by talks from observers who are qualified for microphone speaking.

The extension of the space and treatment allotted to sporting news is a noteworthy feature of the year's activity. The simple catalogue of results has been supplemented as of old, but in greater measure, by eyewitness descriptions and summaries from acknowledged authorities. A remarkable event was the observer's account of the King's Cup Air Race, given immediately after he had stepped out of the winning plane.

As regards talks, it is now the policy only to include, in the body of the bulletin, talks which are themselves news, simplicity and brevity being the qualities aimed at. Other, purely explanatory, talks are now relegated to the end of the bulletin.

Sound, in addition to speech, plays a distinctive part in broadcast news. Full use is made of electrical recordings and of the B.B.C. mobile recording unit. Outstanding among these 'illustrations' of news items during the year were the Review on the Horse Guards Parade, the last voyage of the Mauretania, the Annual Search of the Vaults of Parliament on 'Guy Fawkes Day', and the Cenotaph Service on Armistice Day.

Mention must also be made of a side of the service, the development of which is only possible through the relationships that have grown up with foreign broadcasting organizations. Thanks to these, listeners have heard the voices of foreign statesmen, including President Roosevelt, Signor Mussolini, and M. Laval; and Sir Malcolm Campbell was able to speak direct from Salt Lake City after breaking the world's land speed record. Reciprocally, the B.B.C. has afforded like facilities in this country for their foreign colleagues to draw upon British actuality material for their programmes.

Within the B.B.C.'s own framework, collaboration between the London and the Regional staffs is increasingly intimate, a notable example being the Jubilee Day News. Co-operation of another kind, welcome and probably significant of future developments, was evidenced in the Morning Post's institution of their feature called 'Radio News Box'. Every morning this National newspaper publishes a list of items broadcast in the previous evening's bulletins, indicating the pages of the journal on which the items are confirmed, continued, and developed, as the case may be.

Finally, acknowledgments must be made to the various government departments (particularly the Foreign Office, the Ministries of Transport, Health, and Agriculture, the Board of Education, the Fishery Board for Scotland, and the Department of Overseas Trade) and to various public and semi-official bodies for the co-operation which contributes so greatly to the fullness of the picture that the listener obtains of the work and problems of government.
1935 has seen important advances in School Broadcasting. At the 'transmission end' it has been a year of consolidation. Standard courses must be consistently improved, and new experiments initiated, for bringing the facts to life in terms of sound. School talks illustrated by music and by short dramatic interludes have held their place for some years; more recently illustrations of the 'sound picture' type have been the subject of research work in the studio, with results that the schools have in some cases highly approved.

To take an example, Mr. John Hilton, in talking about life in South Lancashire, was able to let the children hear the clatter of iron-shod clogs on granite setts, as the workers of his childhood memories trooped to the mills between half-past four and six o'clock in the morning. He also did some most effective propaganda against noise by reproducing the hideous sounds still flung into the air about starting time by buzzers, hooters, roars, and the like. And again, telling of work in a weaving shed he had not to rely on mere description to create his atmosphere.

"Here's a weaving shed. Let's walk up to the door, go right in, and ask for a word with the tackler. Come on. Now..." Through their loudspeakers the listening children in the tiny rural schools hear a frightful uproar, and can just make out a voice shouting against it. 'We want a word with the tackler... Tackler! Tackler! What? No, we want to speak to—Oh, come on out of it!', and the banging door shuts off the din.

The 'sound picture' is considered to have a special value in the field of modern language teaching, where the broadcaster aims at helping the pupils to associate the foreign word with a visual image of the object named. In travel talks and in history broadcasts the value of this new type of stimulus is already accepted, and no one with experience has reason to doubt that children, even those who normally tend to be non-visualizers, are quick to form visual images in association with the sound picture.

Mention should be made, too, of advances during the year in the presentation of Shakespeare's plays and other dramatic works at the school microphone—a difficult business, where the maximum length of performance for school children is half an hour, and yet an effect of dramatic unity must somehow be achieved, for the mere reading of scenes falls flat. New methods of cutting, new types of narration are therefore being evolved, and an encouraging interest has been shown by the schools.

With the object of providing more time for programme development, the members of Schools Department have lately been freed from their former part-time functions under the Central Council for School Broadcasting, which has now its separate secretariat, the new officials of the Council taking over responsibility for work at the 'listening end'. This important change in organization establishes the Council as an independent body of educators who are convinced of the service which broadcasting can render to the schools, and who are competent to take full responsibility for its development as an asset in the public service of education. Dr. W. W. Vaughan, M.V.O., formerly Headmaster of Rugby, succeeded to the Chairmanship last spring on Lord Eustace Percy's appointment to the Cabinet.

A rapidly expanding field of work lies before the Council. On all hands Local Education Authorities show signs of accepting financial responsibility for receiving apparatus. Various associations of teachers have welcomed school broadcasting in formal resolutions, and opportunities for meetings and demonstrations are abundant.

Speaking at the Annual Conference of the Association of Education Committees in June, Sir John Reith had regretfully to report that little more than 10 per cent of the schools in England and Wales were making systematic use of school broadcasting. Since then, however, annual returns have shown that during the year there has been an addition of over 1,200 schools using the broadcasts for the first time, pamphlet orders for the Autumn Term considerably exceeded estimates, and all the standard courses appear now to have a satisfactory following of listening schools. It is clear, therefore, that a turning-point in development has been reached, and the Council have formally reported to the B.B.C. that they consider that school broadcasting has already established itself as an educational influence of sufficient importance for them to welcome any public action which might be taken with a view to accelerating the equipment of schools with suitable wireless receiving apparatus.

In Scotland a step in this direction has been
taken in Ayrshire, where the Education Committee made an offer of a wireless receiving set to all the schools in the county. This experiment in wide scale listening will be carefully watched, and the Scottish Sub-Council have offered to organize teachers' meetings for the pooling of experiences and the discussion of different methods of handling broadcasts in the classroom. In Scotland the number of listening schools has been doubled in the past year, and the Scottish Education Department now require an official return from all schools as to the use made of the broadcast programmes. In addition to securing accurate annual statistics, this action of the Department has great value as an indirect encouragement to teachers to regard school broadcasting as a serious educational activity.

In Wales, staff extension has made possible the use of dramatic methods of presentation in the series of School Broadcasts in the Welsh language. Teachers have welcomed the innovation, and some 80 per cent more schools are listening to the Welsh courses than at this time last year.
Mountain Championship at Brooklands
(19 October 1935)
[56]
Outside Broadcasting

Outside broadcasting is in many ways the forerunner of television—for it must transport the listener from his fireside and make him feel that he not only hears but sees what is going on in the world outside. Jubilee Year, with its pageantry of sight and sound, gave plenty of new opportunities for this. A typical example was the Thanksgiving Service on Jubilee Day, with the commentators at Temple Bar and St. Paul's, making the listener one with the procession as it moved on its way down Fleet Street, up Ludgate Hill and on into the Cathedral. But for most people it was the descriptive commentaries with their background of cheering crowds and clattering escorts which carried them on that May morning into the sunlit streets of London.

Seven months later listeners were again at St. Paul's—for the state funeral of Admiral of the Fleet Earl Jellicoe. This time the commentator spoke seldom and in between each sentence came the crash of bells and the slow music of military bands. It was not the first State funeral that had ever been broadcast, for only a week or two before listeners had been able to participate in this wise in the funeral of Lord Carson.

But a glance at the list of the year's outstanding broadcasts (pages 103, etc.)—speeches, ceremonies, sporting events, and actualities of different kinds—will show that outside broadcasting has plenty to do on other and less solemn occasions. During the year listeners were taken to see some of the quaint old customs of town and country—the Boar's Head Festival on Christmas Day at Queen's College, Oxford; Curfew rung from Exeter Cathedral; a Highland Gathering at Dunoon; the Tynwald Ceremony in the Isle of Man; a Cotswold Harvest Home; and the Chairing of the Bard at the Welsh National Eisteddfod.

Somewhat similar in object and method of execution were the programmes which took the listener to an Unemployed Veterans' Club in Wales, a West Country farm, and a Tyneside shipyard; or to explore such different places as May Island, Cleobury Mortimer, and, in company with a diver, the Wookey Hole Caves near Wells.

One of the most important fields of outside broadcasting is, needless to say, the sport commentary. Here again the listener should be made to see as well as hear; by being taken to Epsom or Wembley, he should, as nearly as circumstances allow, be enabled to get the full thrill of watching a contest in the balance, as well as to hear the result as quickly as the protagonists themselves. Besides all the classic sporting broadcasts, the past year has seen the first commentary on the Manchester November Handicap, a snooker match at Thurston's, and the Mountain Race at Brooklands. In addition, the visits of the South African Test Team, the All Blacks, the Harvard and Yale Athletic Clubs, and the German Football team, have provided first-class material for running commentaries. Towards the end of the year the draw for the Third Round of the Cup Tie was broadcast from the Council Chamber of the Football Association, a programme which lasted only ten minutes, and which was of very high interest to the followers of professional football. The scene was set by a commentator speaking in a neighbouring room, and as soon as the Council had reached the appropriate item on the agenda, the proceedings were left to speak for themselves.

In this last instance of an outside broadcast, and, in fact, in all those already mentioned, the voice of the commentator has been a necessary—or at any rate a valuable—adjunct to such other sounds of speech and music as have reached the listener from without. The commentator's contribution has varied between the full-length commentary on a Rugby match and the short description which preceded the Boar's Head Ceremony.

But there were a very large number of programme items coming from outside the studio and yet needing no commentator between them and the listener—symphony concerts from Queen's Hall, church services, opera from Covent Garden, after-dinner speeches, cinema organ recitals, theatre relays, and dance music. Most of these are dealt with in the sections of this review devoted to particular categories of programmes—for in these connexions the role of
the outside broadcast staff is simply that of extending the programme field in cases where the material cannot be provided at the studio or where ‘atmosphere’ and associations are important constituents of the broadcast. In such broadcasts the commentary is almost absent, its place being taken by the announcement. But this simplification of purpose and procedure does not necessarily mean simplification in execution. On the contrary, lines installation costs and the expense of long circuits limit the possibilities of taking advantage of opportunities to a degree that is not fully realized either by the public or by managers of concert halls and cinemas up and down the country.

The type of the uncommented outside broadcast—the dinner speech—has to be limited for a very different reason. Listeners do not seem to welcome it nearly as much as organizing secretaries, and it is found that after-dinner speeches only rarely deserve a relay on programme merit alone.

Ninety-seven times out of a hundred, it would be better to bring the speaker to the studio and let him talk specifically to the listener. But there are just two or three occasions when this is not the case. Perhaps a good speaker cannot be persuaded to come to the studio—and hence Mr. Rudyard Kipling’s broadcast from the dinner of the Royal Society of St. George on Jubilee Day. Perhaps the occasion is of peculiar interest—as in the case of the Earl of Athlone welcoming the South African Test team. Perhaps the dinner itself has some original feature which might intrigue the listener—for instance, the Ilchester Badger Feast on Boxing Day. And lastly, a speech may have specific news value, as when a Cabinet Minister uses the occasion to declare the government’s policy. Otherwise the after-dinner speech is better left to those who have dined in the speaker’s own company.

Save for certain broad distinctions, there can be no scientific classification of outside broadcasts, either by category or merit. They find their way into the programmes for all sorts of reasons and generally for more than one reason at a time. But the linking character of all this raw material is actuality, and there can be no doubt of the extent and genuineness of the public demand for this.
RELIGION

An instructive history of religious broadcasting might be written merely from a study of the Minute Book which records the decisions of the Central Religious Advisory Committee. From the earliest days close contact was made, and has since been kept, by the Corporation with the leaders of those organized religious bodies whose ministrations form the permanent element in the spiritual leadership of the country, and no development has been more marked than the gradual disappearance of the obviously nervous suspicion with which they first regarded the intrusion of ‘wireless religion’, and the growth, stage by stage, of their confidence and desire to co-operate. It is, for instance, a long road from the first decision of more than twelve years ago to broadcast (as an experiment) a religious address from a broadcasting studio to the eve of the King’s Silver Jubilee in 1935, when there were present in the Concert Hall of Broadcasting House—each taking his part in the Preparation Service for the Jubilee—the Archbishop of Canterbury, the Moderator-designate of the Church of Scotland, and the Moderator of the Federal Council of Evangelical Free Churches. Grateful acknowledgment must be made of the debt owed to the Archbishop of Canterbury, whose addresses on Good Friday evening and on the last Sunday of the year have now become almost established features in the wireless programme; to the Archbishop of York and to the leaders of the Free Churches and the Church of Scotland, and the Moderator of the Federal Council of Evangelical Free Churches. Grateful acknowledgment must be made of the debt owed to the Archbishop of Canterbury, whose addresses on Good Friday evening and on the last Sunday of the year have now become almost established features in the wireless programme; to the Archbishop of York and to the leaders of the Free Churches and the Church of Scotland, who have ungrudgingly given their services when called upon; and to the Roman Catholic Archbishop of Westminster, who accepted an invitation to broadcast a Sunday evening service from a B.B.C. studio within a few months of his appointment. A no less sincere expression of gratitude is due to the 270 ministers of religion who have given their services during the past year.

In developing the religious policy of the Corporation, two new features were introduced during 1935. On the appointment of Dr. Matthews as Dean of St. Paul’s, the Cathedral authorities were asked whether they would be willing to broadcast once a month a religious service direct to the Empire. The Dean and Chapter gladly consented, and at 2.15 p.m. on June 9th the first direct service was broadcast to the Dominions and Colonies from the ‘Parish Church of the Empire’. In spite of the inconvenience of the hour the attendance at the service has been well maintained; the broadcast has evidently been appreciated by listeners overseas; and it is hoped that its purpose may be still more usefully served during 1936, when the hour will be changed to 8 p.m., on the second Sunday in every month. The other addition to the religious programmes is the Sunday morning service at 9.30 a.m., which has been welcomed, not only (though especially) by those who value the week-day service at 10.15 a.m., but also by a far wider and more varied circle of listeners.

Nor have local and sectional interests been neglected. Cathedrals and abbeys, old parish churches with a historic past, churches in the new districts with a tradition to build up, drumhead and anniversary services, brotherhoods and conventions, a theatre and a colliery pit-head—all these have worshippers been linked together, in associations that recall or provoke a spiritual fellowship of more than indeterminate value and extent.

In the Sunday afternoon talks, the effort has been continued to cast the net as widely as possible, and to draw into the circle of listeners others than those who have already accepted the Christian creed and way of life. In addition to talks on the Bible and on the method and art of prayer, lectures have been given on the Christian ethic and on the problems of modern civilization; and Dr. Donald Soper has told, with his own wit and wisdom, of his experiences in defending the Christian Faith against the hecklers of Tower Hill. In all these courses, as in the Sunday evening lectures with which the series on ‘The Way to God’ was concluded during the summer, the closing talk has been devoted to answering questions or meeting difficulties on which listeners have written to the lecturer: in future series this custom will be continued.

No account of the year’s work would be complete without mention of ‘Melodies of Christendom’, an anthology of Sacred Music of all ages and nations, which was given monthly by the Wireless Singers under the direction of Sir Walford Davies; and of the two most popular items in the religious
programmes—the Daily Morning Service and the Sunday Evening Epilogue.

Charitable Appeals

As time passes the choice of good causes for appeals becomes increasingly difficult. For the National and London appeals the problem is one of discriminating between the many deserving causes: the flow of new applicants goes steadily on, and those who have had one appeal return to ask for another. Outside the London area it is frequently a question of seeking out the deserving causes, and with this object a statement was issued to the provincial Press during the summer. Where congestion exists it has been alleviated somewhat by decreasing the number of general appeals and increasing the opportunities for semi-national or local appeals for which the competition is keenest. Attempts are being made to arrange a more varied programme of appeals: if the field is too limited there is a danger of the public losing interest. Unfortunately, pressure of deserving applicants at home prevents the regular inclusion of overseas causes.

The Advisory Committees established last year at B.B.C. Regional centres have continued to co-operate with the Central Committee; a valuable liaison meeting between their Chairmen and the members of the Central Committee was held in October, and will be held regularly once a year.

The total amount of money subscribed in 1935 was a record. The figures quoted (see page 64) cover the ‘Week’s Good Cause’, and the Christmas ‘Wireless for the Blind’ Appeal: they do not include the emergency appeals which are very occasionally inserted on week-days, as these are usually part of a public national appeal, and no definite figure can be attributed to the broadcast, though its value is known to be great. Among such week-day appeals this year were the Quetta Earthquake Relief Fund and King George’s Jubilee Trust.

For appeals in the ‘Children’s Hour’, see pages 40 and 64.

A PRAYER FOR THE KING’S MAJESTY

Broadcast by the author on 6 May 1935

O God, whose mercy is our state, 
Whose realms are children in Thy hand, 
Who willed that, in the years of Fate, 
Thy servant George should rule this land.

We thank Thee, that the years of strife 
Have changed to peace, and for this thing 
That Thou hast given him length of life 
Under Thy hand to be our King.

O God, vouchsafe him many years 
With all the world as England’s friend 
And England bright among her peers 
With wisdom that can never end.

JOHN MASEFIELD, Poet Laureate

(Reproduced by the kind permission of the author)
### GOOD CAUSES

#### (A) National and London Regional Appeals

<table>
<thead>
<tr>
<th>DATE</th>
<th>APPEAL</th>
<th>SPEAKER</th>
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<tbody>
<tr>
<td>1935</td>
<td><strong>Jan. 6</strong> † General Council for the Assistance of British Repatriated from Russia</td>
<td>Capt. Victor Cazalet</td>
</tr>
<tr>
<td></td>
<td>† Wayfarers' Sunday Association</td>
<td>Mr. S. P. B. Mais</td>
</tr>
<tr>
<td></td>
<td>13 † Manor House Hospital</td>
<td>Mr. George Lansbury</td>
</tr>
<tr>
<td></td>
<td>20 † Anti-Noise League</td>
<td>Lord Horder</td>
</tr>
<tr>
<td></td>
<td>27 † Plaistow Maternity Hospital</td>
<td>Miss Violet Vanbrugh</td>
</tr>
<tr>
<td></td>
<td>† Variety Artistses Ladies' Guild</td>
<td>Miss Elsie Carlisle</td>
</tr>
<tr>
<td></td>
<td><strong>Feb. 3</strong> † Bogor War Memorial Hospital</td>
<td>Prof. A. Lloyd James</td>
</tr>
<tr>
<td></td>
<td>† Oxford &amp; Bermondsey Club</td>
<td>Bishop of Bristol</td>
</tr>
<tr>
<td></td>
<td>10 † Winter Distress League</td>
<td>Canon H. R. Le Sheppard</td>
</tr>
<tr>
<td></td>
<td>17 † British Seamen's Orphan Boys' Home, Brixham</td>
<td>Rev. C. A. Viner</td>
</tr>
<tr>
<td></td>
<td>† Gordon Hospital</td>
<td>Rev. Dr. Archibald Fleming</td>
</tr>
<tr>
<td></td>
<td>24 † National Birthday Trust Fund for Extension of Maternity Services (Except Scotland)</td>
<td>Mrs. Stanley Baldwin</td>
</tr>
<tr>
<td></td>
<td><strong>Mar. 3</strong> † Royal School for the Blind, Leatherhead</td>
<td>Lord Eustace Percy</td>
</tr>
<tr>
<td></td>
<td>† Fellowship of St. Christopher</td>
<td>Marchioness of Reading</td>
</tr>
<tr>
<td></td>
<td>10 † Queen Alexandra Hospital Home and Royal Savoy Association</td>
<td>Rev. W. H. Elliott</td>
</tr>
<tr>
<td></td>
<td>17 † Ada Leigh Homes, Paris</td>
<td>Lady Simon</td>
</tr>
<tr>
<td></td>
<td>† S. Andrew's Waterside Church Mission for Sailors</td>
<td>Vice-Admiral Sir Percy Douglas</td>
</tr>
<tr>
<td></td>
<td>24 † Seamen's Hospital Society</td>
<td>Lady Lloyd</td>
</tr>
<tr>
<td></td>
<td>31 † Sussex Eye Hospital</td>
<td>Mr. Leonard Neville</td>
</tr>
<tr>
<td></td>
<td>† London Homeopathic Hospital</td>
<td>Mr. Philip Guedalla</td>
</tr>
<tr>
<td></td>
<td><strong>Apr. 7</strong> † Mr. Fegan's Homes</td>
<td>Rear-Admiral Sir H. H. Stileman</td>
</tr>
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<td></td>
<td>† The Housing Centre</td>
<td>Sir Reginald Rowe</td>
</tr>
<tr>
<td></td>
<td>14 † Mrs. Headlam's United Service Scheme (Except Scotland)</td>
<td>Miss Violet Loraine</td>
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<tr>
<td></td>
<td>21 † Home for Training Crippled Boys</td>
<td>Bishop of Kensington</td>
</tr>
<tr>
<td></td>
<td>† Notting Hill Nursery School</td>
<td>One of the Mothers</td>
</tr>
<tr>
<td></td>
<td>28 † Asthma Research Council</td>
<td>Sir Humphry Rolleston</td>
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<tr>
<td></td>
<td><strong>May 5</strong> No appeal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 † Guy's Hospital</td>
<td>Major John Hay Beith (Ian Hay)</td>
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<tr>
<td></td>
<td>19 † Dorset County Hospital</td>
<td>Earl of Shaftesbury</td>
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<td></td>
<td>† S. Marybone Health Society</td>
<td>'A. J. Alan'</td>
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<td></td>
<td>26 † Toynbee Hall</td>
<td>Archbishop of Canterbury</td>
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<td><strong>June 2</strong> † Royal Surrey County Hospital</td>
<td>Canon H. R. L. Sheppard</td>
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<td></td>
<td>† Children's Country Holidays Fund</td>
<td>Seymour Hicks</td>
</tr>
<tr>
<td></td>
<td>9 † Emergency Open-Air Nurseries</td>
<td>Mrs. Oliver Strachey</td>
</tr>
<tr>
<td></td>
<td>16 † Metropolitan Hospital-Sunday Fund</td>
<td>Very Rev. W. R. Matthews</td>
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<tr>
<td></td>
<td>23 † Royal Association in Aid of the Deaf and Dumb</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30 † Whitstable and Tankerton Cottage Hospital (Joint appeal with Midland)</td>
<td>Prebendary W. G. Pennyman</td>
</tr>
<tr>
<td></td>
<td>† Wireless for the Blind Local Maintenance Appeal</td>
<td>Canon H. R. L. Sheppard</td>
</tr>
<tr>
<td></td>
<td><strong>July 7</strong> † Eversfield Chest Hospital, St. Leonards</td>
<td>Lord Sanderson</td>
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<tr>
<td></td>
<td>† Razzard Mission</td>
<td>Major-Gen. E. O. Hay</td>
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<tr>
<td></td>
<td>14 † S. Martin's Summer Appeal</td>
<td>Mr. Colin F. Campbell</td>
</tr>
<tr>
<td></td>
<td><strong>21</strong> † Youth Hostels Association (Except Scotland)</td>
<td>Rev. W. P. G. McCormick</td>
</tr>
<tr>
<td></td>
<td>† denotes all stations; † denotes National programme only; † denotes Regional programme; † denotes Droitwich National only</td>
<td></td>
</tr>
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§ denotes all stations; * denotes National programme only; † denotes Regional programme; † denotes Droitwich National only
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<th>DATE</th>
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<th>SPEAKER</th>
<th>RESULT</th>
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<tr>
<td>July 21</td>
<td>† Factory Girls' Country Holiday Fund</td>
<td>Canon H. R. L. Sheppard</td>
<td>£417</td>
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<tr>
<td>28</td>
<td>§ Cripples' Training College</td>
<td>Lord Moynihan</td>
<td>936</td>
</tr>
<tr>
<td>Aug. 4</td>
<td>* Ex-Services' Welfare Society</td>
<td>'An Unknown Soldier'</td>
<td>3,016</td>
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<tr>
<td>11</td>
<td>† Woking Hospital</td>
<td>Miss Barbara Couper</td>
<td>114</td>
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<td>18</td>
<td>* Caldecott Community</td>
<td>Mr. E. S. Dunkerton</td>
<td>533</td>
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<tr>
<td>25</td>
<td>† Tunbridge Wells Maternity Home</td>
<td>Sir Frederick Hobday</td>
<td>412</td>
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<tr>
<td>Sept. 1</td>
<td>* Friends of Talbot House Seafaring Boys' Club, Southhampton</td>
<td>Lady Bennett</td>
<td>55</td>
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<td>8</td>
<td>† All Hallows' Country Hospital, Ditchingham, Norfolk</td>
<td>Dr. Leonard F. Browne</td>
<td>1,057</td>
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<tr>
<td>15</td>
<td>† West London Hospital</td>
<td>Nova Pilbeam and John Wiggins</td>
<td>123</td>
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<tr>
<td>22</td>
<td>† Hertford British Hospital, Paris</td>
<td>Lord Elmley</td>
<td>738</td>
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<td>29</td>
<td>* Central Council for the Care of Cripples</td>
<td>Mr. G. Titus Barham</td>
<td>325</td>
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<tr>
<td>6</td>
<td>† Royal Sailors' Orphan Girls' School and Home</td>
<td>Lt.-Col. W. G. Johns</td>
<td>335</td>
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<tr>
<td>Oct. 6</td>
<td>* General Lying-in Hospital, Lambeth</td>
<td>Margaret Bailie-Saunders</td>
<td>16</td>
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<td>13</td>
<td>† Victoria Hospital, Lewes</td>
<td>Lord Tyrrell of Avon</td>
<td>358</td>
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<td>20</td>
<td>* Fellowship of S. Michael &amp; All Angels</td>
<td>Sir Cedric Hardwicke</td>
<td>782</td>
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<td>27</td>
<td>* Officers' Families' Industries</td>
<td>Lady Bertha Dawkins</td>
<td>60</td>
</tr>
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<td></td>
<td>† Westminster, Belgravia and Pimlico Association</td>
<td>Sir John Simon</td>
<td>472</td>
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</table>

\$ denotes all stations; * denotes National programme only; † denotes Regional programme; 
‡ denotes Droitwich National only
DATE

1935
Nov. 3 * People's Dispensary for Sick Animals of the Poor
† S. Joseph's Hospice for the Dying
§ British Legion (Except Scotland)
17 * Royal Dental Hospital
† Metropolitan District Nursing Association
24 § Musicians' Benevolent Fund
Dec. 1 * Friends of the Poor
† Infants' Hospital
8 ‡ S. Martin's Christmas Appeal
15 * Agnes Hunt Appeal for Cripples
† House of Charity
22 § Mediterranean Mission to Seamen
29 * Providence (Row) Night Refuge and Home Centre

(B) Other Regional Appeals

(C) Appeals in 'Children's Hours'

March Children's Hospitals
London Regional
Midland Regional
West Regional
North Regional
Scottish Regional
N. Ireland Regional

June Children's Country Holidays
London Regional
Midland Regional
West Regional
North Regional
Scottish Regional
N. Ireland Regional

October Deaf and Dumb Children
London Regional
Midland Regional
West Regional
North Regional

Orphan Children
N. Ireland Regional
Scottish Regional

December Christmas Presents for Poor Children
London Regional (for London's Housing Estates)
West Regional
N. Ireland Regional
Midland Regional
Scottish Regional
North Regional

<table>
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<tr>
<th>SPEAKER</th>
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<tr>
<td>Mr. Christopher Stone</td>
<td>£11,812</td>
</tr>
<tr>
<td>Lord Russell of Killowen</td>
<td>959</td>
</tr>
<tr>
<td>Earl Jellicoe</td>
<td>4,250</td>
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<tr>
<td>Mr. Tom Webster</td>
<td>123</td>
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<tr>
<td>Mabel Constanturos</td>
<td>439</td>
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<tr>
<td>Viscountess Snowden</td>
<td>1,505</td>
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<tr>
<td>The Hon. Mrs. Sydney Marsham</td>
<td>1,560</td>
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<tr>
<td>Sir J. Gomer Berry</td>
<td>184</td>
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<tr>
<td>Rev. W. P. G. McCormick</td>
<td>13,200</td>
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<td>Lady Howard de Walden</td>
<td>627</td>
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<tr>
<td>Earl of Shaftesbury</td>
<td>149</td>
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<td>Bishop of Gibraltar</td>
<td>476</td>
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<tr>
<td>Lord Russell of Killowen</td>
<td>750</td>
</tr>
<tr>
<td>Marchioness of Lansdowne</td>
<td>40</td>
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Total... £85,427

Total... £26,502

§ denotes all stations; * denotes National programme only; † denotes Regional programme;
‡ denotes Droitwich National only; ‡a further £7,000 promised.

Grand Total... £114,894

[ 64 ]
An occasional letter in the B.B.C.'s correspondence shows that there are still people who think that the B.B.C. is a Government Department. It is perhaps desirable, therefore, to make it clear once again that the B.B.C. is an independent Corporation constituted by Royal Charter and bound only by the terms of that Charter and of the Licence issued under the Wireless Telegraphy Acts of 1904 and 1925.

The Corporation's first Charter was limited to a period of ten years ending with the year 1936. Under it the statutory power is vested in a Board of Governors (see page 21).

The Internal Organization

The working organization of the B.B.C. is based on four main activities: Administration, Engineering, Programmes, and Public Relations. The staff dealing with each activity is organized in a Division. Each Division is in charge of a Controller, who is responsible to the Director-General or his Deputy.

The Divisions are divided into Departments—for instance, in the Programme Division there are Music, Variety, Drama, Outside Broadcasts, Talks, News, School Broadcasts, Religion, Programme Planning, Television, and the Empire Service—and many of these in their turn are sub-divided into smaller Departments or Sections.

An important feature of the organization is the principle of the separation of the administrative responsibility from the creative. In the earlier phases of the B.B.C.'s development these were not separated; with the result that difficulties arose from time to time from the fact that the person best suited to directing the creative work of a department was not always the best suited to deal with the mass of administrative detail; nor even if he were, did he have the time for it. The first development was the appointment of an 'executive' official to assist the head of the department in administrative matters, and this system was used for several years. There remained, however, an inherent weakness, in that the creative head of the department still had to make administrative decisions; so that finally in 1933 the present system was instituted. This took the form of the transfer of the 'executives' to the Administration Division with responsibility to chief executives and through them to the Controller (Administration).

To give a simple example of the working of the system, the creative department chooses the artists it requires for a given programme and the corresponding executive department books the artists, arranges their fees, notifies them of the dates of rehearsal, books the studio, and sends their names and programme to the Radio Times. It will be seen that this leaves the creative staff free to concentrate on the actual contents of the programme and its rehearsal and production.

To some extent the organization of a 'Region' is a reproduction in miniature of the Divisional organization of the 'Head Office' staff. But owing to the fact that it is possible for a Region to obtain nearly all its administrative services from the Head Office in London, its activities mainly lie in the building and production of programmes and in their transmission. There are six Regional organizations: Midland, North, Northern Ireland, Scotland, Wales, and West of England. The head of each is a Regional Director who is responsible to the four Controllers in their respective spheres. The work of the Regions is co-ordinated by a Director of Regional Relations.

The Midland Region, with its headquarters at Birmingham, is compact, and without any outlying sub-centres. It includes the Black Country with its dense population, Shakespeare's country, and the 'pastoral heart of England', and is the only entirely inland Region.

The North Region, with Lancashire and Yorkshire as its backbone, has a population of over 10,000,000 and over 2,000,000 licence-holders. There are sub-centres at Leeds for Yorkshire and at Newcastle for Durham and Northumberland. At each of these there is a local B.B.C. Representative, and programme and engineering officials.

On a basis of population and licences, Northern Ireland is the smallest Region,
The Entrance Hall at Broadcasting House, Newcastle
but the opening of the new high-power transmitter at Lisburn, accompanied by intensive programme development, should result in a rapid increase of licences in the near future.

The Scottish and Welsh regions are alike in their national basis. In Scotland, the official headquarters are at Edinburgh, although Glasgow (where new and large headquarters are being prepared at Queen Margaret College) claims a big share of the programmes, and a correspondingly important local organization. There is also a sub-centre at Aberdeen, where the staff includes a Gaelic-speaking programme assistant.

In Wales, the headquarters are at Cardiff, with sub-centres at Bangor and Swansea. The Region has recently been constituted as a separate one, having for over ten years been part of a larger West Region, which included the West of England. The splitting of the Region was made the occasion for securing a complete Welsh-speaking programme staff for the Welsh Region.

The West of England Region is at present operated from a headquarters at Bristol and a sub-centre at Plymouth, but this may not be the final organization of the Region. A great deal depends on the transmission arrangements which it is ultimately possible to make for the service of the area. At present the Region consists of South Gloucestershire, Wiltshire, Dorset, Somerset, Devonshire, and Cornwall, and shares with the Welsh Region the Regional Transmitter at Washford Cross on the N.E. border of Exmoor.

The Home Counties are not organized as a Region but are operated from the Head Office in London and contribute to the London programmes.

The above is a short description of the formal outlines of the organization. It does not, however, give any idea of the day-to-day functioning. This is too complicated to be anything but dull reading if described in detail, but some aspects of it may be of interest.

Perhaps the most obvious aspect is the exacting nature of the work which the organization has to perform, as far as possible without a breakdown or even a temporary hitch. It must be fairly obvious to the listener than an enormous amount of arrangement and anxious preparation is involved in a programme like the annual Christmas broadcast which culminates with the King’s message; but although such a programme is the most spectacular example of the working of the ‘machine’, the performing of the daily round and common task of broadcasting is in many ways nearly as exacting.

The B.B.C. has to work at the tempo of a daily newspaper, and, with the Empire Service included, has to provide programmes all round the clock, and that in circumstances in which the slightest slip or mistake is very obvious even if it happens to escape the headlines of the popular Press. There are of course, and always will be, many such mistakes, and the reader may have his own opinion as to whether there are too many of them. If he should think that they are reasonably few, such comparative success is not to be attributed to any special virtues of the organization, but to the other great factor in broadcasting work, namely, its perennial interest and variety. It is safe to say that it is the absorbing attraction of the work that enables and encourages the staff to carry on at high pressure tasks that in themselves are harassing enough.

It is true that the B.B.C. receives a great deal of appreciation from its listeners and very little criticism; but any one who has had any experience of programme work knows that quite often the reward of weeks of effort culminating in a particular programme is a stony silence on the part of the public, some contradictory notices in the Press, and the faint praise of hypercritical colleagues.

It may here be of interest to discriminate between the permanent staff, the auxiliary staff, and the casual artists or performers used from time to time in the programmes. The permanent staff of the B.B.C. consists of (1) salaried staff and (2) clerical and other staff earning weekly wages. The salaried staff number about 950, of whom about 550 are engineers. Of the remaining 400, 250 are Programme staff, 80 are Public Relations or Publications staff, and 70 Administrative staff. Of the above total of 950, about 350 are employed at the Regional centres.

The auxiliary staff consists of people regularly employed by the B.B.C., but who are not on the permanent staff because of the nature of their employment or because they are not employed full-time. They are mostly
The Orchestral Studio at Newcastle

The Dramatic Studio at Manchester
individuals whose work is in some way directly connected with programmes. They range from part-time accompanists, music arrangers, Children's Hour helpers, and conductors, to the 400 musicians employed by the B.B.C. in its orchestras and bands.

Then there is the third category, that of the artists. The ordinary singer, actor, talker, or comedian, is not normally a member of the staff, but is contracted to appear in a particular programme on a given day or days. The B.B.C.'s relations with such artists is confined to booking them and rehearsing them for particular programmes. Every effort is made to ensure that artists are dealt with impartially, that a just view is taken of their merits, and that, subject to the requirements of the programmes, opportunities are given to as many as possible of the artists who reach the requisite standard. That this is a difficult task can be judged from the fact that there are over two thousand music artists on the books of the B.B.C. and hundreds of actors, comedians, and others.

The familiar process of announcing may serve to provide an illustration of the three categories. All the usual day-to-day announcers are on the permanent staff. At some of the provincial sub-centres there are part-time announcers who come in for an occasional programme once or twice a week; they are on the auxiliary staff. On the other hand, particular programmes may be announced or compèred by artists engaged for the occasion. The most familiar example of this is perhaps the commentator on a sporting event, or the narrator in a play.

In the past thirteen years, the B.B.C. has expanded so much that developments of organization have been inevitable, and it is probable that there will be further development. The coming of television will obviously have an effect which it is difficult at this stage to foresee. At present television is a separate service under the Controller (Programmes) but subject to artistic control by the heads of the relevant broadcasting departments, Music, Drama, Variety, etc. It is possible, however, that in several years' time television may have amalgamated with sound broadcasting, when presumably each element of it would become part of the usual normal structure of the appropriate broadcasting department. Another direction in which there is a certainty of expansion and development is in the Empire Service. This can be described as being at the moment in a state of development corresponding to that of the B.B.C. in what might be called the 2LO days. In the course of the next few years it should catch up the Home Programmes and to a great extent be established on a footing of equality with them.

In sum, there is every prospect that the organization in the B.B.C. will be in a state of progressive development for years to come.

### S.O.S. AND POLICE MESSAGES 1935

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[69]
FINANCE

The Corporation's finances are governed by the conditions laid down in the Charter under which it was established and by the provisions of its Licence from the Postmaster-General. There are many points of difference between the Corporation's finances and those of commercial undertakings on the one hand and of government departments on the other. Some general explanation is required, therefore, for the understanding of the Balance Sheet and Revenue Account for 1935, which appear on pages 75-77.

The most striking difference from the ordinary commercial concern is that the Corporation has no share capital or other capital resources. When it took over from the British Broadcasting Company, Ltd., at the beginning of 1927, the assets of the Company were handed over to the Corporation without payment; all capital expenditure since incurred (amounting to nearly fifteen times the value of the assets then transferred) has had to be financed out of income. The Corporation's income is restricted, consisting mainly as it does of a fixed share (according to a scale laid down in its Licence from the Postmaster-General) of the listeners' licence fees; and the necessity of meeting all expenditure out of income therefore determines the Corporation's whole policy. Revenue expenditure must be limited so as to leave sufficient for the purchase of assets; the effect on revenue expenditure of these assets when acquired must be taken fully into account; and, throughout, the continuous, steady development of the service to the best advantage must be maintained.

In the Balance Sheet, the Capital Account represents amounts reserved out of revenue for the acquisition of fixed assets. In the last few years it has not been possible to transfer the full amount needed for this purpose out of the revenue available—it will be seen that the total of Capital Account falls short of the total of Fixed Assets by nearly £680,000—and so, in effect, the funds representing the Provision for Depreciation have had to be utilized temporarily, all except some £2,300, to supplement the Capital Account reserve. The amounts thus used from the reserve represented by the Provision for Depreciation will have to be replaced, of course, in order that funds will be available for the replacement of the various fixed assets at the expiry of their life. This means that future revenue will have to bear the double burden of restoring the borrowings from Depreciation Reserve funds and providing for current capital expenditure. The latter will be high for some years to come owing to the necessity of carrying out various capital schemes called for by technical progress, the improvement of the programme service and the general developments in broadcasting. New high-power transmitters, for example, are at present being erected and equipped at Burghead, to serve the North of Scotland, and at Stagshaw for North-East England, while that near Lisburn for Northern Ireland is nearly completed. These are required in order to extend the service to cover as far as possible the whole population of Great Britain and Northern Ireland and also to cope with present-day broadcasting conditions. The television service about to be undertaken will itself necessitate heavy capital expenditure: in 1935 a beginning was made in the adaptation and equipment of television premises at Alexandra Palace.

Freehold Land and Premises, Plant and Furniture and Fittings require no special explanation. They represent, of course, the transmitter, studio, and office buildings of the system and their equipment. As regards the next heading, the service naturally requires a large stock of music, of which the Corporation has been able to build up a valuable library which includes a great number of arrangements specially made for broadcasting.

To turn now to the Revenue Account, the Corporation's chief source of income is its share of the licence fees collected by the Post Office. The amounts paid to the Corporation in any fiscal year have represented a proportion of the fees collected in the preceding fiscal year (after deduction of 10 per cent by the Post Office to cover the costs of collection etc.). This system of payment in arrear has made the Corporation's actual share of current licence revenue considerably less than the nominal proportions set forth
in its Licence. In addition, the Corporation, beginning in 1931, has made special voluntary contributions to the Treasury each year in view of the state of the country's finances. Such contributions are, however, no longer necessary and have been discontinued during 1935. The amount actually available for the broadcasting service has been further reduced by the heavy charge for Income Tax. Although the Corporation has no profits in the ordinary sense, as all revenue is applied to the maintenance and development of the service, Income Tax is levied on the amounts necessarily appropriated from revenue for capital expenditure, for other expenditure on improvements, and on the reserve necessarily made for Income Tax itself. In 1935 £120,000 was reserved for Income Tax, bringing the amount actually available for the service down to 5s. 2d. per licence fee of 10s. issued during that year; in the previous year or two the proportion has been less than half of the licence fee.

The other main source of income is the Net Revenue from Publications—that is, from the journals published by the Corporation in furtherance of the broadcasting service—which include the *Radio Times*, *World-Radio*, and *The Listener*. The income from this source has steadily increased and in 1935 amounted to over £421,000. The Revenue Account reveals that the Corporation's share of licence income in 1935 was not sufficient to meet Revenue Expenditure. In effect, the Corporation has had to rely for some years past on its publications to provide not only the balance of revenue expenditure but also the whole of the appropriations for capital expenditure.

Of the revenue expenditure, Programmes is naturally the largest item. The greater part of this expenditure consists of the fees paid to artists, conductors, and speakers, and for outside broadcasts, and of the cost of the permanent orchestras in London—the Symphony, Variety, Theatre, Empire, and Dance Orchestras, and the Wireless Singers—and in the provincial Regions. The enormous number of items broadcast either direct or by gramophone record involves the payment of large sums in performing rights etc., and payment has also to be made in respect of the material supplied for the news service.

The simultaneous broadcast telephone system, which cost some £54,000 in 1935, links up all the transmitters and studios by line so that any programme can be put out by all or any of the transmitters. The bulk of the Programme Staff Salaries is in respect of creative or production staff and is part of the direct cost of programmes in the same sense as are the fees to artists etc., while the remainder represents the cost of the direct preparation, supervision and administration work involved in programmes.

Engineering, the next largest branch of expenditure, consists practically entirely of the direct cost of running the system, comprising as it does Power, Plant Maintenance and Maintenance Engineers' salaries. With the extension of the broadcasting service to the Empire, there are now practically twenty-four hours of transmission daily. Under this heading is included also the cost of research. Premises Maintenance and Overhead Charges, Administration etc. represent the necessary overhead expenses of the organization. Depreciation is a fairly heavy charge owing to the comparatively short life of a great deal of broadcasting plant and its rapid obsolescence. Income Tax has already been mentioned.

The new television service being inaugurated in accordance with the Report issued by the Television Committee in 1935 involved only a small amount of preliminary expenditure in that year. It is impossible as yet to give any definite idea of the ultimate cost of the service, but it will certainly entail rapidly increasing expenditure, both capital and revenue, from now on. The service which will be put into operation in 1936 will be given from one transmitting station now being equipped at Alexandra Palace; but in the course of time it is expected to be extended considerably, involving the construction of further transmitters in various parts of the country and the provision of a complete service of televised programmes.

Apart from this new branch of the service, there is continual change in sound broadcasting also: new programme ideas and standards, new technical discoveries, new conditions, all combine in making ever-increasing demands on the Corporation's finances, which continue to require the most careful planning and management.
Map of the British Isles by Counties showing percentage of wireless licences to population
**LICENCES TO POPULATION**

*as at 31 December 1935*

[Note—'A household' may be taken as averaging between four and five persons of all ages]

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<th>Licences</th>
<th>%</th>
<th>County</th>
<th>Population</th>
<th>Licences</th>
<th>%</th>
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### Anglesey Breconshire Carmarthenshire Caernarvonshire Caernarvonshire Cardiganshire Denbighshire Flintshire Glamorganshire Merionethshire Montgomeryshire Pembrokeshire Radnorshire WALES

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<tr>
<td>48,462</td>
<td>5,716</td>
<td>12</td>
</tr>
<tr>
<td>87,179</td>
<td>9,594</td>
<td>11</td>
</tr>
<tr>
<td>21,314</td>
<td>2,361</td>
<td>11</td>
</tr>
</tbody>
</table>

**SUMMARY**

<table>
<thead>
<tr>
<th>England</th>
<th>Scotland</th>
<th>Wales</th>
<th>N. Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>37,932,137</td>
<td>4,842,554</td>
<td>2,158,193</td>
<td>6,426,993</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population</th>
<th>Licences</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>606,794</td>
<td>57,395</td>
<td>10</td>
</tr>
<tr>
<td>110,670</td>
<td>4,593</td>
<td>4</td>
</tr>
<tr>
<td>209,228</td>
<td>4,372</td>
<td>2</td>
</tr>
<tr>
<td>57,984</td>
<td>1,071</td>
<td>2</td>
</tr>
<tr>
<td>139,693</td>
<td>5,747</td>
<td>4</td>
</tr>
<tr>
<td>132,792</td>
<td>4,010</td>
<td>3</td>
</tr>
</tbody>
</table>

**Reconciliation of 'London Area' Licences**

Post Office Summary of Population by Postal Districts...

Re-allocated to County Administrative Areas

<table>
<thead>
<tr>
<th>Essex</th>
<th>Kent</th>
<th>Middlesex</th>
<th>Surrey</th>
<th>London County Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>116,002</td>
<td>5,963</td>
<td>153,875</td>
<td>26,371</td>
<td>696,482</td>
</tr>
</tbody>
</table>

**Figures in Thousands of Pounds**

Note: the revenue for the years 1922–1926 (total £2,925,000—B.B.C., £1,768,000; Government, £1,157,000) is not included in the diagram, owing to complications arising from a different financial year and (in the first year) royalties on receiving sets.
## REVENUE ACCOUNT
### FOR THE YEAR ENDED 31 DECEMBER 1935

<table>
<thead>
<tr>
<th>EXPENDITURE</th>
<th>INCOME</th>
<th>Adjusted to nearest £</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To Programmes:</strong></td>
<td><strong>By Licence Income (Net)</strong></td>
<td>2,038,262</td>
</tr>
<tr>
<td>Artists, Speakers, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent Orchestras</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing Rights, Copyright</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fees and News Royalties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.B. Telephone System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme Staff Salaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travelling, Stationery, Postages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; Miscellaneous Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engineering:</strong></td>
<td><strong>Amount recoverable from the Post-</strong></td>
<td>4,582</td>
</tr>
<tr>
<td><strong>costs, Research Materials and Transmitting Patents</strong></td>
<td><strong>master-General in respect of a Public</strong></td>
<td></td>
</tr>
<tr>
<td>Engineering Staff Salaries</td>
<td><strong>Television Service being one-half of sums</strong></td>
<td></td>
</tr>
<tr>
<td>Travelling, Stationery, Postages</td>
<td>expended to date and included under</td>
<td></td>
</tr>
<tr>
<td>&amp; Miscellaneous Expenses</td>
<td><strong>the appropriate headings per contra</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Premises Maintenance and Overhead Charges:</strong></td>
<td><strong>Net Revenue from Publications, after</strong></td>
<td>421,576</td>
</tr>
<tr>
<td>Rents, Rates, Taxes and Insurance</td>
<td>providing for Bad and Doubtful Debts</td>
<td></td>
</tr>
<tr>
<td>Heating, Lighting and Telephones</td>
<td><strong>Interest on Investment and Bank Current</strong></td>
<td></td>
</tr>
<tr>
<td>Alterations, Maintenance and Extension of Premises, Furniture, etc.</td>
<td><strong>Account, less Interest on Bank</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Administration:</strong></td>
<td><strong>Loan and Charges</strong></td>
<td></td>
</tr>
<tr>
<td>Administration Staff Salaries</td>
<td><strong>Profit on realization of Investment</strong></td>
<td>1,925</td>
</tr>
<tr>
<td>Travelling, Legal, Audit, Stationery, Postages &amp; Miscellaneous Expenses</td>
<td></td>
<td>6,227</td>
</tr>
<tr>
<td><strong>Contributions to Staff Pension Scheme and Benevolent Fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governors' Fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Provision for Depreciation and Renewal of Premises, Plant, Furniture and Fittings, etc.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Provision for Income Tax</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Balance carried down, being</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Revenue for year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>£2,472,572</strong></td>
<td><strong>£2,472,572</strong></td>
<td></td>
</tr>
</tbody>
</table>

### REVENUE APPROPRIATION ACCOUNT

<table>
<thead>
<tr>
<th>EXPENDITURE</th>
<th>INCOME</th>
<th>Adjusted to nearest £</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To Transfer to Capital Account, as a provision for Capital Expenditure</strong></td>
<td><strong>By Balance (unappropriated Net Revenue)</strong></td>
<td>6,756</td>
</tr>
<tr>
<td>Balance (unappropriated Net Revenue) carried forward at 31 Dec. 1935</td>
<td><strong>brought forward from 31 Dec. 1934</strong></td>
<td>324,161</td>
</tr>
<tr>
<td><strong>£339,917</strong></td>
<td><strong>£339,917</strong></td>
<td></td>
</tr>
</tbody>
</table>
## BALANCE SHEET AS AT 31 DECEMBER 1935

### LIABILITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Adjusted to nearest £</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>174,938</td>
<td></td>
</tr>
<tr>
<td>Appropriated from Revenue towards meeting Capital Expenditure—Appropriated at 31 December 1934 (per last Balance Sheet)</td>
<td>1,535,069</td>
<td></td>
</tr>
<tr>
<td>Appropriated at 31 December 1935</td>
<td>300,000</td>
<td></td>
</tr>
<tr>
<td><strong>PROVISION FOR DEPRECIATION AND RENEWAL OF PREMISES, PLANT, FURNITURE AND FITTINGS, ETC.—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 31 December 1934 (per last Balance Sheet)</td>
<td>511,767</td>
<td></td>
</tr>
<tr>
<td>Add: Further provision during 1935 per Revenue Account</td>
<td>187,000</td>
<td></td>
</tr>
<tr>
<td><strong>Less:</strong> Book Value (net) of Plant, Furniture and Musical Instruments discarded during 1935</td>
<td>19,432</td>
<td></td>
</tr>
<tr>
<td><strong>REVENUE ACCOUNT—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance (Unappropriated Net Revenue) at 31 December 1935, carried forward as per Account</td>
<td>679,335</td>
<td></td>
</tr>
<tr>
<td><strong>CREDITORS AND RESERVE FOR CONTINGENCIES—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry Creditors (including Reserve for Income Tax)</td>
<td>449,924</td>
<td></td>
</tr>
<tr>
<td>Reserve for Contingencies</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td><strong>DEBTORS AND UNEXPIRED CHARGES—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry Debtors (less provision for Doubtful Debts)</td>
<td>£224,832</td>
<td></td>
</tr>
<tr>
<td>Unexpired Charges</td>
<td>£12,772</td>
<td></td>
</tr>
<tr>
<td><strong>CASH AT BANK AND IN HAND—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Banks, on Current Accounts (less Balance on Secured Loan Account)</td>
<td>£244,074</td>
<td></td>
</tr>
<tr>
<td>In Hand</td>
<td>£57,728</td>
<td></td>
</tr>
<tr>
<td><strong>STORES ON HAND AND WORK IN PROGRESS—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at cost or under</td>
<td>18,800</td>
<td></td>
</tr>
<tr>
<td><strong>FREEHOLD LAND AND BUILDINGS—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31 December 1934, at cost, per last Balance Sheet</td>
<td>1,285,973</td>
<td></td>
</tr>
<tr>
<td>Additions during 1935 at cost</td>
<td>395,193</td>
<td></td>
</tr>
<tr>
<td><strong>PLANT—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31 December 1934, at cost, per last Balance Sheet</td>
<td>682,394</td>
<td></td>
</tr>
<tr>
<td>Additions during 1935 at cost (less book value of Plant discarded during the year)</td>
<td>156,748</td>
<td></td>
</tr>
<tr>
<td><strong>MUSICAL INSTRUMENTS, MUSIC AND BOOKS—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31 December 1934, at cost, per last Balance Sheet</td>
<td>53,589</td>
<td></td>
</tr>
<tr>
<td>Additions during 1935 at cost (less book value of Instruments discarded during the year)</td>
<td>6,637</td>
<td></td>
</tr>
<tr>
<td><strong>FURNITURE AND FITTINGS—</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquired from the British Broadcasting Co., Ltd., as valued by the Corporation's Officials, plus additions made by the Corporation to 31 December 1934, at cost, per last Balance Sheet</td>
<td>107,525</td>
<td></td>
</tr>
<tr>
<td>Additions during 1935 at cost (less book value of Furniture discarded during the year)</td>
<td>6,771</td>
<td></td>
</tr>
<tr>
<td><strong>REPORT OF THE AUDITORS TO THE MEMBERS OF THE BRITISH BROADCASTING CORPORATION</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We have examined the above Balance Sheet dated 31 December 1935 with the books and explanations we have required. The Balance Sheet is, in our opinion, properly drawn up so as to exhibit a true and correct view of the state of the Corporation's affairs at 31 December 1935 according to the best of our information and the explanations given to us and as shown by the Books of the Corporation.

5, LONDON WALL BUILDINGS, LONDON, E.C.2
13th January, 1936

(Signed) B. C. Norman, Governors
H. G. Brown, Director-General
J. C. W. Reith, Director-General

Deloitte, Plender, Griffiths & Co., Auditors,
Chartered Accountants
The New Mast Radiator of the Northern Ireland Regional Station at Lisburn

[78]
The scheme of distribution of broadcasting over Great Britain and Northern Ireland must conform, not only to the limits of the present technical position, but also to the restrictions imposed by various agreements, both governmental and international, which have been made for the common benefit. Some knowledge of these is essential if the trend of technical development of broadcasting in this country and abroad is to be followed.

Of the limitations brought about by common agreement between the nations of Europe, by far the most important are those determining the allocation of the wavelengths or ether channels, on which broadcasting stations operate. Broadcasting is only one, and for that matter a comparative newcomer, among the number of different services claiming channels—communication between the shore and ships at sea, naval and military services, wireless telegraph services from one country to another, and so on—most of which had secured for themselves their several ‘places in the sun’ before broadcasting started. With its advent, room had to be made for it if mutual interference were to be avoided, and the ether, already full, became uncomfortably crowded. Perhaps unwillingly, the existing services compressed themselves sufficiently to give certain bands of wavelengths for the use of broadcasting, so that the broadcast listener could be reasonably certain of receiving his local station without being troubled by interference from the other traffic.

But in the thirteen years of broadcasting, the position has become steadily more difficult, not only because of the expansion of broadcasting itself, but because of similar expansion in other wireless services. As a result, research has been directed towards the possibility of increasing the available wavelength channels in order that more should be available for distribution to the various services.

The wavelengths allotted to broadcasting are comprised in two bands, the ‘long’ (1100-1875 metres, 271-160 kc/s) and the ‘medium’ (200-545 metres, 1500-550 kc/s). With few exceptions, all the European broadcasting stations have to be given a place within these, except those which are not intended to give a service within the frontiers of the country in which they are situated, namely, the transcontinental and transoceanic stations operating on ‘short’ wavelengths (13-50 metres).

The early-comers in broadcasting had no difficulty in choosing wavelengths which did not interfere with each other; but it was soon clear that, if the number of broadcasting stations went on increasing indefinitely, there would soon be insufficient space for everybody, and serious interference to reception would result. Clearly, the only way to overcome this trouble was to obtain some international agreement between those countries whose broadcasting stations were likely to interfere with each other. This, in practice, meant the whole of Europe; and broadcasting authorities in Europe, recognizing the danger, drew together in 1925 to form the International Broadcasting Union (Union Internationale de Radiodiffusion) which set to work on this and other common problems of the new phenomenon. The Union took the obvious course of allotting a number of wavelengths for the exclusive use of each country. The first plan of wavelength allocation was formulated at Geneva in 1926. Since then, several revisions have been necessary. These revisions have always tended to reduce the number of waves allotted to the bigger countries, who were the first-comers in order to make room for the smaller ones, where development has been slower.

As a result, the number of wavelengths which the B.B.C. has for the provision of a broadcasting service to Great Britain and Northern Ireland is restricted, and the distribution problem, therefore, became and has remained one of making the best use of the available wavelengths. This limitation cannot be too strongly stressed, because, had the B.B.C. been able to build stations without thought of wavelength restriction, the resultant distribution scheme might have been
very different from what has actually been carried into effect.

Between 1922 and 1924, before the wavelength difficulty became acute, the B.B.C. 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 population as possible might be given a service.

When in 1926 the first international allocation of wavelengths was made, the B.B.C. was faced with the necessity of reducing by half the number of waves which they used. Clearly, the best possible use had to be made of those that remained. This situation had been anticipated, and, with high-power technique emerging from the research stage, it became practicable to build a transmitter which could be heard satisfactorily over a radius of some 50/80 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, in London to serve the metropolitan area, the North to cover the industrial districts of Lancashire and Yorkshire, the Scottish for Glasgow and Edinburgh, and the West to serve South Wales and the more populated parts of the West Country. All these stations are now in operation, each being equipped with two transmitters, so that alternative programmes are available in the areas covered.

The whole of the country, however, is not served by this means. There are large rural districts which fall outside the ranges of any of the Regional Stations. This situation was always anticipated, and, of course, existed to a greater extent in the days of the low-power stations. 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. (There were governmental objections to such an increase in power being applied at Daventry.) The strength of the received signal is proportional to the square root of the power of the transmitter and, therefore, Droitwich gives a little over twice the field strength of Daventry. It was convenient also to replace the Midland Regional transmitter at Daventry by a modern equipment of increased power at Droitwich, which is in a good geographical position for feeding the Midland area. This new transmitter was put into service in February, 1935.

So far, ten transmitters have been mentioned, two in each of five regions. Of these, nine operate on medium wavelengths, and one on a long wavelength. A sixth region is Northern Ireland, at present served by a low-power medium-wave transmitter in Belfast, and lastly, there are similar low-power transmitters in Aberdeen, Newcastle, Bournemouth, and Plymouth. For these fifteen transmitters, the B.B.C. has only eleven wavelengths on which to work. The shortage is overcome by the operation of more than one transmitter on the same channel, a procedure which entails certain limitations of service area as well as imposing the condition that all transmitters working on the same wavelength shall radiate the same programme. At present, the Plymouth and Bournemouth transmitters are synchronized on one wave and the London, North, and West National transmitters on another, while Aberdeen is temporarily using a wave borrowed by agreement from another country.

Sites for transmitting stations are chosen so that the population within the district which will be served shall be as large as possible. Nevertheless, broadcasting is a...

*Wavelength channels in the long and medium band are not of equal value from the point of view of coverage. A long wavelength attenuates or weakens at a slower rate than a medium wavelength, so that a long-wave station has a range of from 150 to 250 miles or more compared with 50 to 80 miles for a medium-wave station of similar power. There are, however, disadvantages associated with the reception of long waves. Electrical interference (see pages 83-85) is more noticeable, so that good reception in densely populated industrial districts is likely to be more difficult than of a medium-wave station whose field strength may be only one-half that of the long-wave station.
Construction in progress *(above)* at the North Scotland Regional Transmitting Station at Burghead, and *(below)* in the Power House at Northern Ireland Station at Lisburn.
public service and the licence revenue from the listeners in a given district, taken individually, may not necessarily be sufficient to pay the capital and running costs of the station in that district. In effect, therefore, one station serving a densely populated area must subsidize another less favourably placed. Of course, there are bound to be inequalities of service, for technical reasons if for no other, since the environs of a station must inevitably get a better service than the fringe of the service area. It is easy enough to cover perhaps 80 per cent of the population, but the provision of a service to the remaining 20 per cent, who are widely scattered, is more difficult.

Extensions must, therefore, be governed, not only by the effects of wavelength restriction, but by the need to locate stations so as substantially to reduce the percentage of population not otherwise provided with a service. Claims to better service may, of course, be propounded and even justified on other grounds, but the technical criterion is solely that of service to the maximum number of listeners.

Improvements in the service in three areas are now in progress. First, the low-power transmitter which has served Belfast for eleven years will shortly be replaced by a new one of high power, situated near Lisburn, ten miles from Belfast, which will serve the greater part of Northern Ireland. Secondly, a new station is under construction at Burghead to serve Inverness and the north-east coast of Scotland, which has hitherto had only a somewhat unreliable service from the Droitwich long-wave transmitter. Finally, the low-power transmitter in Newcastle is to be replaced by a high-power station located sixteen miles west of the city to cover the densely populated industrial area of the north-east coast. Further, the decision to divide the old ‘West Region’ into two, Welsh and West (see p. 67), has made it necessary to examine the possibility of providing a new station or stations for the West Country if the existing West Regional station is to transmit mainly Welsh programmes. The technical problems involved are difficult enough owing to the geographical and geological nature of the
counties of Somerset, Devon, and Cornwall, but a solution is made doubly difficult by the lack of a wavelength on which a new station might work. The only means of obtaining one is by a further extension of the synchronization principle. Experimental work is now in progress to see whether some compromise is possible which will not too seriously affect the existing service.

Such, in general terms, are the conditions under which the service has to be planned and the main points in which developments have occurred in 1935 and are envisaged for 1936. This principal problem, however, by no means exhausts the activities of the Engineering Division, and certain of these, viz., the steps taken to deal with the evil of 'electrical interference', the work of the research department, and the developments which have taken place in studio construction, are dealt with separately. For the important advances made in Empire (short-wave) broadcasting, the reader is referred to the Empire Section, pp. 133-137.

Electrical Interference with Broadcast Reception

At the present time the whole subject of the suppression of electrical interference with broadcast reception is in the hands of a special committee appointed by the Institution of Electrical Engineers. Nevertheless, it is thought that the B.B.C. Annual for 1936 should contain some reference to this gravely important question. The reference, however, must in no way compromise decisions on questions that are sub judice, and it must therefore be restricted to a simple explanation of what is meant by electrical interference, how it is caused, and how it can be cured. Whether one or another method of suppression is economic; who should pay for the suppression; and whether legislation should be drawn up to force manufacturers or owners of interfering apparatus to render it interference free, are matters which cannot be discussed in this article.

Most forms of domestic and industrial electrical apparatus dependent for their action on moving parts, or on contacts which are made and broken, are capable of radiating electro-magnetic waves, and do in fact radiate these waves if some form of aerial is connected to them. The wiring which supplies the electric current to the apparatus is generally a sufficiently good aerial. The most common type of domestic apparatus, such as the vacuum cleaner, contains an electric motor, and can produce quite serious interference. This generally takes the form of clicks when the machine is switched on and off, together with crackles and a whirring sound when it is running. Clicks can also be produced by switching on or off an ordinary electric lamp.

The electro-magnetic waves produced by electrical apparatus do not differ essentially from the waves produced by a broadcasting or other wireless transmitter, and can be received on a broadcast receiver. If their strength at the listener's aerial is comparable with the strength at which the wanted broadcast programme arrives at the aerial, they may cause a loud noise to be superimposed on the wanted programme. Further, unlike the wanted broadcast programme, these interfering waves are not generally confined to a narrow band of wavelengths; and interference caused by domestic or industrial apparatus can therefore often be heard at any setting to which the receiver is tuned, although in most cases it is worst on the longer wavelengths. It can therefore interfere at the same time with reception from a number of different broadcasting stations.

It has been stated above that the interference can be radiated by the electric supply wiring. It can also be conducted along the wiring, and, since many broadcast receivers are mains-operated, it follows that a second point of entry to the broadcast receiver is often available. Furthermore, conduction and radiation can take place simultaneously, with the result that interference produced by a piece of electrical apparatus belonging to a neighbour (who may not be a broadcast listener) can be conducted along the mains and then introduced into a nearby listener's receiver, either directly through the receiver mains connexion, or indirectly by radiation through the aerial connexion.

Only one item of domestic apparatus, the vacuum cleaner, has so far been mentioned in this article. It is mentioned as an example, and it is certainly ubiquitous, though in fact its effects may not be serious, as it is unlikely that many vacuum cleaners will be
in use in the evenings when the broadcast audience is greatest. But there are many other items of domestic, industrial, and medical electrical apparatus which may cause interference with broadcast reception, for instance:

Toys, fans, floor polishers, gramophone motors, hair dryers, refrigerators, washing machines, bells, H.F. medical and diathermy apparatus, sewing machines, lifts, trams and trains (principally with overhead collectors), electric heaters and water heaters fitted with thermostats, and the ignition systems of motor cars (interference confined to short and ultra-short waves).

The scope of the above list will indicate not only that a great deal of electrical interference is caused at the present time, but that this is likely to increase in the future. The question inevitably arises—must the listener always be subject to this interference, or is a great increase in the power of broadcasting stations a way in which it can be ‘shouted down’? While increases in the power of broadcasting stations within practicable limits would help, they would not have much effect, for to achieve complete freedom something like 100 times the power might be necessary. But from the technical aspect it is fortunately possible to reduce interference to a point where the majority of broadcast listeners would not be affected by it when listening to their nearest B.B.C. station, to Droitwich, or (after dark for a large proportion of the time) to the stronger of the Continental stations.

There are three possible points at which this problem may be attacked, namely, at the source (i.e., at the interfering apparatus itself), at the mains, or at the receiving equipment itself, including its aerial and earth system. Since one piece of electrical apparatus is capable of causing interference to a number of broadcast receivers, it is arguable that it is at the apparatus itself that a suppression device should be applied; for if it is surely better to suppress the interference at its source than to allow it to be propagated, and then to take steps to eliminate or reduce it at the many installations which it affects. It is true, however, that in some cases the cost of suppression at the source might be unduly high—or complete suppression might not be possible—and it may therefore be desirable for the broadcast listener himself to take certain steps to assist in obtaining interference-free reception.

From what has been said at the beginning of this article, it will be seen that interference can be conducted to the receiver via the supply mains. Filters can be purchased which will prevent this mains-borne interference from entering the receiver, and indeed, some modern receivers incorporate such filters in their design. It must be remembered, however, that no filter circuit at the point where the mains enter the receiver will be of use if the interference is being radiated from the house mains wiring onto the aerial circuit as frequently occurs. A filter installed at the point where the supply companies’ mains enter the house may be of use, particularly if, as is usual, the mains are buried and the house in question is not too near to other houses where interfering apparatus is in use. It is likely to be less effective in blocks of flats where the house wiring in the walls of one flat may be in close proximity to the wiring of adjacent flats where interfering apparatus is used and no filters are fitted.

Another method by which freedom from interference can sometimes be obtained is to install the receiving aerial so that it picks up the maximum of wanted signal and the minimum of unwanted interference. For instance, if the aerial is an indoor one and is run along the picture-rail of a flat in a steel-beamed building, the pick-up of the wanted signal may be very small, whereas owing to possible proximity of the aerial to the house-wiring circuits, the pick-up of the unwanted interference may be very high. A partial remedy may be to run the aerial diagonally across the room, when the pick-up of the unwanted interference might well be less and that of the wanted signal greater. The problem of installing efficient aerials in blocks of flats is a difficult one, which deserves, and is beginning to receive, the serious attention of architects and builders.

Some listeners, however, who are troubled with electrical interference, have a choice of position for an aerial and, special aerials are now on the market in which the active part of the aerial is placed outside the interference field and connected to the broadcast receiver by a special type of lead-in which, being of screened cable, does not itself pick up interference.

This method of minimizing the effects of existing interference presupposes that an interference-free position can be found for the active part of the aerial, a condition which may be difficult to fulfil for many town dwellers in crowded districts. It may indeed happen that, when the active part of the aerial is moved away from one field of interference, it is moved into another.

It will be seen, therefore, that although the broadcast listener can sometimes alleviate electrical interference, it is not always possible for him to eliminate it.

The problem is primarily a national one, since it is relatively local in its effects. Nevertheless, it has an international aspect, since electrical machinery forms a considerable part of international trade. If one country decides to award an ‘interference-free’ mark to certain types of electrical apparatus,
which incorporate devices making it innocuous to broadcast reception in certain conditions, it is desirable, though not essential, that such apparatus should be acceptable as interference-free in all countries when operated under similar conditions. It follows that international agreement is desirable on the tests to be applied to enable apparatus to qualify for such an interference-free mark. Such international agreement will obviously present considerable difficulties, and a Committee of the International Electro-technical Commission is endeavouring to deal with this, another aspect of the same task, as is being carried out by the above-mentioned Committee of the Institution of Electrical Engineers.

**Progress in Research**

Among the many subjects dealt with by the Engineering Research Department, the following have been selected as being of particular interest: (1) Aerials; (2) Modulation methods; (3) Synchronized transmitters; (4) Microphones; (5) Recording systems. Studio developments are also dealt with separately.

**Aerials**—The two main problems in broadcasting aerial design are: to obtain the maximum radiation for a given power, and to direct the radiation so that it causes the least fading. It is possible, by using a sufficiently high aerial, to reduce fading and improve radiation efficiency considerably; but a metal mast that is high enough to support such an aerial interferes seriously with the radiation from it, and to overcome this effect a single mast is itself frequently used as the aerial. But as the cost of a mast or tower increases rapidly with height, various expedients to obtain the same effectiveness with shorter masts have been tried, such as increasing the capacity at the top of the mast by means of a metallic ring.
or a metal extension tube, or connecting an inductance coil in the mast. A flat-topped aerial supported by two masts, such, for example, as that used by the North Regional transmitter, is, however, quite efficient, while a combination of the ring and extension pole has been found satisfactory in the method employed at the new station in Northern Ireland.

Self-supporting towers have the disadvantage that their cross-section is greater at the base than higher up; this affects the current distribution and in some cases reduces the efficiency and the anti-fading properties. In the case of the cigar-shaped tower (such as in the Northern Ireland transmitter) the middle bulge may upset the current distribution to some extent, but this has not had any serious effect on the vertical directivity of this aerial. It is intended to erect a tower of uniform cross-section at one of the proposed new transmitters to allow this point to be investigated more thoroughly.

A type of aerial which has been used considerably in this country consists of a 500 ft mast with its base insulated from earth, with three wires hung from the top, pulled out at the bottom to a distance of about 150 ft, and thence led in, more or less parallel to the ground, to a common point at the base of the mast. This arrangement is very flexible in that it is easy to change the wavelength, and it gives a relatively efficient aerial with a single mast of straightforward design. It is thought, however, that the mast radiator with the capacity top will give a better performance than this type of aerial, and experiments are being arranged to make direct comparisons of the two types.

Methods of Modulation—In order to avoid the waste of power inseparable from the older systems of high- and low-power modulation in large transmitters, three methods have been proposed in the last few years, known respectively as the Class 'B' system, the floating carrier system and the dephasing system.

In the first the power conversion efficiency of high-power modulation is increased by so arranging the characteristics of a push-pull system that the power taken by the modulator valves is low when the modulation percentage is low, and is increased only under the demand made by higher modulation percentages. In this system matched modulator valves and specially designed transformers are necessary to ensure minimum distortion.

In the floating carrier system, the normal class 'A' modulation at high power is employed, but the modulator valves are connected in series with the valves which they modulate. This series modulation has the advantages of high-power modulation without the necessity of using iron-cored transformers and chokes. It gives great purity of reproduction, but requires a high anode voltage supply. Its efficiency without the floating carrier arrangement is about the same as that of ordinary high-power or low-power modulation systems. The floating carrier method consists in reducing the carrier amplitude at times when the modulation is low and raising it to full power only when modulation is at a maximum. The object is, of course, a considerable saving in power.

In the dephasing system an entirely different method is used. Modulation is applied, in the form of phase modulation, to the input of two identical radio frequency amplifiers, the phase of the modulation being opposite in sense in the two amplifiers. In the output circuit the phase of the two voltages is arranged to
be in opposition during the peak of the negative half-cycle of maximum modulation. For other conditions, the difference of phase determines the amplitude of the current. As the amplitude in the amplifiers does not change, the efficiency remains very high under all conditions.

These new systems of modulation have been studied in the B.B.C., and two of them (Class ‘B’ and floating carrier) will be employed in the two new transmitters at present being built for the Empire Station at Daventry. Class ‘B’ will also be used at the North East Regional Station at present under construction.

Improved Methods of Synchronizing Transmitters—For reasons already stated above it is necessary for groups of transmitters to work on the same wavelength. If the frequency of each of the transmitters in a group is separately controlled, it is impossible to avoid, even with the best possible methods, slight variations between the frequencies. The effect of this, for a listener located between two (or more) transmitters radiating the same programme, is to produce a tremolo or vibration, and this effect is unpleasantly serious if the field strength received by the listener from the wanted transmitter is less than about three times that received from the other (or others).

A method has been developed by the B.B.C. for linking up the transmitters by lines over which a control tone is transmitted at a frequency in the neighbourhood of 1,000 c.p.s. The tone originates from a tuning fork at one of the transmitters and is used to drive it and the others through suitable frequency-multipliers. This system is used for the London National, West National, and North National transmitters and has resulted in a considerable improvement in the service areas, since reception is satisfactory, even when the field strength received from one transmitter is only about twice that from the others. Originally it was found that very slight changes in the lines or slight interference arising in them produced audible sounds on the received programme, but this difficulty has been overcome recently by using a tuning-fork filter to cut out the interfering effects. In the event of a break in the line used for the control tone, the transmitter receiving the tone is automatically switched over to a local tuning fork until the fault is remedied.

Microphones—In the older types of microphone the frequency response characteristic was not altogether satisfactory and varied according to the angle at which the sound waves reached the microphone. A new type of microphone, which has been developed by the B.B.C. in this country, and independently in the U.S.A and Germany, is the ribbon or velocity microphone in which a ribbon of aluminium or duralumin about 1/10,000 in. thick is suspended between the poles of a powerful magnet. The ribbon, being very light moves with the air waves, and its movement through the magnetic field causes voltages to be induced in the ribbon corresponding to the sound waves. This microphone has a satisfactory frequency response characteristic which is practically uniform for all directions, but its sensitivity varies at different angles, so that its directional sensitivity diagram is shaped like a figure ‘8’. This directivity has two advantages: it reduces the effect of reflected sound and makes it possible to place the microphone farther from the performers and so obtain a more natural balance. The other advantage is that the dead sides of the microphone can be pointed in any direction from which unwanted sounds are coming.

Recording Systems—There has been a considerable development in methods of recording programmes during the last few years. The main difficulties in most forms of recording are background noise and overloading, which fix respectively the lower and higher limits of intensity. The best result is obtained by a careful choice of the frequency characteristics of the recording chain and of the reproducing chain, taking into account the frequency band over which the amplitude of the programme peaks is a maximum, and the frequency band where the spurious noise is a maximum.

A very considerable improvement in the steel-tape process (which has been in use for some years in the B.B.C.), has been accomplished by using only a single pole-piece or pick-up for reproducing; the previous method employed two pole-pieces, one on each side of the tape, the pole-pieces being slightly staggered. This change has made the adjustment simpler and has also effected an improvement in quality and a reduction of spurious noise.

In another form of recording, which has been developed during the last few years, a groove is cut in a cellulose coating on a metal disc. The advantages of this type of record over the ordinary gramophone disc is that it can be immediately played back a number of times without any processing. Copies can also be made if required.
During the year, new studios have been opened and new speech-input equipment installed at Bangor, Bristol, Cardiff, and Belfast; but the most important work of the year has been the construction of four additional studios in a building at Maida Vale, London, which was originally a skating rink. These studios are additional to the one which was opened in 1934, and their design has led to very interesting developments in the ideas and practice of studio acoustics.

For a considerable time the fact has been generally recognized that studio acoustics are dependent to a large extent upon the frequency-reverberation characteristic; in other words, that the influence of pitch upon the time taken for sounds arising within the studio to die away to inaudibility is of the greatest importance. During the past few years much experimental work in studio acoustics has been concerned with methods of studio construction and treatment so as to obtain a reverberation time of the required value and decreasing slightly with increasing frequency.

A factor, however, which has not hitherto been precisely investigated is the influence upon acoustics of such features as broken surfaces for walls or ceiling or of the rectangularity or non-rectangularity of ground plan. Some designers of studios, particularly those associated with certain continental broadcasting organizations, have asserted that considerable benefit is to be derived from breaking up the wall surfaces, and hence the reflected sound waves, by heavy pilasters or other decorative features or by providing wall surfaces with deep corrugations. Again, a non-rectangular ground plan has been strongly advocated.

One difficulty in the past in deciding whether such variations in design are of importance or not has been the fact that studios which have differed in the manner under consideration have not been identical in other respects. This has been true, particularly, in regard to any comparison between studios constructed under the auspices of different broadcasting authorities. At Maida Vale, however, the opportunity arose, since four new studios were required, of building two pairs of studios so that each pair could be used in an experiment to discover the effect of a given variation in design.

In the first pair, each studio is of a rectangular type, but one has plane wall surfaces and the other has its walls and ceiling deeply broken up by corrugations. In order to make the scattering of the sound waves at each reflection as complete as possible, the length of the corrugations was varied progressively along the length of the walls, but their depth was kept constant throughout. This will be better understood by reference to the accompanying diagram, which shows the ground plan of the studio with corrugated walls. The ceiling has a similar contour.

Efforts were made to ensure that no other difference should exist between the two studios comprising this pair. The volume and linear dimensions of both were the same; the acoustical treatments were of the same type and were calculated to give, as nearly as possible, the same reverberation-frequency curve for the two studios. Measurements of the reverberation times of the completed studios showed that the last
requirement had been fulfilled within close limits. According to accepted theory, therefore, very little difference was to be expected between the acoustical properties of the two studios. Practical tests in the studios, however, have revealed a very marked difference between them. This can best be expressed briefly by stating that the reverberative effect is much less in the corrugated studio than in that of more conventional design, in spite of the close agreement between their measured reverberation times.

As a result of this distinction, the more ordinary studio seems to be superior for orchestral music, which depends partly on the effect of reverberation for the production of a satisfying result. The corrugated studio has, on the other hand, proved almost ideal for military band music, for which a less reverberative effect is desired. Its properties also appear to be extremely suitable for speech, as heard within the studio itself, that is to say, it possesses excellent lecture hall acoustics. Both these studios have a volume of 60,000 cubic feet and their reverberation times have an average value of about 12 seconds.

The two studios of the other pair are smaller and each has a reverberation time of about 14 seconds. These were also made precisely similar, except that one has a rectangular and the other a non-rectangular ground plan. Very little, if any, difference has so far been detected between these two studios in regard to their acoustical effect. Both show the characteristics which would normally be expected from inspection of their reverberation-frequency curves.

The preliminary result given by this most interesting experiment is therefore that whilst rectangularity or non-rectangularity of ground plan has little influence on studio acoustics, the provision of corrugated wall and ceiling surfaces greatly reduces the reverberative effect whilst having no effect on the measured reverberation time. In order to account for this result several theories have been formed, but their discussion would be outside the scope of this article, and considerable experiment will be necessary before they can be confirmed and a full explanation given of the remarkable effect which has been observed.
Regional Programme

The Listener's Book Chronicle

World-Radio

Biology

French

Art

Discovering England
As has been mentioned in the appropriate place in previous issues of the *Year-Book* and the *Annual*, a special organization has existed for some ten years for the maintenance of B.B.C. contact with the public, with the Press, and with authorities, societies, and institutions concerned with the various aspects of national, local, and sectional life. In its present form this organization bears the title of the ‘Public Relations Division’.

In this respect, of course, the B.B.C. is not unique. Many public bodies and great commercial undertakings are nowadays equipping themselves with such specialized organs for the handling of their ‘public relations’. This is happening partly because the goodwill of the public is coming more widely to be recognized as an important economic asset, and friction between any undertaking and its public as a costly feature in the running of any machine. It is happening, also, because, given the scale and complexity of modern undertakings, the public cannot, except by a process of skilled interpretation, be made familiar with what goes on behind the scenes of bodies created for its service and so be enabled to yield that co-operation upon which efficient public service depends.

Naturally, each such organization has its own special needs and lines and methods of operation. But the Public Relations Division of the B.B.C. has to meet widely different conditions. On the one hand, all sorts of people listen to all sorts of programme material, but on the other hand, they do so through a particular medium. Broadcast programmes can be fully appreciated only by listeners equipped to get the most out of them. Listening, though in a sense a passive proceeding, is nevertheless an art, and considerable selection and planning is involved in the best use of the individual receiving set and hence a contact inward on the listener’s part which it is the B.B.C.’s duty to facilitate. At the originating end, likewise, the framing of successful programmes, which must be delivered to an unseen audience whose reactions, unlike those of the theatre, the concert hall, or the lecture hall, can never reach the broadcaster directly, demands a sensitive observation of, and, therefore, contact outward with, the listener’s habits, tastes, and responses.

Thus, generality in subject-matter and special character in the medium combine to impose a particularly delicate task on the organization interpreting policy. Programmes contain ideas, and ideas on the wireless need and receive a specially careful scrutiny because they enter the home, and they enter it (in a sense) unannounced. They must, therefore, subject themselves to the rules of courtesy observed by a guest. Yet, at the same time, a country where so many different points of view are held is the last place for the repression of ideas. These facts set many problems to the Programme Division. It is to the Public Relations Division that the task falls of explaining the general line of the policy being followed in such controversial fields, a policy which seeks to keep the matter of talks and debates vigorous and stimulating without needlessly offending particular susceptibilities.

A fraction only of the hundreds of thousands of listeners who would like to see what happens behind the scenes of the B.B.C.’s daily work can be shown over the studios and transmitting stations,* as the process of broadcasting demands of performers and engineers alike a concentration, which, in the general interest of listeners, must be respected. The B.B.C. therefore, sets itself to satisfy this interest indirectly—by a regular and up-to-date service of information and photographs to the Press at home and overseas, by enabling journalists to observe and describe to their readers what happens in the studio and at the transmitter, by throwing an impression of its work on the cinema screen, by meeting demands for lectures about broadcasting, and by bringing its background work alive by displays at exhibitions. All these activities are still in course of development. Their progress could have been followed during 1935 in a wide range of Press articles: in a film ‘The Voice of Britain’ made by the G.P.O. Film Unit, which was

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*Provision is, however, made for such visits (see page 157).
awarded a medal of honour in the Brussels
International Exhibition.

During the autumn a service of monthly
Press conferences was started, for the pur-
pose of discussing and improving existing
machinery for the supply of information to
the Press and News Agencies, and of enabling
Press representatives to hear from leading
officers of the B.B.C. accounts of their plans
and policies.

Many attempts to ascertain the tastes of
listeners for particular types of programme
have been made by the B.B.C. in recent
years. Listeners' views, for instance, have
been sought on drama, on the morning talks
for housewives and the evening talks for
farmers, on the Children's Hour, and on the
programmes of the Empire Service. The
150,000 letters which reach the B.B.C.
yearly from appreciative and critical corres-
dpondents contribute useful information, as
do reports on conditions of reception supplied
by overseas listeners (see page 129).

Listener research, hitherto largely experi-
mental, has reached a point at which some
greater degree of specialization is felt to be
required; and on the formation of the pre-
sent Public Relations Division, the responsi-
bility for listener research was allotted to it.

Guidance to the listener, however, on his
choice and appreciation of programmes is
still the most fully developed of the B.B.C.'s
public relations activities. It issues regu-
larly, as a prelude to its series talks, leaflets
designed to supply listeners with outlines of
the subjects to be treated and suggestions for
their further study. It issues also leaflets
for the benefit of listeners overseas. It makes
daily available to the Press accurate time-
tables of all home programmes. It supple-
ments these time-tables with more detailed
information about the artists and speakers
who are to take part in the programmes,
the items which they are to broadcast, and
the technical arrangements made for their
transmission.

But while it thus makes information about
broadcasting arrangements freely available
to the Press, the Corporation recognizes its
responsibility for assisting listeners with
information and guidance in a more special-
ized and extensive form than is appropriate
to the daily newspaper. Its own three
journals are planned for the benefit of the
complete listener. Broadly speaking, the
Radio Times supplies him weekly with de-
tailed programmes and commentaries upon
them; World-Radio gives him similar infor-
mation about overseas broadcasting pro-
grammes; and The Listener provides a perma-
nent home for more important broadcast
talks and illustrates the B.B.C.'s cultural
activities.

The Radio Times, which comes out every Friday,
gives the programmes on all stations for the week
which begins on the following Sunday. At a cost of
3d. it has to-day a circulation which is now nearly
three million. These weekly programmes are given in
some detail. The titles, for example, of all the songs
in a concert, the order of prayers and ceremonies in
the religious services, enable listeners to know what is
coming, and when, and amplify the necessarily brief
and general descriptions which appear in the ordinary
Press. The programmes are the heart of the Radio
Times, but it also contains a large amount of editorial
matter. Past and future programmes are described
and discussed, readers' views are an important feature,
and there are copious annotations and illustrations
relating to the personalities of artists and speakers.
The Radio Times is lightened by humorous line draw-
ings, and by regular humorous features, of which one,
'Samuel Pepys, Listener', is now a firmly rooted
institution.

The Archbishop of York, Mr. G. K. Chesterton,
Sir Richard Terry, Sir Walford Davies, Sir John
Squire, Mr. Hilaire Belloc, Mr. John Hilton, and
Professor E. J. Dent were amongst the outstanding
contributors of 1935.

The Listener, although it prints a programme sum-
mary, is not a programme journal; its purpose is to
preserve week by week the best of the spoken output
of the previous week. It was started in response to
very numerous requests for the text of important talks,
and these talks make up the bulk of the paper. But
in its function as a link between the B.B.C. and the
listening public it necessarily acquired a definite and
recognizable character of its own. It comments week
by week on subjects of general interest; it gives a
service complementary to the news bulletins by pro-
viding a selection of news photographs, and various
matters of controversy, arising out of the different
talks, are actively canvassed in its letter columns.
There has recently been added a special section dealing
with the music programmes, designed as a background
service to increase the understanding and enjoyment
of music. While the more important talks are printed
in full, high spots are selected from a variety of other
addresses given on the Regional as well as on the
National wavelengths. The Listener costs threepence
and comes out every Wednesday.

The third of the Corporation's weekly papers, World-
Radio, gives the programmes of foreign stations all over
the world. These are now so numerous that they
cannot be given in such great detail as the home
programme in the Radio Times, but they are classified
both by stations and chronologically, hour by hour and
day by day, so that the listener can see immediately
what choice lies open to him at the moment when he is
prepared to listen. A selection of the principal items
is also printed as guidance for those who welcome it. The editorial pages, while they provide, with pictures and annotations, information to help listeners to understand the significance of various foreign programmes, are primarily concerned with the technical side of broadcasting. The radio services of countries all over the world, in particular the new developments in short-wave broadcasting, are typical topics. Short-wave programmes have a special section to themselves. The teaching of foreign languages has long been a feature of World-Radio in conjunction with the language lessons in the broadcast programmes. World-Radio appears on Fridays and costs twopence.

**Supplementary Publications**

In addition to its regular journals, and to its *Annual*, the Corporation issues special pamphlets three times a year, giving the details of the different series of forthcoming talks, and classifying them so as to furnish a guide which shows what ground is being covered, on what days, and at what times. Some 200,000 copies are circulated. Similar pamphlets deal with the educational programmes drawn up for the use of schools; in these, teachers are informed not only of the courses to be given, but also of the best ways in which to use them. Specially important series of talks are frequently accompanied by a special pamphlet, which is sold to those who apply for it. The numbers sold vary according to the subject, from around 10,000 to around 60,000. These special pamphlets, which are commonly produced with illustrations and artistic printing, contain a synopsis of each of the talks in the series (usually with a general introduction), and aids to, and references for, further study, and are found useful not only at the time, but in retrospect.
FOREIGN RELATIONS

This year has exhibited the foreign relations of national broadcasting services, those of the B.B.C. included, under both of their two aspects—that of the individual services reciprocally rendered by the broadcasters of different countries and that of more general combination for more general objects. As to the first, broadcasters need from one another in the main only detail services, unobtrusively and constantly given and returned. As to the second, there is perhaps some misunderstanding on the part of the public as to the degree to which it is possible, not indeed to arrive at a common broadcasting policy theoretically—for that is a matter of discussion, persuasion, and eventually of common resolutions—but to implement such a policy. The International Broadcasting Union (of which the Corporation is a founder-member) is a private association, whereas each State, with its sovereignty over wireless communications, has powers over the broadcast programme which it may exercise at a distance, as in this country, or very directly and immediately, as in certain others. Any international policy for the conduct of broadcasting on common and give-and-take lines (whether looking to action or to deliberate abstention from action) cannot be pressed so far that it could only be carried into effect by a society of which the members were all free agents.

Nevertheless there remains a number of essentially practical problems relating to the day-by-day conduct of broadcasting and common to all broadcasters, whatever their aims, which members of the International Broadcasting Union may agree to try to solve in common. Thus in the past year they have agreed to represent each to his own Government that the just claims of broadcasting as a public service—no more than these, and no less—should be kept in sight during the conference that will be held at Brussels in 1936 to revise the Berne Convention for the Protection of Literary and Artistic Works. The proposals of the Belgian Government and the Bureau of the Berne Union, which form the basis of discussion, were minutely examined and a statement of these claims with appropriate modifications in the text of the present Convention were unanimously adopted.

The International Broadcasting Union decided further that the time had come for a discussion on the use that is being made of the ‘short’ waves. Hitherto, most of the international problems that have presented themselves have either been European or, if arising elsewhere, have only had regional effects; or again, where European experience had preceded that of other continents, the conclusions derived from it were already available for the latter to study and adapt to their needs. But the growth of the short-wave services with their world-wide range, not only lifts some of the unsolved continental problems to the inter-continental or world level, but poses special problems in addition. Accordingly, the Union decided in June last to take the initiative in proposing that broadcasters from all over the world should confer together, and a meeting was arranged to take place in Paris in February 1936. From the original proposal there developed a long list of agenda, opening up many matters of greater or less urgency to the exchange of ideas.

The scene was set for the discussion of these problems by the programme, ‘Youth Sings over the Frontiers’, organized by the Union, which took place in October 1935. This programme was composed of short contributions from countries all over the world, and each contribution bore the same character: children singing children’s songs. This gave the programme coherence, although possibly at the expense of introducing monotony. But the children were incidental. It was the last words ‘over the Frontiers’ that implied the intention of the programme: to recall to listeners wherever they were that frontiers are an artificial barrier between one nation and another and one that may be overpassed by goodwill. No one is likely to deny that this programme was a gallant effort, that goodwill is badly needed, or that broadcasting is of all things the most appropriate to the invisible and irresistible crossing of frontiers. But only continual search for, and experiment with, different forms of programme aiming directly or indirectly at this object can be expected to disclose one or
more than demonstrably contain the looked-for solvent. From the standpoint of purpose indeed, it would seem to be immaterial whether such a programme were performed altogether in one country, or relayed from another, or executed in concert by many.

In the meantime, while thus uniting with other broadcasters in trying to estimate the fruitfulness of concerted programmes the B.B.C. has taken steps that promise the British listener a very significant advance in inter-continental relations. After carefully considering the experience of other countries in this regard, the Corporation has now appointed a representative in North America. Throughout the year a great many ‘News Talks’ (see page 111) were given in foreign studios, with the kind collaboration of the local broadcaster, and brought to this country by telephone-circuit (to be broadcast here only). By this means, listeners have been kept abreast of the quickly shifting trend of events in Europe. The series of Transatlantic Bulletins from America has begun to do something of the same service, but perhaps not the least of their value has been to show very clearly how much remains to be done before the English public is familiar with America, before the size and variety of the country become a reality; before the implications of State rights, the written Constitution, and the Supreme Court are grasped and their influence upon external policy present in the mind, and even these things will be only the preface to the next phase: the interpretation of America to Britain.

Broadcasting, for which space, time, and, in this case, the language difficulty, do not exist is, or will presently be, the ideal medium for that interpretation, and—since all the evidences justify the presumption of a similar evolution in America—the part to be played by broadcasting in Anglo-American relations is of an importance not yet perhaps
generally foreseen, but which must be recognized before long to be of the first importance.

These hopes of increasing interchanges extend also to the field of entertainment, where a beginning has been made during the year with the American series ‘Five Hours Back’. It is not to be understood however that there has been, or will be, an exclusive concentration on America. In addition to programmes specially arranged in different countries for the B.B.C. (which included monthly talks from European capitals for the Children’s Hour) a number of most acceptable relays came from foreign programmes, though greater reliability in the servicing of international telephone circuits is a precondition of any extensive development of such relaying.

The major outgoing relay of the year was of course the group of Jubilee programmes. Very many foreign countries shared in the rejoicing, and vivid descriptions of the scenes of 6 May were given from St. Paul’s and Broadcasting House by commentators specially sent to England from abroad. King George was understood to be greatly pleased by the widespread friendly interest. But the occasion was marked most strikingly by the determination of British subjects abroad to enjoy that sense of participation that broadcasting can give. Letters asking for advice on how best to be sure of hearing the programmes poured in from private British listeners in Europe; in many places the British residents met together at some centre and made listening to King George V’s speech the principal part of their celebrations; one European broadcaster in a country where few understand English with great kindness sent out the speech from his own transmitters in order that Englishmen, gathered in their Legation, might be sure of hearing it clearly; and communications companies and local stations co-operated in the cities of South America so that the celebrations of the large British communities might, as they had carefully planned, culminate in listening to the Thanksgiving Service and King George. The effort made to assist the tens of thousands of private and official English listeners in foreign places to imagine themselves that day in England was the happiest undertaken in 1935.
PROGRAMMES OF THE YEAR

MUSIC

London

Jan. 1-12 Winter Series of B.B.C. Promenade Concerts conducted by Sir Henry J. Wood in Queen’s Hall.
Jan. 9 Bach-Handel Anniversary Programme at the Promenade Concert.
Jan. 18 Concert of Contemporary Music conducted by Arthur Bliss and Edward Clark.
Jan. 21 ‘Eternal Story of the Nativity’: Oratorio Programme conducted by Joseph Lewis.
Jan. 23 B.B.C. Symphony Concert in Queen’s Hall. First British performance of Shaporin’s Symphony in C Minor for Chorus and Orchestra conducted by Albert Coates.
Jan. 30 Rutland Boughton’s ‘The Queen of Cornwall’ cond. by Albert Coates.
Feb. 6 B.B.C. Symphony Concert in Queen’s Hall. First performance of Holst’s ‘Scherzo’ conducted by Adrian Boult.
Feb. 20 B.B.C. Symphony Concert in Queen’s Hall. Handel Anniversary Programme conducted by Adrian Boult.
Feb. 23 & July 10 Handel’s ‘Terpsichore’ conducted by Boyd Neel.
Feb. 25 B.B.C. Public Chamber Concert conducted by Adrian Boult. Soloists: Carl Flesch, Jo Vincent, G. Thalben-Ball.
Mar. 1 Concert by B.B.C. Symphony Orchestra in Brussels conducted by Adrian Boult. First visit of the Orchestra abroad.
Mar. 27 B.B.C. Symphony Concert conducted by Felix Weingartner in Queen’s Hall. First British performance of Schubert’s Symphony in E, orchestrated by Weingartner.
Mar. 29 B.B.C. Public Chamber Concert by the Brosa Quartet. First performance of Alan Bush’s ‘Dialectic’.
April 1 First broadcast by Mark Hambourg
April 4 Verdi’s ‘Requiem Mass’ performed at the Royal Philharmonic Society Concert conducted by Sir Thomas Beecham, in Queen’s Hall.
April 12 B.B.C. Symphony Concert cond. by Adrian Boult in Queen’s Hall. First performance of Vaughan Williams’s Symphony in F Minor.
April 24 Verdi’s Opera, ‘Aida’ (Acts I and II) from La Scala, Milan.
April 29 Opening Night of Covent Garden Grand Opera Season conducted by Sir Thomas Beecham.
May 3 Vienna Philharmonic Orchestra conducted by Bruno Walter, in Queen’s Hall.
May 10 Opening Concert of B.B.C. London Music Festival in Queen’s Hall. Bach’s ‘Mass in B Minor’ conducted by Adrian Boult.
Royal Command Concert of British Music, Albert Hall

(24 May 1935)

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May 17, 22, 27  B.B.C. London Music Festival Concert conducted by Koussevitzky.
May 18    ‘Fledermaus’ conducted by Warwick Braithwaite, Sadler’s Wells.
May 24    Royal Command Concert of British Music in the Royal Albert Hall.
May 29    Royal Command performance of ‘The Barber of Seville’ conducted by Sir Thomas Beecham at Covent Garden.
June 3, 5, 9, 12  B.B.C. London Music Festival conducted by Toscanini.
June 18 & 19  Canterbury Festival of Music and Drama. B.B.C. Orchestra—Serenade and Choral and Orchestral Concert.
June 26    Music by Darius Milhaud conducted by the composer.
June 30    Concert from Brussels International Exhibition by the London Philharmonic Orchestra conducted by Sir Thomas Beecham.
July 15    Programme of old Canadian Music conducted by Sir Ernest Macmillan.
July 22    Music by Sir Edward German conducted by Warwick Braithwaite.
Aug. 21    Mozart’s ‘Il Seraglio’ conducted by Bruno Walter (from Salzburg).
Aug. 25    Recital by Elisabeth Schumann.
Aug. 26    Verdi’s ‘Falstaff’ conducted by Toscanini (from Salzburg).
Sept. 10    Liszt Concert from Budapest, Ernő Dohnányi and Béla Bartók.
Sept. 12    First performance of Bliss’s ‘Suite from Film Music 1935’ conducted by the composer at the Promenade Concert.
Sept. 23    ‘Koanga’, an Opera by Delius conducted by Sir Thomas Beecham, at Covent Garden (also Midland Region, Oct. 12)
Sept. 29    Munn and Felton’s Band, winners of National Brass Band Contest (Crystal Palace).
Oct. 22    European Concert from Austria: Vienna Philharmonic Orchestra conducted by Oswald Kabasta.
Dec. 12    B.B.C. Symphony Orchestra at Swansea, cond. by Adrian Boult.
Oct. 31    B.B.C. Symphony Orchestra at Swansea, cond. by Adrian Boult.
Nov. 1    Tenth Season of B.B.C. Concerts of Contemporary Music. Music of Ernst Krenek conducted by Leslie Woodgate; composer at the piano.
Nov. 6    B.B.C. Symphony Concert at Queen’s Hall. First complete performance of Symphony by William Walton, cond. Sir Hamilton Harty.
Nov. 17    Organ Recital by Joseph Bonnet.
Nov. 20    B.B.C. Symphony Concert in Queen’s Hall, Vaughan Williams’s Symphony in F Minor conducted by Adrian Boult.
Nov. 21    Royal Philharmonic Society’s Concert in Queen’s Hall. First performance of Bax’s Symphony No. 6 cond. by Sir Hamilton Harty.
Nov. 24    B.B.C. Sunday Orchestral Concert. Czech Philharmonic Orchestra cond. by Vaclav Talich; Programme of Dvořák’s ‘Slavonic Dances’.
Nov. 27    B.B.C. Symphony Concert at Queen’s Hall. First British performance of Bliss’s ‘Music for String Orchestra’ cond. by Adrian Boult.
Nov. 29    B.B.C. Concert of Contemporary Music. First performance of ‘Symphony in F’ by George Lloyd; first British performance of van Dieren’s ‘Overture’ and Darnton’s ‘Concerto for Pianoforte and Orchestra’, conducted by Warwick Braithwaite.
Dec. 11    B.B.C. Special Concert in Queen’s Hall. Purcell’s ‘King Arthur’ conducted by Adrian Boult.
Dec. 23  'Carols from other Countries' by the B.B.C. Singers conducted by Sir Richard Terry.
Dec. 24  Carols by sections of the B.B.C. Military Band and B.B.C. Chorus conducted by Leslie Woodgate at St. Mary’s Whitechapel.
Dec. 27  London Symphony Orchestra conducted by Sir Landon Ronald.
Dec. 30  Opening Night of B.B.C. Winter Series of Promenade Concerts conducted by Sir Henry J. Wood.

Programmes in the ‘Foundations of Music’ series during 1935 included a ten-weeks’ Handel Celebration under the direction of Professor Edward J. Dent, a Bach Celebration of thirteen weeks under the direction of Dr. Sanford Terry, two weeks’ celebrations devoted to Domenico Scarlatti (under Professor Dent) and Heinrich Schütz (under Sir Hugh Allen), and three weeks’ series of English, French, Italian, and German contemporaries of Bach and Handel, while Sir Richard Terry directed the first performance in modern times of the complete Madrigals of the English composer, Peter Philips.

**Midland**

Feb. 21  Delius Concert by the Birmingham Festival Choral and City of Birmingham Orchestra.
Feb. 27  B.B.C. Symphony Orchestra conducted by Adrian Boult at Birmingham Town Hall.
Aug. 22  Massed Guards’ Bands at Shrewsbury.
Oct. 8   Covent Garden Opera Company in Puccini’s ‘La Bohème’.
Oct. 13  Vaughan Williams’s ‘The Shepherds of the Delectable Mountains’ by the B.B.C. Midland Orchestra conducted by Foster Clark.
Oct. 18  First of a series of ‘Midland Organs and Organists’.

**North**

Jan. 22  Liverpool Philharmonic Concert conducted by Carl Schuricht. Soloists: Orrea Pernel and Antonia Butler.
May 12  Purcell’s ‘Yorkshire Feast Song’ (first modern performance) by the B.B.C. Northern Orchestra and Leeds University Music Society.
Nov. 1   Concert of works by Samuel Sebastian Wesley, performed by the Organist and Choir of Leeds Parish Church.
Nov. 7   Hallé Concert cond. Vincenzo Bellezza. Soloist: Elena Gerhardt.
Nov. 12  Liverpool Philharmonic Concert conducted by Sir Hamilton Harty. Soloist: Jelly d’Aranyi.
Nov. 21  Hallé Concert conducted by Sir Thomas Beecham. Soloist: Emanuel Feuermann.
Dec. 28  'God save the King’, a Concert by the B.B.C. Northern Orchestra and Sale and District Musical Society. Organist: Arnold Goldsborough.
'The Dream of Gerontius'
The Elgar Memorial Window at Worcester Cathedral
(Dedicated 3 September 1935)
West

Feb. 9  Pianoforte Recital by Rubinstein, from Dartington Hall.
July 1  Mousehole Third Summer Music Festival. Male Voice Choir with
       Stuart Robertson, at St. Clement's Hall, Mousehole.
July 30 First broadcast by The Clifton Light Orchestra cond. J. L. Bridgmont.
Oct. 9  The Opening Concert of The Torquay Musical Festival.
Oct. 26 First Concert of the Season of the Bristol Choral Society at The
       Colston Hall, Bristol.
Nov. 29 & ‘Some Organs of the West’, No. 1, Exeter Cathedral; No. 2, The
       Guildhall, Plymouth.
Dec. 23

Northern Ireland

Jan. 19 Concert in Wellington Hall. Soloists: Peter Dawson and Sala.
Feb. 1  Orchestral Concert including Rispah Goodacre and Massed Male
       Voice Choirs, at Ulster Hall.
April 27 Prizewinners at ‘Feis doire Colmcille’, Guildhall, Londonderry.
June 23 Orchestral Concert of Works of Sir Hamilton Harty, conducted by
       the composer.
Oct. 5  Orchestral Concert conducted by John Barbirolli, from Ulster Hall.
       Soloists: Henry Cummings and Cassado.
Nov. 1  Pianoforte Recital by Johanne Stockmarr.
Nov. 2  Orchestral Concert, Wellington Hall. Soloists: Henry Wendon and
       Myra Hess.
Various Philharmonic Subscription Concerts conducted by E. Godfrey Brown,
      dates at Ulster Hall.

Welsh

Jan. 22 Memories of Jenny Lind.
Feb. 10 & Dec. 8 Cardiff Musical Society Concerts.
Feb. 14 & Nov. 3 Concerts by the Herbert Ware Orchestra.
May 23  Montgomery County Musical Festival.
May 23 & 24 Three Valleys Festival, Mountain Ash.
July 18  Aberystwyth Madrigal Singers.
July 21 ‘Gloria’, a Cantata by David Evans from Central Hall, Tonypandy.
Aug. 5 to 10 Concerts at the National Eisteddfod of Wales.
Oct. 31  B.B.C. Symphony Orchestra at Swansea, conducted by Adrian Boult.

And programmes by the Swansea and District, the Pontypridd and District, the Powell
Duffryn, the Swansea Orpheus, and other Choirs. The Cardiff and other Schools festivals
were also broadcast.

Scottish

June 9  Music from Dunfermline Abbey.
Sept. 27 Winning Competitors in the Grand Concert of The Mod.
Oct. 6  Music from St. John’s Church, Perth.
Various Concerts by the Scottish Orchestra, the Choral and Orchestral Union
      dates of Glasgow, the Glasgow Orpheus Choir, and the Reid Orchestra of
      Edinburgh conducted by Sir Donald F. Tovey.
      ‘Music from the Scottish Past.’ Five recitals of old Church music
      arranged by the Sub-Committee of the Scottish Musical Advisory
      Committee.
      Scottish Psalm Tune Recitals, connected with special districts (Aberdeen,
      Glasgow, Dundee, Inverness, Kelso, Kilmarnock, Edinburgh).

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### SPEECHES AND CEREMONIES

*other than Speeches by H.M. King George V, for which see page 10*

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<tr>
<th>Month</th>
<th>Day</th>
<th>Event Description</th>
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<td>Jan.</td>
<td>5</td>
<td>New Year Message from the Prime Minister, Mr. J. Ramsay MacDonald, from Lossiemouth.</td>
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<td>April</td>
<td>3</td>
<td>Speech by H.R.H. the Duke of Gloucester on return from a tour of Australia and New Zealand, at the Empire Society Dinner, London.</td>
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<td>4</td>
<td>Launch of s.s. <em>Strathmore</em> at Barrow-in-Furness.</td>
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<td>12</td>
<td>Appeal by H.R.H. the Prince of Wales for 'The Jubilee Trust'.</td>
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<td>17</td>
<td>The Prime Minister on the Stresa Conference from No. 10, Downing Street. Shakespeare Birthday Speeches by Lord Hanworth, Mr. S. R. Littlewood, and Mr. B. Iden Payne at Stratford-on-Avon.</td>
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<td>29</td>
<td>Speech by the Earl of Athlone at Royal Empire Society's Welcome to the S. African Cricket Team, London.</td>
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<td>May</td>
<td>6</td>
<td>Speech by Mr. Rudyard Kipling at the Royal Society of St. George Banquet.</td>
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<td>11</td>
<td>H.R.H. the Prince of Wales at Arms Park, Cardiff.</td>
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<td>21</td>
<td>Opening of the General Assembly of the Church of Scotland at Edinburgh.</td>
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<td>23</td>
<td>Speech by General J. B. M. Hertzog at the South Africa Club Banquet in London.</td>
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<td>June</td>
<td>1</td>
<td>Speeches by the Earl of Wemys and March, Viscount Bledisloe and Sir Alan Anderson at the 'Welcome Home' Farmers' Dinner to Viscount Bledisloe.</td>
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<td>19</td>
<td>Speech by Lord Tweedsmuir as Warden of Neidpath Castle.</td>
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<td>28</td>
<td>Lord Phillimore and Sir Francis Dyke-Acland at the National Allotment Society Banquet, Brighton.</td>
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<td>6</td>
<td>Royal Air Force Review by King George V at Duxford.</td>
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<td>13</td>
<td>Army Review by King George V at Aldershot. Opening of Leicester Municipal Aerodrome by the Minister for Air.</td>
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<td>16</td>
<td>Naval Review by King George V at Spithead.</td>
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<tr>
<td>Aug.</td>
<td>5-10</td>
<td>The Royal National Eisteddfod of Wales, Caernarvon.</td>
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<td>Sept.</td>
<td>10</td>
<td>Mr. Lloyd George at the Bicentenary of the Calvinistic Methodists, Caernarvon.</td>
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<td>21</td>
<td>Speech by Sir John Squire at the Johnson Celebrations, Lichfield.</td>
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<td>26</td>
<td>Speeches by Sir Alan Anderson and Mr. J. H. Thomas at the Annual Banquet of the Association of British Chambers of Commerce at Derby.</td>
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<td>Oct.</td>
<td>15</td>
<td>Launching of H.M.S. <em>Penelope</em>, Belfast.</td>
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<td>24</td>
<td>Speech by Viscount Bledisloe at the Royal Empire Society Dinner (Bristol).</td>
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<td>26</td>
<td>Funeral of the Rt. Hon. Lord Carson, St. Anne's Cathedral, Belfast.</td>
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<td>28</td>
<td>Conferment of the Freedom of Leamington on Mr. Anthony Eden.</td>
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<td>30</td>
<td>Proclamation of the Dissolution of Parliament at the Mercat Cross, Edinburgh.</td>
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<td>Nov.</td>
<td>1</td>
<td>Speeches by Viscount Bledisloe and Mr. Walter Barrow at the Opening of Avoncroft Agricultural College, Stoke Prior.</td>
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<td></td>
<td>11</td>
<td>Armistice Day Service at the Cenotaph. Festival of Remembrance at the Royal Albert Hall, London.</td>
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<td>29</td>
<td>Speech by Sir Ben Turner at the Yorkshire and North of England Society, Gloucester.</td>
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<tr>
<td>Dec.</td>
<td>25</td>
<td>The Boar's Head Ceremony, Queen's College, Oxford.</td>
</tr>
</tbody>
</table>
COMMENTARIES ON SPORT

**Rugby Football**


Scotland v. Ireland from Dublin, Feb. 23; Scotland v. Wales, from Cardiff, Feb. 2.

Ireland v. Wales, Belfast, Mar. 9; Ireland v. New Zealand, Dublin, Dec. 7.

Scotland v. Vietnam, Murrayfield, Nov. 23.

Other matches of the New Zealand team: Coventry, Sept. 19; Birkenhead Park, Oct. 5; and Twickenham, Dec. 26.


Navy v. Army, Twickenham, Mar. 2.

*Rugby League Final*, Huddersfield v. Castleford, Wembley Stadium, May 4

**Association Football**


Cup Final, Sheffield Wednesday and West Bromwich Albion, Wembley, April 27.


F.A. Charity Shield, Arsenal v. Sheffield Wednesday, Highbury, Oct. 23.

**Cricket**

Test Matches: England v. S. Africa, Trent Bridge, Nottingham, June 15; Lord's, June 29; Leeds, July 13; Old Trafford, Manchester, July 27; Oval, Aug. 17.

**Lawn Tennis**

Wimbledon Championships, June 24 to July 6.

Wimbledon Interzone Davis Cup, July 20, 22, 23.

Wimbledon Davis Cup Challenge Round, July 27, 29, 30.

**Water Sports**


Evesham Regatta, June 10.

The 'Clyde Fortnight' Gourock Yacht Club, June 26.

Prestwick Bathing Lake, Aug. 10.

Cadet Motorboat Racing, Poole, Sept. 28.

**Ice Hockey**


**Rifle Shooting**

Bisley: Final of King's Prize, June 20.

**Boxing**

Jack Petersen v. Walter Neusel at Wembley Pool
(4 February 1935)

Football Match, England v. Germany
(4 December 1935)
Athletics

Oxford v. Cambridge, White City, London, Mar. 23
Corval Highland Gathering, Dunoon, Aug. 31

Racing and Riding

National Hunt Steeplechase, Cheltenham, Mar. 13
Grand National, Aintree, Mar. 29
Chester Cup, May 8
The Derby, Epsom, June 5
King’s Cup, Olympia Horse Show, London, June 24
St. Leger, Doncaster, Sept. 11
Manchester November Handicap, Nov. 23

Motor and Motor Cycle Racing

Red Marley Hill Climb for Motor Cycles, April 22
Shelsley Walsh Hill Climb for Racing Cars, May 18
Isle of Man Car Races, May 29 and 31
Isle of Man T.T. (Senior), June 21
Scottish Motor Cycle Speed Championship, St. Andrew’s Sands, July 20
Ulster Grand Prix, Aug. 24
Ards Circuit–Ulster T.T., Sept. 7
Manx Grand Prix, Sept. 12
Shelsley Walsh Hill Climb, Sept. 28
Donington Park Grand Prix Race (first international road race on the mainland of England), Oct. 5
Brooklands (Mountain Championship), Oct. 19

Snooker

Davis v. Lindrum, Thurston’s Hall, London, Dec. 10
THE SPOKEN WORD

National Lecture


Talks given in the National and London Programmes
(For News Talks and Obituary Tributes, see separate lists below)

SOCIAL, POLITICAL, AND ECONOMIC PROBLEMS

(a) British

Jan. to Feb. India (Sir Samuel Hoare, Mr. C. R. Attlee, Sir George Schuster, Lord Lloyd, Lady Layton, Sir John Perronet Thompson, Rev. C. F. Andrews, Mr. Isaac Foot, Mr. Winston S. Churchill, Mr. George Lansbury, Mr. Stanley Baldwin)

Jan. to March Freedom and Authority in the Modern World (Part 2) (Various speakers) Markets and Men (Mr. J. W. F. Rowe, Mr. J. Hewkes, and others)

March 4 The Peace Ballot (Discussion between Viscount Cecil and Mr. L. S. Amery)

April to June Freedom (Sir Ernest J. P. Benn, Mr. Herbert Morrison, Mr. J. A. Spender, Mr. J. L. Garvin, Mr. Wyndham Lewis, Lord Eustace Percy, Sir Thomas D. Barlow, Sir William Jowitt, Mr. Erwin Schrödinger, Mr. John Moore, Mr. G. K. Chesterton, Mr. Bernard Shaw, Bishop of Durham) Custom and Conduct (Mr. H. A. Mess and Mr. W. G. de Burgh)

Oct. to Nov. Unrehearsed Debates, included: Oct. 12 'That there is not in England equality of treatment before the Law' (Lord Blanesburg, Mr. D. N. Pritt, K.C., Mr. Linton Theodore Thorpe, K.C.). Oct. 19 'That Flats can solve the Housing Problem' (Prof. Leslie Patrick Abercrombie, Mr. G. M. Boumphrey, Sir Ernest Darwin Simon). Nov. 16 'That Parents are unfitted by nature to bring up their own Children' (Dr. Cyril Burt, Mr. Bertrand Russell, Mr. G. K. Chesterton)

Oct. to Dec. The Citizen and His Government (Capt. H. Balfour, Miss Agnes Headlam-Morley) Ways and Means (Mr. Geoffrey Crowther)

(b) Foreign

Feb. to Dec. Transatlantic Bulletin (intermittently) (Mr. Raymond Swing)

April to June Danubian Clues to European Peace (Various speakers)

Nov. to Dec. 'European Exchange' Nov. 23, Germany; Nov. 30, Denmark; Dec. 7, France; Dec. 14, Czechoslovakia; Dec. 21, Turkey Plans for To-morrow 'Tennessee Valley Authority' (Prof. Julian S. Huxley); 'Bolshevo' (Mr. D. N. Pritt, K.C.); 'Bata Shoe Factory at Zlin' (Mr. V. A. Cazalet); The New Public Schools—Germany (Mr. E. K. Milliken); 'The Zuyder Zee Reclamation Scheme' (Mr. F. McDermott)

RELIGION

Various dates The Way to God (Dean of St. Paul's, Father C. C. Martindale, Canon C. E. Raven, Rev. G. F. MacLeod)

May 5 The Venerable Bede (1200th Anniversary of his Death) (Bishop of Jarrow)

May 12 Church and King (Canon A. C. Deane)

May 19 The German Church To-day (Dr. Adolf Keller)

June 2 We have reason to believe (A medical psychologist)

Can we be Materialists? (Mr. Kenneth Ingram)

July 28 The New Christendom, 'Thy Kingdom Come' (Archbishop of York)

Sept. 1 A special talk on the international situation (Archbishop of York)

Oct. 6 The Church Congress (Bishop of Winchester)

Oct. 20 When Ye Pray (Dom Bernard Clements)


Quarterly Review of New Books on Religion (Mr. R. Ellis Roberts)
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<th>Month</th>
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<th>Speaker(s)</th>
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<td>The Sky at Night</td>
<td>Mr. R. L. Waterfield</td>
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<td>April to May</td>
<td>Filming Plants and Animals</td>
<td>Various speakers</td>
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<tr>
<td>Oct. to Nov.</td>
<td>Food for Health</td>
<td>Various speakers</td>
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<td>Oct. to Nov.</td>
<td>The Dangers of Being Human</td>
<td>Very Rev. W. R. Inge and a medical psychologist</td>
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<td>Jan to Dec.</td>
<td>The Theatre</td>
<td>Mr. S. R. Littlewood and Mr. James Agate; The Cinema (Mr. Alistair Cooke)</td>
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<td>Jan to Dec.</td>
<td>Books in General</td>
<td>Mr. G. K. Chesteron and Mr. Desmond MacCarthy; Current Fiction</td>
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<td>July 28</td>
<td>Music Talks (weekly)</td>
<td>Sir Donald F. Tovey, Sir Walford Davies, Dr. Malcolm Sargent, Mr. H. E. Piggott</td>
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<td>Nov. 25</td>
<td>Exhibition of Chinese Art</td>
<td>Mr. W. P. Yetts</td>
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<td>Jan. to March</td>
<td>The Artist and His Public</td>
<td>Mr. Eric Newton and</td>
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<td>Oct. to Dec.</td>
<td>The Play</td>
<td>Mr. E. Martin Browne and [others]</td>
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<td>April</td>
<td>Ancient Britain Out-of-Doors</td>
<td>Mrs. Jacquetta Hawkes and others</td>
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<td>April</td>
<td>The Map of England</td>
<td>Brigadier H. St. J. L.</td>
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<td>Jan. to Dec.</td>
<td>For Farmers Only</td>
<td>Mr. John Morgan and</td>
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<td>Jan. to Dec.</td>
<td>In Your Garden (weekly)</td>
<td>Mr. C. H. Middleton</td>
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<td>Feb. to Sept.</td>
<td>On the Road</td>
<td>Various speakers</td>
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<td>Sept. to Dec.</td>
<td>Revisited</td>
<td>Various speakers</td>
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<td>Nov. 1</td>
<td>Habits of the Beavers (‘Grey Owl’)</td>
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<td>Jan to Dec.</td>
<td>Sports Talks (weekly)</td>
<td>Various speakers</td>
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<td>April to June</td>
<td>American Half-Hour</td>
<td>Mr. Alistair Cooke</td>
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<td>Oct. to Dec.</td>
<td>Young Ideas (weekly)</td>
<td>Various speakers</td>
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<td>Aug. 30</td>
<td>G.W.R. Centenary Programme</td>
<td>Employees, etc.</td>
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<td>Dec. 1</td>
<td>Mark Twain</td>
<td>Mr. Alistair Cooke</td>
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<td>Oct. to Dec.</td>
<td>I Knew a Man — T. H. Huxley</td>
<td>Mr. H. G. Wells; Nansen (Mr. Philip Noel Baker); W. G. Grace (Mr. A. C. MacLaren); Lord Cromer (Sir Horace Rumbold); Kitchener (Sir Ronald Storrs); Lord Roberts (Lt.-General Sir W. Furse); Keir Hardie (Viscount Snowden); Sarah Bernhardt (Mr. James Agate); Brahms (Dame Ethel Smyth).</td>
</tr>
<tr>
<td>Sept.</td>
<td>Looking for the Town of To-morrow</td>
<td>Mr. G. M. [Boumphrey]</td>
</tr>
<tr>
<td>Jan. to Dec.</td>
<td>French (First and Second Year, Part I and II)</td>
<td>M. E. M. Stéphan</td>
</tr>
<tr>
<td>Sept.</td>
<td>The Genius of France</td>
<td>Mr. Cloudesley Brereton</td>
</tr>
<tr>
<td>Jan. to June</td>
<td>German (Second Year, Part II)</td>
<td>Herr Max Kroemer</td>
</tr>
<tr>
<td>Sept.</td>
<td>The Genius of Spain</td>
<td>Dr. A. R. Pastor</td>
</tr>
<tr>
<td>Sept. to Dec.</td>
<td>Spanish (First Year, Part I)</td>
<td>Señorita María de Laguna</td>
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</tbody>
</table>
MORNING TALKS
Primarily intended for housewives and covering health, cookery, and household matters generally, beside including series on living arrangements in various parts of the world and under different conditions. When Parliament was sitting a talk on ‘The Week in Westminster’ was given regularly.

AFTERNOON TALKS
Jan. to Dec.  This and That (Mr. John Hilton)
Jan. to March Question Time (Mr. Richard Clements). To Unemployed Clubs (Mr. John Newsom)

MISCELLANEOUS
Jan. to May Conversations in the Train (intermittently) (Various speakers)
Jan. to Dec. Is that the Law? (intermittently) (Two Counsel)
May to June Among the British Islanders (Various speakers)

Talks given in Regional Programmes
(other than London and News Talks)

MIDLAND REGIONAL TALKS INCLUDED THE FOLLOWING SERIES
Jan. to Dec. Midland Parliament (Sir Charles Mander, Lord Trent, Frank Hodges, G. H. Jones, W. M. W. Thomas, Herbert Buckler, and others.)
Feb. to April Ripe for Development (Mr. G. M. Boumphrey). Back to the Land (Mr. S. L. Bensusan)
May to June Looking to the Air (Mr. W. Lindsay Everard and other speakers)

and ‘UNREHEARSED DEBATES’
Mar. 29 Politician v. Business Man (Lord Dudley, Sir F. Joseph, Mr. L. S. Amery, and others)
Dec. 5 Town Life and Race Deterioration (Mr. O. Baldwin, Mr. G. M. Boumphrey, and Sir C. Grant Robertson)
WEST REGIONAL TALKS INCLUDED THE FOLLOWING SERIES
Jan. to May  Workaday World (Mr. H. A. Marquand and others)
March to June  Yeomen's English (Mr. H. G. Wyld and others)
March to Dec.  The Farming Year  Gunter's Farm
               Down on the Farm  Market Special
Oct. to Dec.  The Changing Village (Mr. F. G. Thomas and others)

WELSH REGIONAL TALKS INCLUDED THE FOLLOWING SERIES
Weekly  Welsh Interludes  Nov. to Dec.  Changing Wales
Jan. to Mar.  Religion and Belief

NORTH REGIONAL TALKS INCLUDED THE FOLLOWING SERIES
Northern Cockpit' (Various speakers)  'History into News' (Mr. Roger Dataller)
'Fur and Feather' (Various speakers)  The Ratepayers' Century (Mr. E. R. Thompson)
Legends Alive (Miss Winifred Holtby, Miss Phillys Bentley, and others)
Dog Days (Various speakers)
Northern Portrait Gallery (Mr. Richard Lambert and others)

SCOTTISH REGIONAL TALKS INCLUDED THE FOLLOWING SERIES
Jan. to March  Stories from the Norse (Mr. Eric Linklater)
April to Aug.  Here awa, There awa (Various speakers)
Oct.  The Letters of Sir Walter Scott (Prof. H. J. C. Grierson)
Oct. to Dec.  Our Children's Scotland (Various speakers, including Mr. James Maxton, Sir
               Robert Greig, Miss Elizabeth Haldane, and Rev. George MacLeod)

NORTHERN IRELAND TALKS INCLUDED THE FOLLOWING SERIES
Jan. to March  As You Were (Various speakers)
April to Sept.  News from Road and Track (Various speakers)
Oct. to Dec.  Ulster Speaks (Talks in local dialects by various speakers)
News Talks

Among News Talks by Leading Public Men on Foreign Affairs Were

Jan. 18  Mr. Anthony Eden, The Saar
Feb. 3   Sir John Simon, Anglo-French Conversations
April 17 Mr. J. Ramsay MacDonald, The Stress Conference
June 19 Sir Bolton Eyres-Monsell, Anglo-German Naval Agreements
July 16  Viscount Cecil, The Refugee Problem
Sept. 12–Nov. 2 Sir Samuel Hoare, The Geneva Situation
Sept. 12  Mr. Te Water, South Africa and Sanctions
          Sir J. Fischer Williams, Sanctions
Oct. 22  The Archbishop of Canterbury, The International Situation

Talks on Home Affairs Were Given By

April 11  Sir T. Inskip, Bucket Shops
June 4   Mr. Herbert Morrison, The L.C.C. Town Planning Scheme

Other Talks dealt with the Following Subjects

Political
Jan. 13–15 Reports from the Saar
Jan. 3, 8  Reports from Paris
May 28, July 13 Reports from Geneva (frequently in summer and autumn)
Oct. 1–5 Party Conferences preceding the General Election
Nov. 27   New Zealand Elections

Jan. 30, 31 The Housing Bill
Feb. 6, 7   The Government of India Bill
Jan. 19    The Situation in China
June 13    Foreign Affairs Survey (regularly)
Nov. 19    Economics of the Week (regularly)

Industrial and Economic
April 11  The Hull Fishing Strike
July 17   The Special Areas Report
Sept. 26  The Milk Settlement

Oct. 19    Miners’ Strike at Nine Mile Point

Learning, Science, and Art
Jan. 1   The Physical Society’s Exhibition
March 26  Translation of the Tasman
Sept. 4–6 British Association Meeting 1935
Oct. 12   The Ellesmere Land Expedition

Aviation
Feb. 13   The ‘Macon’ Disaster
June 17, Nov. 11 England–Africa Flight Record
Aug. 6, Sept. 6, 7 The King’s Cup Race

Aug. 14   ‘The Flying Flea’
Aug. 27   Gliding News

Sport
June 14   Account of the Moody-Stammers Match
July 20–29 Accounts of the Davis Cup Matches

Sept. 24  Capt. F. A. M. Webster on Paavo Nurmi

Various
March 7   First descent of the Gresford Pit
June 12  Microphone Interview—Walt Disney and Stephen Harris

Sept. 27  The Wapping Fire
Nov. 14   The Cairo Riots
Nov. 16   The Rhone Floods

Obituary Tributes Included the Following

Jan. 4    Cardinal Bourne (Lord Fitzalan of Derwent)
          Aug. 17  Lord Bridgeman (Sir John Reith and the Dean of Durham)
Feb. 3    Mr. J. H. Whitley (Sir John Reith)
          Oct. 22  Lord Carson (Lord Craigavon)
May 13   Marshal Pilsudski (H.E. the Polish Ambassador)
          Oct. 24  Mr. Arthur Henderson (Mr. J. R. Clynes)
          Nov. 25  Admiral of the Fleet Earl Jellicoe (Admiral Sir Lionel Halsey)
May 19   Laurence of Arabia (Field-Marshall Lord Allenby and Sir Herbert Baker)
          Dec. 3   H.R.H. Process Victoria
Aug. 15   Sir Basil Blackett (Mr. J. Coatman)
          Dec. 30  Lord Reading (Sir Herbert Samuel)
Miss Ann Driver: Music and Movement for Children
Children in the Studio taking part in the Broadcast Lesson

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**School Broadcasts**

*(Weekly in each term unless otherwise stated)*

**Nature Study.** Eric Parker, C. C. Gaddum, Richard Morse, Noble Rollin.

**Biology.** Prof. Winifred Cullis, Prof. Doris L. MacKinnon.


**French (Elementary and More Advanced Courses).** E. M. Stéphan and others.

**German (Elementary and More Advanced Courses).** Ernst Deissmann, Fräulein Margot Berger, Otto G. Lewald, Fräulein Else Johanssen, A. M. Wagner, A. H. Winter, and others.

**Music (Senior and Junior Courses).** Dr. Thomas Armstrong and Ernest Read.

**Music and Movement for Very Young Children.** Miss Ann Driver.

**World History.** Prof. Eileen Power, Miss Rhoda Power.

**British History.** Miss Rhoda Power.

**Tracing History Backwards.** Commander Stephen King-Hall and K. C. Boswell.

**Regional Geography.** Planned by Prof. C. D. Forde and broadcast by Lord Meston, J. N. L. Baker, Prof. Kenneth Mason, Sir George Dunbar, and others.

**Travel Talks.** Planned by Prof. C. D. Forde and broadcast by various Speakers.


**English Literature.** S. P. B. Mais, Miss Leila Davies, Howard Marshall.

*Friday Stories and Talks.* Frank Roscoe and others.

(The stories for younger children; the talks for older children on matters of general interest.)

**Talks for Sixth Forms** on home and foreign politics, the arts, scientific research, etc., John Gielgud, Stephen Spender, Prof. P. M. S. Blackett, Vernon Bartlett, Sir William Beveridge, Sir William Rothenstein, Harold Nicolson, Prof. J. B. S. Haldane, R. H. Wilenski, C. Leonard Woolley, Rt. Hon. Sir Francis Dyke-Acland. Special Talk on India (Dec. 19) by the Marquess of Zetland (Sec. of State for India).

*Scottish School Broadcasts have included*

**English Literature.** Dr. Wm. McCallum Clyde, J. L. Hardie.

**French.** Jean-Jacques Oberlin, Mme Oberlin, and others.

**Scottish History.** J. S. Richardson, Dr. C. A. Malcolm, Prof. J. D. Mackie, Miss Elizabeth S. Haldane, R. L. Mackie, John Brandane.

**Tracing History Backwards.** Dr. G. S. Pryde and H. M. Conacher (*Summer term*).

**Nature Study.** Prof. James Ritchie, G. W. MacAllister, Miss Agnes Aitkenhead, Prof. R. J. D. Graham.

**Biology.** Prof. A. D. Peacock, Prof. R. C. Garry, Dr. A. E. Kidd.

**Music.** Herbert Wiseman.

**Speech Training.** Miss Anne H. McAllister.

**The Scottish Country-side.** Sir Robert Greig and Dr. W. G. Ogg (*Autumn term*).

**Junior Geography.** Various Speakers.

*Welsh School Broadcasts have included*

**The Earth and Man.** I. C. Peate (*Autumn term*).

**The Wonders of Nature.** Prof. Gwilym Owen (*Summer term*).

**Localities in Wales.** Tom Parry (*Spring and Summer terms*).

**Old Customs of Bygone Wales.** R. W. Jones (*Autumn term*).

**Welsh Adventurers.** Rev. R. G. Berry (*Spring term*).
RELIGION

(see also 'Speeches and Ceremonies')

Jan. 6 Service of Unity from St. Martin's, Birmingham: Address by Prof. H. G. Wood.
Feb. 24 Baptist Studio Service conducted by the Rev. M. E. Aubrey.
April 19 Good Friday Service from St. Sepulchre's, Holborn: Address by the Archbishop of Canterbury.
April 21 Easter Morning Service from Liverpool Cathedral: Address by the Dean of Liverpool.
May 6 Jubilee Thanksgiving Service attended by T.M. The King and Queen, from St. Paul's Cathedral.
May 12 'A Prayer for King and Country', by the Poet Laureate, Mr. John Masefield.
United People's Thanksgiving Service at St. George's Chapel, Windsor.
Jubilee Thanksgiving Service from St. Anne's Cathedral, Belfast: Address by the Lord Primate of All Ireland.
May 19 Roman Catholic Service from St. Barnabas' Cathedral, Nottingham: Address by the Rt. Rev. Monsignor J. Bigland.
May 27 Bede Commemoration Service from Durham Cathedral: Address by the Archbishop of Canterbury.
June 9 First Empire Service from St. Paul's Cathedral.
June 10 Whit-Monday Service from Gwennap Pit, St. Day, Redruth, Cornwall: Address by George P. Dymond, Vice-President of the Methodist Conference.
June 15 Empire Service at Canterbury Cathedral.
June 23 Drumhead Service in memory of Field-Marshal Earl Haig from Dryburgh Abbey: Address by the Rev. Berry Preston.
Aug. 9 Second World Convention of Churches of Christ, Leicester: Address by the Dean of St. Paul's.
Sept. 1 Methodist Service from Wesley's Chapel, City Road: Address by the Rev. William C. Jackson, President of the Methodist Conference.
Sept. 3 Intercession Service for Peace from Westminster Abbey.
Sept. 8 Welsh Service from St. Mary's, Denbigh: Address by the Bishop of St. Asaph.
Sept. 10 Association Meetings, Caernarvon, to celebrate the Bicentenary of the Calvinistic Methodists.
Sept. 15 Roman Catholic Studio Service conducted by the Archbishop of Westminster. Diamond Jubilee Pilgrimage of the Brotherhood Movement. Service from Carr's Lane Church, Birmingham: Address by Canon T. Guy Rogers.
Sept. 22 Memorial Service on the Anniversary of the Gresford Colliery Disaster from The Park, Wrexham: Address by the Bishop of St. Asaph.
Sept. 29 Gaelic Service from St. Giles's Cathedral, Edinburgh.
Service commemorating the Quincentenary of Fotheringhay Church, Northants.: Address by the Bishop of Peterborough.
Oct. 6 Service from Croydon Parish Church: Address by the Bishop of Croydon, (first regular Sunday Morning Service).
QUINCENTENARY OF FOTHERINGHAY CHURCH
(3 September 1935)

Oct. 20  Service from Auckland Castle Chapel: Address by the Bishop of Durham.
Oct. 26  State Funeral of Lord Carson of Duncairn from St. Anne's Cathedral, Belfast.
Oct. 27  Methodist Sunday Morning Service from Brunswick Church, Leeds; Address
          by the Rev. Leslie D. Weatherhead.
          Congregationalist Service from the City Temple: Address by the Rev. F. W.
          Norwood.
Nov. 10  Service from St. Martin-in-the-Fields: Address by the Archbishop of
          Canterbury.
Nov. 17  Studio Service conducted by the Archbishop of York.
          Baptist Service from Bloomsbury Central Church: Address by the Rev.
          F. Townley Lord.
Nov. 25  State Funeral of Admiral of the Fleet Earl Jellicoe from St. Paul's Cathedral.
Dec.  1  Service in commemoration of the Centenary of the Birth of Andrew Carnegie,
          Dornoch Cathedral: Address by Prof. James Mackintosh.
          Service from St. Mary the Virgin, Penzance: Address by the Bishop of Truro.
          Congregationalist Sunday Morning Studio Service conducted by the Rev.
          S. M. Berry.
Dec.  2  Roman Catholic Sunday Morning Studio Service conducted by Father
          M. C. D'Arcy.
Dec.  9  Service from Lambeth Palace: Address by the Archbishop of Canterbury.
Dec. 31  Watch-night Service from St. Paul's Cathedral.

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BROADCAST DRAMA
(1) National and London Regional Programmes

Plays written for Broadcasting

Jan. 9, 10  'In the Shadow' (Horton Giddy).
Feb. 21, 22  'The Mystery of the Temple' (Norman Edwards).
April 4, 5  'Episode Past' (Valentine Dunn).
May 28, 29  'Wedding Group' (Philip Wade).
Aug. 14, 16  'Pleasant Portion' (Barbara Couper).
Dec. 24  'Reconnaissance' (E. J. King-Bull).

Adaptations of Stage Plays and Films

Mar. 7, 8  'Ambrose Applejohn's Adventure' (Walter Hackett, ad. Lance Sieveking).
Mar. 25, 26  'Charlemagne' (Yves Mirande ad. Laurence Gilliam).
April 15, 16  'The Breadwinner' (Somerset Maugham).
May 14, 15  'The Moon in the Yellow River' (Denis Johnston, ad. Barbara Burnham).
July 11, 12  'Hassan' (James Elroy Flecker, ad. Dulcima Glasby).
Oct. 16, 18  'Bulldog Drummond' ( 'Sapper', ad. J. Inglis).
Nov. 12, 14  'Eden End' (J. B. Priestley).
Nov. 28, 29  'Devonshire Cream' (Eden Phillpotts, ad. Cyril Wood).
Dec. 2, 4  'A Bill of Divorcement' (Clemence Dane).
Dec. 18, 19  'Uncle Vanya' (Anton Tchehov).

Sunday Plays, Shakespeare and Other Classics

Jan. 13  'A Winter's Tale' (Shakespeare).
Feb. 10  'Troilus and Cressida' (Shakespeare).
Mar. 10  'The Taming of the Shrew' (Shakespeare).
April 7  'The Rivals' (Sheridan).
May 5  'Henry V' (Shakespeare).
May 19  'Richard II' (Shakespeare).
June 9  'Much Ado About Nothing' (Shakespeare).
June 23  'Justice' (Galsworthy).
Oct. 13  'Macbeth' (Shakespeare).
Nov. 17  'Richard III' (Shakespeare).
Dec. 8  'Cymbeline' (Shakespeare).

Short Foreign Plays

Jan. 8  'A Farewell Supper' (Arthur Schnitzler and H. Granville-Barker).
Feb. 19  'The Lover' (G. M. Sierra and J. G. Underhill).
Mar. 4  'Two for Dinner' (Sacha Guitry, ad. Marianne Helweg).
Sept. 16  'Pariah' (August Strindberg and Edwin Bjorksen).

Feature Programmes

Dec. 31  'Hail and Farewell' (New Year's Eve) (Felix Felton).
Feb. 2  'The Road to St. David's' (Filson Young).
April 25  'Gallipoli' (compiled by Val Gielgud).

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May 6: Jubilee Programme (Harold Temperley and Laurence Gilliam).
June 18: William Cobbett Programme (D. G. Bridson).
July 10: 'Cable Ship' (Laurence Gilliam).
Oct. 17: 'Dinner is Served' (Laurence Gilliam and Gerald Noxon).
Nov. 11: 'Scott in the Antarctic' (Peter Creswell and Val Gielgud).
Dec. 25: 'This Great Family' (compiled by Felix Felton).

FAMOUS TRIALS—Jan. 28, 29: 'Trial of Lady Alice Lisle' (C. Whitaker-Wilson); May 7: 'The Trial of William Penn' (Leslie Baily); Nov. 4, 5: 'The Trial of Madeleine Smith' (John Gough) (Scottish Region).

HISTORICAL OCCASIONS—Jan. 26: 'Gordon at Khartoum' (Peter Creswell); June 10, 11: 'The Golden Hind' (Arthur Bryant and Peter Creswell); June 13: 'The South Sea Bubble' (Cecil Lewis); July 9: 'The Battle of Sedgmoor' (Felix Felton).

Adaptations of Novels, Short Stories, etc.

Jan. 21, 22: 'Goodbye, Mr. Chips' (James Hilton, ad. Barbara Burnham).
Feb. 9: 'Macabre' a Ghost Programme compiled by Felix Felton from 'Mansions' (Bertha Phillips); 'The Open Window' ('Saki'); and 'The Birthright' (Hilda Hughes).
Aug. 1, 2: 'Lost Horizon' (James Hilton, ad. Barbara Burnham).

Religious Plays and Programmes

April 9: 'The Guest Chamber' (Bernard Walke).
April 19: 'Good Friday' (John Masefield).
Dec. 23: 'The Stranger at St. Hilary' (Bernard Walke).

(2) Regional Programmes (other than London Regional)

Midland

Jan. 7: 'The Black Dog of Hergest' (Helen Enoch).
Feb. 12, 23: 'Promotion' and 'Dolmans' (sequel to 'Promotion') (Francis Durbridge).
June 12: 'Crash' (Frank Cromwell).
June 26: 'Play' (Cedric Wallis).
July 9: 'Kenilworth' (Sir Walter Scott, ad. Phyllis Bowman).
Nov. 5: 'Conspiracy in the Midlands' (F. R. Buckley).

West

Mar. 9, 11: 'Westward Ho!' (Parts 1 and 2) (Charles Kingsley, ad. Louise Drury).
May 13: 'Willow the King' (Herbert Farjeon).
Aug. 16: 'The Mollusc' (Hubert Henry Davies).
Aug. 29, 30: 'Bertie' (Diana Morgan and Robert McDermot).
Sept. 21: 'Farewell to Summer' (Herbert Farjeon).
Rodney Millington, Ion Swinley, Esmé Percy, and Surya Senya in 'Lost Horizon'
(1 August 1935)
'Cable Ship'
(10 July 1935)
**Welsh**

Jan. 9  ‘Natur y Cyw yn y Cawl’ (‘The Child is Father of the Man’) (G. Davies).


Mar. 1  St. David’s Day (T. Rowland Hughes and Sam Jones)

Mar. 25  ‘Dafydd Gwyddw Gwinn’ (W. J. Gruffydd).

June 7  ‘Meinir’ (Marjorie Wynn Williams, trans. R. Alun Roberts).

June 13  ‘Yn y Dechreudad’ (‘In the Beginning’) (Picton Davies).


Nov. 7  ‘yr Duw Krishna’ (‘To the God Krishna’) (Dafydd Gruffydd).

Nov. 22  ‘The Dark Strangers’ (Marjorie Wynn Williams).

Dec. 19  ‘Rhondda Roundabout’ (Jack Jones).

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**North**

Jan. 14  ‘There Goes the Buzzer’ (Pat Forrest).

Feb. 7  ‘Famine in Lancashire’ (Michael Reynolds).

Mar. 20  ‘The Lamplighter’s Daughter’ (George Beaumont).

May 8  ‘The Chester Cup’ (G. H. Dayne and A. R. Parker).

June 8  ‘The Prince of Obolo’ (Roger Dataller).

June 18  ‘William Cobbett’ (D. G. Bridson)

Sept. 25  ‘The Round Trip’ (Michael Reynolds, D. A. Stride, and James Eccles).

Oct. 8  ‘Sar’ Alice’ (James R. Gregson).


Nov. 22  ‘The Northerners’ (Harold Brighouse).


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**Scottish**

Feb. 5  ‘Retrospect’ (Andrew P. Wilson).

May 30  ‘Bound Away’ (Captain David W. Bone).

July 26  ‘Return to Clyde’ (Edward Shiels).


Oct. 16  ‘Bandit’ (Andrew Stewart).


Oct. 21  ‘This Day’ (Moultrie Kelsall).


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**Northern Ireland**


April 1  ‘Neighbour’s Childer’ (J. H. McIlveen).

April 17 and  Oct. 3  ‘John Ferguson’ (St. John Ervine, ad. George Shiels).

May 24  ‘The New Gossoon’ (George Shiels, ad. S. A. Bulloch).

June 13  ‘Fairy’s Farm’ (Richard Rowley).

July 4  ‘Insurance Money’ (George Shiels).


Sept. 17  ‘Tully’s Experts’ (George Shiels).

Nov. 10  ‘She Stoops to Conquer’ (Oliver Goldsmith, ad. George Shiels).

Nov. 19  ‘Autumn Fire’ (T. C. Murray ad. S. A. Bulloch).

Dec. 5  ‘The Turn of the Road’ (Rutherford Mayne, ad. S. A. Bulloch).
VARIETY

London Programmes

Jan. 2 Lady Tree in ‘Carriages at Midnight’ by Mark H. Lubbock and C. Denis Freeman.
Jan. 3 Broadcast by Eddie Cantor.
Feb. 12 ‘Scrapbook for 1921’, with Dorothy Dickson, Madeleine Carroll, and Davy Burnaby.
May 8 Edith Day and Harry Welchman in ‘The Desert Song’.
May 10 ‘Songs from the Shows’ (from the Royal Box), including: W. H. Berry, Bertram Wallis, Olive Groves, Jose Collins, Edith Day, and Huntley Wright.
May 11 George Robey, Anna May Wong, Peter Dawson, The Mills Brothers, Cicely Courtneidge, Gitta Alpar, and Albert Sammons in ‘Jubilee Gala’.
May 25 Matheson Lang, Winifred Evans, and Noel Dryden in a sketch, ‘Mr. Wu’.
May 31 Evelyn Laye and Serge Abramovic in ‘Bitter Sweet’.
June 15 First British broadcast of Maurice Chevalier in excerpt from ‘Stop Press’.
June 19 Richard Tauber in a Theatre Orchestra programme.
June 27 First British broadcast of Noah Beery in ‘Music Hall’.
July 4 Alice Delysia and George Robey in excerpts from ‘Accidentally Yours’.
July 13 First British broadcast of The Boswell Sisters.
July 24 ‘City of Music’, by Dr. Julius Buerger, conducted by Stanford Robinson.
Aug. 5 ‘Round the Concert Parties’, excerpts from Concert Parties in the Regions.
Aug. 12 Elsie and Doris Waters in ‘Gert and Daisy take a Zoo-‘Oliday’, a Revue by Ashley Sterne.
Sept. 3 Broadcast by Gracie Fields.
Sept. 12 ‘The Mystery of the Seven Cafés’, by Sydney Horler, adapted by Holt Marvel.
Oct. 3 George Graves in ‘Véronique’.
Oct. 22 ‘The Cat and the Fiddle’, a musical play by Jerome Kern, adapted by John Watt and Henrik Ege.
Oct. 29 Scott and Whaley in ‘The Kentucky Minstrels’, by Harry S. Pepper.
'HOLLYWOOD PARTY'
(23 July 1935)

Nov. 4 'Night Falls on Slow-on-the-Uptake', by Leslie Baily and James C. Baily, with music by George Barker, produced by Charles Brewer.

Nov. 21 'Scrapbook for 1911', by Leslie Baily and Charles Brewer, including the Rev. Walter Pitchford, Air-Commodore Gerrard, Bertram Wallis, Florence Smithson, and Detective-Sergeant Leeson.

Nov. 23 Rawicz and Landauer, Benniamino Riccio (first broadcasts in England), Ivy St. Helier, Elsie and Doris Waters in 'Gala Variety'.

Dec. 5 'A Waltz Dream', by Oscar Strauss, adapted and produced by Gordon McConnel.

Dec. 20 'Pavlova' programme, narrated by Cleo Nordi, with the B.B.C. Theatre Orchestra conducted by Walford Hyden.

Dec. 25 Christmas Party.

Dec. 27 Tod Slaughter, Cyril Nash, Clifford Bean, Dora Gregory, and Valentine Dunn in 'Scrooge'.

Midland

Monthly 'At the Langley's,' a topical Feature.
Feb. 7 'Ten-a-Penny' a Play by Geoffrey Bryant and Wilfrid Southworth.
Feb. 16 Operetta, 'Hearts are Trumps', by L. du Garde Peach and V. Hely Hutchinson.
Mar. 7 'Divertissement', a Programme of light music and sketches.
Mar. 28 'Spring is in the Air', a musical Mélange.
June 4 'Overture and Beginners', a Play by Charles Hatton and Wilfrid Southworth.
June 19 'Paraphernalia Revisited', a Burlesque.
July 4 'Yankee Doodle', a musical Mélange.
Sept. 5 'Main Street of Song', a Revue by Julian Wright.
Oct. 9  'I Spy', a Burlesque by the Melluish Brothers.
Nov. 7  'Love is in the Air Again', a musical Mélange.
Nov. 12 'November Cocktail', the first of three topical Revues.
Nov. 21 'Top o' the Tree', a Revue by Francis Durbridge and George Gordon.
Dec. 3  Cora Goffin in 'Mariella' by Francis Durbridge and Wilfrid Southworth.

**North**

Feb. 9  'Pit People', a Concert Party Show by Yorkshire mining folk.
May 29  'Half-a-MO', a Revue by Muriel Levy.
June 10 'Tyneside Calling', from Newcastle *(also Nov. 7)*.
July 1  'Merry-go-round', by J. Hugh Stanley, Charles Noel, and Howard Knight.
Dec. 2  'New Talent' programme, presented by G. H. Dayne.
Dec. 6  'Up the North Pole', a Revue by Joyce Lustgarten and Henry Reed.

*Note.*—A large proportion of the Variety in the Northern programmes is relayed from outside sources. The list of Theatres thus drawn upon is as follows:

- The Winter Gardens, Morecambe.
- The Palace Theatre, Blackpool.
- The Alhambra, Bradford.
- The Argyle Theatre, Birkenhead.
- Her Majesty's Theatre, Carlisle.
- New Manchester Hippodrome.
- Grand Theatre, Bolton.
- Pavilion Theatre, Liverpool.
- Royalty Theatre, Chester.
- Palace Theatre, Halifax.
- Grand Theatre, Doncaster.
- Theatre Royal, Lincoln.

Various seaside resorts and spas have been represented in the programmes either by concert party or orchestral relays. Broadcasts have also been given from North Wales and the Isle of Man.
Scottish

Various dates
Jan. 11 Jan. 11 'Glasgow 1910' by Robin Russell.
April 29 April 29 'Inversnecky Calling.'
May 17 May 17 'Chopin visits Scotland' by Robin Russell.
Sept. 10 ‘Full Measure.’
Oct. 2 Oct. 2 'The Trial of Harry Gordon', a Burlesque on the Famous Trials Series.
Nov. 22 Nov. 22 'Bitter Brevities', first of 'Macabre' sketches by Halbert Tatlock.
Nov. 29 Nov. 29 'The Manse Muse.'
Dec. 7 Dec. 7 'Highland Holiday', a Musical comedy by John Weir.
Various dates 'Add Wives' Tales.'
Violet Davidson's Concert Parties.
Geordie Broon and his Crood.

The chief outside sources of light entertainment, variety, and pantomime were:
Theatre Royal, Edinburgh.
Pavilion, Glasgow.
Empress Playhouse, Glasgow.
Metropole, Glasgow.
Pavilion, Perth.

Barrfields Pavilion, Largs.
Winter Gardens, Rothesay.
Summer Pavilion, Portobello.
Beach Pavilion, Aberdeen.
Tivoli, Aberdeen.

Welsh (see remarks on page 44)

West

Feb. 12 Feb. 12 'Pantomime Portmanteau', 'Dick Whittington and His Cat' from a script
33 years' old (from the Studio) and to-day from the Prince's Theatre, Bristol.
May 20 May 20 'Microphone Bows', a series by new-comers to the microphone.
May 22 May 22 'Entertainers in Embryo', by David Kean.
Sept. 28 Sept. 28 Variety from the Bristol Radio Exhibition, Colston Hall, Bristol.
Dec. 30 Dec. 30 First of a series of Cabaret Shows from different parts of the Region.

Northern Ireland

Feb. 11 Feb. 11 'Trailers' by George Gordon.
Mar. 20 Mar. 20 'Caravaneilla' by G. Rowntree Harvey and George Gordon.
April 10 April 10 Jamie and Rabbie in 'See Belfast and Live'.
April 24 April 24 'April Showers', a Revue by Roger MacDougall and George Gordon.
May 29 May 29 'Third Time Lucky', by Herbert Sidney and Ernie Gower.
July 25 July 25 'Round the Albert', a Light Feature Programme of Belfast.
Aug. 3 Aug. 3 'Money to Burn.'
Aug. 30 Aug. 30 'Winnie's Hour' by Harry Hemsley.
Oct. 10 Oct. 10 'Grass Widowers.'
Nov. 29 Nov. 29 'Moonlight Masquerade', a Musical Play by George Gordon.
Dec. 24 Dec. 24 'Christmas Eve at Mat Mulcaghey's.'

[ 123 ]
MISCELLANEOUS

Mar. 26 'Wheels in the West': R.A.C. Rally start at Torquay.
April 22 The Dunnow Flitch.
April 23 'Trooping of the Colour' of the Northumberland Fusiliers at York.
May 8 Helston Furry Dance.
May 31 Bath and West Show, Taunton.
June 3 'Trooping of the Colour,' Horse Guards' Parade, London.
June 8 An evening with the Looe Fishermen's Choir.
June 13 Aldershot Tattoo.
June 15 Nottinghamshire Historical Pageant.
June 29 Royal Air Force Display.
July 6 Northern Command Tattoo, Nottingham.
July 8 Manx Tynwald Ceremony.
July 23 Ceremony of the Keys, Tower of London.
Aug. 3 Tidworth Tattoo.
Aug. 15 Rydal Sheep Dog Trials.
Aug. 17 Exploration of Wookey Hole Caves.
Sept. 10 St. Giles's Fair, Oxford.
Sept. 17 'The Old World to the New': Boston, Lincs., to Boston, Massachusetts.
Nov. 1 'Contact': a Tour of Telephone House, Belfast.
Dec. 26 The Ilchester Badger Feast.

Various 'Harry Hopewell's Northern Tours' (Yorkshire, Lakeland, Border) (D. G. Bridson).
Various dates 'Microphone at Large' (Towns and Villages of the Midlands).

DIVERS AT WOOKEY HOLE
(17 August 1935)

[ 124 ]
**CHILDREN’S HOUR**

*London*

**Various dates**

- Five Plays based on Greek Legends, by L. du Garde Peach.
- Four ‘Tales of Redroke’, by Sybil Clarke.
- ‘Snow White’, by Eleanor and Harry Farjeon.
- ‘The Zoo Man’ (weekly).
- ‘The Star Gazer’ (every three weeks).
- Commander King-Hall (weekly).
- European Capitals (once a month).
- ‘Meet Mickey Mouse’

*Midland*

- Feb. 16 ‘Hearts are Trumps’, by L. du Garde Peach and V. Hely Hutchinson.
- May 29 First of a series ‘Have You Heard About This?’ (Midland customs).
- Oct. 3 First of a series by Victor Hely Hutchinson on ‘Tune Building’.

*North*

- Mar. 6 Programme by members of the Children’s Theatre at Ancoats, Manchester.
- April 2 Hans Andersen Birthday programme.
- April 5 ‘Let’s Go North’, Variety by Northumberland children, from Newcastle.

*Scottish (E = Edinburgh; G = Glasgow; A = Aberdeen)*

- Feb. 23 ‘Elspeth in Fairyland’, by Roger MacDougall (G).
- Nov. 21 ‘Dominie Greenfields’, by Ida Rowe (A).

*Welsh*

- Noteworthy serial Plays of 1935
  - ‘The Man from Mars’, by J. D. Strange.

*West*


*Northern Ireland*

- Mar. 16 Belfast Newsboys in a St. Patrick’s Day Programme.
- May 23 ‘Giant Finn McCoul and Joe Rabbit’, a Play by George C. Nash.
OUTSTANDING FOREIGN RELAYS
(for Empire Relays see pages 138-141)

(1) Incoming

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>From</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 15</td>
<td>Declaration of Saar Plebiscite results.</td>
<td>Saarbrücken.</td>
</tr>
<tr>
<td>Jan. 23</td>
<td>Mascagni's 'Nero' (Act I) conducted by the composer.</td>
<td>Warsaw.</td>
</tr>
<tr>
<td>Feb. 16</td>
<td>First of 'Five Hours Back' programmes.</td>
<td>U.S.A.</td>
</tr>
<tr>
<td></td>
<td>B.B.C. Symphony Orchestra's first visit abroad, conducted by Adrian Boult.</td>
<td>Brussels.</td>
</tr>
<tr>
<td>April 24</td>
<td>Acts I and II of 'Aida' conducted by Gino Marinuzzi.</td>
<td>Milan.</td>
</tr>
<tr>
<td>Aug. 26</td>
<td>'Falstaff', conducted by Toscanini.</td>
<td>Salzburg.</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>Hungarian European Concert by the Orchestra of the Royal Hungarian Opera House, conducted by Dohnányi.</td>
<td>Budapest.</td>
</tr>
<tr>
<td>Sept. 24</td>
<td>First of a series of four 'Night Falls in Budapest'.</td>
<td>Budapest.</td>
</tr>
<tr>
<td>Oct. 6</td>
<td>'The Sphinx', a Programme of Egyptian Music.</td>
<td>Cairo.</td>
</tr>
<tr>
<td>Oct. 22</td>
<td>Austrian European Concert by the Vienna Symphony Orchestra, conducted by Oswald Kabasta.</td>
<td>Vienna.</td>
</tr>
<tr>
<td>Oct. 27</td>
<td>'Youth Sings over the Frontiers', a world-wide programme organized by the International Broadcasting Union.</td>
<td>Eighteen countries</td>
</tr>
<tr>
<td>Dec. 3</td>
<td>Polish European Concert by the Polish Broadcasting Symphony Orchestra conducted by Grzegorz Fitelberg.</td>
<td>Warsaw.</td>
</tr>
</tbody>
</table>

Various dates: Talks in Children's Hour from European Capitals.

In addition there have been many occasions when, speaking from studios in Paris, Brussels, and Geneva, statesmen and observers of political and topical events have given short talks (not broadcast in the country of origin) in the evening news bulletins.

(2) Outgoing

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar. 1</td>
<td>St. David's Day Programme (from Cardiff).</td>
<td>U.S.A.</td>
</tr>
<tr>
<td>April 12</td>
<td>H.R.H. the Prince of Wales Appeal for the Jubilee Fund.</td>
<td>U.S.A.</td>
</tr>
<tr>
<td>April 18</td>
<td>'Inquest on Columbine.'</td>
<td>U.S.A.</td>
</tr>
<tr>
<td>May 6</td>
<td>St. Paul's Jubilee Thanksgiving Service.</td>
<td>Europe and N. America</td>
</tr>
<tr>
<td></td>
<td>'Twenty-five Years', a Review of the Reign,</td>
<td>U.S.A., Portugal</td>
</tr>
<tr>
<td></td>
<td>King George V's Broadcast, and Dominion Messages.</td>
<td>Relayed to all parts of the world.</td>
</tr>
<tr>
<td></td>
<td>Mr. Rudyard Kipling's Speech at the Banquet of the Royal Society of St. George.</td>
<td>Denmark, Argentine.</td>
</tr>
<tr>
<td></td>
<td>John Masefield's 'A Prayer for King and Country'.</td>
<td>U.S.A.</td>
</tr>
<tr>
<td>May 7</td>
<td>'La Cenerentola' from Covent Garden.</td>
<td>Italy.</td>
</tr>
<tr>
<td>May 27</td>
<td>London Music Festival Concert, conducted by Koussevitzky.</td>
<td>Austria, Spain.</td>
</tr>
<tr>
<td>June 3</td>
<td>London Music Festival Concert, conducted by Toscanini.</td>
<td>Austria, Hungary, Switzerland, U.S.A.</td>
</tr>
<tr>
<td>June 8</td>
<td>Grace Moore in 'La Bohème' from Covent Garden.</td>
<td>Denmark.</td>
</tr>
<tr>
<td>June 13</td>
<td>Aldershot Tattoo.</td>
<td>Belgium, U.S.A.</td>
</tr>
<tr>
<td>June 16</td>
<td>B.B.C. Military Band.</td>
<td>Italy.</td>
</tr>
<tr>
<td>Oct. 8</td>
<td>First performance of Handel's 'Perseus and Andromeda'.</td>
<td>Germany, Switzerland.</td>
</tr>
<tr>
<td>Oct. 27</td>
<td>British contribution to 'Youth Sings over the Frontiers'.</td>
<td>(See above).</td>
</tr>
<tr>
<td>Dec. 20</td>
<td>'Round the Northern Pantos' (from North Region).</td>
<td>U.S.A.</td>
</tr>
<tr>
<td>Dec. 25</td>
<td>'This Great Family', and King George V's Message.</td>
<td>U.S.A.</td>
</tr>
</tbody>
</table>

Certain other programmes are now relayed regularly by various foreign broadcasting organizations. These included in 1935 B.B.C. Symphony and Promenade Concerts from Queen's Hall and music by dance orchestras.
LISTENING IN TOKIO TO THE CONGRATULATORY MESSAGES FROM LONDON ON THE INAUGURATION OF THE ANGLO-JAPANESE TELEPHONE SERVICE
(12 March 1935)

(3) Special facilities for foreign broadcasting organizations

Facilities were provided on numerous occasions during the year for foreign broadcasting organizations to carry out programmes not broadcast in this country but relayed by means of the General Post Office telephone or radio-telephone services for broadcasting in their own countries. Often such facilities involved merely the loan of a studio at Broadcasting House. Frequently, however, more elaborate arrangements were made to enable programmes and events taking place elsewhere than in the studios to be broadcast. A selection of the more outstanding of these special 'outside broadcasts' follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 31</td>
<td>Visit of MM. Flandin and Laval to London</td>
<td>France</td>
</tr>
<tr>
<td>Feb. 1 to 3</td>
<td>Programme from Keats's house, Hampstead.</td>
<td>C.B.S.*</td>
</tr>
<tr>
<td>Feb. 24</td>
<td>Programme from Wordsworth's cottage, Grasmere.</td>
<td>C.B.S.</td>
</tr>
<tr>
<td>April 7</td>
<td>Cardinal McRory from St. Patrick's Cathedral, Armagh.</td>
<td>C.B.S. [Austria.</td>
</tr>
<tr>
<td>April 20</td>
<td>Commentaries on the Jubilee Procession.</td>
<td>France, Germany,</td>
</tr>
<tr>
<td>May 6</td>
<td>Events at the International Horse Show, Olympia.</td>
<td>Germany.</td>
</tr>
<tr>
<td>June 24 - 26</td>
<td>Programme from Tennyson's house, Haslemere.</td>
<td>C.B.S., N.B.C.‡</td>
</tr>
<tr>
<td>June to July</td>
<td>Wimbledon Tennis commentaries (Various dates).</td>
<td>C.B.S. [Germany.</td>
</tr>
<tr>
<td>Oct. 6</td>
<td>Programme from Tennyson's house, Haslemere.</td>
<td>Holland.</td>
</tr>
<tr>
<td>Oct. 13</td>
<td>Service from Dutch Church, Austin Friars, London.</td>
<td>N.B.C.</td>
</tr>
<tr>
<td>Nov. 3</td>
<td>‘Will Rogers’, by Lady Astor.</td>
<td>N.B.C.</td>
</tr>
<tr>
<td>Nov. 9</td>
<td>Y.W.C.A., Eightieth Birthday Ceremony, Albert Hall, London.</td>
<td>N.B.C.</td>
</tr>
<tr>
<td>Oct. 11</td>
<td>Speech by Lord Cecil, Armistice Day. [Wednesday.</td>
<td>C.B.S.</td>
</tr>
<tr>
<td>Nov. 23</td>
<td>Football match, France v. Wales.</td>
<td>France.</td>
</tr>
<tr>
<td>Nov. 24</td>
<td>Centenary Programme from Andrew Carnegie's birthplace, Dunfermline.</td>
<td>C.B.S.</td>
</tr>
<tr>
<td>Dec. 24</td>
<td>Service from the Norwegian Church, Rotherhithe.</td>
<td>Norway.</td>
</tr>
<tr>
<td>Dec. 25</td>
<td>Service from Buckfast Abbey.</td>
<td>N.B.C.</td>
</tr>
</tbody>
</table>

* The letters C.B.S. represent Columbia Broadcasting System
‡ The letters N.B.C. represent National Broadcasting Company of America

[127]
The old 5XX masts at Daventry now being used to support experimental aerials for transmission to Canada and East Africa.
THE EMPIRE SERVICE

It is entirely appropriate that the year of the Silver Jubilee should have seen emphatic progress in and consolidation of the Empire Broadcasting Service. The Silver Jubilee celebrations yielded many notable broadcasts, which were more widely distributed than has ever before been possible, to and within the constituent parts of the Empire. The profound impression made by King George V’s message on May 6th on individual white listeners isolated in remote parts of the Empire and on groups, and indeed crowds, of natives assembled on a racecourse in a West African colony, or in a public square in British Guiana, was significant of the potentialities of broadcasting in promoting the fundamental interests of the Empire as a whole.

The general organization of the service and the arrangement of its several ‘transmissions’ remained as described on pages 127–130 of the 1935 Annual with the very important addition (dealt with in detail elsewhere) of a Transmission VI, which rounds off the system of transmission so that a daily programme from Daventry is available at a convenient local listening time for every part of the Empire when conditions of short-wave reception are favourable.

Contact with distant listeners, which has contributed so much to the development of the Empire Service in its early years, has been greatly strengthened—and this is perhaps the proper place to observe that if a careful study of correspondence is important in the case of a national system, with its close contact with listeners, it is essential in that of a developing short-wave service. In all, more than 53,000 reception reports and letters have reached Broadcasting House from overseas between the end of 1932 and the end of 1935, but the growth of interest during the particular year under review is evidenced by the fact that it has yielded over 50 per cent of this total correspondence. So much for the size of the ‘Mail Bag’. Incidentally, extracts from these letters have formed the basis of three feature programmes broadcast from Daventry under that title which were greatly appreciated. But during the year, there have been important changes in the nature and sources of the letters. In considering the overseas reaction to widely distributed programmes of a British character employing the English language, there has to be some regard for the quantitative distribution of English-speaking people in the world. Space does not here permit of a detailed analysis (see table, page 136 of last year’s Annual), but some significant figures must be quoted. The population of the United States of America stands at approximately 120 millions. Now the ‘white’ English-speaking population of the Empire, outside Great Britain and Ireland, is only about 21 millions, with, in addition, a relatively small (though significant) number of British residents in non-English-speaking countries. It was, therefore, not surprising that, in the early days of the Empire Service, a larger number of letters (approximately 60 per cent of the total mail bag) came from the U.S.A., where there was already a large number of short-wave listeners, than from the Empire. In the latter half of the past year, however, there has been a marked change-over in proportions, in addition to the aggregate increase in correspondence. During that period over 60 per cent of the incoming letters and reports have emanated from Empire territories with under 40 per cent from the U.S.A. This implies, not a loss of popularity in the U.S.A. and other foreign countries—for the actual increase in reports indicates a gain—but an unmistakable growth of Empire interest and increase in the use made of the service within the Dominions and Colonies. Another aspect of the mail bag may be alluded to here. As the service grows older, listeners’ technical interest in short-wave transmissions may be expected to wane, so that in the end there may even be a falling off in the gross volume of correspondence. Hitherto, there has been no sign of this, although the proportion of letters purely on programme matters has increased by comparison with those of a technical character.

The staff of the Empire News Section was increased during the year, with a consequent strengthening of the service provided by the news bulletins, which are a regular feature in each ‘transmission’. While the basis of
compilation remained unchanged, the improved editorial facilities have assisted in moulding the bulletins to meet the needs of overseas audiences, and in providing an accurate report of world events in the twenty-four hours preceding each reading of news. There was very significant appreciation of the news during the latter part of the year, when authoritative news of British origin helped to counter misleading and disturbing rumours about the international situation which had gained wide currency. In a different field there was an important extension of the bulletins from October 7th, when information about the tendencies in selected commodity markets began to be given weekly in the relevant transmissions, the general policy to be followed in this regard having been agreed in consultation with the Colonial and Dominions Offices, the Imperial Economic Committee, and other authorities. These brief bulletins, incidentally, contain a minimum of actual figures, for the conveyance of which the short-wave medium is not entirely suitable.

In general programme matters the spring and summer months, especially the period of the Silver Jubilee celebrations, were periods of great activity. All the major Jubilee events, including the St. Paul's Thanksgiving Service, the Westminster Hall Ceremony, and the Navy, Army, and Air Force Reviews, were represented in Empire programmes. Special mention must be made of the Empire broadcast on May 6th, which preceded King George V's message and which was made possible by the generous co-operation of Governments and broadcasting organizations in the Dominions, India, and certain Colonies. The use of broadcasting in promoting unity of interests and ideals was demonstrated by broadcasts to listeners in the United Kingdom and overseas by several of the Dominion Premiers who visited England for the Jubilee. Similarly, delegates from all the Empire legislatures represented at the Empire Parliamentary Association Conference in July broadcast in the appropriate transmissions from Daventry. These talks created considerable interest, and the contact thus effected between important visitors to England from overseas and the people in their own countries is significant of future developments.

The incidence in the latter months of the year of three general elections, in Great Britain, Canada, and New Zealand, respectively, presented a new problem in Empire broadcasting. It was obvious that purely party statements, which might be heard out of their context, or without a full appreciation of the immediate political background, would be out of place except in the country concerned with each particular election. The policy adopted was, therefore, as follows. In connexion with the General Election in the United Kingdom there were two talks in each transmission from Daventry. The first, given soon after the dissolution, provided an impartial survey of the political situation and the election issues as represented in party manifestoes; and the second, on the eve of the poll, dealt with the conduct and progress of the election campaign. The latter talks were given by experienced overseas journalists, each an appropriate interpreter of major imperial issues to listeners in the countries to which the various transmissions were primarily directed. The Canadian and New Zealand elections were dealt with in a similar manner both in the National programmes for home listeners and in Empire programmes.

Sporting broadcasts of all kinds, for which there is always a demand from overseas, have continued to occupy an important place in Empire programmes. The visits to this country of the South African Cricket Team and of the New Zealand Rugby Footballers provided excellent opportunities for stimulating interest in the Empire Service. Broadcasts from the grounds of the important matches played by these teams were received with enthusiasm not only in the Dominions directly concerned, but also in many other parts of the Empire to which, in some instances, the particular sports were unfamiliar.

As in former years the beam telephone channels (operated by the Post Offices of the Empire and other authorities) have been utilized for incoming overseas programmes, and each extension of these links opens up fields hitherto untapped to programme relay. Such incoming broadcasts, it must be remembered, not only benefit the home listener, but can be radiated from Daventry for reception throughout the Empire. In addition to the reciprocal Empire programmes on Christmas
Day and in connexion with the Jubilee (already referred to above), outstanding broadcasts of this type during the year included: programmes from Canada in celebration of Empire Day and from South Africa on Union Day; speeches shared simultaneously between gatherings in London and Cape Town during the progress of the Imperial Press Conference, and a second broadcast of speeches with a descriptive commentary from Cape Point on the eve of departure of the delegates from South Africa; the election talks above alluded to; the Bells of the Church of the Nativity at Bethlehem; a Canadian contribution to the home National programme commemorating St. Andrew’s Day, and speeches at the inauguration of the ‘King George V Jubilee Forest’ in Palestine.

A general survey of programme activity would be incomplete without some reference to certain circumstances special to short-wave broadcasting. At the outset there were, alike on the programme and on the technical side, many unknown quantities, but the experience of three years has yielded valuable results. Technical developments are dealt with in their place. In the programme field, it has become increasingly obvious that in certain directions a new technique in broadcasting is involved. The technical limitations in propagation on short waves call for the special adaptation of performances of music, speech, and sound effects. Public ceremonies, speeches, running commentaries on events, and, for that matter, programmes designed for the home audience and simultaneously radiated from Daventry, cannot be adapted
MAP OF THE WORLD SHOWING TRUE BEARING OF DAVENTRY FROM ANY POINT
exclusively to the requirements of the short-wave Service. An increasing proportion of programmes is, however, being specially produced for the Empire Service, particularly at times when no programmes are being given in the Home Service. This is not the place for full consideration of the prime problems involved, but, in the main, a measured pace of speech, a directness of approach, a clear background in dramatic productions, and a steady level of modulation in music of all kinds, have all proved of value in promoting intelligibility at the receiving end. Furthermore, the interests and needs of a scattered audience, isolated from the programme source, are in themselves different from those of listeners to a 'national' service. This factor has also to be carefully studied in its due relation to the building of acceptable programmes for overseas.

Another practical difficulty which should be touched upon briefly is the question of securing performances by artists in all categories at hours when the majority of people are in bed. At the present time, five hours of programmes are provided daily between 11.0 p.m. and 10.0 a.m. (12.0 midnight to 7.30 a.m., in summer months), and programme hours in this period are certain to increase. To quote but one example: the lack of 'atmosphere', which so many variety artists experience in a broadcasting studio, is greatly accentuated when they are required to throw themselves unreservedly into an effort of humorous output in the 'small hours'. Moreover, the fact that Britain is not alone in the field of short-wave broadcasting is an important factor. In certain other countries (Germany and Italy, for instance) the relation of the State authority to artists is such as to make their services more easily available at these 'awkward' hours than is possible in Great Britain.

The construction of two additional transmitters of high power and an extensive new aerial system at Daventry is dealt with below. Programme expansion will have to run parallel with these developments, although, at the outset, the new transmitters and aerials may be employed to provide more effective distribution of programmes within the present limits of timing and reception areas. Experience of the early years of the Service has, however, shown that a convenient time for local listening cannot be arbitrarily determined: for example, rural habits differ from urban habits in any country and hours of leisure (local time) in the East are not the same as in the Western world. Moreover (and this has proved most important in practice) the evidence shows that any one transmission may be heard in several countries. A significant feature of correspondence relating to the introduction of Transmission VI in the past year was the way in which the programmes primarily intended for the evenings of Western Canada were welcomed in India as an early-morning Service. Therefore, in the further growth of the Service there is likely to be an increased demand for the availability of a particular programme in widely-separated areas of different local time. It may also become necessary to radiate from Daventry two (or more) programmes at the same time, in order to cater for specific interests in different parts of the Empire. And, further, as the physical limitations of short-wave transmissions become less restrictive, the experience of local broadcasting will, inevitably, be repeated, and higher standards, once attained, will be demanded, with the result that the programme service, as a whole, will be further strengthened.

Re-broadcasting and Wireless Exchanges

The existence of foreign short-wave stations with well-developed services makes imperative the provision of facilities for the widest possible dissemination within the Dominions and Colonies of programmes of British (i.e., home country or overseas) origin, if broadcasting is to be employed to the full advantage of its potentialities. For it is not only by direct reception of the Empire Station that listeners are receiving the Empire programmes. Relays of these programmes have progressively increased in those Dominions and Colonies where local broadcasting systems already exist, special short-wave receiving stations having been built for the purpose. In Australia the Postmaster-General's Department monitor the Empire transmissions, at the Mont Park, Melbourne, Receiving Station, for several
hours each day, and programmes are re-broadcast over the Australian Broadcasting Commission's stations when good reception conditions coincide with convenient programme timing. The Canadian Radio Broadcasting Commission has recently established an up-to-date short-wave receiving station at Ottawa for the purpose of relaying the Empire station, and a series of regular relays has been inaugurated. More programmes are relayed in those parts of the Empire where it is difficult to obtain local programme material. Thus, in those Colonies where local stations exist, considerable use is made of the Empire programmes. Ceylon was one of the first Colonies to install a special receiving station for the purpose, and in the past year 145 hours of programme have been relayed over the Colombo station. Other examples are Hong Kong, Nairobi, Malta, and Palestine. Listeners at home can form an idea of the results which such re-broadcasting can give from the 'Five Hours Back' series of programmes relayed from American short-wave broadcasting stations through the B.B.C. receiving station at Tatsfield.

Yet another method by which listeners overseas are hearing the Empire programmes is through wireless exchanges established for the purpose. A central short-wave receiving station is connected over a line network directly to loudspeakers in the homes of listeners. This system is particularly applicable to those areas where the population is fairly dense and in compact units, and it has the advantage that the listener can pay a subscription at a small rate each week and is not called upon to put down a sum of money to purchase a receiver. At the same time, the listener has the benefit of a much better short-wave receiver than he is likely to be able to instal in his own home, a benefit which is common both to wireless exchanges and to re-broadcasts over the local station. The wireless exchange system is developing rapidly in the Colonies; it is already well established in the Falkland Islands, Sierra Leone, the Gold Coast, Nigeria, and Gibraltar, and exchanges are being installed in Barbados, Malta, and elsewhere.

Much, however, still remains to be done in the way of material extension of all these services within the Colonial Empire, and the same may be said, indeed, of the whole fabric of Empire broadcasting. The growth of Dominion and Colonial wireless licence figures in the past year and an increased use of 'all-wave' (or medium and short-wave) receivers overseas have been encouraging in this connexion. But broadcasting is nothing less than one of the major Imperial services, and it is as such and not on any lower level of importance that it should receive attention from all parts of the Empire.

Technical Progress

On the technical side the third year of the British Empire broadcasting station at Daventry has been one of steady but unsensational development. Its work is twofold: first, the day-to-day carrying of the Empire programme service to listeners throughout the world, and secondly, the experimental work to provide design data for extensions. In practice, these sides of the work go on simultaneously, the one being complementary to the other, and both being greatly assisted by the willing co-operation of professional observers and private listeners all over the world. The information thus obtained bears on two principal subjects, the choice of an appropriate wavelength for a transmission to a given part of the Empire at a given time and season, and the most efficient design of transmitting aerial. The first of these is important in securing the best results in the day-to-day running of the Empire Service on existing aerials and apparatus; while the second, equally important, has provided information on the design of the new aerial system. Indeed, Empire listeners are already receiving some of the benefit of this experimental work in the form of somewhat stronger signals, for it has been possible to erect temporary aerials of more efficient type on existing masts, although unfortunately it has not been possible to provide these for all Transmissions, owing to lack of space.

The old G5SW transmitter from Chelmsford, with which the initial short-wave tests were made in 1927, was installed at Daventry in the Spring of 1935, in order to facilitate the experimental work on aerials. It has also been used to augment the service on special occasions, such as the Jubilee, and it
has been used experimentally in the first part of Transmission IV to provide a third wavelength for Africa, which is difficult to serve with only two wavelengths, particularly in the Northern summer. Two new transmitters have been ordered for the Empire Station, one each to be supplied by Marconi’s Wireless Telegraph Co., Ltd., and Standard Telephones & Cables, Limited. These transmitters will be of increased power. A contract for a building to house four transmitters has been placed and a further 80 acres of land have been purchased at Daventry to accommodate the extensions to the aerial system. (The present site covers just over 50 acres.) The new aerial system, when complete, will consist of 25 directional aerials giving transmission on different wavelengths in 13 different directions (including long and short path routes to Australia and New Zealand). Naturally, so comprehensive a scheme cannot be completed in a short time and, although work is in hand, some months must elapse before the stage of service is reached.

Turning now from the plans for the future to the operation of the service during the past year, a series of test transmissions was begun at the end of February to see if it were possible to provide a regular service for reception in Western Canada (8 hours behind G.M.T.) at a more convenient listening hour, local time, than that provided by Transmission V. These test transmissions brought an immediate and wide response, not only from Western and Eastern Canada, but also from the United States of America and from India, where they are received at breakfast-time. The original tests were from 2.30 a.m. to 3.30 a.m. G.M.T., but experience showed it to be desirable to change the time to 3.00 a.m. to 4.00 a.m. Four one-hour transmissions per week were made, as a result of which 7,072 reports were received in the first six weeks. There was no doubt about the enthusiasm with which these tests were received, and this experimental transmission was therefore made part of the regular service as Transmission VI, operating on a daily schedule from Dominion Day, July 1st.
Whilst the large number of letters received about these tests is a contributory cause, nevertheless the general level of Empire correspondence has shown a noteworthy increase (see above). The majority of these letters report that reception is satisfactory and, indeed, there is direct evidence of the gradual improvement that has followed the various technical alterations made at Daventry in the letters of a number of listeners, who are, by now, old correspondents.

There is no doubt, however, that listeners judge reception by widely different standards. For instance, those who live in the presence of a well-developed local broadcasting service generally have a higher standard than those who have to depend on short-waves only. In the hope of setting up a common standard and so increasing the usefulness of the reports, a gramophone record of typical short-wave reception at the B.B.C. receiving station at Tatsfield has been made and distributed to selected listeners, the gradings ('Excellent', 'Good', etc.) corresponding with those on the Empire Service log sheets used by them.

This brief survey touching upon some of the problems of Empire broadcasting will serve to indicate the wide field which is open to cultivation. Something has already been achieved, but much more still remains to be done. The interest of listeners at home, the continuation of support from overseas, and a true realization in private and official circles of the real power of broadcasting are needed. These alone can make secure the future of the Empire Service.

**Interference**

The problem of interference on the short-wave bands is becoming of steadily greater importance, and listeners' reports indicate that it is already serious in some areas.

Interference may take the following forms:

(a) Interference between short-wave broadcasting stations owing to insufficient separation between the stations. Generally speaking, it seems impossible, in view of the number of stations and narrowness of the wavebands, for the minimum separation to be greater than 10 kc/s.

(b) Interference between stations which have 10 kc/s. separation, but cause interference because the receiver is not selective enough (adjacent channel selectivity).

(c) Interference caused by telegraph services working in the broadcasting bands, or vice versa.

(d) Interference with broadcasting stations situated near the ends of the short-wave broadcasting bands, due to telegraph stations and insufficient selectivity in the receiver.

(e) Interference with reception of broadcasting stations working in their correct bands, caused by telegraph stations working in their correct bands, the interference being due to second channel or image signal in the receiver.

(f) Interference caused by the harmonics of broadcasting and/or telegraph stations. Short-wave broadcasting stations do not generally cause interference under this heading on wavelengths above 25 metres, since there is no short-wave broadcasting band above 50 metres, and the relationship between the various short-wave broadcasting bands is not harmonic, i.e., in the ratio $1:2$, $1:3$, $1:4$, etc. On the other hand, there is the possibility of medium-wave broadcasting stations having harmonics in the short-wave bands.

Of these types of interstation interference, there is nothing that can be done by the listener to remove types (a) and (c). Of the other types of interference, while the listener can do little to remedy this on existing receivers, he can encourage manufacturers to do so by refraining from purchasing new receivers which show these faults.

It is most desirable that all types of interference should be reported to the broadcaster whose station is affected, for short-wave propagation conditions often make it impossible for the interference to be heard in the country where the broadcast transmitter is situated. Once the interfering station has been identified, it can generally be determined whether the interference is due to insufficient selectivity in the listener's receiver or not. If it is established that the interference is due to a definite fault on the part of the transmitting station in question, e.g., if it is working on a wrong frequency or is occupying an unduly large waveband for the service that it is carrying out, then the matter is brought to the attention of the General Post Office and is dealt with through the ordinary channels.
between telegraph administrations. Past experience has shown that the action taken has generally been most effective.

**Short-wave Receivers**

Not only does the design of the short-wave receiver play a large part in the amount of interference a listener will experience, but it also materially affects the general standard of reception of the Empire Service. The Empire Broadcasting Service has considerably increased the sale of American all-wave receivers, not only in the U.S.A. but also in Empire countries. The 1935 Olympia Radio Exhibition, however, showed that the British manufacturer is at last making an effort to meet the demand for British receivers suitable for use in Empire countries to receive the short-wave service from Daventry. The production of good receivers at a price the Empire listener can pay is a most important factor of the development of the Empire Service.

**The Wavelength Problem**

In this brief review of the technical side of the Empire Service, reference must be made to the general question of the allocation of frequencies or wavelengths in the short-wave bands. At the last World Conference, held in Madrid in 1932, seven bands of frequencies were allotted for short-wave broadcasting in the radiocommunication regulations annexed to the Telecommunications Convention signed there. These frequency bands are between 6,000 kc/s. (50 metres) and 30,000 kc/s. (10 metres) and are as follows:

- 6,000–6,150 kc/s. 50-00–48-78 metres
- 9,500–9,600 " 31-58–31-25 "
- 11,700–11,900 " 25-64–25-21 "
- 15,100–15,350 " 19-87–19-54 "
- 17,750–17,800 " 16-90–16-85 "
- 21,450–21,550 " 13-99–13-92 "
- 25,600–26,600 " 11-72–11-28 "

Between 1922 and 1925, when broadcasting on medium waves was first starting in Europe, frequencies in the medium broadcasting band were reserved for individual stations by those nations that wished to use them as and when necessary. The same is now taking place in the short-wave broadcasting bands, and up to the present no international action has been taken to secure a planned allocation of the short waves to individual stations. With the development of short-wave broadcasting, it is obvious that some international plan is necessary. An international plan became necessary for medium and long-wave broadcasting, and such plans have proved of great value to European Broadcasting.

For short waves, however, it is necessary to have something wider than a European regional agreement, and the subject must be tackled on a world basis. It would seem that the next meeting of the C.C.I.R., to be held at Bucharest in the spring of 1937, or the World Radio Communications Conference, which is to be held at Cairo at the beginning of 1938, would be a suitable opportunity for working out a short-wave plan. In the meantime, technical information is being gathered so that this plan may be made intelligently, taking account of the many factors involved. In particular, the International Broadcasting Union has made arrangements to measure the frequencies of all the short-wave broadcasting stations that can be heard at Brussels, and it has decided to hold an inter-continental meeting of broadcasters in Paris at the beginning of March 1936 for the purpose of discussing various points of interest to broadcasters, among them the technical aspects of the allocation of short waves. This cannot be more than a preliminary discussion between users of short waves, as opposed to licensing authorities, but it is hoped that it may serve the purpose of exploring the field in preparation for the administrative or governmental conferences mentioned above which will ultimately be called upon to take action in the solution of this difficult and complex question.
# PROGRAMME EVENTS IN THE EMPIRE SERVICE

*including outstanding events in the Home Service programmes also broadcast to the Empire*

## Music

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Jan. 30</td>
<td>Indian Songs by Comalata Banerji, sung by John Collinson.</td>
</tr>
<tr>
<td>May 10</td>
<td>London Music Festival Concert, Bach's Mass in B Minor by the B.B.C. Symphony Orchestra cond. by Adrian Boult.</td>
</tr>
<tr>
<td>May 16</td>
<td>Recital of Sinhalese and Indian Music by Surya Sena and Nelun Devi.</td>
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<tr>
<td>May 24</td>
<td>Royal Command Concert from the Royal Albert Hall, London.</td>
</tr>
<tr>
<td>Aug. 29</td>
<td>The B.B.C. Empire Orchestra conducted by Adrian Boult.</td>
</tr>
<tr>
<td>Dec. 7</td>
<td>Grenadier Guards Band.</td>
</tr>
<tr>
<td>Dec. 24</td>
<td>Carol Service (King's College, Camb.).</td>
</tr>
<tr>
<td>Dec. 30</td>
<td>First of the Winter 'Prom.' Concerts.</td>
</tr>
</tbody>
</table>

## Drama

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Jan. 26</td>
<td>'Gordon at Khartoum.'</td>
</tr>
<tr>
<td>April 24</td>
<td>'Scenes from Shakespeare' presented by Sir Barry Jackson and the Birmingham Repertory Theatre Company.</td>
</tr>
<tr>
<td>July 15</td>
<td>'Music of Men's Lives' (Compton Mackenzie).</td>
</tr>
<tr>
<td>July 25</td>
<td>'Enchantments Die' (Langley).</td>
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<tr>
<td>Aug. 7</td>
<td>'The Purple Fileus' (Wells).</td>
</tr>
<tr>
<td>Aug. 20</td>
<td>'Shadow of the Taj' (Dewan Sharar).</td>
</tr>
<tr>
<td>Sept. 13</td>
<td>'A Tale of Old Quebec' (Coultier).</td>
</tr>
<tr>
<td>Oct. 31</td>
<td>'Poet's Corner' (Pakington).</td>
</tr>
<tr>
<td>Nov. 28</td>
<td>'The Wedding' (Tchekhov).</td>
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</tbody>
</table>

## Opera and Operetta

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>April 4</td>
<td>'The Blue Peter' (Herbert).</td>
</tr>
<tr>
<td>April 29</td>
<td>'Lohengrin' (from Covent Garden).</td>
</tr>
<tr>
<td>May 29</td>
<td>Royal Command Performance of 'Barber of Seville' (Covent Garden).</td>
</tr>
<tr>
<td>Sept. 23</td>
<td>Act III of Delius's 'Koanga' (Covent Garden).</td>
</tr>
</tbody>
</table>

## Variety

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 7</td>
<td>'The Little Show' with Morris Harvey.</td>
</tr>
<tr>
<td>Feb. 13</td>
<td>'Eight Bells' (Dewar).</td>
</tr>
<tr>
<td>Mar. 5</td>
<td>'Gallery of London Types', No. 2.</td>
</tr>
<tr>
<td>Mar. 26</td>
<td>First of 'Gossip Hour' series.</td>
</tr>
<tr>
<td>May 9</td>
<td>Empire Variety: all-star programme.</td>
</tr>
<tr>
<td>May 11</td>
<td>Jubilee Gala.</td>
</tr>
<tr>
<td>May 24</td>
<td>First of 'The Coo-Coo Noodle Club'.</td>
</tr>
<tr>
<td>June 5</td>
<td>'Epsom Bound.'</td>
</tr>
<tr>
<td>June 28</td>
<td>First of the series, 'Great Occasions at which we never hope to be Present'.</td>
</tr>
<tr>
<td>Sept. 3</td>
<td>'Fairground'.</td>
</tr>
<tr>
<td>Dec. 24</td>
<td>Empire Pantomime.</td>
</tr>
</tbody>
</table>

## Talks

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>First of a series of technical talks by the Chief Engineer.</td>
</tr>
<tr>
<td>Jan. 4</td>
<td>First of 'Living Dangerously' series, including talks by Lieut. Martin Lindsay, Hugh Rutledge, Herbert G. Ponting, Sir Malcolm Campbell, Cherry Kearton, Robert Flaherty, etc.</td>
</tr>
<tr>
<td>Jan. 9</td>
<td>Lord Baden-Powell on the Pan-Pacific Scout Jamboree, from Australasia.</td>
</tr>
<tr>
<td>Feb. 13</td>
<td>Talks in connexion with the British Industries Fair, by Mr. Walter Runciman, President of the Board of Trade, and Mr. R. W. Dalton, Sir B. N. Mitra, Mr. F. J. du Toit, Mr. Frederic Hudd.</td>
</tr>
<tr>
<td>Feb. 26</td>
<td>'The British Empire in the Flying Age', by Sir Evelyn Wrench.</td>
</tr>
<tr>
<td>Mar. 11</td>
<td>'The Drawing Room of the Empire', by Miss Winefrid Wrench.</td>
</tr>
<tr>
<td>Mar. 12</td>
<td>'Islands of the Empire' series: 'Thursday Island', by Keith Barry.</td>
</tr>
<tr>
<td>April 2</td>
<td>Sir Ernest Benn in the series 'Freedom'.</td>
</tr>
<tr>
<td>April 12</td>
<td>H.R.H. the Prince of Wales on the Jubilee Thank-offering Fund.</td>
</tr>
<tr>
<td>April 15</td>
<td>Mr. Neville Chamberlain on the Budget.</td>
</tr>
<tr>
<td>April 17</td>
<td>The Prime Minister on the Stresa Conference.</td>
</tr>
<tr>
<td>April 25</td>
<td>First of the 'Empire Bookshelf' series.</td>
</tr>
<tr>
<td>May 7 &amp; 9</td>
<td>Mr. G. W. Forbes, Prime Minister of New Zealand.</td>
</tr>
<tr>
<td>May 8</td>
<td>Mr. R. B. Bennett, Prime Minister of Canada.</td>
</tr>
<tr>
<td>May 13</td>
<td>Lord Elibank on Empire Trade Week.</td>
</tr>
<tr>
<td>May 22</td>
<td>Mr. Neville Chamberlain, British Industries Fair at Birmingham.</td>
</tr>
<tr>
<td>May 23</td>
<td>Lord Londonderry on the Air Force Recruiting Scheme.</td>
</tr>
<tr>
<td>May 25</td>
<td>Description of the Royal East End Drive, by the Marquess of Donegall.</td>
</tr>
<tr>
<td>June 8</td>
<td>Talk on 'Discovery II' Expedition.</td>
</tr>
<tr>
<td>July 15</td>
<td>First of the series 'Summertime at Home', including talks by A. G. Street, Ivor Brown, Graham Sutton, Eric Parker, J. L. Hodson, E. Arnot Robertson, and Sir William Beach Thomas.</td>
</tr>
<tr>
<td>July 24</td>
<td>Topical talk on Bisley, by Sir Arnold Hodson, Governor of the Gold Coast.</td>
</tr>
<tr>
<td>Aug. 22</td>
<td>'Namesake Towns of the Empire', by Captain J. D. L. Gavm.</td>
</tr>
</tbody>
</table>
Aug. 23 Radiolymnia talks by the Assistant Chief Engineer, and Mr. Taylor (Sierra Leone).

Aug. 26 'Modern Science and Empire Farming', by Sir John Russell.

Sept. 1 The 'All Blacks', by A. J. Harrop.

Sept. 4 Sir Malcolm Campbell.

Sept. 9 Talk on New Books, by Eric Gillett.

Sept. 11 First of a new series 'A Countryman's Diary', by A. G. Street.

Oct. 4 First talk in the series 'I Knew a Man': H. G. Wells on 'Thomas Huxley'.

Oct. 16 The Canadian General Elections, by H. V. Hodson.

Nov. 11 A Gardener, introduced by Sir Fabian Ware, on the War Graves.


Nov. 26 New Zealand General Election results, by H. I. Low.

Speeches and Ceremonies

Feb. 3, 7 Tributes to the late Mr. J. H. Whitley (Chairman of the B.B.C.).

Feb. 7 Overseas League Luncheon—Exchange of Speeches between London and Cape Town in connexion with the Imperial Press Conference.

Mar. 21 Imperial Press Conference—Departure of Overseas delegates, a descriptive commentary on scene from Cape Point Lighthouse, and speeches by General Smuts and Major J. J. Astor.

April 3 Empire Societies' Banquet—Speech by H.R.H. the Duke of Gloucester on return from Australian tour.

April 29 Luncheon to South African Cricket Team: Speeches by the Earl of Athlone, and Mr. H. F. Wade.

May 6 Mr. Rudyard Kipling at the Banquet of the Royal Society of St. George.
RUGBY INTERNATIONAL, WALES v. THE 'ALL BLACKS', AT CARDIFF

(21 December 1935)

May 9
Jubilee Ceremony in Westminster Hall.

May 13

May 19
Captain Vancouver Anniversary Ceremony in Petersham churchyard.

June 3
'Trooping the Colour'.

June 6, 13, 16
Royal Reviews of the Air Force, the Army, and the Navy.

June 20
Corona Club Dinner—Speeches by Mr. Malcolm MacDonald, Secretary of State for the Colonies, and Sir Philip Cunliffe Lister, Secretary of State for Air.

July–Aug.
Empire Parliamentary Association Conference. Speeches by the Prime Minister (Mr. Stanley Baldwin), Mr. R. G. Menzies (Australia), the Hon. L. D. Amery, Senator Hartog and Col. Reitz (South Africa), Sir Abdur Rahim (India), Senator Copp (Canada), Mr. H. S. Dickie (New Zealand), Capt. Hon. W. S. Senior (Southern Rhodesia), Hon. Sir Baron Jayatilaka (Ceylon), Mr. Harcourt Malcolm (Bahamas), Sir Harold Austin (Barbados).

July 23
'The Ceremony of the Keys.'

July 28
Speeches at the opening of the Gold Coast Wireless Exchange by Mr. Malcolm MacDonald, Secretary of State for the Colonies, and Sir Arnold Hodson, Governor of the Gold Coast.

Aug. 14, & 17
Tributes to the late Viscount Bridgeman, Chairman of the B.B.C.

Sept. 12
Speeches by Sir Samuel Hoare and Mr. C. T. te Water (High Commissioner for South Africa) from Geneva.

Oct. 14
Funeral of the Rt. Hon. Lord Carson, St. Anne's Cathedral, Belfast.

Oct. 26

Nov. 9
The Lord Mayor's Show.

Nov. 25
Funeral procession of Earl Jellicoe.

Dec. 2
Speech by Mr. J. H. Thomas on the opening of the Lagos Wireless Exchange.

Jan. 19
England v. Wales Rugby Football Match, and subsequent matches in the series.
Feb. 6  Commentary on England v. Ireland International Association Football Match, and subsequent matches.
Mar. 2  Wembley Canadians v. Winnipeg Monarchs Ice Hockey Match.
Inter-Services Rugby, Navy v. Army.
Mar. 9  Ice Hockey, England v. Canada.
Mar. 23 Oxford v. Cambridge Inter-Varsity Sports.
Mar. 29 'The Grand National,'
April 27 Association Cup Final Match.
May 18 Shelsley Walsh Car Hill Climb.
June 5  'The Derby.'
July 5,20 Tennis at Wimbledon.
July 22 Australian tennis players, introduced by D. R. P. Turnbull.
July 31 Australia v. England Speedway Test.
Aug. 24 'The Ulster Grand Prix.'
Sept. 11 The 'St. Leger'.
Various dates  Rugby Matches of the 'All Blacks'.

**Religion**

April 21 'Easter Day' from Palestine.
Liverpool, Manchester, and Winchester Cathedral Services.
April 25 Anzac Day Service from St. Clement's Danes.
April 28 Special Scout Service at St. George's Chapel, Windsor.
May 5 Special Studio Service in preparation for the Jubilee.
May 12 Jubilee Thanksgiving Service from St. George's Chapel, Windsor.
June 9 First Monthly Empire Service from St. Paul's Cathedral.
June 15 Special Empire Service from Canterbury Cathedral. Address by the Archbishop.
June 30 Magna Carta Service, from Egham.
Aug. 11 'The Buffs' Service of Remembrance in Canterbury Cathedral.
Sept. 15 Roman Catholic Service from the Studio. The Archbishop of Westminster.
Nov. 10 Jewish Ex-Soldiers' Service of Remembrance at the Cenotaph.
A Commemoration at the Scottish National War Memorial, Edinburgh.
Nov. 11 Armistice Day Service from the Cenotaph and Festival of Remembrance from the Royal Albert Hall, London.

**Commemorative Programmes and National Days**

Jan. 26 Australia Day Programme, including orchestral concert; talk by Mr. S. M. Bruce; and variety by Australian artists.
Feb. 6 New Zealand Day programme; talk by Sir James Parr (High Commissioner), and a programme by New Zealand artists.
Mar. 1 St. David's Day Programme (from Cardiff).
Mar. 17 St. Patrick's Day Programme (from Belfast).
April 25 'Comrade to Comrade', an Anzac Day Concert from the Queen Mary's Hospital for Disabled Soldiers and Sailors. Gallipoli Programme.
May 6 Jubilee Day, including eye-witness accounts of the Celebrations in London, by Philip Thornton, the Thanksgiving Service from St. Paul's Cathedral, and 'Twenty-five Years', a Jubilee Programme including overseas messages and the King's Speech.
May 24 Empire Day Programme, including a talk by Earl Jellicoe. Programme from Canada, with a talk by the Prime Minister, Mr. R. B. Bennett.
May 31 Union Day Programme from South Africa, including talks by the Earl of Athlone and Mr. C. T. te Water.
June 13 Vancouver Day Programme.
July 1 Dominion Day Programme: 'Looking Westward' and Message by Mr. G. Howard Ferguson, High Commissioner for Canada.
Nov. 30 St. Andrew's Day Programme (including a contribution from Canada).
Dec. 25 Christmas Day Programme and The King's Message to the Empire.

**Feature Programmes (including Outside Broadcasts)**

Jan. 26 The Honourable Artillery Company.
Feb. 16 British Industries Fair Programme.
April 9 'Soldiers of the Queen', from the Royal Hospital, Chelsea.
April 16 'Mail Bag', dramatizing letters from overseas.
June 13 The Aldershot Tattoo.
June 29 The Royal Air Force Display.
July 4 'Life on the Ocean Wave', relayed from the Gravesend Sea School.
Sept. 16 'Riverside Drive', dramatizing the Pool of London.
Oct. 6 'Songs of Fashion', the first Programme in a series of 'Musical Oleographs'.
Oct. 15 'D'Ye Ken John Peel'.
Oct. 30 'Turn Round', a Liner in Port.
The tower at Alexandra Palace on which the 300-ft latticed steel aerial mast will be erected being adapted for office accommodation
TELEVISION

The Present Problem

In order to explain the present position of television in this country, it is necessary to go back a few years and recall the events which have led up to it. Late in 1929 the B.B.C. undertook to radiate a regular but limited service of low-definition television, using a system which had been developed by the Baird Company. These transmissions emanated from the Baird studios. In 1932 a studio was equipped in Broadcasting House from which these transmission were continued. This must not be confused with high-definition television—the number of lines per picture was only 30 and the number of pictures per second 124. These transmissions, although regular, were in the nature of an experiment because the possibility of providing attractive programmes was questionable; on a 30-line basis, it was only possible to give a kind of impressionist reproduction with very little detail. At the same time the low number of complete pictures per second caused an unpleasant 'flickering' effect.

In the meanwhile research was being carried out by the Baird Television Company, by Electric & Musical Industries, Limited, and other firms, with the object of perfecting systems removing these serious defects.

The low-definition service was transmitted on an ordinary broadcasting wavelength (261 metres), this being possible only because of the small number of lines per picture and pictures per second. In order to increase the definition sufficiently it became necessary to use several times the number of lines per picture, and to reduce 'flicker' the number of pictures per second had to be at least doubled. This necessitated a correspondingly wider frequency band for transmission, so that an ordinary broadcast wavelength could no longer be used. However, by this time considerable progress was being made in the technique of transmission by ultra-short wavelengths, that is to say those between, say, 5 and 10 metres, and on such wavelengths it is possible to transmit the wide band of frequencies necessary for this improved form of television, now usually called—rather vaguely—high-definition television.

Demonstrations were given to the B.B.C. by the two firms mentioned above, and it became obvious in 1933 that considerable progress was being made. It was not, however, clear exactly how a public service of this kind of television could be established, or even whether it was justified, particularly in view of the high cost to the broadcasting authority of producing programmes, and the high cost of receivers to the 'viewing' public.

Accordingly the Postmaster-General appointed a committee to examine the whole situation, and to recommend whether or not a service should be established, and if so in what way.

This committee first met in May 1934, and consisted of:

Chairman:
Lord Selsdon.

Vice-Chairman:
Sir John Cadman.

Members:

Colonel A. S. Angwin and {G.P.O.}
Mr. F. W. Phillips
Mr. O. F. Brown (Department of Scientific and Industrial Research).
Vice-Admiral Sir Charles Carpendale and Mr. (afterwards Sir Noel) Ashbridge. {B.B.C.}

Secretary:
Mr. J. Varley Roberts (G.P.O.).

This committee listened to a great deal of evidence and examined several television systems in this country, as well as in U.S.A. and Germany. It presented a report in January 1935, which, very briefly, stated that research had reached such a stage that a regular service of high-definition television could be contemplated, and that there were two systems in this country which had reached a high standard of development, namely that of the Baird Television Company, Limited, and the Marconi-E.M.I. Television Company Limited, respectively. It recommended that a station should be established in London only to begin with, in order to
FIG. 1

BAIRD TELEVISION SYSTEM

Fig. 1. Picture Modulation and Synchronizing Impulses
examine, under service conditions, the relative merits of these two systems, at the same time providing a service for the public in the London region. There were, of course, other recommendations in connexion with patents and other matters not mentioned here for reasons of space, but there was one provision which must be referred to, namely, that an Advisory Committee should be appointed to act as a guide in the early stages of the development of a television service.

Shortly after the report was adopted the Postmaster-General appointed this Advisory Committee, the membership being the same as for the original committee with the exception that Sir Frank Smith of the Department of Scientific and Industrial Research was appointed Vice-Chairman. Sir John Cadman, Vice-Chairman of the original committee, was unable to serve.

The committee began its work immediately, one of the first tasks being to choose a site for the London Television Station. Technically it is necessary for a station using ultra-short waves to be located on high ground, and this, of course, limited the choice of site considerably. Ultimately the Alexandra Palace was chosen, and arrangements made with the Palace Trustees for a portion of the building to be set aside for the transmitting apparatus, studios, and other accommodation. It then became necessary to consider in detail the specifications to which the transmitting apparatus should conform. It ultimately appeared to be desirable to allow each company to adopt for their system different technical data relating to the number of lines per picture and the picture frequency, in order that a true comparison of the merits of the two systems could be made.

Technical Details

Using the wording and diagrams issued by the two Companies themselves, the technical data covering each system are as follows:

**Details of the Signal Radiated by the Baird Company’s Apparatus**

Waveform. (Fig. 1) gives complete details of the waveform for picture modulation and synchronizing impulses. From this it will be seen that, using the arbitrary aerial current units of zero to 100, the total modulation for synchronizing (black) extends between the tolerance limits of zero to 5 and 37.5 to 42.5, while the picture modulation (black to white) extends between the tolerance limits 37.5 to 42.5 and 100.

It will be noted that the high frequency synchronizing impulse is rectangular in shape and is maintained for 8 per cent of the total time taken in tracing the line, and occurs between the line traversals. The low frequency synchronizing impulse, which is also rectangular in shape, is maintained during the time that 12 lines are traced, and occurs between the frame traversals. These traversals, as seen by an observer looking at the received image from the front, scan from left to right (line) and from top to bottom (frame).

The diagram also shows that, in addition to the above 8 per cent of the line traversal time occupied by the high frequency synchronizing impulse, a further 2 per cent is masked off to form a blank edging. Similarly, an additional 8 lines are masked off in the case of the low frequency synchronizing impulse for the same purpose.

**Additional Details.** The total number of lines in the complete picture is 240, scanned sequentially and horizontally at 25 picture traversals per second and 25 complete frames per second. The line frequency is thus 6,000 impulses per second and the frame frequency 25 impulses per second. The dimensions of the observed picture have the ratio of 4 horizontal to 3 vertical.

Amplitude modulation is employed, which results in light intensity modulation in the observed picture, the transmitter carrier increasing towards the white. The line synchronizing signals and the frame synchronizing signals are in the sense opposite to increasing picture modulation. The maximum frequency band involved in the transmission is 2 megacycles and the average component of light in the picture is transmitted, a black in the picture being transmitted as black and a white transmitted as white, in accordance with the modulation percentages referred to above.

**Specification of the Radiated Waveform of the Marconi-E.M.I. Television System**

The Marconi-E.M.I. television system transmits 25 complete pictures per second each of 405 total lines. These lines are interlaced so that the frame and flicker frequency is 50 per second. The transmitter will radiate signals with sidebands extending to about 2 megacycles either side of the carrier frequency. Good pictures can be received utilizing only a fraction of the radiated band, but naturally the quality of the received picture will depend upon the degree to which the receiver makes use of the transmitted band width.

The transmitted waveform is shown on Fig. 2.

1. **Line Frequency.** 25 lines per second, scanned from left to right when looking at the received picture.
2. **Frame Frequency.** 50 frames per second, scanned from top to bottom of the received picture.
3. **Type of Scanning.** The scanning is interlaced. Two frames, each of 202.5 lines, are interlaced to give a total of 405 lines with a complete picture speed of 25 per second. The line component and the frame component of scanning are regularly recurrent, the interface being derived from the fractional relationship between line and frame frequencies. An explanation of the method of interlacing is given at the end of this specification.
MARCONI-E.M.I. TELEVISION SYSTEM

Fig. 2. Transmitted Waveform.  Fig. 3. Diagram of Interlaced Scanning.
(4) Interval Between Lines. There will be intervals between the vision signals of successive lines, which intervals provide time for the transmission of a line synchronizing signal and also provide time for the return of the cathode ray beam to the beginning of the next line. The minimum interval between the vision signals of successive lines will be 15 per cent of the total line period (1/10250 seconds), the first 10 per cent of this interval between lines being occupied by the line synchronizing signal and the remaining 5 per cent by a signal corresponding to ‘black’ in intensity. The remaining 85 per cent of the total line period is available for transmitting vision signals.

(5) Interval Between Frames. There will be intervals between the vision signals of successive frames. The minimum interval between frames will be 10 lines, leaving a maximum of 192.5 active lines per frame, or 385 active lines per complete picture.

(6) Picture Radio. The picture ratio will be 5:4; that is to say, the distance scanned during the active 85 per cent of the total line period will be 5/4 times the distance scanned during the 192.5 active lines of the frame.

(7) D.C. Modulation. The picture brightness component (or the D.C. modulation component) is transmitted as an amplitude modulation so that a definite carrier value is associated with a definite brightness. This has been called ‘D.C. working’, and results in there being no fixed value of average carrier, since the average carrier varies with picture brightness. The radio frequency transmitter output is specified in what follows as a percentage of the peak output. This percentage is in terms of current (or voltage) and not in terms of power.

(8) Vision Modulation. The vision modulation is applied in such a direction that an increase in carrier represents an increase in picture brightness. Vision signals occupy values between 30 per cent and 100 per cent of peak carrier. The amount by which the transmitted carrier exceeds 30 per cent represents the brightness of the point being scanned.

(9) Synchronizing Modulation. Signals below 30 per cent of peak carrier represent synchronizing signals. All synchronizing signals are rectangular in shape and extend downwards from 30 per cent peak carrier to effective zero carrier.

(10) Line Synchronizing Signals. The line synchronizing signals are of one-tenth of a line duration, and are followed by a minimum of one-twentieth of a line of black (30 per cent peak) signal.

(11) Frame Synchronizing Signals. The frame synchronizing signals comprise a train of two pulses per line, each occupying four-tenths of a line and having one-tenth of a line interval of black (50 per cent peak) signal between them. At the end of even frames, the first frame pulse starts coincident with what would have been a line signal. At the end of odd frames the first frame pulse starts half a line after the preceding line signal. At least 6 frame signals will be transmitted at the end of each frame, but the number may be increased to any number up to 12 pulses (6 lines). During the remainder of the intervals between frames, normal line synchronizing signals will be transmitted with black (30 per cent peak) signals during the remaining nine-tenths of the line.

It will be noted that throughout the interval between frames (as during the whole transmission), the carrier falls from 30 per cent to zero regularly at line frequency and in phase with the beginning of the normal line synchronizing pulses.

(12) Variations in Transmitted Waveform. The 15 per cent interval between vision signals of successive lines, and the 10 lines interval between successive frames are minimum intervals used at the transmitter. During the initial development of the transmitter, certain transmissions may have longer intervals between lines and between frames, which lengthened intervals correspond to the transmission of a black border round the picture.

The 30 per cent carrier is the ‘black level’ below which no vision signals exist and above which no synchronizing signals extend. The mean black level of any transmission will be 30%±3% of peak carrier. The black level during any one transmission will not vary by more than 3 per cent of peak carrier from the mean value of that transmission.

The residual carrier during the transmission of a synchronizing pulse will be less than 5 per cent of the peak carrier.

The line frequency and the frame frequency will be locked to the 50-cycle supply mains, and therefore will be subject to the frequency variations of the mains.

EXPLANATION OF METHOD OF INTERLACING

The method of interlacing is demonstrated in Fig. 3, which represents the top and bottom portions on the scanned area with the distance between the lines very much enlarged. The lines show the track of the scanning spot which moves under the influence of a regular downward motion (frame scan) with quick return and a regular left to right motion (line scan) with very quick return (not shown on drawing). The combination of these motions produces the slightly sloping scanning lines. Starting at A, not necessarily at the beginning of a line, the spot completes the line AB, returns to the left and travels line CD, then EF and so on down the ‘dotted’ lines on the drawing. At the bottom of the frame the spot travels along line GH and then starts at J and travels to K. At this point the return stroke of the frame motion begins and returns the spot to L at the top of the frame. A complete frame scan has now been made since leaving A, so that 2024 lines have been completed, and the point L is half a line away from A. The downward frame motion now starts again, causing the spot to travel along LM completing a single line motion JKLM. The spot then returns to the left and traces out line NO, which due to L being half a line ahead of A, will lie between lines AB and CD. Similarly, the next line PQ, will lie half-way between CD and EF. The spot now traces down the chain-dotted lines to RS, and finally traces out TU, at which latter point the frame return causes the spot to rise again to the top. When the spot reaches the top it will have completed 2 frames, since leaving A, and as 2 frames occupy the time of exactly 405 complete lines, the spot will return exactly to A, after which the cycle begins again.

From the foregoing, it will be seen that the complete picture is scanned in 2 frames, but as each frame contains an integer number of lines, plus a half, the 2 frames will interlace. The system does not require the short return times shown for the line and frame.
Extensive alterations in progress at Alexandra Palace for the provision of television premises
scans, nor need the lines begin in the positions shown. Provided the line and frame traversals are regularly recurrent and have the correct frequency ratio (2 frames = odd number of lines), an interlaced picture will be obtained.

**Alexandra Palace**

As already indicated, each system, besides using its own studio apparatus, will use its own transmitter, and there will be a third transmitter common to both for transmitting the accompanying sound. The wavelengths or frequencies to be used are 41·5 megacycles per second for sound (7·23 metres), and 45 megacycles per second for vision (6·67 metres approx.). The contracts were concluded about the end of August 1935, and the apparatus is expected to be ready for work in the Spring.

In the meanwhile extensive reconstruction has been carried out at the Alexandra Palace in order to provide the studio accommodation for each system, with the necessary dressing rooms, offices, and so on. At the same time a steel tower is being erected on the top of one of the four brick towers which already exist at each corner of the building. The height of the top of the mast above the ground is approximately 300 feet, and the ground itself is 306 feet above sea-level. Thus the aerial will be raised about 600 feet above sea-level, some 200 feet higher than the cross on St. Paul’s Cathedral.

The transmissions, while giving the first programme service of high-definition television, will be experimental to the extent of providing very valuable data on which to base future developments.

**Programme Questions**

As to the programme side of the future service, experiments have been going on throughout the ‘low-definition’ period in the intricate and difficult details of programme choice and presentation, details which at one end merge into the purely technical field and at the other in the broad questions of the artistic and social role to be played by television.

In the present and tentative phase it is possible to visualize the main characteristics of the programmes. Individual items will be short, to avoid fatigue and eye-strain, as considerable concentration will be necessary. Television cannot be a background to other occupations. A wide field of entertainment must be covered, but the more intimate cabaret type is more likely to be successful than the broader music hall material. News may at first have to be covered by commercial News Reel and Magazine films and by brief talks capable of illustration by film or other means. Serious musical activities and long and complicated dramatic productions must for some time remain a function of sound broadcasting only. There will be opportunities for topical and semi-topical programmes, and there should always be a demand for informative demonstrations of the latest achievements of industry and technology.

As to the future, it may be anticipated that as in the case of sound broadcasting, the curiosity value of the successful projection of pictures will soon pass. But it is hardly possible to imagine that television in its full development will not more profoundly affect both communications as such, entertainment, and, what is more important still, education in its wider sense. In the domain with which this book is concerned, speculation, if it cannot at present harden into positive assertion, can at any rate take shape in questions. How far will normal programmes come to consist of both sound and visual elements? Will the listener of the future, for example, watch an orchestra playing throughout an entire concert, or will his listening to their music be merely reinforced by vision from time to time? Will talks be accompanied by continuous or by intermittent pictures, showing the speaker or documentary material illustrating his theme, or a combination of both? What will be the effect on speakers, if they have to consider the appearance which they are presenting to unseen audiences, as well as the effect of their voices upon them? Will listeners find difficulty in reconciling the discrepancy between the sound of a normal voice and the sight of a miniature portrait such as can alone be viewed on the television screens of the present day? In sound broadcasting, experience has disclosed something like optimum lengths for different sorts of programme unit.
Will television modify these? Will two tendencies emerge in programme presentation—one in which vision will be regarded as primary, and only relieved by a subordinated theme of sound; the other in which sound continues to predominate, with the occasional reinforcement of vision? It is at least easy to imagine that (to take two extreme examples) the former type would be most suitable for the report of a football match, the latter for a poetry reading. Between these two extremes, however, come all the nuances of variety, drama, light music, etc.

The coming of television already casts before it, in the shape of questions to be studied and answered by experiment, the shadow of a wide range of artistic and personal problems. They have merely to be suggested, by such examples as have been mentioned above, for it to become evident that their solutions, and the interaction of each partial solution with the rest, will for a long while tax the powers, no less than they will engage the interest, of all concerned.

This much, however, may be said at once, as it is of general application. More than ever, the listener who wishes to obtain reasonably full value from his set will be called upon to make and keep appointments with it; in other words to study the published programmes selectively, and to give an undivided attention to those items which he chooses for his entertainment or instruction. The habit of switching-on vaguely on the chance of finding a pleasant musical background to other activities would have to be modified. For topicalities of certain kinds, world events, and so on, film backed by explanatory descriptions will almost certainly be the originating medium for many years. The organization of a world service of directly televised news is a formidable and, at present, quite impossible prospect, tempting as are the vistas it discloses of wider mutual understanding among the peoples. There will also be the vastly important problem of an Empire Service to consider.

There is nothing static about television; progress will be continuous; fundamental changes in method of operation are always possible. Apart from the necessity constantly to improve the quality of image reproduction, the problem of finance will probably be for long a source of anxiety. The more successful the service, and the more rapid the expansion, the greater will be the programme cost and the more pressing the demand for a continuously wider spread of service area. It is certain that when the service shall have emerged from its experimental stages, the community as a whole will not take kindly to a system favouring a comparatively small portion of it. Civic pride will also be a factor of some importance. But the high cost of television makes complete Regional programmes as at present understood unlikely for many years, but local activities will eventually come into their own. The trend will probably be towards a main national programme interspersed with items dealing with regional activities, derived from regional sources. As things are at present, the area coverage of television programmes waits upon either a satisfactory solution of difficulties due to the limited range of ultra-short waves, or the installation of a network of special and costly co-axial cable.

Inventions with revolutionary implications have usually necessarily to encounter both inertia and direct opposition. There is widespread apprehension in certain quarters about the effect of television, though there is no reason to suppose that it will adversely affect any enterprise or interest that refuses to be static. Extravagant statements have, however, found their way into print and it will take time before the consequent fears and prejudices can be allayed. Optimistic prophecies of an entirely televisionary world can only add to difficulties already considerable and to general disappointment. Enthusiasm must be tempered by a cool and critical awareness of present limitations, and of the immense labours still required before television is comparable in technique and scope with sound broadcasting.
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Association of Councils of Counties of Cities in Scotland: Sir Charles Cleland, K.B.E., M.V.O., LL.D.
Association of County Councils in Scotland: Bertram Talbot
Federation of Education Committees (Wales and Monmouth): T. J. Rees
National Union of Teachers: W. W. Hill; H. H. Cartwright; Mrs. E. V. Parker; W. Lloyd Pierce
Joint Committee of the Four Secondary Associations: (3):
Incorporated Association of Head Masters, Head Mistresses, Assistant Masters, Assistant Mistresses:
A. Hay; H. Hugh Jones; Miss D. W. Wright
Joint Committee of the Three Technical and Art Associations:
Association of Teachers in Technical Institutes, Associations of Principals in Technical Institutes,
National Society of Art Masters: J. Wickham Murray
Independent Schools' Association: S. Maxwell
Incorporated Association of Preparatory Schools: Bernard Rendall
Educational Institute of Scotland: Harry Blackwood
Training College Association: Miss Hartle
Council of Principals of Training Colleges: H. A. S. Wortley
Scottish Sub-Council for School Broadcasting:
Chairman: ex officio
Chairman of Scottish Executive: ex officio
Nominated Members:
W. W. Vaughan, M.V.O., D.Litt.
R. N. Armfelt
O. F. Brown
Cyril Burt, D.Sc.
F. Clarke
W. J. Gruffydd
W. A. F. Hepburn, M.C.
Sir Percy Nunn, D.Sc.
Sir Henry Richards, C.B.
Frank Roscoe
Miss H. V. Stuart
Sir Percy Watkins
P. Wilson
Secretary: A. C. Cameron, M.C.

SCOTTISH SUB-COUNCIL
Chairman: Sir Charles Cleland, K.B.E., M.V.O., LL.D.
Vice-Chairman: George A. Burnett
Representative Members on Central and Scottish Councils:
Scottish Education Department: J. W. Peck, C.B.
Association of Directors of Education in Scotland: J. Coutts Morrison
Educational Institute of Scotland: Harry Blackwood
Association of Councils of Counties of Cities in Scotland: Sir Charles Cleland, K.B.E., M.V.O., LL.D.
Association of County Councils in Scotland: Bertram Talbot
Nominated Member on Central and Scottish Councils:
W. A. F. Hepburn, M.C.
Representative Members on Scottish Sub-Council:
Scottish Education Department: J. Mackay Thomson
National Committee for the Training of Teachers: George A. Burnett
Educational Institute of Scotland: George A. Lawrence, A. J. Merson
Association of Councils of Counties of Cities in Scotland: P. H. Allan, M.V.O.
Nominated Members:
Rev. A. Andrew, D.D.
Margaret Drummond
J. T. Ewen, O.B.E.
Sir Robert Greig, M.C., LL.D.
Thomas Henderson
Professor J. D. Mackie
Dr. George A. Morrison
Professor A. G. Ogilvie, O.B.E.
Dr. J. C. Smith
Neil S. Snodgrass
Secretary: A. D. Adam
HEAVY FALLS OF SNOW IN . . .

WEATHER FORECASTS

10.30 a.m. Droitwich National and all Regional and Local transmitters. Weather Forecast for Farmers and Shipping. Read twice—first at natural speed, second time at long-hand dictation speed.

6.00 p.m. General Weather Forecast (National Programme).

9.30 p.m. General Weather Forecast, followed by Shipping Forecast (National Programme).

10.00 p.m. General Weather Forecast (Regional Programme).

These last two are the usual timings, 9.30 p.m. being for the Second News and 10.0 p.m. for the News Summary. If there is an alteration on any occasion, the Shipping Forecast is always read with whichever News is in the National Programme. On Sundays the Evening Shipping Forecast is given at 11.0 p.m.

In addition:

Gale Warnings are received from the Meteorological Office, and are broadcast with the Shipping Forecast, and at 1.0, 4.45, and 6.0 p.m.; on Sundays at 12.30 p.m. and 4.30 p.m.

Navigational warnings are received from the Admiralty, and are broadcast with the Shipping Forecast at 9.30 p.m.

Reports on the state of the roads during bad weather are broadcast when circumstances make it advisable to issue them; normally these are provided from case to case by the Royal Automobile Club and the Automobile Association.
VISITS TO B.B.C. STUDIOS

Visits fall into two categories: (1) Presence in the studio during certain broadcasts of light entertainment; (2) conducted tours round the studios.

**London:** Studio Audiences.—Applications may now be made for inclusion on the waiting list, but owing to the demand for admission it will be appreciated that there may be considerable delay before requests can be complied with. Applications should be addressed to the Director of Office Administration, Broadcasting House, London, W.1.

**Visits to Broadcasting House (Conducted Tours).**—Owing to the serious interference caused to rehearsals or transmissions taking place in the various studios at Broadcasting House, it has been found impossible to accede to all of the large number of applications for tours round the building. No waiting list is kept.

**Manchester:** Audiences are allowed for orchestral concerts and occasional variety programmes. Maximum of 40 in one party. Conducted parties, up to 15, are allowed after office hours and on Saturday afternoons. Applications should be addressed to the North Regional Director, Broadcasting House, Piccadilly, Manchester, 1.

**Newcastle:** No audiences. Conducted parties in exceptional cases. Applications should be addressed to the Newcastle Director, Broadcasting House, 54, New Bridge Street, Newcastle-upon-Tyne.

**Leeds:** Audiences are allowed for orchestral concerts and occasional variety programmes. Maximum of 40 in one party. Conducted parties on Saturday afternoons only. Applications should be addressed to the Leeds Representative, Broadcasting House, Albrect Buildings, Woodhouse Lane, Leeds, 2.

**Edinburgh:** Audiences are allowed for both variety programmes and orchestral concerts. Applications should be addressed to the Scottish Regional Director, Broadcasting House, 5 and 6, Queen Street, Edinburgh.

**Cardiff:** Conducted parties are allowed, and small studio audiences not exceeding 10, as accommodation is limited. Applications should be addressed to the Welsh Regional Director, Broadcasting House, 38, 39 and 40, Park Place, Cardiff.

**Bristol:** Conducted parties, and small studio audiences of about 25 people, are allowed. Applications should be addressed to the West of England Regional Director, Broadcasting House, 21–23, Whiteladies Road, Clifton, Bristol.

**Birmingham:** Conducted parties of a technical nature only are allowed. Maximum of 15 in one party. Applications should be addressed to the Midland Regional Director, Broadcasting House, 28z, Broad Street, Birmingham.

**Belfast:** Conducted parties of not more than 30 people are permitted occasionally, and audiences of approximately the same number for variety programmes. Applications should be addressed to the Northern Ireland Regional Director, 31, Linenhall Street, Belfast, Northern Ireland.
RULES FOR S.O.S. MESSAGES

1. FOR RELATIVES OF SICK PERSONS
The B.B.C. 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.

Note
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 S.O.S. be broadcast requesting the attendance of relatives after death has occurred.

2. FOR MISSING PERSONS
Apart from official messages originated by the Police, the B.B.C. 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.

4. No message can be broadcast regarding lost animals or property.

5. There is no charge for broadcasting S.O.S. messages.
## THE TIME SIGNAL SERVICE

<table>
<thead>
<tr>
<th>Time</th>
<th>Signals on Droitwich National Programme</th>
<th>Signals on London Regional Programme</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekdays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.15 a.m.</td>
<td>Big Ben</td>
<td>Big Ben</td>
<td>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 will normally be radiated by all transmitters at the times shown on the accompanying table. Any signal, with the exception of those at 10.30 a.m. and 6.00 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 6.00 p.m. will be suppressed only in exceptional circumstances, and advance notification will be given should such a case arise. Any signal, except those at 9.30 p.m. and 10.00 p.m. which may be suppressed on artistic grounds, will be radiated at the next quarter if that point of time is free from programme matter. The 9.30 p.m. National and 10.00 p.m. London Regional signals will, if suppressed, be radiated at the next quarter, and superimposed on the topical talk, news, or whatever may be going on at the time, unless special advance notification is given. When the news is not at 9.30 p.m., e.g. during the Promenade Season, the six dot seconds will be radiated at 10.00 p.m. instead of at the beginning of the news. Big Ben will be broadcast in accordance with the chart when possible, and will, in addition, be radiated at the beginning of any programme emanating from London, should the start of the programme coincide with a quarter.</td>
</tr>
<tr>
<td>10.30 a.m.</td>
<td>G.T.S.</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>12.00 noon</td>
<td>Big Ben</td>
<td>Big Ben</td>
<td></td>
</tr>
<tr>
<td>2.00 p.m.</td>
<td>G.T.S.</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>5.15 p.m.</td>
<td>Big Ben</td>
<td>Big Ben</td>
<td></td>
</tr>
<tr>
<td>6.00 p.m.</td>
<td>G.T.S.</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>6.30 p.m.</td>
<td>Big Ben</td>
<td>Big Ben</td>
<td></td>
</tr>
<tr>
<td>9.30 p.m.</td>
<td>G.T.S. (When 2nd News is at 9.30 p.m.)</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>10.00 p.m.</td>
<td>G.T.S. (When 2nd News is at 9.30 p.m.)</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>10.00 p.m.</td>
<td>G.T.S.</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>11.30 p.m.</td>
<td>G.T.S.</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>12.00 midn.</td>
<td>Big Ben</td>
<td>Big Ben</td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.30 a.m.</td>
<td>G.T.S.</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>12.30 p.m.</td>
<td>Big Ben</td>
<td>Big Ben</td>
<td></td>
</tr>
<tr>
<td>4.30 p.m.</td>
<td>G.T.S.</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>9.00 p.m.</td>
<td>G.T.S.</td>
<td>G.T.S.</td>
<td></td>
</tr>
<tr>
<td>10.45 p.m.</td>
<td>Big Ben</td>
<td>Big Ben</td>
<td></td>
</tr>
</tbody>
</table>

### Hours of Transmission

The aggregate time for all transmitters (excluding the Empire Station) was 68,795 hours 36 minutes. The equivalent figure for last year was 63,109 hours 20 minutes. The breakdown percentage was 0.026 per cent as compared with 0.022 per cent last year. The aggregate time for the Empire transmitters was 11,662 hours 28 minutes.
### B.B.C. ADDRESSES

**Headquarters**


**Regional Centres**

<table>
<thead>
<tr>
<th>Region</th>
<th>Address</th>
<th>Teleograms: Broadcasting</th>
<th>Telephone: Welbeck</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIDLAND REGION</td>
<td>Broadcasting House, 282, Broad Street, Birmingham.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELSH REGION</td>
<td>Broadcasting House, 38, 39, &amp; 40, Park Place, Cardiff.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORTH REGION</td>
<td>Broadcasting House, Piccadilly, Manchester.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCOTTISH REGION</td>
<td>Broadcasting House, 5 &amp; 6, Queen Street, Edinburgh.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEST OF ENGLAND REGION</td>
<td>Broadcasting House, 21, 23, &amp; 25, White-ladies Road, Clifton.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NORTHERN IRELAND REGION**

31, Linenhall Street, Belfast.

**Other B.B.C. Offices**

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>City</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABERDEEN</td>
<td>15, Belmont Street.</td>
<td>Aberdeen</td>
<td>2296.</td>
</tr>
<tr>
<td>GLASGOW</td>
<td>268, West George Street.</td>
<td>Glasgow</td>
<td>Douglas 5230.</td>
</tr>
<tr>
<td>LEEDS</td>
<td>Broadcasting House, Albrecht's Buildings, Woodhouse Lane.</td>
<td>Leeds</td>
<td>28131.</td>
</tr>
<tr>
<td>PLYMOUTH</td>
<td>Athenæum Chambers.</td>
<td>Plymouth</td>
<td>2283.</td>
</tr>
<tr>
<td>SHEFFIELD</td>
<td>47, Corporation Street.</td>
<td>Swansea</td>
<td>3107.</td>
</tr>
<tr>
<td>BANGOR (N. WALES)</td>
<td>Broadcasting House, Meirion Road.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On the basis of monthly returns from its members, the Union Internationale de Radiodiffusion issues every four months an analysis showing the time given by these organizations to each type of programme matter and its percentage of the whole, according to a classification drawn up by a Committee of the Union. The attached chart is a graphic presentation of the percentage returns for the last three years.
PERCENTAGE ALLOCATION OF TIME TO THE VARIOUS PROGRAMME CLASSES IN FIFTEEN EUROPEAN COUNTRIES

(based on returns of the Union Internationale de Radiodiffusion)

Note: The percentages of various classes are sometimes not clearly distinguishable in the returns. This is indicated by a shading of the background between "Talking", "Light Music", and "Speakers" is not always distinguishable. The columns 7-9 refer to the British series "Futurist". In column 9 only "Talks" is counted.