

1957

COMMONWEALTH OF AUSTRALIA

NINTH ANNUAL REPORT

OF THE

AUSTRALIAN BROADCASTING CONTROL BOARD

YEAR ENDED 30th JUNE, 1957

By Authority:
L. G. SHEA, Government Printer, Tasmania.
(Printed in Australia.)



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AUSTRALIAN BROADCASTING CONTROL BOARD

NINTH ANNUAL REPORT

The Honourable the Postmaster-General:

In conformity with the provisions of section 28 of the *Broadcasting and Television Act 1942-1956*, the Australian Broadcasting Control Board has the honour to furnish its Report, being the Ninth Annual Report of the Board, on its operations during the year ended 30th June, 1957, together with financial accounts in the form approved by the Treasurer, and the report of the Auditor-General on those accounts.

2. This Report is arranged as follows:—

- Part I.—Introductory.
- Part II.—Broadcasting—Administration.
- Part III.—Broadcasting—Technical Services.
- Part IV.—Broadcasting—Programme Services.
- Part V.—Television—Administration.
- Part VI.—Television—Technical Services.
- Part VII.—Television—Programme Services.
- Part VIII.—General.

PART I.—INTRODUCTORY.

LEGISLATION.

3. The *Broadcasting and Television Act 1956*, the primary purpose of which was to prescribe, in detail, the conditions upon which television services would be established and conducted in the Commonwealth, but which also contained a comprehensive review of the law relating to broadcasting, came into force on 1st July, 1956, with the exception of the provisions relating to television viewers' licences, which were proclaimed to commence from 1st January, 1957. A separate Act, the *Broadcasting and Television Stations Licence Fees Act 1956*, was also passed by Parliament in June, 1956, and came into force on 1st July, 1956. It prescribes the fees payable annually by licensees of commercial broadcasting stations and commercial television stations. The effect of the principal provisions of the new legislation was explained in the appropriate paragraphs of the Eighth Annual Report of the Board.

4. The *Broadcasting and Television Act (No. 2) 1956*, assented to on 28th September, 1956, prescribed that the fee for a broadcast listener's licence in Zone I (see paragraph 162) should be increased from £2 to £2 15s. as from 1st October, 1956. The *Broadcasting Act 1942-1954*, as amended by the *Broadcasting and Television Act 1956* and the *Broadcasting and Television Act (No. 2)*, is now cited as the *Broadcasting and Television Act 1942-1956*.

MEMBERSHIP OF THE BOARD.

5. The Act provides that the Board shall consist of three full-time and two part-time members. During the year the Board consisted of:—

Full-time Members.

- Mr. Robert Gumley Osborne, B.A., LL.B., Chairman, appointed for a period of five years from 15th March, 1952, and reappointed for a period of seven years from 15th March, 1957.
- Mr. Robert Bruce Mair, B.E.E., A.M.I.E. (Aust.), S.M.I.R.E. (Aust.) and S.M.I.R.E. (U.S.A.), appointed for a period of five years from 15th March, 1955.
- Mr. Reginald Arthur Yeo, B.Sc., A.C.G.I., D.I.C., appointed for a period of five years from 2nd January, 1957.

Part-time Members.

- Dr. James Ralph Darling, O.B.E., M.A., D.C.L., and
- Mr. Randal Merrick White, M.A., both appointed for a period of five years from 6th January, 1955.

Announcing the appointment of Mr. Yeo as a full-time Member of the Board, the Postmaster-General (Hon. C. W. Davidson, M.P.) stated that the appointment had been made after consideration of applications received in response to an invitation published in Australia and overseas. Mr. Davidson said that Mr. Yeo had a distinguished academic record and had extensive experience with the Royal Naval Scientific Service where, in recent years, he had been a principal scientific officer concerned mainly with radio matters: subsequently, he had been appointed as a Member of H.M. Ordnance Board and Head of its Electronics Division. Mr. Yeo commenced duty in London on 2nd January, 1957, and, after spending some time on investigations into various aspects of broadcasting and television in England, joined the Board in Melbourne on 15th February, 1957.

FUNCTIONS OF THE BOARD.

6. The principal functions of the Board are set out in Divisions 2 and 3 of Part II of the *Broadcasting and Television Act 1942-1956*, and are briefly as follows:—

- (a) to ensure the provision of services by broadcasting stations and television stations in accordance with plans from time to time prepared by the Board and approved by the Minister;
- (b) to ensure that the technical equipment and operation of such stations are in accordance with such standards and practices as the Board considers to be appropriate;
- (c) to ensure that adequate and comprehensive programmes are provided by commercial broadcasting stations and commercial television stations to serve the best interests of the general public;
- (d) to make recommendations to the Minister as to the exercise by him of any of his powers in relation to the licensing of commercial broadcasting stations or commercial television stations;
- (e) to hold public inquiries into applications made to the Minister for licences for commercial broadcasting stations and commercial television stations in areas for which the Minister proposes to grant licences, and into any other matter within its functions if the Board thinks it necessary or desirable, or the Minister so directs; and
- (f) to determine, subject to any direction of the Minister, the situation, operating power, and operating frequencies of broadcasting and television stations.

Other detailed functions of the Board are referred to, where appropriate, in this report.

MEETINGS OF THE BOARD.

7. In previous Annual Reports the Board has referred to the desirability of holding meetings as frequently as possible in other capitals besides Melbourne, where the Board's headquarters are established and regular meetings held. The pressure of business arising from the commencement of television services in September, 1956, prevented the Board from holding meetings in other capital cities during the year, but in October, 1956, it visited several commercial broadcasting stations and held meetings at Wangaratta, Young, Parkes and Orange. In Orange, the Board attended some of the functions associated with the Annual Convention of the Australian Federation of Commercial Broadcasting Stations. Individual members of the Board visited Sydney on several occasions in connection with matters arising from the commencement of television services in that city, and also visited Adelaide and Hobart.

CONSULTATIONS WITH THE POSTMASTER-GENERAL'S DEPARTMENT, THE AUSTRALIAN BROADCASTING COMMISSION, REPRESENTATIVES OF COMMERCIAL STATIONS, MANUFACTURERS AND ADVERTISERS.

8. Section 16 of the *Broadcasting and Television Act 1942-1956* requires the Board to consult representatives of commercial broadcasting stations and commercial television stations in exercising its powers and functions in relation to those stations. In the case of the former stations, the Board consults the Management Committee of the Australian Federation of Commercial Broadcasting Stations, of which the licensee of each commercial station is a member. During the year, the Board conferred with the Management Committee on 19th July, 1956, and 22nd May, 1957, and on both occasions a number of important matters relating to the Commercial Broadcasting Service were discussed. In between these formal meetings with the Management Committee, the practice is for the Board to refer urgent questions which may arise to the President of the Federation. Reference is made later in this report (see paragraphs 52, 63, 78 and 83) to some of the subjects which were discussed with the Federation.

9. Each of the four licensees of the commercial television stations in Sydney and Melbourne commenced service during the year, and, in conformity with the provisions of section 16 of the Act, the Board and its officers have conferred frequently with the licensees and the managers of their stations on many of the problems which have naturally arisen during the formative stages of the Commercial Television Service. The Board has also maintained close relations with the Postmaster-General's Department, the Australian Broadcasting Commission, the Australian Association of Advertising Agencies, the Australian Association of National Advertisers and representatives of the radio manufacturing industry.

STAFF OF THE BOARD.

10. The Head Office organisation of the Board consists of three Divisions, namely, the Administrative Division, the Technical Services Division and the Programme Services Division. The number of officers employed by the Board on 30th June, 1956, was 36 but, because of the additional duties and responsibilities imposed on the Board by the advent of television, the Public Service Board has approved the creation of several new positions, and the total establishment, when all these positions are filled, will number 58.

11. Some idea of the nature of the duties which have to be performed by officers of the Technical Services Division may be gained from Parts III and VI of this report. They are comprehensive and difficult, and the Board has, since its establishment, been severely handicapped in this field by its inability to recruit technical personnel from the limited pool of experienced radio and electronic engineers in the Commonwealth. The Board's problem in this respect was aggravated when it became necessary to undertake extensive planning for the introduction of television services and, with the commencement of those services and the substantial increase in its technical work which resulted therefrom, the Board was obliged to ask the Public Service Board not only to provide additional positions but also to fix salaries for the junior positions which were contemplated on such a level as to attract competent engineers to the service of the Board. During the year, the Public Service Board investigated the proposals which had been submitted to it and, after several discussions with the Board, approved a new organisation for the Technical Services Division, which provided for the reclassification of seven positions of Engineer and the creation of four positions of Engineer, Grade 3, one position of Supervising Technician, Grade 2, one position of Senior Technician (Telecommunications) and one position of Clerk. The Board is confident that when these positions are filled, the staff of the Division will be adequate for the important technical duties which have to be performed, and it is glad to take this opportunity of expressing its appreciation to the Public Service Board for its assistance in the solution of a problem which was, for some time, causing great anxiety to this Board.

12. In its Eighth Annual Report, the Board explained that the responsibilities imposed on it by the Act in relation to television programmes would necessitate the preparation and continuous review of television programme standards, close liaison with the Commonwealth Film Censorship Board, continuous investigations into the social, educational and cultural effects of television, research into programmes designed for children, and the regular observation of, and reporting on, programmes for the purpose of ensuring compliance with the standards, and reported that, to enable these duties to be performed effectively, the Public Service Board had, on 25th June, 1956, approved of the creation of fourteen new positions in the Programme Services Division, five of them to be occupied by officers stationed in Sydney.

13. The approved organisation of the Board was, on 30th June, 1957, as shown hereunder:—

Administrative Division.

Secretary	1
Assistant Secretary	1
Administrative Officer and Clerks	9
Librarian, Clerical Assistant, Typists and Junior Assistant	11

Technical Services Division.

Director	1
Assistant Directors	2
Engineers	12
Technicians	2
Clerk	1

Programme Services Division.

MELBOURNE.

Director	1
Assistant Directors	2
Research Officers	3
Clerks—including Service Officers and Monitors	7

SYDNEY.

Programme Officer	1
Clerks—Service Officer and Monitors	3
Typist	1
	—
	58
	—

STATE ORGANISATION.

14. By arrangement with the Director-General, Posts and Telegraphs, officers of the Engineering Branch of the Postmaster-General's Department continued, during the year, to undertake certain technical duties in the States on behalf of the Board, and officers of the Radio Branch of that Department performed other duties on behalf of the Board. The Superintendent (Radio) in each State acts as the Board's State Representative, the following officers holding this position in the various States for most of the past year:—

New South Wales	Mr. T. Armstrong
Victoria	Mr. J. M. Dobbyn
Queensland	Mr. W. H. Conry
South Australia	Mr. H. K. Burbury
Western Australia	Mr. E. L. Greig
Tasmania	Mr. P. E. L. Dunne

Messrs. Dobbyn, Conry, Burbury and Dunne retired from the Commonwealth Public Service during, or shortly after the close of, the year. All these officers had been engaged in duties associated with the administration of the legislation relating to broadcasting for many years and, because of their long experience in this field, they proved to be very competent representatives of the Board in their respective States. The Board is very grateful to them.

15. Prior to the re-organisation of the Technical Services Division referred to in paragraph 11, the Department and the Board reviewed the arrangement in accordance with which officers of the Post Office undertake certain technical duties in the States on behalf of the Board, and as a result, it was decided that whilst the Department would, for the time being, continue to carry out inspections and field strength surveys of broadcasting stations, the Board's engineers would discharge these duties in respect of television stations. In previous years, the Board had not reimbursed the Department for the costs involved in the performance by its officers of duties on behalf of the Board, but, with the approval of the Treasury, provision is now made in the Board's estimates for payment for these services. During the past year, an amount of £33,513 was paid to the Department.

ACCOMMODATION.

16. The accommodation available for the staff of the Board in the Rialto Building, 497 Collins Street, Melbourne, has become inadequate in view of the additional positions which have been created by the Public Service Board (see paragraph 11) and the need to establish a laboratory for testing and experimental purposes and the safe custody of technical equipment. Efforts to secure additional space in the Rialto Building were unsuccessful and, after intensive investigations in the course of which several alternative proposals were examined, the Board decided to lease space on the Fifth Floor of the State Savings Bank Building, Elizabeth Street, Melbourne. As mentioned in paragraph 13, five officers of the Programme Services Division are employed in Sydney, in which city suitable accommodation has been secured in Dalton House, Pitt Street.

PART II.—BROADCASTING—ADMINISTRATION.

LICENSING OF COMMERCIAL BROADCASTING STATIONS.

17. The statutory provisions relating to the licensing of commercial broadcasting stations are contained in Part IV of the *Broadcasting and Television Act 1942-1956*. The power to grant, renew, suspend or revoke a licence is conferred upon the Minister, who is required to take into consideration any recommendations which have been made by the Board as to the exercise of those powers. There are, however, a number of provisions in the Act which prescribe the procedure to be followed by the Minister and the Board in this connection, and these may be briefly explained as follows:—

- (a) Before granting a new licence, the Minister is obliged to invite applications for the grant of the licence in the Commonwealth Gazette and to refer the applications which are received to the Board, which must hold a public inquiry before making a recommendation to the Minister on the applications;
- (b) The Minister is not to refuse an application for the renewal of a licence unless he has considered a report by the Board made after a public inquiry into specified grounds which either the Minister or the Board thinks may exist for refusing the application;
- (c) The Minister may suspend or revoke a licence on any one of the following grounds:—
 - (i) that the licensee has failed to pay an amount payable by him under the *Broadcasting and Television Stations Licence Fees Act 1956*;
 - (ii) that the licensee has failed to comply with a provision of the Act or of the regulations in so far as that provision is applicable to the licence;
 - (iii) that a condition of the licence has not been complied with; or
 - (iv) that it is advisable in the public interest, for a specified reason, to do so;
- (d) The Minister, however, is not to suspend a licence unless—
 - (i) he has first given not less than three days' notice to the licensee of his intention to suspend the licence upon that ground; and
 - (ii) he has taken into consideration any action taken by the licensee to remove that ground or to prevent the recurrence of similar grounds,
 and the suspension is not to exceed a month unless the Minister has, in the meantime, given notice of his intention to consider the revocation of the licence;
- (e) The Minister is not to revoke a licence upon any ground, other than the failure of the licensee to pay the annual licence fee, unless he has considered a report by the Board on a public inquiry, into specified grounds which either the Minister or the Board thinks may exist for the revocation of the licence.

Licences are granted for an initial period of five years: thereafter, licences are renewable annually subject to the provisions of the Act.

CURRENT LICENCES FOR COMMERCIAL BROADCASTING STATIONS.

18. On 30th June, 1957, there were 108 licences for commercial broadcasting stations in force. A list of licensees is contained in Appendix "A". A map of Australia showing the location of all broadcasting stations is included after Appendix "D". The disposition of the licences according to States is shown hereunder:—

State	Metropolitan Area	Country Districts	Total
New South Wales (including Australian Capital Territory)	7	31	38
Victoria	6	14	20
Queensland	4	16	20
South Australia	3	5	8
Western Australia	4	10	14
Tasmania	2	6	8
COMMONWEALTH	26	82	108

GRANT OF NEW LICENCES.

19. Thirteen applications were made during the year for licences, and several previous applications for licences were renewed, for commercial broadcasting stations in localities where it is claimed that listeners are not receiving a satisfactory service from existing stations. The grant of new licences is now subject to the procedure outlined in paragraph 17, but, because of its inability under existing circumstances to allocate frequency channels for additional stations in most of the areas in question, the Board has suggested to the Minister that it is desirable to suspend the grant of any new licences until the question of allocating frequencies in the very high frequency (VHF) band to stations using frequency modulation (FM) has been determined. (See paragraphs 53 and 54.) No licences were granted for new commercial broadcasting stations during the year, but Moree Broadcasting and Development Co. Ltd., to which company a licence was granted on 26th June, 1956, commenced operations at Moree, New South Wales, with the call sign 2VM, on 12th January, 1957.

RENEWAL OF LICENCES.

20. The initial period of the licence for a commercial broadcasting station is five years and thereafter licences are renewable annually subject to the relevant provisions of the Act, which are designed to ensure that each licensee efficiently maintains and operates the technical equipment of his station and provides adequate and comprehensive programmes for the listeners in his service area. The Board is required by the Act to submit a recommendation to the Minister as to whether he should grant the renewal of a licence and, before doing so, it makes a complete review of the service which is being provided by the licensee. In the course of this review, the Board takes into consideration the reports of engineers who have, during the previous year, made a comprehensive inspection of the station for the purpose of ascertaining whether the Board's Standards for the Technical Equipment and Operation of Broadcasting Stations are being observed, and the report of the Director, Programme Services Division, on the programmes which are being transmitted. During the year, 25 stations were visited by officers of that Division and extensive observations of programmes were undertaken by officers of the Board and its State Representatives. The Board is glad to say that these reports disclose a satisfactory state of affairs in the Commercial Broadcasting Service because, although it was necessary to require a few licensees to remedy some deficiencies, in no case were they sufficiently serious to justify an unfavourable recommendation to the Minister.

FEES FOR LICENCES FOR COMMERCIAL BROADCASTING STATIONS.

21. From 1st July, 1942, until 30th June, 1956, the licensee of each commercial broadcasting station was required to pay an annual licence fee, assessed in accordance with the *Commercial Broadcasting Stations Licence Fees Act 1942*, which provided for an annual fee of £25 per annum, plus one-half of one per centum of the gross earnings of any station which in the preceding year had made a profit. The *Commercial Broadcasting Stations Licence Fees Act 1942* was repealed in 1956, and licence fees are now payable in accordance with the provisions of the *Broadcasting and Television Stations Licence Fees Act 1956*, which came into operation on 1st July, 1957. Under this Act, the annual fee for a licence for a commercial broadcasting station, which is payable whether or not the station has in the previous year made a profit, is £25, plus one per centum of the gross earnings of the station from the broadcasting of advertisements or other matter, that is to say, generally speaking, gross earnings from what is usually known in the industry as the "sale of station time". The total amount of licence fees payable during 1956-57 was £70,566, made up as follows:—

State	Fees Paid by—		Total
	Metropolitan Stations	Country Stations	
	£	£	£
New South Wales	14,626	14,451	29,077
Victoria	11,861	6,595	18,456
Queensland	5,705	5,643	11,348
South Australia	3,978	213	4,191
Western Australia	3,444	908	4,352
Tasmania	1,430	1,712	3,142
COMMONWEALTH	£41,044	£29,522	£70,566

In the previous financial year the total amount of licence fees paid was £34,287.

COMMERCIAL BROADCASTING STATIONS—FINANCIAL RESULTS OF OPERATIONS.

22. The following particulars, which have been extracted from statements submitted by the licensees of commercial broadcasting stations since 1942, in pursuance of the provisions of section 106 of the *Broadcasting and Television Act 1942-1956*, show the financial results from the operations of such stations during the past fifteen years:—

	Number of Stations in Operation	Stations Making a Profit	Stations Showing a Loss	Total Revenue	Total Expenditure	Total Profit
				£	£	£
1941-42	97	53	44	1,330,000	1,248,188	81,689
1942-43	96	66	30	1,298,197	1,157,294	141,003
1943-44	98	87	11	1,871,851	1,491,967	379,885
1944-45	100	89	11	2,184,686	1,758,905	425,781
1945-46	100	86	14	2,279,719	1,851,042	428,678
1946-47	101	85	16	2,388,567	2,013,363	375,224
1947-48	102	86	16	2,774,371	2,278,319	496,053
1948-49	102	90	12	3,212,253	2,619,474	592,779
1949-50	102	84	18	3,178,360	2,748,594	429,766
1950-51	102	88	14	3,607,498	3,092,259	515,239
1951-52	103	87	16	4,329,675	3,729,554	600,121
1952-53	105	93	12	4,916,557	4,138,013	778,544
1953-54	106	94	12	5,647,494	4,587,234	1,060,260
1954-55	106	95	11	6,686,924	5,252,831	1,434,093
1955-56	107	104	3	7,382,476	5,870,794	1,511,682

TRANSFER OF LICENCES AND LEASING OF STATIONS.

23. Section 88 (1.) of the *Broadcasting and Television Act 1942-1956* provides that a licensee may not, without the consent in writing of the Minister, transfer the licence or admit another person to participate in any of the benefits of the licence. On 4th April, 1957, the Minister gave his consent to the transfer of the licences for commercial broadcasting stations 3SR Shepparton, 3UL Warragul, and 3YB Warrnambool from the Argus and Australasian Ltd., to Messrs. A. J. Hancock and B. K. Donaldson as trustees for a company to be formed (see paragraph 29).

24. At 30th June, 1957, the following four stations were, with the consent of the Minister, being operated by persons other than the licensees:—

Station	Licensee	Date of Original Consent	Date of Expiry of Existing Consent	Operating Company
2CH Sydney	New South Wales Council of Churches Service	14.4.36	31.12.61	Amalgamated Wireless (A/asia) Ltd.
3SH Swan Hill	Swan Hill Broadcasting Co. Pty. Ltd.	4.4.37	31.12.61	Central Murray Broadcasters Pty. Ltd.
3KZ Melbourne ..	Industrial Printing and Publicity Co. Ltd.	12.2.32	30.6.59	3KZ Broadcasting Co. Pty. Ltd.
3XY Melbourne ..	Station 3XY Pty. Ltd.	17.5.35	1.5.61	Efftee Broadcasters Pty. Ltd.

During the year, the Minister gave his consent for the continuance, until 31st December, 1961, of the agreements between the licensees and operating companies in respect of stations 2CH Sydney and 3SH Swan Hill respectively.

OWNERSHIP OF COMMERCIAL BROADCASTING STATIONS.

25. Sub-sections (1.) and (2.) of section 90 of the *Broadcasting and Television Act 1942-1956* provide—

“(1.) A person shall not own, or be in a position to exercise control, either directly or indirectly, of more than—

- (a) one metropolitan commercial broadcasting station in any State;
- (b) four metropolitan commercial broadcasting stations in Australia;
- (c) four commercial broadcasting stations in any one State; or
- (d) eight commercial broadcasting stations in Australia.

(2.) Where a licence for a commercial broadcasting station is held by a company having a share capital, the licence is subject to the condition that substantial changes in the beneficial ownership of the shares in the company, or in the memorandum or articles of association of the company, will not take place without the approval of the Minister."

For the purposes of this section, it is necessary for reliable information concerning the ownership and control of commercial broadcasting stations to be available to the Board, in order that the Minister may be advised whether the statutory limitations on the ownership and control of stations are being observed. Accordingly, each company to which the Minister proposes to grant a licence for a commercial broadcasting station is required to submit a complete list of shareholders and a copy of its memorandum and articles of association to the Board prior to the grant of a licence, and each licensee is required to submit an up-to-date list of shareholders and directors with its annual application for renewal of its licence. It is a condition of each licence that "the control of the station shall not be varied in any manner whatsoever, directly or indirectly, without the permission of the Minister", and it is the practice, on the occasion of the renewal of each licence, to remind the licensee of the provisions of subsection (2.) of section 90 and to request the company to consult the Minister when any substantial transaction affecting either the shareholding in, or control of, the company is contemplated. In addition to maintaining records of shareholdings in licensee companies for the purpose of section 90 of the Act, the Board carefully examines any contemplated change in the ownership or control of stations by any of the methods mentioned in section 88, and makes a report, in each such case, to the Minister indicating whether, on the information available to the Board, the proposal would result in any infringement of section 90.

26. According to the information supplied by the licensees to the Board during the year, 29 of the 108 stations then in service were being operated by persons or organizations which were in a position to control only one station, and 18 by persons or organizations which were in a position to control, or were substantially interested in, two stations. The remaining stations, 61 in number, are controlled by persons or organizations which are in a position to control, directly or indirectly, or have substantial interests in, three or more stations, but in no case did it appear to the Board from the information in its possession that there had been any infringement of section 90 of the Act during the year to which this report relates. The matter is under constant review, and it is the practice of the Board to bring under the notice of the Minister any increases in the holdings of any person or organization which appear to be contrary to the intention of the legislation. In the succeeding paragraphs, details are given of significant changes in the ownership of stations during the year and of companies or persons who have a controlling or substantial interest in several stations.

27. *Herald and Weekly Times Ltd.*—This company holds the licences for stations 3DB Melbourne and 3LK Lubeck and is the principal shareholder, with 987,620 ordinary shares (in a total of 2,688,000 ordinary and 168,000 preference shares) in Advertiser Newspapers Ltd., which controls stations 5AD Adelaide, 5MU Murray Bridge, 5PI Crystal Brook and 5SE Mount Gambier. During the year there was a substantial change in the company's interest in stations 4AK Oakey and 4BK Brisbane, the licences for which are held by Queensland Newspapers Pty. Ltd. The shares in the latter company were previously held by The Herald and Weekly Times Ltd. (303,876 shares) and C.W.L. Pty. Ltd. (264,004 shares), both of which have disposed of their holdings to Queensland Press Ltd., a public company in which the shares are held in the following proportions:—

Herald and Weekly Times Ltd.	37 1/3rd per cent
C.W.L. Pty. Ltd.	29 1/3rd per cent
Public Subscribers	33 1/3rd per cent

28. *M.P.A. Productions Pty. Ltd.*—M.P.A. Productions Pty. Ltd. is a company incorporated in Victoria in 1949, the issued capital in which is held equally by or on behalf of two public companies registered and carrying on business in England, namely, The Daily Mirror Newspapers Limited and Sunday Pictorial Newspapers (1920) Limited. M.P.A. Productions Pty. Ltd. owns all the shares in Broadcasting Associates Pty. Ltd., a company which has shareholdings

as set out hereunder in several companies holding licences for commercial broadcasting stations:—

Shares Held by Broadcasting Associates Pty. Ltd.

Company	Station of which company is licensee	Total shares issued	Shares held by Broadcasting Associates Pty. Ltd.
Broadcasting Station 2GB Pty. Ltd.	2GB Sydney	99,370	44,468
Young Broadcasters Pty. Ltd.	2LF Young	8,557	2,140
Lithgow Broadcasters Pty. Ltd.	2LT Lithgow	3,747	750
Mudgee Broadcasting Company Pty. Ltd.	2MG Mudgee	3,418	856
Parkes Broadcasting Company Pty. Ltd.	2PK Parkes	1,000	165
Wollongong Broadcasting Pty. Ltd.	2WL Wollongong	11,000	5,500

Shares Held by Broadcasting Station 2GB Pty. Ltd.

Company	Station of which company is licensee	Total shares issued	Shares held by Broadcasting Station 2GB Pty. Ltd.
Canberra Broadcasters Pty. Ltd.	2CA Canberra	30,000† 2,050*	29,805† 450*
Young Broadcasters Pty. Ltd.	2LF Young	8,557	2,139
Lithgow Broadcasters Pty. Ltd.	2LT Lithgow	3,747	749
Mudgee Broadcasting Company Pty. Ltd.	2MG Mudgee	3,418	854
3AW Broadcasting Company Pty. Ltd.	3AW Melbourne	56,000	14,000
Hume Broadcasters Ltd.	5DN Adelaide	8,405† 4,000*	5,000† 2,000*

† Ordinary.

* Preference.

As a result of the transaction referred to in paragraph 29, M.P.A. Productions Pty. Ltd. acquired 1,400,000 ordinary 5s. shares in the Herald and Weekly Times Ltd. This constitutes 14 per cent of the total shareholding, but the voting rights assigned to these shares are subject to special provisions which restrict those rights to 1.64 per cent of the total. The Minister, after considering a report from the Board, approved of this transaction in so far as his approval was necessary pursuant to section 90 (2.) of the Act.

29. *Associated Broadcasting Services Limited.*—The English companies which, as mentioned above, control M.P.A. Productions Pty. Ltd., were until recently also in a position, through their control of The Argus and Australasian Ltd., to control stations 3SR Shepparton, 3UL Warragul and 3YB Warrnambool. On 21st January, 1957, the Minister was informed that the Herald and Weekly Times Ltd., and M.P.A. Productions Pty. Ltd. had reached an agreement whereby the former would purchase from the latter all but 1,200 of the issued ordinary shares of The Argus and Australasian Ltd. The question arose as to the future control of the three stations which had been owned by the Argus Company and on 22nd January, 1957, the Minister, after considering a report from the Board, decided that all three stations should be disposed of to companies consisting predominantly of interests representative of the districts in which they are located. Subsequently, the Minister informed The Herald and Weekly Times Ltd. that, in conformity with the general policy of the Government of encouraging the ownership and control of country broadcasting stations by residents of the districts which they serve, he would be prepared to agree to the transfer of the licences for stations 3SR, 3UL and 3YB to a single company; subject to the following conditions:—

- (a) that the capital of the company should be drawn from the three districts concerned;
- (b) that no person or company in a position to exercise control directly or indirectly of any existing commercial broadcasting station should be permitted to acquire shares;
- (c) that the prospectus of the proposed company should be submitted for the Minister's approval; and
- (d) that the Board of Directors of the proposed company should contain at least one representative of the shareholders in each of the three districts in which the stations are located.

30. The Minister also approved of The Argus and Australasian Ltd. entering into a contract, in terms to be approved by him, to transfer the licences for, and sell the assets of, the three stations to trustees for the company to be formed on the basis outlined above. The contract of sale for the three stations was in due course submitted to the Minister who, on 4th April, gave his consent for the transfer of the licences from The Argus and Australasian Ltd. to Messrs. A. J. Hancock and B. K. Donaldson as trustees for the proposed company. The new company, Associated Broadcasting Services Ltd. was registered on 30th April, 1957, and its prospectus, which indicated clearly that it proposed to comply with the Minister's conditions both as to the allocation of shares to residents in the Shepparton, Warragul and Warrnambool districts and the appointment of directors who would be representative of those shareholders, was approved by the Minister. Subsequently the Minister approved of the transfer of the licences for these stations to the new company.

31. *Amalgamated Wireless (Australasia) Ltd.*—This company has the following interests in commercial broadcasting stations:—

- (a) it holds the licences for 2AY Albury, 3BO Bendigo, 4CA Cairns and 4TO Townsville;
- (b) it owns all the shares in the companies which operate 2GF Grafton and 2GN Goulburn, and has a controlling interest (4,400 shares in a total of 5,000 shares) in the company which operates 4WK Warwick;
- (c) by agreement with the licensee, it conducts the service of 2CH Sydney;
- (d) it holds 800 shares (in a total of 6,500 shares) in 2SM Sydney; 400 shares (in a total of 4,975 shares) in 3HA Hamilton; and 10,000 shares (in a total of 20,000 shares) in 7LA Launceston;
- (e) it holds 1,000 preference shares (in totals of 3,643 (£1) preference, 3,604 (£1) ordinary and 14,000 (5s.) ordinary shares) in Transcontinental Broadcasting Corporation Ltd., which controls 2KA Ltd., licensee of 2KA Katoomba.

32. *Commonwealth Broadcasting Corporation Pty. Ltd., Sydney and Commonwealth Broadcasting Corporation (Queensland) Ltd., Brisbane.*—The shares in these two companies are owned by the same interests. The former is the licensee of 2UW Sydney, and the latter, which is the licensee of 4BC Brisbane, has a controlling interest in 4GR Toowoomba (1,663 shares in a total of 3,300 shares), 4MB Maryborough (1,060 shares in a total of 2,000 shares) and 4RO Rockhampton (holds the total shares—2,000). Commonwealth Broadcasting Corporation (Queensland) Limited also holds 1,300 ordinary shares (in totals of 3,395 ordinary and 2,405 preference shares) in 4SB Kingaroy.

Findlays Pty. Ltd., Tasmania.—Findlays Pty. Ltd. has a third interest in 7HO Hobart, holds all the shares in 7SD Scottsdale, and shareholders in Findlays Pty. Ltd. hold all the shares in station 7AD Devonport and station 7BU Burnie. (After the close of the period to which this report relates, certain transfers of shares to individual shareholders in Findlays Pty. Ltd. were approved by the Minister).

Nicholson's Ltd., Perth.—Nicholson's Ltd. holds licences for 6PR Perth, 6CI Collie and 6TZ Bunbury.

Whitford Interests, Perth.—Mr. and Mrs. A. P. H. Whitford and Mr. and Mrs. F. R. Whitford and their families, control the companies holding the licences for 6AM Northam, 6KG Kalgoorlie and 6PM Perth and have a controlling interest in 6GE Geraldton.

33. *Newspaper Companies.*—Reference has been made in the Board's previous reports to the substantial interests held by newspaper companies in commercial broadcasting companies. During the past year—

- (a) Associated Newspapers Ltd. (the Sydney Sun) disposed of its controlling interest in station 2UE to Newcastle Broadcasting Co. Pty. Ltd.;
- (b) as indicated in paragraph 30, the three stations previously owned by the Argus and Australasian Ltd. were transferred to a company controlled by residents of the districts in which they are located; and
- (c) News Ltd., Adelaide, disposed of its interest in Station 5RM Renmark to the Central Methodist Mission, Adelaide.

Newspaper companies, or persons substantially interested in newspapers, owned eleven of the 108 stations in operation on 30th June, 1957, and held shares in 29 other stations. The principal newspaper interests in broadcasting stations, other than those of the English newspapers mentioned in paragraph 28 are set out below:—

CAPITAL CITY NEWSPAPERS.

2GB Sydney	John Fairfax and Sons Pty. Ltd. (the Sydney Morning Herald) holds 14,000 shares in a total of 99,370.
3DB Melbourne 3LK Lubeck	} Licences held by the Herald and Weekly Times Ltd. (the Melbourne Herald).
3AW Melbourne 3CV Maryborough	} Quarter interest held by David Syme and Co. Ltd. (the Melbourne Age) in 3AW Broadcasting Co. Pty. Ltd. which controls 3CV Maryborough.
4AK Oakey 4BK Brisbane	} Licences held by Queensland Newspapers Pty. Ltd. (the Brisbane Courier-Mail) : see paragraph 27.
5AD Adelaide 5MU Murray Bridge 5PI Crystal Brook 5SE Mount Gambier	} Licence for 5AD held by Advertiser Newspapers Ltd. (the Adelaide Advertiser), which controls the companies holding the licences for the other three stations.
2BH Broken Hill 5DN Adelaide	} News Ltd. (the Adelaide News) owns 2BH Broken Hill, and has 3,405 ordinary shares and 2,000 preference shares (in totals of 8,405 ordinary and 4,000 preference shares) in the company which holds the licence for 5DN Adelaide.
6IX Perth 6MD Merredin 6WB Katanning 6BY Bridgetown	} West Australian Newspapers Ltd. (the West Australian, Perth) has a half interest in W.A. Broadcasters Pty. Ltd., which controls stations 6IX Perth, 6WB Katanning, 6MD Merredin and 6BY Bridgetown.
7HO Hobart	Davies Bros., Ltd. (the Hobart Mercury) has a third interest in the station.

OTHER NEWSPAPERS.

2AD Armidale	The Armidale Newspaper Co. Ltd. has a half interest and one of its nominees a casting vote on the Board of Directors.
2LT Lithgow 2LF Young	} Western Newspapers Ltd. (conducting country newspapers in New South Wales) has 2,248 shares (in a total of 3,747 shares) in Lithgow Broadcasters Pty. Ltd., which holds the licence for 2LT Lithgow, and has 4,221 shares (in a total of 8,557 shares) in Young Broadcasters Pty. Ltd. which holds the licence for 2LF Young.
2LM Lismore	Northern Star Ltd. holds 4,000 shares (in a total of 7,125 shares) in Richmond River Broadcasters Pty. Ltd. which holds the licence for the station.
2NM Muswellbrook 2NX Bolwarra	} The Newcastle Morning Herald and Miners' Advocate Pty. Ltd., and the Singleton Argus Publishing Company each hold 7,555 shares (in a total of 30,220 shares) in Hunter Broadcasters Pty. Ltd. which holds the licences for the stations.
3BA Ballarat	The Ballarat Courier Pty. Ltd. owns the station.
3GL Geelong	The Geelong Advertiser Pty. Ltd. owns the station.
3MA Mildura	New Sunraysia Daily Pty. Ltd. holds 500 preference shares (in totals of 500 preference and 500 ordinary shares) in Sunraysia Broadcasters Pty. Ltd. which holds the licence for the station.
6VA Albany	Albany Advertiser (1932) Ltd. holds 7,000 shares (in a total of 18,875 shares) in Albany Broadcasters Ltd., which holds the licence for the station.
7EX Launceston	W. R. Rolph and Sons Pty. Ltd. (the Examiner, Launceston) holds 1,800 shares (in a total of 2,500 shares) in 7EX Pty. Ltd., which holds the licence for the station.

The above particulars do not take into account shareholdings of individuals or companies who are substantial shareholders in both broadcasting and newspaper companies.

NETWORKS OF COMMERCIAL BROADCASTING STATIONS.

34. Section 16 of the Act empowers the Board to regulate the establishment and operation of networks of commercial broadcasting stations and the making of arrangements by licensees of such stations for the provision of programmes or the broadcasting of advertisements. In addition, the licensee of each commercial broadcasting station is required to obtain the Board's consent before entering, or becoming a member of, any network, by a condition of the licence, which reads as under:—

"The licensee shall not, without the consent in writing of the Australian Broadcasting Control Board, enter or become a member of any network of broadcasting stations, or any other association or organisation of broadcasting stations formed for the purpose of making arrangements for the provision of programmes or the broadcasting of advertisements, or acquire by itself or any persons or company on its behalf, any shares or other interest in any such network, association or organisation."

The three principal networks in existence at present are the Macquarie Broadcasting Network, the Major Broadcasting Network and the Independent Group.

35. The Macquarie Broadcasting Network is a proprietary company (Macquarie Broadcasting Service Pty. Ltd.) in which the following member stations were shareholders on 30th June, 1957:—

MACQUARIE BROADCASTING NETWORK.

<i>New South Wales—</i>	<i>Victoria—</i>	<i>Western Australia—</i>
2CA Canberra	3AW Melbourne	6IX Perth
2GB Sydney		6MD Merredin
2LF Young	<i>Queensland—</i>	6WB Katanning
2LT Lithgow	4BH Brisbane	6BY Bridgetown
2MW Murwillumbah	4BU Bundaberg	
2PK Parkes	4GY Gympie	<i>Tasmania—</i>
2NM Muswellbrook		7HO Hobart
2NX Bolwarra	<i>South Australia—</i>	7LA Launceston
2WL Wollongong	5DN Adelaide	

Macquarie Broadcasting Service Pty. Ltd. has an arrangement with a number of other stations in accordance with which they may co-operate with the network on agreed terms in the sale of station time for the broadcasting of Macquarie programmes.

36. The Major Broadcasting Network is not a company, but is an association of stations of which the following were members on 30th June, 1957:—

<i>New South Wales—</i>	<i>Victoria—</i>
2KO Newcastle	3DB Melbourne
2UE Sydney	3LK Lubeck
<i>Queensland—</i>	<i>Western Australia—</i>
4AK Oakey	6CI Collie
4BK Brisbane	6PR Perth
	6TZ Bunbury
<i>South Australia—</i>	<i>Tasmania—</i>
5AD Adelaide	7EX Launceston
5MU Murray Bridge	7HT Hobart
5PI Crystal Brook	
5SE Mount Gambier	

The Independent Group consists of stations 2UW Sydney, 3UZ Melbourne, 4BC Brisbane, 4SB Kingaroy, 5KA Adelaide, 5AU Port Augusta, 5RM Renmark, 6PM Perth and 6AM Northam. There are also several associations of stations or groups of stations in the same ownership which are described as networks. Details of these are given in previous Annual Reports.

ACTIVITIES OF THE AUSTRALIAN UNESCO COMMITTEE FOR RADIO—1957.

37. The Australian UNESCO Committee for Radio, on which the Board is represented by its Chairman, has, together with the UNESCO Committees in other fields, continued to advise the Commonwealth Government on UNESCO'S Programme and to advise and assist in the carrying out of UNESCO projects in Australia. The Radio Committee in conjunction with the Australian UNESCO Committee for Press and Films met in March this year to consider the UNESCO Programme for 1957-58, which had been approved at the Ninth Session of the General Conference

of UNESCO held in New Dehli, India, late in 1956, and to suggest ways of implementing approved projects in the field of mass communications. On this occasion Dr. Keith Barry of the Australian Broadcasting Commission was unanimously re-elected Chairman of the Radio Committee. In the course of the meeting, members were addressed by Sir Richard Boyer, Chairman of the Australian Broadcasting Commission, who had led the Australian Delegation to the New Dehli General Conference. Dr. Gardner Davies, who is the Australian representative on the Executive Board of UNESCO and who is this country's permanent delegate to UNESCO, visited Australia in May of this year.

38. The Radio Committee is represented on a joint working party which has been formed to advise on Australia's contribution to the UNESCO project on the Mutual Appreciation of Eastern and Western Cultural Values. The broad aim of this project is to bring about the development of a better reciprocal understanding of the principal characteristics of the life and culture of the peoples of these two great zones of civilization. UNESCO hopes to bring about this mutual understanding by encouraging research, by working for the improvement of school education, by developing contacts and exchanges of persons, and by promoting the translation of literary works and the diffusion of music and the plastic arts. UNESCO recognises the important role that the mass communications media can play in assisting the project through the ability to reach as many people, both of the east and west, as possible. However, the project will gain force only if the Member States take an active part in it and this is the reason behind the setting up of this working party. The Radio Committee is also represented on another working party which has been formed to consider the practical implications which would result from Australian adherence to the UNESCO agreement on the Importation of Educational, Scientific and Cultural Materials. The major purpose of the agreement, as its title indicates, is to make it easier to import materials of an educational, scientific and cultural nature.

39. As in previous years, the Committee has provided information on radio developments and organisations in Australia to the Clearing House in UNESCO'S Department of Mass Communications. Both national and commercial broadcasting stations have continued to give publicity to the work of UNESCO in interviews with people connected with UNESCO and in broadcasts specially devoted to the work of the Organisation. In 1958 the Australian Broadcasting Commission will transmit, as its National Project in the School and Youth Broadcasts Programme, a series of twelve broadcasts on the theme of international understanding. This series will endeavour to show how people from all parts of the world are making contributions to the betterment of mankind, and the aid of UNESCO will be sought in the completion of material.

PART III—BROADCASTING—TECHNICAL SERVICES.

40. On 30th June, 1957, broadcasting services were being provided by 163 medium frequency stations (55 national and 108 commercial), and by nine high frequency stations, which are intended to provide for listeners in the more remote parts of the Commonwealth and in the Territories. Details of these stations are given in Appendices "A" and "B", and their location is shown in the map which follows Appendix "D".

41. As has been explained in previous reports, the technical efficiency of both the National and Commercial Broadcasting Services has been greatly increased as a result of plans developed by the Board soon after its appointment in 1949. The establishment of new stations, substantial increases in the power of many existing stations, in most cases effected by the installation of new transmitters, and the general raising of technical efficiency which has resulted from the application of the Board's Standards for the Technical Equipment and Operation of Broadcasting Stations have increased the effective coverage of both Services and the technical quality of the service available to listeners has been further improved by the erection at many stations of new studios and the installation of modern studio equipment. The great majority of Australian listeners have thus been enabled to enjoy much better reception, especially in areas where atmospheric or noise caused by the operation of electrical equipment had previously proved an irritating obstacle to clear reception. In this Part details are given of new stations established and other improvements effected during the past year.

DEVELOPMENT OF NATIONAL BROADCASTING SERVICE.

42. The Board's plans for the development of the National Broadcasting Service provided for the establishment of 17 new stations and an increase in the operating power of 27 existing stations. At 30th June, 1957, 13 of the 17 additional stations were in operation, including the following two regional stations which commenced operation during the year:—

	Power (watts)	Commenced operation on—
2GL Glen Innes	10,000	5th February, 1957
5PA Penola	2,000	30th November, 1956

The position with respect to the other four proposed stations was, according to the latest information available to the Board at the time this report was being prepared, as under:—

5MV Renmark	After a short period of operation on an experimental basis in July, 1957, the station commenced regular transmissions on 31st July, 1957.
2AN Armidale	In the Eighth Annual Report it was indicated that the possibility of using a "booster" station to serve Armidale would be investigated after station 2GL Glen Innes had commenced service. This investigation indicated that the signal strength available from 2GL at Armidale was insufficient to permit of the successful use of the "booster" type of operation. At the time of writing this report, no decision had been made on the technical conditions under which the Armidale station would operate.
2WN Woolongong	It is expected that constructional work on this station, which has been delayed by lack of funds, will commence during the current year and that the station will commence operation in 1958.
3BN Bendigo	Establishment of this station has been deferred until the effect of the planned increase in power of existing stations which serve the Bendigo district has been observed.

43. The establishment of new stations has been given priority in the implementation of the Board's plans, with the result that whilst an increase in the power of 27 stations is contemplated, power increases have so far been effected only at the following stations—

2CO Corowa	increase from 7,500 to 10,000 watts.
2NA Newcastle	increase from 2,000 to 10,000 watts.
3GI Sale	increase from 7,000 to 10,000 watts.
4QL Longreach	increase from 200 to 10,000 watts.
4RK Rockhampton	increase from 2,000 to 10,000 watts.
5CK Crystal Brook	increase from 7,500 to 10,000 watts.
5DR Darwin	increase from 200 to 2,000 watts.
6WN Perth	increase from 6,000 to 10,000 watts.
7NT Kelso	increase from 7,000 to 10,000 watts.

The operating frequency of Station 2NA was changed in January, 1957, to 1,510 kilocycles per second, the 820 kilocycles per second channel on which it previously operated being required for 2GL Glen Innes.

44. Progress is being made in connection with the increase in the power of the following:—

6WA Wagin	To be increased to 50,000 watts. The new transmitter has been delivered and installation work is in progress. It is expected that operation on the higher power will commence before the end of 1957.
2NR Grafton	To be increased to 50,000 watts. The transmitter is due for delivery early in 1957-58 and it is expected that operation on the higher power will commence during the first half of 1958.
4QN Townsville.	To be increased to 50,000 watts. This station is to be re-established at a new site which has been acquired. A contract has been placed for the station buildings and the delivery of the transmitter is expected early in 1958. The completion date of the buildings will determine the date on which operation on the higher power can commence and on present indications the station should be operating from the new site during 1958-59.
7ZL/7ZR Hobart	Each to be increased to 10,000 watts. These two stations are being re-established at a new site. Operation from the new site is expected to commence in the first half of 1958 with 7ZL operating with 10,000 watts and 7ZR with 2,000 watts. The 10,000 watt transmitter for 7ZR is expected to be in operation during the latter half of 1958.

DEVELOPMENT OF THE COMMERCIAL BROADCASTING SERVICE.

Increased Power for Country Stations on Shared Channels.

45. In previous reports, the Board has given complete details of the steps which have been taken since its establishment to improve the technical efficiency of the Commercial Broadcasting Service by increasing the power of most of the commercial stations and by the application of appropriate standards for the technical equipment and operation of such stations. The Board has authorized the use of higher power by 63 shared channel stations and all these stations are now operating on the higher level of power approved by the Board. The powers allocated to the 63 stations are shown hereunder:—

2,000 watts, day and night	26 stations.
1,000 watts, day and night	11 stations.
1,000 watts, during hours of darkness	13 stations.
2,000 watts during daylight hours	
500 watts, day and night	11 stations.
500 watts, during hours of darkness	2 stations.
2,000 watts, during daylight hours	

46. As has been explained in previous reports, the operation of the shared channel stations on higher power has resulted in much better reception for their listeners and a marked improvement in the financial position of the licensees concerned. Nevertheless, the Board continues to receive applications for further increases in power from licensees of stations which are still operating on 500 watts and 1,000 watts, to which they are restricted because the geographical separation from the station, or stations, which operate on the same channels is not sufficient to permit of higher power without causing undesirable interference to other stations. The standards adopted by the Board in respect of the allocation of power to shared channel stations were explained in paragraphs 45-53 of its Seventh Annual Report and, without degrading those standards, it is not practicable to increase the power of the stations concerned. The Board realises that in some of these cases, a better service would be provided for remote listeners if the operating conditions of the stations could be improved and it has therefore made a comprehensive review of frequency allocations for the purpose of ascertaining if, by making some minor frequency changes, some of the shared channel stations could be enabled to extend their coverage.

47. The review made by the Board indicated that although all requests could not be met, some improvement of service to listeners could be obtained by changing the frequencies of certain stations. The changes which are envisaged cannot be effected without the concurrence of the New Zealand Administration because they would entail alterations in detail to the terms of an agreement with New Zealand concerning the use of medium frequency broadcasting channels in that country and the Commonwealth. Negotiations with New Zealand were commenced during the year covering not only the changes which it is desired to make in respect of the channels of certain Australian stations, but also variations desired by the New Zealand Administration to provide for development of the broadcasting service in that country. At the time of writing this report, the negotiations had not been completed.

Increased Power for Commercial Stations in Capital Cities and Newcastle.

48. The Board has also authorized the use of higher power in the capital cities and Newcastle, as under:—

	Power Increased	
	From	To
Sydney	1,000 watts	5,000 watts
Melbourne	600 watts	5,000 watts
Brisbane	1,000 watts	2,000 watts
Adelaide	500 watts	2,000 watts
Perth	500 watts	2,000 watts
Hobart	500 watts	2,000 watts
Newcastle	500 watts	2,000 watts

Station 3AK Melbourne operates under special conditions on 500 watts, and the power of station 4KQ Brisbane is limited to 1,000 watts during the hours of darkness because of a provision in the agreement between Australia and New Zealand relating to the allocation of frequencies to broadcasting stations. Station 4KQ operates on the same frequency as station 3YA Christchurch (N.Z.) and the purpose of the restriction is to avoid excessive interference to the reception in New Zealand of 3YA.

49. With the exception of the stations in Perth, all commercial broadcasting stations in the capital cities and Newcastle have increased power to the authorized levels. Although approval was given in 1953 for stations 6PR, 6PM, 6IX and 6KY Perth to increase their operating power

to 2,000 watts, this increase has not yet been effected and the stations are still operating with a power of 500 watts. One reason for the delay in this connection has been the necessity for two of the stations to acquire new sites suitable for 2,000 watts operation. These two stations have recently acquired a site, however, at which it is proposed to provide a joint installation using a common mast. The Board has accordingly advised the licensees of the four stations that 1st January, 1958, has been determined as the date from which they will be required to commence operation with the authorized power of 2,000 watts.

50. When the increase in the power of the Perth stations has been effected, the approved plan for improving the coverage by the Commercial Broadcasting Service will have been completed. From a technical viewpoint, it has resulted in a marked improvement in the grade of service available to listeners and this has been particularly evident in the case of the Melbourne and Adelaide stations, which, with commencement of operation on higher power, transferred to more efficient sites with improved radiating systems. At the time that it was proposed by the Board to authorize an increase of the power of the Melbourne and Sydney stations, fears were expressed by the licensees of certain country stations near the capital cities that the increased power would have an adverse effect on their operations. The Board, however, took the view that the country stations concerned would continue to provide to a large population a better grade of service than could be provided from capital city stations and that the increase in the power of the capital city stations should not adversely affect them. Although this view has, for the most part, been proved in practice to be correct, the Board realises that certain of the country stations near the capital cities are operating under unfavourable technical conditions compared with other commercial stations and is closely examining the frequency allocation position and other technical methods by which the coverage of those stations might be improved.

CLEAR CHANNEL STATIONS IN COUNTRY DISTRICTS.

51. In the Seventh Annual Report, the Board stated that having increased the power of the commercial broadcasting stations mentioned in the preceding paragraphs 45 to 50, it had considered the case of the stations which operate on 2,000 watts on clear channels in country districts and had come to the conclusion that it would be undesirable to authorize these stations to use power in excess of the maximum power of the shared channel stations, namely 2,000 watts. The Board's reasons for this conclusion were explained in the following terms:—

“The clear channel stations have for several years enjoyed much more favourable conditions than their competitors on shared channels, and although the increase in the power of the shared channel stations has brought about a better balance between the various stations comprising the Commercial Broadcasting Service, the clear channel stations are still much more favourably placed than their shared channel competitors. They have a much wider coverage and this gives them a bargaining power with advertisers which is not enjoyed by the less fortunate shared channel stations, whose coverage is severely restricted during hours of darkness. The action which has been taken to improve the position of the shared channel stations has conferred great benefits on listeners in country areas, not only from a technical viewpoint in improving the grade of service, but also from a programme viewpoint in that the more popular programmes have become available over a larger number of commercial stations. It would, in the Board's opinion, be unfortunate to disturb the existing situation, as such a move would most probably in the long run be to the detriment of listeners as well as to the licensees of the shared channel stations who, in many cases with much smaller resources than the clear channel stations, have invested some hundreds of thousands of pounds in improving the service to country listeners.”

52. In the Eighth Annual Report, the Board stated that, in consequence of the strong representations which had been made to the Minister and the Board in support of an increase in the power of certain of these stations, it proposed to discuss the matter with the Management Committee of the Australian Federation of Commercial Broadcasting Stations in accordance with the obligation the Board has to confer with representatives of the commercial stations before exercising its powers under section 16 of the Act, including the power to determine the operating power of broadcasting stations. During the year, the question was taken up with the Federation which informed the Board that, because of its constituent membership, the Federation was not competent to give a view on the matter. Because of the complex nature of the issues which would be involved in further increasing the power of a limited number of country stations the Board has not yet reached a decision on the representations made to it, but it is keeping the matter under continuous review.

PLANS FOR THE FURTHER DEVELOPMENT OF BROADCASTING SERVICES.

53. In several of its previous reports, the Board has pointed out that for the purpose of ultimately ensuring a full and comprehensive service for all listeners, in any plans for development of broadcasting services provision should be made on a long-term basis for the following, although not necessarily in this order:—

- (a) the establishment of additional national stations in areas where they are required to provide service for substantial numbers of people who cannot yet receive any national station satisfactorily;
- (b) the extension of the national service in such a way as to ensure the reception of a second programme of the Australian Broadcasting Commission by listeners in areas where at present only one such programme is available as a primary service;
- (c) the provision of a third national programme in accordance with proposals repeatedly made by the Australian Broadcasting Commission;
- (d) the granting of licences for additional commercial broadcasting stations, especially in country areas where no existing commercial station can be consistently received at present;
- (e) the establishment of stations in areas of rapidly increasing population.

54. In the Seventh Annual Report, the Board commented on this matter at some length, explaining in paragraphs 45 to 53 the difficulties in the way of allocating channels in the medium frequency band for additional stations and, in paragraphs 54 to 58, the possibility of overcoming those difficulties by the use of frequency modulation stations in the very high frequency band, in which many broadcasting stations are operating overseas. The prohibition on the use of frequency modulation by commercial broadcasting stations was repealed by the *Broadcasting and Television Act 1956*, and contemplated as in its last Annual Report, the Board, with the approval of the Minister, has commenced a public inquiry into the introduction of frequency modulation broadcasting in the Commonwealth. Such an investigation should enable all the technical and economic factors which are involved to be thoroughly examined in the light of evidence provided by the many interested parties and a well-informed decision to be reached as to whether or not the use of frequency modulation in the very high frequency band would be the best solution of the problem arising from the limitation placed by the International Radio Regulations on the number of medium frequency channels which may be used for broadcasting purposes.

55. The Board's plans for the development of the National Broadcasting Service, mentioned in paragraph 42, were approved by the Minister in 1952, and although progress has not been as rapid as had been hoped, partly due to the restricted funds available for the purpose, good progress is now being made towards completion. Subject to availability of the necessary funds from year to year, it is aimed to complete the approved programme of development by 1960-61, one year later than envisaged when the plan was approved.

56. Notwithstanding the improvements made and yet to be made in the coverage of the National Broadcasting Service in accordance with the approved plans, there will still be some areas which will not receive a completely satisfactory service from any existing or proposed station. In this connection, of particular concern are outlying areas of the Northern Territory, Queensland and Western Australia where the medium frequency service is very poor, and where the reception of high frequency (short wave) services for various reasons leaves much to be desired. The matter is under active investigation by the Board and during the year a visit was made by an engineer to various centres in the Northern Territory, Mt. Isa and other centres in North Queensland to investigate the position at first hand. The visit was made during the latter half of the year, and at the time of writing this report, the engineer's report and recommendations arising from the visit had not been considered by the Board. A visit to outlying areas of Western Australia will be made to examine reception conditions in that State after the power of 6WA Wagin has been increased to 50,000 watts late in 1957 (see paragraph 44).

57. The Board is making a detailed study of the technical adequacy of the high frequency (short wave) services. It is known that the service at times suffers from interference from stations operating in other countries, but it is an extremely difficult problem to obtain reliable information from the large and scattered areas which the stations are intended to serve. Arrangements have been made with the Department of Civil Aviation for regular observations to be made by competent personnel at aeradio stations in a number of areas, and reports on the service are now being regularly received. Due to shortage of technical staff, it has not been practicable

to analyse the large amount of information now forthcoming, but it is hoped in the near future, with the appointment of additional technical personnel (see paragraph 11), to study the position fully with the aim of determining what action is necessary to improve the service.

STANDARDS FOR THE TECHNICAL EQUIPMENT AND OPERATION OF MEDIUM FREQUENCY BROADCASTING STATIONS.

58. In the Eighth Annual Report, it was explained that in the light of experience gained in the application of the Board's Standards for the Technical Equipment and Operation of Medium Frequency Broadcasting Stations first determined on 17th March, 1952, it has become apparent that some revision is necessary to clarify or modify certain requirements. This matter is one of considerable detail which it has not yet been practicable to complete. Some discussions have been held with the Post Office and it is intended, when details are further advanced, to discuss the question with the Australian Federation of Commercial Broadcasting Stations.

UNATTENDED OPERATION OF BROADCASTING STATIONS.

59. In previous reports reference has been made to the Board's policy of approving the unattended operation of broadcasting transmitters, subject to the requirements laid down in the Board's Technical Standards. This facility is being generally adopted by the licensees of commercial broadcasting stations and there are now 66 commercial stations at which the transmitting equipment is operated unattended. Twelve national stations are also operated in this manner.

DIRECTIONAL AERIALS.

60. During the year the first medium wave directional array to be used by an Australian broadcasting station was placed in operation by Station 4BH Brisbane. This array has proved most effective for the purposes for which it was designed, namely, to improve the radiation in the direction where there is the maximum population and to reduce radiation in the opposite direction. The Board is examining the possibility of extending the use of directional aerials, particularly with regard to shared channel stations, where the array can be arranged to reduce radiation of a station in the direction of its sharing partner.

PART IV.—BROADCASTING: PROGRAMME SERVICES.

61. The Board's statutory responsibilities in respect of programmes relate only to the services provided by commercial broadcasting stations and commercial television stations. We are, however, with the assistance of the Australian Broadcasting Commission, able to include, where it seems desirable, some information about the programmes of the National Broadcasting Service.

62. During the year the Board, in accordance with its usual practice as explained in previous annual reports, has made a review of the programmes and programme services of all commercial stations, and is of the opinion that in most cases the programme services may be considered adequate. The Board has been gratified to observe the improvement that has been made during the past few years in studios and studio equipment. Many stations have constructed new studios, while others have effected improvements in which particular attention has been paid to acoustics and to the installation of modern studio equipment. The greater flexibility in the use of studios has enabled the stations to provide more adequately for the needs and interests of the communities they serve. There are few stations which have not made some improvement in the field of community service, and many have readily adopted suggestions from the Board and from listeners for regular or periodical broadcasts of information of purely local interest. The year has also seen some change in the general pattern of evening programmes, due largely to the expected competition from television stations. More time in evening programmes is being devoted to music, and in some cases the standard and quality of the music broadcast has improved. It is noted with regret, however, that in the field of drama, plots based on crime and the more sordid and unsavoury aspects of society are still prominent. In its Eighth Annual Report, the Board suggested that licensees should examine their programmes in order to satisfy themselves that their obligation to provide listeners with balanced programmes was being properly carried out, particularly with regard to the provision of matter from which some positive value may be derived. Although the Board feels that there is still much room for improvement, particularly in the latter field, it is of the opinion that a greater overall variety of programmes is available than in the past. It is to be hoped that the competition from television, the effect of which on broadcast programmes is being felt indirectly throughout the whole of the Commonwealth, will stimulate licensees of commercial broadcasting stations to develop further those particular types of programmes in which sound broadcasting has natural advantages over television.

BROADCASTING PROGRAMME STANDARDS.

63. The fundamental obligation of the licensee of each commercial broadcasting station in respect of programmes is expressed in subsection (1.) of section 99 of the *Broadcasting and Television Act 1942-56* which now provides that:—

“A licensee shall provide programmes and shall supervise the broadcasting . . . of programmes from his station in such a manner as to ensure, as far as practicable, that the programmes are in accordance with standards determined by the Board.”

As was explained in paragraph 55 of the Eighth Annual Report, this provision came into force on 1st July, 1956, replacing a previous requirement that a licensee should broadcast programmes which were “to the satisfaction of the Board”. The Board has had several discussions with the Management Committee of the Australian Federation of Commercial Broadcasting Stations concerning this matter in the course of which it has suggested to the Committee that the Broadcasting Programme Standards should, as far as is practicable, follow the same lines as the Television Programme Standards which appear to have met with general approval (see paragraph 130). The drafting of Broadcasting Programme Standards was nearing completion when this report was being prepared, and the Management Committee of the Federation has appointed a sub-committee which will examine the details of the proposed standards in collaboration with the Board's officers in order that the views of the Federation may be considered before the standards are finally determined by the Board.

CHILDREN'S PROGRAMMES.

64. In previous Annual Reports, the Board has directed attention to the growing criticism expressed by responsible sections in the community regarding the nature of some of the programmes broadcast in the early evening hours when large numbers of children are likely to be listening. The Board believes that these criticisms have much validity and, for this reason, it proposes that the Broadcasting Programme Standards should, as in the case of the Television Programme Standards, contain special provisions relating to programmes broadcast during hours when there is a substantial child audience. The Television Programme Standards include the following paragraph:—

“The child's education and training receive very close supervision, both by his parents and by the State, so that by the time he reaches maturity he may be able to fit into the complex adult world with a minimum of difficulty. To achieve this goal, the child must gradually acquire a sound standard of values, self discipline, and an appreciation of adult responsibilities. In the course of his development, he is brought into gradual contact with the good and not-so-good aspects of life, so that the training he has received will enable him to cope with the various experiences he will encounter. Just as a good parent would not expose his child to an aspect of life for which the child is not equipped, so the television broadcaster must allow for the likely composition of his audience at these times of day. At the same time, it must be remembered that during these periods there are great opportunities for good in television, in enlarging the horizons of children and in cementing family ties and associations. It is earnestly hoped that television stations will make the most of these opportunities.”

These observations, of course, apply with equal force to broadcasting and it is the intention of the Board to provide in the Broadcasting Programme Standards that in the late afternoon and early evening, good, wholesome, programmes should be broadcast which family groups of all ages might listen to with complete confidence.

65. The Board believes that if this result can be achieved, it will have done much to remove the cause of some dissatisfaction with certain programmes of the Commercial Broadcasting Service which has been evident over the years and to assist parents who, notwithstanding anything the Board may do, still have the responsibility of regulating the listening habits of their children. The existing principles governing programmes broadcast in the early evening period (see Fifth Annual Report, Appendix “D”) require stations to exercise “meticulous supervision over programmes broadcast when children are likely to be listening”: experience appears to have demonstrated that this requirement should be made more explicit, particularly in respect of the precise hours during which it should apply. This matter in particular will be discussed with the Australian Federation of Commercial Broadcasting Stations.

COMMUNITY SERVICES.

66. The importance of the various forms of what is usually described as mass-communications in binding a community together has often been emphasised, and a local broadcasting station has, as the Board has pointed out in several previous annual reports, great opportunities in assisting in the development of the domestic, cultural and social life of its community and in the development of community projects. With few exceptions, licensees of commercial broadcasting stations, particularly those located in country areas, continued during the year to provide essential

local services covering a wide field and to give wide publicity to the activities of numerous organisations working in the welfare of their districts. No reference to this aspect of the operations of commercial broadcasting stations would be complete without mentioning their magnificent efforts in the cause of charity. Station managements lend their support to every worthwhile appeal and many set aside the whole of one day in the year in which their total resources are devoted to the raising of money for hospitals or other charitable institutions.

67. There are several groups of stations in rural areas to which programmes are relayed from metropolitan stations. Because of the lack of local representatives in the areas covered by some of these stations, they have not participated in the life of the communities which they are serving to nearly the same extent as country stations which are controlled and operated by local residents. The Board has frequently urged the licensees of the stations in question to take special steps to overcome this deficiency in their services, and is glad to report that in several cases considerable improvement was effected during the past year. The Board appreciates that some of these stations are in areas of sparse population which could not maintain locally-operated studios, but it is confident that, with the co-operation of the licensees, further improvements will be effected as opportunities arise.

NEWS BROADCASTS.

68. Increased attention has been given during the year by licensees of commercial broadcasting stations to the development of news services and the Board is gratified to note the improvement in this field. Of particular importance is the provision of town and district news by some country stations which in the past had been unable to provide this service because of their inability to arrange with local newspaper proprietors for the supply of news items for broadcasting. Other stations have appointed their own news gathering and editing staffs which prepare several bulletins of local news daily and the Board commends these stations for their enterprise and sense of public service. A further innovation on the part of many stations is the introduction of news flashes at intervals throughout the day. News commentaries and discussions on current affairs have become a regular feature of programmes of several stations. In some instances there is a tendency to over-dramatise the material presented, but the positive value of these broadcasts lies in the stimulation of thought on matters which directly or indirectly concern the welfare of each member of the community. A variant of the news commentary type of programme is that provided by a "roving reporter" who records, for later broadcasting, descriptions of occurrences, or on-the-spot interviews. These contributions to the dissemination of news are of considerable interest and it is a pity that this service is occasionally marred by the inclusion of items the suitability of which for broadcasting is doubtful.

RELIGIOUS BROADCASTS.

69. Section 103 of the *Broadcasting and Television Act 1942-1956* provides that a licensee shall broadcast from his station Divine Worship or other matter of a religious nature during such periods as the Board determines and, if the Board so directs, shall do so without charge. Briefly stated, the Board's requirements are that each licensee of a commercial broadcasting station shall devote at least one hour each week, free of charge, to the broadcasting of religious matter either by way of broadcasts of Divine Worship on Sundays or by studio presentations throughout the week, time being allotted, as far as practicable, in proportion to the number of adherents to each denomination. The amount of free time allocated by licensees to the broadcasting of religious matters varies in accordance with individual station policies but at the end of the year under review a total period of 303 hours per week was being devoted to religious broadcasts representing an average of about $2\frac{3}{4}$ hours for each of the 108 commercial stations in operation. In addition, sponsored religious broadcasts totalled 146 hours per week.

POLITICAL BROADCASTS.

70. There is no statutory obligation on the licensee of a commercial broadcasting station to broadcast political matter, but section 116 of the *Broadcasting and Television Act 1942-1956* provides in subsection (3.) that:—

"If, during an election period, a licensee broadcasts or televises election matter, he shall afford reasonable opportunities for the broadcasting or televising of election matter to all political parties contesting the election, being parties which were represented in either House of the Parliament for which the election is to be held at the time of its last meeting before the election period."

A general election for the House of Assembly in Tasmania was held during the year to which this reports relates and, following its usual practice, the Board obtained details of broadcasts in connection therewith.

71. The Act also provides (section 116 (2.)) that a licensee shall not broadcast a dramatisation of any political matter "which is then current or was current at any time during the last five preceding years". In its Second Annual Report, the Board, at the request of the Australian Federation of Commercial Broadcasting Stations, published a guide to the meaning of the expression "dramatisation of political matter" for the assistance of licensees. It was considered desirable during the year to review this question and to issue the following revised explanation so as to cover also the televising of a dramatisation of political matter:—

"The expression 'Dramatisation of political matter' includes any method of presentation or production of broadcast or televised material dealing with a subject of a political nature which involves or includes—

- (a) a representation by means of characters (whether named or not, and whether presented visually, by still or animated cartoon or picture or otherwise, or aurally, or visually and aurally) of a past or imaginary event, speech or conversation, whether the characters portrayed are real or imaginary people;
- (b) any statement, address, or dialogue containing simulated voices.

The expression does not, however, include any visual or aural presentation of dialogue or discussion between actual persons not purporting to represent other persons, or the use of quotations or of factual pictures."

The Board pointed out that, in providing this explanation, it did not purport to give an authoritative ruling on the interpretation of the Act; such a ruling could not be given otherwise than by a Court in the light of the actual facts of a particular presentation.

ENCOURAGEMENT OF AUSTRALIAN ARTISTS.

72. Section 114 of the *Broadcasting and Television Act 1942-1956* provides:—

"114.—(1.) The Commission and licensees shall, as far as possible, use the services of Australians in the production and presentation of broadcasting and television programmes.

(2.) Not less than five per centum of the time occupied by the programmes of the Commission, and not less than five per centum of the time occupied by the programmes of a commercial broadcasting station, in the broadcasting of music shall be devoted to the broadcasting of works of composers who are Australians.

(3.) In this section, 'Australian' means a person who was born or is ordinarily resident in Australia."

73. As was explained in paragraphs 69 and 70 of the Eighth Annual Report, the obligations of broadcasters to make use of the services of Australians in the production and presentation of programmes are now expressed more explicitly than was the case prior to the passing of the *Broadcasting and Television Act 1956*. Subsection (1.) now places an obligation on licensees to use Australians in the production and presentation of programmes in terms which are much more positive than previously. Subsection (2.) has increased the proportion of Australian music which each station is required to broadcast from two and one half per cent to five per cent.

74. Nearly all commercial stations broadcast programmes employing Australian artists which have been produced and recorded in one or other of the capital cities, and in recent years the number of these programmes has been increased. In most cases, the production of these programmes is made possible by the contributions towards the overall cost by the large number of stations involved, but a licensee's obligation under this section cannot be regarded as being wholly discharged by a contribution to the cost of a programme devised and presented by another organisation. Each station should, to the best of its ability, also use the services of Australians who may be competent to contribute to its programme. In many cases, this is being done and the interest aroused by competitive types of programme to which local artists contribute is ample proof of the worth of the time and effort involved in the presentation of such programmes—even though the standard may not be as high as that of gramophone records. The following table shows that, in consequence of the statutory alteration of the amount of time to be devoted to the works of Australian composers, there was, during the past year, a substantial increase in the amount of time devoted to such works by the Australian Broadcasting Commission and the licensees of commercial broadcasting stations:—

Year	Australian Broadcasting Commission	Commercial Stations	
	Average percentage of all metropolitan stations	Average Percentage of all Commercial Stations	Number of Stations below Prescribed Quota*
1952-53	4.23	4.21	7
1953-54	4.06	3.64	17
1954-55	4.78	3.91	3
1955-56	5.09	3.51	10
1956-57	6.54	5.07	49

* 5 per cent since 1st July, 1956; 2½ per cent before that date.

Of the 49 commercial stations which did not comply with the statutory requirements, 21 reached a figure between 4.5 per cent and 5 per cent, 14 between 4 per cent and 4.5 per cent; 14 were below 4 per cent, and complete figures were not available for 7 when this report was being prepared. Appropriate action has been taken to ensure that all these stations observe the statutory requirement during the current year.

75. The Board has constantly referred in its Annual Reports to the need for an adequate supply of recorded Australian compositions and it has endeavoured to interest recording companies in the production of records which would enable broadcasters to devote a steadily increasing proportion of the transmission times to Australian music. The recent increase from two and one half per cent to five per cent in the proportion of Australian music which each station is required to broadcast emphasises the need for further effort in this respect. During the year the Board had evidence of the desire of some record manufacturing companies to expand the supply of such music, but it was doubtful whether all the items which it was proposed to record could be regarded as Australian.

ADVERTISING.

76. Section 100 of the *Broadcasting and Television Act 1942-1956* provides, amongst other things, that a licensee of a commercial broadcasting station shall comply with such standards as the Board determines in relation to the broadcasting of advertisements, and shall not broadcast advertisements on a Sunday except in accordance with such conditions as the Board determines. No change was made during the year in the Advertising Time Standards as published in the Sixth Annual Report, with the exception of the provisions relating to Sunday advertising which is referred to in the next paragraph. Whilst the Board's observations indicate that the Advertising Standards are being complied with by the great majority of stations, there have been a few cases of grossly excessive advertising in respect of which the Board has taken appropriate action. Complaints have been received from listeners concerning some of the excesses, which seems to suggest that there is a limit beyond which advertising is not acceptable to listeners. The Advertising Standards attempt to strike a reasonable balance between the desire of licensees to increase their income and the capacity of listeners to accept advertisements in a spirit of goodwill.

SUNDAY ADVERTISING.

77. Subsection (5.) of section 100 of the *Broadcasting and Television Act 1942-1956* provides that a licensee shall not broadcast advertisements on a Sunday except in such manner and in accordance with such conditions as the Board determines. The Board's general attitude to Sunday advertising is that advertisements should be presented in good taste and with discretion and as unobtrusively as possible, and in its Seventh Annual Report, the Board (in paragraph 72) gave particulars of the conditions which it had determined for Sunday Advertising, the principal being that the number of advertising announcements should not be more than two in any period of fifteen minutes, and that not more than six minutes in any period of one hour should be occupied in the broadcasting of advertisements.

78. At the request of the Australian Federation of Commercial Broadcasting Stations, the Board during the year reviewed these conditions. The Federation did not ask for any increase in the overall duration of advertising, but requested greater flexibility in the use of the permitted time for "spot advertisements" in order to enable stations to earn more income. Instead of two direct advertising announcements of 45 seconds (100 words) each in a fifteen-minute programme, which were then permissible, the Federation proposed that stations be permitted to divide each 100-word announcement into shorter advertisements to be broadcast in a group not exceeding three in number. The effect on the listener would be that instead of hearing advertising matter occupying 45 seconds and dealing with a single subject, he might hear advertising matter occupying the same amount of time, but dealing with up to three separate subjects. The Board considered that the request of the Federation was reasonable and decided to accede to it. The Board decided also that existing restrictions on the use on Sundays of recorded advertising announcements should be withdrawn in view of the general requirement "that advertisements should be presented in good taste and with discretion and as unobtrusively as possible".

79. The revised conditions which came into operation on 4th November, 1956, are set out hereunder:—

Sponsored Sessions—Except as otherwise provided, advertisements may be included in a sponsored session, but the time devoted to advertising matter in such a session shall not exceed ten per centum of the total time occupied by the session, and the number of advertising announcements shall not exceed two in any period of 15 minutes.

Spot Advertisements—Except as otherwise provided, direct advertising announcements ("spot advertisements") may be broadcast but the total time occupied by such announcements shall not exceed six minutes in any period of one hour. Not more than two groups of announcements shall be broadcast in each fifteen-minute period and not more than three advertisements shall be included in any one group.

Reference to Prices—The price of any article or service shall not be mentioned more than once in each advertising announcement relating to that article or service.

Shopping Guide—A session containing a group of advertising announcements, in the form of a shopping guide, may be broadcast at a time, not later than six p.m. (local time) to be approved by the Board, provided that—

- (a) the time occupied by such session does not exceed 15 minutes;
- (b) the time occupied by any single advertising announcement in such session does not exceed one minute in duration or contain more than 140 words; and
- (c) the session shall not be broadcast between 11 a.m. and 12.15 p.m., but a licensee may, after consulting the Board, substitute for this period another period usually accepted by the majority of Churches in the area served by the station as the hour for holding Divine Worship.

Alcoholic Liquor—No advertisement relating to alcoholic liquor shall be broadcast.

Restrictions on Broadcasts in certain periods—Advertisements (other than opening and closing announcements) shall not be broadcast by a station during any part of a sponsored session which is devoted to the broadcasting of Divine Worship or other matter of a religious nature. Opening and closing announcements in respect of such a session shall not contain any reference to the price of any goods or services. Direct advertising announcements ("spot advertisements") shall not be broadcast during a session which is devoted to the broadcasting of Divine Worship or other matter of a religious nature.

Presentation of Advertisements—Advertisements should be presented in good taste and with discretion and as unobtrusively as possible. Repetition and sensational presentation should be avoided, especially in statements relating to prices. Advertising matter relating to medicines and medical and toilet preparations should be kept strictly within the bounds of good taste.

MEDICAL ADVERTISEMENTS AND TALKS.

80. Sections 100 and 122 of the *Broadcasting and Television Act 1942-1956* respectively prescribe that a licensee shall not broadcast an advertisement relating to medicine unless the text of the proposed advertisement has been approved by the Director-General of Health or on appeal to the Minister, by the Minister, and that a person shall not broadcast a talk on a medical subject unless the text thereof has been approved by the Director-General of Health, or, on appeal to the Minister, by the Minister. No appeals under these sections were made during the year under review.

HOURS OF SERVICE.

81. During the year 22 stations increased their daily periods of transmission: in 19 instances the increase was effected by opening the station at an earlier hour. The trend to earlier commencement of transmission in the past six years is shown in the following table. The figures represent the average opening time of commercial broadcasting stations:—

1951 average opening time	6.34 a.m.
1953 average opening time	6.23 a.m.
1955 average opening time	6.12 a.m.
1957 average opening time	6.02 a.m.

At 30th June, 1957, 108 stations were operating for an aggregate of 13,768 hours per week, which was 1,377 hours a week more than at the close of the previous year. Temporary variations in hours of commercial stations were authorised during the year on 837 occasions. The 64 stations of the National Broadcasting Service were operating for a total of 7,644 hours a week at 30th June, 1957, which was an increase of 245 hours a week on the figure for the previous year. During the year, approval was given to station 2UE Sydney to provide a 24-hour service: the six stations now providing a continuous service are 2UE and 2UW, Sydney, 2KO Newcastle, 3XY Melbourne, 4BC Brisbane, and 5KA Adelaide.

BROADCASTS IN FOREIGN LANGUAGES.

82. The question of the extent to which foreign languages should be used in broadcasting programmes in Australia has been under examination for some years. The general rules under which languages other than English might be used were set out in the Board's Eighth Annual Report (paragraph 76). These programmes have something to commend them, when the speech content is directed towards the assistance, education, or assimilation of non-English speaking persons who are newcomers to Australia. But it is evident that foreign languages have been used for commercial purposes to a much greater extent than was expected when the rules were drawn up, and a recent survey of the position indicates a considerable increase in the number of bilingual programmes in which a great part of the spoken word, including advertisements, is in a foreign language. A careful review of the general principles relating to this difficult question is in progress. Educational and immigration authorities have given a great deal of assistance to the Board in this matter.

BROADCASTING OF OBJECTIONABLE MATTER.

83. Observations of programmes by the Board's officers and its State Representatives during the year did not reveal any breach of the provisions of section 118 of the *Broadcasting and Television Act 1942-1956*, which prohibits the broadcasting of any matter which is blasphemous, indecent or obscene, nor did the Board's investigations of complaints received from listeners concerning the broadcasting of objectionable items disclose that grossly offensive matter had been broadcast. There were, however, some programmes, mostly performed in front of a studio audience, in which the cumulative effect of patter, situations and sketches was at times not in keeping with the usual standards. During the year, the Board directed the attention of the Management Committee of the Australian Federation of Commercial Broadcasting Stations to this type of programme and urged the Committee to impress on the members of the Federation the importance of exercising the adequate supervision over their programmes which is a specific responsibility of each licensee of a commercial broadcasting station under section 99 of the Act.

84. There was some evidence during the year of a lack of proper supervision, particularly in respect of programmes prepared by production organisations which, as was pointed out in paragraph 74 of the Board's Eighth Annual Report, have no responsibilities under the Act. The Board has found it necessary to question the suitability of a series of such programmes on various grounds, but mainly because of the fact that they were unsuitable in several respects for broadcasting at a time when there would be a large juvenile audience, namely 7 p.m. on Sunday evening. As a result of the Board's action, the series which was mainly in the form of dramatisations of actual crimes in which the identities of the persons concerned were at times very thinly disguised, has been replaced by another programme.

85. Another programme prepared by a production organisation, which was considered by the Board to be unsuitable for broadcasting, was one of a series dealing with social problems, the Board's general attitude to which is indicated by the following extract from the Television Programme Standards, which is equally applicable to broadcasting programmes:—

"It should be understood that these standards are not intended to prevent the televising in good faith, at appropriate times and in appropriate circumstances, of—

- (a) genuine works of artistic or literary merit; or
- (b) serious presentation of moral and social issues.

Such programmes are, indeed, to be encouraged, so long as due warning of the nature of the programme is given, where necessary, both in advance publicity and at its commencement."

The episode in question related to prostitution. It was in two parts, a dramatised version of how a person fell into prostitution and a discussion based broadly on that subject. The dramatisation was not, in the opinion of the Board, an essential preliminary to the discussion; it was unnecessarily revolting; it did not, in any case, appear to the Board to deal at all adequately with the problem in many of its aspects; moreover, it occupied half the time available, with the result that insufficient time was left for a serious discussion of the problem. In consequence, the subject received inadequate treatment, several aspects of the problem including, for example, the moral issues, being completely ignored. On these grounds, the Board informed the producers that, because of the inadequacy of the treatment of the subject, the production was unsuitable for broadcasting, and that the presentation of such a programme without previous warning and at 6.30 p.m. on a Sunday, as had been the case at one station, was to be deplored.

THE OLYMPIC GAMES.

86. In 1956 the Olympic Games were held in the Southern Hemisphere for the first time, posing great problems for broadcasting and communication authorities. Planning, which had commenced about three years in advance, was co-ordinated by a Communications and Broadcasting Committee consisting of representatives of the XVIth Olympic Games Organising Committee, the Postmaster-General's Department, the Overseas Telecommunications Commission, the Australian Broadcasting Commission and the Australian Federation of Commercial Broadcasting Stations. The coverage of the Games by forty-three broadcasting organisations from all parts of the world demanded the provision of special facilities on a large scale. This responsibility was undertaken by the Australian Broadcasting Commission and the Postmaster-General's Department in consultation with the overseas bodies concerned. General organisation, including accommodation, meals, transport, interpreters, &c., was the responsibility of the Australian Broadcasting Commission whilst the Postmaster-General's Department concentrated on the task of providing the technical services.

87. All arrangements were completed in detail many months beforehand so that when the overseas commentators arrived in Melbourne all the facilities to meet their particular requirements were readily available. Microphones, landlines and magnetic tape recorders were provided at twenty different points distributed over the ten competition venues. As such a large number of commentaries and interviews in many languages could not be transmitted simultaneously, forty-eight small studios with associated control, recording and switching equipment were constructed at the main stadium to enable commentators to edit their material into recorded programme units prior to dispatch. These were transmitted at the earliest times favourable for reception at their respective destinations, all six of Radio Australia's transmitters and one of the internal service high-frequency stations being used for this purpose. In spite of the suspension of Radio Australia's normal programmes (other than news services) and the employment of the transmitters almost continuously, it was necessary for a considerable overflow of programmes to be sent on radio telephone channels. This the Overseas Telecommunications Commission accomplished whilst meeting unprecedented demands for external services of a general nature. In all, the ninety-six overseas commentators were able to transmit 1,144 separate programmes, of 736 hours total duration, to their homelands over the brief period of the Games.

88. Australian listeners were given an excellent coverage both by the Australian Broadcasting Commission and by the Australian Federation of Commercial Broadcasting Stations. On the national network programme schedules were re-arranged to make way for eye-witness descriptions of all main events. With the exception of a few events which were by nature unsuitable for broadcasting in full, descriptions were given of all main competitions. The practice adopted was to describe events as they occurred at the principal venues, and to provide summaries of these and other events at regular intervals. A daily summary "Olympic Magazine" was broadcast at 6.30 p.m. The commercial stations pooled resources in order to give a Federation coverage of high standard. Twenty-six of the most experienced commentators from commercial broadcasting stations were selected to give a comprehensive coverage. The necessity for maintaining advertising and feature programme schedules prevented most stations from using all the material available but the opening and closing ceremonies were broadcast throughout the Commonwealth, as were three daily summaries at times convenient to the majority of listeners (1.00 p.m., 4.30 p.m. and 9.30 p.m.).

PART V: TELEVISION: ADMINISTRATION.

89. The year to which this report relates was specially notable for the fact that both the National Television Service and the Commercial Television Service were inaugurated in Sydney and Melbourne in accordance with the provisions of the *Broadcasting and Television Act 1942-*

1956, the dates of commencement of service by the national and commercial stations in those cities being—

- National Station ABN Sydney, 5th November, 1956.
- National Station ABV Melbourne, 18th November, 1956.
- Commercial Station TCN Sydney, 16th September, 1956.
- Commercial Station ATN Sydney, 2nd December, 1956.
- Commercial Station HSV Melbourne, 4th November, 1956.
- Commercial Station GTV Melbourne, 19th January, 1957.

These stations were established in conformity with the general policy of the Government, determined in September, 1954, after considering the recommendations of the Royal Commission on Television, that television should be introduced on a gradual basis commencing with stations in Sydney and Melbourne, and that as soon as it was considered practicable to do so, services should be extended to other capital cities and to country areas. As will be seen from Parts VI and VII of this report, very satisfactory progress has been made with the development of the services in Sydney and Melbourne and towards the end of the year to which this report relates, the Board considered that a stage had been reached when, pursuant to section 16 of the Act, it should make proposals to the Minister for the extension of television to other centres.

90. The Board accordingly submitted a full report to the Minister on the existing services, in which it pointed out—

- (a) that at each of the stations in Sydney and Melbourne, technical equipment had been installed and was being operated in accordance with the Board's Standards for the Technical Equipment and Operation of Television Stations;
- (b) that from inspections of the stations and observations of their transmissions over a wide area, a high standard of technical efficiency had been attained notwithstanding that, in the case of the national stations, the service had been commenced on an interim basis pending the erection of the main transmitters and towers;
- (c) that the experience already gained had demonstrated that the technical standards on which the services have been commenced are soundly based;
- (d) that in the short time during which the Sydney and Melbourne stations had been in operation, both the Australian Broadcasting Commission and the licensees of the commercial television stations had made remarkable progress towards the development of programme services of a comprehensive character;
- (e) that the hours of service of the stations were being steadily increased; and
- (f) that there was a substantial increase each month in the number of receivers in the hands of the public.

The Board expressed the view to the Minister that, in view of the successful establishment of the services in Sydney and Melbourne, it seemed desirable to plan for the extension of television to other centres, and submitted proposals for his consideration.

91. On the 4th September, 1957, the Minister announced in the House of Representatives that the Government had decided to proceed with the second phase of the extension of television services in Australia. Arrangements would be made, he said, for the establishment of national television stations in Brisbane, Adelaide, Perth and Hobart and for the Board to hold public inquiries into applications for a licence for a commercial television station in each of those cities. The Minister pointed out that this decision was in accordance with the policy announced by the Government in 1954 that television would be introduced into the Commonwealth on a gradual basis, the extent and timing of each stage in the development of the services being determined by the knowledge gained in the previous stages and the economic circumstances of the nation. The Government, he stated, had made a special examination of the financial aspects of the matter, from which it seemed evident that the revenue which would be received from viewers' licence fees (£5 per annum) and the excise duty of £7 on cathode ray tubes would ensure that the costs of the service are borne by those who use it and that the provision of the service would therefore impose no financial burden on the public in general.

THE NATIONAL TELEVISION SERVICE.

92. As stated in the Board's Eighth Annual Report, section 59 of the *Broadcasting and Television Act 1942-1956* imposes on the Australian Broadcasting Commission the responsibility of providing the programmes of the National Television Service, while section 74 of the Act requires the Postmaster-General's Department to provide and operate the national television transmitting stations as well as the technical equipment required to connect the studios of the Commission to the local transmitter. The Commission provides and operates all other technical equipment. The sites of the transmitting stations for Sydney and Melbourne are at Gore Hill and Mt. Dandenong respectively, while studios are in the course of erection adjacent to the transmit-

ting site in the case of Sydney, and at Ripponlea in the case of Melbourne. It was necessary for the Commission to commence the national service in both cities on an interim basis pending the completion of the studios and the installation of the main transmitters and towers. The transmitting installations were, however, completed and brought into service in Sydney in July, 1957, and in Melbourne in September, 1957. The two main studios to be provided in Sydney and one of the two in Melbourne are expected to be in operation early in 1958, and the second Melbourne studio later in that year. Meanwhile programmes are being produced in a small section of the permanent building in Melbourne and in a temporary structure on the studio site in Sydney.

THE COMMERCIAL TELEVISION SERVICE.

Licences for Commercial Television Stations.

93. The licensees of the four commercial television stations at present in operation are:—

- Station ATN, Sydney—Amalgamated Television Services Pty. Ltd.
- Station TCN, Sydney—Television Corporation Ltd.
- Station HSV, Melbourne—Herald-Sun TV Pty. Ltd.
- Station GTV, Melbourne—General Television Corporation Pty. Ltd.

The licences were granted for a period of five years commencing on 1st December, 1955, in accordance with the provisions of regulations under the *Television Act 1953*, which were subsequently incorporated in the *Broadcasting and Television Act 1942-1956*.

94. The *Broadcasting and Television Stations Licence Fees Act 1956* prescribes that the fee for the first year of the period of the licence shall be £100 and for each subsequent year £100 plus one per centum of the gross earnings of the station from the televising of advertisements or other matter.

The Licensees of Commercial Television Stations.

95. Details of shareholdings in the companies holding licences for commercial television stations as at 30th June, 1956, were set out in the Boards Eighth Annual Report.

Section 92 of the *Broadcasting and Television Act 1942-56* provides that where a licence for a commercial television station is held by a company having a share capital, the licence is subject to the condition that substantial changes in the beneficial ownership of the shares in the company, or in the memorandum or articles of association of the company, will not take place without the approval of the Minister. During the year, Amalgamated Television Services Pty. Ltd. and General Television Services Pty. Ltd. sought the approval of the Minister for changes in the beneficial ownership of a substantial number of shares in their companies and in their articles of association. After carefully considering the reasons advanced for the changes by the companies, which in each case were supported by all the shareholders, and the reports and recommendations made by the Board as requested by the Act, the Minister gave his approval to their proposals.

96. The shareholdings in each of the licensee companies and the directors of those companies were, at the time this report was being prepared, as shown hereunder:—

AMALGAMATED TELEVISION SERVICES PTY. LTD., LICENSEE OF STATION ATN, SYDNEY.

	£1 Shares
The Sun-Herald-2 UE Group—	
Associated Newspapers Ltd.	125,000
John Fairfax & Sons Pty. Ltd.	150,000
Radio 2 UE Sydney Pty. Ltd.	25,000
	300,000
The John Fairfax-Macquarie Group—	
John Fairfax & Sons Pty. Ltd.	340,000
2 GB-Macquarie-Artransa	60,000
	400,000
The 2 GB-Macquarie-Artransa Group—	
Broadcasting Station 2 GB Pty. Ltd.	} 119,118
Macquarie Broadcasting Service Pty. Ltd.	
Artransa Pty. Ltd.	
The A.W.A. Group—	
Amalgamated Wireless (Australasia) Ltd.	75,000
Email Ltd.	89,000
G. B. S. Falkiner	10,000
Sir Norman Nock	5,000
Cranbrook Holdings Pty. Ltd.	10,000
Washington H. Soul Pattinson & Co. Ltd.	25,000
T. G. Murray	5,000
Mrs. C. Murray	5,000
W. H. Paling & Co. Limited	10,000
Australian Record Co. Limited	5,000
Australian United Investment Co. Ltd.	10,000

	£1 Shares
Gearin O'Riordan Limited	10,000
The Anglo-Australian Corporation Pty. Ltd.	10,000
Beale and Co. Limited	10,000
C. N. McKay	7,000
H. V. McKay	7,000
Mrs. H. M. Stevenson	7,000
	<hr/>
	300,000
The 2 UW Group—	75,000
The Australian Broadcasting Co. Pty. Ltd. ..	<hr/>
Grand total	1,194,118

Directors:

Mr. Justice A. V. Maxwell (Chairman)	P. H. Palmer
R. A. G. Henderson (Executive Chairman)	J. D. Patience
A. H. McLachlan	A. F. Albert
Sir Lionel Hooke	S. R. I. Clark
E. G. F. Horne	

TELEVISION CORPORATION LTD., LICENSEE OF STATION TCN, SYDNEY.

	10s. Shares
Consolidated Press Ltd.	569,493
Associated Newspapers Ltd., England	232,000
Philips Electrical Industries Pty. Ltd.	115,500
Broadcasting Station 2 SM Pty. Ltd.	49,500
Paramount Film Service Pty. Ltd.	30,500
2 KY Broadcasting Station	19,500
Tivoli Circuit Australia Pty. Ltd.	20,000
Church of England Property Trust, Diocese of Sydney	60,000
Shares held by over 4,000 shareholders in lots ranging from 100 to 30,000 shares	803,500
	<hr/>
Total	1,899,993

Directors:

D. F. H. Packer (Chairman)	D. F. S. McLean
C. Von Hake	G. F. Sanger
R. A. King	Father M. R. Prendergast
F. N. Leddy	Major-General Rev. C. A. Osborne
D. N. Martin	N. B. Theodore

GENERAL TELEVISION CORPORATION PTY. LTD., LICENSEE OF STATION GTV, MELBOURNE.

	£1 Shares
Electronic Industries Ltd.	551,668
David Syme & Co. Ltd.	168,301
Hoyts Theatres Ltd.	52,633
Greater Union Theatres Pty. Ltd.	52,634
Nilsen's Broadcasting Service Pty. Ltd.	35,290
Val Morgan & Sons Pty. Ltd.	17,646
Efttee Broadcasters Pty. Ltd.	12,306
J. C. Williamson Theatres Ltd.	9,522
	<hr/>
	700,000

Directors:

Sir Frank Tait (Chairman)	N. B. Rydge
Sir Harold Campbell	E. Turnbull
A. J. Moir	Sir Arthur Warner
O. J. Nilsen	H. P. Abrahams

HERALD-SUN TV PTY. LTD., LICENSEE OF STATION HSV, MELBOURNE.

	£1 Shares
Herald and Weekly Times Ltd.	637,500
Associated Newspapers Ltd., London	112,500
	<hr/>
	750,000

Directors:

H. D. Giddy (Chairman)	P. F. Jones
G. A. Caro	J. C. A. Waters
J. F. Williams	D. J. Riddle

Limitation on ownership and control of commercial television stations.

97. Licences for commercial television stations were granted to the companies mentioned in the preceding paragraph subject to conditions as to the extent to which shares would be held by persons other than Australian residents, and these restrictions have been incorporated in section 92 of the *Broadcasting and Television Act 1942-1956* in the following terms:—

“Where a licence for a commercial television station is held by a company having a share capital, the licence is subject to the following conditions:—

(a) at all times during the currency of the licence—

(i) shares representing not less than eighty per centum of the issued capital of the licensee will be beneficially owned by persons each of whom is either a resident of Australia (other than a company) or a company controlled by persons (other than companies) who are residents of Australia; and

(ii) shares representing more than fifteen per centum of the issued capital of the licensee will not be beneficially owned by a person (other than a company) who is not a resident of Australia or by a company controlled, directly or indirectly, by persons who are not residents of Australia;

(b) the Chairman of Directors of the licensee or another director approved by the Minister, and the person holding or acting in the office of manager of the licensee or the office of secretary of the licensee, will make and lodge with the Board, within fourteen days after the end of the first period of six months of the currency of the licence, and within fourteen days after the end of each succeeding period of six months of the currency of the licence, a statutory declaration stating whether, to the best of his knowledge and belief, the last preceding paragraph has been complied with at all times during that period of six months, and stating what steps he has taken to ascertain whether that condition has been so complied with.”

Each of the four companies holding licences at the present time submitted statutory declarations during the year in accordance with paragraph (b) above.

TELEVISION IN RELATION TO DEAF AND DUMB PERSONS.

98. Evidence submitted to the Royal Commission on Television (1953) by the Adult Deaf and Dumb Society of Victoria stressed the special benefits of television for people so afflicted in that, because of their handicap, their entertainment and education are received mainly through the sense of sight. It was pointed out that the visual component alone of many programmes provides an understanding of their meaning and that there is much opportunity to supplement this by lip-reading. The Association suggested that special programmes should be provided for the deaf and dumb, including programmes designed for children, and referred to the excellent work of the British Broadcasting Corporation in this field. The Society also requested that provision should be made for the issue of free television viewers' licences to the deaf and dumb, it being claimed that television is of the same value to these people as broadcasting is to the blind who, under the Act, are granted free broadcasting listeners' licences.

99. During the year, the Postmaster-General's Department, which is responsible for the administration of the sections of the Act relating to broadcast listeners' and television viewers' licences, sought the views of the Board concerning representations from the Adult Deaf and Dumb Society of Western Australia for the grant of free viewers' licences to the deaf and dumb. After full consideration of the subject, the Board formed the opinion that the matter should be sympathetically considered because it felt that the use of television receivers in homes or institutions where there were deaf and dumb children should be encouraged in view of the aid that television could be in the education of such children, particularly if special sessions in lip-reading, &c., were arranged for their benefit.

100. The Board also invited the attention of the Australian Broadcasting Commission and the licensees of commercial television stations to the evidence submitted to the Royal Commission on the subject of television in relation to the deaf and dumb in the hope that at some future date they may be able to arrange services especially designed to assist the education of deaf and dumb children similar to those which are conducted by the British Broadcasting Corporation. At the date of writing this report, replies promising consideration had been received from the Commission and from the licensee of one commercial television station.

PART VI.—TELEVISION—TECHNICAL SERVICES.

101. Under section 16 of the *Broadcasting and Television Act 1942-1956*, the Board is obliged amongst other things—

- (a) to ensure the provision of services by television stations in accordance with the plans from time to time prepared by the Board and approved by the Minister;
- (b) to determine the situation and operating power of a television station;
- (c) to determine the frequencies of a television station within bands of frequencies notified to the Board by the Postmaster-General as being available for such stations; and
- (d) to ensure that the technical equipment and operation of television stations are in accordance with such standards and practices as the Board considers to be appropriate.

FREQUENCY ASSIGNMENT PLAN.

102. The first step taken by the Board in connection with the development of plans for the provision of services by television stations was the preparation of a Provisional Frequency Assignment Plan, the purpose of which was to allocate channels for television stations throughout the Commonwealth from the following ten channels which are available for television:—

- Channel 1—49-56 megacycles per second.
- Channel 2—63-70 megacycles per second.
- Channel 3—85-92 megacycles per second. (For use in inland country areas only).
- Channel 4—132-139 megacycles per second. (Available from 1st July, 1963).
- Channel 5—139-146 megacycles per second. (Available from 1st July, 1963).
- Channel 6—174-181 megacycles per second.
- Channel 7—181-188 megacycles per second.
- Channel 8—188-195 megacycles per second.
- Channel 9—195-202 megacycles per second.
- Channel 10—209-216 megacycles per second.

As the Board has explained in previous reports, under the Provisional Frequency Assignment Plan, which is again published in Appendix "C", channels have been allocated in such a way as to provide for four services in the capital city of each State and two services in every town throughout the Commonwealth with a population in excess of 5,000. In the absence of actual experience under Australian conditions the plan was based on certain assumptions as to the grade of service required to ensure acceptable reception by the public and on the propagation characteristics of the available frequencies. It provides for the sharing of channels by two or more stations located sufficiently far apart to avoid objectionable inter-station interference. In its preparation, the Board was obliged to rely on data from overseas sources, and in particular on the standards of acceptable field strengths for urban and rural service and the geographical separation of co-channel and adjacent channel stations, which had been adopted by the Federal Communications Commission (F.C.C.) of the United States. Because of the reduction of the noise level in modern receivers and the use of higher gain receiving aerials, the F.C.C. has recently varied its standards by lowering the field strength previously regarded as necessary to ensure satisfactory reception in rural areas. These developments have had the effect of extending the estimated coverage of a television station, provided it is not subject to interference from stations operating on the same channel.

103. The technical basis of the Provisional Frequency Plan was explained in paragraphs 143 to 147 of the Board's Seventh Annual Report, and in paragraph 92 of its Eighth Annual Report, the Board stated that it proposed to hold a public inquiry into the Plan. The Board deferred this proposal, pending the Government's consideration of its report concerning the extension of television services (see paragraph 90). It is, however, now possible to examine the Provisional Frequency Assignment Plan in the light of the actual experience of the operation of the six television stations which commenced service in Sydney and Melbourne during the year. Field strength surveys of all six stations have been made and they have disclosed no serious differences between the measured field strengths of the stations and the field strengths which were predicted for comparable conditions when the Provisional Frequency Assignment Plan was being prepared. This applies not only to field strengths measured at locations within the service areas of the stations, but also to measurements made at a few locations some distance beyond the service areas where interference from co-channel stations might be expected when those stations are ultimately established. The Board is therefore satisfied that, technically, the Provisional Frequency Assignment Plan is based on sound principles and that, from that point of view, it provides an acceptable basis for the development of television services throughout the Commonwealth,

although minor modifications may be desirable to overcome difficulties which might otherwise be encountered because of the fact that channels 4 and 5 will not, as the Board is at present advised, be available for television until 1st July, 1963. As mentioned in paragraph 102, the Plan provides for four stations in the capital cities of the States, for one of which channel 10 has been reserved. On the other hand, channels 4 and 5 have been reserved for stations in country districts. As it now seems likely that stations will be established in country districts before a fourth station commences service in either Sydney or Melbourne, consideration is being given to the desirability of allocating channel 10 to country stations and reserving channel 4 or 5 for a fourth station in Sydney and Melbourne. This re-arrangement, which would present no difficulties, would enable two channels to be provided as soon as required for stations to serve the Illawarra, Central Tablelands, Richmond-Tweed areas of New South Wales and the Bendigo district and Latrobe Valley in Victoria.

104. During the field surveys, it was observed that the existing television services are being regularly received at much greater distances from the stations than the predictions, based on the F.C.C. standards of limits of acceptable service, indicated would be the case, even if the predictions had been based on the reduced F.C.C. standard of acceptable field strength mentioned in paragraph 102. Although no quantitative measurements have been made by the Board of the noise level of Australian receivers, they are, in this respect, probably equivalent to American receivers. Reception of the Sydney and Melbourne services at distances beyond the predicted limits of acceptable service may be accounted for by the fact that the viewers in question have installed higher gain receiving aerials operated at greater heights above the ground than those contemplated in the F.C.C. standards. The allocation of frequencies cannot be based on the assumption that costly high gain receiving aerials at heights of the order of 100 feet, as was observed to be the case with many receivers in the fringe areas of the stations already in operation, would be generally used. With the extension of television services, a number of additional stations will be established, some operating on the same channels as those in use by the Sydney and Melbourne stations, and interference from co-channel stations will be experienced in many locations, where long distance reception is now practicable. Viewers in these locations will then have to change the direction of their aerial systems to secure reliable reception from other stations.

TECHNICAL DETAILS OF TELEVISION STATIONS IN SYDNEY AND MELBOURNE.

105. Full details were given, in paragraph 93 of the Eighth Annual Report, of the sites, studios and technical equipment of the following national and commercial television stations which were at the time being established in Sydney and Melbourne:—

National Television Station ABN Sydney—

Operating frequencies: Channel 2—63-70 Mc/s. Vision 64.25 Mc/s. Sound 69.75 Mc/s.
Operating power: Vision 100 kw e.r.p. Sound 20 kw e.r.p.

National Television Station ABV Melbourne—

Operating frequencies: Channel 2—63-70 Mc/s. Vision 64.25 Mc/s. Sound 69.75 Mc/s.
Operating power: Vision 100 kw e.r.p. Sound 20 kw e.r.p.

Commercial Station ATN Sydney—

Operating frequencies: Channel 7—181-188 Mc/s. Vision 182.25 Mc/s. Sound 187.75 Mc/s.
Operating power: Vision 100 kw e.r.p. Sound 20 kw e.r.p.

Commercial Station TCN Sydney—

Operating frequencies: Channel 9—195-202 Mc/s. Vision 196.25 Mc/s. Sound 201.75 Mc/s.
Operating power: Vision 100 kw e.r.p. Sound 20 kw e.r.p.

Commercial Station GTV Melbourne—

Operating frequencies: Channel 9—195-202 Mc/s. Vision 196.25 Mc/s. Sound 201.75 Mc/s.
Operating power: Vision 100 kw e.r.p. Sound 20 kw e.r.p.

Commercial Station HSV Melbourne—

Operating frequencies: Channel 7—181-188 Mc/s. Vision 182.25 Mc/s. Sound 187.75 Mc/s.
Operating power: Vision 100 kw e.r.p. Sound 20 kw e.r.p.

106. The national stations commenced operations on low power and with temporary aerial arrangements, but the technical installation of the stations having been finally completed ABN and ABV commenced transmission on full power from their permanent radiating systems in July, 1957, and September, 1957, respectively. Information on the acceptance tests of the transmitting and studio equipment, which have been carried out by the Postmaster-General's Department and the Australian Broadcasting Commission respectively, has been made available to the Board and it indicates that the installations comply with the Board's Standards for the Technical Equipment and Operation of Television Stations. The commercial stations are all operating on

full power, and their technical equipment has been carefully examined by the Board's engineers for compliance with the Standards. There are some items of equipment in respect of which the Board has, for various reasons, considered it premature to fix standards. These have been checked and found to be in accordance with modern practice. As a result of the inspections made by the Board's officers, some desirable modifications were made to equipment by licensees, and at the time this report was being prepared, each of the four stations was, except for some minor deficiencies in certain cases, complying with the Technical Standards. The quality of pictures transmitted by all the stations in Sydney and Melbourne is good and compares very favourably with pictures transmitted by stations in overseas countries.

STANDARDS FOR THE TECHNICAL EQUIPMENT AND OPERATION OF TELEVISION STATIONS.

107. In paragraph 96 of its Eighth Annual Report, the Board stated its intention of deferring the final adoption of its Standards for the Technical Equipment and Operation of Television Stations, which had been prepared after consultation with the Post Office, the Australian Broadcasting Commission and the licensees of commercial television stations, until their applicability in practice had been tested by the actual operation of the television stations in Sydney and Melbourne. As a result of the experience which has been gained, some variations of the provisional Standards are considered necessary and it is also intended to fix standards in relation to a number of matters not previously covered, such as the transient response characteristics of equipment. The proposed modifications of the Standards will not, however, be extensive, as the performance characteristics already specified are considered on the whole to be adequate to ensure good pictures and sound.

GHOST TRANSMISSIONS DUE TO REFLECTION.

108. Reference was made in paragraphs 94 and 95 of the Eighth Annual Report to the conflicting views which were held at the time concerning the possibility that reflections from transmitting towers and aerials some hundreds of feet apart, as was proposed in the case of the three television stations to be established at Gore Hill (Sydney) and Mt. Dandenong (Melbourne), could cause ghosts or displaced images on transmissions, and that such reflections might be of sufficient magnitude to make the ghosts noticeable throughout the service areas of the stations concerned. Because of the conflict of opinion on this point, the Board made practical tests at Mount Dandenong before the stations were established there, and these tests indicated that the proposed location of transmitting aerials at distances of half a mile or less would give satisfactory results. Experience of the transmissions of the Sydney and Melbourne stations has confirmed this conclusion and although it has been suggested that ghosts of discernible magnitude from this cause do exist, the Board's investigations indicate that they are not of any greater magnitude than images due to "overshoot" or "ringing" on the transmissions, or indeed to ghosts occurring from objects within the service area. The Board proposes to make detailed measurements of the magnitude of reflections on the transmissions of the stations when staff is available for the purpose.

TELEVISION OPERATOR'S CERTIFICATES OF PROFICIENCY.

109. Section 93 of the *Broadcasting and Television Act 1942-1956* provides that the technical equipment of a commercial television station "shall be operated in such manner as the Board approves and only by such persons as, in the opinion of the Board, are competent to operate the equipment". The Board has determined that—

- (a) all technical staff operating television transmitters should be required to hold the Board's Television Operator's Certificate of Proficiency or to be otherwise qualified to the satisfaction of the Board;
- (b) during all actual broadcasts of programmes from studios or outside broadcasting units, an operator holding the certificate, or otherwise qualified to the satisfaction of the Board, should be present at the location from which the programme originates to supervise all the technical officers concerned; and
- (c) a person holding the certificate, or otherwise qualified to the satisfaction of the Board, should be responsible for the maintenance of studio transmitting and outside broadcast equipment.

Examinations of candidates for the Television Operator's Certificate of Proficiency are now conducted by the Board in June and December each year. The following figures show the number of candidates for the examination during the past year and the number who passed:—

	Number of Candidates.	Number of Passes.
December, 1956	87	34
June, 1957	41	14

MEETING OF THE C.C.I.R. (COMITE CONSULTATIF INTERNATIONAL DES RADIO COMMUNICATIONS).

110. A plenary assembly of the C.C.I.R. was held at Warsaw in August and September, 1956, Australia being represented by Mr. J. D. Campbell, Sectional Engineer, Radio Section, Postmaster-General's Department, Dr. W. Baker, Officer-in-Charge, Ionospheric Prediction Service, Flight-Lieut. D. Evans (R.A.A.F.), and Mr. J. M. Dixon of the Board's technical staff. Three of the study groups among which the work of the C.C.I.R. is divided are of particular interest to the Board, namely, Study Group X on Broadcasting, Study Group XI on Television, and Study Group XII on Tropical Broadcasting. Some information concerning subjects discussed by these three Groups is given in the succeeding paragraphs.

111. *Frequency modulation broadcasting.* In connection with frequency modulation broadcasting, Study Group X recommended—

- (a) that the maximum frequency deviation should be either ± 75 kc/s or ± 50 kc/s;
- (b) that the pre-emphasis shall be in accordance with the admittance of a parallel combination of a capacitance and resistance having a time constant of 50 microseconds; and
- (c) that the acceptable field strengths to ensure satisfactory reception of a frequency modulation broadcasting station should, for a 10 meter height of receiving aerial, be 50 microvolts per metre minimum in the absence of industrial and domestic interference, 250 microvolts per metre minimum in rural areas in the presence of such interference, 1 millivolts per metre (mv/m) in urban areas, and 3 mv/m in large cities.

These recommendations will be considered by the Board in the event of frequency modulation broadcasting being introduced into Australia. (See paragraph 54.)

112. *Sound recording on film.* The methods recommended by Study Group XI for the standardisation of sound recording on film for the international exchange of television programmes were—

- (a) conventional optical methods on 16 mm or 35 mm film in accordance with the appropriate Standards of the American Standards Association;
- (b) magnetic stripe on 16 mm picture film with various provisions including a sound recording 28 frames in advance of the picture;
- (c) 16 mm magnetic sprocketed film separate from the picture film and running at identical speeds, with the sound track on the edge of the sprocketed film. Further studies on the standardisation of this method are to continue in collaboration with the International Electro-technical Commission and the International Standards Organisation.

Australian practice in this field is in accordance with these methods, programmes being recorded on 16 mm magnetic film unmarried to the picture film (two locations of the sound tracks being used, in some cases the edge, and in some cases the centre), on optical film (by medium of 16 mm magnetic unmarried film as an intermediate stage) and on magnetic stripe on 16 mm picture film. It has been noted that the American Society for Motion Picture and Television Engineers recently published a proposed standard of advance of magnetic stripe sound recording of 28 frames which will, in due course, be submitted to the American Standards Association.

113. *Colour Television.* Study Group XI concluded that the time was not yet opportune for a decision on a common colour television standard for Europe. This decision was partly due to the reluctance of European nations which are not using the 625 line monochrome system to agree to a compatible system such as a modification of the N.T.S.C. system used in the United

States of America. An informal meeting was held of representatives of countries which have adopted the 625 line system. This meeting favoured the use of 625 lines for colour television using a system similar to that standardised for use in the U.S.A. (N.T.S.C. system). However, the adoption of such a system, which would be incompatible with systems using other than 625 lines, might involve the use of the UHF bands for colour, if a common standard were to be achieved. This meeting proposed to take action to submit a proposal for a system such as N.T.S.C. to the next meeting of Study Group XI. Italy and West Germany indicated that they no longer feel obliged to reserve bands IV and V (ultra high frequencies—UHF) for colour television and that they intend using band IV to complete their monochrome coverage. The Board is closely watching developments in this field.

114. *Phase distortion in picture transmitters and receivers.* The subject of phase distortion in television picture transmitters and receivers was discussed and a study programme was put in hand. The contributing forms of distortion are quadrature distortion and group delay in the transmitter brought about by vestigial sideband transmission, and group delay introduced in the receiver. Two practical possibilities were discussed, first, phase correction to be applied at the video input to the transmitter to correct both for the transmitter and for an average receiver; and, secondly, phase correction at the transmitter for the transmitter only, implying the use of phase linear receivers. The former is common practice in Germany, and for colour transmission in the U.S.A. The United Kingdom considers that there should be compensation at the transmitter for the transmitting system but not for the receiver. In Australia, this subject is one of considerable interest at the present time, and informal discussions have taken place between the Board's engineers and representatives of stations and receiver manufacturers. (See also paragraph 121.)

115. *Wave Form.* Some modifications have been recommended to the waveform of the C.C.I.R. 625 line system. These include a specification for "set up" or difference between blanking and black levels, an increase in front porch to 1.0-1.5 microseconds, a reduction in the horizontal synchronising pulse width to 4.8-5.2 microseconds, and in equalising pulse width to 2.3-2.6 microseconds, an increase in rise and decay times of synchronising and equalising pulses to 0.2-0.4 microsecond and a reduction in vertical blanking period to 1160-1417 microseconds. The desirability of incorporating these changes in the Australian Standards is being considered by the Board. Existing receivers would not be affected by the proposed changes.

116. *Tropical broadcasting.* The work of Study Group XII on Tropical Broadcasting is of special importance to Australian internal high frequency services in view of its proposals for the limitation of power, which question was discussed in paragraph 89 of the Board's Sixth Annual Report. At the plenary meeting of the C.C.I.R. in 1953, consideration was given to a recommendation of the 1951 meeting that the upper limit of power for short distance high frequency broadcasting in the tropical zone should be—

(a) for frequencies up to and including 5060 kc/s, 10,000 watts by day and 5,000 watts by night;

(b) for frequencies above 5,060 kc/s, 5,000 watts by day and 1,000 watts by night.

This proposal was opposed by the Australian delegation, mainly on the ground that it discriminated against short distance internal services, because, whilst an upper power limit was proposed for short distance transmissions, no such limit was suggested for other services sharing the same frequency bands. A reservation was entered at the 1953 meeting on behalf of the Commonwealth.

117. At the Warsaw meeting, the recommendation of 1951 was replaced by a new recommendation to the effect that for services in the tropical zone:—

(a) for frequencies below 5,060 kc/s and for a service area limited to 400 kilometres (km), the nominal power of a transmitter should not exceed 10 kw;

(b) for frequencies below 5,060 kc/s and for a service area limited to 800 km, the nominal power of a transmitter should not exceed 30kw;

(c) for frequencies above 5,060 kc/s where tropical broadcasting services use the same frequency bands as the high frequency broadcasting services, the same power limit as recommended by the Mexico City Conference, 1949, shall apply, namely, a nominal power limit of 130 kw which can be increased to 240 kw for difficult circuits.

In an earlier draft of this recommendation the power limits of (a) and (b) above applied both above and below 5,060 kc/s. In the discussion on this draft, Australia opposed power limits for tropical broadcasting in bands shared with high frequency broadcasting where there were no corresponding power limits. As a compromise, Australia agreed to accept the power limits stated, provided a satisfactory high frequency broadcasting plan was completed by the International Frequency Registration Board. The final recommendation outlined above was accepted by Australia without reservation.

118. *Atmospheric noise data.* One C.C.I.R. document of particular interest to the Board was that on atmospheric noise data prepared as a result of work carried out by Study Group VI prior to the Warsaw Plenary Assembly. The data which was made available for the most part by the United States and the United Kingdom enables natural noise levels to be calculated for any area in the world for any frequency between 10 kc/s and 30 mc/s. The data is more accurate than similar information previously published, and some estimates of field strength required to overcome noise in Australia, which are based on the information in the new document, are more in accordance with known facts than were predictions based on earlier data of a similar nature. The document is therefore regarded as a valuable addition to the Board's information on the technical aspects of broadcasting.

SITES FOR TELEVISION STATIONS.

119. The selection of suitable sites is one of the most important factors in planning television services, because the coverage of a television station depends very largely on the availability of an elevated location on which the mast of the station can be erected. The Board's officers have, accordingly, devoted considerable time to this important question and with the aid of contour maps and other information have provisionally selected one or more possible sites for television stations in all the areas for which tentative allocations of channels have been made in the Provisional Frequency Assignment Plan. It will, of course, be necessary for an examination of the provisionally chosen sites to be made before any definite conclusion is reached as to their suitability and investigations have already been made in a number of districts by the Board's engineers. The selection of sites is complicated by the aviation hazards involved in the use of high masts on elevated locations and by the possibilities of interference to or from the operation of other radio services on the same sites. For this reason, the Board's officers who are engaged on the selection of sites collaborate freely with the Department of Civil Aviation and the authorities concerned with the operation of radio services.

TELEVISION RECEIVERS.

120. Paragraph 105 of the Board's Eighth Annual Report contained details of the standards with respect to intermediate frequencies, limits of beat oscillator radiation, tuning range, and radiation from sweep circuits, of television receivers, which had been adopted by the Board after consultation with representatives of receiver manufacturers. At the present time, more than 20 makes of television receivers are being manufactured in Australia and a limited number of receivers designed for Australian standards and channels are being imported. Most of the manufacturers, from the outset, adopted the standard intermediate frequencies and equipped their sets for operation on all ten frequency channels reserved for Australian television stations. One manufacturer at first did not adopt the standard intermediate frequencies and another produced a receiver which was not equipped for operation on all ten channels, but, as far as is known, all manufacturers are now making receivers having the standard intermediate frequencies and being capable of operation on all channels. It has been impracticable for the Board to carry out comprehensive tests of limits of radiation on all makes and types of receivers. Some tests have, however, been made to determine the magnitude of radiation, in some instances, on prototypes at the request of the manufacturers. In almost every case, the receivers which were tested complied substantially with the Board's standards.

121. Some defects in transmission became evident on receivers during the early months of operation of the Sydney and Melbourne stations. One of these was a herringbone pattern appearing in some receivers on Channel 2, sometimes at a low signal input, sometimes at a high input, sometimes at both, without occurring at intermediate levels. This was due to interference between sound and vision channels in the receiver itself, the two combining and producing a video frequency interfering signal. The fact that some receivers were free of the trouble (which in receivers exhibiting it was at about threshold level at normal viewing distances) indicates that its elimination is a matter of receiver design. A second defect was the existence of a white vertical line near the left hand side of the picture. It occurred only in some receivers, and in many cases was limited to one transmission. An investigation indicated that the defect was due to overshoot following the decay of the line synchronising signal (causing the signal during the blanking period to move to a brighter condition than black level). The defect which was inherent in a number of receivers was sometimes aggravated by a similar overshoot in the transmissions of a particular station: it was minimised by a re-arrangement of circuitry in the station.

EXPERIMENTAL INVESTIGATIONS.

122. During the year, a programme of tests on locally made television receivers was put in hand to determine characteristics which are of importance in connection with the Board's responsibilities to ensure satisfactory standards of transmission from television stations and to minimise the incidence of interference. Two aspects of receiver performance received particular attention, namely, the selectivity characteristics and the phase delay characteristics. The former characteristics have a bearing on the interference likely to be experienced by television viewers and the latter on the phase characteristics which should be adopted for television transmitters in order to ensure satisfactory overall transient response characteristics. The defects referred to in the preceding paragraph, namely, the herringbone pattern existing on channel 2 in some receivers and the white vertical line were also investigated in the laboratory.

123. Experimental investigations have also been made into interference from mobile radio services adjacent to channel 2 in the frequency spectrum. The magnitude of the interference has been assessed quantitatively in some typical cases, and investigations have been made regarding suitable remedies for such interference. In the case of proposals for new services likely to cause interference with television, the selectivity characteristics of the television receivers tested enable an assessment to be made of the likely magnitude of the interference. (See also paragraph 127.)

INTERFERENCE TO RECEPTION OF TELEVISION PROGRAMMES.

124. The problem of interference to the reception of television programmes was discussed in paragraphs 102-104 of the Eighth Annual Report, in which reference was made to section 134 of the *Broadcasting and Television Act 1942-1956* which provides that the Governor-General may make regulations for preventing interference to the reception of the programmes of broadcasting stations or television stations.

125. Until television services have been in operation for some time, it will be difficult to assess the extent of the interference which is likely to be experienced in practice. It is therefore premature to contemplate the making of regulations to deal with the problem. It is desirable that as far as is practicable, interference should be prevented at its source, but the attainment of this ideal would be possible only if all electrical equipment and other sources of interference had, in the past, been so designed as to keep radiation below certain limits and similar practices were followed in the future. As matters stand, it may be said, in general, that a large proportion of electrical equipment now in use, including the ignition system of motor vehicles, is a potential source of interference, and in respect of this equipment the best that can be done is to apply corrective measures to proved sources of interference. The possibility of preventive measures being taken in the case of electrical equipment employing electric motors and motor vehicles manufactured in the future has been discussed with the appropriate State Government bodies, and with the representatives of motor car manufacturers and assemblers, and the manufacturers of electrical equipment.

126. It is understood that many of the motor vehicles now being manufactured or imported are fitted with interference suppressors. The matter of electrical equipment, however, presents a more complex problem and until such time as further practical experience has been gained, it is not possible to determine whether the incorporation of interference suppressors during the manufacturing stage is practicable or justified. In the meantime the Standards Association of Australia is proceeding with the task of fixing limits of interference from various classes of electrical equipment not only in respect of the bands of frequencies assigned to television services, but also to other parts of the radio frequency spectrum. The Chairman of the Committee of the Standards Association dealing with this matter is an officer of the Board and the efforts of the Committee are being directed, in the first place, to interference in the medium, high frequency and very high frequency bands, from domestic and light commercial appliances, in relation to which draft standards are being prepared.

127. With the commencement of television services, plans were prepared and facilities established for the investigation of complaints from viewers whose reception was being affected by interference. The Board has undertaken the responsibility for the planning of the measures to be taken in this regard, and the Postmaster-General's Department will implement those measures as an extension of its similar activities in relation to broadcasting and radio-communication services. Although a number of cases of interference to the reception of television programmes has been reported to the Department, interference, up to the present, has not been of a serious nature. The number of complaints received by the Postmaster-General's Department up to the end of

June, 1957 (approximately 200 in Sydney and 360 in Melbourne) was considerably less than was anticipated, representing about 0.8 per cent of the total number of viewers' licences issued in Sydney and Melbourne; this is considered to be attributable to the fact that the high power and suitable location of the television stations is ensuring the provision of adequate field strengths in the populous "built-up" areas. In this connection, it is significant that interference during the year was experienced mostly in respect of reception of Channel 2, in which the national television stations were operating on low power and temporary aerials for several months. Faults in, and the improper adjustment of, television receivers were the main causes of the complaints which were received. Other sources of interference were high tension reticulation systems, other radio services, domestic equipment, and industrial, scientific, and medical equipment, in that order. Ignition interference was not a serious source of complaint, although it could be more troublesome than the complaints indicated. Interference from the operation of other radio services gave rise to many complaints, particularly in respect of Channel 2. Some of this interference was due to harmonic radiations of fixed transmitters and was dealt with by suppression measures in the transmitters. There was considerable interference from mobile radio services operating in the band of frequencies adjacent to Channel 2. It was realised before the commencement of television that some interference of this nature would occur, but it was not considered practicable, due to insufficient information being available, to press for the re-allocation of the frequencies of existing mobile services having regard to the expenditure which would be involved. In this connection, the Postmaster General's Department has co-operated fully by allocating frequencies to any new services in such a manner as to obviate as far as practicable the possibility of interference being caused. The operation of the national stations on their authorised power will overcome much of the trouble.

128. In Sydney the sweep circuit radiation from television receivers has caused some interference with medium frequency broadcast receivers, particularly in blocks of flats where television receivers are so close to medium frequency receivers in adjacent flats that interference is often difficult to remedy. The Board has recommended limits for radiation from sweep circuits of television receivers to minimise this type of interference, and from the tests of typical receivers which the Board has made, the limits recommended are considered to be adequate for normal conditions. Reception in blocks of flats presents a special problem, the remedy for which might necessitate the application of stricter standards than are necessary in the vast majority of cases. This problem is being kept under review.

129. The Board has collaborated with the Postmaster General's Department in the preparation of a brochure containing general information concerning the efficient installation and operation of television receivers and associated aerial systems. The brochure, which is being issued to all holders of licences for television receivers, emphasises the importance of proper installation and operation in order to ensure the best reception. It also outlines the steps which viewers themselves may take to avoid or correct interference difficulties which may arise.

PART VII.—TELEVISION—PROGRAMME SERVICES.

130. The licensee of each commercial television station is required by section 99 of the *Broadcasting and Television Act 1942-1956* to provide programmes and "to supervise . . . the televising of programmes from his station in such manner as to ensure, as far as practicable, that the programmes are in accordance with standards determined by the Board". The Board's Television Programme Standards were published in Appendix "D" to its Eighth Annual Report, in paragraph 108 of which the Board explained the principles on which they were based in the following terms:—

"In approaching this task the Board took as its guiding principles the broad considerations that television as a medium for entertainment, information and education, would reach great numbers of persons of all ages, of all educational backgrounds, and of differing religious faiths, in the privacy of their homes; it was essential to secure that programmes which might cause offence to sections of the public or be harmful to the young people who would make up a large part of the television audience should be avoided; and that, by reason of the nature of the medium itself, television stations have an obligation to ensure that television will be used constructively for the welfare of the community. The Board took the view that while responsibility for the selection of programmes to be seen and heard in each home must to some extent lie with the viewer, it is reasonable for the viewer to assume that the programmes offered will reach standards which have been determined having regard both to the nature of the medium and the obligation of all television stations to use it in the best interests of the Australian community. The objectives of the Board, and the general basis of the standards, are set out in the opening paragraphs, where it is stated that fundamentally the standards require the observance in television programmes of—

- (a) ordinary good taste and commonsense;
- (b) respect for the individual opinions of the public;
- (c) proper regard for the special needs of children; and
- (d) respect for the law and social institutions."

131. As will be seen from the contents of this Part of the report, the licensees of the four commercial television stations in Sydney and Melbourne have, in the short period during which they have been in operation, made good progress towards the development of programme services of a comprehensive character. There has been a steady increase in their hours of service to provide for new features and the presentation of the programmes has improved as experience has been gained. The Board has conducted extensive observations of the programmes and it is glad to report substantial compliance by all licensees with the four fundamental requirements of the Television Programme Standards which are mentioned in the preceding paragraph. The Board was obliged to question the suitability of a few programmes during the year, but from the explanations of the licensees concerned, it appeared that the breaches of the standards was due more to inexperience than to any other cause. In his second reading speech on the Broadcasting and Television Bill, 1956, the Postmaster-General said ". . . the objective of all stations, from the outset, should be to provide programmes that will have the ultimate effect of raising standards of public taste" and in the extract from the Eighth Annual Report quoted in the preceding paragraph it will be seen that the Board expressed the view that "television stations have an obligation to ensure that television will be used constructively for the welfare of the community". It is too soon to express any opinions as to the extent to which licensees have succeeded in attaining these high ideals, but it is essential that they should be borne in mind constantly by all those who have any part to play in the production and presentation of programmes. There may perhaps be observed in the attitude of licensees a tendency to regard their responsibilities in this field as satisfied by the provision of programmes which can be said to be of some general entertainment value. In this respect their achievements, in the establishment period, have been considerable and perhaps little more could have been expected in that short period, especially having regard to the limitations of Australian resources in this field. It must be emphasised, however, that as the stations gain in experience and financial resources, initiative, imagination and skill should be increasingly employed in developing programmes of higher standard, including programmes which really employ to the best possible advantage Australian artists, producers and script writers and make use of the best quality of Australian enterprise.

132. The Board has been gratified by the great demand for copies of the Television Programme Standards and by the general approval of their contents. It is glad to note the interest which has been displayed in the Standards by members of the public, because, as the Board pointed out in the Eighth Annual Report, "the support of an alert, intelligent and articulate public . . . may well be the best safeguard against any abuse of the new medium". There is some evidence of a quickening of the interest of the public in this matter—the Board hopes it will be maintained.

FAMILY AND CHILDREN'S PROGRAMMES.

133. In paragraphs 112-113 of its Eighth Annual Report, the Board explained the reasons which had prompted it to include special conditions in the Television Programme Standards which were designed to ensure that, between 5 p.m. and 7.30 p.m. on week days and at any time before 7.30 p.m. on Saturdays and Sundays, when the television audience is likely to contain large numbers of children and young people, there would be good, wholesome programmes which family groups of all ages might view with complete confidence. After some months of television, the Board is convinced that it was completely justified in establishing that principle, the application of which has achieved quite satisfactory results without seriously inconveniencing the television stations. The Board is not yet, however, satisfied that all the programmes televised during the Family and Children's Programme period comply fully with the spirit of the special conditions which apply to them or that licensees and advertisers have always given proper consideration to the objective of presenting, within this period, matter which is suitable for viewing by persons of all ages and will not produce any undesirable effects on children. In this connection, the Board wishes to direct the attention of licensees especially to sub-paragraph 34 (a) of the Standards which requires licensees to exercise very great care and judgment in respect of advertisements televised during the periods indicated and to take precautions to avoid the exploitation of the natural credulity and sense of loyalty of children. The small number of complaints from the public concerning programmes which are viewed by children is perhaps an indication that the commercial television stations have been able to avoid most of the errors of taste and other mistakes in judgment which are likely to happen in an industry developing rapidly with relatively inexperienced staffs. Nevertheless, it is necessary to recognize that the programmes seen on commercial television stations do not yet represent the highest achievement of which the medium is capable, particularly in respect of those programmes which are designed for and directed to children. The techniques of television programme planning and production in this field can, of course, only be mastered after years of experience and continuous effort and experiment. In the next paragraph

the Board refers in some detail to the establishment and proceedings of the Advisory Committee on Children's Television Programmes. At the close of the period to which this report relates, the Board was awaiting the first report of the Committee, which is expected to deal with the matters discussed in this paragraph.

ADVISORY COMMITTEE ON CHILDREN'S TELEVISION PROGRAMMES.

134. The Royal Commission on Television (1953) expressed the view that it would be advisable to secure the maximum amount of public participation in the deliberations of the Board in the field of television programmes and suggested that this could very well be achieved by the appointment of Advisory Committees. In particular, the Royal Commission recommended that the Board should establish an Advisory Committee on children's programmes. Provision for the appointment of such a Committee was made in section 29 of the *Broadcasting and Television Act 1942-1956*, and an Advisory Committee on Children's Television Programmes was established by the Board in November, 1956, with the following main functions in respect of the programmes of commercial television stations:—

- (i) To advise the Board on the adequacy of the Board's standards for children's television programmes;
- (ii) To advise on such matters as the most appropriate techniques to be used, the range of subject matter, the adequacy of programmes for various age groups, and the suitability of times chosen for the transmission of children's television programmes;
- (iii) To recommend any changes in the production or presentation of children's television programmes which it considers desirable.

The principle adopted in the appointment of members of the Committee was that they should be people who have special qualifications and practical experience in the upbringing, education and welfare of children; they were not to be representative of particular organizations. The members of the Committee are:—

- Mr. W. Trudinger—Head Teacher, Valkstone State School, Melbourne, Chairman.
- Mr. C. M. Blackshield—Headmaster, Cabramatta Public School, Sydney.
- Professor W. H. Frederick—Professor of Education, University of Melbourne.
- Mr. P. Loftus—Public Relations Officer, Victorian Association of Youth Clubs.
- Mrs. M. Matheson—Founder of the Children's Library and Crafts Movement, Sydney.
- Mrs. E. I. Shann—Convenor, Standing Committee on Television, National Council of Women, Victoria.

(The appointments of Messrs. Blackshield and Trudinger were made after consultation with the Director-General of Education, New South Wales, and the Director of Education, Victoria.) The Committee held two meetings in the period under review: Mr. W. Trudinger was elected Chairman; Mr. A. Snare, of the Board's office, acts as Secretary. The Board is grateful to the members of the Committee for their assistance, and also to the Australian Broadcasting Commission and the licensees of the commercial television stations who attended meetings of the Committee and provided it with a great deal of information.

CENSORSHIP OF FILMS FOR TELEVISION.

135. It was explained in the Board's Eighth Annual Report that arrangements had been made with the Commonwealth Film Censorship Board for that Board to classify all films imported into Australia for use by commercial television stations according to the classification set out in paragraph 17 of the Board's Television Programme Standards, which are as follows:—

- (i) Unrestricted for Television ("G").
- (ii) Not suitable for children ("A").
- (iii) Not to be televised before 8.30 p.m. ("AO").
- (iv) Not suitable for television.

These classifications are different from those applicable to films for theatrical exhibition. This has resulted in a considerable amount of additional work for the censors and has involved the appointment of two new members to the Film Censorship Board, as well as the establishment of additional theatres for censorship screenings. During the period under review films totalling over six million feet were examined and classified by the Film Censorship Board. The majority was classified in the "G" or "A" categories, but it was found necessary to make eliminations in 401 films, and 25 films were rejected for television. Of the films examined, 75 per cent originated in the U.S.A., and 18 per cent were of U.K. origin.

136. In the Eighth Annual Report of the Board, the procedure adopted for the censorship of films for use on commercial television stations was explained at some length. At the end of the period to which that report related, discussions were still proceeding with the Australian Broadcasting Commission in respect of the classification of television films to be used by the Commission, and the procedure to be applied in the censorship of such films. As a result of these discussions, complete agreement has been reached for the adoption, for censorship purposes, of the classifications of films set out in the Board's Standards, which will be based on the appropriate provisions of the Standards. The procedure set out in paragraph 115 of the Board's Eighth Annual Report has now been adopted for the censorship of all films for television, but as a result of experience certain minor modifications in detail have been made.

137. It was expected that some difficulties might arise in respect of appeals against the classification of films for television as the appeals procedure under the Customs (Cinematograph Films) Regulations applies only in respect of conditions imposed on the registration of films, and not on their classification. Arrangements have now been satisfactorily worked out which permit television stations to appeal against classification of films as well as against their rejection. During the period under review no appeals against classification were lodged, but in several cases the classification of a film was varied after re-examination by the Censor and some modifications of the films concerned. Some confusion arose from the assumption made by licensees that films made for use by overseas television stations would be acceptable for unrestricted use by Australian stations. Although licensees claim to have selected overseas films with considerable care, and to have avoided much that was considered undesirable or inferior in type, the Chief Censor had found it necessary to reject some films, and to classify an appreciable number in the "AO" category. In some cases classifications of each of the groups "G", "A", and "AO" have been found necessary in a single programme series containing a number of half-hour episodes. It has, in fact, been rather disturbing to find that a series of films apparently designed for children may contain a few episodes which either wholly or in part are quite unsuitable for children. While this state of affairs does not appear to be widespread, it has been sufficiently noticeable to indicate the value of the principles set out in the standards relating to the Family and Children's Programmes and their strict application in practice. In several cases, it has been necessary for stations to remove a partly-completed film series from one time channel and place it in another in order to comply with the Board's Standards. On a number of occasions the Board has noticed, in published programmes, that films not classified as suitable for presentation in the Family and Children's Programme period had been scheduled within this period. On being brought under notice of the stations concerned, the matter was rectified in all cases before transmission took place. The Chief Censor has reported some difficulty in respect of feature films which were already in Australia and which had already received a classification for theatrical purposes. In some cases these films were obtained locally by television stations and were televised without being re-submitted for a television classification. Appropriate provision has been made to deal with this aspect of the matter.

138. The Board wishes to acknowledge the amount of time and thought which the Chief Censor and members of the Film Censorship Board have given to the censorship of films for use in television. Many problems have arisen during the year which have been the subject of frequent discussion both as to the policies to be adopted, and as to the means of putting the policies into effect. Only the closest co-operation between the Chief Censor and the Board has made practicable the handling of the great quantities of programme matter involved. In this connection the Board wishes to pay tribute to the foresight and experience of the former Chief Film Censor, Mr. J. O. Alexander, who retired in January. The present Chief Censor, Mr. C. J. Campbell, has taken great care in developing the principles which had been established by his predecessor and in applying them in practice to the many different kinds of films which are used in the complex construction of television programmes. In this he has been conspicuously successful.

TELEVISION ADVERTISING STANDARDS.

139. The Television Advertising Standards, which the Board determined in accordance with section 100 of the *Broadcasting and Television Act 1942-1956*, were set out in Appendix D of the Eighth Annual Report. Generally speaking, the Board feels that these standards are adequate and have operated successfully, although some problems have occurred in matters of detail. There have been several instances of insufficient care by licensees in carrying out their obligations to observe these standards. This is believed to be due mainly to an inadequate acquaintance with the Standards by those responsible for the preparation and presentation of programme matter. In every case where the Board has questioned any programme on the ground of non-observance of the advertising standards, the licensee has been greatly concerned about the occurrence. Some

errors have been made in the placing of advertisements in time channels that are unsuitable either because of the nature of the products or the form of presentation. The Board understands that a number of advertisements have been rejected by licensees and that others have been recast in a more suitable form before being accepted for television. It has been found that the majority of cases of excessive advertising have occurred during the live presentation of advertisements. This appears to be due to comparative inexperience coupled with the temptation to improvise or depart from the prepared script. There is also some doubt whether licensees and advertisers yet understand the relevant part of the Board Standards dealing with advertising by means of fixed or moving background effects, scenes, and lettering. Provision was made in the Television Advertising Standards (paragraph 44) for programmes which take the form of a shopping guide, market information, or similar material and so provide a special service to viewers in which advertisements form an informative and integral part of the programme. This facility has been used freely, and has proved its value as a service to listeners. The standards place some limitations on the duration and spacing of such programmes, set a limit of 30 minutes to each session, and require a separation from similar programmes of at least one hour (sub-paragraphs 44 (b) and (d)). The introduction of day-time programmes which include short practical demonstrations of advertised products has raised the question of the adequacy of these sub-paragraphs in their present form. This will be considered in consultation with the licensees.

TYPE OF PROGRAMMES PROVIDED BY COMMERCIAL TELEVISION STATIONS.

140. The table set out hereunder, which is based on the programmes of commercial television stations in typical weeks during May and June, 1957, shows the proportions of the various types of programmes available to viewers in Sydney and Melbourne from those stations. In the preparation of the table, the following conditions were observed:—

Children's programmes include only those features designed for children; adventure serials have been excluded.

Women's programmes are only those addressed directly to women.

News refers to the presentation of the news and commentaries only; topical talks and interviews have been included under "talks"; weather reports have been included under "community service".

Variety includes all programmes which include more than one type of entertainment, and is coupled with "talent" programmes.

Quiz and Panel programmes include those in which the question-and-answer technique provide the predominant interest of the programme.

Talks exclude those of a religious or sporting nature, those in women's sessions, and those which are accompanied by a practical demonstration.

Community service does not include the major charitable efforts of stations which did not occur during the periods on which the figures are based.

Composition of Commercial Television Programmes, Autumn, 1957.

Type of Programme	Percentage of Programme Time			
	Melbourne Stations		Sydney Stations	
	%	%	%	%
Drama—				
Adventure	12.9		10.1	
General	11.4		8.2	
Crime	6.1		8.8	
Total Drama		30.4		27.1
Comedy		5.2		4.8
Children's Programmes		14.9		16.9
Sport		12.9		13.0
Variety and Talent Programmes		10.7		7.7
News		6.6		6.0
Quiz and Panel Programmes		5.8		6.0
Documentaries		3.5		2.8
Women's Programmes		1.5		5.7
Religious Matter		2.5		2.1
Music—				
Light	0.2		1.8	
Dance, Popular	2.1		2.2	
Total Music		2.3		4.0
Talks and Interviews		1.4		2.2
Community Service		1.8		1.1
Demonstrations		0.5		0.6
		100.0		100.0

The succeeding paragraphs contain observations on some of these programmes.

Drama.

141. The greater part of the imported film programmes are in drama form, whether as individual plays (mostly of half-hour duration) or as self-contained episodes under a series title. These dramatic presentations fall into three groups—adventure, crime, and general drama. Of these, the adventure group provides most scope for the technical facilities available to television; the group also includes programmes of the “western” type, some of which appear to have been produced with a minimum of expense and imagination. Crime drama appears to have a compelling attraction for television as well as for broadcasting audiences.

Comedy.

142. Australian television is, in this field, following closely the practices of American television where the main emphasis is on “laughs”. These are sought in several ways, including the personality show (often in quiz format), the situation comedy (usually centered round one or two central characters), and modern slapstick (based on one or two stars). The majority of these programmes which have so far appeared are the better type of American programme, and they include many which are popular with viewers overseas and are highly regarded by critics.

Sporting Programmes.

143. The outstanding sporting programmes which were televised during the year were those covering the Olympic Games in Melbourne, which were held soon after the commencement of the regular services by national station ABV and commercial station HSV, and the commencement of test transmissions by station GTV. Each of these stations provided a very comprehensive coverage of the Games in a manner which did great credit to the programme and technical personnel who, with considerable ingenuity and intelligence, seized the opportunity to develop their skill in a field in which they had little previous experience. As the Games proceeded, there was rapid progress in the standard of camera work and the commentaries, with the result that almost every detail of the proceedings at the Olympic Stadium and the Olympic Pool, and many events from other venues, were completely televised for viewers in Melbourne. The Sydney stations, although unable to give a direct coverage of the Games, provided daily summaries of the main events using films specially prepared and flown from Melbourne each day. The experience gained during the Olympic Games enabled stations subsequently to present many sporting events in an efficient and interesting manner, and there have been many telecasts of trotting, football, tennis, golf, rowing

and athletic events, although some have been restricted to only part of the events. Horse racing has so far been limited to film "re-runs" in sporting summaries. Television stations are obviously well equipped to present outdoor events, and with the aid of long-focus lenses, they can present aspects of sport which even the most favourably placed observer cannot always see.

News and Weather Data.

144. One of the special features of television is its presentation of news and weather information. It was thought likely that, at least in the early stages, news would be limited to periodical newsreel programmes and a brief summary of the headlines, but all four commercial television stations have organised quite extensive news coverage which is supplemented by pictures from local and world sources. At times the availability of pictures seems to have influenced the news content, but this has not been so dominant a factor as was expected. All stations have taken the view that there is no objection to the pictorial representation of an announcer reading news when it is not possible to illustrate items by still or moving pictures of the scenes themselves. On the other hand, all stations have shown considerable enterprise in obtaining pictures of items of current interest each day. The Board is glad to report that after a period of simultaneous news telecasts from national and commercial stations, some of these sessions are now televised at different times with the result that viewers have a choice of programme at news times and are not compelled to limit their viewing of news to one service only. All stations give considerable prominence to the daily weather notes, discussing the movements of pressure systems as pictured on a map of Australia showing current barometric gradients. In some cases authentic explanations of the factors controlling the weather are given at some length.

Documentary and Actuality.

145. This type of programme was used extensively by commercial television stations during preliminary test transmission periods, but in more recent times has been replaced by other items. The National Service continues to use extensively films dealing with subjects such as the search for oil, industrial development, international motor car races, etc. Some other forms of documentary programme occur occasionally on commercial stations either as part of a longer programme or as sustaining material. The actuality type of programme is mainly confined to shorts in newsreels. A noteworthy exception to the comparatively minor role played by programmes of this type occurred towards the end of the year under review when a documentary presented by His Royal Highness, the Duke of Edinburgh, covering his world tour, was televised from national and commercial stations. More recently His Royal Highness introduced a programme to mark the commencement of the International Geophysical Year. Both these programmes, which were kinescopes of English television programmes, showed the great possibilities of the documentary type of programme.

Women's Programmes.

146. The attraction of television for women in the home is undeniable, and it was to be expected that at an early stage stations would provide programmes designed for women. In some cases programmes of this type were presented almost at the outset of regular services; in others they have been slower to develop. All stations are now televising some matter of women's interest, and all are exploiting the technique of practical demonstrations. Some demonstration programmes are directed mainly towards the advertising of the products being demonstrated; in other cases the advertised product, during the demonstration at least, takes second place to the demonstration itself. A tendency to excessive advertising in these programmes is gradually disappearing and a greater proportion of general entertainment is being included. All stations now give fashion displays, demonstrations of domestic interest, topical interviews, as well as some general entertainment. Considerable use is made of the shopping guide form of advertising.

Religious Programmes.

147. Section 103 of the *Broadcasting and Television Act 1942-1956* provides that "a licensee shall . . . televise from his station Divine Worship or other matter of a religious nature during such periods as the Board determines, and if the Board so directs, shall do so without charge". The Television Programme Standards provide that—

- (a) Time should be allocated for the televising of matter of a religious nature to the extent of at least one per cent of the normal weekly hours of service, with a minimum of 30 minutes each week, to be scheduled either as a complete unit occupying the whole time allocated; or as a series of programmes on one or more days of the week, with a minimum of five minutes for each programme.

- (b) Station time as allocated shall be provided, free of charge, to the church or religious body concerned, but reasonable charges may be made to cover costs other than those of a programme presented in, and using the normal facilities of, a studio under the control of the licensee.
- (c) Time should be allocated among the various churches and denominations as far as practicable in proportion to the number of adherents to each denomination in the area served by the station as shown in the latest census; such arrangements should be made by mutual agreement between the licensees and representatives of the churches and denominations and should have regard to the suitability for televising of the services or other religious matter proposed to be televised.

The Board did not specify any particular form of presentation of religious programmes, preferring to leave that aspect of the matter for mutual agreement between the Churches and the licensees. Two of the four licensees are televising half-hour sessions, in one case from imported films which are approved or provided by the Churches and in the other case partly in the form of some studio presentations arranged by them and partly from films. A six-minute devotional programme is televised by a third station on five week days by representatives of different Churches in rotation, and in the remaining case, there are readings from the Bible for five minutes at the close of transmission every night. Mention should also be made of the various presentations of Church services. These have been undertaken mainly by the Australian Broadcasting Commission, as simultaneous "outside broadcasts", and have met with considerable success. On special occasions commercial television stations have also broadcast religious services from Churches. In addition to these religious programmes, several sponsored religious sessions are being televised.

Music.

148. Music occupies a much less prominent place in television than in sound broadcasting where it accounts for over 50 per cent of programme time. Most television variety type programmes incorporate a proportion of light music, and the treatment of popular music by some stations shows considerable ingenuity. The presentation of serious music on television involves complicated problems: some interesting experiments have been made in this field.

Community Service.

149. Several stations provide regular talks on road safety, animal care, dental care, gardening and similar subjects; and in both Sydney and Melbourne appeals for funds to provide television receivers in hospitals, &c., have been well supported. The opportunity for minor community and individual services often arises, and it is freely used. For example, fire danger and water restriction announcements and news flash announcements bearing on transport facilities have been made.

Controversial Matter.

150. In this field, which is full of difficulties, stations have made a cautious beginning with some interesting programmes, both in commentaries and in sessions of the "Meet the Press" type.

HOURS OF SERVICE.

151. Section 16 (2) (c) of the *Broadcasting and Television Act 1942-1956*, empowers the Board to determine the hours during which programmes may be televised. At the time this report was being prepared, the periods of transmission authorised for each station were in accordance with the following schedule:—

Commercial Stations:

ATN SYDNEY—

Sunday	5.00 p.m. — 10.30 p.m.
Monday, Tuesday, Thursday, Friday	4.30 p.m. — 11.00 p.m.
Wednesday	4.00 p.m. — 11.00 p.m.
Saturday	2.00 p.m. — 10.30 p.m.

Total 47 hours weekly.

TCN SYDNEY—

Sunday	4.00 p.m. — 4.15 p.m.
Monday, Wednesday	5.30 p.m. — 10.00 p.m.
Tuesday	5.54 p.m. — 10.15 p.m.
Thursday	4.00 p.m. — 10.15 p.m.
Friday	1.00 p.m. — 3.45 p.m.
Saturday	5.54 p.m. — 10.15 p.m.
	5.54 p.m. — 10.35 p.m.
	2.00 p.m. — 10.30 p.m.

Total 39 hours 15 minutes weekly.

GTV MELBOURNE—

Sunday	4.45 p.m. — 10.35 p.m.
Monday, Tuesday, Wednesday	5.15 p.m. — 10.45 p.m.
Thursday	1.00 p.m. — 2.00 p.m.
Friday	5.15 p.m. — 11.15 p.m.
Saturday	5.15 p.m. — 10.45 p.m.
	2.00 p.m. — 11.30 p.m.

Total 44 hours 20 minutes weekly.

HSV MELBOURNE—

Sunday	5.45 p.m. — 10.15 p.m.
Monday	4.45 p.m. — 10.30 p.m.
Tuesday	5.15 p.m. — 10.45 p.m.
Wednesday	4.30 p.m. — 10.45 p.m.
Thursday	5.15 p.m. — 11.00 p.m.
Friday	5.15 p.m. — 10.35 p.m.
Saturday	2.00 p.m. — 10.45 p.m.

Total 41 hours 20 minutes weekly.

National Stations:

ABN SYDNEY—

Sunday	5.00 p.m. — 6.00 p.m.
Monday	7.00 p.m. — 10.00 p.m.
	3.30 p.m. — 4.00 p.m.
	5.00 p.m. — 5.30 p.m.
Tuesday	7.00 p.m. — 10.00 p.m.
	3.30 p.m. — 4.00 p.m.
	5.00 p.m. — 5.30 p.m.
Wednesday	7.00 p.m. — 10.30 p.m.
	3.30 p.m. — 4.15 p.m.
	5.00 p.m. — 5.30 p.m.
Thursday	7.00 p.m. — 10.00 p.m.
	3.30 p.m. — 4.15 p.m.
	5.00 p.m. — 5.30 p.m.
Friday	7.00 p.m. — 10.00 p.m.
	3.30 p.m. — 4.15 p.m.
	5.00 p.m. — 5.30 p.m.
Saturday	7.00 p.m. — 10.00 p.m.
	2.00 p.m. — 5.00 p.m.
	7.00 p.m. — 10.00 p.m.

Total 31½ hours weekly.

ABV MELBOURNE—

Sunday	5.00 p.m. — 6.00 p.m.
	7.00 p.m. — 10.00 p.m.
Monday	3.30 p.m. — 4.00 p.m.
	5.00 p.m. — 5.30 p.m.
	7.00 p.m. — 10.00 p.m.
Tuesday	3.30 p.m. — 4.15 p.m.
	5.00 p.m. — 5.30 p.m.
	7.00 p.m. — 10.00 p.m.
Wednesday	3.30 p.m. — 4.00 p.m.
	5.00 p.m. — 5.30 p.m.
	7.00 p.m. — 10.00 p.m.
Thursday	3.30 p.m. — 4.15 p.m.
	5.00 p.m. — 5.30 p.m.
	7.00 p.m. — 10.00 p.m.
Friday	3.30 p.m. — 4.00 p.m.
	5.00 p.m. — 5.30 p.m.
	7.00 p.m. — 10.00 p.m.
Saturday	2.30 p.m. — 5.00 p.m.
	7.00 p.m. — 10.00 p.m.

Total 30 hours weekly.

The significance of operating hours in relation to standards of programmes has often been stressed; it was emphasised, for instance, in the Report of the Royal Commission on Television and the Board's Report on Applications for Television Licences in 1955. Among the matters to be considered by the Board in this connection are the suitability of a proposed programme for the time at which it is to be televised and the use of Australians in the production and presentation of programmes, as required by section 114 of the Act. It was evident that in their anxiety to expand programme schedules, the licensees of commercial television stations did not fully appreciate the responsibility which had been placed on the Board through its statutory obligation to fix hours of service. Permanent extensions, as well as temporary extensions, of the approved hours of service were proposed at such short notice that the Board had considerable difficulty in assessing the value of the expanding schedules and whether they were in the best interests of the public. From the outset the Board has felt that it was undesirable to insist on rigid adherence to the clock at the expense of programme presentation and general interest, and has indicated to licensees that the time for the close of transmission each day could be flexible within reasonable limits. However, it is considered that the creation of new programme periods in the afternoons and the introduction of new programme features in the late afternoon or early evening are matters which may considerably affect domestic and social habits, and that consequently the proposed programme matter must be carefully considered in all its aspects.

ENCOURAGEMENT OF AUSTRALIAN ARTISTS.

152. As was explained in previous reports, the question of the employment of Australian artists in the production and presentation of television programmes had been the subject of strong representations by numerous bodies to the Royal Commission on Television and, subsequently to the Government and to the Board in recent years, and when the *Broadcasting and Television Bill* 1956 was being considered by Parliament, an amendment was moved, the purpose of which was to insert a provision in the Act that not less than 55 per cent of the time occupied by a television station in the transmission of programmes other than news and sporting events should be occupied by Australian programmes. The Government was not prepared to accept the principle of a quota system for Australian programmes, but provision was made in the Bill that the Australian Broadcasting Commission and the licensee of each commercial television station should, as far as possible, use the services of Australians in the production and presentation of television programmes.

153. This obligation is now contained in section 114 of the *Broadcasting and Television Act* 1942-1956, which came into force on 1st July, 1956. Soon after that date, the Minister informed each of the licensees of commercial television stations that he would not be prepared to give his consent, as required by the Act, for any station to commence service until he had received a satisfactory assurance from the licensee as to the employment of Australians in the production and presentation of the station's programmes. The licensees submitted details of their proposals in relation to their programmes and in each case evidence was produced to the Minister that a substantial proportion of the hours of service of each of the stations would be devoted to items of Australian origin. At the time of writing of this report, such items were occupying the percentages shown hereunder of the total hours of service of the commercial television stations—

ATN, Sydney	66%
TCN, Sydney	45%
GTV, Melbourne,	61%
HSV, Melbourne	45%

154. The programmes represented by these percentages include some children's sessions, variety and talent sessions, news, sport, quiz and panel sessions, women's sessions, religious matter, talks and interviews, community services, demonstrations, etc. The remainder of the programmes—a very substantial proportion indeed—are being provided on films from overseas sources. All of these programmes are, as is explained in paragraphs 135 to 138, subject to censorship by the Film Censorship Board on the basis of the relevant parts of the Board's Television Programme Standards. Many are excellent productions which provide much appreciated entertainment for Australian viewers, but others are of a type which, while in general complying with the Board's Standards, do not appear to the Board to represent the type of programmes which would be desirable as a permanent feature of the Australian television services. It was inevitable that the licensees of the commercial television stations, confronted with the difficult task of commencing television services in this country, where the programme resources are necessarily, at this stage, severely limited, should seek programmes on film from the long established television industries of Great Britain and the United States, and as the Minister said in his second reading speech on the *Broadcasting and Television Bill 1956* "it would be absurd to endeavour to shut ourselves off from outside influences" in this field. The use of imported programmes is however, a matter which gives rise to very difficult and involved problems in respect both of the quality and quantity of the programmes which are televised. As mentioned in paragraph 121 of the Board's Eighth Annual Report, the Australian Broadcasting Commission and the licensees of the commercial television stations were, in July, 1955, authorised to spend an amount not exceeding £60,000 per annum on the purchase of programmes from overseas, but no overseas funds were made available to other persons or organisations for the acquisition of programmes. Although this restriction was imposed for the purpose of conserving overseas exchange, it automatically placed a limitation on the amount of films which could be obtained from the United Kingdom and the United States. In July, 1957, the Government decided, in the light of improvements in the overseas balance of payments, to relax these restrictions, and this decision gave rise to strong protests from various organisations which feared that, as a result of the decision, there would be a substantial increase in the use of overseas programmes by television stations and less likelihood of the production of Australian television programmes which would create opportunities for Australian artists and writers. The whole question was being reviewed by the Minister and the Board, in consultation with licensees, as required by the Act, when this report was being prepared.

RESEARCH INTO THE SOCIAL EFFECTS OF TELEVISION.

155. The Board's Eighth Annual Report referred to the establishment of a Research Advisory Committee to assist the Board in planning and conducting a programme of research into the social effects of television in Sydney and Melbourne. The Board regards investigations of this kind as an important part of its responsibilities. It is gratifying to record that the organizations which it has approached for assistance in this field hold similar views on the urgent need for co-ordinated research into the ways in which television may affect the daily lives of different sections of the community, especially those most likely to be susceptible to the effects of the new medium. During the year, Professor G. S. Browne retired from the Chair of Education at the University of Melbourne, and his place on the Committee was taken by his successor, Professor W. H. Frederick. Dr. J. A. Keats was appointed to a post in the University of Queensland and was unable to continue to serve on the Committee. The Board wishes to record its appreciation of the contribution made by these members of the Committee before their retirement from it. The membership of the Research Advisory Committee is now as follows:—

- Dr. W. C. Radford—Australian Council for Educational Research.
- Professor W. H. Frederick—Department of Education, University of Melbourne.
- Dr. E. R. Wyeth—Department of Education, University of Melbourne.
- Professor W. F. Connell—Department of Education, University of Sydney.
- Dr. W. J. Campbell—Department of Education, University of Sydney.
- Professor O. E. Oeser—Department of Psychology, University of Melbourne and Social Science Research Council of Australia.
- Professor J. F. Clark—Department of Applied Psychology, N.S.W. University of Technology.
- Professor L. C. Webb—Australian National University.
- Professor W. M. O'Neil—Department of Psychology, University of Sydney.
- Mr. Newman Rosenthal—Department of Audio-Visual Aids, University of Melbourne.
- Dr. F. E. Emery—Department of Audio-Visual Aids, University of Melbourne.

together with representatives of the Commonwealth Office of Education, the Australian Broadcasting Commission, and the Board. New members who accepted an invitation to participate in the work of the Committee are Professor O'Neil, Mr. Rosenthal, and Dr. Emery.

156. One project in particular had been recognized by the Committee as urgent; this was the investigation of the pattern of domestic habits and attitudes in Sydney and Melbourne before the commencement of regular television programme services, in order to have reliable data against which an assessment could be made at a later stage of the influence of television in the home. Accordingly, investigations were commenced in 1956 along the lines explained in paragraph 127 of the Eighth Annual Report. The investigations which were conducted by the University of Sydney and the New South Wales University of Technology are designed to provide the type of information which will enable further investigations to be devised concerning the various social effects of television in Sydney. In Melbourne, the Department of Education at the University has commenced a three-year survey of changes in the leisure activities of 10, 13 and 16 year old children and their families. The current study, which will cover one year only, is expected to establish a pattern against which future reports may be compared and some assessment made of the influence of television in these age groups.

157. During 1957, the Department of Education, University of Sydney, is conducting an investigation into "Social Change in a Rural Community". This investigation is expected to yield significant information concerning the impact of television on social relationships in a community which is essentially rural in character. It is expected that this investigation will throw some light on the ways in which comparatively isolated communities are affected by the introduction of television, and any differences in this respect from urban communities.

158. The Research Advisory Committee's next task is to plan the direction which future research investigations in this field should take. It has appointed a sub-committee for this purpose, which will also recommend the priorities to be given the various research projects. An important matter for consideration by this sub-committee is the planning of research work of a more intensive and fundamental nature, including experimental work. The Board also has asked the Department of Audio-Visual Aids at the University of Melbourne to undertake an experimental investigation into the immediate and progressive effects on children of television programmes which have violence as their main theme.

159. The Board is grateful to the organisations represented on the Research Advisory Committee for their willingness to co-operate in the complex task of assessing the influence of television on the daily lives of Australian men, women and children. It believes that substantial progress has been made in the past year. In addition to the financial assistance for research in this field which was reported in the Board's Eighth Annual Report, a sum of £2610 was provided in the last financial year for this purpose.

PART VIII.—GENERAL.

FINANCIAL ACCOUNTS OF THE BOARD.

160. In conformity with the provisions of section 28 of the Act, a statement of the financial accounts of the Board for the year ended 30th June, 1957, together with the report of the Auditor-General as to those accounts, appears in Appendix "D" of this Report.

ANNUAL DEVELOPMENT OF BROADCASTING.

161. The following table shows the progressive development in the number of broadcasting stations and licensed listeners since the inception of broadcasting in 1923:—

Year.	Number of Broadcasting Stations in Operation.		Number of Licensed Listeners.
	Class "A"	Class "B"	
30th June— 1924	4	1,206
1925	7	6	63,874
1926	8	9	128,060
1927	8	12	225,240
1928	8	12	270,507
1929	8	12	301,199
	National	Commercial	
1930	8	13	312,192
1931	9	27	331,969
1932	12	43	369,945
1933	12	48	469,477
1934	12	53	599,159
1935	12	57	721,852
1936	14	73	825,136
1937	20	80	940,068
1938	24	94	1,057,911
1939	24	98	1,131,861
1940	26	100	1,212,581
1941	27	96	1,293,266
1942	27	97	1,320,073
1943	27	96	1,370,000
1944	28	98	1,394,880
1945	29	100	1,415,229
1946	29	100	1,436,789
1947	32	101	1,678,276
1948	33	102	1,703,970
1949	37	102	1,762,675
1950	39	102	1,841,211
1951	41	103	1,884,834
1952	42	103	1,961,044
1953	44	105	1,985,655
1954	46	106	2,041,615
1955	50	106	2,034,676
1956	53	107	2,088,793
1957	55	108	2,107,253

In addition to the above national stations, there were, as at 30th June, 1957, nine high frequency (short-wave) transmitters providing services to listeners in remote areas.

LISTENERS' LICENCES.

162. The following table shows the various classes of broadcast listeners' licences which were current on 30th June, 1957:—

Class of Licence.	New South Wales.	Victoria,	Queens-land.	South Australia.	Western Australia.	Tasmania.	Commonwealth.
Ordinary	694,045	509,827	280,933	214,296	139,391	66,066	1,904,558
Pensioners	80,176	43,273	29,780	18,777	15,155	7,012	194,173
Blind Persons	802	619	338	298	379	187	2,623
Schools	2,049	1,190	1,476	749	241	194	5,899
Total	777,072	554,909	312,527	234,120	155,166	73,459	2,107,253
Ratio to 100 of population	21.42	20.86	22.59	26.40	22.55	22.34	21.97

The fee for a broadcast listener's licence is £2 15s. for Zone 1, which includes all places within a circle having a radius of 250 miles from a broadcasting station specified by the Board. All except 12,927 of the broadcast listeners' licences current on 30th June, 1957, were issued in Zone 1. The fee for such licences in Zone 2 is £1 8s.

TELEVISION VIEWERS' LICENCES.

163. The following table shows the various classes of television viewers' licences which were current at the end of each month from 1st January, 1957, from which date persons in possession of a television receiver were required to hold a viewer's licence, the fee for which is £5:—

	N.S.W.	Victoria	Tasmania	Total
31st January	6,576	15,119	21,695
28th February	9,140	18,465	27,605
31st March	11,873	21,769	33,642
30th April	15,572	26,398	1	41,971
31st May	22,475	34,699	8	57,182
30th June	28,912	44,985	11	73,908

COST OF NATIONAL BROADCASTING SERVICE AND NATIONAL TELEVISION SERVICE.

164. Expenditure on the operation of the National Broadcasting Service and the National Television Service (including both programme and technical services) during 1956-57 was £6,547,994, made up as follows:—

Australian Broadcasting Commission	£	4,633,000
Technical and other services (including Television £53,060)		1,896,716
Audit of accounts		4,000
Repairs and maintenance of buildings		14,278
		<hr/>
		£6,547,994

165. The gross expenditure of the Australian Broadcasting Commission was £5,115,100 (including £807,239 on television) but revenue amounting to £482,100 was derived from public concerts, subsidies for symphony orchestras, sales of the A.B.C. Weekly, the sale of news services, and miscellaneous sources. The total cash revenue received, excluding that received by the Commission, was £5,233,816, viz.:—

Broadcast listener's licence fees	£	4,865,400
Television viewer's licence fees		343,438
Miscellaneous		24,978
		<hr/>
		£5,233,816

In addition to the television viewer's licence fee an excise duty of £7 is payable on every cathode ray tube used in a television receiver. The expenditure on Capital Works was £2,713,727, of which £17,000 was provided from the Australian Broadcasting Commission reserves.

ACKNOWLEDGMENTS.

166. Again during the past year, the Board received assistance in many ways from the Postmaster-General's Department and it wishes, in particular, to thank the Superintendents (Radio) who, as the Board's State Representatives, have performed so willingly and so well the many duties required of them in that capacity, and also the officers of the Engineering Branch who likewise undertake many technical duties in the States on behalf of the Board. The Board is grateful to the Department of Civil Aviation for allowing Mr. Ian Richardson, who succeeded Mr. D. J. Anderson as Civil Air Attache in Washington, to replace Mr. Anderson as its representative in the United States and also for the valuable assistance officers of the Department in remote areas are rendering the Board in furnishing regular reports on observations of high frequency (short-wave) services. The Board desires to express its appreciation also to the Australian Broadcasting Commission and the Australian Federation of Commercial Broadcasting Stations, with both of which it has many mutual interests, for their co-operation in numerous ways.

J. O'KELLY, Secretary.
16th September, 1957.

R. G. OSBORNE, Chairman.
R. B. MAIR, Member.
R. A. YEO, Member.
J. R. DARLING, Part-time Member.
R. M. WHITE, Part-time Member.

APPENDIX A.

COMMERCIAL BROADCASTING STATIONS IN OPERATION ON 30TH JUNE, 1957.

Call Sign	Location of Station	Frequency (kc/s)	Authorized Power (Watts)	Licensee and Registered Office	Hours of Service per Week (to nearest Quarter Hour)
AUSTRALIAN CAPITAL TERRITORY.					
2CA	Canberra	1,050	2,000	Canberra Broadcasters Pty. Ltd., Mort Street, Braddon, Canberra	119
NEW SOUTH WALES.					
<i>Metropolitan.</i>					
2CH	Sydney	1,170	5,000	New South Wales Council of Churches Service, c/o St. Peter's Rectory, 188 Forbes Street, Darlinghurst	126
2GB	Sydney	870	5,000	Broadcasting Station 2GB Pty. Ltd., 136-138 Phillip-street, Sydney	121½
2KY	Sydney	1,020	5,000	The Trustees, R. H. Erskine and J. N. Thom, and the Secretary, R. A. King, of the Labor Council of New South Wales, Trades Hall, Goulburn-street, Sydney	125½
2SM	Sydney	1,270	5,000	Broadcasting Station 2SM Pty. Ltd., City Mutual Building, 60 Hunter-street, Sydney	121
2UE	Sydney	950	5,000	Radio 2UE Sydney Pty. Ltd., 29 Bligh-street, Sydney	168
2UW	Sydney	1,110	5,000	Commonwealth Broadcasting Corporation Pty. Ltd., 49 Market-street, Sydney	168
<i>Country.</i>					
2AD	Armidale	1,130	D. 2,000 N. 1,000	New England Broadcasters Pty. Ltd., Rusden-street, Armidale	112½
2AY	Albury	1,490	2,000	Amalgamated Wireless (A/asia) Ltd., 47 York-st., Sydney	121
2BE	Bega	1,480	1,000	J. A. Kerr, Carp Street, Bega	98½
2BH	Broken Hill	660	200	Radio Silver City Pty. Ltd., cnr. Blende and Sulphide streets, Broken Hill	106½
2BS	Bathurst	1,500	2,000	Bathurst Broadcasters Pty. Ltd., 109 George-st., Bathurst	121
2DU	Dubbo	1,250	2,000	Western Broadcasters Pty. Ltd., 45 Macquarie-st., Dubbo	124½
2GF	Grafton	1,210	D. 2,000 N. 1,000	Grafton Broadcasting Co. Pty. Ltd., 47 York-st., Sydney	118
2GN	Goulburn	1,380	2,000	Goulburn Broadcasting Co. Pty. Ltd., 47 York-st., Sydney	118
2GZ	Orange	990	2,000	Country Broadcasting Services Ltd., Hosking House, Hosking-place, 84½ Pitt-st., Sydney	121½
2HD	Newcastle	1,140	2,000	Airsales Broadcasting Co. Pty. Ltd., Maitland-road, Sandgate	128½
2KA	Katoomba	780	D. 2,000 N. 1,000	2KA Ltd., 4th Floor, Stanway House, 77 King-st., Sydney	111
2KM	Kempsey	980	D. 2,000 N. 1,000	Radio Kempsey Ltd., 4th Floor, Stanway House, 77 King-street, Sydney	110
2KO	Newcastle	1,410	2,000	Newcastle Broadcasting Co. Pty. Ltd., C.M.L. Building, 72 Hunter-street, Newcastle	168
2LF	Young	1,340	2,000	Young Broadcasters Pty. Ltd., 24 Lovell Street, Young	117½
2LM	Lismore	900	D. 2,000 N. 1,000	Richmond River Broadcasters Pty. Ltd., Northern Star Building, 11 Molesworth-street, Lismore	115
2LT	Lithgow	1,370	500	Lithgow Broadcasters Pty. Ltd., Great Western Highway, Lithgow	113
2MG	Mudgee	1,450	500	Mudgee Broadcasting Co. Pty. Ltd., Wellington-road, Mudgee	110½
2MO	Gunnedah	1,080	1,000	2MO Gunnedah Ltd., 59 Marquis-street, Gunnedah	113
2MW	Murwillumbah	1,440	D. 2,000 N. 1,000	Tweed Radio and Broadcasting Co. Pty. Ltd., 19 Church-lane, Murwillumbah	113
2NM	Muswellbrook	1,460	500	Hunter Broadcasters Pty. Ltd., 315 High-street, Maitland	122½
2NX	Bolwarra	1,360	2,000	Hunter Broadcasters Pty. Ltd., 315 High-street, Maitland	122½
2NZ	Inverell	1,190	2,000	Northern Broadcasters Pty. Ltd., Hosking House, Hosking-place, 84½ Pitt-street, Sydney	117½
2PK	Parkes	1,400	500	Parkes Broadcasting Co. Pty. Ltd., 307 Clarinda-st., Parkes	113½
2QN	Deniliquin	1,520	2,000	Southern Riverina Broadcasters, 16 Fitzmaurice-street, Wagga	110
2RE	Taree	1,560	D. 2,000 N. 500	Manning Valley Broadcasting Pty. Ltd., Pulteney-street, Taree	115
2RG	Griffith	1,070	D. 2,000 N. 1,000	2RG Broadcasters Pty. Ltd., Ulong-street, Griffith	111
2TM	Tamworth	1,300	2,000	Tamworth Radio Development Co. Pty. Ltd., 312 Peel-street, Tamworth	116½
2VM	Moree	1530	D. 2,000 N. 500	Moree Broadcasting and Development Co. Ltd., 93 Balostreet, Moree	113
2WG	Wagga	1,150	2,000	Riverina Broadcasters, 16 Fitzmaurice-street, Wagga	117½
2WL	Wollongong	1,430	2,000	Wollongong Broadcasting Pty. Ltd., Edward-street, Wollongong	123½
2XL	Cooma	920	1,000	Cooma Broadcasters Pty. Ltd., 134 Sharp-st., Cooma	119

COMMERCIAL BROADCASTING STATIONS IN OPERATION ON 30TH JUNE, 1957—continued.

Call Sign	Location of Station	Frequency (kc/s)	Authorized Power (Watts)	Licensee and Registered Office	Hours of Service per Week (to nearest Quarter Hour)
VICTORIA.					
<i>Metropolitan.</i>					
3AK	Melbourne	1,500	500	Melbourne Broadcasters Pty. Ltd., 262 Flinders-lane, Melbourne, C.1	80½
3AW	Melbourne	1,280	5,000	3AW Broadcasting Co. Pty. Ltd., 382 Latrobe-street, Melbourne, C.1	128½
3DB	Melbourne	1,080	5,000	The Herald and Weekly Times Ltd., 44-74 Flinders-street, Melbourne, C.1	133½
3KZ	Melbourne	1,180	5,000	Industrial Printing and Publicity Co. Ltd., 24-30 Victoria-street, Carlton, N.3	121
3UZ	Melbourne	930	5,000	Nilsen's Broadcasting Service Pty. Ltd., 45-47 Bourke-street, Melbourne, C.1	128
3XY	Melbourne	1,420	5,000	Station 3XY Pty. Ltd., Charter House, 4 Bank-place, Melbourne, C.1	168
<i>Country.</i>					
3BA	Ballarat	1,320	1,000	Ballarat Broadcasters Pty. Ltd., 56 Lydiard-st. North, Ballarat	123
3BO	Bendigo	960	1,000	Amalgamated Wireless (A/asia) Ltd., 47 York-st., Sydney	124½
3CS	Colac	1,130	1,000	Colac Broadcasting Co. Pty. Ltd., 241 Murray-st., Colac	113
3CV	Maryborough	1,440	1,000	Central Victoria Broadcasters Pty. Ltd., 382 Latrobe-street, Melbourne	116
3GL	Geelong	1,350	1,000	Geelong Broadcasters Pty. Ltd., Little Malop-st., Geelong	117
3HA	Hamilton	1,000	2,000	Western Province Radio Pty. Ltd., The "Age" Chambers, 239 Collins-street, Melbourne, C.1	120
3LK	Lubeck	1,090	2,000	The Herald and Weekly Times Ltd., 44-74 Flinders-st., Melbourne, C.1	124
3MA	Mildura	1,470	2,000	Sunraysia Broadcasters Pty. Ltd., 22 Deakin-av., Mildura	109½
3NE	Wangaratta	1,600	D. 2,000 N. 1,000	Wangaratta Broadcasting Co. Pty. Ltd., Templeton-st., Wangaratta	118
3SH	Swan Hill	1,330	2,000	Swan Hill Broadcasting Co. Pty. Ltd., 125 Campbell-st., Swan Hill	117
3SR	Shepparton	1,260	2,000	Associated Broadcasting Services Ltd., 365 Elizabeth-street, Melbourne, C.1	119½
3TR	Sale	1,240	2,000	Broadcast Entertainments Pty. Ltd., The "Age" Chambers, 239 Collins-street, Melbourne, C.1	123½
3UL	Warragul	880	D. 2,000 N. 1,000	Associated Broadcasting Services Ltd., 365 Elizabeth-street, Melbourne, C.1	118
3YB	Warrnambool	1,210	1,000	Associated Broadcasting Services Ltd., 365 Elizabeth-street, Melbourne, C.1	118
QUEENSLAND.					
<i>Metropolitan.</i>					
4BC	Brisbane	1,120	2,000	Commonwealth Broadcasting Corporation (Q'ld) Ltd., 5th Floor, T. & G. Building, 189-191 Queen-street, Brisbane	168
4BH	Brisbane	1,390	2,000	Broadcasters (Aust.) Pty. Ltd., cnr. Albert and Charlotte streets, Brisbane	125
4BK	Brisbane	1,290	2,000	Queensland Newspapers Pty. Ltd., 288-298 Queen-street, Brisbane	125½
4KQ	Brisbane	690	D. 2,000 N. 1,000	The Trustees, R. J. J. Bukowski and J. M. Schmella, of the Queensland Branch of the Australian Labor Party, 231 Elizabeth-street, Brisbane	125
<i>Country.</i>					
4AK	Oakey	1,220	2,000	Queensland Newspapers Pty. Ltd., 288-298 Queen-street, Brisbane	125½
4AY	Ayr	960	D. 2,000 N. 1,000	Ayr Broadcasters Pty. Ltd., Penneys Building, 386 Flinders-street, Townsville	114½
4BU	Bundaberg	1,330	2,000	Bundaberg Broadcasters Pty. Ltd., 55 Woongarra-street, Bundaberg	113½
4CA	Cairns	1,010	D. 2,000 N. 1,000	Amalgamated Wireless (A/asia) Ltd., 47 York-st., Sydney	118
4GR	Toowoomba	860	2,000	Gold Radio Service Pty. Ltd., 5th Floor, T. & G. Building, Queen-street, Brisbane	122½
4GY	Gympie	1,350	D. 2,000 N. 500	Gympie Broadcasting Co. Ltd., Smithfield Chambers, 232 Mary-street Gympie	110
4IP	Ipswich	1,010	1,000	Ipswich Broadcasting Co. Pty. Ltd., 233 Brisbane-street, Ipswich	113½
4LG	Longreach	1,100	2,000	E. B. Connor and Co., 105 Eagle-street, Longreach	81½
4MB	Maryborough	1,160	2,000	Maryborough Broadcasting Co. Pty. Ltd., 5th Floor, T. & G. Building, Queen-street, Brisbane	113½
4MK	Mackay	1,380	2,000	Mackay Broadcasting Service Pty. Ltd., 38 Gordon-street, Mackay	113
4RO	Rockhampton	1,000	2,000	Rockhampton Broadcasting Co. Pty. Ltd., 5th Floor, T. & G. Building, Queen-street, Brisbane	114½
4SB	Kingaroy	1,060	2,000	South Burnett Broadcasting Co. Ltd., Alford-st., Kingaroy	114½
4TO	Townsville	780	D. 2,000 N. 1,000	Amalgamated Wireless (A/asia) Ltd., 47 York-st., Sydney	121
4VL	Charleville	920	1,000	Charleville Broadcasting Co. Ltd., Radio House, Wills-st., Charleville	110½
4WK	Warwick	880	D. 2,000 N. 1,000	Warwick Broadcasting Co. Pty. Ltd., Glennie Hall, Albion-street, Warwick	111½
4ZR	Roma	1,480	D. 2,000 N. 1,000	Maranoa Broadcasting Co. Ltd., McDowell-street, Roma	110½

COMMERCIAL BROADCASTING STATIONS IN OPERATION ON 30TH JUNE, 1957—continued.

Call Sign	Location of Station	Frequency (kc/s)	Authorized Power (Watts)	Licensee and Registered Office	Hours of Service per Week (to nearest Quarter Hour)
SOUTH AUSTRALIA.					
<i>Metropolitan.</i>					
5AD	Adelaide	1,310	2,000	Advertiser Newspapers Ltd., 121 King William-street, Adelaide	122
5DN	Adelaide	970	2,000	Hume Broadcasters Ltd., 201 Tynte-street North Adelaide	122
5KA	Adelaide	1,200	2,000	5KA Broadcasting Co. Ltd., 43 Franklin-st., Adelaide	168
<i>Country.</i>					
5AU	Port Augusta	1,400	500	Port Augusta Broadcasting Co. Ltd., 43 Franklin-street, Adelaide	119½
5MU	Murray Bridge	1,460	500	Murray Bridge Broadcasting Co. Ltd., 11 Weymouth-street, Adelaide	120½
5PI	Crystal Brook	1,040	2,000	Midlands Broadcasting Services Ltd., 11 Weymouth-street, Adelaide	122
5RM	Renmark	800	2,000	River Murray Broadcasters Ltd., 47 Weymouth-street, Adelaide	119½
5SE	Mount Gambier	1,370	500	South-Eastern Broadcasting Co. Ltd., 11 Weymouth-street, Adelaide	120½
WESTERN AUSTRALIA.					
<i>Metropolitan.</i>					
6IX	Perth	1,240	2,000	W.A. Broadcasters Pty. Ltd., Lyric House, 223 Murray-street, Perth	119
6KY	Perth	1,320	2,000	The People's Printing and Publishing Co. of Western Australia Ltd., 17-19 James-street, Perth	120
6PM	Perth	1,130	2,000	6PM Broadcasters Pty. Ltd., St. George's House, 115 St. George's-terrace, Perth	117½
6PR	Perth	880	2,000	Nicholson's Ltd., 86 Barrack-street, Perth	118½
<i>Country.</i>					
6AM	Northam	980	2,000	6AM Broadcasters Pty. Ltd., St. George's House, 115 St. George's-terrace, Perth	107
6BY	Bridgetown	900	2,000	W.A. Broadcasters Pty. Ltd., Lyric House, 223 Murray-street, Perth	113
6CI	Collie	1,340	2,000	Nicholson's Ltd., 86 Barrack-street, Perth	93½
6GE	Geraldton	1,010	2,000	Great Northern Broadcasters Ltd., E.S. & A. Bank Buildings, 145 Marine-terrace, Geraldton	78½
6KG	Kalgoorlie	1,210	2,000	Goldfields Broadcasters (1933) Pty. Ltd., St. George's House, 115 St. George's-terrace, Perth	80
6MD	Merredin	1,100	2,000	W.A. Broadcasters Pty. Ltd., Lyric House, 223 Murray-street, Perth	94½
6NA	Narrogin	920	2,000	The People's Printing and Publishing Co. of Western Australia Ltd., 17-19 James-street, Perth	120
6TZ	Bunbury	960	2,000	Nicholson's Ltd., 86 Barrack-street, Perth	113½
6VA	Albany	1,370	2,000	Albany Broadcasters Ltd., 167 York-street, Albany	70½
6WB	Katanning	1,070	2,000	W.A. Broadcasters Pty. Ltd., Lyric House, 223 Murray-street, Perth	93½
TASMANIA.					
<i>Metropolitan.</i>					
7HO	Hobart	860	2,000	Commercial Broadcasters Pty. Ltd., 23 Elizabeth-street, Hobart	117½
7HT	Hobart	1,080	2,000	Metropolitan Broadcasters Pty. Ltd., cnr. Elizabeth and Melville streets, Hobart	117½
<i>Country.</i>					
7AD	Devonport	900	500	Northern Tasmania Broadcasters Pty. Ltd., 29 Paterson-street, Launceston	108½
7BU	Burnie	560	500	Burnie Broadcasting Service Pty. Ltd., 29 Paterson-street, Launceston	98
7EX	Launceston	1,010	2,000	7EX Pty. Ltd., 71 Paterson-street, Launceston	113
7LA	Launceston	1,100	2,000	Findlay and Wills Broadcasters Pty. Ltd., 21 Paterson-street, Launceston	113
7QT	Queenstown	720	500	West Coast Broadcasters Pty. Ltd., 21 Paterson-street, Launceston	80½
7SD	Scottsdale	1,450	500	North-East Tasmanian Radio Broadcasters Pty. Ltd., 29 Paterson-street, Launceston	74½

D. = Day-time.

N. = Night-time.

APPENDIX B.

NATIONAL BROADCASTING STATIONS IN OPERATION ON 30TH JUNE, 1957.

Call Sign.	Station.	Frequency (kc/s).	Aerial Power (Watts).	Hours of Service per Week (to nearest Quarter Hour).
MEDIUM FREQUENCY SERVICES.				
<i>Australian Capital Territory.</i>				
2CN	Canberra	1,540	2,000	112
2CY	Canberra Regional (Canberra)	850	10,000	122½
<i>New South Wales.</i>				
Metropolitan.				
2BL	Sydney	740	10,000	118½
2FC	Sydney	610	10,000	119
Country.				
2BA	Bega	810	10,000	122½
2CO	Riverina Regional (Corowa)	670	10,000	122½
2CR	Central Regional (Cumnock)	550	10,000	122½
2GL	Glen Innes	820	10,000	122½
2KP	Kempsey Regional (Smithton)	680	10,000	122½
2LG	Lithgow Regional (Lithgow)	1,570	200	122½
2ML	Murwillumbah	560	200	122½
2NA	Hunter River Regional No. 2 (Newcastle)	1510	2,000	116
2NB	Broken Hill Regional (Broken Hill)	760	1,000	123
2NC	Hunter River Regional No. 1 (Newcastle)	1,230	2,000	118½
2NR	Northern Rivers Regional (Grafton)	700	10,000	122½
2NU	Northern Tablelands Regional (Manilla)	650	10,000	122½
2TR	Manning River Regional (Taree)	720	200	122½
<i>Victoria.</i>				
Metropolitan.				
3AR	Melbourne	620	10,000	119
3LO	Melbourne	770	10,000	118½
Country.				
3GI	Gippsland Regional (Sale)	830	10,000	122½
3WL	Warrnambool	1,570	200	122½
3WV	Western Regional (Dooen)	580	10,000	122½
<i>Queensland.</i>				
Metropolitan.				
4QG	Brisbane	790	10,000	119
4QR	Brisbane	590	10,000	118½
Country.				
4AT	Atherton Regional (Atherton)	600	500	122½
4GM	Gympie Regional (Gympie)	1,570	200	122½
4QA	Mackay Regional (Mackay)	720	2,000	122½
4QB	Wide Bay Regional (Pialba)	910	2,000	122½
4QL	Longreach Regional (Longreach)	540	10,000	122½
4QN	North Regional (Townsville)	630	2,000	122½
4QS	Darling Downs Regional (Dalby)	750	10,000	122½
4QY	Cairns Regional (Cairns)	940	2,000	122½
4RK	Rockhampton Regional (Rockhampton)	840	10,000	122½
4SO	South Coast Regional (Southport)	1,590	200	122½
<i>South Australia.</i>				
Metropolitan.				
5AN	Adelaide	890	2,000	119
5CL	Adelaide	730	5,000	119
Country.				
5CK	North Regional (Crystal Brook)	640	10,000	123
5LN	Port Lincoln Regional (Port Lincoln)	1,530	200	123
5MG	Mount Gambier	1,580	200	123
5PA	Penola	1,160	2,000	123
5WM	Woomera	1,580	50	123
<i>Western Australia.</i>				
Metropolitan.				
6WF	Perth	690	5,000	119
6WN	Perth	810	10,000	118½
Country.				
6AL	Albany	650	400	122½
6GF	Goldfields Regional (Kalgoorlie)	720	2,000	122½
6GN	Geraldton Regional (Geraldton)	830	2,000	122½
6WA	South-West Regional (Wagin)	560	10,000	122½
6NM	Northam	600	200	122½

NATIONAL BROADCASTING STATIONS IN OPERATION ON 30TH JUNE, 1957—continued.

Call Sign.	Station.	Frequency (kc/s).	Aerial Power (Watts).	Hours of Service per Week (to nearest Quarter Hour).
<i>Tasmania.</i>				
Metropolitan.				
7ZL	Hobart	600	2,000	119
7ZR	Hobart	940	2,000	118½
Country.				
7NT	North Regional (Kelso)	710	10,000	122½
7QN	Queenstown	540	200	122½
<i>Northern Territory.</i>				
5AL	Alice Springs	1,530	50	123
5DR	Darwin	1,500	2,000	123
<i>Papua.</i>				
9PA	Port Moresby	1,250	500	99¾

HIGH FREQUENCY SERVICES.*

Call Sign.	Location.	Power (Watts).	Hours of Service per Week (to nearest Quarter Hour).
VLG	Lyndhurst, Victoria	10,000	53½
VLH	Lyndhurst, Victoria	10,000	119
VLJ	Sydney, New South Wales	2,000	119
VLM	Brisbane, Queensland	10,000	122½
VLQ	Brisbane, Queensland	10,000	122½
VLR	Lyndhurst, Victoria	5,000	116¾
VLT	Port Moresby, Papua	2,000	99¾
VLW	Perth, Western Australia	2,000	119
VLX	Perth, Western Australia	10,000	119

* The frequencies on which these stations transmit are varied, as required, to obtain optimum results.

FREQUENCY MODULATION SERVICES.

(Experimental.)

Location.	Frequency (Mc/s).	Power (Watts).
Melbourne, Victoria	91,100	2,000
Sydney, New South Wales	92,100	2,000
Adelaide, South Australia	97,300	3,000
Brisbane, Queensland	91,100	1,000

APPENDIX C.

PROVISIONAL PLAN FOR THE ASSIGNMENT OF CHANNELS FOR AUSTRALIAN TELEVISION SERVICES.

Area. 1.	Channel Numbers. 2.	Power (kw.) and Polarization, Horizontal (H) or Vertical (V). 3.	Population Served (1954 Census). 4.	Main Towns Served and Grade of Service.	
				Urban. 5.	Rural. 6.
<i>New South Wales.</i>					
Sydney	2 7 9 10	100 H	2,000,000	Sydney metropolitan area (including Cronulla)	Penrith, Camden Campbelltown Windsor Palm Beach
Newcastle-Hunter River	6 8	100 H	314,000	Newcastle Cessnock Maitland Singleton Kurri Kurri Weston The Entrance Raymond Terrace	Gosford Muswellbrook Dungog Woy Woy
Blue Mountains	4	100 H	165,000 (not including Sydney)	Katoomba Penrith Windsor Camden Campbelltown Riverstone	Lithgow Mittagong Bowral Picton
Illawarra	1 5	100 H	133,000	Wollongong Mittagong Bowral Kiama Nowra Port Kembla Berry Shellharbour	Ulladulla Moss Vale
Central Tablelands	1 5	100 V	113,000	Orange Cowra Canowindra Molong	Bathurst Parkes Forbes Wellington Young
Richmond-Tweed	1 5	100 H	93,000	Lismore Casino Byron Bay Ballina Tweed Heads Coolangatta Mullumbimby	Murwillumbah Kyogle
South Western Slopes	2 9	100 H	76,000	Cootamundra Junee Temora Murrumburrah	Wagga Young Narrandera Gundagai Grenfell Coolamon
Blue Mountains (West)	3	100 H	63,000	Lithgow Katoomba Portland Blackheath	Bathurst
Eastern Riverina	4 6	100 H	62,000	Wagga Junee Coolamon	Leeton Temora Narrandera Lockhart
Macleay-Hastings	9 10	100 H	54,000	Kempsey Coffs Harbour Pt. Macquarie Macksville	Dorrigo
Upper Namoi River	3 5	100 H	50,000	Tamworth Gunnedah Manilla Quirindi	Barraba
Aust. Capital Territory	7 10	100 V	44,000	Canberra Queanbeyan	Yass

APPENDIX C—continued.

Area. 1.	Channel Numbers. 2.	Power (kw.) and Polariza- tion, Hori- zontal (H) or Vertical (V). 3.	Population Served (1954 Census). 4.	Main Towns Served and Grade of Service.	
				Urban. 5.	Rural. 6.
<i>New South Wales—continued.</i>					
Southern Tablelands	6 8	100 V	43,000	Goulburn Crookwell Moss Vale	Bowral
New England	6 8	100 H	40,000	Glen Innes Inverell	Barraba Part of Armidale
Clarence	2 7	100 H	39,000	Grafton South Grafton Macleay	Coffs Harbour Dorrigo
Manning River	1 4	100 H	37,000	Taree Wingham	Port Macquarie Gloucester
Central Western Slopes	7 9	100 H	36,000	Dubbo Narromine	Gilgandra Wellington
Murrumbidgee Irrigation Areas (M.I.A.)	7 10	100 H	36,000	Griffith Leeton	Narrandera
Broken Hill	4 7	100 H	32,000	Broken Hill	
Bathurst	2 10	1 V	20,000	Bathurst	
Gwydir River	2 10	100 H	19,000	Moree	Warialda Bingara
Armidale	1 4	1 V	12,000	Armidale	
<i>Victoria.</i>					
Melbourne	2 7 9 10	100 H	1,600,000	Melbourne metropolitan area Mornington Rosebud Sorrento Werribee Healesville Sunbury	Geelong Bacchus Marsh Parts of Kilmore
Ballarat	3 8	100 H	207,000 (not includ- ing Mel- bourne)	Ballarat Maryborough Daylesford (Parts of Geelong and Corio)	Colac Camperdown Ararat Bacchus Marsh Werribee
Latrobe Valley	4 6	100 H	132,000	Morwell Yallourn Traralgon Maffra Sale Warragul Korumburra Yarram, Moe Drouin Leongatha	Bairnsdale Wonthaggi
Bendigo	4 6	100 H	130,000	Bendigo Castlemaine Maryborough Kyneton	Seymour St. Arnaud Kyabram Rochester Echuca
Geelong	1 5	14 H	127,000	Geelong Queenscliff	Werribee Mornington Rosebud Sorrento Winchelsea
Goulburn Valley	1 5	100 H	102,000	Shepparton Wangaratta Euroa Benalla Yarrawonga Kyabram Tatura Mooroopna Numurkah Cobram	Beechworth Corowa Echuca Rutherglen Rochester

APPENDIX C—continued.

Area. 1.	Channel Numbers. 2.	Power (kw.) and Polariza- tion, Hori- zontal (H) or Vertical (V). 3.	Population Served (1954 Census). 4.	Main Towns Served and Grade of Service.	
				Urban. 5.	Rural. 6.
<i>Victoria—continued.</i>					
Upper Murray	3 8	100 H	87,000	Albury Wodonga Corowa	Beechworth Wangaratta Yarrawonga Rutherglen
Western District	2 9	100 H	75,000	Hamilton Warrnambool Port Fairy Terang	Casterton Camperdown Portland Ararat
Wimmera	7 10	100 H	48,000	Horsham Stawell Dimboola	Warracknabeal Nhill St. Arnaud
Mildura	3 8	100 H	32,000	Mildura Wentworth Red Cliffs Merbein	
Murray Valley	2 9	100 H	30,000	Swan Hill Kerang	Deniliquin
Colac	7 10	1 V	23,000	Colac	Camperdown
<i>Queensland.</i>					
Brisbane	2 7 9 10	100 H	600,000	Brisbane metropolitan area Ipswich Southport Redcliffe Beaudesert Rosewood Caboolture	Caloundra Gatton Boonah
Darling Downs	6 8	100 H	107,000	Toowoomba Oakey Gatton	Dalby Warwick Rosewood
Wide Bay	1 4	100 H	77,000	Maryborough Gympie Pialba	Bundaberg
Rockhampton	6 8	100 H	65,000	Rockhampton Mt. Morgan Yeppoon	Gladstone
Townsville	7 9	100 H	61,000	Townsville Ayr Home Hill	
Cairns	2 6	100 H	56,000	Cairns Innisfail Atherton Gordon Vale	
South Downs-North New England	3 4	100 H	44,000	Warwick Tenterfield Stanthorpe	Inglewood
Mackay	2 9	100 H	43,000	Mackay Mackay North Sarina	Proserpine
Bundaberg	7 9	100 H	33,000	Bundaberg	Childers
<i>South Australia.</i>					
Adelaide	2 7 9 10	100 H	600,000	Adelaide metropolitan area Salisbury Gawler Mt. Barker	Murray Bridge Tailem Bend Victor Harbour Maitland Tanunda Balaclava Meningie
Spencer Gulf (North)	4 8	100 H	67,000	Port Pirie Whyalla Port Augusta Jamestown Peterborough	Walleroo Kadina Clare Moonta

APPENDIX C—continued.

Area. 1.	Channel Numbers. 2.	Power (kw.) and Polariza- tion, Hori- zontal (H) or Vertical (V). 3.	Population Served (1954 Census). 4.	Main Towns Served and Grade of Service.	
				Urban. 5.	Rural. 6.
<i>South Australia—continued.</i>					
South East	1 8	100 H	37,000	Mt. Gambier Millicent Penola	Casterton
Renmark	1 5	100 H	22,000	Renmark Berri Loxton Barmere	Waikerie
<i>Western Australia.</i>					
Perth	2 7 9 10	100 H	400,000	Perth metropolitan area Gosnells Armadale Mundaring Kalamunda	Coates Pinjarra Gin Gin
Bunbury	4 8	100 H	39,000	Bunbury Collie Harvey	Busselton
Kalgoorlie	3 8	100 H	24,000	Kalgoorlie Boulder	Coolgardie
Albany	2 7	100 H	17,000	Albany Mt. Barker	Denmark
Geraldton	2 6	100 H	15,000	Geraldton Northampton	Mullewa Dongarra Mingenew Ajana
<i>Tasmania.</i>					
Hobart	2 4 6 8	100 H	120,000	Hobart metropolitan area New Norfolk Sorell Richmond	Geeveston Cygnet Franklin Oatlands
North-Eastern Tasmania	7 10	100 H	85,000	Launceston Scottsdale Longford	Georgetown Deloraine
Burnie-Devonport	5 9	100 H	59,000	Burnie Devonport Ulverstone Wynyard Latrobe Penguin	Smithton

APPENDIX D.

AUSTRALIAN BROADCASTING CONTROL BOARD.
Statement of Expenditure for Year Ended 30th June, 1957.

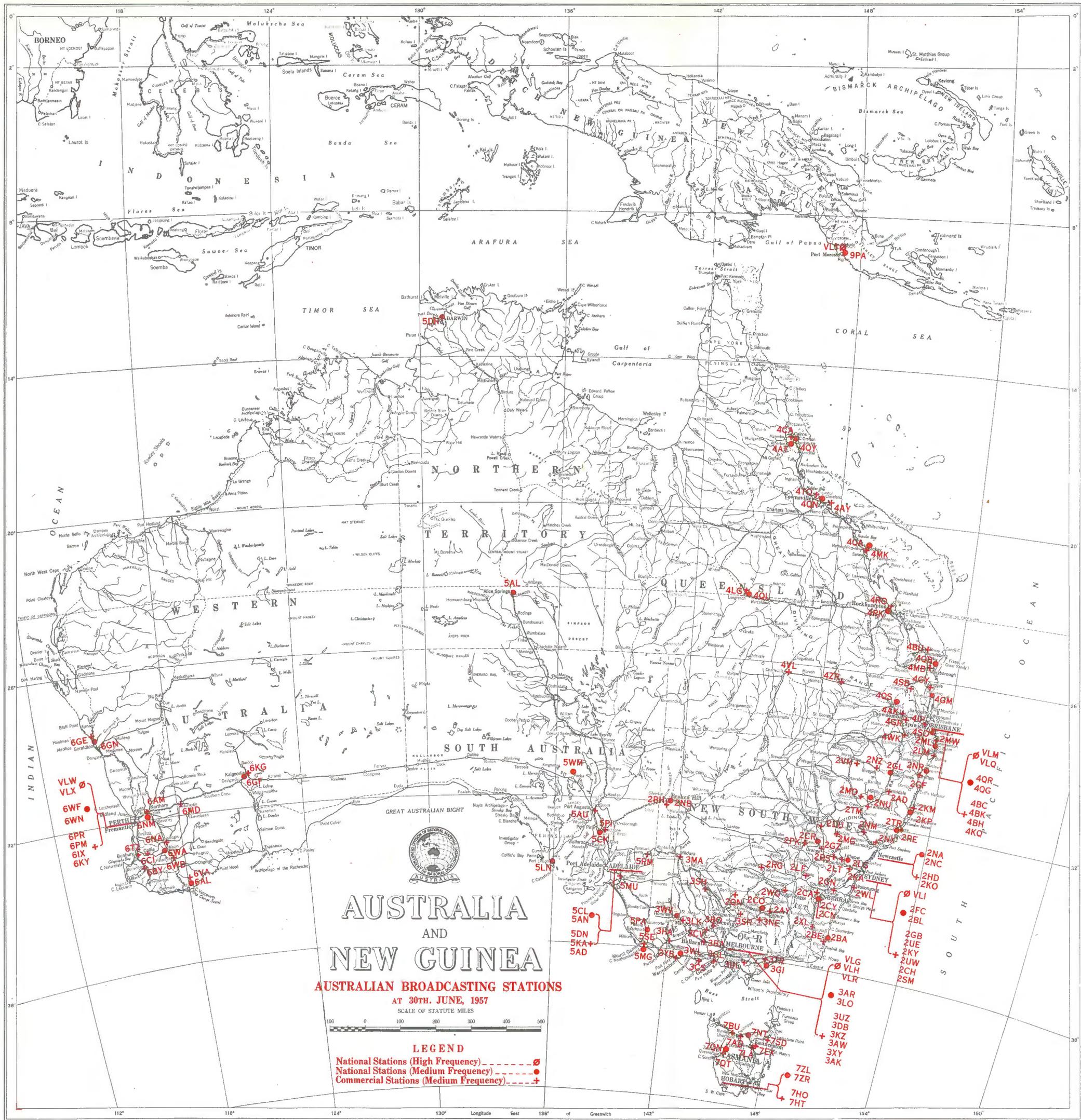
1955-56.		1956-57.
£	£	£
	<i>Salaries and Wages—</i>	
60,561	Salaries	68,922
1,353	Temporary assistance	2,612
1,007	Extra duty pay	1,374
62,921		72,908
	<i>General Expenses—</i>	
3,567	Travelling and subsistence	7,432
2,040	Office requisites	2,068
1,842	Postages, telephones, &c.	2,548
.....	Programme research & library	5,630
.....	Payments to Post Office for	
.....	station inspections, obser-	33,513
6,983	vations, &c.	4,490
14,432	Incidental & other expenditure	55,681
	<i>Stores and Materials—</i>	
22,875	Technical equipment	20,047
£100,228	TOTAL	£148,636

J. O'KELLY, Secretary,
5th September, 1957.

R. G. OSBORNE, Chairman.
5th September, 1957.

The above statement has been examined and is in agreement with the books. In my opinion it is a correct statement of the expenditure of the Australian Broadcasting Control Board for the year ended 30th June, 1957.

V. J. W. SKERMER, Acting Auditor-General for the Commonwealth,
23rd September, 1957.



AUSTRALIA AND NEW GUINEA

AUSTRALIAN BROADCASTING STATIONS
 AT 30TH. JUNE, 1957
 SCALE OF STATUTE MILES



- LEGEND**
- National Stations (High Frequency) ———— ●
 - National Stations (Medium Frequency) ———— ○
 - Commercial Stations (Medium Frequency) ———— +