

BROADCASTING BUSINESS

# YEAR BOOK

1939

OF AUSTRALIA

1939



- VALVES—Transmitting, Rectifying, Amplifying, Grid-control, Repeater.
- TRANSMITTERS—Broadcast, Aircraft, Radiophone, Marine, Components.
- RECEIVERS—Aircraft, Communications, Diversity.
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**YEAR BOOK**  
OF AUSTRALIA

**1939**

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# BROADCASTING BUSINESS YEAR BOOK of AUSTRALIA

Fourth Edition  
1939

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1938

Calendar grid for 1938, months January to June. Columns: SMTWTFSS, rows: days of month.

Calendar grid for 1938, months July to December. Columns: SMTWTFSS, rows: days of month.

1939

Calendar grid for 1939, months January to June. Columns: SMTWTFSS, rows: days of month.

Calendar grid for 1939, months July to December. Columns: SMTWTFSS, rows: days of month.

1940

Calendar grid for 1940, months January to June. Columns: SMTWTFSS, rows: days of month.

Calendar grid for 1940, months July to December. Columns: SMTWTFSS, rows: days of month.



LOCATION OF AUSTRALIAN BROADCASTING STATIONS

National Stations underlined

# Commercial Broadcasting in Australia

## A Review of 1938

The rapid progress that is being made by the commercial broadcasting stations throughout the Commonwealth of Australia is truly amazing. It is generally believed in broadcasting circles that the growth of advertising over commercial stations has resulted in a depreciation of advertising by the printed word, and, if the first three months of 1939 are any indication, then one can accept that statement as being very close to the point.

During the year 1938, the total number of wireless listeners' licences in Australia amounted to 1,102,315 at the end of September (at February 28, 1939, this figure was 1,116,042). During 1938 the actual net increase was 93,720 licences, showing a 9% increase on the year and giving a ratio of 15.99 radio homes to 100 population. The peak month for issue of new licences was August, when 23,930 new licences were taken out, plus 106,194 renewals, making a total of 130,124 licences issued during that month. This figure fell down sharply to a total of 73,965 during December, 1938. Detailed figures, showing the listening audience throughout the various parts of Australia, are given further on in this YEAR BOOK.

In the various States of Australia, N.S.W., possessing the greatest population, naturally has the greatest number of licensed radio homes, with a total of 421,341. Victoria is next with 323,438, then Queensland with 127,630, followed by South Australia with 115,571, Western Australia with 76,240, and Tasmania with 38,095, at the end of December last year.

It is hardly necessary to point out, so far as volume is concerned, that the broadcasting system in Australia incorporates the British system on the one hand as typified by our Australian Broadcasting Commission, conducting the National Broadcasting Service, and the United States system on the other hand, to which our commercial broadcasting stations service is similar.

### Control of Radio

Radio is generally controlled by the Postmaster-General's Department, under authority of the Wireless Act, passed by the Federal Parliament. The P.M.G.'s Department allocate the various wavelengths and supervise the stations in regard to their conduct, etc., the licence for which, in respect to the commercial stations, is on a yearly basis. While this is just twice the period that exists in the United States, nevertheless the Australian stations feel that even 12 months security of tenure is insufficient for the huge amount of capital that is invested, and strenuous efforts are continually being made to have this period extended to three or five years.

Any person desiring to possess a wireless set in Australia, must pay a listener's licence of 21/- per annum, 12/- of which is allocated to the Australian Broadcasting Commission to conduct the programs, while the P.M.G.'s Department retail the balance of 9/- to maintain the technical services for the Commission, and also the Radio Inspector's Department, which polices the commercial stations and conducts investigation into the elimination of radio inductive interference for the listeners. The Radio Inspector's Department supervises the issuing of licences, and also has a staff of inspectors, continually patrolling all areas to ascertain who does or who does not possess a wireless licence. Quite a large number of people have been summoned for not having a licence.

The remarkable entertainment value that is available on the broadcasting air of Australia every day, seven days a week, 365 days a year, considering the population of just short of 7,000,000, is truly amazing. Approximately 96 commercial stations function, varying from

2,000 watts down to 100 watts. The highest powered metropolitan commercial station is 1,000 watts, while the highest powered country station is 2,000 watts, and there are quite a number of these 2,000 watts country stations now operating.

There is no doubt that the commercial stations have materially contributed to the expanse of the number of radio listeners, who pay well over £1,000,000 per annum, all of which goes to the Government for the conduct of the national service. Therefore, the commercial stations do not get one penny of the listeners' licences paid every year. These commercial stations rely entirely on advertising for their revenue, and, in the majority of cases, they have made quite a good job of it, although a number of the smaller country stations find the going very hard. This, of course, is largely on account of the sparse population of those areas, as against the more thickly populated metropolitan areas where the broadcasting stations are doing a very good job and conducting their business in a proper manner. One Sydney station, who issued its balance sheet recently, on a turnover of about £30,000 made about £8,000 net profit. That station would only be considered about four or fifth out of six stations. It might be added that the station in question does not possess a big staff of highly paid executives, but nevertheless, it is a very successful station comparatively, and must have a huge following, otherwise, the advertisers would not pay all that money to provide entertainment.

### Commercial Stations Lead in Public Favour

It is generally believed that the commercial stations are responsible for entertaining about 75% or about 800,000 of the radio homes throughout Australia. In other words, the commercial stations entertain about three and a-half million people out of about five million who have easy access to a radio set.

The policy of the Australian Broadcasting Commission is one of a high order—ultra cultural and more addicted to broadcasting classics than the commercial stations, who believe in providing general entertainment for the public.

In every capital city in Australia, there is a highly competitive spirit existing amongst the commercial stations, which does not appear to detract from their success.

The broadcasting system of the Commonwealth undoubtedly is one of the best systems that could be devised, incorporating, as we said before, the British system on the one hand and the American system on the other, all cleverly supervised by the Postmaster-General's officials, who are generally acknowledged as being very capable and of performing very efficient service.

It is interesting to note that in the metropolitan areas about 82% of the homes are radio equipped, while in country areas, about 51% of the homes possess radio sets. While this would appear to leave quite a substantial market yet to be supplied with radio receivers, it is nevertheless, generally accepted in the radio manufacturing industry that the peak periods of sales have passed and that the major business in the future will settle down to replacing old sets. In that direction, while the broadcasting stations have spent a lot of money in keeping their stations up-to-date, putting in new transmitters, studios and equipment, on the other hand the listening public have been very slow of disposing of their old sets and buying new ones capable of giving better reception of the excellent program transmission. A reliable authority, estimating the number of radio sets sold during 1938, said that this totalled about 160,000 at the most, and that, for the first time in many years, there was quite a large carryover of sets unsold as at December,

## Review of Commercial Broadcasting in Australia during 1938

### News Broadcasts

The year under review brought about vast strides in commercial station program presentation, not the least important phase being the development of news broadcasts to a very much greater degree than hitherto. In this regard several news commentators in Australia and New Zealand brought about the displeasure of the authorities which led to official restrictions being imposed, and, in one case that of 2KY Sydney, resulted in the station's licence being suspended and the station cut off the air for a period of over three days. Nevertheless, straight news-casting came more and more into its own with stations giving an ever increasing amount of time to the coverage of special events by outside broadcasts and studio arranged news summaries.

This fact, plus the proof of commercial broadcastings power as an advertising medium reflected in lower advertising appropriations for the Press and higher appropriations for radio by most of the biggest national advertisers, led to the declaration of open warfare by the Sydney Press against commercial broadcasting stations.

The daily newspapers, acting in accordance with a decision of the Australian Newspapers' Conference held in Melbourne late in 1938, and dating from February 1, deleted all station program listings which had been established over the years as a reader-service. Demands were made upon the stations for advertising rates for the insertion of program listings in the news columns. The newspaper terms were not accepted generally, the stations concentrating more fully upon keeping their listeners informed of program highlights. First newspaper to break the ban was the "Daily News," which on April 12, restored the program listings "in the interest of service to readers."

A matter which had a definite bearing upon the banning of certain news commentators referred to above transpired early in 1938 when it was disclosed by the then Postmaster-General (Senator A. J. McLachlan, that the Commonwealth Government had become party to an agreement of an International Convention concerning the use of broadcasting held at Geneva in 1936. As the year progressed and the international relationships of various countries became more strained an ever increasing vigilance was maintained by broadcasting station executives over all news matter for broadcast. The news service thus rendered listeners throughout Australia was and still is of inestimable value in its completeness and faithfulness.

### More Highlights

Further events of interest in commercial broadcasting in Australia which occurred during the year 1938 and early part of 1939 was culled from the back numbers of BROADCASTING BUSINESS include: The winning of the Racing Case Appeal to the Privy Council, January, 1938; World Radio Convention held in Sydney April, 1938; A.W.A. celebrated 25 years in radio, June, 1938; Ray Dooley appointed secretary, A.F.C.B.S., June, 1938; the Provincial Network (N.S.W.) formed July, 1938; the Macquarie Broadcasting Network announced July, 1938; Empire State Network formed July, 1938; Lawrence Tibbett comes to Australia on commercial broadcast hook-up, July, 1938; fourth birthday of BROADCASTING BUSINESS, October, 1938; "Broadcasting Business Quarterly," incorporating rate cards of commercial stations, first issued October, 1938; the Hon. A. G. Cameron appointed Postmaster-General, November, 1938; direct radio telephone service opened between Sydney and San Francisco,

(Continued page 6.)

1938. Unfortunately, there is no available record of the actual number of sets that are sold, unless you make your own deductions from the licence figures, released by the Postmaster-General's Department, as published in this YEAR BOOK. The Editor of this YEAR BOOK prefers to believe that at least 200,000 radio sets were sold during 1938, and indications are that 1939 will be substantially lower in that regard, because the bulk of the people who have not yet purchased a radio set, either do not want one or are not in a position to get one. The balance will be considered to be hard selling.

### Activities of the Federation

The Australian Federation of Commercial Broadcasting Stations grew to greater strength and influence during 1938 and in the early part of the present year than at any other stage of its history. Under the guidance of the Federation individual and collective action was taken by commercial broadcasting stations to raise the standards of their programs. Co-operation throughout the industry was brought about on many matters of vital importance, particularly in regard to program standards, and with the co-operation and blessing of the Postmaster-General's Department, the Federation by the close of the year, was able to give the Government an assurance of its ability to regulate the industry and of the desire of members to co-operate with the Postal Department in maintaining standards of broadcasting advertising. To assist in this direction the Federation brought about the formation of a Commercial Radio Advertising Board, comprising representatives of the Federation, the Australian Association of National Advertisers, and the Accredited Advertising Agents' Association. Additionally a Board of Reference was appointed from the Federal Executive of the Federation.

Another important step by the Federation during 1938 was the establishment and operation of a Federal Accreditation Bureau for the accreditation of advertising service agencies.

By its forceful endeavours on behalf of the industry the Federation moved from strength to strength within the commercial broadcasting industry in Australia, winning the utmost confidence of its members and of the Federal and State Governments, under the able presidency of Mr. C. F. Marden. During this period and again during the present year, the commercial broadcasting stations of Australia, individually and collectively or in groups, demonstrated many times their powerful influence for good and the welfare of the community, in special broadcasts often of a National significance. On all of these occasions we find from the records that the Federation played its guiding part. Notable instances were the Australian 150th Anniversary Pageant broadcast in January, 1938, made available through the co-operative effort of the Federation to all stations; Prime Minister's historic broadcast during March on the Government's Defence Policy over 88 commercial and 18 National stations (this was the forerunner to several other notable broadcasts by the late Mr. J. A. Lyons); appeals for the after-care of infantile paralysis victims; fire-fighting directions in the disastrous Victorian and New South Wales bushfires during the summer of 1938, and subsequent appeal for funds for the victims, etc.

On the industrial side the Federation kept a close watch over all matters affecting employment within the industry, and in April, 1939, following application to the Federal Arbitration Court by the Announcers' Association of Australia for an award, arrived at an agreement with that body governing working conditions, wages, etc., which was duly registered in the Court.

In November, 1938, the Federation held its eighth annual convention at Jervis Bay, details of which are recorded elsewhere in this Year Book.

Review of Commercial Broadcasting in Australia during 1938 (contd.)

December, 1938; first American program relay by Major Network through radio telephone link with America, February, 1939; A.W.A. new headquarters in Sydney completed externally March, 1939; Tasmanian Radio Network formed March, 1939.

New Stations

Several new commercial stations came into operation during the year, important changes occurred in relation to several others, while all over the continent almost weekly some station or other installed new transmission or studio equipment and facilities for the general improvement of broadcasting. The new Launceston, Tasmania, Station 7EX commenced operations February, 1938; another Tasmanian station, 7DY Derby, opened up in the same month; while a third February "birth" was the Young (N.S.W.) station, 2LF; in March, 1938, 4SB Kingaroy, was officially opened; in the same month the former 3MB Birchip in Victoria became 3CV Charlton; a new South Australian station, 5AU Port Augusta, commenced operations in April, 1938; Mudgee, New South Wales, station, 2MG, commenced operations in July, 1938; in October, 1938, the Canberra station, 2CA, commenced a 24 hours a day transmission schedule, thus making the second 24 hours a day station in the Commonwealth, the other being 2UW Sydney, which has maintained the round the clock schedule for several years; 2CK Cessnock was officially put on the air in January, 1939; and in February, 1939, 4AT Atherton, Queensland, commenced operations.

Legislation

Two enactments of the New South Wales Parliament passed during 1938, the Medical Practitioners' Act, 1938, and the Gaming and Betting (Amendment) Act, 1938, have a very definite bearing upon commercial station programs and advertising and are dealt with on later pages. The new betting legislation in New South Wales was introduced primarily to help restrict the activities of unregistered and, or S.P. bookmakers, professional race tipsters, and generally the practice of starting price or off the course betting. Measures of a similar nature had been previously enacted in several other States, and, consequently, according to the various authorities, the campaign against the so-called evils of S.P. betting was considerably implemented. A certain loss of revenue was incurred by stations by the Acts banning professional tipsters from the air. Certain minor restrictions were imposed against race broadcasts by legislation, but the true position in regard to some of these matters has not yet been clarified.

# Australian Commercial Broadcasting Stations

## Complete Listing by Call Signs

NOTE: Networks. Commonwealth Broadcasting Network shown (C.B.N.), The Major Network (Major), Macquarie Broadcasting Network (Macquarie), Amalgamated Wireless (A/sia) Ltd. affiliates (A.W.A.), The Provincial Network (T.P.N.), The Empire State Network (E.S.N.), The Victorian Broadcasting Network (V.B.N.), The Argus Broadcasting Network (Argus), Advertiser Network (Advertiser), Tasmanian Broadcasting Network (T.B.N.), Whitford's Broadcasting Network (Whitfords).

NEW SOUTH WALES.

Station	Location.	Operator.	Network	Metres	Watts
2AD	Armidale	New England Broadcasters	Nil	265	100
2AY	Albury	Amalgamated Wireless	A.W.A.	203	200
2BE	Bega	Bega and Far South Coast Broadcasters Pty. Ltd.	Nil	201	100
2BH	Broken Hill	Radio Silver City Ltd.	Major	349	100
2BS	Bathurst	Bathurst Broadcasters Pty. Ltd.	C.B.N.	200	100
2CA	Canberra	Canberra Broadcasters Ltd.	Macquarie	286	2000
2CH	Sydney	Amalgamated Wireless	Major	252	1000
2CK	Cessnock	Coalfields Broadcasting Co. Pty. Ltd.	Nil	205	200
2DU	Dubbo	Western Broadcasters Pty. Ltd.	Nil	455	100
2GB	Sydney	2GB Broadcasting Station Pty. Ltd.	Macquarie	345	1000
2GF	Grafton	Grafton Broadcasting Co. Pty. Ltd.	A.W.A.	248	200
2GN	Goulburn	Goulburn Broadcasting Co. Pty. Ltd.	A.W.A.	216	200
2GZ	Orange	Country Broadcasting Services Ltd.	T.P.N.	303	2000

# Commercial Stations by Call Signs (contd.)

NEW SOUTH WALES STATIONS (contd.)

Station	Location	Operator.	Network	Metres	Watts
2HD	Newcastle	Airsales Broadcasting Co.	C.B.N. and E.S.N.	263	500
2HR	Lochinvar	Hunter River Broadcasters Pty. Ltd.	Macquarie	441	300
2KA	Katoomba	2KA Katoomba Ltd.	Macquarie	385	1000
2KM	Kempsey	Radio Kempsey Ltd.	Nil	306	100
2KO	Newcastle	Newcastle Broadcasting Co. Pty. Ltd.	T.P.N. and Major	213	500
2KY	Sydney	Labour Council of New South Wales	Nil	294	1000
2LF	Young	Young Broadcasters Pty. Ltd.	Nil	224	300
2LT	Lithgow	Projected station.		278	100
2LM	Lismore	Richmond River Broadcasters Pty. Ltd.	T.P.N.	333	500
2MG	Mudgee	Mudgee Broadcasting Co. Pty. Ltd.	E.S.N.	207	100
2MO	Gunnedah	2MO Gunnedah Ltd.	Nil	219	100
2MW	Murwillumbah	Tweed Radio and Broadcasting Co. Pty. Ltd.	Nil	204	100
2NZ	Inverell	Northern Broadcasters Pty. Ltd.	T.P.N.	256	2000
2PK	Parkes	Parkes Broadcasting Co. Pty. Ltd.	E.S.N.	214	200
2QN	Deniliquin	Deniliquin Broadcasting Co. Ltd.	E.S.N.	208	100
2RG	Griffith	Irrigation Area Newspapers Ltd.	Nil	280	100
2SM	Sydney	Catholic Broadcasting Co. Ltd.	Nil	236	1000
2TM	Tamworth	Tamworth Radio Development Co. Ltd.	C.B.N. and T.P.N.	231	2000
2UE	Sydney	Radio 2UE Sydney Pty. Ltd.	Nil	316	1000
2UW	Sydney	Commonwealth Broadcasting Corp. Pty. Ltd.	C.B.N.	270	750
2WG	Wagga	Riverina Broadcasting Pty. Ltd.	C.B.N.	261	2000
2WL	Wollongong	Wollongong Broadcasting Pty. Ltd.	Macquarie	210	500
2XL	Cooma	W. A. Evans (lessee)	E.S.N.	341	100

VICTORIA.

3AK	Melbourne	Melbourne Broadcasters Pty. Ltd.	Nil	200	200
3AW	Melbourne	3AW Broadcasting Co. Pty. Ltd.	V.B.N. and Macquarie	234	600
3BA	Ballarat	Ballarat Broadcasters Pty. Ltd.	Nil	227	500
3BO	Bendigo	Amalgamated Wireless	A.W.A.	309	300
3CS	Colac	Projected Station			200
3CV	Charlton	Malee Broadcasters Pty. Ltd.	C.B.N.	204	200
3DB	Melbourne	3DB Broadcasting Co.	Major	291	600
3LK	Lubeck	(Relay station for 3DB)	Major	275	2000
3GL	Geelong	Geelong Broadcasters Pty. Ltd.	Nil	222	500
3HA	Hamilton	Western Province Radio Pty. Ltd.	V.B.N. and Macquarie	297	750
3KZ	Melbourne	3KZ Broadcasting Co. Pty. Ltd.	Nil	254	600
3MA	Mildura	Sunraysia Broadcasters Pty. Ltd.	Nil	221	100
3SH	Swan Hill	Central Murray Broadcasters Pty. Ltd.	V.B.N. and Macquarie	226	200
3SR	Shepparton	"The Argus" Broadcasting Services Pty. Ltd.	"Argus" and C.B.N.	238	2000
3TR	Sale	Broadcast Entertainments Pty. Ltd.	V.B.N. and Macquarie	242	1000
3UL	Warragul	"The Argus" Broadcasting Services Pty. Ltd.	"Argus" and C.B.N.	333	200
3UZ	Melbourne	Nilsen's Broadcasting Service Pty. Ltd.	"Argus" and C.B.N.	323	600
3XY	Melbourne	Efftee Broadcasters Pty. Ltd.	Nil	211	600
3YB	Warrnambool	"The Argus" Broadcasting Services Pty. Ltd.	"Argus" and C.B.N.	248	200

(Continued next page)

## Commercial Stations by Call Signs (contd.)

QUEENSLAND.					
Station	Location	Operator.	Network	Metres	Watts
4AK	Oakey	Brisbane Broadcasting Pty. Ltd.	Major	246	2000
4AT	Atherton	Atherton Tablelands Broadcasters Pty. Ltd.	C.B.N.	441	500
4AY	Ayr	Ayr Broadcasters Pty. Ltd.	C.B.N.	349	500
4BC	Brisbane	Commonwealth Broadcasting Corp. (Q'ld) Pty. Ltd.	C.B.N.	268	1000
4BH	Brisbane	Broadcasters (Aust.) Pty. Ltd.	Macquarie	217	1000
4BK	Brisbane	Brisbane Broadcasting Pty. Ltd.	Major	233	500
4BU	Bundaberg	Bundaberg Broadcasters Pty. Ltd.	Major	226	500
4CA	Cairns	Amalgamated Wireless	A.W.A.	300	200
4GR	Toowoomba	Gold Radio Service Pty. Ltd.	C.B.N.	300	500
4GY	Gympie	(Projected station)		222	200
4IP	Ipswich	The Ipswich Broadcasting Co. Pty. Ltd.		208	100
4LG	Longreach	Central Western Broadcasting Co. Pty. Ltd.		273	500
4MB	Maryborough	Maryborough Broadcasting Co. Pty. Ltd.	C.B.N.	214	100
4MK	Mackay	Mackay Broadcasting Service Pty. Ltd.	A.W.A.	216	100
4PM	Port Moresby	Amalgamated Wireless	A.W.A.	221	100
4SB	Kingaroy	(Relay station for 4BC)			
4TO	Townsville	South Burnett Broadcasting Co. Ltd.	C.B.N.	283	2000
4VL	Charleville	Amalgamated Wireless	A.W.A.	385	200
4WK	Warwick	Charleville Broadcasting Service Pty. Ltd.	C.B.N.	526	200
4ZR	Roma	Warwick Broadcasting Co. Pty. Ltd.	A.W.A.	341	100
		Maranoa Broadcasting Co. Ltd.	C.B.N.	201	100
SOUTH AUSTRALIA.					
5AD	Adelaide	Advertiser Newspapers Ltd.	"Advertiser" and Major	229	500
5AU	Port Augusta	Sport Radio Broadcasting Co. Ltd.	C.B.N.	214	100
5DN	Adelaide	Hume Broadcasters Ltd.	Macquarie	313	500
5KA	Adelaide	Sport Radio Broadcasting Co. Ltd.	C.B.N.	250	500
5MU	Murray Bridge	Advertiser Newspapers Ltd.	"Advertiser" and Major	207	100
5PI	Crystal Brook	Advertiser Newspapers Ltd.	"Advertiser" and Major	288	2000
5RM	Renmark	River Murray Broadcasters Ltd.	Macquarie	370	1000
5SE	Mount Gambier	Advertiser Newspapers Ltd.	"Advertiser" and Major	219	100
WESTERN AUSTRALIA.					
6AM	Northam	6AM Broadcasters Ltd.	Whitford	306	2000
6GE	Geraldton	Great Northern Broadcasters Ltd.		219	500
6IX	Perth	W.A. Broadcasters Ltd.	Major	242	500
6KG	Kalgoorlie	Goldfields Broadcasters (1933) Ltd.	Whitford	265	500
6ML	Perth	W.A. Broadcasters Ltd.	C.B.N.	248	500
6PM	Fremantle	6PM Broadcasters Ltd.	Whitford	216	500
6PR	Perth	Nicholson's Ltd.	Macquarie	341	500
6WB	Katanning	W.A. Broadcasters Ltd.	Major	280	2000
TASMANIA.					
7BU	Burnie	Burnie Broadcasting Service Pty. Ltd.	T.B.N. and Macquarie	455	200
7DY	Derby	North East Tasmanian Radio B'casters Pty. Ltd.	T.B.N. and Macquarie	214	200
7EX	Launceston	7EX Pty. Ltd.	Major	300	500
7HO	Hobart	Commercial Broadcasters Pty. Ltd.	T.B.N. and Macquarie	349	500
7HT	Hobart	Metropolitan Broadcasters Pty. Ltd.	Nil	278	500
7LA	Launceston	Findlay and Wills Broadcasters Pty. Ltd.	T.B.N. and Macquarie	273	500
7QT	Queenstown	West Coast Broadcasters Pty. Ltd.	T.B.N. and Macquarie	441	300
7UV	Ulverstone	Northern Tasmania Broadcasters Pty. Ltd.	C.B.N.	205	300

## COUNTRY MERCHANDISING DATA

### Special Value to Advertisers

#### Country Town and Municipality Population Figures

The following list of Australian commercial broadcasting stations will prove invaluable for radio reference. In each case the town name shown in the first column is the town in respect of which the broadcasting licence has been issued, or the approximate location of the transmitting site. The second column shows the call sign of the station, the third column shows the power in watts of each station, and in the fourth column are the names of the principal towns, or towns with a population of 300 or more, within 50 miles radius of the broadcasting station town.

The purpose of this section is, not to attempt an indication of the population coverage available to each station, but to assist in the study of merchandising in relation to broadcast advertising campaigns.

Unless otherwise stated the population figures given for each broadcasting station town refer to the population within the municipality only, and do not take into account "district" or purely rural population. The valuable assistance given by Shire and Town Clerks throughout Australia, in the collection of the data in this section, is appreciated by the Publishers.

NEWCASTLE AND COALFIELDS DISTRICT, N.S.W.: The density of population in this area and the overlapping of towns within 50 miles radii of the four stations grouped—2HD and 2KO at Newcastle, 2CK transmitting from Cessnock, and 2HR transmitting from Lochinvar, Hunter River—render most difficult the segregation of the towns within 50 miles radius of each transmitting centre. We have therefore taken figures as supplied by The Greater Newcastle Tourist and Commercial Intelligence Bureau of population and towns within approximately 50 miles radius of Greater Newcastle. This information will be found at the end of the list of N.S.W. Stations.

#### AUSTRALIAN CAPITAL TERRITORY

TOWN	STATION	POWER	PRINCIPAL TOWNS WITHIN 50 MILES RADIUS
Canberra	2CA	2,000	Canberra (9,830), Bowning, Bungendore, Captains Flat, Queanbeyan, Yass.

#### NEW SOUTH WALES

Albury	2AY	200	Albury (12,500), 50 miles towns not available.
Armidale	2AD	100	Armidale (7,800), Bundarra (1,000), Ebor (500), Glencoe (300), Guyra (1,500), Tingha (1,000), Uralla (1,200), Walcha (1,600).
Bathurst	2BS	100	Bathurst, city (11,000), within 50 miles 93,400. (Towns not available).
Bega	2BE	100	Bega (2,800). List of 50 miles towns not available.
Broken Hill	2BH	100	Broken Hill (28,000).
Cessnock	2CK	300	(See Newcastle District).
Lismore	2LM	500	Lismore (13,600), Alstonville, Ballina, Bangalow, Broadwater, Brunswick Heads, Byron Bay, Casino, Coraki, Clunes, Dunoon, Evan's Head, Kyogle, Nimbin, Wardell, Woodburn.
Lochinvar	2HR	300	(See Newcastle District).
Cooma	2XL	100	Cooma (2,600), Adaminaby (550), Nimmitabel (550).
Deniliquin	2QN	100	Deniliquin (3,260). List of 50 miles towns not available.
Dubbo	2DU	100	Dubbo (9,400), Gilgandra (2,000), Narromine and district (3,500), Peak Hill (1,200), Trangie (900), Wellington (4,400).
Goulburn	2GN	200	Goulburn (16,000), Crookwell and district (9,000), Gunning (650), Marulan and district (800), Tarago, Taralga (420).
Grafton	2GF	200	Grafton (9,500), Brushgrove (350), Coffs Harbour (3,800), Copmanhurst (350), Coramba (400), Dorrigo (800), Glenreagh (500), Harwood (720), Lawrence, Maclean (2,250), Tyringham (800), Ulmarra (Police Patrol District, 2,200), Woodburn, Woolgoolga (1,000), Yamba (700).
Griffith	2RG	100	Griffith (4,000), Barellan, Darlington Point, Leeton, Whitton, Yanco, Yenda.
Gunnedah	2MO	100	Gunnedah (4,750), Boggabri, Curlewis, Manilla, Tambar Springs, Tamworth, Werris Creek.
Inverell	2NZ	2,000	Inverell (6,700), Ashford, Bingara, Bundarra, Delungra, Emmaville, Glen Innes, Tingha, Warialda.

# Country Merchandising Data (Continued from Page 9)

## NEW SOUTH WALES (contd.)

TOWN	STATION	POWER
Kempsey	2KM	100
Katoomba	2KA	1,000
Mudgee	2MG	100
Murwillumbah	2MW	100
Newcastle	2HD 2KO	500 500
Orange	2GZ	2,000
Parkes	2PK	200
Tamworth	2TM	2,000
Wagga Wagga	2WG	2,000
Wollongong	2WL	500
Young	2LF	300

**PRINCIPAL TOWNS WITHIN 59 MILES RADIUS**  
 Kempsey (5,500), Gladstone, Macksville, Smithtown.  
 Katoomba (11,000), (up to 60,000 in season), Blackheath, Lawson, Lithgow, Mt. Victoria, Penrith, Springwood, Wentworth Falls.  
 Mudgee (4,100), Capertee, Dunedoo, Gulgong, Kandos, Rylstone.  
 Murwillumbah (5,500), Ballina, Bangalow, Burleigh Heads, Byron Bay, Coolangatta (Q.), Kyogle, Mullumbimby, Southport (Q.), Tweed Heads. (See special listing).  
 Orange (12,000), Bathurst, Blayney, Cudal, Eugowra, Manildra, Millthorpe, Molong, Newbridge.  
 Parkes (6,900). List of towns not available.  
 Tamworth (district, 25,000), Armidale (7,395), Attunga (948), Barraba (1,456), Gunnedah (4,750), Kootingal (1,080), Manilla (2,154), Nundle (620), Murrurundi (1,200), Quirindi and district (4,668), Walcha (1,640), Weabonga (839), Uralla and district (4,303), Werris Creek (urban area, 1763).  
 Wagga (13,000), Adelong, Batlow, Boree Creek, Bethunga, Coolac, Coolamon, Cootamundra, Coreinbob, Culcairn, Ganmain, Gilmore, Grong Grong, Gundagai, Henty, Holbrook, Illabo, Ladysmith, Lockhart, Marrar, Matong, Old Junee, Pleasant Hills, Temora, The Rock, Tumblong, Tumut, Urquinty, Terong Creek.  
 Wollongong (17,630). Ten miles radius: Port Kembla (7,258), Bulli-Woonona (6,576), Corrimal (4,560), Balgownie (3,452), Thirroul (4,125), Austinmer (2,125), Albion Park-Shell Harbour-Dapto (4,494), Coniston-Mt. Keira-Mt. Kembra-Unanderra-Figtree (4,491).  
 Young (4,350), Binalong, Boorowa, Cootamundra, Cowra, Grenfell, Harden, Koorawatha, Murrumburrah, Rye Park, Stockinbingal, Temora, Wallendbeen.

## Official Population Statistics Greater Newcastle and District Within Approximate Distance of Fifty Miles

*(Issued by Newcastle Tourist and Commercial Intelligence Bureau)*

City of Greater Newcastle comprising the city proper and eleven suburbs (110,660).

The following population figures of other municipalities in the north are reported to be:—Cessnock, 14,500; Dungog, 2,128; Gosford, 2,362; Maitland East, 4,380; Maitland West, 8,260; Morpeth, 1,040; Singleton, 3,668. Total, 36,338.

**In Other Towns:** Details of the population of towns other than in Municipalities in the Newcastle and Maitland districts, as estimated by the police at December 31, 1938, are:—Abermain, 2,694; Abernethy, 343; Argenton, 360; Barnsley, 160; Bellbird, 1,675; Belmont, 4,221; Beresfield, 254; Boolaroo, 1,706; Branxton, 1,289; Cardiff, 3,896; Catherine Hill Bay, 1,074; Charlestown, 1,350; Dudley, 795; Estelville, 188; Greta, 1,363; Heddon Greta, 310; Hexham, 872; Holmesville, 621; Kearsley, 954; Killing-

worth, 220; Kitchener, 640; Kurri Kurri, 6,258; Lorn and Bolwarra, 1,807; Mayfield West, 1,901; Minmi, 500; Neath, 682; Paxton, 2,587; Pelaw Main, 1,350; Patterson, 416; Pokolbin, 1,125; Raymond Terrace, 1,146; Rothbury, 176; Rutherford, 394; Sandgate, 339; Shortland, 461; Speers Point, 1,573; Stanford Merthyr, 541; Swansea, 2,657; Tarro, 262; Telarah, 959; Tenambit, 239; Teralba, 879; Thornton, 434; Toronto, 2,553; Wakefield, 116; Warner's Bay, 587; Weston, 4,518; West Wallsend, 1,800; Wyong, 1,188; Young Wallsend, 510. Total, 64,447.

**District Total:** At the present stage there are no available statistics of the purely rural population; that is, those who do not live in the towns, but the estimate is 25,000.

Grand total for area embracing Great Newcastle and radius of 50 miles is 236,445.

## VICTORIA

Ballarat	3BA	500
Bendigo	3BO	300
Charlton	3CV	200
Geelong	3GL	500
Hamilton	3HA	2,000

Ballarat (37,256). Addington, Allendale, Alma, Amherst, Ascot, Avoca, Bacchus Marsh, Ballan, Bannockburn, Barry's Reef, Batesford, Beaufort, Beecac, Beremboke, Berringa, Berrybank, Blackwood, Blakeville, Bowenvale, Broomfield, Buangor, Bunding, Bungaree, Buninyong, Carisbrook, Castlemaine, Chilwell, Clunes, Coghill's Creek, Colac, Cressy, Creswick, Daylesford, Deer Park, Dunolly, Eganstown, Egerton, Elaine, Evansford, Geelong, Gordon's, Kingston, Korweinguboorra, Kyneton, Lake Bolac, Lal Lal, Learmonth, Leigh Creek, Leonard's Hill, Lexton, Little Bendigo, Maldon, Maryborough, Melton, Miner's Rest, Mount Clear, Mount Wallace, Newstead, Parwan, Rokewood, Scarsdale, Sebastopol, Shefford, Skipton, Smeaton, Smythesdale, Snake Valley, Steiglitz, Streatham, Talbot, Trawalla, Trentham, Yendon.  
 Bendigo (26,715), Castlemaine, Dunolly, Daylesford, Echuca, Eaglehawk, Elmore, Inglewood, Kyneton, Maldon, Malmsbury, Marong, Maryborough, Mitiamo, Pyramid Hill, Rochester, Rushworth, Seymour, Tarnagulla, Wedderburn, Woodend.  
 Charlton (1,500), Birchip, Boort, Donald, Inglewood, Quambatook, St. Arnaud, Wedderburn, Wychebrook.  
 Geelong (25 miles radius, 63,596). List of 50 mile towns not available.  
 Hamilton (6,000), Casterton (1,900), Coleraine (900), Dunkeld (370), Peshurst (720).

# Country Merchandising Data (Continued from Page 10)

TOWN	STATION	POWER
Lubeck	3LK	2,000
Mildura	3MA	100
Sale	3TR	1,000
Shepparton	3SR	2,000
Swan Hill	3SH	200
Warragul	3UL	200
Warrnambool	3YB	200
Atherton	4AT	500
Ayr	4AY	500
Bundaberg	4BU	500
Cairns	4CA	200
Charleville	4VL	100
Ipswich	4IP	100
Kingaroy	4SB	1,000
Longreach	4LG	500
Mackay	4MK	100
Maryborough	4MB	100
Oakey	4AK	2,000
Rockhampton	4RO	100
Roma	4ZR	100
Toowoomba	4GR	500
Townsville	4TO	200
Warwick	4WK	100
Crystal Brook	5PI	2,000
Mount Gambier	5SE	100
Murray Bridge	5MU	100
Port Augusta	5AU	100
Renmark	5RM	1,000
Geraldton	6GE	500
Kalgoorlie	6KG	500
Katanning	6WB	2,000
Northam	6AM	2,000
Burnie	7BU	200
Derby	7DY	200
Launceston	7LA	500
	7EX	500
Queenstown	7QT	300
Ulverstone	7UV	300

**PRINCIPAL TOWNS WITHIN 59 MILES RADIUS**  
 Lubeck (25 miles radius, 20,857). List of 50 mile towns not available.  
 Mildura (7,500, city), Merbein (1,250), Red Cliffs (1,500), Wentworth (1,000).  
 Sale (25 miles radius, 16,563). List of 50 miles towns not available.  
 Shepparton (25 miles radius, 33,435). List of 50 miles towns not available.  
 Swan Hill (4,500), Barham (500), Kerang (3,000), Koondrook (500), Lake Boga (300), Manangatang (400), Moulamein (300), Nyahwest (400), Quambatook (500), Sea Lake 600, Ultima (300).  
 Warragul (25 miles radius 41,645). List of 50 miles towns not available.  
 Warrnambool (9,100), Allansford (300), Camperdown (3,500), Cobden (450), Dennington (310), Koroit (1,700), Macarthur (350), Mortlake (1,000), Port Campbell (300), Port Fairy (1,850), Peshurst (720), Terang (2,350).

## QUEENSLAND

Atherton (2,000), Gordonvale, Herberton, Malanda, Mareeba, Millaa Millaa, Ravenshoe, Tolga, Yungaburra.  
 Ayr (6,500), Brandon (3,000), Giru (750), Home Hill (3,000).  
 Bundaberg (25 miles radius, 22,518). List of 50 miles towns not available.  
 Cairns (14,000), coastal; Babinda, Edmonton, Gordonvale, Innisfail, Mossman, Redlynch, Stratford. Tablelands: Atherton, Herberton, Malanda, Mareeba, Millaa Millaa, Tolga, Yungaburra.  
 Charleville (3,300), Augathella.  
 Ipswich (22,500). List of 50 miles towns not available.  
 Kingaroy (25 miles radius, 16,092). List of 50 miles towns not available.  
 Longreach (3,700), district estimated 5,000.  
 Mackay (11,720), Eton, Finch Hatton, Nebo, Sarina, Walkerston.  
 Maryborough (11,843), Baddow, Bauple, Childers, Cordalba, Degilbo, Gunalda, Howard, Isis Junction, Mungar Junction, Pialba, Scarness, Theebine, Tiaro, Torbanlea, Torquay, Urangan.  
 Oakey (25 miles radius, 47,928). List of 50 miles towns not available.  
 Rockhampton (33,000). List of 50 miles towns not available.  
 Roma (3,369), Injune, Jackson, Mitchell, Surat, Wallumbilla, Yeulba.  
 Toowoomba (28,600). List of 50 miles towns not available.  
 Townsville (31,414), Ayr (5,500).  
 Warwick (25 miles radius 21,209). List of 50 miles towns not available.

## SOUTH AUSTRALIA

Crystal Brook and district (1,300), Gladstone, Jamestown, Laura, Port Pirie.  
 Mount Gambier (6,000), near district (5,000), Casterton, Kalangadoo, Millicent, Penola, Port MacDonalid.  
 Murray Bridge (3,700), Adelaide and metropolitan area, Alawoona, Aldgate, Angaston, Ashton, Balhanna, Birdwood, Bridgewater, Carey's Gully, Clarendon, Coomandook, Crafers, Echunga, Eden Valley, Gawler, Goolwa, Gumeracha, Hahndorf, Hope Valley, Houghton, Jervois, Karoonda, Kersbrook, Keyneton, Lenswood, Littlehampton, Lobethal, Longwood, Macclesfield, Mannum, McLaren Vale, Meadows, Meningie, Milang, Modbury, Montieith, Morphett Vale, Mt. Barker, Mt. Compass, Mt. Lofty, Mt. Pleasant, Mt. Torrens, Mylor, Myponga, Myponga, Nairne, Narrung, Noarlunga, Norton's Summit, Nuriootpa, Oakbank, O'Halloran Hill, One Tree Hill, Palmer, Peake, Pt. Elliott, Reynella, Salisbury, Sedan, Springton, Stirling West, Strathalbyn, Summerton, Swan Reach, Taillem Bend, Tannunda, Tea Tree Gully, Uraidla, Verdun, Victor Harbour, Williamstown, Willunga, Woodside, Wynarka, Yankalilla.  
 Port Augusta (3,750), Iron Knob, Melrose, Quorn, Whyalla, Wilmington.  
 Renmark (5,000), Barmera (2,500), Berri (2,500), Cal Lal (300), Karoonda (500), Loxton (2,000), Lyrup (500), Waikerie (2,000).

## WESTERN AUSTRALIA

Geraldton (25 miles radius, 7,270). List of 50 miles towns not available.  
 Kalgoorlie, district including Boulder and Kalgoorlie Road Board district (25,000), Broad Arrow, Coolgardie, Kanowna, Ora Banda.  
 Katanning (Road Board district, 3,197), Dumbleyung, Gnowangerup, Konjonup, Wagin.  
 Northam (25 miles radius, 12,780). List of 50 miles town not available.

## TASMANIA

Burnie (25 miles radius, 27,236). List of 50 miles towns not available.  
 Derby (25 miles radius, 9,009). List of 50 miles towns not available.  
 Launceston (31,590), Beaconsfield, Campbell Town, Deloraine, Evandale, Georgetown, Lilydale, Longford, Perth, Ross, St. Leonards, Scottsdale, Sheffield, Westbury.  
 Queenstown (4,200), Gormanston, Rosebery, Strahan, Zeehan.  
 Ulverstone (3,000), Burnie, Deloraine, Devonport, Latrobe, Penguin, Sheffield, Wynyard.

# BROADCAST LISTENERS' LICENCES

Official Licence Figures Within 25 and 50 Miles of Principal Cities and Towns Supplied by the Postmaster General's Dept.

(As at December 31, 1938, compared with relative figures as at December 31, 1937)

The purpose of these lists is to indicate at a glance the growth of radio licences, and their distribution, during the year 1938. During 1937 the 25 miles radius figures were not made available by the P.M.G.'s Department and consequently the comparison of the two years must be confined to the 50 miles radius figures. In each case in the following list the figures in the first column relate to December 31, 1938, with the 1937 figures following in brackets. The 25 miles figures appear above the 50 miles figures.

## N.S.W. AND AUSTRALIAN CAPITAL TERRITORY.

Locality	Licences		Population		— Ratio of Licences to 100 of — Population Dwellings	
	1938	1937	1938	1937	1938	1937
Sydney	262,068		1,366,912		19.17	81
	276,274 (259,726)		1,479,817 (1,467,294)		18.67 (17.70)	79 (75)
Albury	4,068		30,588		13.30	58
	8,790 (7,912)		68,808 (68,808)		12.77 (11.49)	55
Armidale	2,005		16,138		12.42	55
	2,817 (2,557)		31,562 (31,562)		8.92 (8.10)	38 (35)
Bathurst	3,264		27,114		12.04	51
	11,693 (9,764)		93,390 (93,390)		12.52 (10.45)	54 (44)
Bega	1,070		10,323		10.36	46
	2,192 (1,824)		20,321 (20,321)		10.78 (8.97)	46 (37)
Broken Hill	4,430		27,532		16.09	68
	4,438 (4,041)		28,257 (28,257)		15.70 (14.15)	63 (57)
Canberra	2,624		15,738		16.67	73
	4,431 (3,872)		33,586 (33,586)		13.19 (11.53)	57 (50)
Cessnock	36,906		216,905		17.01	73
	41,966		259,535		16.17	70
Cooma	568		5,290		10.73	46
	2,008 (1,614)		15,828 (15,828)		12.68 (10.19)	56 (47)
Corowa	2,087		23,646		8.82	38
	10,298 (9,433)		81,131 (81,131)		12.69 (11.62)	55
Cumnock	816		10,280		7.93	34
	8,341 (7,764)		71,758 (71,758)		11.62 (10.81)	52 (48)
Deniliquin	731		6,550		11.16	49
	4,355 (4,067)		38,225 (38,225)		11.13 (10.64)	49
Dubbo	2,047		16,559		12.36	55
	4,508 (3,822)		31,277 (31,277)		14.41 (12.21)	63 (54)
Goulburn	2,901		23,573		12.30	57
	6,682 (6,079)		61,541 (61,541)		10.85 (9.87)	48 (43)
Grafton	2,903		20,335		14.27	63
	4,645 (4,085)		42,314 (42,314)		10.97 (9.67)	48 (43)
Griffith	1,339		13,364		10.02	44
	3,619 (3,387)		34,831 (34,831)		10.38 (9.72)	48 (45)
Gunnedah	1,111		10,190		10.90	51
	4,860 (4,190)		47,214 (47,214)		10.29 (8.87)	47 (42)
Inverell	1,465		13,383		10.94	50
	4,081 (3,516)		38,502 (38,502)		10.59 (9.13)	47 (41)
Katoomba (25)	6,355		38,761		16.39	66
(50) Inc. metro. area	146,818 (138,655)		810,165 (805,084)		18.12 (17.22)	76 (73)
Exc. metro. area	22,601 (22,329)		168,687 (168,687)		13.39 (13.23)	55 (56)
Kempsey	2,086		18,827		11.08	51
	3,804 (3,070)		40,180 (40,180)		9.46 (7.64)	43 (35)
Lismore	7,577		59,611		12.71	59
	10,894 (9,393)		96,492 (96,492)		11.29 (9.73)	51
Lithgow	5,406		34,967		15.46	62
	12,177		100,730		12.09	50
Moss Vale	2,812		22,917		12.27	51

# BROADCAST LISTENERS' LICENCES

Listeners' Licences Within 25 and 50 Miles of Principal Cities and Towns - 1937 - 38 Comparison - (Continued)

Locality	Licences		Population		— Ratio of Licences to 100 of — Population Dwellings	
	1938	1937	1938	1937	1938	1937
Mudgee	15,751 (14,262)		114,179 (114,179)		13.79 (12.49)	59 (54)
	1,483		13,473		11.00	44
	3,739		35,694		10.47	43
Murwillumbah	4,553		38,615		11.79	52
	12,545 (10,734)		106,250 (106,250)		11.81 (10.10)	53
Newcastle	35,535		198,069		17.94	77
	41,112 (36,392)		242,606 (242,606)		16.94 (14.99)	73 (64)
Orange	3,649		30,058		12.13	55
	7,980 (6,603)		79,855 (79,855)		9.99 (8.39)	43 (36)
Parkes	2,230		17,577		12.68	58
	4,224 (3,472)		43,808 (43,808)		9.64 (9.06)	44 (42)
Singleton	5,589		52,955		10.55	46
	39,804 (35,251)		242,662 (242,662)		16.40 (14.52)	71 (64)
Tamworth	2,856		21,613		13.21	60
	5,559 (4,834)		50,312 (50,312)		11.05 (9.60)	50 (43)
Wagga	3,715		27,672		13.42	61
	8,178 (7,647)		73,086 (73,086)		11.19 (10.46)	51 (48)
Wollongong (25)	10,177		57,415		17.72	74
(50) Inc. metro. area	271,550 (255,523)		1,430,030 (1,419,868)		18.99 (17.99)	80 (76)
Exc. metro. area	23,115 (22,875)		147,073 (147,073)		15.71 (15.55)	66 (65)
Young	1,723		17,039		10.11	47
	6,541 (5,922)		56,728 (56,728)		11.53 (10.43)	52 (47)

## VICTORIA.

Melbourne	217,954		1,109,495		19.64	32
	238,268 (230,784)		1,231,140 (1,222,419)		19.35 (18.87)	80 (78)
Ballarat	9,601		66,845		14.36	57
	28,161 (25,798)		161,826 (161,826)		17.40 (15.94)	70 (63)
Bendigo	7,962		53,605		14.99	58
	16,268 (14,730)		126,454 (126,454)		12.86 (11.64)	50 (45)
Charlton	1,763		15,567		11.33	50
	5,796		45,168		12.83	55
Geelong (25)	10,768		63,596		16.93	71
(50) Inc. metro. area	239,764 (231,566)		1,184,284 (1,176,406)		20.24 (19.68)	83 (82)
Exc. metro. area	32,647 (29,799)		156,164 (156,164)		20.90 (19.08)	86 (79)
Hamilton	2,317		18,464		14.07	61
	7,660 (6,388)		55,555 (55,555)		13.78 (11.31)	59 (48)
Horsham	2,868		16,047		17.87	76
	6,841 (5,797)		44,380 (44,380)		15.41 (13.47)	65 (57)
Lubeck	3,381		20,857		16.21	71
	7,617 (6,734)		55,451 (55,451)		13.74 (12.14)	61 (54)
Mildura	3,824		22,962		16.65	70
	4,094 (3,511)		27,560 (27,560)		14.85 (12.77)	63
Sale	2,306		16,563		13.92	60
	7,367 (6,696)		49,869 (49,869)		14.77 (13.42)	60 (54)
Shepparton	4,021		33,435		12.02	52
	10,310 (9,569)		85,566 (85,566)		12.05 (11.18)	52
Swan Hill	1,639		13,425		12.21	54
	4,068 (3,487)		35,073 (35,073)		11.59 (9.94)	50
Warragul (25)	6,276		41,645		15.07	60
(50) Inc. metro. area	34,393 (33,628)		220,576 (218,953)		15.59 (15.36)	62 (61)
Exc. metro. area	20,830 (18,900)		152,760 (152,760)		13.64 (12.37)	53 (49)
Warrnambool	3,614		27,505		13.13	58
	8,245 (7,008)		50,119 (50,119)		16.45 (13.98)	73 (62)

## QUEENSLAND.

Brisbane	72,817		370,581		19.64	84
	77,799 (68,192)		422,388 (416,565)		18.41 (16.36)	79 (70)
Atherton	1,287		17,625		7.30	30
	4,757		52,404		9.07	39
Ayr	1,314		12,375		10.61	47
	5,239 (4,393)		41,529 (41,529)		12.61 (10.57)	56 (47)
Bundaberg	2,804		22,518		12.45	51
	5,262 (4,117)		46,421 (46,421)		11.33 (8.86)	46 (36)
Cairns	2,514		23,745		10.58	47
	4,540 (3,597)		48,850 (48,850)		9.30 (7.36)	40 (31)
Charleville	459		3,742		12.26	57
	546 (409)		5,067 (5,067)		10.77 (8.07)	50 (37)
Gympie	1,775		24,390		7.27	31
	6,436 (6,057)		68,492 (68,492)		9.40 (8.84)	40 (37)

(Continued next page)

# BROADCAST LISTENERS' LICENCES

Listeners' Licences Within 25 and 50 Miles of Principal Cities and Towns - 1937-38 Comparison - (Continued)

QUEENSLAND (contd.)				
Locality	Licences	Population	— Ratio of Licences to 100 of — Population Dwellings	
Ipswich (25)				
Inc. metro. area . . . .	72,940	370,279	19.69	85
Exc. metro. area . . . .	6,152	48,778	12.61	56
(50)				
Inc. metro. area . . . .	81,385( 70,730)	451,465( 446,555)	18.02(15.84)	78(69)
Exc. metro. area . . . .	14,597( 11,993)	129,964( 129,964)	11.23( 9.22)	50(41)
Gingaroy . . . . .	2,049	16,092	12.73	61
	3,472( 2,458)	35,789( 35,789)	9.70( 6.86)	45(32)
Longreach . . . . .	637	4,041	15.76	76
	640( 482)	5,062( 5,062)	12.64( 9.52)	59(46)
Mackay . . . . .	2,722	22,860	11.90	54
	3,083( 2,519)	29,065( 29,065)	10.60( 8.66)	46(38)
Maryborough . . . . .	2,490	20,190	12.33	49
	6,466( 5,270)	53,527( 53,527)	12.07( 9.84)	49(40)
Ookey . . . . .	5,887	47,928	12.38	57
	9,448( 7,692)	83,064( 83,064)	11.37( 9.26)	53(43)
Rockhampton . . . . .	6,226	41,908	14.85	66
	6,640( 5,563)	47,944( 57,944)	13.84(11.60)	61(51)
Roma . . . . .	683	5,045	13.53	57
	1,149( 791)	8,492( 8,492)	15.53( 9.31)	58(40)
Toowoomba . . . . .	6,542	53,241	12.28	56
	15,731( 13,131)	123,059( 123,059)	12.78(10.67)	58(48)
Townsville . . . . .	3,925	28,533	13.75	61
	5,263( 4,446)	40,055( 40,055)	13.13(11.09)	58(49)
Warwick . . . . .	2,111	21,209	9.95	45
	10,299( 8,569)	88,339( 88,339)	11.66( 9.68)	52
SOUTH AUSTRALIA.				
Adelaide . . . . .	79,980	356,479	22.43	90
	86,278( 79,455)	398,787( 396,524)	21.61(20.04)	86(80)
Crystal Brook . . . . .	4,893	25,349	19.30	84
	9,325( 8,240)	50,128( 50,128)	18.60(16.44)	80(71)
Mt. Gambier . . . . .	1,629	13,147	12.39	53
	3,849( 3,593)	25,103( 25,103)	15.33(14.31)	65
Murray Bridge (25)	3,709	18,696	19.84	83
(50) Inc. metro. area . . . .	85,212( 78,728)	391,686( 389,504)	21.75(20.21)	88(83)
Exc. metro. area . . . .	10,758( 9,332)	72,910( 72,910)	14.76(12.80)	61(52)
Port Augusta . . . . .	1,163	6,012	19.34	86
	2,261	13,778	16.41	72
Port Lincoln . . . . .	876	4,362	20.09	84
	1,482( 1,317)	7,196( 7,196)	20.59(18.30)	88(79)
Renmark . . . . .	2,393	11,159	21.45	90
	2,990( 2,820)	21,501( 21,501)	13.91(13.03)	60(53)
WESTERN AUSTRALIA.				
Perth . . . . .	47,913	237,078	20.20	86
	49,552( 44,883)	249,137( 243,471)	19.88(18.43)	85(79)
Albany . . . . .	955	5,539	17.24	69
	1,645( 1,352)	9,416( 9,416)	17.47(14.38)	65(54)
Bunbury . . . . .	2,127	15,086	14.09	55
	5,230( 4,153)	33,848( 33,848)	15.45(12.28)	60(48)
Collie . . . . .	2,104	11,430	18.40	70
	5,310( 4,155)	35,470( 35,470)	14.97(11.71)	57(44)
Fremantle (25)				
Inc. metro. area . . . .	47,825	228,441	20.22	87
Exc. metro. area . . . .	1,144	17,150	6.55	27
(50)				
Inc. metro. area . . . .	48,557( 43,807)	246,991( 241,363)	19.65(18.15)	85(78)
Exc. metro. area . . . .	1,876( 1,598)	28,000( 28,000)	6.70( 5.71)	27(23)
Geraldton . . . . .	897	7,270	12.33	57
	1,065( 801)	9,984( 9,984)	10.66( 8.01)	49(37)
Kalgoorlie . . . . .	3,727	21,390	17.42	72
	3,727( 2,770)	23,257( 23,257)	16.02(11.88)	62(46)
Katanning . . . . .	1,251	6,010	20.81	90
	2,634( 3,065)	14,537( 14,537)	18.11(21.13)	76(89)
Merredin . . . . .	708	5,170	13.69	58
	2,139( 1,805)	15,031( 15,031)	14.23(12.03)	60(51)
Narrogin . . . . .	1,041	6,916	17.30	73

(Continued opposite page)

# BROADCAST LISTENERS' LICENCES

Listeners' Licences Within 25 and 50 Miles of Principal Cities and Towns - 1937-38 Comparison - (Continued)

WESTERN AUSTRALIA (contd.)				
Locality	Licences	Population	— Ratio of Licences to 100 of — Population Dwellings	
Northam (25) . . . . .	2,537( 2,099)	15,847( 15,847)	16.00(13.28)	68(57)
(50) Inc. portion	1,622	12,782	12.68	57
metro. area . . . .	15,557( 14,003)	92,530( 91,123)	16.81(15.37)	71(66)
Exc. metro. area . . . .	3,887( 3,451)	37,782( 37,782)	10.28( 9.12)	43(38)
Wagin . . . . .	654	4,387	14.90	64
	2,990( 2,519)	17,767( 17,767)	16.82(14.23)	71(60)
TASMANIA.				
Hobart . . . . .	16,794	84,875	19.79	85
	18,143( 16,730)	101,829( 101,071)	17.82(16.55)	77(71)
Burnie . . . . .	3,910	27,236	14.36	63
	7,255( 6,537)	48,377( 48,377)	14.99(13.51)	66(59)
Derby . . . . .	1,176	9,009	13.05	55
	9,211( 7,761)	55,828( 55,828)	16.50(13.90)	70(59)
Devonport . . . . .	4,946	31,603	15.65	68
	14,072( 12,274)	86,597( 86,597)	16.25(14.17)	70(61)
Kelso . . . . .	2,496	18,804	13.27	57
	14,199( 12,598)	90,769( 90,769)	15.64(13.88)	68(60)
Launceston . . . . .	8,995	51,497	17.47	75
	12,915( 11,378)	82,196( 82,196)	15.71(13.84)	68(59)
Queenstown . . . . .	1,544	6,660	23.18	98
	1,820( 1,561)	9,719( 9,719)	18.73(16.06)	75(65)
Ulverstone . . . . .	4,980	32,794	15.18	67
	7,242( 6,224)	47,864( 47,864)	15.13(13.00)	67(58)

## National Stations Operated by the Australian Broadcasting Commission

Station	Location	Transmitter	Wavelength	Power
2BL	Sydney	Coogee	405M	3,000
2CO	Regional	Corowa	448	7,500
2CR	Regional	Cumnock	545	10,000
2CY	Regional	Canberra	353	10,000
2FC	Sydney	Liverpool	492	10,000
2NC	Regional	Newcastle	244	2,000
2NR	Regional	Lawrence	429	7,000
3AR	Melbourne	Braybrook	484	4,500
3GI	Regional	Gippsland	361	7,000
3LO	Melbourne	Melbourne	390	10,000
3WV	Regional	Doven	517	10,000
4QG	Brisbane	Brisbane	375	2,500
4QN	Regional	Dalby	476	7,000
4QR	Brisbane	Brisbane	319	500
4QS	Regional	Darling Downs	395	7,000
4RK	Regional	Rockhampton	330	2,000
5AN	Adelaide	Adelaide	337	500
5CK	Regional	Crystal Brook	469	7,500
5CL	Adelaide	Brooklyn Park	411	4,000
6GF	Regional	Kalgoorlie	417	2,000
6WA	Regional	Minding	536	10,000
6WF	Perth	Perth	435	3,500
6WN	Perth	Perth	380	500
7NT	Regional	Kelso	423	7,000
7ZL	Hobart	Hobart	500	2,000
7ZR	Hobart	Hobart	259	500
VLR	Melbourne	Lyndhurst	11880 9580kC 6140kC	2,000

## LICENCE DISTRIBUTION AS AT DECEMBER 31, 1937

Country	Population	Total Licences	Per 100 of P'tion
1. United States of America	129,257,000	26,411,000*	20.433
2. Denmark . . . . .	3,706,349	704,062	18.99
3. Great Britain . . . . .	46,189,445	8,479,500	18.35
4. New Zealand . . . . .	1,601,927	279,054	17.41
5. Sweden . . . . .	6,300,000	1,074,473	17.05
6. Australia . . . . .	6,846,398	1,008,595	14.73
7. Germany . . . . .	67,822,000	9,087,454	13.39
8. Netherlands . . . . .	8,351,117	1,071,869	12.83
9. Belgium . . . . .	8,330,959	1,018,108	12.2
10. Switzerland . . . . .	4,167,100	504,132	12.09
11. Norway . . . . .	2,897,000	304,913	10.52
12. France . . . . .	41,905,968	4,163,692	9.93
13. Argentine . . . . .	12,028,646†	1,095,000	9.9
14. Canada . . . . .	11,280,000	1,103,768‡	9.78
15. Austria . . . . .	6,760,000	619,623	9.16
16. South Africa . . . . .	2,043,700†	180,227	8.8
17. Czechoslovakia . . . . .	15,150,000	1,044,332	6.89
18. Finland . . . . .	3,765,000	231,696	6.26
19. Latvia . . . . .	1,964,000	114,305	5.82
20. Esthonia . . . . .	1,130,155	48,949	4.33
21. Hungary . . . . .	8,993,629	383,274	4.26
22. Irish Free State . . . . .	2,965,854	112,192	3.78
23. Japan . . . . .	97,800,092	3,402,489*	3.47
24. Poland . . . . .	34,221,000	861,256	2.51
25. U.S.S.R. . . . .	170,000,000	3,760,400§	2.21
26. Palestine . . . . .	1,320,900	28,515	2.15
27. Mexico . . . . .	16,800,000†	350,000	2.08
28. Italy . . . . .	43,286,000	795,000	1.83
29. Brazil . . . . .	45,000,000	500,000	1.1

\* Listeners are not licensed and the totals shown are merely estimates of the number of receiving sets in operation.  
† Excluding natives.  
‡ As at 31st March, 1938.  
§ 1936 figures. 1937 figures are not available.

# Distribution of Country — Metropolitan Listeners' Licences

In all States and the Commonwealth during 1938

THE following figures show the quarterly licence figures in the various metropolitan and country areas for each State for the four quarters of 1938.

It must be specially noted that the generally accepted boundaries for the metropolitan areas are not exactly in accordance with that as defined by the Commonwealth Statistician, and to assist the radio industry throughout Australia in a proper determination of the various figures, it will be noted that the names of the various municipalities are given hereunder in each State:—

New South Wales.					Queensland.					Victoria.					South Australia.								
Metropolitan—					Metropolitan—					Metropolitan—					Metropolitan—								
31/3/'38	30/6/'38	30/9/'38	31/12/'38	State—	31/3/'38	30/6/'38	30/9/'38	31/12/'38	State—	31/3/'38	30/6/'38	30/9/'38	31/12/'38	State—	31/3/'38	30/6/'38	30/9/'38	31/12/'38	State—	31/3/'38	30/6/'38	30/9/'38	31/12/'38
Licences .. .	238,986	242,387	248,465	Licences .. .	310,111	315,945	319,234	323,438	Licences .. .	157,256	162,323	170,120	172,906	Licences .. .	202,440	204,905	204,140	207,117	Licences .. .	70,699	73,102	73,817	74,454
Population ..	1,276,440	1,279,080	1,282,469	Population ..	1,856,939	1,859,487	1,865,967	1,867,047	Population ..	1,434,221	1,441,906	1,445,903	1,447,506	Population ..	1,020,963	1,024,000	1,027,526	1,028,120	Population ..	317,146	318,190	318,488	318,776
Ratio: Licences to 100 Popn. .	18.72	18.95	19.37	Ratio: Licences to 100 Popn. .	16.70	16.99	17.11	17.32	Ratio: Licences to 100 Popn. .	10.96	11.26	11.76	11.94	Ratio: Licences to 100 Popn. .	19.82	20.00	19.87	20.15	Ratio: Licences to 100 Popn. .	22.29	22.97	23.18	23.36
Dwellings ..	79	80	82	Dwellings ..	69	69	71	72	Dwellings ..	48	49	51	52	Dwellings ..	83	84	83	84	Dwellings ..	90	93	94	94
% of State ..	60	60	59	% of State ..	—	—	—	—	% of State ..	40	40	41	41	% of State ..	65	65	64	64	% of State ..	66	65	65	64
Metropolitan area of Sydney includes: Alexandria, Annandale, Ashfield, Auburn, Balmain, Bankstown, Bexley, Botany, Burwood, Canterbury, Concord, Darlinghurst, Drummoyn, Dundas, Eastwood, Enfield, Ermington and Rydalmere, Erskineville, Glebe, Granville, Holroyd (part), Homebush, Hunter's Hill, Hurstville, Kogarah, Kuringgai, Lane Cove, Leichhardt, Lidcombe, Manly, Marrickville, Mascot, Mosman, Newtown, Paddington, Parramatta, Petersham, Randwick, Redfern, Rockdale, Ryde, St. Peters, Strathfield, Sydney, Sydney North, Vacluse, Waterloo, Waverley, Willoughby, Woollahra.					Metropolitan area of Brisbane includes: State Electoral Districts, Bremer (part), Brisbane, Brisbane South, Bulimba, Buranda, Enoggera (part), Fortitude Valley, Hamilton, Ithaca, Kelvin Grove, Kurilpa, Logan (part), Maree, Merthyr, Nundah, Oxley (part), Sandgate (part), Toowong, Windsor, Wynnum (part).					Metropolitan area of Melbourne includes: Box Hill, Brighton, Brunswick, Camberwell, Caulfield, Chelsea, Coburg, Collingwood, Essendon, Fitzroy, Footscray, Hawthorn, Kew, Malvern, Melbourne, Melbourne South, Mordialloc, Northcote, Oakleigh, Port Melbourne, Prahran, Preston, Richmond, Sandringham, St. Kilda, Williamstown, and Shires of Braybrook (part), Heidelberg (part), Moorabbin.					Metropolitan area of Adelaide includes: Corporations Adelaide, Brighton, Colonel Light Gardens, Glenelg, Henley and Grange, Hindmarsh, Kensington and Norwood, Port Adelaide, St. Peters, Thebarton, Unley, and the following District Councils: Burnside, Campbelltown, Marion, Mitcham, Payneham, Prospect, Torrens West, Walkerville.								
Country—					Country—					Country—					Country—								
Licences .. .	157,256	162,323	170,120	Licences .. .	52,635	54,786	58,965	60,842	Licences .. .	107,671	111,040	115,094	116,321	Licences .. .	36,948	38,864	40,386	41,117	Licences .. .	36,948	38,864	40,386	41,117
Population ..	1,434,221	1,441,906	1,445,903	Population ..	675,966	675,031	676,917	681,671	Population ..	835,976	835,487	838,431	838,927	Population ..	278,004	278,365	278,819	279,235	Population ..	278,004	278,365	278,819	279,235
Ratio: Licences to 100 Popn. .	10.96	11.26	11.76	Ratio: Licences to 100 Popn. .	7.77	8.12	8.71	8.92	Ratio: Licences to 100 Popn. .	13.29	13.29	13.73	13.87	Ratio: Licences to 100 Popn. .	13.29	13.96	14.48	14.72	Ratio: Licences to 100 Popn. .	13.29	13.96	14.48	14.72
Dwellings ..	48	49	51	Dwellings ..	34	35	38	39	Dwellings ..	57	60	62	63	Dwellings ..	57	60	62	63	Dwellings ..	57	60	62	63
% of State ..	40	40	41	% of State ..	46	47	47	48	% of State ..	40	40	41	41	% of State ..	34	35	35	36	% of State ..	34	35	35	36

# Country—Metropolitan Licence Distribution (contd.)

South Australia (contd.)					Western Australia.					Tasmania.				
31/3/'38	30/6/'38	30/9/'38	31/12/'38	Ratio: Licences to 100 Popn. .	31/3/'38	30/6/'38	30/9/'38	31/12/'38	Ratio: Licences to 100 Popn. .	31/3/'38	30/6/'38	30/9/'38	31/12/'38	Ratio: Licences to 100 Popn. .
Licences .. .	107,647	111,966	114,203	115,571	Licences .. .	43,238	44,709	46,108	46,680	Licences .. .	11,814	12,201	12,487	12,660
Population ..	595,150	596,555	597,307	598,061	Population ..	214,260	217,550	218,184	218,991	Population ..	61,057	62,450	61,535	61,174
Ratio: Licences to 100 Popn. .	18.08	18.77	19.12	19.33	Ratio: Licences to 100 Popn. .	20.18	20.55	21.13	21.31	Ratio: Licences to 100 Popn. .	15.01	15.63	16.28	16.56
Dwellings ..	75	78	79	80	Dwellings ..	87	89	91	92	Dwellings ..	62	65	68	69
% of State ..	—	—	—	—	% of State ..	63	63	62	61	% of State ..	—	—	—	—
Metropolitan area of Hobart includes: Glenoreby, Hobart, Kingborough (part), Clarence (part).					Metropolitan area of Perth includes: Municipalities: Claremont, Cottesloe, Fremantle, Fremantle East, Fremantle North, Guildford, Midland Junction, Perth, Subiaco, and the following Road Board districts: Bassendean, Bayswater, Belmont Park, Buckland Hill, Cannin, Melville, Nedland, Peppermint Grove, Perth, Perth South, Swan (part).					Metropolitan area of Hobart includes: Glenoreby, Hobart, Kingborough (part), Clarence (part).				
Country—					Country—					Country—				
Licences .. .	22,293	23,871	24,979	25,435	Licences .. .	25,215	26,746	28,541	29,560	Licences .. .	25,215	26,746	28,541	29,560
Population ..	172,333	176,540	174,005	173,004	Population ..	241,763	239,561	240,269	241,170	Population ..	241,763	239,561	240,269	241,170
Ratio: Licences to 100 Popn. .	12.94	13.52	14.36	14.70	Ratio: Licences to 100 Popn. .	10.42	11.16	11.87	12.25	Ratio: Licences to 100 Popn. .	10.42	11.16	11.87	12.25
Dwellings ..	56	59	62	64	Dwellings ..	42	45	48	49	Dwellings ..	42	45	48	49
% of State ..	65	66	67	67	% of State ..	37	37	38	39	% of State ..	37	37	38	39
State—					State—					State—				
Licences .. .	34,107	36,072	37,466	38,095	Licences .. .	68,452	71,455	74,649	76,240	Licences .. .	68,452	71,455	74,649	76,240
Population ..	233,390	238,990	235,540	234,178	Population ..	456,023	457,111	458,453	460,161	Population ..	456,023	457,111	458,453	460,161
Ratio: Licences to 100 Popn. .	14.61	15.09	15.91	16.26	Ratio: Licences to 100 Popn. .	15.01	15.63	16.28	16.56	Ratio: Licences to 100 Popn. .	15.01	15.63	16.28	16.56
Dwellings ..	63	65	69	70	Dwellings ..	62	65	68	69	Dwellings ..	62	65	68	69
% of State ..	—	—	—	—	% of State ..	—	—	—	—	% of State ..	—	—	—	—
Commonwealth.					Commonwealth.					Commonwealth.				
Licences .. .	627,814	640,281	650,539	656,134	Licences .. .	627,814	640,281	650,539	656,134	Licences .. .	1,029,832	1,057,911	1,088,624	1,102,315
Population ..	3,207,135	3,219,700	3,227,504	3,231,519	Population ..	3,207,135	3,219,700	3,227,504	3,231,519	Population ..	6,846,398	6,866,590	6,881,848	6,893,082
Ratio: Licences to 100 Popn. .	19.57	19.89	20.16	20.30	Ratio: Licences to 100 Popn. .	19.57	19.89	20.16	20.30	Ratio: Licences to 100 Popn. .	11.04	11.45	11.99	12.18
Dwellings ..	82	84	85	85	Dwellings ..	82	84	85	85	Dwellings ..	47	49	51	52
% of State ..	61	61	60	60	% of State ..	61	61	60	60	% of State ..	39	39	40	40
Country—					Country—					Country—				
Licences .. .	402,018	417,630	438,085	446,181	Licences .. .	402,018	417,630	438,085	446,181	Licences .. .	1,029,832	1,057,911	1,088,624	1,102,315
Population ..	3,639,263	3,646,890	3,654,344	3,661,563	Population ..	3,639,263	3,646,890	3,654,344	3,661,563	Population ..	6,846,398	6,866,590	6,881,848	6,893,082
Ratio: Licences to 100 Popn. .	11.04	11.45	11.99	12.18	Ratio: Licences to 100 Popn. .	11.04	11.45	11.99	12.18	Ratio: Licences to 100 Popn. .	15.04	15.40	15.82	15.99
Dwellings ..	47	49	51	52	Dwellings ..	47	49	51	52	Dwellings ..	64	65	67	68
% of State ..	39	39	40	40	% of State ..	39	39	40	40	% of Commonwealth ..	—	—	—	—

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# AUSTRALIAN LISTENERS' LICENCE FIGURES

## Licences in Australia, 1934-5-6-7-8

At end of	N.S.W.		VIC.		Q'LD.		S.A.		W.A.		TAS.		C'WEALTH	
	Licences in force.	Ratio to 100 of Population.	Licences in force.	Ratio to 100 of Population.	Licences in force.	Ratio to 100 of Population.	Licences in force.	Ratio to 100 of Population.	Licences in force.	Ratio to 100 of Population.	Licences in force.	Ratio to 100 of Population.	Licences in force.	Ratio to 100 of Population.
<b>1934</b>														
Jan.	201,654	7.71	186,717	10.25	42,021	4.43	56,539	9.64	25,985	5.91	14,087	6.19	527,003	7.93
Feb.	204,618	7.82	187,918	10.31	44,280	4.66	57,322	9.77	26,457	6.01	14,292	6.28	534,887	8.05
Mar.	218,770	8.34	199,660	10.94	49,258	5.19	61,252	9.91	27,202	6.18	14,554	6.27	543,715	8.17
Apr.	212,903	8.12	194,746	10.67	47,076	4.96	59,548	10.15	25,136	6.39	15,014	6.47	557,423	8.37
May	218,770	8.34	199,660	10.94	49,258	5.19	61,229	10.42	29,540	6.71	15,658	6.75	574,115	8.62
June	227,289	8.66	207,324	11.36	52,185	5.50	64,303	10.94	31,476	7.15	16,582	7.14	599,159	9.00
July	238,625	9.07	211,442	11.57	54,906	5.80	66,933	11.38	33,293	7.55	16,582	7.14	599,159	9.00
Aug.	247,757	9.42	218,442	11.94	57,414	5.99	69,141	11.75	34,639	7.83	17,470	7.60	622,674	9.34
Sept.	251,967	9.57	220,290	12.04	59,074	6.16	69,838	11.87	35,279	7.98	18,238	8.00	645,631	9.67
Oct.	256,117	9.73	223,999	12.24	60,719	6.34	70,863	12.05	36,238	8.20	18,400	8.07	654,848	9.81
Nov.	259,645	9.87	225,670	12.33	61,847	6.45	71,587	12.17	36,899	8.34	18,777	8.23	666,563	9.98
Dec.	262,988	9.97	227,135	12.33	62,721	6.54	72,476	12.31	37,417	8.46	18,897	8.29	681,634	10.19
<b>1935</b>														
Jan.	265,887	10.08	227,760	12.41	63,857	6.65	73,171	12.43	38,004	8.59	19,086	8.38	687,765	10.28
Feb.	269,394	10.22	229,756	12.52	63,703	6.64	73,756	12.53	38,550	8.71	19,320	8.48	694,479	10.38
Mar.	272,342	10.29	232,116	12.63	64,605	6.74	74,408	12.62	39,249	8.87	19,486	8.42	702,206	10.47
Apr.	274,364	10.37	233,913	12.73	65,589	6.83	75,294	12.77	39,968	9.03	19,653	8.53	708,781	10.57
May	277,921	10.50	236,853	12.89	66,931	6.97	76,294	12.94	40,650	9.18	19,957	8.62	718,598	10.71
June	279,166	10.53	237,247	12.90	67,546	7.02	76,515	12.97	41,257	9.29	20,121	8.76	721,852	10.74
July	280,731	10.59	239,694	13.03	69,034	7.17	77,756	13.18	42,249	9.51	20,495	8.92	729,959	10.87
Aug.	282,147	10.64	242,036	13.16	70,002	7.27	78,346	13.28	43,221	9.73	20,848	9.07	736,600	10.97
Sept.	285,641	10.76	244,716	13.31	71,387	7.37	79,142	13.41	44,057	9.88	21,282	9.30	746,225	11.09
Oct.	288,402	10.87	246,587	13.36	72,786	7.52	80,088	13.85	46,219	10.34	22,244	9.73	770,152	11.43
Nov.	291,924	10.99	249,351	13.56	73,785	7.62	81,024	13.56	44,836	10.06	22,615	9.45	754,250	11.22
Dec.	294,232	11.06	250,758	13.63	74,911	7.72	81,788	13.85	45,580	10.22	21,951	9.59	763,598	11.35
<b>1936</b>														
Jan.	297,033	11.17	254,198	13.81	75,712	7.80	82,626	13.99	46,636	10.44	22,446	9.82	778,651	11.56
Feb.	300,232	11.29	255,898	13.91	76,938	7.93	83,598	14.16	47,234	10.57	22,542	9.86	786,492	11.78
Mar.	305,545	11.47	256,493	13.92	78,043	8.03	84,483	14.29	47,653	10.63	22,898	9.95	795,115	11.87
Apr.	308,406	11.58	258,980	14.05	79,849	8.13	85,289	14.42	48,293	10.78	23,204	10.09	803,215	11.90
May	312,137	11.72	259,473	14.07	81,075	8.34	85,873	14.52	48,986	10.93	23,456	10.19	811,000	12.02
June	316,340	11.87	263,817	14.31	83,230	8.56	87,500	14.80	50,081	11.18	24,168	10.50	825,136	12.22
July	323,246	12.09	269,529	14.59	85,402	8.77	89,953	15.02	51,160	11.39	24,648	10.66	842,938	12.45
Aug.	327,848	12.26	270,867	14.66	86,916	8.92	89,651	15.13	52,193	11.62	24,924	10.78	852,399	12.59
Sept.	331,542	12.39	271,338	14.69	88,461	9.02	90,597	15.28	53,344	11.84	25,497	11.10	860,829	12.70
Oct.	336,733	12.58	274,168	14.84	89,686	9.14	91,784	15.48	54,051	12.00	25,860	11.26	872,282	12.87
Nov.	338,762	12.66	275,186	14.90	90,712	9.25	92,526	15.61	54,448	12.09	26,213	11.41	877,847	12.96
Dec.	341,493	12.76	277,344	15.02	92,208	9.40	93,881	15.84	55,246	12.27	26,843	11.69	887,015	13.09
<b>1937.</b>														
Jan.	342,824	12.78	279,243	15.10	93,235	9.48	94,804	15.98	56,226	12.46	27,072	11.79	893,404	13.16
Feb.	344,072	12.83	279,988	15.14	94,497	9.61	95,675	16.12	56,678	12.56	27,616	12.03	898,526	13.23
Mar.	345,714	12.84	282,159	15.24	95,469	9.72	96,442	16.22	57,414	12.71	27,970	11.9	905,168	13.3
Apr.	349,054	12.97	284,643	15.35	97,283	9.90	97,345	16.37	58,503	12.95	28,615	12.17	915,343	13.44
May	353,590	13.14	287,174	15.51	99,499	10.13	98,539	16.57	59,465	13.16	29,214	12.43	927,481	13.63
June	358,976	13.30	289,198	15.58	101,590	10.31	99,209	16.71	61,265	13.23	29,830	12.78	940,068	13.78
July	365,380	13.53	290,414	15.65	103,291	10.49	99,715	16.80	62,397	13.78	30,388	13.03	951,585	13.95
Aug.	370,972	13.74	295,777	15.92	104,820	10.64	101,656	17.12	63,464	14.02	31,165	13.36	967,854	14.19
Sept.	377,481	13.99	302,604	16.30	106,971	10.78	102,886	17.31	64,413	14.18	31,628	13.61	985,983	14.43
Oct.	379,432	14.04	303,101	16.32	107,984	10.88	103,393	17.40	64,958	14.30	32,129	13.83	990,997	14.51
Nov.	384,649	14.23	304,384	16.43	109,232	11.01	104,317	17.55	65,766	14.47	32,512	13.99	1,000,860	14.65
Dec.	387,762	14.32	306,620	16.52	110,111	11.10	105,045	17.68	66,269	14.59	32,788	14.12	1,008,595	14.76
<b>1938</b>														
Jan.	389,756	14.37	307,071	16.53	110,981	11.16	105,392	17.71	66,573	14.59	33,172	14.21	1,012,945	14.79
Feb.	391,909	14.46	307,513	16.56	111,725	11.24	106,412	17.88	67,447	14.79	33,486	14.35	1,018,493	14.88
Mar.	396,242	14.62	310,111	16.70	113,272	11.39	107,647	18.08	68,453	15.01	34,107	14.61	1,029,832	15.04
Apr.	398,648	14.71	310,517	16.72	114,090	11.47	108,530	18.23	68,934	15.13	34,477	14.77	1,035,246	15.12
May	401,386	14.75	313,034	16.83	115,540	11.63	109,781	18.40	70,367	15.39	35,255	14.75	1,045,363	15.22
June	404,710	14.87	315,945	16.99	117,763	11.76	111,966	18.77	71,455	15.63	36,072	15.09	1,057,911	15.40
July	405,969	14.88	318,043	17.04	119,777	12.02	112,783	18.88	72,857	15.89	36,712	15.58	1,066,141	15.49
Aug.	415,433	15.23	319,047	17.10	123,186	12.37	113,660	19.03	74,082	16.16	37,133	15.73	1,082,641	15.73
Sept.	418,585	15.34	321,234	17.11	124,487	12.50	114,203	19.12	74,649	16.28	37,466	16.08	1,088,624	15.82
Oct.	420,647	15.41	322,649	17.23	125,968	12.55	114,581	19.16	75,469	16.40	37,660	16.08	1,095,451	15.89
Nov.	420,834	15.41	322,649	17.23	126,937	12.72	115,038	19.23	75,922	16.49	37,892	16.18	1,099,272	15.94
Dec.	421,341	15.43	323,438	17.32	127,630	12.72	115,571	19.32	76,240	16.56	38,095	16.26	1,102,315	15.99

# GROWTH OF LISTENERS' LICENCES IN COMMONWEALTH SINCE 1924

The Total Number of Licences in operation during the various months since 1924 are given hereunder, together with the ratio to 100 population.

1924		1930		1931		1932		1933		1934		1935		1936		1937		1938		1939	
Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio	Licences	Ratio
July	1,206	.02	January	311,074	4.86	September	654,848	9.81	January	342,824	12.78	January									



Monthly Totals by States for 1938 (Continued from Page 21)

JULY									
	Issues New	Renewals	Issues Total	Can- cellations	Monthly Total	Net Increase	Popln. Ratio	Experi- mental	Free Blind
N.S.W. . . . .	8,040(10)	40,847( 50)	48,897	6,791(—)	405,969	1,259	14.88	725	658
Victoria . . . .	5,535(10)	31,184( 56)	36,719	3,437( 9)	318,043	2,098	17.04	529	678
Queensland . . .	3,303( 3)	11,198( 20)	14,501	1,289( 2)	119,777	2,014	12.02	263	260
S. Australia . . .	2,229( 7)	10,763( 25)	12,992	1,412( 3)	112,783	817	18.88	186	270
W. Australia . . .	2,133( 6)	7,049( 19)	9,182	731(—)	72,857	1,402	15.89	125	220
Tasmania . . . .	1,424( 2)	3,038( 9)	4,462	734( 3)	36,712	640	15.58	59	116
C'wealth . . . .	22,674(38)	104,079(179)	126,753	14,444(17)	1,066,141	8,230	15.49	1,887	2,202
AUGUST									
N.S.W. . . . .	11,084( 9)	40,861( 52)	51,945	1,570(—)	415,483	9,514	15.23	736	667
Victoria . . . .	5,139(24)	31,912( 59)	37,051	4,135(—)	319,047	1,004	17.10	535	702
Queensland . . .	3,411( 1)	10,806( 15)	14,217	2( 2)	123,186	3,409	12.37	273	259
S. Australia . . .	1,865(10)	12,095( 24)	13,960	988( 7)	113,660	877	19.03	187	273
W. Australia . . .	1,650(10)	6,859( 9)	8,509	425(—)	74,082	1,225	16.16	131	230
Tasmania . . . .	781( 1)	3,661( 7)	4,442	310(—)	37,183	471	15.78	54	117
C'wealth . . . .	23,930(55)	106,194(166)	130,124	7,430( 9)	1,082,641	16,500	15.73	1,916	2,248
SEPTEMBER									
N.S.W. . . . .	5,916(-9)	33,586( 35)	39,502	2,814(—)	418,585	3,102	15.34	732	676
Victoria . . . .	3,987( 8)	24,816( 31)	28,803	3,800( 8)	319,234	187	17.11	536	702
Queensland . . .	2,167( 2)	9,623( 21)	11,790	866( 6)	124,487	1,301	12.50	267	255
S. Australia . . .	1,245( 2)	7,746( 11)	8,991	702( 1)	114,203	543	19.12	189	274
W. Australia . . .	1,002( 2)	5,595( 21)	6,597	435(—)	74,649	567	16.28	136	232
Tasmania . . . .	501(—)	2,710( 7)	3,211	218(—)	37,466	283	15.91	55	117
C'wealth . . . .	14,818(23)	84,076(126)	98,894	8,835(15)	1,088,624	5,983	15.82	1,915	2,256
OCTOBER									
N.S.W. . . . .	5,132(10)	28,378( 37)	33,510	3,070( 4)	420,647	2,062	15.41	735	682
Victoria . . . .	2,999( 2)	23,781( 44)	26,780	1,107( 4)	321,126	1,892	17.20	543	700
Queensland . . .	1,983( 7)	8,464( 15)	10,447	502( 1)	125,968	1,481	12.55	267	261
S. Australia . . .	1,166( 1)	6,960( 8)	8,126	788(—)	114,581	378	19.16	187	275
W. Australia . . .	993( 4)	5,082( 8)	6,075	173( 6)	75,469	820	16.40	136	230
Tasmania . . . .	410(—)	2,364( 7)	2,774	216( 1)	37,660	194	16.08	55	116
C'wealth . . . .	12,683(24)	75,029(119)	87,712	5,856(16)	1,095,451	6,827	15.89	1,923	2,264
NOVEMBER									
N.S.W. . . . .	4,110(10)	27,394( 43)	31,504	3,923(10)	420,834	187	15.41	747	682
Victoria . . . .	3,151( 5)	20,224( 38)	23,375	1,628( 5)	322,649	1,523	17.28	556	700
Queensland . . .	1,501( 7)	7,945( 13)	9,446	532( 5)	126,937	969	12.65	274	263
S. Australia . . .	1,009( 8)	6,742( 19)	7,831	632(—)	115,038	457	19.23	185	283
W. Australia . . .	899( 6)	4,645( 10)	5,544	446(—)	75,922	453	16.49	141	236
Tasmania . . . .	431( 3)	2,177( 8)	2,608	199( 2)	37,892	232	16.18	60	117
C'wealth . . . .	11,181(39)	69,127(131)	80,308	7,360(22)	1,099,272	3,821	15.94	1,963	2,281
DECEMBER									
N.S.W. . . . .	3,980( 5)	23,340( 31)	27,320	3,473( 9)	421,341	507	15.43	746	678
Victoria . . . .	2,523( 8)	20,128( 24)	22,651	1,734( 2)	323,438	789	17.32	553	706
Queensland . . .	1,258( 1)	6,890( 12)	8,148	565( 1)	127,630	693	12.72	266	263
S. Australia . . .	1,808( 4)	6,560( 9)	8,368	1,275( 3)	115,571	533	19.32	181	284
W. Australia . . .	714(—)	4,144( 10)	4,858	396( 4)	76,240	318	16.56	137	232
Tasmania . . . .	383( 2)	2,237( 9)	2,620	180(—)	38,095	203	16.26	59	119
C'wealth . . . .	10,666(20)	63,299( 95)	73,965	7,623(19)	1,102,315	3,043	15.99	1,942	2,282

COMMONWEALTH MONTHLY TOTALS OF BROADCAST LISTENERS' LICENCE FIGURES FOR 1938.

Month	Issues	Renewals	Issues Total	Can- cellations	Monthly Total	Net Increase	Popln. Ratio	Experi- mental	Free Blind
January . . . .	12,107(19)	55,295(260)	67,402	7,757(22)	1,012,945	4,350	14.79	1,827	2,130
February . . . .	11,681(29)	53,700(167)	65,381	6,133(17)	1,018,493	5,548	14.88	1,859	2,142
March . . . . .	14,514(29)	62,743(197)	77,257	3,175(22)	1,029,832	11,339	15.04	1,902	2,149
April . . . . .	13,998(25)	62,329(156)	76,327	8,584(16)	1,035,246	5,414	15.12	1,898	2,158
May . . . . .	19,168(32)	81,751(164)	100,919	9,051(25)	1,045,363	10,117	15.22	1,908	2,165
June . . . . .	23,852(34)	93,421(165)	117,273	11,304(18)	1,057,911	12,548	15.40	1,907	2,181
July . . . . .	22,674(38)	104,079(179)	126,753	14,444(17)	1,066,141	8,230	15.49	1,887	2,202
August . . . . .	23,930(55)	106,194(166)	130,124	7,430( 9)	1,082,641	16,500	15.73	1,916	2,248
September . . . .	14,818(23)	84,076(126)	98,894	8,835(15)	1,088,624	5,983	15.82	1,915	2,256
October . . . . .	12,683(24)	75,029(119)	87,712	5,856(16)	1,095,451	6,827	15.89	1,923	2,264
November . . . . .	11,181(39)	69,127(131)	80,308	7,360(22)	1,099,272	3,821	15.94	1,963	2,281
December . . . .	10,666(20)	63,299( 95)	73,965	7,623(19)	1,102,315	3,043	15.99	1,942	2,282

**THE GREATEST GOODWILL FORCE IN AUSTRALIA...**

**C.B.N. COMMONWEALTH BROADCASTING NETWORK**

**OPENS ALL DOORS**

**Takes you into every home!**

**PROVIDING FAR GREATER NATION-WIDE COVERAGE THAN ANY OTHER NETWORK**

And with the ultimate in modern facilities—plus the perfection of programming—has won the approval of Australia's millions, thereby holding the greatest listening audiences.

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QUEENSLAND	NEW SOUTH WALES	STH. AUSTRALIA	VICTORIA	WEST. AUSTRALIA
4BC Brisbane	2UW Sydney	5KA Adelaide	3UZ Melbourne	6ML Perth
4GR Toowoomba	2HD Newcastle	5AU Augusta	3SR Shepparton	
4SB Kingaroy	2WG Wagga		3YB Warrnambool	
4ZR Roma	2TM Tamworth		3UL Warragul	
4VL Charleville	2BS Bathurst		3CV Charlton	
4MB Maryborough				<b>TASMANIA</b>
4RO Rockhampton				7UV Ulverstone
4AY Ayr				
4AT Atherton				



## Station Particulars (contd.)

**2BS Bathurst (Contd.)**

Commenced operations: January 1, 1937.

General manager: A. C. Paddison. Station manager: George Foster. Chief engineer: T. C. Croke. Announcers: Chief announcer, George Foster, Terry Croke. Lady announcers: Pam Manning, V. McFarland.

Daily transmission hours: Monday to Friday, 6.30 a.m.-10 a.m., 12 p.m.-2 p.m., 5.30 p.m.-10 p.m. Saturday, 6.30 a.m.-10.30 a.m., 12 p.m.-2 p.m., 5.30 p.m.-10 p.m.; Sunday, 6 p.m.-10 p.m.

Type of transmitter used: 203A final, class "B" modulation, Pr. 800's. Type of aerial system: Quarter wave L type.

**2CA CANBERRA.**

Operated by Canberra Broadcasters Ltd. Station slogan: "Radio Canberra." Address: City, Canberra, A.C.T. Studio located: Mort Street, Canberra. Transmitter located: Belconnen, Yass Road. Telegraphic address: TWOCA. Telephones: Canberra 678, 679.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 286 metres, 1,050 kilocycles.

Commenced Operations: 1932. Network affiliation: Macquarie Broadcasting.

Directors: R. E. Denison, C. Ogilvy, A. J. Ryan. Secretary: J. A. Byron.

Local Advertisers in 23 towns, over an area of 12,000 square miles, find it PAYS them to take time on

**2CA CANBERRA**

And 4,413 listeners in 308 towns throughout New Zealand and Australia have WRITTEN to say "Thank You" for 2CA's Midnight-to-Dawn Session.

Coming  
Down  
To  
FACTS

MEASURE THE AUDIENCE !

General manager: C. S. Sharp. Chief engineer: A. J. Ryan. Other technical staff: G. Barlin, A. Ellis, R. Hawkins, C. Knight, A. Mitchell, D. Thomas. Sales staff: P. Furley. Announcers: Eric Colman, P. C. Furley, N. Battye, R. M. Roberts, Wyn Gilmour, Eileen Coates, J. Stevens. Program production staff: Eric Colman (program manager), Eileen Coates and R. M. Roberts. Total full time staff, 18.

Interstate and intra-state representatives: Macquarie Broadcasting Services, Sydney and Melbourne.

Daily transmission hours: Continuous 24 hour service.

Type of transmitter used: Low level modulation with linear amp. Type of aerial system: Quarter wave vertical, self supporting tower, 12 miles star earth cable. Number of studios: Three.

Radio listener clubs: 2CA Women's Radio Club (2,250), 2CA Younger Set (560), 2CA Night Owls (2,100), 2CA Boys' Club (560).

**2CH SYDNEY.**

Operated by Amalgamated Wireless (A/sia) Ltd. Station slogan: "Entertains the Whole Family." Address: 47 York Street, Sydney. Studios located: 47 York Street, Sydney. Transmitter located: Dundas. Telegraphic address: "Expanse," Sydney. Telephones: BW 2211.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 252 metres, 1,190 kC.

Commenced operations: February 5, 1932.

Network affiliation: Major network.

Directors: Sir Ernest Fisk (chairman of directors). General manager: L. A. Hooke. Station manager: T. Spencer. Chief engineer: F. Stevens. Other technical staff: A. B. Sharland, H. Tuson, H. Allen, K. Stewart, W. Cottrell, H. Young, C. Binns. Advertising manager: C. T. Sproule. Other sales staff: F. H. Knowles, G. C. McGuinness, J. Minto, W. F. Raynor, D. G. Donald, B. C. Button. Announcers: A. S. Cochrane, K. Layton, C. Stanley, P. Geeves, L. Myers, E. Pearce, G. Jennings, Mrs. M. McSpeerin, Miss L. Fleming and Joan Read. Program production staff: Claude Flemming, Miss G. Gibson, Total full time staff: 55.

Interstate and intra-state representatives: A.W.A. Melbourne, and Major Network representatives each State.

Daily transmission hours: Monday to Saturday, 5.45 a.m. to 11 p.m.; Sunday, 9 a.m. to 12.30 p.m., 2.30 p.m. to 6.15 p.m., 7.15 p.m. to 10 p.m.

Type of transmitter used: Series modulation. Type of aerial system: "T" type aerial. Number of studios: Three.

Type of recording plant: A.W.A. Recording Department.

Radio listeners' clubs: 2CH Women's League (8,000 members). Subsidiary organisations: Happy Companions' Club, Home Makers' Club, etc.; also 2CH Smile Club (children's organisation).

## Station Particulars (contd.)

**2CK CESSNOCK.**

Operated by Coalfields Broadcasting Co. Pty. Ltd. Station slogan: The Voice of the Coalfields. Address: Vincent Street, Cessnock. Studios located: Vincent Street, Cessnock. Transmitter located: Neath. Telegraphic address: TWOCK, Cessnock. Telephones: Cessnock 408, 409.

Licensed power: 300 watts. Operating power: 300 watts. Wavelength: 205 metres, 1,460 kilocycles.

Commenced operations: January 9, 1939.

Network affiliation: None.

Directors: R. E. Smith (chairman), M. Dodds, P. J. Ryan, E. P. M. Sheedy, W. E. Lingard. Secretary: J. O. Prior. General manager: L. Jeffrey. Chief engineer: T. Taylor. Other technical staff: J. Money, L. Elphinstone. Sales manager: L. Jeffrey. Other sales staff: W. Hill. Announcers: Eric Bessemer, "Sally," Jim Max, T. Macartney, Hal. Hooker, W. Hill. Program production staff: Eric Bessemer and "Sally." Total full time staff: 12.

Interstate representatives: Sydney, Chandler's Broadcasting Service (Walter J. Smyth), Australia House, Carrington Street; Melbourne, I. V. Robertson, 379 Collins Street.

Daily transmission hours: Monday to Friday, 5.30 a.m. to 1 p.m., 5.30 p.m. to 10 p.m.; Saturday, 5.30 a.m. to 9 a.m. noon to 11 p.m.; Sunday, 5.30 a.m. to 11 p.m.

Type of transmitter: A.W.A. class "B" modulation. Type of aerial system: Quarter wave self-supporting vertical. Number of studios: Three.

**2DU DUBBO.**

Operated by Western Broadcasters Pty. Ltd. Station slogan: The Western Station. Address: Union Bank, Macquarie Street, Dubbo. Studios located: Union Bank, Dubbo. Transmitter located: Tamworth Street, Dubbo. Telegraphic address: TWODU. Telephones: Dubbo 440.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 455 metres, 660 kilocycles.

Commenced operations: July 3, 1936.

Network Affiliation: None.

Directors: E. I. Body (chairman), A. K. K. Scott, M. G. Mitchell, F. N. B. Fitzhardinge, D. E. Holmes. Secretary: F. L. Keyworth. General manager: Frank S. Walpole. Station manager: Frank S. Walpole. Chief engineer: D. E. Holmes. Other technical staff: Russell Ayling, Maxwell Moore. Sales manager: Frank S. Walpole. Other sales staff: D. E. Holmes. Announcers: Frank S. Walpole, Russell Ayling, Maxwell Moore, Betty Drew. Program production staff: Lillian Blight, Betty Drew. Total full time staff: Six.

Interstate and intra-State representatives: Sydney, Roy Wilson, Watson House, Bligh Street; Melbourne, A.W.A., Queen Street.

Daily transmission hours: Nine.

Type of transmitter used: Multi-Stage type, high level, class "A" modulated. Type of aerial system: Marconi "T" type. Number of studios: Two.

Radio listener clubs: Waggon Wheels Club, Senior and Junior (3,000 members).

**2GB SYDNEY.**

Operated by Broadcasting Station 2GB Pty. Ltd. Address: Savoy House, 29 Bligh Street, Sydney. Studios located: 29 Bligh Street, Sydney. Transmitter located: Homebush Point, Parramatta. Telegraphic address: TWOGB Sydney. Telephones: B 7876-79, B 7870, B 2986, B 1092.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 345 metres, 870 kilocycles.

Commenced operation: August 23, 1926.

Network affiliation: Macquarie Broadcasting Network.

Directors: Sir Hugh Denison, R. E. Denison, L. A. Denison, Frederick Daniell, A. W. Perriam. Secretary: W. C. Calley. General manager: H. G. Horner. Station manager: G. H. Anderson. Chief engineer: L. N. Schultz. Other technical staff: C. K. Louer, H. R. R. Thomas, C. Hibbert, M. Callow, J. Morrow, L. Cumston, A. Gibbons, M. Lane, D. G. Walters. Advertising manager: R. E. Lane. Assistant advertising manager: C. A. Fletcher. Other sales staff: E. Brewer, S. O. Clarke, W. Firth, L. R. Heath, W. J. Stelzer. Announcers: C. H. Cousens, John Dease, Harry Dearth, Jack Davey, Dick Fair, Frank Sturge Harty, Mrs. D. Jordan, Miss G. Reeve, Mrs. E. M. Stelzer. Program production staff: G. J. Jackson (program manager), B. Hart, Robin Ordell, Ron Watson. Miscellaneous staff: Frank Grose, C. Oliver, Ellis Price. Total full time staff: 69.

Interstate representatives: Macquarie Broadcasting Services, 37 Queen Street, Melbourne.

(Continued next page.)

# FOR

Complete Coverage of the  
Coalfields, Newcastle,  
Maitland and Hunter River  
you must use

# 2CK

CESSNOCK

*The Voice of the Coalfields*

15,000 Miners have made 2CK their Official Station.

**£76,000**

Is the Average Fortnightly Pay of the Coalfields Miners.

Your Campaign will Pay — by using 2CK

## Station Particulars (contd.)

### 2GB Sydney (Contd.)

Daily transmission hours: Monday to Saturday, 6 a.m.-11.30 p.m.; Sunday, 8 a.m.-11 p.m.

Transmitter and studio amplifier: Composite equipment manufactured by 2GB technical staff. Type of aerial system: Quarter-wave vertical radiator. Number of studios: Four.

Type of recording plant: High quality Lateral disc.

Radio listener clubs: 2GB Happiness Club (16,000 members), 2GB Radio Youth Club (1,573 members), Radio Reporters (13,000 members), Goodie Reeve's Chicks' Club (3,200 members).

### 2GF GRAFTON.

Operated by Grafton Broadcasting Co. Pty. Ltd. Station slogan: "The North Coast Station." Address: 47 York Street, Sydney. Offices and studios located: Tudor House, Prince Street, Grafton. Telegraphic address: TWOGF. Telephones: Offices 289, studio 290 Grafton.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 248 metres, 1,210 kilocycles.

Commenced operations: December 12, 1933.

Network affiliation: A.W.A.

Directors: Sir Ernest Fisk (chairman). Chief engineer: A. E. R. Fox. Other technical staff: H. H. Peaston, R. C. Baggs. Announcers: A. E. R. Fox, Hugh Peaston, Ronald Baggs, W. J. Wallace, Margaret Saunders, Kitty Langborne, Ivan Layton, Program production staff: Spencer Carter.

Interstate and intra-state representatives: A.W.A. Ltd., 47 York Street, Sydney; 167 Queen Street, Melbourne; Col. Mutual Building, Queen Street, Brisbane.

Daily transmission hours: Monday to Saturday, 7 a.m.-10 a.m., 12 noon-2 p.m., 5.30 p.m.-10.30 p.m.; Sunday, 12 noon-2 p.m., 7 p.m.-10 p.m.

Type of transmitter used: A.W.A. "class B" modulated 200 watt broadcast transmitter type J.2129. Type of aerial system: Multi-wire cage type "T" supported by twin 160 ft. telescopic steel masts. Number of studios: Two. Type of recording plant: A.W.A. Recording Studios, Sydney.

Radio listener clubs: 2GF Children's Smile Club (4,543), North Coast Radio Players (50).

### 2GN GOULBURN.

Operated by Goulburn Broadcasting Co. Pty. Ltd. Address: 209 Auburn Street, Goulburn. Studios located: 209 Auburn Street and River Road, Goulburn. Transmitter located: River Road, Goulburn. Telephones: Office, Goulburn 365; studio and transmitter, Goulburn 91.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 216 metres, 1,390 kilocycles.

Commenced operations: December 17, 1931.

Network affiliation: A.W.A.

Station manager: H. J. Lewis. Announcers: H. J.

Lewis, C. E. Coldwell Smith, V. Shearston, D. Marshall, D. Robertson. Total full time staff: Seven.

Interstate and intra-State representatives: A.W.A., Sydney and Melbourne.

Daily transmission hours: Monday to Friday, 7 a.m. to 10.30 p.m.; Saturday, 12 noon to 1 p.m., 5.30 p.m. to 10.30 p.m.; Sunday, 11 a.m. to 1 p.m., 7 p.m. to 10 p.m.

Type of transmitter used: A.W.A. Type of aerial system: A.W.A. Number of studios: Two.

### 2GZ ORANGE.

Operated by Country Broadcasting Services Ltd. Station slogan: "Country Service." Address: Hosking House, Hosking Place, Sydney. Studios located: Hosking Place, Sydney, and Union Bank, Orange. Transmitter located: Amaroo. Telegraphic address: TWOGZ. Telephones: BW1428-9, B1818.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 303 metres, 990 kilocycles.

Commenced operation: October 31, 1935.

Network affiliation: T.P.N.

Directors: A. F. Manchee (chairman), J. P. Abbott, F. B. Fleming, J. H. Middleton, D. J. Gilligan. Secretary: A. R. Chaloner, A.I.C.A. General manager: J. E. Ridley. Chief engineer: E. C. Crouch. Other technical staff: H. Hannam, C. Breed, G. Ratcliffe, F. Hanna, W. Hart. Sales manager: Alan Ridley. Other sales staff: F. Haines, P. Lahey, G. Parkinson, T. J. Radford. Announcers: Raymond Bermingham, Peter MacGregor, Laurence C. Collings, Frank Cayley, Gordon Ratcliffe, Barbara McGhie. Program production staff: Brian Maxwell (manager), Joan Orchard, M. Jamieson, N. Frazer.

Interstate representative: S. Allen, Newspaper House, Collins Street, Melbourne.

Daily transmission hours: Monday, Tuesday, Thursday, Friday, 6.30 a.m. to 2 p.m., 3.30 p.m. to 11 p.m.; Wednesday, 6.30 a.m. to 11 p.m.; Saturday, 6.30 a.m. to 12 midnight; Sunday, 8 a.m. to 10.30 p.m.

Type of transmitter used: A.W.A. series modulated. Type of aerial system: Folded Back Antenna—buried cartwheel earth system. Number of studios: Sydney, four; Orange, two.

Type of recording plant: A.W.A.

Radio listener clubs: Country Service Club (5,000 members), Junior Country Service Club (3,000 members), Old Timers' Club.

### 2HD NEWCASTLE.

Operated by Airsales Broadcasting Co. Pty. Ltd. Station slogan: "The Voice of Friendship." Address: Box 123 Newcastle, N.S.W. Studios located: Sandgate and 149 King Street, Newcastle, N.S.W. Transmitter located: Sandgate, N.S.W. Telephone: Newcastle, 1263.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 263 metres, 1,140 kilocycles.

Commenced operation: January 27, 1925.

Network affiliation: C.B.N. and Empire State Network.

(Continued next page)



COVERING the ground—and certain to get there . . . A broadcast campaign, too, if it is to be effective, must cover the ground, it must GET THERE!

*95 PER CENT of the 4,000,000 listeners throughout Australia are now within reach of a Macquarie Station*

THAT is why more and more national advertisers, each month, are planning campaigns the Macquarie way.

## Macquarie Broadcasting Network

Key Station — 2GB Sydney

2GB Sydney, 2CA Canberra, 2KA Katoomba, 2WL the South Coast Station, 2HR the Newcastle-Hunter River Station, 2KM Kempsey, 3AW Melbourne, 3HA Western District, 3TR Gippsland, 3SH Northern Victoria, 4BH Brisbane, 5DN Adelaide, 5RM Renmark, 6PR Perth, 7HO Hobart, 7LA Launceston, 7QT Queenstown, 7DY Derby, 7BU Burnie.

Sydney: 29 Bligh Street

Melbourne: 37 Queen Street

Telegrams: Macradio

## Station Particulars (contd.)

### 2HD Newcastle (Contd.)

Directors: Alex. Macgillivray, John Kennedy Jameson. Secretary: W. L. Wills. General manager: Alex. Macgillivray. Chief engineer: R. A. Oakley. Station manager: Michael O'Halloran. Other technical staff: R. Franks, W. Hosking, D. Marple, C. Omodei. Sales manager: Geo. Unsworth. Other sales staff: Duncan Macgregor, J. McNeilly. Announcers: Jack Holland, Bernie Bernard, Jim Crago, Geo. Unsworth, Mau de Johnston, Kathleen Morrissey. Program production staff: E. W. Rowe, W. R. Panes, Norman Scholes.

Interstate and intra-state representatives: C. A. Monks, Shell House, Carrington Street, Sydney; E. A. Wood, Shell Corner, Bourke Street, Melbourne, Victoria.

Daily transmission hours: Monday, Tuesday, Wednesday and Friday, 6 a.m.-11 p.m.; Thursday, Saturday and Sunday, 6 a.m.-12 midnight.

Type of aerial system: Quarter-wave tubular steel vertical radiator. Number of studios: Three. Type of recording plant: Presto.

Radio listener clubs: Joy Club (juniors), Joyster Club (adults).

### 2HR HUNTER RIVER.

Operated by Hunter River Broadcasters Pty. Ltd. Station slogan: "The Hunter River Station." Address: O'Brien's, Cnr. Heigh Street, West Maitland. Studios located: West Maitland; Cessnock and Lochinvar. Transmitter located: Lochinvar. Telegraphic address: TWOHR, West Maitland. Telephones: Office and Studio, West Maitland, 410, 431, Cessnock studio 399. Transmitter, West Maitland, 923.

Licensed power: 300 watts. Operating power: 300 watts. Wavelength: 441 metres, 680 kilocycles.

Commenced operations: September 6, 1937.

Network affiliation: Macquarie Network.

Directors: R. E. Denison, F. Daniell, E. Robinson, D. Robinson, C. H. Dunlop, A. S. Mather. Secretary: K. Robinson. General manager: J. A. Radford. Chief engineer: A. S. Mather. Other technical staff: N. Young, H. Brosie. Sales manager: B. Palmer. Other sales staff: E. Hall, R. Kelly. Announcers: A. Webber (studio manager), Ian Healy, Mora Downie, Reg. Kelly, J. O'Brien, N. Hallsworth, N. A. Judd. Program production staff: N. Hallsworth. Total full time staff: 17.

Interstate and intra-state representatives: Macquarie Broadcasting Network, 29 Bligh Street, Sydney; Mather and Stelling, 422 Collins Street, Melbourne.

Daily transmission hours: 6.30 a.m.-2 p.m., 5.30 p.m.-10.30 p.m.; Sundays, 3 p.m.-10.30 p.m.

Type of transmitter used: Constructed by Hunter River Broadcasters Pty. Ltd. Type of aerial system: Marconi quarter-wave. Number of studios: Four.

Radio listener clubs: 2HR Radio Club (2,500), 2HR Women's Club (700).

### 2KA KATOOMBA.

Operated by Transcontinental Broadcasting Corporation Ltd. Station slogan: "The Voice of the Mountains." Address: 19 Bligh Street, Sydney. Studios located: 19 Bligh Street, Sydney, and Katoomba Street, Katoomba. Transmitter located: Wentworth Falls. Telephones: BW4501-2.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 385 metres, 780 kilocycles.

Commenced operations: September 7, 1935.

Network affiliation: Macquarie network.

Directors: John P. O'Neill (chairman), Geo. E. McCauley (managing director), A. C. Paddison, A. L. McCauley. Secretary: McCauley and McCauley. General manager: A. C. Paddison. Other technical staff: C. Bischoff, A. Searle, T. Toakley. Sales manager: H. S. Darke, F.O.A. Other sales staff: J. Morris and Macquarie network. Announcers: G. Foster, I. McDonald, H. G. Barry, Mrs. A. Macdougall. Sales promotion: J. Morris.

Interstate representatives: Macquarie Broadcasting Network, Melbourne.

Daily transmission hours: Monday, Tuesday, Thursday and Friday, 6.30 a.m.-2 p.m.; Wednesday, 6.30 a.m.-11 p.m.; Sunday, 8.30 a.m.-11 p.m.; Saturday, 6.30 a.m.-11 p.m.

Type of transmitter used: A.W.A. Type of aerial system: Folding top-A.W.A. Number of studios: Two. Radio listener club: 2KA Radio Service Club.

### 2KM KEMPSEY.

Operated by Radio Kempsey Ltd. Station slogan: "The Macleay Station." Address: 16 Barrack Street, Sydney. Studios located: Belgrave Street, Kempsey. Transmitter located: Belgrave Street, Kempsey. Telephones: Kempsey 36.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 306 metres, 980 kilocycles.

Commenced operations: October 20, 1937.

Network affiliation: Macquarie.

Directors: J. P. O'Neill (chairman), A. L. McCauley, A. C. Paddison, C. A. Ryan, F. H. Moses. Secretaries: McCauley and McCauley. Station manager: Val. Hutchinson. Other technical staff: Val. Hutchinson, Graham Chisholm. Sales manager: Harold S. Darke, F.O.A. Other sales staff: J. Morris and Macquarie Network. Announcers: Val. Hutchinson, Graham Chisholm, Eunice Kahle. Program production staff: Graham Chisholm, Eunice Kahle. Total full time staff: Seven.

Interstate and intra-state representatives: Macquarie Broadcasting Network, 29 Bligh Street, Sydney; Macquarie Broadcasting Network, 37 Queen Street, Melbourne.

Daily transmission hours: 7.30 a.m. to 9 a.m., 6 p.m. to 10.30 p.m.

Type of transmitter used: Philips KVFHP 500/1 lb.

Type of aerial system: "T"-type 110 feet. Number of studios: One.

Radio listener clubs: Gumnut Club, 1,500 children.

# 3

## ESSENTIAL FACTORS In Every Radio Campaign

# 2KA

FOURTH LARGEST  
COUNTRY AUDIENCE

# 2BS

THE VOICE OF THE  
BATHURST PLAINS

# 2KM

EXCLUSIVE CENTRAL  
NTH. COAST COVERAGE

## Three Great Markets Three Ace Stations

### ONE DEFINITE CONCLUSION RESULTS

ATTRACTIVE DISCOUNTS FOR THREE IN ONE BUYING

One Headquarters for responsibility, service, and enquiries

2KA, 19 BLIGH STREET, SYDNEY      TELEPHONE: BW 4501-4502

## Station Particulars (contd.)

### 2KO NEWCASTLE.

Operated by The Newcastle Broadcasting Co. Pty. Ltd. Station slogan: "The Voice of Industry." Address: C.M.L. Building, 70-72 Hunter Street, Newcastle. Studios located: C.M.L. Building, 70-72 Hunter Street, Newcastle. Telegraphic address: TWOKO. Telephone: N/le. 932/957.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 213 metres, 1,410 kilocycles.

Commenced operations (date): August 1, 1931. Network affiliations: Major and Provincial.

Directors: Allen Fairhall, Harold Pickhover. Secretary: Allan D. Faulkner.

Managing director: Allen Fairhall. Chief engineer: K. N. G. Greenhalgh. Other technical staff: M. Spitzkowsky, J. Cowan, H. Chinner, J. Greenhalgh, N. Andrews. Announcers: H. Pickhover, T. King, F. Bennett, W. Davidson, Elma Gibbs. Program production manager: H. Pickhover. Total full time staff, 26.

Intra-state and interstate representatives: E. S. Cox, Shell House, Carrington Street, Sydney; Hugh Anderson, 130 Exhibition Street, Melbourne.

Daily transmission hours: Monday to Friday, 7 a.m. to 4 p.m., 5 p.m. to 10.30 p.m.; Saturday, 7 a.m. to 12 noon, 2 p.m. to 11 p.m.; Sunday, 9 a.m. to 4 p.m., 5.30 to 10.30 p.m.

Type of transmitter used: Own construction. Type of aerial system: Vertical under construction. Number of studios: Four.

Radio listener clubs: 2KO Cheerio Club (600), 2KO Radio Correspondence Club (1,000).

### 2KY SYDNEY.

Operated by The Labour Council of N.S.W. Station slogan: "The Brightest Station on the Air." Address: Dymock's Building, 428 George Street, Sydney. Studios located: 428 George Street, Sydney. Transmitter located: Beacon Hill, French's Forest. Telephones: M 6291 (3 lines).

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 294 metres, 1,020 kilocycles.

Commenced operations: October 25, 1925.

Network affiliation: Nil.

Directors: R. A. King, A. McAlpine, J. R. Hughes, T. Wright, Dr. Lloyd Ross, F. O'Neill, J. Moloney. Secretary: The Hon. R. A. King, M.L.C. Station manager: H. E. Beaver. Chief engineer: J. H. Brown. Other technical staff: H. E. Edwards, M. Harmer, A. Carlin, F. L. Morris, L. Spinner, J. Pullan, J. Stewart, J. White, N. Southwell. Sales manager: H. E. Beaver. Other sales staff: R. Wharton, J. Dunn, L. Lunn, J. Harper. Announcers: J. Harper, Captain Bairnsfather, H. M. Garden, J. Farrelly, John Fox, Eric Walker, Mrs. Grey, Myra Dempsey, Lionel Lunn, George Saunders, Ken Howard, Vernon Sellars, Brian Howard, J. K. Morley. Program production staff: Esme Williams, H. M. Garden, Fred Will, Dan Welton. Total full time staff: 45.

Interstate representative: I. V. Robertson, 379 Collins Street, Melbourne.

Daily transmission hours: 6.45 a.m. to 12 midnight (close between 12 midday and 1 p.m., Monday, Tuesday, Thursday and Friday); 7.30 a.m. to 11.30 p.m., Sundays.

Type of transmitter used: 1 kW. Type of aerial system: Quarter "T". Number of studios: Two.

### 2LF YOUNG.

Operated by Young Broadcasters Pty. Ltd., A.M.P. Building, Young. Studios and transmitter: Young, N.S.W. Operating power: 300 watts. Wavelength: 224 metres, 1,340 kC.

Commenced operations: February 16, 1937.

Representative: Roy Wilson, Watson House, Bligh Street, Sydney.

### 2LM LISMORE.

Operated by Richmond River Broadcasters Pty. Ltd. Address: Molesworth Street, Lismore. Studios located: Lismore. Transmitter located: Goonellabah (five miles from Lismore). Telegraphic address: TWOLM, Lismore. Telephone: Studio, Lismore 1028. Transmitter Lismore, 1029.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 333 metres, 900 kilocycles.

Commenced operations: September 21, 1936.

Network affiliation: T.P.N.

Directors: C. M. Robertson (chairman), Dr. A. J. Opie, A. E. Brand, J. McLean, J. C. McIntosh. Secretary: F. G. Jackson. Station manager: C. V. Woodland. Chief engineer: S. Tokin. Other technical staff: E. J. Aked, P. O'Sullivan, J. Biggins. Sales manager: Harry Wharf. Other sales staff: Tom Ward. Announcers: C. V. Woodland, Harry Wharf, Tom Ward, Alan Light, Merle Puddicombe, Mollie Noonan, Carl Small. Program production staff: C. V. Woodland (producer), Harry Wharf. Total full time staff: Twelve.

Interstate and intra-state representatives: The Provincial Network Pty. Ltd., Hosking House, Hosking Place, Sydney; and 118 Queen Street, Melbourne.

Daily transmission hours: Monday to Saturday, 6.30 a.m. to 3 p.m., 5 p.m. to 10.30 p.m.; Sunday, 1 p.m. to 3 p.m., and 6 p.m. to 10 p.m.

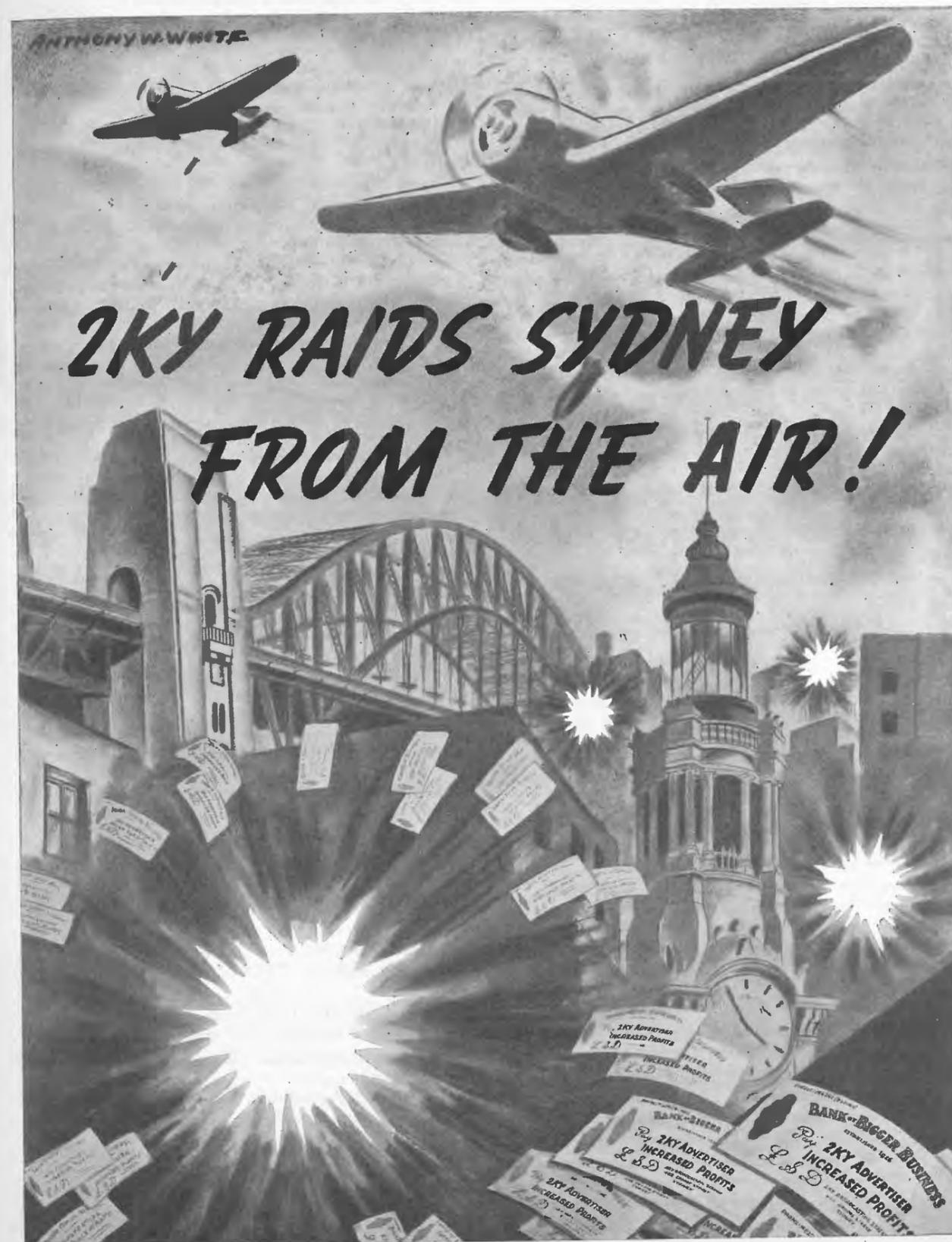
Type of transmitter used: A.W.A. 500 watt aerial rating, Class "B" modulation. Type of aerial system: A.W.A. folded top. Number of studios: One main studio.

Radio listener clubs: Good Companions Children's Club (5,000 members), 2LM Riding Club (120 members).

THIS YEAR BOOK IS FREE

To

"Broadcasting Business" Subscribers



## Station Particulars (contd.)

## 2MG MUDGEES.

Operated by Mudgee Broadcasting Co. Pty. Ltd. Station slogan: Voice of the Tablelands. Address: P.O. Box 44, Mudgee. Studios located: Wellington Road. Transmitter located: Wellington Road.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 207 metres, 1,450 kilocycles.

Commenced operations: July 2, 1938.  
Network affiliation: Empire State.

Directors: H. W. Milton, G. Thompson, E. W. Hodges, E. E. Milton. Secretary: E. E. Milton. General manager: H. W. Milton. Chief engineer: W. Frewin. Other technical staff: H. Milton. Other sales staff: C. J. Moloney, W. Frewin. Announcers: C. J. Moloney, W. Frewin. Program production staff: C. J. Moloney, E. Sheath. Total full time staff: Four.

Intra-State representative: Sydney, C. A. Monks, Shell House, Carrington Street.

Daily transmission hours: Monday to Friday, inclusive, 8½ hours; Saturdays, 6½ hours; Sundays, 7½ hours.

Type of transmitter used: Audio Equipment Lekmek, R. Freq. S.T.C. Type of aerial system: XT (mostly vertical). Number of studios: Two. Type of recording plant: Nil.

Radio listener club: 2MG Radio Social Club (742 members).

## 2MO GUNNEDAH.

Operated by 2MO Gunnedah Ltd. Station Slogan: "First Station in the North West." Address: Marquis Street, Gunnedah. Studio located: Marquis Street, Gunnedah. Transmitter located: Marquis Street, Gunnedah. Telegraphic address: TWOMO, Gunnedah. Telephone: Gunnedah 236.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 219 metres, 1,370 kilocycles.

Commenced operations: December, 1930.

Directors: E. Higginbotham, W. McDonagh, V. MacAdam, O. Bennett, S. Kennedy. Secretary: S. Kennedy. Station manager: A. H. Whistler. Chief engineer: E. Tibbett. Other technical staff: T. Whitcomb (consulting engineer). Sales manager: A. H. Whistler. Announcers: A. H. Whistler, Hilery Whistler, E. Tibbett. Total full time staff: Three.

Interstate and intra-state representatives: Sydney office, 515 Australia House, Carrington Street; Melbourne, A.W.A. (Australasia) Ltd.

Daily transmission hours: 7 a.m. to 9 a.m., 12 noon to 2 p.m., 5.15 p.m. to 10 p.m.; Sunday, 8 a.m. to 10 a.m., 6 p.m. to 10 p.m.

Type of transmitter used: Five Stage High Level Modulation. Type of aerial system: "L" Type Marconi to Ground. Number of studios: Three.

Radio listener clubs: Smilers Club, Pyjama Parade Club, Civic Theatre Club.

## 2MW MURWILLUMBAH.

Operated by Tweed Radio and Broadcasting Co. Pty. Ltd. Station slogan: "The Friendly Station." Address: Offices, Commercial Road, Murwillumbah. Studios: Condong Road, Murwillumbah. Transmitter located: Condong Road, Murwillumbah. Telegraphic address: TWOMW Murwillumbah. Telephones: Offices, Murwillumbah 12. Studios: Murwillumbah 432.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 204 metres, 1,470 kC.

Commenced operations: September 2, 1937.  
Network affiliation: Nil.

Directors: A. A. Budd (chairman), F. E. Nicholl, A. C. Pratt, J. C. Price, J. T. Raward. Secretary: John Theyer. Station manager: Richard Pile. Chief engineer: T. A. Small. Other technical staff: A. G. Simmonds. Sales manager: Richard Pile. Other sales staff: L. H. Martin, Miss M. Kay. Announcers: Richard Pile, L. H. Martin, John Rowland, T. A. Small, Miss Joyce Palmer, Gordon Spicer. Program production staff: Miss Joyce Palmer. Program director: Miss A. Myers. Total full time staff: 8.

Interstate representatives: Sydney, Walter J. Smyth, C/o Chandler's Broadcasting Service, Australia House, Carrington Street; Melbourne, Macquarie Broadcasting Services Pty. Ltd., 37 Queen Street; Brisbane, Chandler's Broadcasting Service, 43 Adelaide Street.

Daily transmission hours: 7 to 9 a.m., 10 to 11.30 a.m., 12.30 to 2.30 p.m., 5.30 to 10.30 p.m.; Sundays, 8.30 to 10.30 a.m., 6.30 to 10 p.m.

Type of transmitter: Standard telephones and cables.

Type of aerial system: "T" type, quarter-wave. Number of studios, two.

Type of recording plant: Recording facilities through Brisbane agents.

Radio listeners' clubs: Smile Club (3,000 members).

## 2NZ INVERELL.

Operated by Northern Broadcasters Pty. Ltd. Station slogan: "2NZ Northern New South Wales." Address: P.O. Box 3, Inverell. Studios located: Broadcasting House, 20 Otho Street, Inverell. Transmitter located: Little Plain, 9.4 miles west of Inverell. Telegraphic address: TWONZ. Telephones: Inverell 9 and 4.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 256 metres, 1,170 kilocycles.

Commenced operations: This station was opened under the call-sign of 2VL on March 30, 1936. In January, 1937, the call-sign was changed to 2NZ.

Network affiliation: T.P.N.

Directors: H. T. Knapton (chairman), Hon. E. C. Sommerlad, C.B.E., M.L.C., Hon. D. H. Drummond, M.L.A., J. E. Ridley, A. F. Manchee, J. H. Middleton. Secretary: A. R. Chaloner, A.I.C.A. Studio manager: L. Gordon. Chief engineer: E. C. Crouch. Other

(Continued next page)

## Station Particulars (contd.)

## 2NZ Inverell (Contd.)

technical staff: E. S. Stevens, M. J. Chatfield, O. Bartle, A. Gardiner. Sales representative: J. W. Twyford. Announcers: Hilda Grace, Laurie Gordon, Ron. Scott, Roderick Douglas, Errol Hugh, Bert Condon. Program production staff: Misses V. Jessen, M. Ryan, H. Pearse, B. Anderson, M. Edmonds. Total full-time staff: 15.

Interstate and intra-State representatives: Sydney, and Newcastle, Country Broadcasting Services Ltd., 84½ Pitt Street, Sydney. Melbourne: S. Allen, Newspaper House, Collins Street.

Transmission hours: Monday to Friday, 6.30 a.m. to 9 a.m., 11 a.m. to 2 p.m., 3.30 p.m. to 10.30 p.m.; Saturday, 6.30 a.m. to 9 a.m., 11 a.m. to 2 p.m., 5 p.m. to 10.30 p.m.; Sunday, 8 a.m. to 10 p.m.

Type of transmitter: Low power Heinsing modulated transmitter. Linear amplifier consisting of 4 x 279A standard valves, is modulated by 2 x 242 standard valves. Type of aerial system: Transmission line fed "T" type.

Production facilities: Two studios, control room, dramatic control panel controlling two microphones and five pick-ups.

Radio listener clubs: 2NZ Country Service Club, 2NZ Junior Country Service Club.

## 2PK PARKES.

Operated by Parkes Broadcasting Co. Pty. Ltd. Station slogan: "The Voice of the Golden West." Address: 20 Close Street, Parkes. Studios located: 20 Close Street, Parkes. Transmitter located: 20 Close Street, Parkes. Telegraphic address: TWOPK. Telephone: Parkes 480.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 214 metres, 1,400 kilocycles.

Commenced operations: October 5, 1937.

Network affiliation: Empire State.

Directors: A. J. Matthews (chairman), Hon. F. W. Spicer, M.L.C., (managing director), C. Johnson, J. P. Sheahan. Secretary: J. P. Sheahan. Station manager: J. E. Parris. Chief engineer: J. E. Parris. Other technical staff: A. Chaplin, J. Kerr. Sales staff: J. Kerr. Announcers: Max Abrahams (chief announcer), J. Parris, J. Kerr, A. Chaplin, Miss V. Wearne, K. Darken, F. W. Spicer. Program production staff: Max Abrahams, J. Parris, Miss V. Wearne. Total full time staff: Seven.

Interstate and intra-State representatives: Sydney, C. A. Monks, Shell House, Carrington Street; Melbourne, E. A. Wood, Shell Corner, Bourke Street.

Daily transmission hours: Monday to Saturday, 7 a.m. to 9 a.m., 11.30 a.m. to 2 p.m., 5.30 p.m. to 10 p.m.; Sunday: 8.45 a.m. to 12 noon, 5.30 p.m. to 10 p.m.

Type of transmitter used: S.T.C. Type of aerial system: "T" type, 110ft. high, 60ft. flat top. Number of studios: One.

Radio listener club: Koala Club (500 members).

## 2QN DENILQUIN.

Operated by Deniliquin Broadcasting Co. Ltd. Station slogan: "The Riverina Station." Address: End Street, Deniliquin. Studios located: Deniliquin. Transmitter located: Deniliquin. Telephones: Deniliquin 260 and Deniliquin 307.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 208 metres, 1,440 kilocycles.

Commenced operations: November, 1935.

Network affiliation: "Age" Network.

Directors: James Tasker, Cyril Gove, John Carse. Secretary: Basil J. Jackson. General manager: Basil J. Jackson. Station manager: John V. Reilly. Chief engineer: J. Parris. Other technical staff: N. McLean. Sales manager: R. F. Byrne. Other sales staff: John V. Reilly. Announcers: Reg. McMaster, Jack Parris, Bob Donovan, Dianne Reilly. Total full time staff: 7.

Interstate and intra-state representatives: C. A. Monks, "Shell House," Carrington Street, Sydney; R. F. Byrne, 499 Little Collins Street, Melbourne.

Daily transmission hours: 7 a.m. to 9 a.m., 12 p.m. to 3.30 p.m., 6 p.m. to 10.30 p.m.; Saturday, the same with exception of night sessions, 6 p.m. to 11 p.m.; Sunday, 10 a.m. to 4 p.m. and 6 p.m. to 10 p.m.

Type of transmitter used: Built by station engineers. Type of aerial system: Marconi. Number of Studios: One.

Radio listener clubs: Cheerio Club (children), 1,600; Women's Club, 1,450.

£100 - PER HOUR - £100  
That's our Pulling Power

2PK

PARKES, N.S.W.

"The Voice of the Golden West"

In a recent charity appeal raised over £300 in three hours, following a five minute talk by the Mayor of Parkes.

Let us get Results for You!

REPRESENTATIVES:

CUTHBERT MONKS, Shell House, Sydney A.W.A., Brisbane	E. A. WOOD, 532-543 Bourke Street, Melbourne, Vic. A.W.A., Melbourne
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£100 - PER HOUR - £100

## Station Particulars (contd.)

## 2RG GRIFFITH.

Operated by Irrigation Area Newspapers Pty. Ltd. Station slogan: "The Voice of the Murrumbidgee." Address: Ulong Street, Griffith. Studios located: Griffith. Transmitter located: Griffith. Telegraphic address: TWORG Griffith. Telephone: Griffith 45.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 280 metres, 1,070 kilocycles.

Commenced operations: September 14, 1936.

Directors: Hubert Browett Whitham, Leo Manning Jones. Secretary: E. Miller. General manager: D. L. M. Jones. Chief engineer: V. Jarvis. Announcers: John Baden Powell, Ray Walkers, Miss E. Davis, Miss K. O'Donnell. Total full time staff: Five.

Intra-State representative: D. N. Scott, 9 Bligh Street, Sydney.

Daily transmission hours: Week days, 10 a.m. to 11.30 a.m., 6 p.m. to 10.30 p.m.; Saturdays, 5 p.m. to 10.30 p.m.; Sundays, 9 a.m. to 2 p.m., 6 p.m. to 10 p.m.

Radio listener clubs: Sunshine Club (Women) (923 members), Area Sunbeamers (children), (848 members).

## 2SM SYDNEY.

Operated by Catholic Broadcasting Co. Pty. Ltd. Station slogan: "The Modern Station." Address: 46 Carrington Street, Sydney. Studios located: 46 Carrington Street, Sydney. Transmitter located: Pennant Hills. Telegraphic address: TWOSM, Sydney. Telephones: B7294-5-6.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 236.2 metres, 1,270 kilocycles.

Commenced operations: December 24, 1931.

Network affiliation: Nil.

Directors: Mons. J. A. Meany, W. Hurley, T. G. Murray, M. O'Neill, R. Fagan, M. L'Estrange, E. Lashmar. Secretary: Peter J. Egan. Managing director: Mons. J. A. Meany. Studio manager: John S. Dunne. Advertising manager: L. P. Quirk. Asst. advertising manager: B. B. Stapleton. Sales staff: Sydney E. Baume, E. C. Farris, H. A. Petters, H. Middlemass. Announcers: John S. Dunne, Dom. Harnett, Tommy Jay, Doreen McKay, William Beatty, Elsie Waine, Fred. Webber.

Victorian representative: J. Jordan, 238 Flinders Lane, Melbourne.

Daily transmission hours: Monday to Saturday, breakfast session 6-9 a.m., midday 1-3 p.m., women's 3-5 p.m., children's 5-6 p.m., evening, 6-10.30 p.m.; Sunday, 11 a.m.-10.30 p.m.

Type of transmitter used: A.W.A. Type of aerial system: Half-wave vertical. Number of studios: Five. Type of recording plant: Presto.

## 2TM TAMWORTH.

Operated by Tamworth Radio Development Co. Ltd. Station slogan: "Northern N.S.W." Address: 312 Peel Street, Tamworth. Studios located: Tamworth. Transmitter located: Duri. Telegraphic address: TWOTM. Telephones: Tamworth B988, B989, Sydney BW 7375.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 231 metres, 1,300 kilocycles.

Commenced operations: February 27, 1935.

Network affiliation: T.P.N. and C.B.N.

Directors: E. Higginbotham (managing director and chairman), H. M. Sheffer, A. Joseph, O. Bennett, T. Whitcomb. Secretary: S. W. Kennedy. Chief engineer: T. Whitcomb. Other technical staff: D. Dawson, L. Pengilly, F. Potter. Sales staff: Sydney office, J. Leiper, R. Davidson; Tamworth, R. B. Stewart. Announcers: K. Moginie, Knox Godfrey, W. Weir, B. North-Ash, J. Whitmore. Program production staff: A. (Lewis) Bennett (studio manager), D. Phillips, E. Long, M. Pengilly, Knox Godfrey, J. Whitmore. Total full time staff: 26.

Interstate representatives: Victoria: S. Allen, Newspaper House, Collins Street, Melbourne.

Daily transmission hours: 6 a.m. to 11 p.m.

Type of transmitter used: 2,000 watt suppressor modulated Colville wireless. Type of aerial system: Quarter-wave "T" type. Number of studios: 3. Sound on film equipment.

Radio listener clubs: 2TM Women's Radio Club, Possum Club.

## 2UE SYDNEY.

Operated by Radio 2UE Sydney Pty. Ltd. Address: 29 Bligh Street, Sydney. Studios located: 29 Bligh Street, Sydney. Transmitter located: Lilli Pilli, Port Hacking. Telegraphic address: TWOUE. Telephones: BW3121 (6 lines).

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 316 metres, 950 kilocycles.

Commenced operations: January 26, 1925.

Network affiliation: None.

Director: C. V. Stevenson (managing director). Secretary: R. Wolff. General manager: C. V. Stevenson. Manager: Oswald Anderson. Assistant manager: J. A. Armitage. Chief engineer: Murray H. Stevenson. Assistant engineer: W. Robinson. Other technical staff: R. M. Piermont, W. J. Dukes, B. Munnings, A. Llewellyn, G. Cole, N. S. Piermont, R. Cameron, S. Kruger, B. Piermont, H. Payne, R. Piermont, J. Carr, P. Seaton. Sales promotion executive: A. A. Campbell-Jones. Other sales staff: C. N. Baeyertz, H. N. Yates, G. Brothie, Norman Stevenson (service supervisor). Announcers: Rod. Gainford (chief announcer), Claude Holland, S. Meredith, Allan Toohey, Ernest Walsh, Stuart Edwards, Arnold Browning Smith, Ken Johnston, C. Honeyfield, Mrs. Filmer, Grace Shaw. Program production executive: Arthur Carr. Total full time staff: 58.

(Continued next page)

## Station Particulars (contd.)

## 2UE Sydney (Contd.)

Interstate representatives: Melbourne, Noel Dickson, 68 King Street, Melbourne.

Daily transmission hours: Week days, 6 a.m. to 11.30 p.m.; Sundays, 8 a.m. to 11 p.m.

Type of transmitter used: 1,000 watt unmodulated with low-power modulation of 100 per cent. capacity. Type of aerial system: "T" type suspended between 180ft. self-supporting steel towers. Number of studios: Five.

Type of recording plant: Composite recording equipment, designed to provide general recording facilities.

Radio listener club: Call to Youth Club (4,000 members), Mothercraft Club.

## 2UW SYDNEY.

Operated by Commonwealth Broadcasting Corporation Pty. Ltd. Station slogan: "2UW From the Top of the State." Address: State Shopping Block, 49 Market Street, Sydney. Studios located: State Shopping Block, 49 Market Street, Sydney. Transmitter located: State Shopping Block, 49 Market Street, Sydney. Telegraphic address: TWOUW, Sydney. Telephones: M6686 (6 lines).

Licensed power: 750 watts. Operating power: 750

watts. Wavelength: 270 metres, 1,110 kilocycles.

Commenced operations: February 13, 1925.

Network affiliation: C.B.N. (key station).

Directors: Stuart F. Doyle, M. F. Albert, A. F. Albert. Chairman of directors: Stuart F. Doyle. General manager: C. F. Marden. Secretary: W. Sayle. Station manager: N. Lyons. Director of production: George Edwards. Maurice Francis, author and dramatist, George Edwards Productions. Nell Stirling, George Edwards Productions. Secretary to the general manager: Miss C. H. Wood. Accountant: C. Carter. Service department: Miss R. Foott. Publicity manager: F. Clarke-Cottrell. Program department: Miss G. Lammas. Production: C. J. Arnold. Announcers: J. M. Prentice, J. Wheeler, V. Lisle, C. James, J. Walker, E. Scott, E. Collibee, J. A. Crawford, H. Gregory, Hilda C. Morse. Sporting department: Sporting editor, A. Anderson; sporting annotator, C. Lawrence, Cliff Carey; sporting commentator, C. Angles. Sales manager: F. E. Levy; C. Gilder, assistant sales manager. Other sales staff: E. Collibee, W. Hardy, J. McConnell, H. Ringland, R. McMahon, H. Gregory, R. McKinnon, J. Wheeler, J. McKay. Technical staff: T. A. McNeil (chief engineer), J. P. Phillips, J. Phillips, C. Hammer, E. D. Austwick, B. Stephenson.

Interstate representatives: Peter Sullivan, Alkira House, 18 Queen Street, Melbourne, Victoria; and Station 4BC, Wintergarden Theatre, Queen Street, Brisbane, Queensland.

(Continued next page)



## LET T.P.N. SIT IN WITH YOU

WHEN considering advertising to New South Wales major market (53% of the population live outside the Metropolis), let us sit in with you from the jump. We can then suggest an integrated plan based on complete knowledge of our local markets, local radio habits and station programmes. We can recommend a safe course through the shifting currents of listener-preferences. We can suggest the best time or spot bargains on our Associate Stations. We can indicate in the light of experience, pitfalls to avoid and give you the benefit of case histories of related campaigns.

Therefore, let us sit in with you from the first roughing out of the campaign. This will be the first move towards success.

## THE PROVINCIAL NETWORK OUTLETS

<b>2TM</b> TAMWORTH 2,000 watts	<b>2KO</b> NEWCASTLE 500 watts	<b>2NZ</b> INVERELL 2,000 watts	<b>2LM</b> LISMORE 500 watts	<b>2GZ</b> ORANGE 2,000 watts
COVERING— NORTHERN, N.S.W. POPULATION 172,070 RADIO HOMES 21,047	COVERING— NEWCASTLE AND DISTRICT POPULATION 242,606 RADIO HOMES 41,112	COVERING— NORTH N.S.W. AND STH. QUEENSLAND POPULATION 120,500 RADIO HOMES 12,869	COVERING— LISMORE AND DISTRICT POPULATION 101,300 RADIO HOMES 10,894	COVERING— CENTRAL N.S.W. POPULATION 228,000 RADIO HOMES 25,830

## THE PROVINCIAL NETWORK PTY. LTD.

HOSKING HOUSE : : : : HOSKING PLACE,  
SYDNEY : : : : 'Phone B5488

Station Particulars (contd.)

2UW Sydney (Contd.)

Transmission: 24 hours continuous service.  
Recording facilities: At station ("Presto").  
Transmitter: A.W.A. high fidelity.  
Studio amplifier equipment: A.W.A.  
Type of aerial system: "T" aerial system.

2WG WAGGA.

Operated by Riverina Broadcasting Pty. Ltd. Station slogan: "The Riverina Broadcasting Station." Address: Wagga, N.S.W. Studios located: Wagga. Transmitter located: 7 miles Wagga. Telegraphic address: TWOWG. Telephones: Wagga 164, Sydney office B5449.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 261 metres, 1,150 kilocycles.

Commenced operations: June, 1932.

Network affiliation: C.B.N.

Directors: E. V. Roberts (managing director); I. A. Roberts, C. A. Garrett. General manager: E. V. Roberts. Station manager: I. A. Roberts. Chief engineer: P. Roberts. Other technical staff: A. Williams, H. Rudd. Sales manager: R. Jenkins. Announcers: J. O'Brien, E. Broughall, D. Jenkins, Briggs, E. Clough, Kay Millen, M. Keirans. Program production staff: Briggs, M. Brentnall, Miss M. Keirans, Miss A. Crowdice. Total full time staff: 32.

Interstate and intra-state representatives: Sydney office, L. S. Decent, Lisgar House, Carrington Street, Sydney; Melbourne office, I. V. Robertson, 379 Collins Street.

Daily transmission hours: 7 a.m.-10.30 p.m.

Type of transmitter used: Class "B" modulated.  
Type of aerial system: Marconi T-radial earth watt.  
Number of studios: 3. Type of recording plant: Universal.

Radio listener clubs: Women's Club, 6,730 at 28/1/39; Children's Flee Club, 8,300.

2WL WOLLONGONG.

Operated by Wollongong Broadcasting Pty. Ltd. Station slogan: The South Coast Station. Address: Edward Street, Wollongong. Studios located: Wollongong and Sydney. Transmitter located: Unanderra. Telephone: Wollongong 203.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 210 metres, 1,430 kilocycles.

Commenced operations: July 18, 1931.

Network affiliation: Macquarie Broadcasting Network.

Directors: R. E. Denison, F. de R. Duncan, F. H. Daniell, R. A. Yeldon. Secretary: J. A. Byron. Gen-

eral manager: Russell A. Yeldon. Studio and advertising manager: Arthur O'Keefe. Chief engineer: P. Makin. Other technical staff: A. J. Yeldon, C. B. Sautelle, J. Gray. District sales representative: W. G. Herring. Announcers and production staff: Ann Vidor, John Merchant, Stuart Dibley, Lawrence Gray. Total full time staff: 18.

Interstate and intra-State representatives: Macquarie Broadcasting Services, 29 Bligh Street, Sydney, and 37 Queen Street, Melbourne.

Daily transmission hours: Monday and Thursday, 7.30 a.m. to 11.30 a.m., 5.30 p.m. to 10.45 p.m.; Tuesday and Friday, 7.30 a.m. to 11.30 a.m., 5.30 p.m. to 10.15 p.m.; Wednesday, 7.30 a.m. to 11.30 a.m., 12 noon to 10.15 p.m.; Saturday, 7.30 a.m. to 11.30 a.m., 12.30 p.m. to 10.45 p.m.; Sunday 8.30 a.m. to 12 noon, 3 p.m. to 10 p.m.

Type of transmitter used: High power plate modulated American design. Type of aerial system: Supported by latticed steel towers. Number of studios: Three.

Radio listener clubs: 2WL Friendship Club, 2WL Tailwaggers' Club.

2XL COOMA.

Operated by W. A. Evans, lessee. Station slogan: "The Southern Tablelands Station." Address: Cooma. Studios and transmitter located: Cromwell Street, Cooma.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 340.7 metres, 880 kilocycles.

Commenced operations: September 20, 1937.

Network affiliation: Nil.

General manager: W. A. Evans. Chief engineer: R. K. Try. Sales manager: R. Moran.

Interstate and intra-State representatives: Sydney, C. A. Monks, Shell House, Carrington Street; Melbourne, I. V. Robertson, 379 Collins Street.

Commencing Dates of Operation of N.S.W. Stations

26/ 1/25	2UE Sydney	11/11/35	2QN Deniliquin
27/ 1/25	2HD Newcastle	6/ 2/36	2AD Armidale
13/ 2/25	2UW Sydney	30/ 3/36	2NZ Inverell
25/10/25	2KY Sydney	31/ 7/36	2DU Dubbo
23/ 8/26	2GB Sydney	14/ 9/36	2RG Griffith
16/ 6/30	2MO Gunnedah	21/ 9/36	2LM Lismore
17/12/30	2AY Albury	1/ 1/37	2BS Bathurst
18/ 7/31	2WL Wollongong	16/ 2/37	2LF Young
1/ 8/31	2KO Newcastle	2/ 9/37	2MW Murwillumbur
17/12/31	2GN Goulburn		
24/12/31	2SM Sydney	6/ 9/37	2HR Lochinvar
5/ 2/32	2CH Sydney	20/ 9/37	2XL Cooma
29/ 6/32	2WG Wagga	30/ 9/37	2BE Bega
12/12/33	2GF Grafton	5/10/37	2PK Parkes
30/ 6/34	2BH Broken Hill	20/10/37	2KM Kempsey
27/ 2/35	2TM Tamworth	2/ 7/38	2MG Mudgee
31/10/35	2GZ Orange	9/ 1/39	2CK Cessnock
7/ 9/35	2KA Katoomba		

THE STAMP OF APPROVAL!



Marks the appreciation given by the Public to the Superlative Twenty-four Hour Service Broadcast by Australia's Leading Commercial Broadcaster.

**SERVICE!**—That gives to the People the finest In Radio Entertainment.

**SERVICE!**—That gives to Advertisers Unprecedented Coverage—plus the Greatest Listening Audience by Virtue of its Consistent Policy of

**RADIO SHOWMANSHIP**

Owned and Operated by The Commonwealth Broadcasting Corp. Pty. Ltd.  
**KEY STATION OF THE C.B.N.**

4BC

3000 WATTS WITH ITS RELAY STATION..

4SB KINGAROO

KEY STATION OF THE QUEENSLAND SECTOR OF THE C.B.N.

COMPLETELY COVERING

**QUEENSLAND'S RICHEST BUYING CENTRES**

WITH

ASSOCIATE STATIONS

**4GR 4RO 4MB**

Toowoomba Rockhampton Maryborough

**4VL 4ZR**

Charleville Roma

Campaign State-wide FOR

**BETTER BUSINESS! BIGGER BUSINESS!!**

Victorian Office: "Alkira House," 18 Queen Street, Melbourne

N.S.W. Representative: A. D. Bourke, 5 Barrack Street, Sydney

**COMMONWEALTH BROADCASTING CORPORATION (Q'LAND) LTD.**

## Broadcasting Station Particulars (contd.)

### VICTORIAN STATIONS



#### 3AK MELBOURNE.

Operated by Melbourne Broadcasters Pty. Ltd. Station slogan: "The Voice of the Night" and "Your Sporting Station." Address: 480 Bourke Street, Melbourne, C.1. Studios located: 480 Bourke Street, C.1. Transmitter located: Balwyn, Victoria. Telephones: M5667, M5668, W2100.

Operating power: 200 watts. Licensed power: 200 watts. Wavelength: 1,500 metres.

Commenced operations: March 1, 1931.

Network affiliation: Nil.

Directors: W. Harrison, Esq., W. H. Edgar, M.L.C. Secretary: B. J. Jackson. General manager: C. Tilley. Chief engineer, L. Wright. Other technical staff: Eric Webb, K. Temby. Sales manager: C. Weiss. Other sales staff: J. Oliver, C. Sherriff. Announcers, A. Andrew, H. Earl, E. Spence, K. Richards, C. Mason, G. Snell. Program production staff: H. Earl, E. Spence, D. Fidler. Total full time staff: 17.

Interstate representatives: Radiovision Pty. Ltd., 61 Hunter Street, Sydney.

Daily transmission hours: 11.30 p.m.-7 a.m. (Monday to Friday); Saturday, midday 1-2 p.m.; Sunday, midday 12.30-2.30 p.m.

Type of transmitter used: High level modulation (Heising). Type of aerial system: Single wide "T" conductive earth. Number of studios: 2.

Radio listener clubs: Listeners' League, 10,000; Birthday League, 8,000.

#### 3AW MELBOURNE.

Operated by 3AW Broadcasting Co. Pty. Ltd. Station slogan: "The Feature Station." Address: 382 Latrobe Street, Melbourne. Studios located: 382 Latrobe Street, Melbourne. Transmitter located: 382 Latrobe Street, Melbourne. Telegraphic address: THREEAW. Telephones: Central 1112-3-4-5.

Licensed power: 600 watts (aerial). Operating power: 600 watts (aerial). Wavelength: 234 metres, 1,280 kilocycles.

Commenced operations: February, 1932.

Network affiliation: Macquarie.

Directors: John H. Tait (chairman), Frank S. Tait, David Syme, Oswald J. Syme, George Sutherland, Fred H. Allen, F. H. Deniell. Secretary: Hector Harris. General manager: John T. Taylor. Chief engineer: John W. Ryan. Other technical staff: M. Israel, S. White, J. Scarlett, M. Cookson. Sales staff: J. F. O'Hagan, T. R. Wardle, D. Duff, F. Russell. Announcers: A. Dear, E. Cecil, L. Grice, C. Nicholls, F. Tupper, Miss Varley, Miss Mannix, A. Nixon, A. Sanders, Miss Lindgren. Program production staff: G. L. Tait, John Masters, Frank Allen. Total full time staff: 52.

Interstate representatives: Macquarie Broadcasting Services Pty. Ltd., 29 Bligh Street, Sydney, N.S.W.

(Continued next page)

## Station Particulars (contd.)

#### 3AW Melbourne (Contd.)

Daily transmission hours: 6.30 a.m. to 11.30 p.m. Monday to Friday; Saturday, 6.30 a.m. to 1 a.m. Sunday, and 10 a.m. to 12.30 p.m. and 2 p.m. to 10.30 p.m.

Type of transmitter used: Transmission Equipment (manufactured 1939). Type of aerial system: Marconi T. Number of studios: Four.

Type of recording plant: Universal (America).

Radio listener clubs: Nicky and Tuppy's Breakfast Club, 3AW Women's Association Clubs—Tennis, Golf, Dressmaking, Dancing, Bridge, Riding, Community Singing, Floral Art and Homecraft.

#### 3BA BALLARAT.

Operated by Ballarat Broadcasters Pty. Ltd. Station slogan: The "Courier Station." Address: 56 Lydiard Street, Ballarat. Studios located: Ballarat. Transmitter located: Cardigan. Telegraphic address: THREEBA Ballarat. Telephones: Ballarat 568.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 227 metres, 1,320 kilocycles.

Commenced operations: July 31, 1930.

Network affiliation: None.

Directors: T. W. J. Clark (chairman), J. H. Davey (managing director), C. P. A. Taylor, K. Taylor. Secretary: E. J. W. Whykes. General manager: J. H. Davey. Chief engineers: W. A. Wilson, A. D. Kerr. Other technical staff: B. Scetrine, W. Mather, A. Beaton, N. Terfell. Sales manager: E. J. W. Whykes. Announcers: E. Trotman, R. Atholwood, T. Negri, E. Mitchell, Miss L. Lake, Mrs. T. Hillman. Total full time staff: 16.

Interstate and intra-state representatives: Sydney, George Hill, 15 Hamilton Street; Melbourne, Stanford Allan, Newspaper House, Collins Street.

Daily transmission hours: Monday, Tuesday, Wednesday and Friday: 6.30 a.m. to 3 p.m., 4.45 p.m. to 11 p.m.; Thursday, 6.30 a.m. to 4 p.m., 4.45 p.m. to 11 p.m.; Saturday, 6.30 a.m. to 11.30 p.m.; Sunday, 9.30 a.m. to 2 p.m., 6.15 p.m. to 10.30 p.m.

Type of transmitter used: T.E.P.L. High Level Class "B" modulated. Type of aerial system: Quarter wave Vertical Antenna, Radical Earth Mat. Number of studios: Two.

Radio listener clubs: 3BA Bluebirds Club (children) (10,586 members), 3BA Friendship Circle (women) (3,565 members), 3BA Regent Picture Club (women) (5,084 members).

#### 3BO BENDIGO

Operated by Amalgamated Wireless Australasia Ltd. Station slogan: "The Friendly Voice of the North." Address: Beehive Chambers, Pall Mall, Bendigo. Studios located: Kangaroo Flat and Pall Mall Bendigo. Transmitter located: Kangaroo Flat. Telephones: 1666 (2 lines), Kangaroo Flat 26.

Operating power: 500 watts. Licensed power: 500

(Continued next page)

# "KZCOVERAGEKZ"

No—that's not Dutch. It's just our way of pointing out that complete coverage of this State starts and finishes with KZ.

Over 70 per cent. of Victoria's listeners in receipt of weekly pay envelopes live within 50 miles of the Melbourne G.P.O.—an area dominated by 3KZ.

# 3 K Z

## MELBOURNE

## Station Particulars (contd.)

**3BO Bendigo (Contd.)**

watts. Wavelength: 309 metres, 970 kilocycles.

Commenced operations: 1931.

Network affiliation: A.W.A.

Station manager: J. P. Banney. Technical staff: Ron Smith and W. S. M. Moore. Announcers: Scott Griffiths, R. Gaze, R. Rudd, Miss Betty Errington. Total full time staff: 11.

Interstate and intra-state representatives: A.W.A. Sydney, A.W.A. Melbourne.

Daily transmission hours: Mondays, Tuesdays, Wednesdays and Fridays, 7 a.m. to 10.30 p.m.; Thursdays and Saturdays, 7 a.m.-11 p.m.; Sundays, 9 a.m.-10.30 p.m.

Type of transmitter used: A.W.A. Type of aerial: System T. Number of studios: Two.

Radio listener clubs: 3BO Women's Home Forum Club, 5,200; 3BO Smile Club, 7,050.

**3CV CHARLTON**

Operated by Central Victoria Broadcasting Pty. Ltd. Station slogan: "The People's Station." Address: Charlton. Studios located: Bendigo & Charlton. Transmitter located: Charlton. Telegraphic address: THREECV Bendigo. Telephones: Bendigo 226, Charlton 220.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 204 metres, 1,470 kilocycles.

Commenced operations: October, 1935.

Network affiliation: C.B.N.

Directors: Ernest Holloway (managing director), G. V. Lansell, C.M.G., M.L.C. (chairman), W. J. Stephens. Secretary: E. Holloway. General manager: E. Holloway. Station manager: E. Holloway. Chief engineer: A. Hopton. Other technical staff: Dave Quick, Max Norris. Sales manager: E. Holloway. Announcers: E. Holloway, R. K. Devereaux, K. Hudson, Pat Friswell, Reg Clarke. Program production staff: E. Holloway, R. K. Devereaux. Total full time staff: Ten.

Interstate and intra-State representatives: Sydney, Radiovision Pty. Ltd., 61 Hunter Street, Sydney, telephone B5453; Melbourne, Lin Corr, Legionnaire Sound Productions, 68 King Street, Melbourne, telephone MU6171.

Daily transmission hours: 7 a.m. to 9.30 a.m., 11 a.m. to 4 p.m., 5.30 p.m. to 10.30 p.m.

Type of transmitter used: Class "B" modulator. Type of aerial system: Half wave vertical steel 258ft. and earth mat 7½ miles of wire. Number of studios: Three.

Radio listener clubs: Women's Club and Young Comrades' Club.

**"BROADCASTING BUSINESS"**  
Subscription is only 15/- per annum  
It includes FREE this Year Book

**3DB MELBOURNE.**

Operated by 3DB Broadcasting Co. Station slogan: The "Herald" station. Address: 36 Flinders Street, Melbourne. Studios and transmitter located: The "Herald," 36 Flinders Street, Melbourne. Telegraphic address: THREEEDB. Telephones: F2118 (6 lines).

Licensed power: 600 watts. Operating power: 600 watts. Wavelength: 291 metres, 1,030 kilocycles.

Commenced operations: 1927.

Network affiliation: Major Network.

Directors: Sir Keith Murdoch, William Dunstan, L. Fink, H. Pacini, J. Taylor, A. Whyte. Secretary: D. Worrall. General manager: D. Worrall. Chief engineer: M. Hooper. Other technical staff: F. Maughan, M. Thompson, M. Sleep. Sales manager: B. Brewin. Other sales staff: W. Denby, S. Grist. Announcers: E. Welch, R. Miller, M. Blandford, M. Callard, K. Eden, J. Stuart, Louise Homfrey. Program production staff: S. Clarke, H. Reidy. Total full time staff: 60.

Interstate representatives: I. Phillips, Hamilton Street, Sydney.

Daily transmission hours: 6.30 a.m.-11.30 p.m.

Type of transmitter used: A.W.A. Number of studios: 5. Type of recording plant: A.W.A.

Radio listener club: Smile Away Club.

**3GL GEELONG.**

Operated by Geelong Broadcasters Pty. Ltd. Station slogan: "Geelong Advertiser Station." Address: 4 James Street, Geelong. Studios located: 4 James Street. Transmitter located: Grovedale. Telegraphic address: 3GL, Geelong. Telephones: 1516, 3734.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 222 metres, 1,350 kilocycles.

Commenced operations: August, 1930.

Network affiliation: Nil.

Directors: Ramsay Burns Cook (managing director). Manager: James McKenzie. Studio manager: W. Gray. Chief engineer: Jack Mattlicios. Other technical staff: Allan Phillpot, Len Blackney, Max Neilson. Sales manager: W. Gray. Other sales staff: Vera Cartwright. Announcers: W. "Reg" Gray, John Brebner, I. Dickson, William Stewart, John Henry, Vera Cartwright. Program production staff: W. Gray. Total full time staff: 12.

Interstate and intra-state representatives: George Hill, 15 Hamilton Street, Sydney; S. Stanford Allan, 247 Collins Street, Melbourne.

Daily transmission hours: 7 a.m. to 10.15 a.m., 7 p.m. to 10 p.m.; Sunday: 10 a.m. to 2 p.m., 7 p.m. to 10 p.m.

Type of transmitter used: 500 watt Type B5 Transmission Equipment. Type of aerial system: Vertical quarter-wave. Number of studios: Two.

Radio listener clubs: Old King Cole's Court, 13,000 (children); Garden Lovers' Club, 150.

## Station Particulars (contd.)

**3HA HAMILTON.**

Operated by Western Province Radio Pty. Ltd. Station slogan: "Radio Western 3HA." Address: 239 Collins Street, Melbourne. Studios located: 37 Gray Street, Hamilton. Transmitter located: Mt. Bainbridge, Hamilton. Telegraphic address: "Radio Centre," Melbourne. Telephones: MX 4731, Hamilton 316, 317.

Licensed power: 750 watts. Operating power: 750 watts. Wavelength: 297 metres, 1,010 kilocycles.

Commenced operations: October 24, 1931.

Network affiliations: V.B.N. and Macquarie Broadcasting Networks.

Directors: G. Featonby, David Syme, G. Sutherland, G. Apperley. Secretary: J. Walls. General manager: R. A. Fitts. Station manager: C. V. Bradshaw. Chief engineer: J. Murphy. Other technical staff: V. Monaghan, J. Radcliffe. Sales manager: N. F. Dixon. Other sales staff: T. G. Coombs. Announcers: J. Broadbent, N. Blee, G. Wells, C. Hosking, G. Pither. Program production staff: C. Hosking, N. Blee, D. Fitts. Total full time staff: 23.

Interstate representatives: Macquarie Broadcasting Services, Bligh Street, Sydney.

Daily transmission hours: Week days, 7 a.m. to 11 p.m.; Saturdays, 7 a.m. to 1 a.m.; Sundays, 11 a.m. to 4.30 p.m., and 6 p.m. to 11 p.m.

Type of transmitter used: A.W.A. 1,000 watts. Type of aerial system: Marconi. Number of studios: Two at Hamilton, one at Melbourne.

Type of recording plant: Presto Wide Range.

Radio listener clubs: Women's Club (3,200 members), Sunshine Club (7,700 members).

**3KZ MELBOURNE.**

Operated by 3KZ Broadcasting Co. Pty. Ltd. Station slogan: "Brighter Broadcasting Service." Address: 64 Elizabeth Street, Melbourne. Studios located: Corner Victoria and Lygon Streets. Transmitter located: Corner Victoria and Lygon Streets. Telegraphic address: THREEKZ. Telephones: Central 318, 319, 279.

Licensed power: 600 watts. Operating power: 600 watts. Wavelength: 254 metres, 1,180 kilocycles.

Commenced operations: December 8, 1930.

Directors: S. Morgan, W. V. Morgan, M. G. Sloman. Secretary: M. B. Duffy. General manager: S. Morgan. Station manager: S. Morgan. Chief engineer: A. Grace. Other technical staff: S. Thurling. Sales manager: A. J. Murray. Other sales staff: A. Gray, A. Banks, C. Rose. Announcers: N. Banks, N. E. Balmer, K. Hudson, D. Elliott, G. Lilburne, D. Moore, N. Swain, Z. Dunoon, I. Greenham. Program production staff: N. E. Balmer, K. Hudson, Miss K. Dunlop, D. Joyce, J. Alenson. Total full time staff: 42.

Interstate representative: John A. Armstrong, 75 Pitt Street, Sydney.

Daily transmission hours: Monday to Friday, 6.30 a.m. to 11.30 p.m.; Saturday, 6.30 a.m. to 1 a.m.; Sunday, 10 a.m. to 12.30 p.m., 2.30 p.m. to 10.30 p.m.

Type of transmitter used: Built by technical staff of 3KZ using low-powered modulation. Type 4228A. Water-cooled valve in output stage. Type of aerial system: Flat top "T" type, Quarter-wave. Number of studios: Three. Type of recording plant: Manufactured by Precision Engineering Co., "Neuman," Cutting Head. Records at 33 1/3 and 78 r.p.m. Cuts 93, 112 and 130 lines to the inch.

Radio listener clubs: Happiness Club (children), 3KZ's Friendship Circle, Women's Radio Magazine (Social Section).

**3LK LUBECK.**

(RELAY STATION OF 3DB MELBOURNE)

Operated by 3DB Broadcasting. Station slogan: The "Herald" Station. Address: 36 Flinders Street, Melbourne. Studios located: 36 Flinders Street, Melbourne. Transmitter located: Lubeck. Telegraphic address: "THREEEDB," Melbourne. Telephone: F 2118-9.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 275 metres, 1,090 kC.

Commenced operations: December, 1936.

Chief engineer: N. Buzzacott. Other technical staff: H. Boast, M. Thompson.

Daily transmission hours: 6.30 a.m. to 11.30 p.m.

Type of transmitter used: A.W.A. low power modulation. Type of aerial system: Folded half-wave.

**3MA MILDURA.**

Operated by Sunraysia Broadcasters Pty. Ltd. Station slogan: "The Sunraysia Station." Address: P.O. Box 200, Mildura, Victoria. Studios and transmitters: T. & G. Buildings, 8th Street, Mildura. Telegraphic address: Station THREEEMA, Mildura. Telephone: Mildura 25.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 221 metres, 1,360 kilocycles.

Commenced operations: May 25, 1933. Network affiliations: Nil.

Directors: R. D. Elliott, G. S. Bater, C. D. Lanyon. Secretary: C. D. Lanyon.

General manager: Val J. Anderson. Chief engineer: Max Folie. Other technical staff: Ken Parker. Sales staff: Local, the Manager and Les Wilkinson. Announcers: Val J. Anderson, Les Wilkinson, Lorna McNeilly, Doreen Sarah, W. Byrne (racing), Murray Linton (other sports). Production staff: Mr. M. Folie, Miss D. Sarah. Total full time staff: 7.

Interstate and intra-state representatives: Geo. Hill, 15 Hamilton Street, Sydney, N.S.W.; Stanford Allan, 247 Collins Street, Melbourne.

Daily transmission hours: 6 a.m. to 1.30 p.m., 5.30 p.m. to 10.30 p.m. (11 p.m. on Saturdays); Sundays, 9 a.m. to 2 p.m., 7 p.m. to 10.30 p.m.

Type of aerial system: Type "T," 110' high. Number of studios: One.

Radio listener clubs: Amazons' Club (girls) (550), Sunraysia Boys' Club (3,500).

## Station Particulars (contd.)

### 3SH SWAN HILL.

Operated by Central Murray Broadcaster Pty. Ltd. Station slogan: "The Border Feature Station." Address: Campbell Street, Swan Hill. Studios located: Campbell Street, Swan Hill. Transmitter located: Campbell Street, Swan Hill. Telegraphic address: THREESH. Telephones: Swan Hill 226.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 226 metres, 1,330 kilocycles.

Commenced operations: August 27, 1931.

Network affiliation: Macquarie and Victorian Broadcasting Networks.

Directors: David F. Syme, Maisie A. Syme, George A. Featonby. Secretary: June Walls. General Manager: R. A. Fitts. Chief Engineer: E. Evans. Other technical staff: G. Chandler. Sales manager: Neville Dixon. Other sales staff: T. Coombes. Announcers: W. Bowie, H. Chamberlain, Enid Cameron. Program production staff: W. Bowie. Total full-time staff: Six.

Interstate representatives: Macquarie Broadcasting Services, 29 Bligh Street, Sydney.

Daily transmission hours: Monday to Friday, 12.30 p.m. to 4 p.m., 6 p.m. to 10.30 p.m.; Saturday, 10.30 a.m. to 5.30 p.m., 6 p.m. to 10.30 p.m.; Sunday, 12.15 p.m. to 2.15 p.m.; 4.15 p.m. to 6 p.m., 7.15 p.m. to 10.30 p.m.

Type of transmitter used: Transmission Equipment Pty. Ltd. Type of aerial system: Marconi. Number of studios: Two.

Type of recording plant: "Presto" recorder at Melbourne Studios.

Radio listener clubs: Merry Makers' Club (6,921 members), 3SH Women's Club (962 members).

### 3SR SHEPPARTON.

Operated by The Argus Broadcasting Services Pty. Ltd. Station slogan: "Heart of Victoria." Address: Fraser Street, Shepparton. Studios located: Fraser Street, Shepparton. Transmitter located: Congupna—6 miles distant. Telegraphic address: THREESR, Shepparton. Telephones: Shepparton 505 and 555.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 238 metres, 1,260 kilocycles.

Commenced operations: February 1, 1937. Network affiliation: Argus Chain and C.B.N.

Directors: Staniforth Ricketson, Kingsley A. Henderson, Sir G. Dalziel Kelly (chairman), Sir H. Lawson, J. B. Aitken, Allen Spowers. Secretary: E. J. K. Thompson.

General manager: S. J. A. Kemp. Station manager: V. M. Dinneny. Chief engineer: Ray Shortell. Other technical staff: J. Burrage, H. James, D. Clayton. Head office sales rep.: V. Dinneny. Other sales staff: E. McRae. Announcers: Gordon Bell, Rex Eynstone, Frank Ruler, Jim Henderson, Kathleen Errington, Leslie Morris. Program production staff: Peter Hemery. Total full time staff, 19.

Interstate representatives: Sydney: A. D. Bourke, 5-7 Barrack Street.

Daily transmission hours: 6 a.m. to 2 p.m., 3 p.m. to 11 p.m., Monday to Friday. Saturday, 6 a.m. to 2 p.m., 5 p.m. to 12 midnight. Sunday 9 a.m. to 2 p.m., 6 p.m. to 10.30 p.m.

### 3TR GIPPSLAND.

Operated by Broadcast Entertainments Pty. Ltd. Station slogan: "Radio Gippsland." Address: Stawell Street, Sale. Studios: Stawell Street, Sale. Transmitter located: Myrtlebank, 5 miles from Sale. Telephone: Sale 107.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 242 metres, 1,240 kilocycles.

Network affiliations: Macquarie and Victorian Broadcasting Networks.

Directors: David F. Syme, Maisie A. Syme. Secretary: June Walls. General manager: R. A. Fitts. Station manager: F. Chamberlain. Chief engineer: Geo. Nolte. Other technical staff: R. Schmidt, G. McGowan. Sales manager: Neville Dixon. Other sales staff: T. Coombes, A. Corley. Announcers: Colin Binks, S. McDonald, Don. James, Judy Willing. Total full-time staff: Nine (9).

Interstate representatives: Macquarie Broadcasting Service, 29 Bligh Street, Sydney.

Daily transmission hours: Monday to Friday, 7 a.m. to 9 a.m., 11 a.m. to 4 p.m., 5 p.m. to 10.30 p.m.; Saturday, 7 a.m. to 9 a.m., 12 noon to 5 p.m., 6 p.m. to 12 p.m.; Sunday, 10.45 a.m. to 2 p.m., 6.30 to 10.30 p.m.

Type of transmitter used: A.W.A. Type of aerial system: Quarter wave, vertical radial. Number of studios: Two.

Type of recording plant: This station has the use of recorder in Melbourne studios (Presto).

Radio listener clubs: Women's Club (1,505), Koala Club (3,626).

### 3UL WARRAGUL.

Operated by Argus Broadcasting Services Pty. Ltd. Station slogan: "An Argus Station." Address: Offices, Victoria Street, Warragul. Studios located: Victoria Street, Warragul. Transmitter located: South Road, Warragul. Telegraphic address: THREEUL, Warragul. Telephones: 326, 327.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 333 metres, 900 kilocycles.

Commenced operations: May 19, 1937. Network affiliations: "The Argus" Chain and Commonwealth Broadcasting Network.

Directors: Sir G. Dalziel Kelly (chairman), Staniforth Ricketson, Kingsley A. Henderson, J. B. Aitken, Allan Spowers, E. J. K. Thompson. Secretary: E. J. K. Thompson. General manager: S. J. A. Kemp. Station manager: E. J. Lewis. Chief engineer: E. M. Clyne. Other technical staff: R. R. MacGregor. Sales manager: V. M. Dinneny. Other sales staff: K. P. G. Lloyd. Announcers: Gordon Lewis, Clarrie Cook, Bill Vautin Andrews, Miss D. M. Wilby. Total full time staff, ten.

(Continued next page.)

## Station Particulars (contd.)

### 3UL WARRAGUL (Contd.)

Interstate representative: Sydney: A. D. Bourke, 5-7 Barrack Street.

Daily transmission hours: 7 to 9.30 a.m., daily; Tuesdays and Thursdays to 10.15 a.m., 11 a.m. to 4 p.m. (women's session 2 to 4), 5.30 to 10.45 p.m. (children's session, 5.30 to 6.15).

Radio listener clubs: Breakfast Club (742), Friendly Circle (women) (1438), Cheerio Club (children) (2,070).

### 3UZ MELBOURNE.

Operated by Nilsen's Broadcasting Services Pty. Ltd. Station slogan: "The Voice of Victoria." Address: 45 Bourke Street, Melbourne, C.1. Studios located: 45 Bourke Street, Melbourne. Transmitter located: 45 Bourke Street, Melbourne. Telegraphic address: THREEUZ, Melbourne. Telephones: Central 572, MX3529.

Licensed power: 600 watts. Operating power: 600 watts. Wavelength: 322 metres, 930 kilocycles.

Commenced operations: 1923.

Network affiliation: The Argus Chain and C.B.N.

Directors: Oliver J. Nilsen, Charles T. Cromie, O. V. A. Nilsen, Gordon W. Marsh (managing). Secretary: E. L. Cottrell. General manager: A. N. Kemsley. Chief engineer: L. S. Glew. Other technical staff: S. W. Riches, W. Virgona, L. Archibold, H. James. Sales

staff: O. W. Abramowski, W. Adams, G. S. Fawcett. Announcers: Walter Pym, Roly Barlee, Gil. Charlesworth, John McMahon, Mrs. Coffee, Stephani Bini. Program director: Harper Wilson. Total full time staff: 39.

Interstate representatives: A. D. Bourke, 5 Barrack Street, Sydney.

Daily transmission hours: Monday to Friday, 6.30 a.m.-11.30 p.m.; Saturday, 6.30 a.m.-12 noon and 2 p.m. midnight; Sunday, 10 a.m.-12.30 p.m. and 2.30 p.m.-10.30 p.m.

Type of transmitter used: High powered modulation. Type of aerial system: "T" type with counterpoise. Number of studios: Five.

Type of recording plant: Neumann.

Radio listener clubs: Victorian Housewives' Association. Look-up and Laugh Club, Bonio Pets' Club, Bobby Bear Club, Grub Club.

### 3XY MELBOURNE.

Operated by Efftee Broadcasters Pty. Ltd. Station slogan: "The Quality Station." Address: 163 Spring Street, Melbourne, C.1. Studios and transmitter located: Princess Theatre Building. Telegraphic address: Efftee, Melbourne. Telephones: Central 6612 (7 lines).

Licensed power: 600 watts. Operating power: 600 watts. Wavelength: 211 metres, 1,420 kilocycles.

Commenced operations: September 8, 1935.

Network affiliation: Nil.

(Continued next page)

3 of a kind

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in Victorian Radio

Provincial stations, each enjoying the friendship and confidence of the people in its vicinity comprise the country members of The Victorian Broadcasting Network . . . Each station is *established* and closely identified with the interests and affairs of its community . . . The locality of these stations is of vital importance in connection with coverage of the Victorian Market, covering more territory than you can reach through any other network at such low cost.

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SYDNEY:—MACQUARIE BROADCASTING SERVICES  
29 BLIGH STREET—PHONE: B 7887.

MEMBERS OF THE MACQUARIE BROADCASTING NETWORK

Western Victoria  
Northern Victoria  
Gippsland

Station Particulars (contd.)

3XY Melbourne (Contd.)

Directors: V. G. H. Harrison, Olive Thring, P. W. Ettelson, L. Shepherd. Secretary: F. R. Mogg. General manager: Tom Holt. Chief engineer: Lindsay Shepherd. Other technical staff: W. R. Rowland, B. Clarke-Cottrell, W. Chamberlain, S. Hackhouse. Sales manager: K. M. Campbell. Other sales staff: A. B. Robinson, B. Campbell, S. Thomas, Joan Campbell. Announcers: John Barnes, George Blackshaw, Carl Bleazby, Donald Day, Eric Hambly, Eric Snell, John Storr, Frank Timson, Harry Solomons, Wallace Sharland, Madge Thomas, Catherine Neill. Program production staff: C. G. French, Mayne Lynton, Roy Steyne, Brian Bridges, Alex. Good, Douglas MacKenzie, Ray Woods. Total full time staff: 75.

Interstate representatives: D. N. Scott, Watson House, 9 Bligh Street, Sydney.

Daily transmission hours: 6.30 a.m.-11.30 p.m.; Sundays, 10 a.m.-12.30 p.m., 2.30 p.m.-10.30 p.m.

Type of transmitter used: A.W.A. high fidelity, series modulated, with R.C.A. peak-limiting amplifier. Type of aerial system: Quarter-wave "T" type. Number of studios: Two.

Radio listener clubs: Conducted, the Good Companions Women's Club, 8,040; 3XY Pals Children's Club, 13,248; 3XY Fishermen's Club, 350; 3XY broadcasts daily programs for the Housewives' Association with a membership of 68,000.

THE UNSEEN SHOPPING LIST

The List in Mrs. Jones' handbag says toothpaste. The unseen list in her head says Ipana or Pepsodent. And Ipana or Pepsodent is what she buys.

On such unseen lists, national advertising writes the brand names which steady buyers steadily demand.

The sure way to get the name of your product on mental shopping lists is to use 3XY. Your advertising message over 3XY is identified with a station whose programs are consistently outstanding—programs which have so strongly influenced Melbourne's Million, that they'll go to market when you say. No matter what you sell, 3XY will help you sell more!

SMART ADVERTISERS KNOW, THE BEST BUY IS



3YB WARRNAMBOOL.

Operated by The Argus Broadcasting Services Pty. Ltd. Address: Liebig Street, Warrnambool. Studios located: Liebig Street. Transmitter located: Wier Road. Telephones: Warrnambool 388, 158.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 248 metres, 1,210 kilocycles.

Commenced operations: February, 1936.

Network affiliation: C.B.N.

Directors: Chairman, Sir Dalziel Kelly; Allan Spowers, Esq., K. A. Henderson, Esq. Secretary: E. J. K. Thompson. General manager: S. J. A. Kemp. Station manager: C. Anthony Strange. Chief engineer: Harold Fuller. Other technical staff: 2nd engineer, L. Kermond; junior engineer, A. Smith. Local sales representative: Jas. Proctor. Announcers: Senior announcer, Ted Furlong; morning announcer, Vern Haycroft; lady announcer (Pamela Bright), Margaret Walker; sports commentator, Jack Frawley; relief announcer, Jack Paton. Total full time staff: 12.

Interstate and intra-State representatives: Sydney, A. D. Bourke, 5-7 Barrack Street; Melbourne, P. Sullivan, 18 Queen Street.

Daily transmission hours: Monday to Saturday, inclusive, 7 a.m. to 9.30 a.m., 11 a.m. to 4 p.m., 5.30 p.m. to 10.45 p.m.

Type of transmission used: 200 watt crystal controlled, class "B." Type of aerial system: Flat top. Number of studios: One.

Commencing Dates of Operation of Victorian Stations

8/ 3/'25	3UZ Melbourne
-/ -/'27	3DB Melbourne
31/ 7/'30	3BA Ballarat
3/12/'30	3GL Geelong
8/12/'30	3KZ Melbourne
1/ 3/'31	3AK Melbourne
-/ -/'31	3BO Bendigo
27/ 8/'31	3SH Swan Hill
24/10/'31	3HA Hamilton
22/ 2/'32	3AW Melbourne
25/ 5/'33	3MA Mildura
18/ 6/'35	3CV Charlton
8/ 9/'35	3XY Melbourne
18/ 1/'36	3YB Warrnambool
-/12/'36	3LK Lubeck
1/ 2/'37	3SR Shepparton
19/ 5/'37	3UL Warragul

Broadcasting Station Particulars (contd.)

QUEENSLAND STATIONS



Walters, A. K. Armistead, J. McGrath, J. Armistead. Program production staff: A. K. Armistead, J. McGrath.

Interstate representatives: Sydney, C. A. Monks, Shell House, Carrington Street. Melbourne, E. A. Wood, 532 Bourke Street.

Daily transmission hours: 6 a.m. to 9 a.m., 11 a.m. to 2 p.m., 5 p.m. to 10.30 p.m.

Type of transmitter: A.W.A. Type of aerial system: Quarter wave vertical radiator. Number of studios: One.

4AY AYR.

Operated by Ayr Broadcasters Pty. Ltd. Station slogan: "The Brighter Broadcasting Service." Address: Ayr, North Queensland. Studios located: Ayr. Transmitter located: Airdmillan. Telegraphic address: FOURAY. Telephones: Ayr 219.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 349 metres, 860 kilocycles.

Commenced operations: October 1, 1934.

Network affiliation: C.B.N.

Directors: Robert D. Low (chairman), Jack L. Humphry. Secretary: E. M. L. Dahl. General manager: E. M. L. Dahl. Chief engineer, W. Faber. Sales manager: D. H. Simpson. Other sales staff: A. V. Hitch. Announcers: Keith Spencer, A. V. Hitch, Miss L. Searle. Program production staff: Keith Spencer. Total full time staff: Nine.

Interstate and/or intra-state representatives: A. D. Bourke, 5-7 Barrack Street, Sydney; Station 4BC Brisbane; P. Sullivan, Queen Street, Melbourne.

Daily transmission hours: Eight.

Type of transmitter used: Colville, suppressor grid modulated. Type of aerial system: Flat-top "T." Number of studios: One.

Radio listener club: 4AY Stamp Club, 1,100 members.

4BC BRISBANE.

Operated by Commonwealth Broadcasting Corporation Queensland Ltd. Station slogan: "The Radio Voice of Queensland." Address: Wintergarden Theatre, Queen Street, Brisbane. Studios located: Wintergarden Theatre. Transmitter located: Oxley.

(Continued next page.)

4AK DARLING DOWNS.

Operated by Brisbane Broadcasting Pty. Ltd. Station slogan: "The Courier-Mail Stations." Address: 288-298 Queen Street, Brisbane. Studios located: 288-298 Queen Street, Brisbane. Transmitter located: Kingside, near Oakey, 15 miles from Toowoomba. Telegraphic address: FOURBK, Brisbane. Telephones: B1925 (4 lines).

Licensed power: 2,000 watts. Operating power: 2,000 watts. Acts as a permanent relay for 4BK. Wavelength: 246 metres, 1,220 kilocycles.

Commenced operations: August 1, 1935.

Network affiliation: Major Network.

Type of transmitter used: 2,000 watt low-powered modulated. Type of aerial system: Quarter-wave vertical radiator.

4AT ATHERTON.

Operated by Atherton Tablelands Broadcasters. Station slogan: Voice of the Tablelands. Address: Box 236 Atherton, N.Q. Studios located: Malanda Road, Atherton. Transmitter located: Malanda Road, Atherton. Telephone: Atherton 223.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 441 metres, 680 kilocycles.

Commenced operations: February 15, 1939.

Network affiliation: C.B.N.

Directors: E. Dahl, S. Cornish, I. Johnston. Secretary: E. Dahl. General manager: L. A. Walters. Chief engineer: A. K. Armistead. Announcers: L. A.

## Station Particulars (contd.)

### 4BC Brisbane (Contd.)

Telegraphic address: FOURBC. Telephones: BO 333 (4 lines).

Licensed power: 1,000 aerial watts. Operating power: 1,000 aerial watts. Wavelength: 268 metres, 1,120 kilocycles.

Commenced operations: August 16, 1930.

Network affiliation: C.B.N.

Directors: Stuart F. Doyle (chairman), Frank Albert (vice-chairman), A. F. Albert, C. F. Marden, Chas. Bowly. Secretary: E. P. Griffin. General manager: C. F. Marden. Station manager: Russell F. Roberts. Supervising engineer: F. E. Elliott. Other technical staff: S. Disney Smith, J. Weller, J. Griffin, Bill Jack, R. Smith; Oxley: D. Dunstan, L. Enticknap. Sales manager: Arthur L. Prince. Other sales staff: R. Graham, A. J. Siemons, R. K. Whiteman. Announcers: Tom McGregor (studio manager), Ruth Rutherford, Gerry Connolly, David Grahame, Harry Millard, Jim Anderson, Leisha Bonfield, Ailsa Krimmer, Herbert Stallard, Stan Phillips. Program production staff: Edgar Littleton, Netta Craig, Joan McKenzie, Phyllis Hutton. Total full time staff: 50.

Interstate representatives: P. G. Sullivan, 18 Queen Street, Melbourne. A. D. Bourke, Country Press Chambers, 5 Barrack Street, Sydney.

Daily transmission hours: Monday to Saturday inclusive, 6.30 a.m. to 11 p.m.; Sunday, 7 a.m. to 10.30 p.m.

Type of transmitter used: A.W.A. Type of aerial system: "T" aerial. Number of studios: Four. Type of recording plant: Presto and Neuman.

Radio listener clubs: 4BC Pals' Club (12,000 members).

### 4BH BRISBANE.

Operated by Broadcasters (Australia) Pty. Ltd. Station slogan: "A Chandler Station." Address: 43 Adelaide Street, Brisbane. Studios located: 43 Adelaide Street, Brisbane. Transmitter located: Bald Hills. Telegraphic address: FOURBH. Telephones: B 2002 (4 lines).

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 217 metres, 1,380 kilocycles.

Commenced operations: January 2, 1931.

Network affiliation: Macquarie.

Directors: J. B. Chandler (chairman), V. F. Mitchell (managing director), N. O'Sullivan, F. B. Chandler. Secretary: H. W. Duncan.

Station manager: C. R. Carson. Chief engineer: E. C. Littler. Other technical staff: C. Moran, R. McNicol, G. Gipp, A. Gardner, A. Kemp, G. Ham. Sales staff: G. Stokes, G. G. Forsythe, J. McCann, H. Drake, R. Tyson. Announcers: Frank Hatherley, George Hardman, Les Daley, Sydney Everett, Reg Cameron, Wilson Irving, Dulcie Scott, Audrey Tomlinson. Program production staff: H. Sleath, A. Foulkes, O. Craig, B. W. Klemm, Misses W. Goliman, J. Vincent, N. Fowles, B. Burdon, L. Henzell, M. Allen. Total full time staff: 39.

Interstate representatives: W. J. Smyth, Chandlers Broadcasting Service, Australia House, Carrington Street, Sydney; Macquarie Broadcasting Services, 37 Queen Street, Melbourne.

Daily transmission hours: 6 a.m. to 11 p.m., week days; 7 a.m. to 11 p.m., Sundays.

Type of transmitter used: Composite. Type of aerial system: Conventional "T" Type. Number of studios: Five. Type of recording plant: "Presto."

Radio listener clubs: Kookaburra (8,000), Lone Ranger (5,000), Bridge Club (300).

### 4BK BRISBANE.

Operated by Brisbane Broadcasting Pty. Ltd. Station slogan: "The Courier-Mail Stations." Address: 288-298 Queen Street, Brisbane. Studios located: 288-298 Queen Street, Brisbane. Transmitter located: 288-298 Queen Street, Brisbane. Telegraphic address: FOURBK, Brisbane. Telephones: B1025 (4 lines).

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 233 metres, 1,290 kilocycles.

Network affiliation: Major Network.

Directors: Sir Edward Macartney, M. S. Herring, J. F. Williams. Secretary: H. M. Bayley. General manager: Alec. Robertson. Chief engineer: Arthur L. Dixon. Other technical staff: P. L. Grant. Sales manager: Roger Fair. Other sales staff: F. S. Thomas, S. R. Webb. Announcers: Miss H. Hastie, Mrs. R. M. Stokes, Harry Humphrey, Kevin Gunn, G. Lee, R. Smith. Program production staff: Harry Harper (studio manager).

Interstate representatives: I. W. Phillips, Warwick Buildings, Hamilton Street, Sydney; G. N. Bednall, Newspaper House, Collins Street, Melbourne.

Daily transmission hours: 6.30 a.m. to 11 p.m., Monday to Friday; Saturday, 6.30 a.m. to 12 midnight; Sunday, 9.30 a.m. to 2 p.m. and 5 p.m. to 10.30 p.m.

Type of transmitter used: Amalgamated Wireless 600 watt series, modulated type J 2728. Type of aerial system: Vertical radiator-counter-poise system. Number of studios: Three. Type of recording plant: A.W.A. complete with associated apparatus (A.W.A.).

### 4BU BUNDABERG.

Operated by Bundaberg Broadcasters Pty. Ltd. Station slogan: The Voice of the Burnett. Address: Bourbong Street, Bundaberg. Studios located: Bourbong Street, Bundaberg. Transmitter located: Kalkie. Telegraphic address: FOURBU. Telephone: Bundaberg 505.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 226 metres, 1,330 kilocycles.

Commenced operations: December 16, 1935.

Network affiliation: Major Network.

Directors: William James Harvey (chairman), R. G. Curtis, A. J. Christensen. Secretary: P. Moller. General manager: J. A. Sharp. Chief engineer: Hector Green. Other technical staff: E. Chippindall, K. Meredith, P. Mountney. Sales manager: W. A. Diamond. Announcers: J. A. Sharp, W. A. G. Diamond,

(Continued next page.)

## Station Particulars (contd.)

### 4BU Bundaberg (Contd.)

R. Goss, Miss M. Mikkelsen, Mrs. Netterfield. Program production staff: R. Goss. Total full time staff: 10.

Interstate representatives: Sydney, I. W. Phillips, Warwick Building, Hamilton Street; Melbourne, A.W.A., Queen Street.

Daily transmission hours: Monday to Saturday, 6.30 a.m. to 8.30 a.m., 10 a.m. to 1.30 p.m., 5.30 p.m. to 10 p.m.; Sunday, 8.30 a.m. to 10.30 a.m., 6 p.m. to 10 p.m.

Type of transmitter used: Colville Wireless Equipment Co., Sydney; 5-stage crystal, Type K.V.F.H. 200/2C, with the addition of a linear amplifier, consisting of 2 Philips MA4/600 triodes, with independent 3-phase power supply. Type of aerial system: Quarter wave vertical. Fabricated steel mast—172 feet.

### 4CA CAIRNS.

Operated by Amalgamated Wireless (A/sia) Ltd. Station slogan: "At the Top of Australia." Address: 8 Grove Street, Cairns, Nth. Queensland. Studios located: 8 Grove Street, Cairns. Transmitter located: 8 Grove Street, Cairns. Telegraphic address: FOURCA. Telephone: 2972.

Licensed power: 300 watts. Operating power: 300 watts. Wavelength: 300 metres, 1,000 kilocycles.

Commenced operations: May 16, 1936.

Network affiliation: A.W.A.

Directors: Sir E. T. Fisk (chairman), F.R.S.A., F.Inst.R.E., A.M.I.E. (Aust.). Secretary: J. E. Wilson, Esq. General manager: L. A. Hooke, Esq., M.I.R.E. (Aust.), M.I.R.E. (U.S.A.). Station manager: F. R. Pearce. Chief engineer, F. R. Pearce. Other technical staff: W. R. Nash. Sales manager: F. R. Pearce. Announcers: Colin D. Yeo, W. R. Nash, Bernard Harper, E. R. Pearce. Program production staff: W. R. Nash, Miss G. Gelling. Total full time staff: Six.

Interstate and intra-state representatives: H. E. Cox, A.W.A., 289 Queen Street, Brisbane; C. T. Sproule, A.W.A., 47 York Street, Sydney; D. Gilder, A.W.A., 167 Queen Street, Melbourne.

Daily transmission hours: Monday to Saturday, 7.30 a.m. to 10.30 a.m., 12 noon to 2 p.m. (except Saturday), 5.30 p.m. to 10.30 p.m.; Sunday, 8.30 a.m. to 1 p.m., 6.30 p.m. to 10 p.m.

Type of transmitter used: Class "B" modulated, manufactured by Amalgamated Wireless (A/sia) Ltd., with input of 300 watts (unmodulated) to aerial. Type of aerial system: A.W.A. folded type 100 feet high. Number of studios: Two, main 21 x 14½ feet, talks studio 10 x 9 feet.

### 4GR TOOWOOMBA.

Operated by Gold Radio Service Pty. Ltd. Station slogan: "The Voice of the Downs." Address: 453 Ruthven Street, Toowoomba, Queensland. Studios located: 453 Ruthven Street, Toowoomba, Queensland. Transmitter located: Drayton. Telegraphic address: FOURGR. Telephone: Toowoomba 88.

Licensed power: 500 watts. Operating power: 500 watts, aerial unmodulated. Wavelength: 300 metres, 1,000 kilocycles.

Commenced operations: August 16, 1925.

Network affiliation: C.B.N.

Directors: E. E. Gold, Stuart F. Doyle, M. F. Albert, A. F. Albert. Secretary: E. P. Griffen. Managing director: E. Gold. Sales manager: G. R. Harrington. Chief engineer: N. Bishop. Other technical staff: H. Buzacott, H. Shaw, D. Gold, K. Smith, Ron Nicol. Announcers: Ron Beattie, Keith Walker, Col. Welch, Miss Nada Smith. Production and copy: Miss S. Elliott.

Interstate representatives: P. G. Sullivan, Alkira House, Queen Street, Melbourne. A. D. Bourke, 5 Barrack Street, Sydney. Intra-state representative: Commonwealth Broadcasting Corporation (Queensland) Ltd., 4BC Wintergarden Theatre, Brisbane.

Daily transmission hours: Monday to Friday inclusive, 6.30 a.m. to 2 p.m., 3 p.m. to 4.30 p.m., 5.30 p.m. to 11 p.m. Saturday, 6.30 a.m. to 10 a.m., 5.30 p.m. to 11 p.m. Sunday, 11 a.m. to 2 p.m., 6 p.m. to 10 p.m.

Type of transmitter used: High level modulation, 100% peak modulated. High fidelity throughout. Type of aerial: Quarter wave Tubular Steel Welded Joint Radiator. With outrigger at top, 230' high. Number of studios: Two, with large control room which is also used for certain studio work. Type of recording plant: Audak Professional Cutting Head on Universal pattern gear.

500 WATTS

500 WATTS

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## Station Particulars (contd.)

## 4IP IPSWICH.

Operated by Ipswich Broadcasting Co. Pty. Ltd. Station slogan: "The Radio Voice of West Moreton." Address: Brisbane Street, Ipswich. Studios and transmitter located: Brisbane Street, Ipswich. Telegraphic address: FOURIP. Telephone: 267.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 208 metres, 1,440 kilocycles.

Commenced operations: September 2, 1935.

Network affiliation: Nil.

Directors: F. J. Meacham, W. J. Johnson, E. B. Johnson, W. Parkinson. Secretary: W. J. Johnson. Manager: Terence Lambart. Chief engineer: K. Fairweather. Other technical staff: J. Bailey, T. Forsyth. Sales manager: T. Lambart. Other sales staff: F. Wilde, Miss P. Scrivener. Announcers: Peggy Willesden, T. Lambart, T. Forysth, W. Nowlan, L. McMahon, F. Wilde. Program production staff: Mona Walters, W. Nowlan, T. Forsyth. Total full time staff: Ten.

Interstate representatives: A. Clay, 102 Sussex Street, Sydney.

Daily transmission hours: 8, excepting Saturday, Saturday midday, program 11-12.30; Monday to Friday, 6.30 a.m. to 10 a.m., 5 p.m. to 10 p.m.; Saturday, 6.30 a.m. to 10 a.m., 11 a.m. to 12.30 p.m., 6.30 p.m. to 10 p.m.; Sunday, 10.30 a.m. to 12.30 p.m., 6 p.m. to 10 p.m.

Type of transmitter used: Colville. Type of aerial system: Inverted "L" type. Number of studios: One.

Radio listener club: Smiles Club, 800 members.

## 4LG LONGREACH.

Operated by Central Western Broadcasting Co. Pty. Ltd. Station slogan: "In the Midst of the Golden Fleece." Address: Eagle Street, Longreach. Studios located: Eagle Street, Longreach. Transmitter located: 3 miles east of Longreach. Telegraphic address: FOURLG, Longreach. Telephones: 102, 224 Longreach.

Licensed power: 1,000 watts. Operating power: 500 watts. Wavelength: 273 metres, 1,100 kilocycles.

Commenced operation: May 4, 1936.

Network affiliation: Nil.

Directors: R. M. Nicholson, J. Maud Nicholson. Secretary: J. M. Nicholson. Station manager: R. M. Nicholson. Announcers: C. H. Haiburg, A. Carswell. Interstate representatives: Sydney, A. D. Bourke, 5 Barrack Street.

Type of transmitter used: S.T.C. Type of aerial system: Vertical wire. Number of studios: Two. Type of recording plant: Presto Stationary.

## 4MB MARYBOROUGH.

Operated by Maryborough Broadcasting Co. Pty. Ltd. Station slogan: "Voice of the Wide Bay." Address: Kent Street, Maryborough, Queensland. Studios located: Kent Street, Maryborough. Transmitter located: Upper Kent Street, Maryborough. Telegraphic address: FOURMB, Maryborough. Telephones: Maryborough 214, 452, 424.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 214 metres, 1,400 kilocycles.

Commenced operations: August 16, 1931.

Network affiliation: C.B.N.

Directors: Stuart F. Doyle, F. Albert, A. F. Albert, A. P. Wynne. Secretary: E. P. Griffin. General manager: A. P. Wynne. Chief engineer: R. J. Beatson. Other technical staff: W. James, D. Kuskie. Sales manager: O. J. Storey. Announcers: N. McCormack, O. J. Storey. Program production staff: Miss E. Harper. Total full time staff: 8.

Interstate representatives: A. D. Bourke, 5 Barrack Street, Sydney. Station 2UW, State Building, Sydney. Station 2UW, Alkira House, 18 Queen Street, Melbourne.

Daily transmission hours: Monday to Saturday inclusive, 7 a.m. to 10.15 a.m., 12 noon to 2 p.m.; Sunday, 8.30 a.m. to 12.15 p.m., 5.30 p.m. to 10 p.m.

Type of transmitter used: High Level Modulated by Class "B" Modulators. Type of aerial system: Modified "T" 100 feet high. Number of studios: Two.

Radio listener clubs: Auburn Club (1,200).

## 4MK MACKAY

Operated by Mackay Broadcasting Service Pty. Ltd. Address: 64 Nelson Street, Mackay, Queensland. Transmitter located: Mackay. Telephone: Mackay 333.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 216 metres.

Commenced operations: January 12, 1931.

Representatives: Amalgamated Wireless (A/sia) Ltd., 47 York Street, Sydney.

Transmission hours: 6.30 a.m. to 8 a.m., 12 noon to 2 p.m., 3 p.m. to 5 p.m., 6 p.m. to 10.30 p.m.

## 4RO ROCKHAMPTON.

Operated by Rockhampton Broadcasting Co. Pty. Ltd. Station slogan: "The Key to Central Queensland." Address: Corner East and William Streets, Rockhampton. Studios located: East and William Streets. Transmitter located: East and William Streets, Rockhampton. Telegraphic address: "FOURRO." Telephones: Rockhampton 9.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 277.78 metres, 1,080 kilocycles.

Commenced operation: July 1, 1932.

Network affiliation: C.B.N.

(Continued opposite page.)

## Station Particulars (contd.)

## 4RO Rockhampton (Contd.)

Directors: Stuart F. Doyle (chairman), Frank Albert (vice-chairman), A. F. Albert, C. F. Marden, Chas. Bowly. General manager: E. J. Rheuben. Chief engineer: E. Semfel. Other technical staff: D. Guthrie. Announcers: Graham Keir, Charles Beck, Betty Parry. Program production staff: Rae Berry, Geraldine Moran. Total full time staff: Eight.

Interstate and/or intra-state representatives: A. D. Bourke, Country Press Chambers, 5-7 Barrack Street, Sydney; P. G. Sullivan, Alkira House, 18 Queen Street, Melbourne.

Daily transmission hours: Monday to Friday, 6.30 a.m.-11 a.m., 5.30 p.m.-10.30 p.m.; Saturday, 6.30 a.m.-11.30 a.m., 1 p.m.-10.30 p.m.; Sunday, 6 p.m.-10 p.m.

Type of transmitter used: A.W.A. Type of aerial system: "L" type. Number of studios: One.

Radio listener club: Crystomint Life Savers' Club, 700 members.

## 4SB KINGAROY.

Operated by South Burnett Broadcasting Co. Ltd. Address: Alford Street, Kingaroy, Q'land. Studios located: Kingaroy. Transmitter located: Wooroolin. Telegraphic address: FOURSB. Telephone: 202 Kingaroy.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 283 metres, 1,060 kilocycles.

Commenced operations: March 11, 1938.

Network affiliation: C.B.N.

Directors: Charles F. Adermann, Stuart F. Doyle, J. B. Chandler, George S. Darrow, Henry C. Muston. Secretary: Henry S. Muston. General manager: V. F. Mitchell. Station manager: Peter Le Brum. Chief engineer: Norman W. Cruickshank. Other technical staff: Bernard Harte. Sales manager: Peter Le Brum. Announcers: Peter Le Brum, Norman W. Cruickshank, Bernard Harte. Program production staff: Peter Le Brum. Total full time staff: Five.

Interstate and intra-State representatives: C.B. Network, Brisbane, Sydney, Melbourne.

Daily transmission hours: 6.30 a.m. to 9.30 a.m., 11 a.m. to 2 p.m., 6 p.m. to 10 p.m.; Wednesdays and Saturdays, 11 a.m. to 5 p.m.

Type of transmitter used: A.W.A. series modulated 3KW. Type of aerial system: Folded back T. Number of studios: One.

Radio listener clubs: 4SB Sunday School Club (membership 800).

## 4TO TOWNSVILLE.

Operated by Amalgamated Wireless (A/sia) Ltd. Station slogan: "The Townsville." Station address: Beak House, Flinders Street. Studios located: Beak House, Flinders Street, Townsville. Transmitter lo-

cated: South Townsville. Telegraphic address: FOUR TO. Telephone: 490 Studio.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 384.6 metres, 780 kilocycles.

Commenced operations: October 5, 1931. Network affiliation: A.W.A.

Station manager and chief engineer: A. E. Lawrence. Other technical staff: Ray Kidd. Sales manager: J. Badger. Other sales staff: Ray Kidd. Secretary: Miss J. Gray. Announcers: A. E. Lawrence, J. Gray, F. Badger, R. Kidd, A. Cameron. Program production staff: Ray Kidd (program director), Miss A. Cameron, Miss D. Feather, record department. Total full time staff, 6.

Interstate and intra-state representatives: Amalgamated Wireless (A/sia) Ltd., 47 York Street, Sydney. Amalgamated Wireless (A/sia) Ltd., 167 Queen Street, Melbourne. Brisbane representatives: H. E. Cox, C.M.L. Building, Queen Street.

Daily transmission hours: Monday to Friday, 7 a.m. to 8.30 a.m., 10.30 a.m. to 2 p.m., 5.30 p.m. to 10.15 p.m.; Saturday, 7 a.m. to 8.30 a.m., 10.30 a.m. to 5 p.m., 5.30 p.m. to 10.30 p.m.; Sunday 10 a.m. to 12 noon, 7 p.m. to 10.30 p.m.

Type of transmitter used: A.W.A. 200 watt Heising Modulated 50 watt unit feeding 200 watt Linear Amplifier, delivering 200 watts aerial. Type of aerial system: Sausage type supported by 250ft. lattice steel mast. Number of studios: Two — one at Beak House, one at South Townsville.

Radio listener clubs: Kiwi Club, Smile Club, Commander Singing Club, Women's Club.

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Representative:

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Station Particulars (contd.)

4VL CHARLEVILLE.

Operated by Charleville Broadcasting Service Pty. Ltd., Alfred Street, Charleville, Queensland. Transmitter: Alfred Street, Charleville. Licensed and operating power: 100 watts. Wavelength: 526 m., 570 kC. Commenced operations: February 12, 1936. Network affiliation: C.B.N. Directors: A. G. B. Mars, J. Falknemier. Manager: A. B. Searle. Assistant announcer: June Falknemier. Representatives: Sydney, A. D. Bourke, 5-7 Barrack Street, Melbourne, P. Sullivan, "Alkira" House, Queen Street. Transmission times: 7.30-8.30 a.m., 12-1.30 p.m., 6-10 p.m. Transmitter: Three-stage C.C. high level modulation.

4WK WARWICK.

Operated by Warwick Broadcasting Co. Pty. Ltd. Station slogan: "Companion." Address. Offices, Albion Street, Warwick. Studios: Albion Street, Warwick. Transmitter located: Albion Street, Warwick. Telegraphic address: 4WK, Warwick. Telephones: Warwick 9. Licensed power: 100 watts. Operating power: 100 watts. Wavelength, 341 metres, 880 kilocycles. Commenced operation: March 1, 1935. Network affiliation: A.W.A. Directors: Sir Ernest T. Fisk, J. T. Wilson, Thomas Collins, L. A. Hook. Secretary: P. V. Thomas. Station manager: Charles Alfred Hurdell. Chief engineer, J. K. Lowe. Sales staff: A. W. Bradford. Announcers: Charles A. Hurdell, A. W. Bradford, J. K. Lowe, David Ross, Miss Lena Cross, Mrs. C. A. Hurdell. Total full time staff: Five. Interstate representatives: Amalgamated Wireless (A/sia) Ltd., 47 York Street, Sydney; 167-169 Queen Street, Melbourne; 289 Queen Street, Brisbane. Daily transmission hours: 7 to 10 a.m.; 12.30 to 2.30 p.m., 5.30 to 10.30 p.m.; Sundays, 8 a.m. to 2 p.m., 7 to 9.30 p.m. Type of transmitter: A.W.A. 100 watts series modulated. Type of aerial system: Folding "T." Number of studios: One. Radio listeners' club: Children's Smile Club, 1,800 members.

4ZR ROMA.

Operated by Maranoa Broadcasting Co. Ltd. Station slogan: The Voice of the West. Address: Bowen Street, Roma. Studios located: Bowen Street, Roma. Transmitter located: Bowen Street, Roma. Telephone: Roma 80. Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 201 metres, 1,490 kilocycles. Commenced operations: July 23, 1937. Network affiliation: C.B.N. Directors: E. E. Gold (chairman), S. F. Doyle,

W. G. Mayne, R. S. McGeoch. Secretary: R. B. Taylor. General manager: E. E. Gold. Chief engineer: J. Walker. Sales manager: G. W. Robertson. Announcer: G. Wilfred Robertson. Total full time staff: Three.

Interstate representatives: Sydney, A. D. Bourke, 5 Barrack Street; Melbourne, P. Sullivan, 18 Queen Street.

Daily transmission hours: Monday to Friday, 7 a.m. to 8.30 a.m., 12 noon to 2 p.m., 6 p.m. to 10.30 p.m.; Saturdays, 7 a.m. to 8.30 a.m., 6 p.m. to 10.30 p.m.; Sunday, 10 a.m. to 12 noon, 6 p.m. to 10 p.m.

Type of transmitter used: Designed by E. E. Gold. Type of aerial system: "T" type. Number of studios: One.

Radio listener club: Kiwi Children's Club (650 members).

4PM PORT MORESBY.

Operated by Amalgamated Wireless (A/sia) Ltd. Address: 47 York Street, Sydney. Studios located: Port Moresby. Transmitter located: Port Moresby.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 221 metres, 1,360 kilocycles.

Commenced operations: October 25, 1935.

Network affiliation: A.W.A.

Station manager: K. Frank. Chief engineer: C. Searle. Announcers: K. Frank, C. Searle. Total full time staff: 4.

Interstate representatives: A.W.A., Sydney and Melbourne.

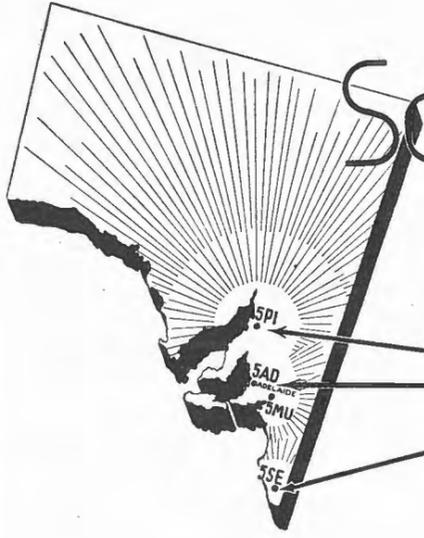
Daily transmission hours: Monday to Saturday: 1 p.m. to 2 p.m., 6 p.m. to 7 p.m.

Type of transmitter: A.W.A. Standard Transmitter. Type of aerial system: "T" Type. Number of studios: Two.

Commencing Dates of Operation of Queensland Stations

16/ 8/'25	4GR Toowoomba
16/ 8/'30	4BC Brisbane
12/ 1/'31	4MK Mackay
16/ 8/'31	4MB Maryborough
5/10/'31	4TO Townsville
2/ 1/'32	4BH Brisbane
1/ 7/'32	4RO Rockhampton
1/10/'34	4AY Ayr
1/ 3/'35	4WK Warwick
31/ 8/'35	4AK Oakey
2/ 9/'35	4IP Ipswich
25/10/'35	4PM Port Moresby
16/12/'35	4BU Bundaberg
-/ 8/'35	4BK Brisbane
2/ 2/'36	4VL Charleville
4/ 5/'36	4LG Longreach
16/ 5/'36	4CA Cairns
23/ 7/'37	4ZR Roma
11/ 3/'38	4SB Kingaroy
12/ 2/'39	4AT Atherton

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- ☆ Hollywood Dick
- ☆ Mr. and Mrs. Everybody
- ☆ The House of Peter McGregor
- ☆ Betty and Bob
- ☆ Yes What
- ☆ Famous Australians
- ☆ The Crimson Trail
- ☆ The Lone Ranger
- ☆ The Rich Uncle from Fiji
- ☆ I Want a Divorce
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- ☆ His Last Plunge
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MELBOURNE: G. N. BEDNALL, Newspaper House, 247 Collins Street.

# Broadcasting Station Particulars (contd.)

## SOUTH AUSTRALIAN STATIONS



### 5AD ADELAIDE.

Operated by Advertiser Newspaper Ltd. Station slogan: "Premier Station in the State." Address: Waymouth Street, Adelaide. Studios located: Waymouth Street, Adelaide. Transmitter located: Waymouth Street, Adelaide. Telegraphic address: FIVEAD, Adelaide. Telephones: C7440 (14 lines).

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 229 metres, 1,310 kilocycles. (This station owns and relays to 5PI, 5MU and 5SE.) Commenced operations: August 2, 1930.

Network Affiliations: Major Network and Advertiser Network.

Directors: J. F. Downer (chairman), Sir Keith Murdoch, W. B. Carr, Lloyd Dumas, W. Crookall, Sir J. Lavington Bonython. Secretary: V. J. Bruer. General manager: A. C. Kinnear. Chief engineer: D. M. Gooding. Other technical staff: H. B. Wilson (recording engineer), R. Parasiers (maintenance engineer). Technicians: 14. Sales manager: M. D. Chap-

man. Other sales staff: C. Stock, N. Omond, F. McConnell, V. Jacques, J. Fisher. Announcers: Jack Burgess (chief announcer), C. Norton, J. Young, R. Harding Browne, K. Macdonald, D. Edwards, B. Beard, J. Fisher. Program production staff: K. Macdonald (director), E. Benson, D. Pearce, L. England, G. Franklin, M. Warburton and four assistants for filing, indexing, etc., R. Dawe, J. Gardiner, J. Williams, R. Peterson, F. MacCarron (recorded features). Total full time staff: 50.

Interstate representatives: G. N. Bednall, Newspaper House, 247 Collins Street, Melbourne. Fred Thompson, Warwick Building, 15 Hamilton Street, Sydney.

Daily transmission hours: 6 a.m. to 12 midnight, Monday to Saturday; 5 a.m. to 10 p.m., Sundays.

Type of transmitter used: High power modulation, Class B limiting amplifier. Type of aerial system: Quarter-wave "T" type. Number of studios: Two broadcasting studios, one recording studio. Type of recording plant: A.W.A. dual tables.

Radio listener clubs: Kangaroo Club (46,300), Home Circle Club (14,000), Short Wave DX Club, Liars' Club.

### 5AU PORT AUGUSTA.

Operated by Sport Radio Broadcasting Co. Ltd. Station slogan: "The Voice of the North." Address: Port Augusta. Studios located: Port Augusta. Transmitter located: Port Augusta. Telegraphic address: FIVEAU. Telephone: Port Augusta 124.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 214 metres, 1,400 kilocycles.

Commenced operations: May 25, 1938.

Network affiliation: C.B.N.

General manager: W. K. Schneider. Local manager: S. J. Meakins. Secretary: H. Haddy. Chief engineer: G. F. Nutley. Announcers: S. J. Meakins, G. F. Nutley, Miss E. M. Smith. Total full time staff: Three.

Interstate representatives: Sydney, C. A. Monks, Shell House, Carrington Street; Melbourne, E. A. Wood, Shell Corner, Bourke Street.

Daily transmission hours: Monday to Friday: 7 a.m. to 9 a.m., 6 p.m. to 10.30 p.m.; Saturday, 7 a.m. to 9 a.m., 6 p.m. to 11 p.m.; Sunday, 8 a.m. to 10 a.m., 6 p.m. to 10 p.m.

Type of transmitter used: A.W.A. class "B" modulated. Type of aerial system: Radiating steel tubular mast. Number of studios: One.

### 5DN ADELAIDE.

Operated by Hume Broadcasters Ltd. Station slogan: "First in the State." Address: 12th floor, C.M.L. Building, King William Street, Adelaide. Studios located: C.M.L. Building, King William Street, Adelaide. Transmitter located: C.M.L. Building, King William Street, Adelaide. Telegraphic address: "Firstation," Adelaide. Telephones: C8006 (3 lines), C8118.

(Continued opposite page.)

## Station Particulars (contd.)

### 5DN Adelaide (Contd.)

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 313 metres, 960 kilocycles.

Commenced operations: February 24, 1925.

Network affiliation: Macquarie Broadcasting Network.

Directors: William Queale (chairman), H. R. Pinkerton, R. Denison, Sir H. Denison, F. W. H. Daniell. Secretary: A. J. Carvosso. General manager: Randal M. White. Production manager: K. Crossman. Chief engineer: E. J. Hume. Other technical staff: F. T. Hill, C. R. Howie, F. F. Wells, R. R. Davies, D. A. Wilkinson, A. F. Fisher. Sales manager: J. S. Larkin. Other sales staff: Mrs. E. Pullman, P. A. Smyth. Announcers: K. Crossman, H. P. Woolley, D. Nicholson, R. Sullivan, M. Hynes, Mrs. E. Pullman. Program production staff: D. Stevens, R. Anthony, Miss D. Balk, Miss S. O'Sullivan, Miss L. Stephens. Total full time staff: 29.

Interstate representatives: Macquarie Broadcasting Services Pty. Ltd., 29 Bligh Street, Sydney, and 37 Queen Street, Melbourne.

Daily transmission hours: Monday to Friday, 6.50 a.m. to midnight; Saturday, 6.50 a.m. to 1 a.m. (Sunday); Sunday, 9.30 a.m. to 10.15 p.m.

Type of transmitter used: Low level modulation with two linear amplifiers. Crystal controlled oscillator. Peak limiting amplifier. Type of aerial system: "T" type cage system. Number of studios: Five.

Type of recording plant: Lateral cut 33 1/3 and 78 r.p.m.

Radio listener club: 5DN Kipling Boys' Club (18,000 members).

### 5KA ADELAIDE.

Operated by Sport Radio Broadcasting Co. Ltd. Station slogan: "Voice of South Australia." Address: 99 Currie Street, Adelaide. Studios located: 99 Currie Street, Adelaide. Transmitter located: 99 Currie Street, Adelaide. Telegraphic address: FIVEKA. Telephones: C2920-2921-2922.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 250 metres, 1,200 kilocycles.

Commenced operations: August, 1926.

Network affiliation: C.B.N.

Directors: W. K. Schneider, M. O'Halloran, C. A. Tareha, H. Hunter. Secretary: H. Hunter. General manager: W. K. Schneider. Assistant manager: A. Auchterlonie. Chief engineer: C. A. Tareha. Other technical staff: G. Nutley, H. H. Heath. Advertising manager: C. A. Freeman. Sales manager: H. Hunter. Other sales staff: J. Holland, L. T. M. Rees, S. J. Tuendemann. Announcers: A. Auchterlonie, C. A. Freeman, H. A. Thorn, L. H. Gibson, J. Holland, R. A. Ashley. Program production staff: Miss E. L. Linke, A. Wakeling, H. A. Thorn, L. Gibson. Total full time staff: 43.

Interstate representatives: Sydney, C. A. Monks, Shell House, Carrington Street; Melbourne, E. A. Wood, Shell Corner, 532 Bourke Street.

Daily transmission hours: Monday to Friday, 5.30

a.m. to 12.15 a.m.; Saturday: 5.30 a.m. to 1 a.m.; Sunday, 8 a.m. to 11 p.m.

Type of transmitter used: Manufactured by 5KA staff. Type of aerial system: Inverted "L" with counter-poise. Number of studios: Four.

Radio listener clubs: The Merrymakers' Club (15,000 members), The A1 Club (3,000 members).

### 5PI CRYSTAL BROOK.

#### RELAY STATION OF 5AD

Operated by Advertiser Newspapers Ltd. Station slogan: "Premier Station in the State." Address: Waymouth Street, Adelaide. Studios located: Waymouth Street, Adelaide. Transmitter located: Waymouth Street, Adelaide. Telegraphic address: FIVEAD Adelaide. Telephones: C7440 (14 lines).

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 288 metres, 1,040 kilocycles.

Commenced operations: January 7, 1932.

Daily transmission hours: 6 a.m.-12 midnight, Mondays to Fridays; 5 a.m.-10 p.m., Sundays.

### 5MU MURRAY BRIDGE.

#### (RELAY STATION OF 5AD)

Operated by Advertiser Newspapers Ltd. Station slogan: "Premier Station in the State." Address: Waymouth Street, Adelaide. Studios located: Waymouth Street, Adelaide. Transmitter located: Waymouth Street, Adelaide. (Continued next page.)

## STAR PROGRAMMES

+ POWER  
= AUDIENCE

## 5 R M

MURRAY HEIGHTS

Regional Relay Unit of

## 5 D N

ADELAIDE

is now operating on an output power of

## 2,000 Watts

The maximum power allocated to any Commercial Broadcasting Station in the Commonwealth.

## Station Particulars (contd.)

## 5PI Crystal Brook (Contd.)

mouth Street, Adelaide. Telegraphic address: FIVEAD Adelaide. Telephones: C7440 (14 lines).

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 207 metres, 1,450 kilocycles.

Commenced operation: September 16, 1934.

Daily transmission hours: 6.30 a.m.-2 p.m. and 5 p.m.-11 p.m., Monday to Friday; 5 a.m.-10 p.m. Saturday.

## 5SRM MURRAY HEIGHTS.

(Relay Station of 5DN)

Operated by River Murray Broadcasters Limited. Station slogan: 5RM Murray Heights. Address: 29 Rundle Street, Adelaide. Studios located: C.M.L. Building, King William Street, Adelaide. Transmitter located: Between Renmark and Berri, S.A. Telegraphic address: "Firstation," Adelaide. Telephones: C8006 (3 lines), and Berri 80.

Governing director: Randal M. White.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 371.3 metres.

Commenced operations: February 5, 1935.

Transmission hours: Relays 5DN programs.

Type of transmitter used: Heising modulation with one linear amplifier. Type of aerial system: "T" type.

## 5SE MOUNT GAMBIER.

Operated by Advertiser Newspapers Ltd. Address: Mount Gambier, South Australia. Studios located: South Terrace, Mount Gambier. Transmitter located: South Terrace, Mount Gambier. Telegraphic address: FIVESE, Mount Gambier. Telephones: Mount Gambier 442.

Licensed power: 100 watts. Operating power: 100 watts. Wavelength: 219 metres, 1,370 kilocycles.

Commenced operations: 3/7/37.

Network affiliation: "The Advertiser" Broadcasting and Major Networks.

Directors: Mr. J. F. Downer (chairman), Sir Keith Murdoch, Sir Lavington Bonython, Messrs. W. B. Carr, Lloyd Dumas, W. Crookall. Secretary: V. J. Bruer, General manager: A. C. Kinnear. Station manager: John Cameron. Chief engineer: T. Welling. Other technical staff: Bruce Forgan. Sales manager: John Cameron. Announcers: John Cameron (chief announcer) John Morgan, Miss Billing. Program production staff: Miss D. Pearce. Total full time staff: 7.

Interstate representatives: G. N. Bednall, Newspaper House, 247 Collins Street, Melbourne; Fred. Thompson, Warwick Building, 15 Hamilton Street, Sydney.

Daily transmission hours: Week days, 7 a.m.-2 p.m., 5-11 p.m.; Sundays, 6 p.m.-10 p.m.

Type of transmitter used: High-power modulation, class "AB." Type of aerial system: Quarter-wave "T" type 135 feet high. Number of studios: One.

Radio listener clubs: Kangaroo Club membership (3,500), Homecraft Club.

## Commencing Dates of Operation of South Australian Stations

24/2/25	5DN Adelaide	7/1/32	5PI Crystal Brook
24/2/25	5RM Murray Heights	16/9/34	5MU Murray Bridge
-/8/26	5KA Adelaide	3/7/37	5SE Mount Gambier
2/8/30	5AD Adelaide	25/5/38	5AU Port Augusta

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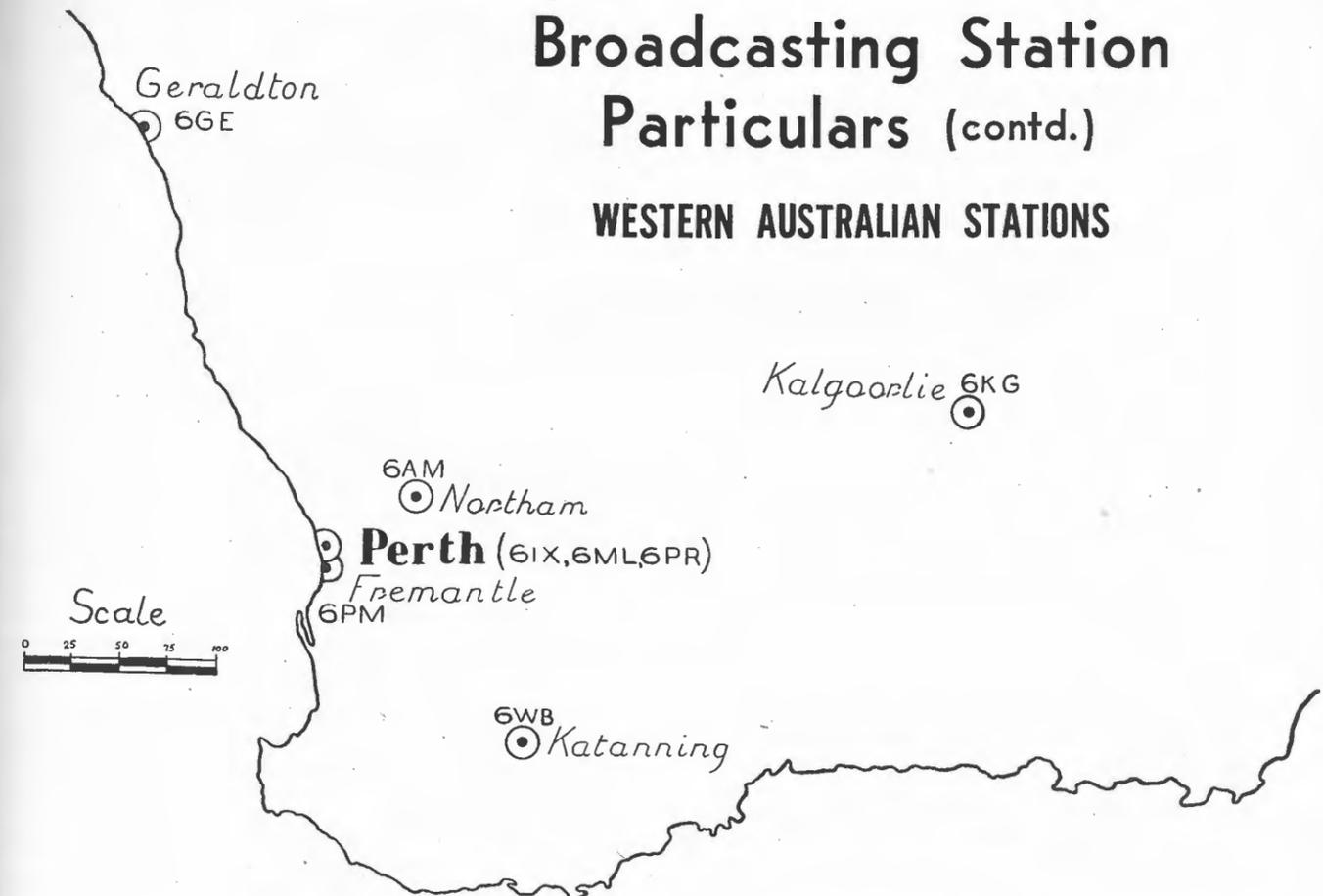
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## Broadcasting Station Particulars (contd.)

## WESTERN AUSTRALIAN STATIONS



## 6AM NORTHAM.

Operated by 6AM Broadcasters Ltd. Station slogan: The Happy Station. Address: St. George's House, St. George's Terrace, Perth. Studios located: St. George's House, St. George's Terrace, Perth. Transmitter located: Four miles west of Northam, 48 air miles from Perth. Telephones: B4921, B8484.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 306 metres, 980 kilocycles.

Commenced operations: June 1, 1934.

Network affiliation: Whitford Network.

Directors: Archer P. H. Whitford, F. R. Whitford, A. A. Whitford, E. I. Whitford. Managing director: F. R. Whitford. Secretary: D. White. Chief engineer: F. Tredrea. Other technical staff: R. Choate, R. Henwood, A. L. Read. Sales manager: J. Tozer. Other sales staff: J. F. Patton, G. E. Galloway, W. E. Talbot. Announcers and program production staff: Moray J. Powell, Juan Cortez, Geoff. Carter, Hugh Hay, Mrs. E. M. Broad, Cliff Muhling, Geoff. Manion, Philip Gray. Total full time staff: In conjunction with 6PM and 6KG—42.

Interstate representatives: Sydney, A. Clay, 102 Sussex Street; Melbourne, H. Anderson, Poster House, 130 Exhibition Street.

Daily transmission hours: Monday to Friday, 6.30 a.m. to 8.30 a.m., 12 noon to 2 p.m., 5.30 p.m. to 10.30 p.m.; Saturday, 12 noon to 12.45 a.m.; Sunday, 8.30 a.m. to 1 p.m., 6.30 p.m. to 10 p.m.

Type of transmitter used: 3,000 watts. Low level modulation. Type of aerial system: Marconi Quarter-wave. Number of studios: Five.

Radio listener Clubs: Willie Weeties' Club, Happy Hour Club.

## 6GE GERALDTON.

Operated by Great Northern Broadcasters Ltd. Station slogan: "The Featured Station." Address: Marine Terrace, Geraldton, Western Australia. Studios located: Marine Terrace, Geraldton. Transmitter located: Deepdale, 4½ miles east. Telegraphic address: SIXGE. Telephone: 130.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 219 metres, 1,370 kilocycles.

Commenced operation: October 8, 1937.

Network affiliation: Nil.

Directors: Dr. Louis Gelle, L. W. Sheppard, A. P. Rock. Secretary: W. R. Campbell. Station manager: Herbert N. Ebrall. Chief engineer: C. Morrison. Other technical staff: H. N. Ebrall. Sales manager: H. Ebrall. Announcers: Herbert N. Ebrall (chief announcer), Ron. H. Muir, Noreen Leen, Mollie Foster. Program production staff: H. N. Ebrall, R. H. Muir, Mollie Foster, Noreen Leen, Sheila Rooke. Total full time staff: Nine.

Interstate representatives: Sydney and Melbourne A.W.A.

(Continued next page.)

## Station Particulars (contd.)

### 6GE Geraldton (Contd.)

Daily transmission hours: Monday to Friday, 6.30-9.30 a.m., 12-2 p.m., 5-10.30 p.m.; Saturday, 6.30-9.30 a.m., 12.2 p.m.; 5.11 p.m.; Sunday, 9.30-11.30 a.m., 2.30-3.30 p.m., 6-10 p.m.

Type of transmitter used: A.W.A. class "B" modulation. Type of aerial system: Inverted "T" from tuning box under aerial. Number of studios: One.

Radio listener clubs: 6GE Joy Club, 200 (juveniles), 6GE Cheerio Club 80 (adults).

### 6IX PERTH.

Operated by Western Australian Broadcasters Ltd. Address: Lyric House, Murray Street, Perth. Studios located: Lyric House, Murray Street, Perth. Transmitter located: Newspaper House, St. George's Terrace, Perth. Telegraphic address: SIXIX. Telephones: B9321, 9322, 9323.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 242 metres, 1,240 kilocycles.

Commenced operations: November, 1933.

Network affiliation: Major Broadcasting Network.

Directors: H. B. Jackson, K.D. (chairman), M. D'O. Musgrove, C. P. Smith, H. Greig, F. C. Kingston. Secretary: E. H. Rosman. General manager: B. Samuel. Chief engineer: H. T. Simmons. Other technical staff: G. Butterfield, N. Parker, C. Robson, D. Wood. Sales manager: E. C. Churchward. Other sales staff: E. L. Gower, K. P. Hayward, C. H. Giraud. Announcers: F. Atkinson, R. Gledhill, R. McGregor, L. Lewis, B. Carter, J. Robertson. Program production staff: B. F. B. Saunders, B. Carter. Total full time staff: 24.

Interstate representatives: B. Rieusset, A.P.A. Building, 379 Collins Street, Melbourne; I. W. Phillips, Warwick Building, 15 Hamilton Street, Sydney.

Daily transmission hours: Monday to Friday, 7 to 10.30 a.m., 2 to 3 p.m., 6 to 11 p.m.; Saturday, 7 to 10.30 a.m., 6 to 11 p.m.; Sunday, 2 to 5 p.m., 6 to 10.30 p.m.

Type of transmitter used: Philips Lamps (A/sia) Ltd. Type of aerial system: "T" type. Number of studios: Two.

Type of recording plant: Amalgamated Wireless (A/sia) Ltd.

### 6KG KALGOORLIE.

Operated by Goldfields Broadcasters (1933) Ltd. Address: 209 Hannan Street, Kalgoorlie. Studios located: Kalgoorlie. Transmitter located: Parkston, two miles N.E. of Kalgoorlie P.O.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 248 metres, 1,210 kilocycles.

Commenced operations: September 16, 1931.

Network affiliation: Whitford Network.

Chief engineer: F. Tredrea. Other technical staff: S. Hogg, A. Taylor. Sales manager: J. Tozer. Other sales staff: J. F. Patton, G. E. Galloway, W. E. Talbot. Announcers and program production staff: Juan Cortez, Allan Weir, A. McCaskill, Mrs. Illidge.

Interstate representatives: Sydney, A. Clay, 102 Sussex Street; Melbourne, Hugh. Anderson, Poster House, 130 Exhibition Street.

Daily transmission hours: Monday to Saturday, 7 a.m. to 9 a.m., 11 a.m. to 1.30 p.m., 5.30 p.m. to 10.30 p.m.; Sunday, 10 a.m. to 1 p.m., 6 p.m. to 10 p.m.

Type of transmitter used: 750 watts, high level modulation. Type of aerial system: Marconi Quarter-wave.

### 6ML PERTH.

Operated by W.A. Broadcasters Ltd. Address: Lyric House, Murray Street, Perth. Studios located: Lyric House, Murray Street, Perth. Transmitter located: Lyric House, Murray Street, Perth. Telegraphic address: SIXML. Telephones: B9321, 9322, 9323.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 265 metres, 1,130 kilocycles.

Commenced operations: March 19, 1930.

Network affiliation: C.B.N.

Directors: H. B. Jackson, K.C. (chairman), M. D'O. Musgrove, C. P. Smith, H. Greig, F. C. Kingston. Secretary: E. H. Rosman. General manager: B. Samuel. Chief engineer: H. T. Simmons. Other technical staff: M. Urquhart, J. R. Tapper. Sales manager: E. C. Churchward. Other sales staff: E. L. Gower, K. P. Hayward, C. H. Giraud. Announcers: E. O. Simms, N. Taylor, R. McGregor, Miss L. Berryman, B. F. B. Saunders. Program production staff: B. F. B. Saunders, B. Carter. Total full time staff: 23.

Interstate representatives: Sydney, I. W. Phillips, Warwick Building, Hamilton Street; Melbourne, B. Rieusset, A.P.A. Building, 379 Collins Street.

Daily transmission hours: Monday to Saturday, 7 a.m. to 9 a.m., 11.30 a.m. to 1.30 p.m., 6 p.m. to 10.30 p.m.; Sunday, 9 a.m. to 11 a.m., 1 p.m. to 5 p.m., 6 p.m. to 10.30 p.m.

Type of transmitter used: Philips Lamps (A/sia) Pty. Ltd. Type of aerial system: "T" type. Number of studios: Three.

Type of recording plant: A.W.A.

### 6PM FREMANTLE.

Operated by 6PM Broadcasters Ltd. Address: St. George's House, St. George's Terrace, Perth. Studios located: St. George's House, St. George's Terrace, Perth. Transmitter located: Fremantle. Telephones: B4921, B8484.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 216 metres, 1,390 kilocycles.

Commenced operations: April 22, 1937.

Network affiliation: Whitford Network.

Directors: Archer P. H. Whitford, F. R. Whitford, A. A. Whitford, E. I. Whitford. Managing director: F. R. Whitford. Secretary: D. White. Chief engineer: F. Tredrea. Other technical staff: W. H. Lonergan, W. Phipps. Sales manager: J. Tozer. Other sales staff: J. F. Patton, G. E. Galloway, W. E. Talbot. Announcing and program production staff: Moray J. Powell, Juan Cortez, Geoff. Carter, Hugh. Hay, Mrs. E. M. Broad, Cliff Muhling, Geoff. Manion, Philip Gray. Total full time staff: In conjunction with 6AM and 6KG—42.

(Continued next page.)

## Station Particulars (contd.)

### 6PM Fremantle (Contd.)

Interstate representatives: Sydney, A. Clay, 102 Sussex Street; Melbourne, H. Anderson, Poster House, 130 Exhibition Street.

Daily transmission hours: Monday to Friday, 6.30 a.m. to 9 a.m., 12 noon to 2 p.m., 4.30 p.m. to 10.30 p.m.; Saturday, 6.30 a.m. to 9 a.m., 12 noon to 12.45 a.m. (Sunday); Sunday, 8.30 a.m. to 12.30 p.m., 5.30 p.m. to 10 p.m.

Type of transmitter used: 700 watts. High level modulation. Type of aerial system: Marconi Quarter-wave. Number of studios: Five.

Radio listener clubs: Willie Weeties' Club, Happy Hour Club.

### 6PR PERTH.

Operated by Nicholsons Ltd. Station slogan: "6PR—The Centre of the Dial, the Centre of Attraction." Address: 86-90 Barrack Street, Perth. Studios located: 86-90 Barrack Street, Perth. Transmitter located: Applecross (6 miles from Perth). Telegraphic address: "Nicholsons." Telephones: B6131 (4 lines).

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 341 metres, 880 kilocycles.

Commenced operations: October, 1931.

Network affiliation: Macquarie Broadcasting Network.

Directors: H. P. Downing (chairman), A. H. Dickson, J. L. Paton, E. M. Barker, J. D. Stoddart. Secretary: M. W. Yelverton. General manager: E. M. Barker. Station manager: T. St. J. Kennedy. Technical staff: W. Rodda, W. Paterson. Sales staff: A. C. Kurts, A. E. Lovegrove, R. G. Hender. Announcers: A. C. Kurts, E. A. Kean, R. G. Hender, P. D. Mantle, Mrs. D. James. Program production staff: Marion Slater, E. G. Parrant, A. C. Kurts, E. A. Kean. Total full time staff: 18.

Interstate representatives: Macquarie Broadcasting Services Pty. Ltd., Sydney and Melbourne.

Daily transmission hours: Monday to Saturday, 7 a.m. to 11.30 a.m., 5.15 p.m. to 10.30 p.m.; Sunday, 9 a.m. to 2 p.m., 6 p.m. to 10 p.m.

Type of transmitter used: A.W.A. type—class "B" modulated, final stage water cooled linear. Type of aerial system: Cage type—inverted "L"—Letcher fed. Number of studios: Two.

Type of recording plant: "Marguerite" (England) Stationary—3 speed—for acetates or pressings.

Radio listener clubs: 6PR Listeners' Club (2,200 members), Tail-Waggers' Club (150 members).

### 6WB KATANNING.

Operated by W.A. Broadcasters Ltd. Address: Lyric House, Murray Street, Perth. Studios located: Lyric House, Murray Street, Perth. Transmitter located: Katanning, W.A. Telegraphic address: SIXWB. Telephones: B9321, 9322, 9323.

Licensed power: 2,000 watts. Operating power: 2,000 watts. Wavelength: 280 metres, 1,070 kilocycles.

Commenced operations: September, 1936.

Network affiliation: Major Broadcasting Network.

Directors: H. B. Jackson, K.C. (chairman), M. D'O. Musgrove, C. P. Smith, H. Greig, F. C. Kingston. Secretary: E. H. Rosman. General manager: B. Samuel. Chief engineer: H. T. Simmons. Other technical staff: N. C. Greer, C. Sirl, R. Kaye, B. Rogers. Sales manager: E. C. Churchward. Other sales staff: E. L. Gower, K. P. Hayward, C. H. Giraud. Announcers: R. Gledhill, L. Lewis, N. Joyce, F. Atkinson, B. F. B. Saunders, E. O. Simms, R. McGregor, Miss L. Berryman. Program production staff: B. F. B. Saunders, B. Carter. Total full time staff: 27.

Interstate representatives: Sydney, I. W. Phillips, Warwick Building, Hamilton Street; Melbourne, B. Rieusset, A.P.A. Building, 379 Collins Street.

Daily transmission hours: Monday to Saturday, 7 a.m. to 9 a.m., 11.30 a.m. to 1.30 p.m., 6 p.m. to 10.30 p.m.; Sunday, 9 a.m. to 11 a.m., 1 p.m. to 6 p.m., 6 p.m. to 10.30 p.m.

Type of transmitter used: Philips Lamps (A/sia) Pty. Ltd. Type of aerial system: "T" type. Number of studios: Three.

Type of recording plant: A.W.A.

### Commencing Dates of Western Australian Stations.

19/ 3/'30	6ML Perth.	/ 9/'36	6WB Katanning.
/10/'31	6PR Perth.	22/ 4/'37	6PM Fremantle.
/11/'33	6IX Perth.	8/10/'37	6KG Kalgoorlie.
1/ 6/'34	6AM Northam.	8/10/'37	6GE Geraldton.

## Commercial Broadcasting Rate Book

(Incorporating "Broadcasting Business Quarterly")

Australian and New Zealand Commercial Station Rate Cards, Network Discounts and Group Rates, together with Station Location Maps by States, Alphabetical List of Stations showing location, name of operator, power, wavelength and network affiliation, 25 and 50 Mile Quarterly Distribution of Licences by Stations, Country and Metropolitan Licence Distribution, Interstate and Intra-state Representatives.

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# Broadcasting Station Particulars (contd.)

## TASMANIAN STATIONS

### 7BU BURNIE.

Operated by The Burnie Broadcasting Service Pty. Ltd. Station slogan: "First for the Coast." Address: Wilson Street, Burnie, Tasmania. Studio located: Wilson Street, Burnie. Transmitter located: Wilson Street, Burnie. Telephones: Burnie 125-268.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 455 metres, 660 kilocycles.

Commenced operations: October 19, 1935.

Network affiliation: Tasmanian Network and Macquarie Broadcasting Network.

Directors: A. P. Findlay, P. A. Findlay, A. D. Towner, A. P. Findlay (managing director). Secretary: P. A. Frible. General manager: A. D. Towner. Sales manager: A. D. Towner. Station manager: B. O'Brien. Chief engineer: Tasman Lord. Other technical staff: James Trethewie, William Boorgest. Other sales staff: Trevor Brain, Francis Holmes, N. Williams. Announcers: B. O'Brien, William Boorgest, Dave Ritchie, Betty Raymond, Peggy Dowling, Francis Holmes, L. Elliott. Program production staff: Basil O'Brien, William Boorgest, Dave Ritchie, Betty Raymond, Peggy Dowling, Francis Holmes, L. Elliott. Total full time staff: Twelve.

Interstate representatives: Macquarie Broadcasting Services Pty. Ltd., 29 Bligh Street, Sydney, and 37 Queen Street, Melbourne.

Daily transmission hours: Monday to Friday, 7-9 a.m., 11-2 p.m., 5-10.30 p.m.; Saturday, 7-9 a.m., 1.30-11 p.m.; Sunday, 10-12 noon, 5-10.30 p.m.

Type of transmitter used: Constructed by station engineer. Type of aerial system: Inverted L. Number of studios: Three.

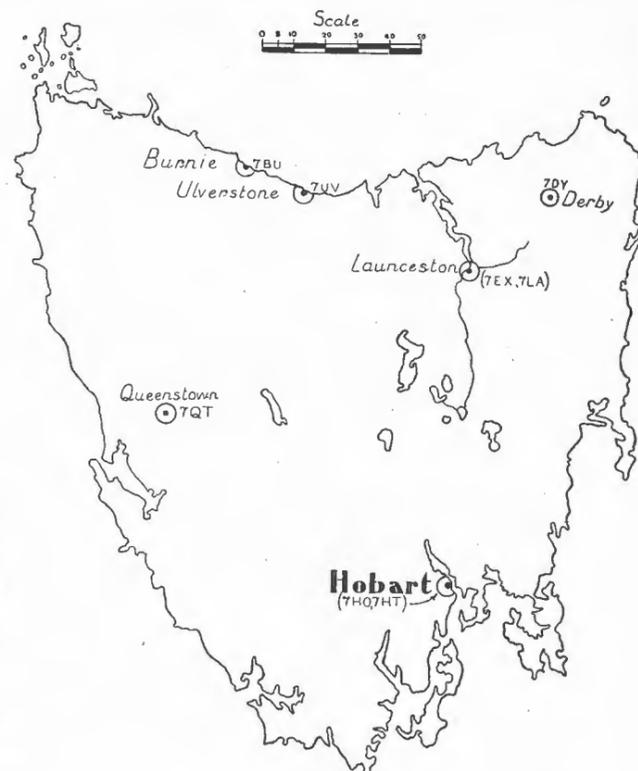
Radio listener clubs: Sunpolishers' Club (juniors), (6,044 members).

### 7DY DERBY.

Operated by North East Tasmanian Radio Broadcasters Pty. Ltd. Address: Derby. Studios and transmitter located: Derby. Telegraphic address: SEVENDY Derby. Telephones: Derby 55.

Licensed power: 200 watts. Operating power: 200 watts. Wavelength: 214 metres, 1,400 kilocycles.

Commenced operation: February 26, 1938.



Network affiliation: Findlay Tasmanian and Macquarie.

Directors: A. P. Findlay (managing director), H. G. Riley, Winnaleah, A. D. Towner, Burnie. Secretary: P. A. Frith, Launceston. General manager: R. Parish. Supervising engineer: T. Lord. Other technical staff: A. M. Lennan. Announcers: H. R. Parish (chief announcer), L. E. Parish, Miss D. Gough, Chas. Saunders and E. T. Kerby.

Interstate representatives: Macquarie Broadcasting Services Pty. Ltd., Melbourne and Sydney.

Daily transmission hours: 7.15-8.30 a.m.; early morning session, 10.30 a.m.-noon; women's session, 5-10.30 p.m.; evening session, Saturdays, 7.15-8.30 a.m., 5-10.30 p.m.; Sundays, 7-10 p.m.

Type of transmitter used: Constructed by station engineers. Type of aerial system: Grounded "T" aerial.

Radio listener club: Sunpolishers' Club, membership 2,000.

### 7EX LAUNCESTON.

Operated by 7EX Pty. Ltd. Station slogan: "On Top in Tasmania." Address: 74 Charles Street, Launceston. Studios located: 74 Charles Street, Launceston. Transmitter located: St. Leonards. Telegraphic address: SEVENEX. Telephones: 773 (2 lines).

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 300 metres, 1,000 kilocycles.

(Continued opposite page.)

## Station Particulars (contd.)

### 7EX Launceston (Contd.)

Commenced operations: February 5, 1938.

Network affiliation: Major.

Directors: W. R. Rolph, G. B. Rolph. Secretary: S. Guy. Station manager: R. Brearley. Chief engineer: C. A. Cullinan. Other technical staff: F. Holland, H. Coofier, L. Low, D. Bonner. Sales staff: M. Munro, K. Goynes, J. D. Vallantyne. Announcers: D. Cossins, R. Cossins, M. Beckett, Margaret O'Brien, W. Drew, M. Marriott. Program production staff: D. Cossins, R. Cossins. Total full-time staff: 22.

Interstate representatives: H. Anderson, Melbourne; D. Scott, Sydney.

Daily transmission hours: 7 a.m.-2 p.m., 5 p.m.-11 p.m., Wednesdays; 7 a.m.-11 p.m., Saturdays; 10 a.m.-4 p.m., 5.30-10.30 p.m., Sundays.

Type of transmitter used: T.E.L.P. class B modulation. Type of aerial system: Quarter-wave "T." Number of studios: Three. Type of recording plant: Presto Wide Range.

Radio listener clubs: Smilex Club, 7EX Army Women's Association, League of Young Airmen, Gardening League.

### 7HO HOBART.

Operated by Commercial Broadcasters Pty. Ltd. Station slogan: "Hobart's Original Station." Address: 82 Elizabeth Street, Hobart. Studios located: 82 Elizabeth Street, Hobart. Transmitter located: Mt. Nelson. Telegraphic address: SEVENHO. Telephones: 6008 and 4226.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 349 metres, 860 kilocycles.

Commenced operations: June 1, 1930.

Network affiliation: Macquarie Network.

Directors: Selwyn H. Findlay, Len Nettlefold, G. E. Davies. Secretary: R. Paton. General manager: S. H. Findlay. Station manager: G. Bills-Thompson. Chief engineer: W. Nicholas. Other technical staff: J. S. Dodds, R. Brundle, W. Morrison, J. Butler, D. Webb. Sales manager: J. L. Rycroft. Other sales staff: G. Rycroft, S. Barrie, M. Findlay. Announcers: G. Bills-Thompson, Brian Hodgman, G. McKillop, Allan Clayton, Susan Barrie, Mollie Findlay, George Ward. Program production staff: G. Bills-Thompson, Allan Clayton, Mary Lamprill. Total full time staff: 18.

Interstate representatives: Macquarie Network, 37 Queen Street, Melbourne; 29 Bligh Street, Sydney.

Daily transmission hours: Monday to Friday, 7-9 a.m., 10.30-2 p.m., 3.30-11 p.m.; Saturdays, 7-9, 10.30-2 p.m., 5-11 p.m.; Sundays, 6-11 p.m.

Type of transmitter used: High level class "B" modulation, frequency control by "Cold" type crystal oscillator. Push-pull circuits throughout. Type of aerial system: Marconi "T" type. Vertical portion one-eighth wave in length. 1,000 feet above sea level, masts 150 feet high. Number of studios: Two, audition room, etc. Recording plant: Presto.

Radio listener clubs: Breakfast Club, 780; Women's Association, 700; Women's Theatre Circle, 2,000; Pals' Club (children), 6,000.

### 7HT HOBART.

Operated by Metropolitan Broadcasters. Station slogan: "The Feature Station." Address: 51 Murray Street, Hobart. Studios located: 51 Murray Street, Hobart. Transmitter located: Rosny. Telegraphic address: SEVENHT. Telephones: 5083, 5084.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 278 metres, 1,080 kilocycles.

Commenced operations: April 19, 1937.

Network affiliation: Nil.

Directors: Russell Young (chairman), B. McCann, L. McCann, R. Morris. Secretary: T. A. Spencer. Station manager: R. C. Thomas. Chief engineer: G. Miles. Other technical staff: E. Cooper, N. Stone, D. Hildyard, J. Wilson. Sales manager: C. J. Cross. Other sales staff: W. Barwick. Announcers: R. Vertigan, J. Vertigan, J. Spencer. Program production staff: R. Vertigan, Pat Stephenson. Total full time staff: 23.

Interstate representatives: A. L. Finn, 66 King Street, Sydney; Hugh Anderson, 130 Exhibition Street, Melbourne.

Daily transmission hours: 7-11 a.m., 12 noon-3 p.m., 5.30-11 p.m.

Type of transmitter used: Transmission Equipment Pty. Ltd. Type of aerial system: Quarter-wave vertical radiator. Number of studios: Two.

Radio listener clubs: Women's Association, 1,500; Kiwi, 4,000; C.C.C., 3,000; Sunshiners, 1,300; 7HT 10th Hobart Scout Troop, 20.

7HT

A. L. Finn,  
66 King St.,  
Sydney.

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sponded. The Capital wrote their re-  
plies to the comprehensive  
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Melbourne.

62.2%

AUDIENCE

## Station Particulars (contd.)

## 7LA LAUNCESTON.

Operated by Findlay & Wills Broadcasters Pty. Ltd. Station Slogan: "The Voice of Northern Tasmania." Address: Findlay's Building, George Street, Launceston. Studios located: Brisbane Street. Transmitter located: Prospect. Telephone: Launceston 1486.

Licensed power: 500 watts. Operating power: 500 watts. Wavelength: 273 metres, 1,100 kilocycles.

Commenced operations: December 13, 1930.

Network Affiliation: Findlay's Tasmanian Network, and Macquarie Broadcasting Network.

Directors: Sir Ernest Fisk, J. D. Millen, A. P. Findlay, N. A. Findlay. Secretary: A. E. Garrott. General manager: D. L. Richardson. Advertising manager: John T. Gough. Chief engineer: V. Sydes. Other technical staff: L. Harris, R. McLean, A. Morrison. Sales manager: J. Vertigan. Other sales staff: N. Williams. Announcers: D. Caddy, E. W. Davies, N. Williams, D. Lay, N. Young, K. Coe, H. Duncan, A. Cobern. Program production staff: E. W. Davies, N. Young, M. Bonser. Total full-time staff: Fifteen.

Interstate representatives: Macquarie Broadcasting Services Pty. Ltd., 37 Queen Street, Melbourne; Amalgamated Wireless (A/sia) Ltd., Melbourne; Macquarie Broadcasting Services, 29 Bligh Street, Sydney; Amalgamated Wireless (Australasia) Ltd., Sydney.

Daily transmission hours: 7 a.m.-2 p.m., 5 p.m.-11 p.m.; Saturdays, 7-9 a.m., 5-12 p.m.; Sundays, 9.30 a.m.-5 p.m., 6 p.m.-11 p.m.

Type of transmitter used: A.W.A. low power modulation. Type of aerial system: Marconi. Number of studios: Two.

Radio listener clubs: Juvenile Club, Women's Association, Boys' Club, Merrymakers' Club.

## 7QT QUEENSTOWN.

Operated by West Coast Broadcasters Pty. Ltd. Station slogan: "Voice of Western Tasmania." Address: Conlan Street, South Queenstown. Studios and transmitter located: South Queenstown. Telegraphic address: Queenstown. Telephone: Queenstown 124.

Licensed power: 300 watts. Operating power: 300 watts. Wavelength: 441 metres, 680 kilocycles.

Commenced operations: May 7, 1937. Network affiliation: Macquarie Broadcasting Services Pty. Ltd.

Directors: L. P. R. Bean, N. A. Findlay (managing director), A. E. Garrott. Secretary: A. E. Garrott, F.I.C.A.

General manager: R. E. Ward. Chief engineer: L. A. Chappell. Announcers: R. E. Ward (chief), L. A. Chappell (breakfast sessions), F. A. Lawson, Miss M. M. McEachern. Total full time staff, 3.

Interstate representatives: Macquarie Broadcasting Services Pty. Ltd., 29 Bligh Street, Sydney; 37 Queen Street, Melbourne.

Daily transmission hours: 7.30 a.m. to 9 a.m., 1 p.m. to 2 p.m., 5.15 p.m. to 10.30 p.m.

Type of transmitter used: Low Level Modulation. Type of aerial system: L Inverted. Number of studios: One.

Radio listener clubs: Chums' Club (900).

## 7UV ULVERSTONE.

Operated by Northern Tasmania Broadcasters Pty. Ltd. Station slogan: "The Voice of the Island State." Address: Box 11, P.O., Ulverstone and Devonport. Studios located: 44 Rooke Street, Devonport; Reibey Street, Ulverstone. Transmitter located: Gawler. Telegraphic address: SEVENUV. Telephones: Ulverstone 48, Devonport 437.

Licensed power: 300 watts in aerial. Wavelength: 205 metres, 1,140 kilocycles.

Commenced operations: October 31, 1933.

Network Affiliation: C.B.N.

Directors: T. C. Kitto, G. A. Bray. General manager: E. A. Wood. Chief engineer: T. C. Kitto. Station manager: E. A. Wood. Other technical staff: R. Kinley. Sales manager: G. A. Bray. Other sales staff: W. Wilson. Announcers: Stewart Edwards, W. Wilson, Eric Wood, George Bray, Max Beckett, Ivy Wood, Jon Wilson. Program production staff: Stewart Edwards, Joan Wilson. Total full time staff: Ten.

Interstate representatives: C. A. Monks, Shell House, Carrington Street, Sydney; E. A. Wood, Shell House, 532 Bourke Street, Melbourne C1.

Daily transmission hours: 7 a.m. to 9 a.m., 11 a.m. to 2 p.m., 5 p.m. to 10.30 p.m.; Saturday, 7 a.m. to 9 a.m. and 12 noon to 11 p.m.; Sunday, 10 a.m. to 2 p.m., 5 p.m. to 10.30 p.m.

Type of transmitter used: Low level modulated. Type of aerial system: Inverted L. Number of studios: Two.

## Commencing Dates of Operation of Tasmanian Stations

1/ 6/30	7HO Hobart.
13/12/30	7LA Launceston
31/10/33	7UV Ulverstone.
19/10/35	7BU Burnie.
19/ 4/37	7HT Hobart
29/ 5/37	7QT Queenstown
5/ 2/38	7EX Launceston.
26/ 2/38	7DY Derby.

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BROADCASTING NETWORKA.W.A. ASSOCIATES  
(Australia).

Headquarters: 47 York Street, Sydney. Manager, Broadcasting Division A.W.A., V. M. Brooker.

Associates comprise:—

New South Wales: 2CH Sydney, 2GF Grafton, 2GN Goulburn, 2AY Albury.

Victoria: 3BO Bendigo.

Queensland: 4CA Cairns, 4TO Townsville, 4WK Warwick, 4PM Port Moresby.

Tasmania: 7LA Launceston.

Fiji: VPD2 and ZJV Suva.

World experimental broadcasting stations: VK2ME Sydney, VK3ME Melbourne, and VK6ME Perth.

"ARGUS" BROADCASTING NETWORK  
(Victoria).

Headquarters: 365 Elizabeth Street, Melbourne. N. S. Sheppard, superintending manager.

Network Comprises: 3UZ Melbourne (key station), 3SR Shepparton, 3YB Warrnambool and 3UL Warragul, 3CV Charlton.

Sydney representative: A. D. Bourke, 5-7 Barrack Street, and C.B.N. 49 Market Street.

COMMONWEALTH  
BROADCASTING NETWORK  
(Australia).

Headquarters: State Building, 49 Market Street, Sydney. General manager of key station, C. F. Marden.

Network comprises:—

New South Wales: 2UW Sydney (key station), 2HD Newcastle, 2TM Tamworth, 2WG Wagga.

Victoria: 3UZ Melbourne (Victorian key station), 3SR Shepparton, 3UL Warragul, 3YB Warrnambool, 3CV Charlton.

Queensland: 4BC Brisbane (Queensland key station), 4SB Kingaroy, 4GR Toowoomba, 4ZR Roma, 4MB Maryborough, 4RO Rockhampton, 4VL Charleville, 4AY Ayr, 4AT Atherton.

South Australia: 5KA Adelaide, 5AU Port Augusta.

Western Australia: 6ML Perth.

Tasmania: 7UV Ulverstone.

Melbourne representative: Peter Sullivan, "Alkira House," 18 Queen Street.

(Continued next page)

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7LA-7DY 7HO-7QT 7BU

## Commercial Broadcasting Network Particulars (contd.)

### EMPIRE STATE NETWORK

(New South Wales).

Headquarters: Shell House, Carrington Street, Sydney. Network sales manager, C. A. Monks.

Network comprises: 2HD Newcastle, 2PK Parkes, 2MG Mudgee, 2QN Deniliquin.

### MACQUARIE BROADCASTING NETWORK

(Australia).

Headquarters: 29 Bligh Street, Sydney. Executive Director, R. E. Denison; Director of Broadcasting Services, H. G. Horner; Network sales manager, R. E. Lane.

Network comprises:—

Australian Capital Territory: 2CA Canberra.

New South Wales: 2GB Sydney, 2HR Hunter River, 2WL Wollongong, 2KA Katoomba, 2KM Kempsey.

Victoria: 3AW Melbourne, 3HA Hamilton, 3TR Sale, 3SH Swan Hill.

Queensland: 4BH Brisbane (associate).

South Australia: 5DN Adelaide, 5RM Renmark.

Western Australia: 6PR Perth.

Tasmania: 7LA-DY Launceston and Derby, 7HO-QT Hobart and Queenstown, 7BU Burnie.

Representatives: Melbourne, Macquarie Broadcasting Services Pty. Ltd., 37 Queen Street.

### MAJOR NETWORK

(Australia).

Headquarters: 36 Flinders Street, Melbourne.

Network Comprises:—

Victoria: 3DB Melbourne, 3LK Lubeck.

New South Wales: 2CH Sydney, 2KO Newcastle, 2BH Broken Hill.

Queensland: 4BK Brisbane, 4AK Oakey, 4BU Bundaberg.

South Australia: 5AD Adelaide, 5PI Crystal Brook, 5MU Murray Bridge, 5SE Mt. Gambier.

Western Australia: 6IX Perth, 6WB Katanning.

Tasmania: 7EX Launceston.

Sydney representative: I. Phillips, Warwick Building, Hamilton Street.

### TASMANIAN BROADCASTING NETWORK

(Tasmania).

Headquarters: 67 Brisbane Street, Launceston.

Network comprises: 7LA Launceston, 7HO Hobart, 7DY Derby, 7BU Burnie, 7QT Queenstown.

Representatives: Macquarie Broadcasting Services Pty. Ltd., 29 Bligh Street, Sydney, and 37 Queen Street, Melbourne.

### "THE ADVERTISER" NETWORK

(South Australia).

Headquarters: "The Advertiser" office, Weymouth Street, Adelaide.

Network comprises: 5AD Adelaide, 5MU Murray Bridge, 5PI Crystal Brook, 5SE Mount Gambier, 2BH Broken Hill.

Representatives: Sydney, Fred. Thompson, Warwick Building, Hamilton Street; Melbourne, G. N. Bednall, 247 Collins Street; London, A. J. Chard, 92 Fleet Street.

### THE PROVINCIAL NETWORK

(New South Wales).

Headquarters: Hosking House, Hosking Place, Sydney. Phone BW1428.

Sales promotion manager: H. P. Clarke, Phone, BW1428.

Network comprises: 2GZ Orange, 2KO Newcastle, 2TM Tamworth, 2NZ Inverell, and 2LM Lismore.

Melbourne representative: Stanford Allan, 247 Collins Street.

### VICTORIAN BROADCASTING NETWORK

Headquarters: 239 Collins Street, Melbourne. R. A. Fitts, general manager of 3HA-TR-SH.

Network comprises: 3HA Hamilton, 3TR Sale and 3SH Swan Hill, associated with 3AW Melbourne.

Sydney representative: Macquarie Broadcasting Services Pty. Ltd., 29 Bligh Street, Sydney.

### WHITFORD NETWORK

(Western Australia).

Headquarters: St. George House, St. George's Terrace, Perth.

Network comprises: 6AM Northam, 6PM Fremantle, 6KG Kalgoorlie.

Representatives: Sydney, A. Clay, 102 Sussex Street. Phone, BW2994. Melbourne, Hugh Anderson, Poster House, Exhibition Street.

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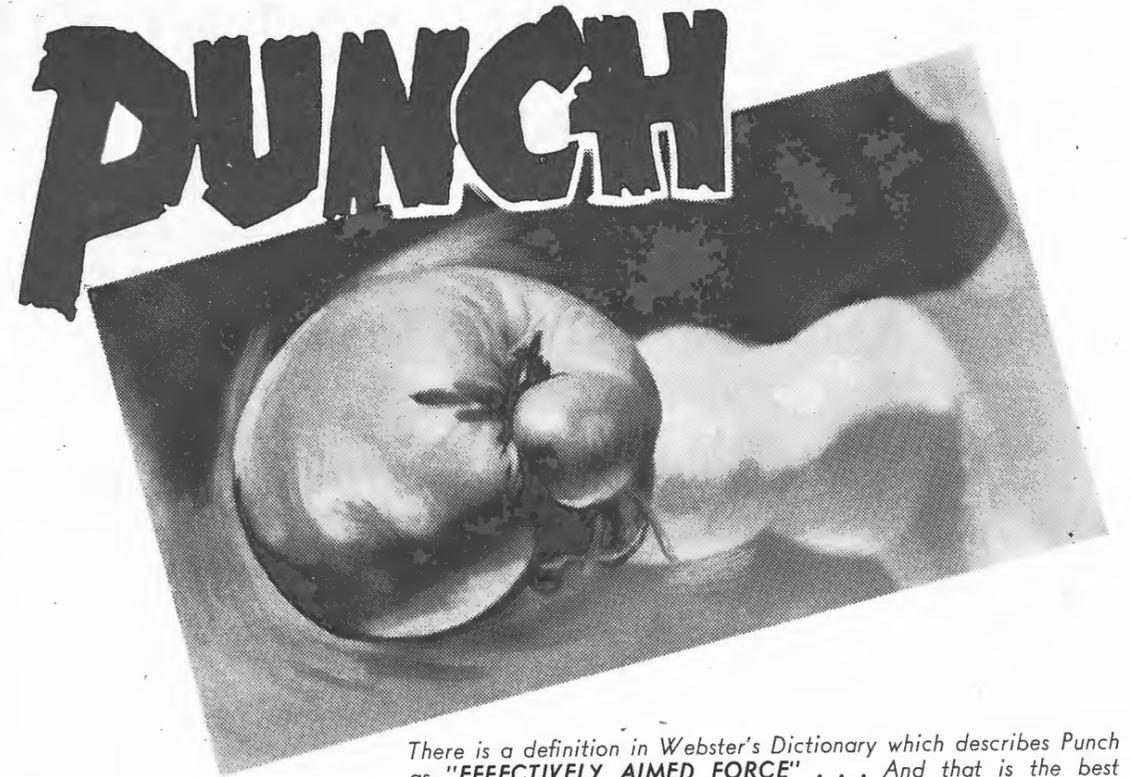
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# BROADCASTING STATION REPRESENTATIVES

See succeeding section for complete alphabetical list of representatives and addresses

## NEW SOUTH WALES STATIONS.

Station.	Sydney Representative.	Melbourne Representative.
2AD	A. D. Bourke	Amalgamated Wireless (A/sia) Ltd.
2AY	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
2BE	Roy Wilson	Bedgood Advertising Co.
2BH	I. W. Phillips	H. Anderson
2BS	Transcontinental Broadcasting Corporation Ltd.	I. V. Robertson
2CA	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
2CH	Station Sales Staff	Amalgamated Wireless (A/sia) Ltd.
2CK	Chandlers Broadcasting Service (Walter J. Smyth)	I. V. Robertson
2DU	Roy Wilson	—
2GB	Station Sales Staff	Macquarie Broadcasting Services Pty. Ltd.
2GF	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
2GN	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
2GZ	Country Broadcasting Services Ltd.	S. Allan
2HD	C. A. Monks	E. A. Wood
2HR	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
2KA	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
2KM	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
2KO	E. T. Cox	H. Anderson
2KY	Station Sales Staff	I. V. Robertson
2LF	Roy Wilson	Hugh Anderson
2LM	Country Broadcasting Services Ltd.	S. Allan
2MG	C. A. Monks	E. A. Wood
2MO	Tamworth Radio and Development Co.	—
2MW	Walter J. Smyth	Macquarie Broadcasting Services Pty. Ltd.
2NZ	Country Broadcasting Services Ltd.	S. Allen
2PK	C. A. Monks	E. A. Wood
2QN	C. A. Monks	R. M. Byrne
2RG	D. N. Scott	H. Anderson
2SM	Station Sales Staff	J. M. Jordan
2TM	Tamworth Radio and Development Co.	S. Allen
2UE	Station Sales Staff	Noel Dickson
2UW	Station Sales Staff	P. Sullivan
2WG	Riverina Broadcasters Pty. Ltd. (S. Decent)	I. V. Robertson
2WL	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
2XL	C. A. Monks.	—

## VICTORIAN STATIONS.

3AK	Radiovision Pty. Ltd.	Station Sales Staff
3AW	Macquarie Broadcasting Services Pty. Ltd.	Station Sales Staff
3BA	Geo. Hill	Stanford Allan
3BO	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
3CV	Radiovision Pty. Ltd.	K. L. Corr

## Broadcasting Station Representatives (continued)

### VICTORIAN STATIONS (Contd.)

3DB-LK	I. W. Phillips	Station Sales Staff
3GL	Geo. Hill	Stanford Allan
3HA	Macquaries Broadcasting Services Pty. Ltd.	V. B. Network
3KZ	C. A. Monks	Station Sales Staff
3MA	Geo. Hill	Stanford Allan
3SH	Macquarie Broadcasting Services Pty. Ltd.	V. B. Network
3SR	A. D. Bourke	"Argus 3UZ" Network
3TR	Macquarie Broadcasting Services Pty. Ltd.	V. B. Network
3UL	A. D. Bourke	"Argus 3UZ" Network
3UZ	A. D. Bourke	Station Sales Staff
3XY	D. N. Scott	Station Sales Staff
3YB	A. D. Bourke	"Argus 3UZ" Network

### QUEENSLAND STATIONS.

4AK	I. W. Phillips	G. N. Bednall
4AT	C. A. Monks	E. A. Wood
4AY	A. D. Bourke	P. Sullivan
4BC-SB	A. D. Bourke	P. Sullivan
4BH	Chandlers Broadcasting Service (Walter J. Smyth)	Macquarie Broadcasting Services Pty. Ltd.
4BK	I. W. Phillips	G. N. Bednall
4BU	I. W. Phillips	Amalgamated Wireless (A/sia) Ltd.
4CA	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
4GR	A. D. Bourke	P. Sullivan
4IP	Alan Clay	—
4LG	A. D. Bourke	P. Sullivan
4MB	A. D. Bourke	Amalgamated Wireless (A/sia) Ltd.
4MK	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
4PM	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
4RO	A. D. Bourke	P. Sullivan
4TO	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
4VL	A. D. Bourke	P. Sullivan
4WK	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
4ZR	A. D. Bourke	P. Sullivan

### SOUTH AUSTRALIAN STATIONS.

Station	Sydney Representative	Melbourne Representative
5AD	F. Thompson	G. N. Bednall
5AU	C. A. Monks	E. A. Wood
5DN	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
5KA	C. A. Monks	E. A. Wood
5MU	F. Thompson	G. N. Bednall
5PI	F. Thompson	G. N. Bednall
5RM	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
5SE	F. Thompson	G. N. Bednall

### WESTERN AUSTRALIAN STATIONS.

6PM	Alan Clay	H. Anderson
6GE	Amalgamated Wireless (A/sia) Ltd.	Amalgamated Wireless (A/sia) Ltd.
6IX	I. W. Phillips	B. Rieusset
6KG	Alan Clay	H. Anderson
6ML	I. W. Phillips	B. Rieusset
6PM	Alan Clay	H. Anderson
6PR	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
6WB	I. W. Phillips	B. Rieusset

### TASMANIAN STATIONS.

7BU	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
7DY	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
7EX	D. N. Scott	H. Anderson
7HO	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
7HT	A. L. Finn	H. Anderson
7LA	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
7QT	Macquarie Broadcasting Services Pty. Ltd.	Macquarie Broadcasting Services Pty. Ltd.
7UV	C. A. Monks	E. A. Wood

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PUBLICATIONS PTY.  
LTD.**

30 Carrington Street, Sydney  
or Box 3765, G.P.O., Sydney  
'Phone B 7188

Melb. Address: 239 Collins Street,  
'Phone Cent. 442

# Broadcasting Station Representatives

The following list of station representatives is compiled from information received (effective as of March 31, 1939). The station call-sign alongside a name indicates the station advised as being represented:—

## SYDNEY

**AMALGAMATED WIRELESS (A/SIA) LTD.**, Radio Advertising Department, 47 York Street, Sydney. 2CH, 2AY, 2GF, 2GN, 3BO, 4CA, 4MK, 4PM, 4TO, 4WK, 6GE, VPD2 Suva, Fiji. 'Phone: BW2211.

**BOURKE, A. D.**, 5-7 Barrack Street, Sydney. 2UW, 2AD, 3SR, 3UL, 3UZ, 3YB, 4AY, 4BC-SB, 4GR, 4LG, 4MB, 4RO, 4VL, 4ZR. 'Phone: B2085.

**CHANDLERS BROADCASTING SERVICE (Walter J. Smyth)**, Australia House, Carrington Street, Sydney. 2CK, 2MW, 4BH. 'Phone: B6401.

**CLAY, ALAN**, 106 Sussex Street. 4IP, 6AM, 6PM, 6KG. 'Phone: BW 2994.

**COUNTRY BROADCASTING SERVICES LTD.**, Hosking House, Hosking Place, 84½ Pitt Street, Sydney. 2GZ, 2LM, 2NZ. 'Phone: BW1428.

**COX, E. T.**, 3rd Floor, Shell House, Carrington Street, Sydney. 2KO. 'Phone: B5370.

**FINN, A. L.**, A.C.A. Building, King Street, Sydney. 7HT. 'Phone: BW 6251.

**HILL, Geo.**, Chamber of Commerce Building, Grosvenor Street, Sydney. 3BA, 3GL, 3MA. 'Phone: B 2840.

**MACQUARIE BROADCASTING SERVICES PTY. LTD.**, 20 Bligh Street, Sydney. 2CA, 2GB, 2HR, 2KA, 2KM, 2WL, 3AW, 3HA, 3SH, 3TR, 5DN-RM, 6PR, 7BU, 7HO-7QT, 7LDY. 'Phone: B7887.

**MONKS, C. A.**, 2nd Floor, Carrington Street, Sydney. 2HD, 2MG, 2PK, 2QN, 2XL, 3KZ, 4AT, 5KA-AU, 7UV. 'Phone: BW4135.

**PHILIPS, I. W.**, Warwick Building, Hamilton Street, Sydney. 2BH, 3DB-LK, 4BK-AK, 4BU, 6IX-WB, 6ML and Major Network. 'Phone: B6451.

**RADIOVISION PTY. LTD.**, 61 Hunter Street, Sydney. N.C.B.S. of N.Z., 3AK, 3CV. 'Phone: B5453.

**RIVERINA BROADCASTERS PTY. LTD.** (S. Decent), Lisgar House, Carrington Street, Sydney. 2WG. 'Phone: B5449.

**SCOTT, D. N.**, Watson House, Bligh Street, Sydney. 2RG, 3XY, 7EX. 'Phone: BW7283.

**TAMWORTH RADIO DEVELOPMENT CO. LTD.**, Australia House, Carrington Street, Sydney. 2MO, 2TM. 'Phone: BW7375.

**THOMPSON, F. W.**, Warwick Building, Hamilton Street, Sydney.

5AD, 5MU, 5PI, 5SE. 'Phone: B6451.

**TRANSCONTINENTAL BROADCASTERS LTD.**, 19 Bligh Street, Sydney. 2BS. 'Phone: BW 4501.

**WILSON, R.**, Watson House, Bligh Street, Sydney. 2BE, 2DU, 2LF. 'Phone: BW7283.

## MELBOURNE

**ALLAN, STANFORD**, Newspaper House, 247 Collins Street, Melbourne. 2GZ, 2LM, 2NZ, 2TM, 3BA, 3GL, 3MA. 'Phone: Cent. 4705.

**AMALGAMATED WIRELESS (A/SIA) LTD.**, 167-9 Queen Street, Melbourne. 2AD, 2AY, 2CH, 2GF, 2GN, 3BO, 4BU, 4CA, 4MK, 4PM, 4TO, 4WK, 6GE. 'Phone: M 4161.

**ANDERSON, HUGH**, Poster House, 130 Exhibition Street, Melbourne. 2BH, 2KO, 2LF, 2RG, 6AM, 6PM, 6KG, 7EX, 7HT. 'Phone: Cent. 4367.

**"ARGUS"-3UZ NETWORK**, 365 Elizabeth Street, Melbourne. 3SR, 3UL, 3UZ, 3YB. 'Phone: Cent. 572.

**BEDGOOD ADVERTISING CO.**, No. 6 St. James' Building, 129 William Street, Melbourne. 2BE. 'Phone: MU 4046.

**BEDNALL, G. N.**, Newspaper House, 247 Collins Street, Melbourne. 4BK-AK, 5AD-MU, 5PI, 5SE, and Major Network. 'Phone: MX4323.

**BYRNE, R. M.**, 499 Little Collins Street, Melbourne. 2QN. 'Phone: M5981.

**CORR, K. L.**, 68-70 King Street, Melbourne. 3CV. 'Phone: MU 6171.

**DICKSON, N.**, 130 Exhibition Street, Melbourne. 2UE. 'Phone: Cent. 4367.

**JORDAN, J. M.**, 238 Flinders Lane, Melbourne. 2SM. 'Phone: F4695.

**MACQUARIE BROADCASTERS SERVICES PTY. LTD.**, 37 Queen Street, Melbourne. 2CA, 2GB, 2HR, 2KA, 2KN, 2MW, 2WL, 2BH, 5DN-RM, 6PR, 7BU, 7HO-7QT, 7LA-7DY. 'Phone: 4878.

**RIEUSSET, B.**, A.P.A. Building, 379 Collins Street, Melbourne. 6IX, 6ML, 6WB. 'Phone: MU4505.

**ROBERTSON, I. V.**, 379 Collins Street, Melbourne. 2BS, 2CK, 2KY, 2WG. 'Phone: MU4725.

**SULLIVAN, P.**, 18 Queen Street, Melbourne. 2UW, 4AY, 4BC-SB, 4GR, 4MB, 4RO, 4VL, 4ZR and C.B.N. 'Phone: MU2819.

**VICTORIAN BROADCASTING NETWORK**, 239 Collins Street, Melbourne. 3HA, 3SH, 3TR. (In association with 3AW). 'Phone: MU4731.

**WOOD, E. A.**, Shell. Cnr. Bourke Street, Melbourne. 2HD, 2MG, 2PK, 4AT, 5KA-5AU, 7UV. 'Phone: MU2735.

# AUSTRALIAN COMMERCIAL STATIONS

## Telegraphic Addresses and Telephone Numbers

Station	Telegraphic	Telephone	Station	Telegraphic	Telephone
2AD	Twoad Armidale	Armidale 180	3KZ	Threekz Melbourne	Cent. 318, 319, 279
2AY	Twoay Albury	Studio: Albury 289. Transmitter: Albury 261	3LK	Threedb Melbourne	F 2118-9 Melbourne
2BE		Bega 192, 225	3MA	Station 3MA Mildura	Mildura 25
2BH	Twobh Broken Hill	Broken Hill 16, 422, 567	3SH	Thresh Swan Hill	Swan Hill 226
2BS		Bathurst 555	3SR	3SR Shepparton	Shepparton 505, 555
2CA	Twoca Canberra	Canberra 678, 679	3TR		Sale 107
2CH	Expanse Sydney	BW 2211	3UL	Threel Warragul	Warragul 326, 327
2CK	Twock Cessnock	Cessnock 408-409	3UZ	Threuz Melbourne	Central 572, MX 3529
2DU	Twodu Dubbo	Dubbo 440	3XY	Efttee Melbourne	Central 6612 (7 lines)
2GB	Twogb Sydney	B 7876-79, B 7870, B 2986, B 1092			Warrnambool 388, 188
2GF	Twogf Grafton	Office: Grafton 289, Studio: Grafton 290	4AK	Fourak Brisbane	B 1025 (4 lines)
2GN		Office: Goulburn 365, Studio and Trans.: Goulburn 91	4AT		Atherton 223
2GZ	Twogz Central New South Wales	BW 1428, B 1818 Sydney	4AY	Fouray Ayr	Ayr 219
2HD		Newcastle 1263, Waratah 487	4BC	Fourbc Brisbane	B 0333 (4 lines)
2HR	Twohr West Maitland	Office and Studio: West Maitland 410, 431; Transmitter: West Maitland 923; Cessnock Studio: Cessnock 399	4BH	Fourbh Brisbane	B 2002 (4 lines)
2KO	Twoko Newcastle	Newcastle 932, 957	4BK	Fourbk Brisbane	B 1025 (4 lines)
2KA		BW 4501-2	4BU	Fourbu Bundaberg	Bundaberg 505
2KM		Kempsey 36	4CA	Fourca Cairns	Cairns 2972
2KY		M 6291	4GR	Fourgr Toowoomba	Toowoomba 88
2LF		Young 27; Sydney Office: BW 7283	4IP	Fourip Ipswich	Ipswich 267
2LM	Twolm Lismore	Studio: Lismore 1028; Station: Lismore 1029	4LG	Fourlg Longreach	Longreach 102, 224
2LT (Projected Station)			4GY (Projected)		
2MG		Mudgee 179	4MB	Fourmb Maryborough	Maryborough 214, 452, 424
2MO	Twomo Gunnedah	Gunnedah 236	4MK		Mackay 333
2MW	Twomo Murwillumbah	Office: Murwillumbah 12; Studio: Murwillumbah 432	4PM		
2NZ	Twonz Inverell	Inverell 9, 4	4RO	Fourro Rockhampton	Rockhampton 9
2PK	Twopekay Parkes	Parkes 480	4SB	Foursb Kingaroy	Kingaroy 202
2QN		Deniliquin 260, 307	4TO	Fourto Townsville	Studio: Townsville 490; Transmitter, Townsville 349
2RG	Tworg Griffith	Griffith 45			Charleville 221
2SM		B 7294-5-6	4VL		Warwick 8
2TM	Twotm Tamworth	Office: Sydney BW 7375; Tamworth 211, 212	4WK	4WK Warwick	Roma 80
2UE	Twoue Sydney	BW 3121 (6 lines)	4ZR		
2UW	Twouw Sydney	M 6686			
2WG	Twowg Wagga	Wagga 164; Sydney Office: B5449			
2WL		Wollongong 203			
2XL		Cooma, 218			
3AK		M 5667, M 5668, W 2100	5AD-5PI-		C7440 (14 lines)
3AW	Threaw Melbourne	Cent. 1112-3-4-5	5MU	Fivead Adelaide	
3BA	Threeba Ballarat	Ballarat 568	5AN	Fiveau Pt. Augusta	Port Augusta 124
3BO		Studio: Bendigo 1666. Transmitter: Kangaroo Flat 26	5DN-		
3CS (Projected Station)			5RM	Firstation Adelaide	C8006 (3 lines), C8118
3CV	Threecv Bendigo	Bendigo 226, Charlton 220	5KA	Fiveka Adelaide	C2920-2921-2922
3DB	Threedb Melbourne	F2118 (6 lines)	5SE	Fivese Mt. Gambier	Mt. Gambier 442
3GL	Threegl Geelong	Geelong 1516, 3734	6AM-		B4921, B8484
3HA	Radio Centre Melbourne	XM 4731 Melbourne; Hamilton 316, 317	6PM		
			6GE	Sixge Geraldton	Geraldton 130; Transmitter Geraldton 62
			6IX	Sixix Perth	B9321, 9322, 9323
			6KG		Kalgoorlie 464
			6ML	Sixml Perth	B9321, 9322, 9323
			6WB	Sixwb Perth	Studio: B9321, B9322, B9323. Transmitter: Katanning 144
			6PR	"Nicholson" Perth	B6131 (4 lines)
			6TZ (Projected Station)		
			7BU		Burnie 125, 268
			7DY	7DY Derby	Derby 55
			7EX	Sevenex Launceston	Launceston 777 (2 lines)
			7HO	Sevenho Hobart	Hobart 6008, 4226
			7HT	7HT Hobart	Hobart 5083, 5084
			7LA		Launceston 1486
			7QT		Queenstown 124
			7UV	Sevenuv Ulverstone	Ulverstone 48; Devonport 437

# CONTACT EXECUTIVES

of

# AUSTRALIAN BROADCASTING STATIONS

The following list of Managers, Commercial Managers (or Sales Managers) and Chief Engineers, of Australian Commercial Broadcasting Stations is compiled from information contained in questionnaires returned from the stations. Its purpose is to give quick reference to the names of the various executives most frequently contacted in the normal course of transacting commercial broadcasting station business.

Station	Manager	Commercial Manager.	Chief Engineer.
2AD	Blake, L.	Blake, L.	Taylor, H. V. L.
2AY	Dower, John	Dower, John	Dower, John
2BE	James, E.	James, E.	Ling, J.
2BH	Hay, A. Colin R.	Hay, A. C.R.	Brown, H. M.
2BS	Paddison, A. C.	Darke, H. S.	Croke, T. L.
2CA	Sharp, C. S.	Sharp, C. S.	Ryan, A. J.
2CH	Spencer, T.	Sproule, C. T.	Stevens, F.
2CK	Jeffrey, L.	Jeffrey, L.	Taylor, T.
2DU	Walpole, F. S.	Walpole, F. S.	Holmes, D. E.
2GB	Horner, H. G.	Lane, R. E.	Schultz, L. N.
2GF	Fox, A. E. R.	Fox, A. E. R.	Fox, A. E. R.
2GN	Lewis, H. J.	Lewis, H. J.	Lewis, H. J.
2GZ	Riddley, J. E.	Ridley, A.	Crouch, E. C.
2HD	O'Halloran, M.	Unsworth, G.	Oakley, R. A.
2HR	Radford, J. A.	Palmer, B.	Mather, A. S.
2KO	Fairhall, A.	Cox, E. T.	Greenhalgh, K. N.
2KA	Paddison, A. C.	Darke, H. S.	—
2KM	Hutchinson, Val.	Darke, H. S.	Hutchinson, Val.
2KY	Beaver, H. E.	Beaver, H. E.	Brown, J. H.
2LF	Whitham, H. B.	—	—
2LM	Woodland, C. V.	Wharf, H.	Tonkin, S.
2MG	Milton, E. E.	Milton, E. E.	Frewin, W.
2MO	Whistler, A. H.	Whistler, A. H.	Tibbett, E.
2MW	Pile, R.	Pile, R.	Small, T. A.
2NZ	Gordon, L.	Gordon, L.	Crouch, E. C.
2PK	Parris, J. E.	Parris, J. E.	Parris, J. E.
2QN	Jackson, Basil	Byrne, R. F.	Jarvis, V.
2RG	Jones, D. L. M.	—	A.W.A.
2SM	Meany, Mons. J. A.	Quirk, L. P.	Whitcomb, T.
2TM	Higginbotham, E.	Higginbotham, E.	Whitcomb, T.
2UE	Anderson, O.	Campbell-Jones, A. A.	Stevenson, Murray H.
2UW	Marden, C. F.	Levy, F. E.	McNeil, T. A.
2WG	Roberts, E. V.	Roberts, E. V.	Roberts, P.
2WL	Yeldon, R. A.	Yeldon, R. A.	Makin, P.
2XL	Evans W. A.	Evans, W. A.	Try, R. K.
3AK	Tilley, C.	Weiss, C.	Wright, L.
3AW	Taylor, J. T.	O'Hagan, J. F.	Ryan, John W.
3BA	Davey, J. H.	Whykes, E. J. W.	Kerr, A. D., Wilson, . A.
3BO	Banney, J. P.	Banney, J. P.	Banney, J. P.

(Continued next page)

## Contact Executives of Australian Broadcasting Stations (contd.)

Station.	Manager.	Commercial Manager.	Chief Engineer.
3CV	Holloway, E.	Holloway, E.	Hopton, A.
3DB	Worrall, D.	Brewin, D.	Hooper, M.
3HA	Fitts, R. A.	Dixon, N. F.	Murphy, J.
3KZ	Morgan, S.	Murray, A. J.	Grace, A.
3LK	Worrall, D.	Brewin, D.	Buzzacott, N.
3MA	Anderson, Val. J.	Anderson, Val. J.	Folie, Max
3SH	Fitts, R. A.	Dixon, N. F.	Evans, E.
3SR	Kemp, S. J. A.	Dinneny, V. M.	Shortell, Ray
3TR	Chamberlain, F.	Dixon, N.	Nolte, George
3UL	Kemp, S. J. A.	Lewis, E. J.	Clyne, E. M.
3UZ	Kemsley, A. N.	Abramowski, O. W.	Glew, L. S.
3XY	Holt, Tom	Campbell, K. M.	Shephard, Lindsay.
3YB	Kemp, S. J. A.	Strange, C. A.	—
4AK	Robertson, Alec	Fair, Roger	Dixon, A. L.
4AT	Walters, L. A.	Walters, L. A.	Armistead, A. K.
4AY	Dahl, E. M. L.	Dahl, E. M. L.	Faber, W.
4BC	Roberts, Russell	Prince, A. L.	Elliott F. E.
4BH	Carson, C. R.	Stokes, G.	Littler, E. C.
4BK	Robertson, Alec	Fair, Roger.	Dixon, A. L.
4BU	Sharp, J. A.	Sharp, J. A.	Green, Hector
4CA	Pearce, F. R.	Pearce, F. R.	Pearce, F. R.
4GR	Gold, E.	Harrington, S. R.	Bishop, N.
4IP	Lambart, T.	Lambart, T.	Fairweather, K.
4LG	Nicholson, R. M.	Nicholson, R. M.	—
4GY	—	—	—
4MB	Wynne, A. P.	Storey, O. J.	Beatson, R. J.
4PM	Frank, K.	Frank, K.	Frank, K.
4RO	Rheuben, E. J.	Rheuben, E. J.	Semfel, E.
4SB	—	Le Brun, P.	Cruickshank, N. W.
4TO	Lawrence, A. E.	Lawrence, A. E.	Lawrence, A. E.
4VL	Searle, B.	—	—
4WK	Hurdell, Charles A.	Hurdell, C. A.	Hurdell, C. A.
4ZR	Gold, E. E.	Gold, E. E.	Walker, Jack
5AD	Kinnear, A. C.	Chapman, M. D.	Gooding, D. M.
5AU	Schneider, W.	Schneider, W.	Nulley, G. F.
5DN	White, R. M.	Larkin, J. S.	Hume, E. J.
5KA	Schneider, W.	Hunter, H.	Tareha, C. A.
5MU	Kinnear, A. C.	Chapman, M. D.	Gooding, D. M.
5PI	Kinnear, A. C.	Chapman, M. D.	Gooding, D. M.
5RM	White, R. M.	White, R. M.	Hume, E. J.
5SE	Kinnear, A. C.	Cameron, J.	Welling, T.
6AM	Whitford, F. R.	Tozer, J.	Tredrea, F.
6GE	Ebrall, Herbert N.	Ebrall, Herbert	Morrison, C.
6IX	Samuel, B.	Churchward, E. C.	Simmons, H. T.
6KG	Whitford, F. R.	Tozer, J.	Tredrea, F.
6ML	Samuel, B.	Churchward, E. C.	Simmons, H. T.
6WB	Samuel, B.	Churchward, E. C.	Simmons, H. T.
6PM	Whitford, F. R.	Tozer, J.	Tredrea, F.
6PR	Kennedy, T. St. J.	Kennedy, T. St. J.	—
7BU	Towner, A. D.	O'Brien, B.	Lord, Tasman
7DY	Parish, R.	Parish, R.	Lord, T.
7EX	Breatley, R.	Breatley, R.	Culliman, C. A.
7HO	Bills-Thompson, G.	Rycroft, J. L.	Nicholas, W.
7HT	Thomas, R. C.	Cross, C. J.	Miles, G.
7LA	Richardson, D. L.	Vertigan, J.	Sydes, V.
7QT	Ward, R. E.	Ward, R. E.	Chappell, L. A.
7UV	Wood, E. A.	Bray, G. A.	Kitto, T. C.

## DIRECTORS OF AUSTRALIAN COMMERCIAL RADIO STATION COMPANIES

- A**  
Abbott, J. P., 2GZ.  
Adermann, C. F., 4SB.  
Aitken, J. B., 3UL.  
Albert, A. F., 4BC, 4RO, 4GR, 4MB, 2UW.  
Albert, M. F., 4BC, 2UW, 4MB, 4GR, 4RO (Vice Chairman).  
Allen, F. H., 3AW.  
Apperley, G., 3HA.  
Austin, Dr. R. B., 2AD (Chairman).
- B**  
Balmain, W. H., 2BE (Chairman).  
Barker, E. M., 6PR.  
Bater, G. S., 3MA.  
Bean, L. P. R., 7QT.  
Bennett, O., 2TM, 2MO.  
Blake, R. L., 2AD.  
Body, E. J., 2DU (Chairman).  
Bonnython, Sir J. Lavington, 5AD, 5PI, 5MU, 5SE.  
Bowly, Charles, 4BC, 4RO.  
Brady, James, 2BE.  
Brand, A. E., 2LM.  
Bray, G. A., 7UV.  
Budd, A. A., 2MW.  
Bush, R. B., 2BE.
- C**  
Carr, W. B., 5SE, 5AD, 5PI, 5MU.  
Carse, John, 2QN.  
Chandler, F. B., 4BH.  
Chandler, J. B., 4BH, 4SB.  
Chapman, W. F., 2BE.  
Christensen, A. J., 4BU.  
Clarke, T. W. J., 3BA (Chairman).  
Collins, Thomas, 4WK.  
Cook, R. B. (Managing), 3GL.  
Cornish, S., 4AT.  
Cromie, Charles T., 3UZ.  
Crookall, W., 5AD, 5PI, 5MU, 5SE.  
Curtis, R. G., 4BU.
- D**  
Dahl, E., 4AT.  
Daniell, F. H., 2GB, 3AW, 2WL, 5DN, 5RM.  
Daniell, R., 2HR.  
Darrow, George, 4SB.  
Davey, J. H., 3BA (Managing Director).  
Davies, G. E., 7HO.  
Denison, Sir H., 2GB, 5DN, 5RM.  
Denison, L. A., 2GB.  
Denison, R. E., 5DN, 5RM, 2WL, 2GB, 2HR, 2CA.  
Dickson, A. H., 6PR.  
Dodds, M., 2CK.  
Downer, J. F., 5AD, 5PI, 5MU, 5SE (Chairman).  
Downing, H. P., 6PR (Chairman).  
Doyle, S. F., 4GR, 4SB, 4ZR, 4MB, 2UW, 4BC, 4RO (Chairman).  
Drummond, Hon. H. M., M.L.A., 2NZ, 2AD.  
Ducan, R. de R., 2WL.  
Dumas, Lloyd, 5AD, 5PI, 5MU, 5SE.  
Dunlop, C. H., 2HR.  
Dunstan, William, 3DB.
- E**  
Edgar, W. H., M.L.C., 3AK.  
Elliott, R. D., 3MA.  
Ettelson, P. W., 3XY.
- F**  
Fagan, R., 2SM.  
Fairhall, Allan, 2KO.  
Fairweather, K., 4IP.  
Falknemiier, J., 4VL.  
Featombly, G. A., 3HA, 3SH.  
Findlay, A. P., 7LA, 7DY, 7BU.  
Findlay, H. S., 7HO.  
Findlay, M. A., 7LA, 7QT.  
Findlay, P. A., 7BU.  
Fink, L., 3DB.  
Fisk, Sir Ernest, 2CH, 7LA, and A.W.A. Stations (Chairman).  
Fitzhardings, F. M. B., 2DU.  
Fleming, J. B., 2GZ.  
Fuller, H., 3YB.
- G**  
Garrett, C. A., 2WG.  
Gaviott, A. E., 7QT.  
Gelle, Dr. Louis., 6GE.  
Gilligan, D. J., 2GZ.  
Gold, E. E., 4GR, 4ZR (Chairman).  
Gove, Cyril, 2QN.  
Gowing, D. R., 2BE.  
Greig, H., 6WB, 6IX, 6ML.
- H**  
Harrison, V. G. H., 3XY.  
Harrison, W., 3AK.  
Harvey, W. J., 4BU (Chairman).  
Hay, A. C. R., 2BH.  
Henderson, K. A., 3UL, 3YB.  
Henderson, Sir G., 3SR.  
Herring, M. S., 4BK, 4AK.  
Higginbotham, E., 2MO, 2TM (Managing Director and Chairman).  
Hodges, E. W., 2MG.  
Holloway, E., 3CV.  
Holmes, D. E., 2DU.  
Hook, L. A., 4WK.  
Hughes, J. A., 2KY.  
Humphry, Jack L., 4AY.  
Hunter, H., 5KA.  
Hurley, W., 2SM.
- J**  
Jackson, H. B., 6WB, 6IX, 6ML.  
Jameson, K. J., 2HD.  
Johnson, C., 2PK.  
Johnson, E. B., 4IP.  
Johnson, W. J., 4IP.  
Johnston, I., 4AT.  
Jones, M. L., 2RG.  
Joseph, A., 2TM.
- K**  
Kelly, Sir Dalziel G., 3YB, 3UL (Chairman).  
Kennedy, S., 2MO.  
King, R. A., 2KY.  
Kingsley, A., 3SR.  
Kingston, F. C., 6WV, 6IX, 6ML.  
Kitto, T. C., 7UV.  
Knapton, H. T., 2NZ.
- L**  
Lambert, Terence, 4IP.  
Lanigan, C. D., 3MA.  
Lansell, G. V., 3CV.  
Lashmar, E., 2SM.  
L'Estrange, M., 2SM.  
Lingard, W. E., 2CK.  
Low, D. Robert, 4AY.
- M**  
MacAdam, V., 2MO.  
Macartney, Sir E., 4BK, 4AK.  
Macgillivray, A., 2HD.  
Manchee, A. F., 2NZ, 2GZ (Chairman).  
Marden, C. F., 4BC, 4RO.  
Mars, A. G. B., 4VL.  
Marsh, Gordon, W., 3UZ.  
Mather, A. S., 2HR.  
Matthews, A. J., 2PK.  
Mayne, W. G., 4ZR.  
Meacham, F. J., 4IP.  
Meany, J. A. Rt. Rev. Monsignor, 2SM.  
Middleton, J. H., 2NZ, 2GZ.  
Millen, J. D., 7LA.  
Milton, E. E., 2MG.  
Milton, H. W., 2MG.  
Mitchell, M. G., 2DU.  
Mitchell, V. F., 4BH.  
Moloney, J., 2KY.  
Morgan, C. P., 2BE.  
Morgan, S., 3KZ.  
Morgan, W. V., 3KZ.  
Morris, R., 7HT.  
Moses, F. H., 2KM.  
Murdoch, Sir Keith, 3DB, 5AD, 5SE, 5PI, 5MU.  
Murray, J. S., 2BH (Chairman).  
Murray, T. G., 2SM.  
Musgrove, M. D'O., 6WB, 6ML, 6IX.  
Muston, Henry C., 4SB.
- Mc**  
McAlpine, A., 2KY.  
McCann, B., 7HT.  
McCann, L., 7HT.  
McCauley, A. L., 2KA, 2KM.  
McCauley, Geo. E., 2KA.  
McDonagh, W., 2MO.  
McGeoch, R. S., 4ZR.  
McIntosh, C. J., 2LM.  
McKensie, J., 3GL.  
McLean, J., 2LM.
- N**  
Nettlefold, Len, 7HO.  
Nicholl, F. E., 2MW.  
Nicholson, J. Maud, 4LG.  
Nicholson, R. M., 4LG.  
Nilsen, Oliver J., 3UZ.  
Nilsen, O. V. A., 3UZ.
- O**  
O'Halloran, M. W., 5KA.  
O'Neill, F., 2KY.  
O'Neill, John P., 2KA, 2KM (Chairman).  
O'Neill, M., 2SM.  
Opie, Dr. A. J., 2LM.  
O'Sullivan, N., 4BH.
- P**  
Pacini, H., 3DB.  
Paddison, A. C., 2KM, 2KA.  
Parkinson, W., 4IP.  
Paton, L. J., 6PR.  
Pell, E. M., 2BE.  
Periam, A. W., 2GB.  
Pickhover, H., 2KO.  
Pinkerton, H. R., 5DN, 5RM.  
Pratt, A. C., 2MW.  
Price, J. C., 2MW.
- Q**  
Queale, W., 5DN, 5RM (Chairman).
- R**  
Raward, J. T., 2MW.  
Ricketson, S. K., 3SR, 3UL.  
Ridley, J. E., 2NZ.  
Riley, H. G., 7DY.  
Roberts, A. I., 2WG.  
Roberts, E. V., 2WG.  
Robertson, C. N., 2LM (Chairman).  
Robinson, E., 2HR.  
Robinson, I., 2HR.  
Rock, A. P., 6GE.  
Rolph, G. B., 7EX.  
Rolph, W. R., 7EX.  
Ross, Dr. Lloyd, 2KY.
- S**  
Schneider, W., 5KA.  
Scoth, A. K., 2DU.  
Sheahan, J. P., 3PK.  
Sheedy, E. P. M., 2CK.  
Sheffer, H. M., 2TM.  
Shepherd, L. W., 6GE, 3XY.  
Simpson, E., 2AD.  
Sloman, N. G., 3KZ.  
Smith, C. P., 6WB, 6IX, 6ML.  
Smith, R. E., 2CK.  
Smith, W. A., 2BE.  
Sommerlad, Hon. E. C., C.B.E., M.L.C., 2AD, 2NZ.  
Sutherland, G., 3HA.  
Spicer, F. W., 2PK.  
Spowers, Allan, 3YB.  
Stephens, W. J., 3CV.  
Stevenson, C. V., 2UE.  
Stevenson, Murray, 2UE.  
Stodart, J. D., 6PR.  
Sutherland, G., 3AW.  
Syme, D. F., 3SH, 3TR, 3AW.  
Syme, M. A., 3SH, 3TR.  
Syme, O. J., 3AW.
- T**  
Tait, F. S., 3AW.  
Tait, H. J., 3AW.  
Tareha, C. A., 5KA.  
Tarlinton, L. F., 2BE.  
Tasker, James, 2QN.  
Tailor, C. P. A., 3BA.  
Tailor, J., 3DB.  
Tailor, K., 3BA.  
Thompson, E. J. K., 3UL.  
Thompson, G., 2MG.  
Thring, Olive, 3XY.  
Towner, A. D., 7BU, 7DY.
- W**  
Walsh, A. J., 7UV.  
Whitcomb, T., 2TM.  
Whitford, A. A., 6AM, 6PM.  
Whitford, A. P. H., 6AM, 6PM.  
Whitford, E. I., 6AM, 6PM.  
Whitford, F. R., 6AM, 6PM.  
Whitham, H. D., 2RG, 2LF.  
Whyte, A., 3DB.  
Williams, J. F., 4BK, 4AK.  
Wilson, J. T., 4WK.  
Wright, T., 2KY.  
Wynne, A. P., 4MB.
- Y**  
Yeldon, R. A., 2WL.  
Young, Russell, 7HT (Chairman).

## Directors of Commercial Station Companies (contd.)

- P**  
Pacini, H., 3DB.  
Paddison, A. C., 2KM, 2KA.  
Parkinson, W., 4IP.  
Paton, L. J., 6PR.  
Pell, E. M., 2BE.  
Periam, A. W., 2GB.  
Pickhover, H., 2KO.  
Pinkerton, H. R., 5DN, 5RM.  
Pratt, A. C., 2MW.  
Price, J. C., 2MW.
- Q**  
Queale, W., 5DN, 5RM (Chairman).
- R**  
Raward, J. T., 2MW.  
Ricketson, S. K., 3SR, 3UL.  
Ridley, J. E., 2NZ.  
Riley, H. G., 7DY.  
Roberts, A. I., 2WG.  
Roberts, E. V., 2WG.  
Robertson, C. N., 2LM (Chairman).  
Robinson, E., 2HR.  
Robinson, I., 2HR.  
Rock, A. P., 6GE.  
Rolph, G. B., 7EX.  
Rolph, W. R., 7EX.  
Ross, Dr. Lloyd, 2KY.
- S**  
Schneider, W., 5KA.  
Scoth, A. K., 2DU.  
Sheahan, J. P., 3PK.  
Sheedy, E. P. M., 2CK.  
Sheffer, H. M., 2TM.  
Shepherd, L. W., 6GE, 3XY.  
Simpson, E., 2AD.  
Sloman, N. G., 3KZ.  
Smith, C. P., 6WB, 6IX, 6ML.  
Smith, R. E., 2CK.  
Smith, W. A., 2BE.  
Sommerlad, Hon. E. C., C.B.E., M.L.C., 2AD, 2NZ.  
Sutherland, G., 3HA.  
Spicer, F. W., 2PK.  
Spowers, Allan, 3YB.  
Stephens, W. J., 3CV.  
Stevenson, C. V., 2UE.  
Stevenson, Murray, 2UE.  
Stodart, J. D., 6PR.  
Sutherland, G., 3AW.  
Syme, D. F., 3SH, 3TR, 3AW.  
Syme, M. A., 3SH, 3TR.  
Syme, O. J., 3AW.
- T**  
Tait, F. S., 3AW.  
Tait, H. J., 3AW.  
Tareha, C. A., 5KA.  
Tarlinton, L. F., 2BE.  
Tasker, James, 2QN.  
Tailor, C. P. A., 3BA.  
Tailor, J., 3DB.  
Tailor, K., 3BA.  
Thompson, E. J. K., 3UL.  
Thompson, G., 2MG.  
Thring, Olive, 3XY.  
Towner, A. D., 7BU, 7DY.
- W**  
Walsh, A. J., 7UV.  
Whitcomb, T., 2TM.  
Whitford, A. A., 6AM, 6PM.  
Whitford, A. P. H., 6AM, 6PM.  
Whitford, E. I., 6AM, 6PM.  
Whitford, F. R., 6AM, 6PM.  
Whitham, H. D., 2RG, 2LF.  
Whyte, A., 3DB.  
Williams, J. F., 4BK, 4AK.  
Wilson, J. T., 4WK.  
Wright, T., 2KY.  
Wynne, A. P., 4MB.
- Y**  
Yeldon, R. A., 2WL.  
Young, Russell, 7HT (Chairman).

**Money Makes Money . . . .**

**If Spent Where Money Is!**

**2TM**  
T.P.N.



**2TM**  
C.B.N.

Peel Street, Tamworth.

The Centre of the Commercial Centre of Northern New South Wales in which 2TM's Studios are Located.

Associated T.P.N. Stations: 2KO, 2GZ, 2NZ, 2LM

**2TM - 2,000 Watts - On the Air 17 Hours Daily - 2TM**

(Continued next page.)

# WHO'S WHO

## In Australian Commercial Broadcasting

### 1939 Office Bearers of the Australian Federation of Commercial Broadcasting Stations

#### President

**MARDEN, Charles Frank:** President of The Australian Federation of Commercial Broadcasting Stations, general manager of the Australian Broadcasting Company Pty. Ltd. and the Commonwealth Broadcasting Corporation Pty. Ltd., director and general



manager of the Commonwealth Broadcasting Corporation (Q.) Ltd. Was general manager of the Australian Broadcasting Company when it controlled the national stations for the Commonwealth Government. Previous to joining broadcasting was for many years actively engaged as a high executive in the theatrical business. Private address: Chamberlain Avenue, Rose Bay, N.S.W.

#### N.S.W. Secretary

**BROWN, Andrew F. O.:** N.S.W. secretary Australian Federation of Broadcasting Stations, 44 Margaret Street, Sydney. Secretary, Electrical and Radio Association, N.S.W. Assistant secretary, Electrical Association, 1923. Appointed secretary, 1928. Recreations: Tennis, golf. Born 25/6/1903.

#### Senior Vice-President

**HOLT, Thomas James:** general manager 3XY. Elected senior vice-president of the Federation 1938 Convention. Had long association with the theatrical world, having been associated with such well-known organisations as J. C. Williamson (overseas representative), Hugh D. McIntosh, also joined the late F. W. Thring at Efftee Film Production in 1929, from where appointed to present position at the station's inception in 1935. Born at Young, N.S.W.



Educated at Young, N.S.W. and Sydney, N.S.W. Private address: 449 St. Kilda Road, Melbourne, Sc.2. Recreations and hobbies: Tennis and golf. Clubs: Green Room.

#### Country Vice-President

**FAIRHALL, Allan:** Managing director 2KO. Elected country vice-president of the Federation 1938 Convention. Studied electrical engineering after secondary school education, took up radio as hobby, moved into broadcasting technically, then executive position

at present held. Born: Morpeth, N.S.W., November 24, 1909. Private address: Parkway Avenue, Newcastle. Recreations and hobbies: Golf,



tennis, radio (experimental). Clubs: Newcastle Rotary Club, Newcastle Business Men's Club, Wireless Institute of Australia.

#### Junior Vice-President

**ROBERTSON, Alec.:** Manager 4BK-AK (Brisbane Broadcasting Pty. Ltd.). Elected junior vice-president of the



Federation 1938 Convention. Began industrial career as reporter "Brisbane Courier,"

and later served with Brisbane "Daily Mail" and "Daily Standard," rising with the last named journal from sub-editor to Managing-Editor. Resigned this position 1931, and appointed to editorial position on "Brisbane Courier." Following amalgamation of "Courier" and "Daily Mail" in 1933, and acquisition by "Courier-Mail" of Station 4BK, was appointed manager.

#### Federation Secretary

**DOOLEY, Raymond, M.B.E., F.C.I.S., Dip. Com. (Melb.), A.F.I.A.:** Secretary Australian Federation of Commercial Broadcasting Stations. Entered Commonwealth Public Service 1912, resigned 1926. Manager G. L. Chilvers until 1935. Then in



practice as secretary and public accountant, Melbourne, until assuming present position. Saw war service as Lieutenant, 8th Machine Gun Company, and Adjutant No. 1 Command Depot, England. Born: Wangaratta (Vic.), February 28, 1896. Educated, Wesley College, Melbourne. Private address: 3 Rotherwood Road, Ivanhoe (Vic.). Recreations: Tennis and golf. Clubs: Naval and Military, Emerald Country Club.

# WHO'S WHO

## In Australian Commercial Broadcasting

### A

**ANDERSON, Andrew Oswald,** Manager Radio 2UE. Arranged first public broadcasts in Australia in 1923; managed 2FC for six years and then 2UW for a similar period. Carried out first Australian programs



broadcast by B.B.C., was official announcer opening of Sydney Harbour Bridge, 1934. Initiated first Test cricket ball-by-ball broadcasts in 1930. In 1936 went to London and for three years was in charge of Broadcast Enterprises Limited. He was chairman of Inspector Hornleigh Investigates Ltd., a company handling the stage and film rights of the well-known plays over the B.B.C. Keen student of television. Born Sydney, October 15, 1886; educated Sydney and Melbourne. Private address: 56 Milson Rd., Cremore. Recreations: tennis, golf and swimming.

**ANDERSON, George Herbert:** Assistant Manager, 2GB Sydney. Executive committee of the R.I.F. Club. Pre-war, civil engineer railway survey and construction. War, 4 1/2 years' service with A.I.F. After abolition of compulsory training in 1929, commanded 14th Heavy Battery (Coastal defence,



Georges Heights and Middle Head); 60th Field Battery, 61st Field Battery, and appointed, 1938, Staff Captain 2nd Divisional Headquarters, Australian Field Artillery. After war, 4 years orchardist, grazier and farmer (director, Darwent Val-

ley Fruitgrowers' Co-op. Ltd.). Two years business agency, 8 1/2 years assistant general secretary Graziers' Association of N.S.W.; three years general manager, Country Broadcasting Services Ltd. (2GZ), two years director Northern Broadcasters Ltd. (2NZ); assisted with formation, and first sales manager of Macquarie Broadcasting Network (1/6/38); appointed assistant manager 2GB, November, 1928. Born: 20/3/1897, Hobart, Tasmania. Private address: "Encantada," Boomerang Street, Turramurra. Club: Tattersall's. Recreations: Tennis, golf, swimming.

**ANDERSON, Valwynne James L.T.C.L., L.A.S.A. (Hons.):** Manager 3MA. Has been farmer, salesman and teacher. European tour, 1929. Commenced broadcasting 1930, as actor and producer 5CL-5CK. 1933—joined 5DN, announcer; 1934—joined 2BH, chief announcer; 1936—joined 6ML, chief announcer; 1937—joined 3MA, manager. Born: Unley, South Australia, October 11, 1910. Educated: Prince Alfred College, Adelaide, and Adelaide University. Private address: "St. Anne's," 8th Street, Mildura, Victoria. Recreations and hobbies: Golf, rowing, writing, stage work. Clubs: Mildura Settlers' Club, Riverside Golf Club, Mildura Rowing Club.

**APPERLEY, George:** M. Inst. R.E. (Aust.). Manager of Communication Amalgamated Wireless (A/sia) Ltd., Melbourne. Early training and experience telegraphy, telephony, and wireless with N.Z. Government Telegraphs. 1910-1912 Wireless Service of British



Colonial Government, 1913 joined A.W.A. 1914-16 Chief of Marconi Wireless School. 1916-1919 A.W.A. Works Manager. 1919-1923, A.W.A. Technical Superintendent and in charge Patent Dept. 1924 in charge Beam Wireless Service. Visited England and Continent of Europe in 1925-6, and again in 1933 on Beam Wireless investigation. Visited Canada, U.S.A. and England in 1935, and England again in 1937 on similar missions. Born, 24/3/1887.

**ARMSTRONG, D. R.:** Assistant advertising manager 2GB and Macquarie Broadcasting Network. Educated Ballarat Grammar School, Victoria and Southport School, Queensland. Previously with Nestle's Milk Queensland, South Australia



and Sydney, in charge advertising department. Joined 2UE, 1936, as announcer, became program manager, and subsequently assistant manager, 1937. Transferred to 2GB at end 1937. Member Millions Club and Masonic Club. Recreations: Golf. Born: 1898, Stanthorpe, Queensland.

### B

**BAIRD, William Reginald,** Assoc. I.R.E. (U.S.A.), Amalgamated Wireless (A/sia) Ltd., Sydney. Joined A.W.A. Marine Service 1921. Transferred Coastal Radio Service in 1926, and later to technical section Broadcasting Department. Transferred head office Engineering Department 1932. Private address: "Wambo," Victory Street, Rose Bay.

**BAIRNSFATHER, Tom Duncan, M.C.:** Order of the Crown of Italy. Announcer 2KY Sydney. Educated at Oundle, Northants, England. Royal Military College, Sandhurst; served throughout Great War in France; Armistice Commission, Russia, Afghanistan and China. Invalided from Regular Army with rank of Captain. Commenced broadcasting 1928 2LO London, and since arrival in Australia has broadcast from 3LO, 3AR, 3GL, 2FC, 2EL, 2CH, 2UE. Recreations: Swimming, boxing, golf, and motoring.

**BANNEY, John P.:** Manager, 3BO Bendigo. Joined Amalgamated Wireless (A/sia) Ltd., marine department, 1921, transferred to broadcasting department and appointed present position January, 1936. Born: Grafton, N.S.W., 24/5/99. Recreations: Motoring, riding.

**BEAVER, Herbert Edward:** Manager, Station 2KY, Sydney. One of radio's early personalities, joining 2KY at its inception 10 years ago, and was responsible for 2KY's first children's radio club, with a



membership of over 30,000; conducted the children's party at Marcus Clark's for over 5 years. Wrote and produced the Christmas Pantomimes. Born: 23/3/1897, Broken Hill, N.S.W. Member of North Brighton Golf Club and Magicians' Club. Recreations: Golf and magic.

**BENNETT, Alfred Lewis, L.D.S.:** Studio manager 2TM Tamworth. Seven years dance band and theatrical experience. With 4BH for seven



months, 2UE for 12 months. Private address: 113 Upper Street, Tamworth, N.S.W. Born: 20/9/1908, Cairns, N.Q. Clubs: Rotary and Microphone. Recreations: Golf, tennis, music, reading.

**BERMINGHAM, Raymond:** Studio manager-producer 2GZ. Studied Economics Adelaide University Vocal work, seven years Elder Conservatorium. Studied accountancy, later teacher of voice in Sydney; considerable experience in musical and dramatic work in early days of radio. Joined 2GZ early 1937 as announcer. Born: Adelaide.

## Who's Who - - - - - (contd.)

**BERRY, William Hart:** General manager, director Featuradio, Melbourne. Eight years Hugo Wertheim Pty. Ltd., manager musical instrument and gramophone department. Transferred to Columbia Gramophone (Aust.) Ltd., Homebush, N.S.W. after factory established in Australia. Served three years various capacities including interstate



and New Zealand representative. Transferred to Melbourne as Victorian manager of Columbia Gramophone (Aust.) Ltd., distributors for Columbia, His Master's Voice, Parlophone records, also His Master's Voice radios, refrigerators, etc. Seven years this capacity. Resigned March 3, 1937. Joined Featuradio same year. Born: Melbourne, 1898. Educated: Church of England Grammar. Private address: 474 St. Kilda Road, Melbourne. Recreations: Golf, music. Club: Melbourne C.T.A.

**BLAKE, Roy Leslie:** Managing director, 2AD. Entered journalism Bendigo and served city and provincial dailies New South Wales and Victoria. Editor Armidale "Express" 1929, when two Armidale papers amalgamated by Armidale Newspaper Co. Ltd. Appointed managing editor 1932 and general manager of Company and Radio 2AD 1938. Elected to board of directors 1939 and appointed managing-director. Armidale District Coroner. Appointed by Senate University of Sydney to Advisory Council of New England University College. Director Hilton Presbyterian Ladies' College, Armidale. Vice-president Armidale Rotary Club. Born: Bendigo, Victoria, August 18, 1897. Educated: Violet Street School, Bendigo, Bendigo High, and privately. Private address: 120 Mossman Street, Armidale. Recreations: Tennis and golf.

**BOURKE, Alex. David:** Sydney representative for 4BC-SB, 4RO, 4MB, 4GR, 4AY Queensland, 3UZ, 3SR, 3YB, 3UL Victoria. Has completed 25 years' representative work. Born: Emmaville, N.S.W. Educated: Armidale. Private address: Woolstonecraft. Recreation: Golf. Club: Killara.

**BOWES-KELLY, Darvell:** Director, International Sound Recordings, Sydney. Gained certificate as wireless operator at London Wireless Institute, and joined mercantile marine. Left the sea, and went to Italy for voice training under Fachini. First visited Aus-

tralia in 1913 with the Quinlan Grand Opera Co. Next sang at Chicago Grand Opera House, and returned to Australia in 1922. Appeared on concert platform and in musical comedy in all States and New Zealand. Re-entered the wireless field and has written, produced and broadcast scripts from the principal stations of the Commonwealth. Founded V.O.A. Sound Productions early 1938. Joined International Sound Recordings same year. Born: England, July 22, 1889. Recreation: Experimental wireless (call sign VK2DB).

**BILLS-THOMPSON, George:** Station manager, 7HO. Guest artist national and commercial stations. joined 7LA, announcer, resigned as studio manager. Four years chief announcer 3AW, 12 months 2UW announcer and surf patrol pilot. Appointed sta-



tion manager 7HO, January, 1938. Born: Launceston, 1910. Educated: Launceston Church Grammar School. Private address: Margate Hall, Marieville Esplanade, Sandy Bay, Hobart. Recreations and hobbies: Flying, photography, music. Clubs: Royal Victorian Aeroplane Club, Royal Yacht Club of Tasmania.

**BRADSHAW, Cliff:** Manager 3HA. Joined Australian Broadcasting Commission 1929, announcer, after previous commercial broadcasting experience. With A.B.C. in charge



record library, programs. Represented A.B.C. in A.P.R.A. Arbitration 1938. Took office June 1, 1938. Born: Melbourne, 1889. Educated: King's College, Melbourne. Private address: French Street, Hamilton. Recreations: Tennis and music.

**BREARLEY, Ronald C.:** Manager 7EX. Was musical director Hoyts Theatres. Musical director 3AP and 6WF. Advertising and studio manager 6ML. Manager 7EX, A.I.F. 1916-1919. Born: Geelong, Victoria, 1898. Educated: C. B. College, Perth, Western Australia. Private address: 32 Ramsay Street, Launceston. Recreations: Tennis, music. Club: C.T.A.

**BREWER, Ernest Hammond:** For many years correspondent of Sydney "Sun" in West Australia, and later employed by the United Cable Service in London. First advertising director of "Smith's Weekly"; first advertising director of "The Daily Guardian" (Sydney). Entered business on his own account in 1935, as "Radio Representation" in Assembly Hall, Sydney. Now Sydney sales staff Macquarie Broadcasting Network.

**BREWIN, Darrel:** Sales manager 3DB-3LK. Studied mechanical engineering Leeds University. Employed Lloyds Bank, London. Came to Australia 1922, farmed at Tresco 3 years, then 12 months head teacher at State schools in the bush. Joined Chartres Remington Co. as country salesman for 2½ years. Resigned to become sales manager of a wine, spirit and tobacco concern. Returned to Chartres as country salesman. Joined 3DB in 1934, and appointed sales manager 1938. Born: Allahabad, India. Educated: Ripon School, Yorkshaw, England. Private address: 34 Molinunta Street, Kew, E.4. Recreations and hobbies: Rugby, cricket, golf, squash racquets. Clubs: Public Schools Club, Celtic Club, Harlequin Club.

**BROOKER, Vivian M.,** M.Inst. R.E. (Aust.), M.Inst. R.E. (U.S.A.), M.I.W.T. (London); Manager Broadcasting Division, Amalgamated Wireless (Asia) Ltd. Joined Amalgamated Wireless in 1917. Dur- ing 1926 was Chief Wireless Officer of s.s. "Jervis Bay," and communicated from that ship at Tilbury direct to Sydney, and handled traffic for the



Prime Minister, who was attending the Imperial Conference. This was done on short waves, and constituted a record in long distance commercial traffic transmission. Appointed manager and chief engineer of 7LA Launceston, from 1931 to July, 1933. Transferred to present position July, 1933. Born: 11/2/1899.

**BROWN, A. F. O.** (see p. 74)

**BROWN, Sir Harry Percy:** C.M.G., M.B.E., M.I.E.E., Director-General P.M.G.'s Department. Son of George Brown, of Sunderland, Eng. Born December 28, 1878, Tower House, Hylton, near Sunderland, Eng. Educated Bede College, Sunderland, Durham College, Newcastle-on-Tyne; had 25 years' service in British Post Office, occupied position of



staff engineer; visited India 1913-14 in connection with telephone, telegraph, and railway traffic control communication; during Great War was responsible for telephone plant of U.K. and emergency communications for Defence System; at invitation of the Commonwealth Government came to Commonwealth Post Office, January, 1923; as technical adviser in relation to Post Office Administration app. Director-General Post and Telegraphs December, 1923; as rep. of Commonwealth Government attended International Radio Telegraphy Conference at Washington, 1927, and Imperial Cable and Wireless Conference, London, 1928; rep. Australia at the Telecommunications Convention held in London, 1937. Married September 28, 1904, Emily, d. H. T. Aldours, 2 s., 1 d. Recreations: Motoring, golf. Address: 518 Barker's Rd., Hawthorn, E.3, Vic.

**BUDD, Arthur Aubrey,** managing director 2MW. Chair-director Tweed Radio and Sons Pty. Ltd. Three years' war service with 49th Inf. Battalion A.I.F. Chairman directors Tweed Radio and Broadcasting Co. Pty. Ltd. Born: Murwillumbah, March 15, 1898. Private address: Old Ferry Road, Murwillumbah.

**BUILDER, Geoffrey, B.Sc.,** Ph.D., F.Inst.P., A.M.I.E. (Aust.), M.Inst.R.E. (Aust.), Officer-in-charge of A.W.A. Research Laboratories, Ashfield. Educated at Guildford Grammar School, W.A., University of W.A., University of London. One time Observer at the Waterloo Observatory of the Carnegie Institution of Washington. There carried out experiments with low power radio equipment and maintained a service route from the Observatory to headquarters in Washington. From there went to London and two years later obtained doctorate for Radio Investigations of the Ionosphere. Then in charge of the British Polar Year expedition work in Norway. Returned to Australia and carried out investigations for the Australian Radio Research Board until joining

(Continued next page)

## Who's Who - - - - - (contd.)

**BUILDER, G.** (contd.)



A.W.A. in 1934. Has published a number of papers on various aspects of radio research. Recreations: Tennis and swimming. Born: 2/6/06.

**BURGESS, Jack:** Chief announcer "The Advertiser" Network. Handled production for 5CL Adelaide (not then National Station). In 1930 joined 5AD, announcer. 1931 took charge Kangaroo Club Born: Adelaide, April 12, 1903. Educated: Goodwood and Sturt Street School, Adelaide High. Private address: 90 East Avenue, Clarence Park. Recreations and hobbies: Golf, swimming, fishing. Clubs: C.T.A. and Glenelg.

**BYRON, J. Alexander:** Secretary 2CA, 2WL and B.A.P. Served throughout Great War as Asst. Paymaster Royal Navy. Seven years, Northcliffe Press statistical branch. Joined finance branch, General Motors, 1927. Appointed secretary 2WL December, 1936, 2CA January, 1937. Born: Westminster, London, 1895. Educated: City of Westminster Technical College. Private address: 117 Chaleyer Street, Rose Bay. Recreations: Golf, photography.

## C

**CAMERON, Archie Galbraith:** Postmaster-General in third Lyons' Ministry. Contested first political election at age of 29. Entered South Australian Parliament for Wooroora 1927, resigned 1934 to successfully contest Federal Electorate of Barker, majority increased 1937 election. Appointed assistant Minister to Ministry for Commerce during Sir Earl Page's absence abroad. Appointed P.M.G. following resignation of Senator McLachlan from Ministry, November, 1938. In this capacity he has displayed a forcefulness of purpose in the courageous administration of his Department. He has also shown a sympathetic disposition towards the work being done by the Australian Federation of Commercial Broadcasting Stations to improve broadcasting, and displayed a willingness to co-operate with the Federation on all matters concerning commercial broadcasting, thus winning widespread respect.

His particular interest outside departmental responsibilities is in Australian military development. He enlisted in 1916 and served as N.C.O. on active service, returning to Australia 1919 as Quartermaster-Sergeant. Lieutenant in

27th Battalion 1937, Captain in 1932, and Major in 1938. Born: Happy Valley, South Australia, March 26, 1895.

**CAMPBELL-JONES, Allan:** Sales promotion manager Radio 2UE. Commenced commercial career with Gollin & Co., Sydney. Then joined Boyd Edkins Ltd. on sales staff. Joined Daily Telegraph Pictorial as



Motoring Editor, 1929, transferred to Evening News in similar capacity, and subsequently to the Daily Telegraph. On Melbourne staff of Sun Newspapers Ltd., 1932. Joined Country Life Newspapers as advertising manager same year, transferring in 1937 to Smith's Weekly. Appointed to present position March, 1939. Private address: 11 Holt Street, Double Bay, Sydney. Recreation: Golf. Club: Royal Sydney.

**CARR, Arthur.** Program supervisor, 2UE, which station joined nine years ago. Spent whole life in theatrical busi-



ness. Plays part of "Ambrose" in children's session, is father of Bobby Filbert. Served A.I.F. Born Bathurst, 1890.

**CARRUTHERS, Thomas** Ramsay, Media Manager J. Walter Thompson (Aust.) Pty. Ltd. Educated Sydney Technical High School. Studied architecture before entering advertising. Joined J. Walter Thompson (Aust.) Pty. Ltd. in 1931, and for several years acted as Production Manager. Recreation: Golf.

**CARSON, Cecil Ruddle** (Charles): A.T.C.L., Manager 4BH, Brisbane. Joined Queensland Railway Department as junior, rising to Officer in Charge Luggage Section; General Manager Office Brisbane, and later Claims Inspector. In 1934 joined 4BC as announcer, later studio manager 1935-36, assistant to general sales manager J. B. Chandler & Co., 1936-1939. Manager 4BH Brisbane. Born: Rockhampton 24/4/1896. Educated: Rockhampton Grammar School. Private address: Boyd Road, Nundah, Brisbane, Queensland. Recreations: golf, reading.

**CAYLEY, Frank:** Chief copy-writer and announcer, 2GZ. Pres. Annors. Assn. of Aust. Associated with radio since 1929. Featured over both "A" and "B" class stations in plays, sketches and monologues. Writes, produces and acts. One time press man on Sydney "Sun," "Evening News," and "World." Advertising agency experience in Queensland and New South Wales. A bridge player of note. Born 1910. Recreations: Bridge, swimming, tennis.

**CHALONER, Alfred Roy:** A.I.C.A.; Secretary, Northern Broadcasters Pty. Ltd. Ten years Northern Newspapers Pty. Ltd., publishers of "Glen Innes Examiner" and "Inverell Times." Appointed secretary April, 1936. Appointed present position July, 1936. Born: Manchester, England. Educated: Gladsmville Public School and Drummoyn High School. Private address: 42 George Street, Inverell. Recreations: tennis and Militia. Club: Apex.

**CHAMBERLAIN, Frank S.:** Manager 3TR. Before joining staff of 3HA held important journalistic positions in metropolitan and country centres. First association with radio was a series of talks on "The World Abroad" through 3HA



to which station he subsequently transferred as continuity writer and news editor. Swan Hill appointment made January, 1938. Keen follower of International affairs. Born: Melbourne. Educated: Melbourne High School and Melbourne University. Private address: Star Hotel, Sale. Recreations and hobbies: Appreciates good music, motoring, reading. Clubs: Australian Journalists, International Club.

**CHANDLER, John Beals:** Managing Director, J. B. Chandler and Co. Chairman of Directors 4BH; also interested in several Broadcasting Sta-



tions. Past Pres. A.F.C.B.S. Born: Norfolk, England, in 1887, and arrived in Australia in 1907. In 1913 established the firm of J. B. Chandler & Co., of Brisbane. Prominent Radio and Electrical Wholesaler.

**CHAPMAN, Maurice Dale:** Advertising Manager, "The Advertiser Network." Resigned position as sales manager Australia-wide refrigeration manufacturers, to begin radio career 10 years ago as script writer. Was under contract to American agency for 12 months. In conjunction with Louis Dangar, wrote the film scenario, "The Cavendish Affair." Collaborated with same author in successful American radio serial. Joined "The Advertiser" Network 1932. Was appointed production manager in 1934 and advertising manager in 1935. Born: Adelaide, September 7, 1908. Educated: Prince Alfred College. Private address: "Secort," Philip Street, Somerton. Recreations: Golf, tennis, writing for radio.

**CLARK, Harry Powis:** Sales representative, publicity and research Country Broadcasting Services Ltd. (2GZ). Sales promotion manager the Provincial Network. Advertising manager



"Labor Daily"; two years with Associated Newspapers Ltd.; joined 2GZ 1937; contributor to business journals, etc. Concert baritone. Born 8/3/1904. Private address: "Verlaine," Bruce Street, Bexley. Club: Royal Motor Yacht Club. Recreations: Yachting and fishing.

**CLUBB, Alex. M.:** A. M. Clubb and Co. Ltd., 76 Clarence Street, Sydney. Qualified electrical Engineer, early training with Aberdeen (Scotland) City Council Electricity Dept. Arrived Australia 1922, commenced with Scott and Co. (A/sia) Pty. Ltd., Melbourne, when this Company was formed, representing A.G.E., Berlin, and Telefunken, Berlin. Continued with Scott & Co. until 1929 when own business was formed in Sydney, taking over amongst others N.S.W. Agency for Telefunken Radio. A pioneer of Recording of Acetate Discs in Australia.

**COLVILLE, Sydney Victor:** Governing Director, Colville Wireless Equipment Co. Pty.



Ltd., Broadway, Sydney. Entered radio field experimentally (Continued next page)

## Who's Who - - - - - (contd.)

## COLVILLE, S. (contd.)

1911, and commercially 1921. Specialty transmission design and manufacture. Born: Kerang, Vic., 1894. Educated: Brisbane. Private address: Lucoseville Road, Glenbrook, N.S.W. Recreation: Golf.



**CONRY, William Henry, M.** Inst.R.E.(Aust.): Radio Inspector, P.M.G.'s Dept., Hobart, 1910, appointed Engineer's Branch, P.M.G.'s Dept. 1915-1918. Wireless Operator R.A.N. Radio Service (Transport). Born, 3/6/1892.

**CONWAY, Eric V.:** Productions Manager, Legionnaire Sound Productions Pty. Ltd., Melbourne. Educated Worcester Cathedral Collegiate School. Associated theatrical, radio, film enterprises since 1906, when played with famous Fred Karno's Comedy Companies. Came to Australia as vaudeville actor under contract to Fullers' Theatres, 1922, and since been associated in Australia and N.Z. with J. T. Wil-



hamson's, Fuller's, Muriel Starr, Allan Wilkie, Seymour Hicks, and Pat Hanna Film Productions. First broadcast 2FC 1924, and since with national and commercial network. Was asst. production and program mgr. 3DB until joining Legionnaire when company was formed. Feature artist Shell Show 1935-6-7. Recreations: Reading, playwriting, gardening. Born London.

**COOMBES, T. G.:** Sales staff 3HA-TR-SH. Educated St. Peter's College, Adelaide. Worked in advertising agencies. Over 15 years with J. C. Williamson, Musgrove's, J. & N. Tait and costume comedy shows under the management of Cedric Johnson, Hugh Huxham, Sutton Crowe and many others. Gravitated to 3LO, 3AR, 5CL, and from there to commercial radio stations. Continuity, announcing and advertising with 5KA Adelaide, and then joined "The Age" Broadcasting Service, Melbourne. Went to 3HA Hamilton as assistant manager, and from there to present position. Recreations: Motoring, dancing, writing. Born: Adelaide, 1896.

**CORR, Kenneth Lindsay:** Managing Director, Legionnaire Sound Productions Pty. Ltd., Melbourne, and Melb. rep. 3CV Charlton. Graduated from sub-editorial staff, Melbourne "Herald" to broadcast advertising. A.I.F. 1916 to 1919. Ten

years in Technical Service, Education Dept. Private address: Hoyt St., Brighton Beach, Victoria. Born: 18/8/1897, Cobden, Vic.

**COTTRELL, Eric L.:** Secretary and Accountant, 3UZ Nilsen's Broadcasting Service Pty. Ltd., Oliver J. Nilsen Pty. Ltd., Nilsen Cromie Pty. Ltd. Private address: Kew, Vic. Born Bulawayo, South Africa. Married. Recreations: Tennis, golf, rowing.

**COTTRELL, F. T. Clarke:** Publicity and Advertising Manager 2UW Sydney and the C.B.N. For many years associated with Union Theatres engaged in technical and production activities. Script writing and radio production work over the past seven years gave him a thorough grip of the broadcasting business. Hobbies: Music, landscape painting, yachting.

**COX, Edmund (Ted):** Sydney representative and Sales Manager 2KO Newcastle. Educated Trinity Grammar School, actively engaged radio field since 1927. Attached sales staff



Philips Lamps A/sia Ltd., five years. For past five years acted sales manager Amplan, Aust. Ltd. Resigned to take up present position with 2KO 1938. Member United Service Institute. Holds rank Lieutenant City of Sydney's Own Regiment. Recreation: Golf, army activities.

**COX, Harold Edward:** A.W.A. representative, Brisbane. Has had 26 years uninterrupted wireless, joined English Marconi Co., 1911. Came to Australia, 1914. Served as W/T operator aboard Australian troopship during the Great War. Drafted into R.A.N. Coastal Wireless Service, later A.W.A. Coastal Radio. Entered the Broadcasting Dept. of A.W.A. 1931. Opened 3BO Bendigo; appointed Manager 4TO Townsville.

**CRAWFORD, W. T. S.:** Senior Radio Inspector for New South Wales. Councillor and Member Inst.R.E. (Aust.). Appointed O.I.C. Hobart Radio, 1912. O.I.C., V.I.M. Melbourne, 1914. Transferred to Naval Wireless, October, 1915, as



1931, joined staff of 2GB, engaged in designing and constructing audio control equipment and complete transmitter. Resigned from 2GB October, 1935, to join present Company. Acted as consultant in the case of several stations and carried out constructional work including new extensive control equipment for 2GZ's Sydney and Orange studios. Experimented in short and medium wave transmission since 1920. Trained with Royal Australian Naval Reserve, and finished as Petty Officer, First-class P.M.G. Commercial Certificate (Washington Convention). Born Beechworth, Vic., 1908.

## D

**DAHL, Edward M. L.:** General Manager and Secretary 4AY, Director and Secretary 4AT; started as mechanical engineer. Served fitting and turning indentures with F. J. Walkers Ltd. Since concentrated on Efficiency Engineering with F. J. Walker Ltd., Australian



Radio Inspector, Melbourne. Appointed, Radio Lieutenant and Inspector Sydney, January, 1918. After the war reverted to P.M.G.'s Department as Radio Inspector October, 1920. Classified Senior Radio Inspector May, 1934. Educated South Melb. College. Private address: 5 Bruce Av., Killara. Recreations: Gardening, rifle shooting, billiards. Born: Bendigo, 14/12/1880.

**CROMIE, Charles Thomas:** Director Station 3UZ—Nilsen's Broadcasting Service Pty. Ltd., Oliver J. Nilsen Pty. Ltd., Nilsen Cromie Pty. Ltd., Neon Electric Signs Pty. Ltd. Born at Sale. Recreations: Gardening and golf.

**CROSSMAN, Kenneth D.:** Production and service manager, Station 5DN Adelaide. Educated Prince Alfred College, Adelaide. Entered radio as Announcer and Engineer 5DN in 1925. Qualified commercial radio engineer, joined A.W.A. Marine staff. Joined sales staff Mick Simmons Radio Department, Sydney, and later



Manager Sheffield Trading Company's Radio and Electrical Divisions. Recreations: Caravaning, swimming. Born 20/1/1908.

**CROUCH, E. C.:** Chief Engineer Country Broadcasting Services Ltd. Educated Mosman, Neutral Bay and Sydney Technical schools. Joined P.M.G. Department 1924, engaged in installation, operation and maintenance of Common Battery, Magneto and Automatic systems of telephonic communication constructional work, in-1929 transferred to Wireless Branch and attached to 2BL engaged in installation, operation and maintenance of studio and station equipment, and associated with Australian Broadcasting Company. Leaving P.M.G. Department at end of



Pty. Ltd., Broadcasting Service Association, Australian Record Company, Figtree

(Continued next page)

## Who's Who - - - - - (contd.)

## DANIELL, F. W. H. (contd.)

Studios Pty. Ltd., Argosy Films Ltd. Alternative director of Australian and New Zealand Theatres Ltd. Prominent in film and radio circles, particularly for his position as general manager of National Productions Ltd., which produced "The Flying Doctor." Investigated screen and radio development in Europe for Denison Estates. Has been associated with big radio hook-ups such as the occasion of the outbreak of war in Abyssinia, the King's death, the inauguration of overseas air services, and Southern Seas Broadcast.

**DARKE, Harold Stanley:** F.O.A., Director of Sales and Advertising, Transcontinental Broadcasting Corp. Ltd. (2KA



and 2KM). Has had extensive career in advertising, specialising in marketing, particularly associated with Myer Emporium, Melb., Berlei Ltd., Holeproof Hosiery (advertising and sales promotion manager), Felaco Ltd. (advertising manager), F. S. Walton (advertising manager) followed by several years advertising agency. Joined 2KA September, 1937, as publicity officer, later acting manager. Resigned April, 1938, to join 2GZ; rejoined 2KA June, 1938. Fellow of A.A.A. Recreations: Golf, ice hockey. Born May 11, 1904, Nottingham, England.

**DAVEY, James Henry:** Managing Director 3EA Ballarat. Was one of the founders of 3EA and has always occupied the position of Managing Director. Is a well-known personality in Ballarat and has been prominent in musical and dramatic circles in Victoria for many years. Recreations: Golf, music and horticulture.

**DENISON, Reginald Ernest, B.A., L.L.B.:** Director Macquarie Broadcasting Services Pty. Ltd.; Director B.S.A. and 2GB; Executive Director Associated Newspapers Ltd.; Past President Australian Newspapers' Conference, Director Australian and New Zealand Theatre Pty. Ltd., and many other public companies. Educated Sydney Grammar School and Sydney University. War service overseas, reaching rank of Captain; after war article to Sydney solicitor; then became secretary Sun Newspapers Ltd.; on formation of Associated Newspapers Ltd., became secretary and then general manager, now being executive director. Born November 20, 1894, at North Adelaide. Club: Union, Sydney. Recreations: Cricket, golf and tennis.

**DICKSON, Noel W.:** Sales Manager for Australasia, Legionnaire Sound Productions, and Melbourne representative 2UE. Educated Caulfield Grammar School, reporter and sporting writer on the "Herald,"



Melbourne; special writer and sub-editor the "Star," Melbourne. Toured South Sea Islands in trading and recruiting schooner, 1931, and wrote series article for the "Herald." 1935-36 spent in England, France, Spain, Germany, Austria, Switzerland, Hungary, Czechoslovakia and Belgium. 1937 joined Legionnaire. Recreations: Ski-ing (vice-president of Ski Club of Victoria), squash rackets, tennis, golf.

**DINNENY, Victor M.:** Manager 3SR. Many years in electrical industry. Served A.I.F. 3rd Division M.T. France 3 years. Entered automobile business 1924 Western District Victoria. Established 3YB "Mobile Station" 1931. Managing director of company formed to establish 3YB as fixed unit in Warrnambool until com-



pany's interest taken over by Argus and Australasian Ltd. Advertising representative of the Argus Broadcasting Services Pty. Ltd. until present appointment. Born: Adelaide, South Australia, 1888. Educated: Carlton College, Melbourne. Private address: McKinnay Street, Shepparton. Recreation: Golf.

**DIXON, Neville:** Advertising Manager, Victorian Broadcasting Network. Experience in Commercial and Advertising field spread over a number of years. Born, Heidelberg, Victoria. Educated, Wesley College. Private address: Swansea Road, Lilydale, Victoria. Recreations and hobbies: Swimming and motoring.

**DOBBS, S. Beardsley:** Managing director, J. Walter Thompson (Aust.) Pty. Ltd., Sydney. Wide experience of advertising and selling past 16

years. With Boston Paint and Varnish Co., Cambridge Associates of Boston, Livermore and Knight, advertising agents, of Providence, Rhode Island. Went to New York in 1932 as sales and advertising manager Calsodent Company of New York. Following year joined J. Walter Thompson Co.'s New York office. Was the program director of several important radio programs, including Burns and Allen, the famous Walter Winchell broadcasts, Pathe News of the Air. For two years was assistant accountant executive on the Shell Company's advertising in the United States. Joined the Australian company July, 1936, and worked as co-director with Mr. M. L. Stiver, and appointed managing director July, 1937.

**DOBBY, Joseph McMullen, M.Inst.R.E. (Aust.):** Radio Inspector, P.M.G.'s Dept., Melbourne. 1908-1911 apprentice electrical engineering. 1911-1925 Electrical Engineers' Branch, P.M.G.'s Dept., Melbourne. During the Great War, served as Wireless Operator, R.A.N. Transport Service. 1925, Radio Inspector. Born 20/7/1892.

**DONNER, W. A.:** Managing Director, Columbia Graphophone (Aust.) Pty. Ltd., Homebush, N.S.W. Also manager, Australian branch of The Gramophone Co. Ltd. ("His Master's Voice"), and manager,



Australian branch of The Parlophone Co. Ltd. Before coming to Australia in 1929 was export manager, Columbia Graphophone Co. Ltd., London. Private address: 15 Olphert Av., Vaucluse.

**DOOLEY, R. (See p. 74)**

**DOYLE, Stuart Frank:** Leading figure in amusement world of Australia. Was responsible for organisation of largest circuit of metropolitan picture



theatres in Commonwealth, including State Theatres Sydney and Melbourne; established first

permanent production company for production Australian motion pictures and founded the establishment of British films in Australia. As Chairman of Australian Broadcasting Co. actively worked on organisation of National Broadcasting Network for Commonwealth Government under contract and subsequently acted as Chairman of the Company when it purchased 2UW. Is Chairman of Directors Commonwealth Broadcasting Corp. Pty. Ltd., Fidelity Radio Pty. Ltd., Commonwealth Broadcasting Corporation (Q'land) Ltd., and is Chairman several other commercial organisations in Australia. Managing Director London Theatre Centre Ltd., General Agency and Trust Co. Pty. Ltd., and Famous Artists and Production Agency; well known in U.S.A. as well as England for interests in theatrical, broadcasting, aviation and commerce; Chairman of Directors Aircraft Development Pty. Ltd., which represents several groups important aircraft manufacturers in England. Born 1/12/1877. Clubs: R.A.C.A. and R.M.Y.C. Hobby: Yachting.

**DRAFFIN, James Charles:** M.Inst.R.E. Aust. Engineer, Broadcasting Department, Amalgamated Wireless (A/sia) Ltd., Sydney. Commenced in radio as Telegraphist with the Australian Forces in New



Guinea 1916-21. 1922-25, Officer in Charge, Bitapapa Radio, New Guinea. 1927-35, Engineer in Charge, Beam Station, Fiskville, Victoria. 1935, transferred to head office, A.W.A., Sydney. Born 23/5/1893.

**DUDMAN, Victor H.:** M.Inst. R.E. (Aust.), Manager Transmission Department, Philips Lamps (A/sia) Ltd., 69-73 Clar-



ence Street, Sydney, N.S.W. 1919-28 Royal Navy and Royal Australian Navy. 1928 to date, Philips Lamps. Private address: 31 Bunyula Road, Bellevue Hill, Sydney. Born London, 2/7/1903.

Who's Who (contd.)

DU MAURIER, Dr. Northey: Managing director, Du Maurier Productions Pty. Ltd.; qualified doctor of electro therapeutics, gave up practice to give full



time to producing; first health lecture on the air in Australia in 1925. Recreations: Fishing and yachting. Born: London, April 1884.

DUNNE, John S.: Studio Manager, Broadcasting Station 2SM. Twelve years with J. C. Williamsons in musical comedy and dramatic productions. Six years at N.S.W. Conservatorium



of Music. Had broadcast with every National station in Australia and New Zealand for five years before joining 2SM. Toured the world in 1935 for 2SM in search of programme features. Born Sydney, N.S.W.

E

EBRALL, Herbert Novelle: A.M.Inst.R.E. (Aust.); Manager and Chief Announcer, 6GE. Born England, arrived Perth at early age, trained for scientific career. Study in Perth and Newcastle. Joined 2HD technical staff 1931. Represented 2HD in Sydney and Melbourne. Became evening announcer and



produced a number of successful radio plays. Elected Ass. M.I.R.E. (Aust.), 1936, joined Newcastle Aero Club as radio instructor. Went to 5KA Ade-

laide May, 1937, as technician, and later, Jan., 1938, appointed manager of 6GE Geraldton. Conducted research into dangers to aircraft from static, and elected Ass. I.R.E. (U.S.A.) Feb., 1939. Born Eastborn, England, July 20, 1909. Educated Perth Technical College, Perth Boys' School, Newcastle Technical College. Private address: Victorian Hotel, Geraldton. Recreations and hobbies: Golf, surfing and flying. Clubs: Utakarra Golf Club, Northern Districts Gliding Club.

EDWARDS, George: Producer 2UW Sydney. 30 years as playwright, producer vaudeville, musical comedy, drama. Managing director George Edwards Players Pty. Ltd., chairman directors Cobbers Pty. Ltd. Private address: "Darjoa," Long-



worth Av., Point Piper, N.S.W. Born Adelaide, S.A., 11/3/1886. Club: Tattersall's. Recreations: Golf, racing. Clubs: Tattersall's Club, Canterbury Race Club.

EDWARDS, James Roy, M. Inst.R.E. (Aust.): Technical Editor and director Australian Radio Publications Pty. Ltd., 30 Carrington Street, Sydney. Executive secretary and Editor Proceedings Inst.R.E. Member Sydney committee Inst.R.E. Entered radio as amateur experimenter 1919. General experience in radio, sound and



broadcasting fields in South Australia until transferring to Sydney during 1930. Took over factory management of Custom Built Radio. Transferred to Kriesler Radio Company as chief engineer, and has held similar positions at Paramount, Radio and Crown Radio. Joined Australian Radio Publications Ltd. in July, 1935. Experience covers practically every phase of radio and sound equipment design and production, and special attention has been paid to the design and construction of testing and measuring equipment for laboratory, production and service work. Was responsible for editing all papers produced

at the World Radio Convention, Sydney, 1938. Private address: "Brantwood Hall," Edgecliffe, N.S.W. Born 11/12/07.

EVANS, Wyatt Arthur: Lessee 2XL. Born Wales, 1894. Educated St. Oswalds, Salop and Nichfield. Private address: Cooma, N.S.W. Recreation: Fishing.

EXON, Frank C.: Managing Director, Fiji Broadcasting Co. Ltd., and Superintendent, A.W.A. Fijian Radio Service. Joined Royal Australian Naval Service 1915. Appointed A.W.A. marine staff 1920. In 1923, transferred to Coastal Radio Service. 1926, A.W.A. Engineering Dept., and in following year appointed to Beam Transmitting Station, Fliskville, Member Fiji Club. Born 6/4/96, England.

F

FAIR, Roger: Advertising Manager 4BK Brisbane and 4AK Darling Downs, the "Courier-Mail" stations. Served with 14th Battalion A.I.F. on Gallipoli, invalided home. Six



years commercial activities in India and America, associated with the "Daily Telegraph," Sydney. Joined A.W.A. in 1932 as program organiser, broadcasting department, appointed Brisbane representative A.W.A. 1936. Appointed Advertising Manager 4BK-AK September, 1938.

FAIRHALL, A. (See p. 74)

FINDLAY, A. P.: Director Findlay's Pty. Ltd., Tasmania. Has spent 31 years in musical instrument business, with experience in England and Germany. In radio merchandising since 1924. Director and supervisor 7LA Launceston. Managing director 7BU Burnie and



7DY Derby. Director Wills and Co. Pty. Ltd., Findlays' and Wills (Devonport) Pty. Ltd., Columbia Supplies Pty. Ltd., Tasmania. Educated Scotch College, Launceston. Member

Northern Club, Launceston, C.T.A. Launceston. A.B.C. Bowling Club, Rotary Club, Launceston, president East Launceston Cricket Club. Born 1892, Launceston, Tasmania.

FINDLAY, Norman A.: Director Tasmanian Broadcasting Network, supervisor and director 7LA Launceston, managing director 7QT Queenstown, managing director Wills & Co. Pty. Ltd., Launceston. Managing director Findlay & Wills (D'pt) Pty. Ltd., radio distributing & broadcasting since 1923. Military service with A.M.F. and two years with A.I.F. (wounded and mentioned in Sir Douglas Haig's despatches). Educated: Scotch College, Launceston.



Member Launceston Rotary Club, Launceston Golf Club, Launceston Cricket Club, Tamar Yacht Club. Private address: 6 Abbott Street, Launceston, Tasmania. Born: April 20, 1894.

FINDLAY, Selwyn Harry: Managing Director 7HO. Manager and Director of Findlay's Pty. Ltd., Director of Wills &



Co. Pty. Ltd. Educated Launceston Grammar School. Born Launceston, Tas. February 13, 1897. Private address: 14 Land Street, Sandy Bay, Hobart. Recreations: Golf, fishing, yachting. Clubs: Athanaeum Club, Royal Yacht Club, Royal Auto Club.

FISK, Sir Ernest Thomas, K.B.: F.R.S.A., F.Inst.R.E. (Aust.), Fel. I.R.E. (U.S.A.), A.M.I.E. (Aust.), Chairman and Managing Director, Amalgamated Wireless (A/sia) Ltd., 47 York Street, Sydney. Born at Sunbury-on-Thames, near London, 1886, joined Marconi Co., 1905. Trained and worked in all branches wireless engineering operation in England, America and other countries. 1909 went to Arctic icefields, demonstrated possibilities of wireless with Newfoundland sealing fleet. 1910 on board s.s. "Otranto" exchanged messages with H.M.S. "Powerful" in Sydney Harbour when "Otranto" was 200 miles north-west of Fremantle, a distance of 1,800 miles—a record in those days. Came to Australia 1911, as representative of Marconi Wireless Telegraph

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Who's Who (contd.)

FISK, Sir Ernest (contd.) Co. Amalgamated Wireless incorporated 1913, appointed general manager with a seat on the Board; three years later became managing director. In September, 1918, received first direct wireless telegraphic messages transmitted from England at his station at Wahroonga, N.S.W. August, 1919, gave first



public demonstration of broadcasting at Royal Society of N.S.W., Sydney. The establishment of the Beam Wireless Service between Australia and England was largely due to his experimental work and his consistent advocacy with both British and Australian Governments for the adoption of his plans for the service. Wireless Telephone Service between Australia and Homeland mainly due to his experimental work. The prestige of Amalgamated Wireless as one of the foremost wireless companies of the world is due to the broad vision and high executive ability of Sir Ernest Fisk, who, during the past 20 years, has developed wireless in Australia and in the Pacific from a national point of view. He is considered the foremost wireless authority in Australia. Visited England, U.S.A., and the Continent of Europe in 1933 investigating latest developments in wireless. Made a Chevalier of the Order of the Crown of Italy by the King of Italy. President, Institution of Radio Engineers (Aust.) 1932-1938. Created Knight Bachelor in Coronation Honours, 1937.

FITTS, Rupert A.: M.I.R.E. (Aust.); General Manager of the Victorian Broadcasting Network. Ten years with Royal Australian Navy, followed by seven years on technical staff



of 3LO, 3AR. Radio Western 3HA's transmitter and studio were installed under his supervision, and he then carried on as chief engineer of the station until his appointment as Manager in 1936. Outstanding executive ability and a thorough

knowledge of all departments of commercial radio have gained for Mr. Fitts the General Managership of the Network. Born Hawthorn, Victoria. Educated Melbourne. Private address: 41 Rix Street, Glen Iris, Vic. Recreations and hobbies: Rifle shooting and motoring.

FLEMMING, Claude: Actor and producer in charge of studio presentations at 2CH; first appeared on the stage at the Theatre Royal, Perth, W.A. in 1900; first appearance in England with Bebohm Tree in "Tribby"; appeared at Covent Garden. Left Australia in 1926 to produce series of travelogue films, and appeared in Holly-



wood films. Returned to Australia to produce for the late F. W. Thring; produced the "March to Nationhood" pageant for Australia's 150th Anniversary Celebrations; considerable broadcasting work in America and in Australia. Joined 2CH May, 1938. Born Sydney. Recreation: Golf. Club: Savage Club.

FLETCHER, Charles A.: Service manager 2GB. Has had long advertising career. After several years in advertising dept., Chivers and Sons Ltd. (one of largest jam mfrs. in Eng.), came to Aust. 1912,



& soon afterwards joined David Jones Ltd., where he was later in charge of the firm's press publicity department. Subsequently had agency experience and then as advertising manager of Overland (Sydney) Ltd. Acquired an interest in Motor Life Publications Ltd., director-manager for seven years. Joined 2GB March, 1931. Recreations: Motoring, photography, golf. Born September 28, 1890, Appledore, Devon, England.

FLETCHER, John Hamilton: Transmission engineer, Philips Lamps (A/sia) Pty. Ltd., 69-73 Clarence Street, Sydney. 1933-35, electricity supply department J. & A. Brown & Aber-

main Seaham Collieries Pty. generation and distribution. Ltd. High and low tension 1935-37 transmission department Philips Lamps. 1937-38, Colville Wireless Equipment Company Pty. Ltd. 1938 to date, transmission department Philips Lamps. Born: Newcastle, 1914. Educated: Newcastle and Sydney Technical Colleges.

FOSTER, George: Manager 2BS, associated with most commercial stations in Sydney, Melbourne, Adelaide and Brisbane as free lance radio entertainer. Started career on stage, toured New Zealand and Australia. Entered radio with Charles Lawrence's community concerts in Sydney. Mixed radio with musical comedy and revue. With Royal and Rex Theatres, Brisbane, for 16 months, played Adelaide for S.A. Centenary Celebrations. Announcer, salesman and community singing leader with 2KA and 2LM. Born: Minmi, N.S.W. Educated: Fort Street High School, Sydney. Private address: "Braemar," Keppel Street, Bathurst. Recreations: Tennis.

FOX, A. E. R., A.M.Inst.R.E. (Aust.): Manager 2GF Grafton. Entered Telegraphs and Wireless Branch, P.M.G.'s Department, Melbourne, 1926. Appointed Technical Staff National Broadcasting Service 3LO, 3AR Melbourne, 1929. Victoria Police Radio Division, 1933. Manager Store Publicity Co., and founded Fox Displays Co., Melbourne, 1934. Joined Amalgamated Wireless (A/sia) Ltd. Marine Department 1935. Engaged in Far East and Islands Services. Transferred Broadcasting Department 1936. Appointed present position 1937. Born England, September 28, 1910. Sub-lieutenant R.A.N.R. Clubs: Rotary of Grafton, St. Kilda Yacht Club and United Services Institute.

FOX, Matt. J., F.R.S.S.: Managing Director, Fox Advertising Service Pty. Ltd. Born Ireland. Educated at T.C.D. Private address: Hensley Hill, Bellevue Hill.

FRANCIS, Maurice: Dramatist, George Edwards Productions. Has been journalist, commercial traveller in Melbourne and New Zealand. Educated Wesley College, Melbourne and Melbourne University. Private address: 7 Princes Ave., Vaucluse, N.S.W.



Born 1904 Durban, South Africa. Clubs: C.T.A., Old Wesley Collegians. Recreations: Motoring, golf and bridge.

FRY, Charles Leslie: Philips-Miller engineer, transmission department Philips Lamps

(A/sia) Pty. Ltd. Construction and erection of 2KW. Radiophone Transmitter, Akureyri, Iceland, 1928. Construction and operation S.W. Transmitter, France; 1930-30 sound staff British International Pictures, Elstree, London. During 1932 went with film expedition to Timbuctoo and Gold Coast. 1933, recordist, Triumph Studios Ltd., Hammersmith, London. 1933-35, sound engineer Gaumont British Studios, Shepherd's Bush, London. 1935-36, visited Sydney, installation and operation of British Acoustic Films Ltd. Sound recording equipment at National Studios, Pagewood. Supervised recording "Flying Doctor" and "Uncivilised." Returned to England, joined Philips, Holland, February, 1937, as Philips-Miller engineer—transferred to Sydney, April, 1938. Born: Leamington Spa, England, March 23, 1904. Educated: St. Joseph's, Weybridge, Surrey. Private address: 30 Lamrock Avenue, Bondi Beach, Sydney. Recreations and hobbies: Short-wave amateur, photography, surfing.

G

GARDEN, Harcourt M.: Educated at Fort Street High School and Newington College, Sydney. Joined 3KY as announcer in July, 1929; graduated to Assistant Manager and Program Director, which positions he now holds. Recreations: Golf, motoring and riding.

GENDLE, Charles Henry: General manager and director Australian Record Co. Pty. Ltd., formerly Featuradio Sound Productions (N.S.W.) Pty. Ltd. Previously general manager Vocalion Gramophone



Co. Ltd. (Aust.), 1926-33. Secretary and general manager of Vocalion Gramophone Co. Ltd. in London 1921-26, and prior to that a director of World Record Co. Ltd. Arrived in Australia 1926 to establish Vocalion factory for recording and production of records. Established Sound Recording Division of Featuradio Sound Productions Pty. Ltd., Melbourne, Victoria. Born London, 1893. Private address: 12 Boronia Road, Bellevue Hill, N.S.W.

GIBSON, Miss Grace: Manager, American Radio Transcription Agencies. Came to Australia from America four years ago representing many leading American transcription companies. Since then has been in charge of sales for above company in Australia and New Zealand. Before coming to

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Who's Who (contd.)

GIBSON, Grace (contd.)



his full time and energy. Address: 10 Bowen Street, Annerley, Brisbane. Clubs: President Toowoomba Men's Hockey Association, Vice-president Toowoomba City Golf Club, Past President R.A.C.Q. member Rotary Club and Tattersall's Club.

GOODING, Donald McPherson: M.I.R.E. (Aust.). Chief Engineer "Advertiser" Network. R.A.N. 1916-1921; P.M.G. Department, Mercantile Marine;



Australia was associated with Radio Transcription Co. of America and KFVB broadcasting station, Hollywood. Recreations: Riding, yachting, surfing. Born El Paso, Texas, U.S.A.

GILMOUR, Norman Stanley: Managing director Lekmek (Australasia) Ltd., 75 William Street, Sydney. M.Inst.R.E. (Aust.) and President of the Institution 1938-9. Millions



"Advertiser" Network 1930 until present. Born Port Pirie May 30, 1901. Educated Port Pirie High School. Private address: 12 Lewis Street, Lockleys. Recreations: Tennis. Clubs: R.S.A.

GORDON, Lawrence: Studio Manager, 2NZ. Entered Commercial Radio January, 1935, with 2KO Newcastle as Announcer-copy-writer. Appointed Announcer-copy-continuity writer 2UE April, 1936; 15 months 2KO. Joined 2GZ as Chief Announcer. 1936 transferred to Northern Broadcasters Pty. Ltd.; 2NZ Inverell in October, 1937, as Program Manager-Chief Announcer. Before entering radio was four years with Newcastle firm (David Cohen and Co.) as sales assistant, Born Forest Lodge, Sydney, N.S.W., April 10, 1914. Educated Marist Bros' College. Private address: Collins Street, Ross Hill, Inverell, N.S.W. Recreations: Tennis, swimming, shooting.

GOLD, Edward E.: M.Inst. R.E. Aust.). Managing Director 4GR Toowoomba; Managing Director 4ZR Roma; Chairman of Directors 4VL Charleville; Superintendent Commonwealth Broadcasting Corporation (Q'land) Ltd; country in-



terests; Queensland's pioneer commercial broadcaster, established 4GR 14 years ago. Commenced life in electrical engineering, later becoming involved in engineering branch theatres. Managed motor sales and service business and took on radio as a side line and recreation, which later commanded

GOUGH, John T.: Advertising Manager, 71A. Ex-commercial traveller and association



member of the C.T.A. Prominent in Tasmanian competitions (literary) and winner of the Grand Champion for Elocution on five occasions. Stage-managed many theatrical productions. Adopted radio as a profession at inception 71A, 1930, as advertising manager, copywriter and announcer. Born Melbourne. Educated Hawthorn, Victoria. Private

address: 18 Patrick Street. Recreations: Gardening. Clubs: C.T.A.

GRAHAM, George Borton: Managing Director, Graham Advertising (Aust.) Ltd. Entered advertising 1934 as copywriter at Ad-craft Service, 1935. Manager of Canny Advertising Agency. 1936, commenced operations as Graham Advertising Agency. Author of



more than 500 radio plays and ghost stories and one-act stage plays. Born Perth Western Australia. Educated Northam High School. Private address: 25A Clark Street, Nedlands. Clubs: Advertising Institute.

GREEN, Alfred Leonard: M.Sc., Ph.D., F. Inst. P., A.M.I.E.E., Fel.I.R.E.(U.S.A.), M.Inst.R.E.(Aust.), A.W.A. Research Laboratories, Ashfield, N.S.W. Educated Baneroff's School, Essex, and King's College, University of London. 1926-27, Assis. Mathematical Master at Mercer's School, London, and part-time research student at King's College under Professor E. V. Appleton, F.R.S. 1927-29, Senior Scientific Assistant at Peterborough Radio Research Station of British Radio Research Board working on Ionospheric Investigations. 1929-35, Senior Research Physicist to Australian Radio Research Board engaged on Ionospheric Investiga-



tions. Made the first precise measurement in Australia of Kennelly-Heaviside layer height. Verified Professor Appleton's prediction that polarisation of downcoming sky wave is right-handed in Southern Hemisphere. Collaborated with other physicists of the Board in investigations of polarisation, field intensity, fading, lateral deviation of sky waves, fading control, for which see published papers. For this work awarded external Ph.D. Degree of University of London, appointed Honorary Lecturer in Electrical Engineering at University of Sydney, and awarded Overseas Premium Prize of Institution of Electrical Engineers, London, for session 1936-1937. 1935 joined Research Laboratories of A.W.A. Born, 3/2/'05.

GREENHALGH, Kenneth Neal, A.M.Inst.R.E. (Aust.): Chief Engineer Commercial Station 2KO (Newcastle Broadcasting Co. Ltd.), 1927-29, final two years of apprenticeship in Electrical Branch Government Tramways. 1929 operator experimental Station 2KG. 1932 appointed Chief Engineer Station 2KO. Born 27/2/1909.

GRIFFITHS, Alexander Robert: Dip. of Adv. Co-partner Griffiths Huse, Melbourne. Served all branches advertising. Executive and finance committees, Victorian Missions to Seamen. Student of International politics; spent part of life on the Continent of Europe. German linguist. Born: Scotland. State, secondary and university education. Recreations and hobbies: Golf, swimming, music and philately. Clubs: Tivoli, British Industries, Prahrner Philatelic Society, Klub zu Bremen.

GRIFFITHS, John Walter: Assistant National Advertising Manager, N.C.B.S. (New Zealand). Was on Advertising Staff "Sydney Morning Herald" and other newspapers. Advertising Manager Station 12B for 18 months prior to appointment to present position. Born: New South Wales, 1903. Educated Sydney High School. Private address: 319, The Terrace, Wellington, New Zealand. Recreations: Golf.

H

HAINES, Frank Benson: Sales representative 2GZ; born Chicago, U.S.A., travelled in Canada and came to Australia at early age. Accountant in Perth, W.A. Sales promotion in Sydney; joined 2GZ at its establishment. Private address: 10 Boyle Street, Mosman. Recreations: Motoring, tennis, golf.

HALLSWORTH, Norman Frederick Deaves: Program director 2HR; formerly manager 3YB Warranbool. On West Coast of Africa with trading firm. Travelling representative in the Far East, covering Ceylon, Straits Settlements, Java, Sumatra, Siam, Indo China, China, Japan and East Russia. Born: 31/7/1898, Rock Ferry, Cheshire, England. Clubs: Life member Singapore Cricket Club and Royal Singapore Yacht Club.

HARNETT, Dominic: Chief announcer 2SM, Sydney. Born Sydney 1905. Educated Patrician Brothers, Sydney and Ryde. Graduated from amateur theatricals to stage and picture work. Taught singing by Professor Bindley, Melbourne, and Francis Halls, Sydney. Joined Station 2SM Sydney as announcer August, 1934. Recreations: Golf, tennis.

HARPER, John: Announcer, 2KY Sydney. Ten years with J. C. Williamson and Fullers. Two years paymaster on Government Silos, Temora, 1920-1922. With 11th Battalion, A.I.F. Born Mosman, N.S.W., 4/6/'01. Member of Automobile and Microphone Clubs and Y.M.C.A.

HARRINGTON, George R.: Sales manager 4GR, Toowoomba. Organised and made possible The City Golf Links, within a mile of the centre of the city. President City Golf

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Who's Who (contd.)

HARRINGTON, G. R. (Contd.)

Club. Enlisted and served overseas in 9th Battalion, and Officer Commanding 3rd Australian Machine Gun Co. A.I.F. President Sons of Soldiers and Sailors League, Toowoomba branch. Private address: 16 Lindsay Street, Toowoomba. Recreations: Quail shooting and golf.

HARRIS, Hector McDonald: Secretary, 3AW Broadcasting Co. Pty. Ltd., Melbourne. Joined 3AW at inception, February, 1932, and was appointed secretary October, 1932. Born 22/12/1901. Recreations: Golf and tennis.

HARRIS, Robert Keith: Officer in charge Amalgamated Wireless (A/sia) Ltd., provincial broadcasting stations. Joined A.W.A. May, 1927, and successively held responsible positions in the sales department (Radiolas), accounts section, purchasing department until present appointment, 1933. Member Fed. Inst. Accountants. Recreations: Shooting, photography, reading. Born: January 20, 1911, Sydney, N.S.W.

HARTY, Frank Sturge: Feature sessions 2GB, Sydney. Educated Jamaica College, B.W.I. Served with Imperial Forces (1914-1919), France, Greece, Serbia, Egypt, Pales-



tine. Lecturer in industrial organisation, New Zealand, United States, Great Britain, Australia. Edited a weekly journal 1930-33. With 2UE 1934-1938, joined 2KY April, 1938. Joined 2GB November, 1938. Recreations: Tennis and walking.

HARVEY, William James: Chairman of directors, 4BU, Bundaberg Broadcasters Pty. Ltd., Bourong Street, Bundaberg, Queensland. Arrived in



Queensland, 1908. Manager, Bundaberg Hardware Co. Ltd., 1909-1917. Joined Wyper Bros. Ltd., hardware merchants and manufacturers, October, 1917,

appointed managing director, 1929. Clubs: Rotary, Burnett, Bowling. Born: 13/6/1877, Banff, Scotland.

HAYSOM, William John: Principal W. John Haysom Advertising Agency. Salesman Rhodes Motor Co., 1926-29. Promoter proprietary lines division Australian General Electric Co. 1929-32. Sales manager wholesale department Lucullus Ltd. 1933. Advertising agency



account executive 1934-7. Commenced own agency 1937. Born: South Yarra, April, 1907. Educated: Melbourne Technical School. Private address: 19 Millicent Avenue, Toorak. Recreations and hobbies: Tennis, golf, swimming. Clubs: Vic. Institute of Advertising, Albert Park Golf Club.

HEATH, L. Roy: Sydney sales staff Macquarie Broadcasting Network. Trained as civil engineer; entered commercial world and was in turn sales manager, manager and proprietor of car firms. Joined Melbourne "Age" advertising staff. Transferred to 3HA as



Melbourne sales manager. Acting Melbourne manager Victorian network during part of 1937, and later manager of 3HA. Became N.S.W. representative Victorian Network February, 1938. Commenced present position 1/7/'38. Recreations: Swimming, motoring.

HEMERY, Clement John Peter: Studio manager 3SR. Trained as architect with Stephenson & Turner, Hospital Architects. Commenced broadcasting in free lance capacity with A.B.C. in special commentaries, and dramatic work. Instituted first chain mike broadcast in Australia in Cowes Motor Race. Took up radio permanently with 3XY, Melbourne, shortly joining Argus Broadcasting Services. Wrote and produced "I Will Reply" broadcast from 3UZ on direct relay to a network of seven stations. Also "The Elusive Pimpernel." Produced and directed the Shepparton Centenary Historical Pageant with a cast of 200. Born: Sandy Bay, Hobart, Tasmania. Educated: Adwalton. Private ad-

dress: 217 Wyndham Street, Shepparton. Recreations: Swimming, tennis, golf, shooting. Clubs: Shepparton Golf and Tennis-Apex.

HICKLING, Rupert Charles: Manager, Radio Division, Goldberg Advertising Pty. Ltd. Commenced operation of radio division of Goldberg Advertising (Melbourne) in 1936. Pro-



ducer of "March of Time," "King of Kings," and some 500 other dramas. Previously managed radio department and production department at Catts-Patterson Co. (Vic.) Pty. Ltd. for seven years. Born: Melbourne, 1906. Private address: Venezia Court, Beaconsfield Parade, St. Kilda, Melbourne.

HIGGINBOTHAM, E.: Chairman of directors and managing director, 2TM. Arrived Australia 1920, joined B.G.E. Radio Department 1924, left as radio



department manager 1927; joined A.G.E. as country representative, occupied that position for three years; four years as assistant radio department manager, resigned February 14, 1935, to open up Station 2TM.

HOAD, Arthur E.: Engineer-announcer 2AY Albury. Previously held same position 2GF Grafton and 4CA Cairns. Engineer-announcer Station 3BO



Bendigo nearly two years. Earlier experience at 4TO Townsville and Sydney. A.M. Inst.R.E.(Aust.). Born March 24, 1911.

HOLLOWAY, Ernest: Managing director 3CV. Formerly manager 3AW Melbourne, manager 3MA Mildura. Held commissioned rank A.I.F., served from January 7th, 1915, to No-



ember, 1920. Born: London, June, 1892. Educated: London. Private address: 68, Short Street, Bendigo. Recreations and hobbies: Boxing, athletics.

HOLT, T. J. (See p. 74)

HOOKE, Lionel Alfred: General manager, Amalgamated Wireless (A/sia) Ltd., 47 York Street, Sydney, N.S.W. M.I.R.E. (America), Councillor and M.Inst.R.E. (Aust.). Joined Amalgamated Wireless 1913,



and in 1914 joined Shackleton's Polar Expedition. During war commissioned in New Zealand Royal Naval Volunteer Reserve, served as commissioned officer in submarine chasers. Transferred as pilot to Air Force, subsequently commanding Air Station at Bude. On return to Australia appointed Melbourne office A.W.A., and later became Melbourne manager. Transferred to Sydney as assistant manager and became deputy-general manager position 1936. Travelled Europe and America for A.W.A. in 1930-32 investigating world's development in radio. Councillor Institution Radio Engineers, Australia 1932-1939. Deputy - chairman World Radio Convention 1938. Born 31/12/1894.

HOOPER, Edgar M., A.M. Inst.R.E. (Aust.), Assoc.I.R.E. (U.S.A.): Engineer in charge 3DB, Melbourne. Experienced in marine operating. A class broadcasting, equipment design, construction and maintenance. Recreations: Amateur radio, tennis and motoring.

HORNER, H. G.: General manager Broadcasting Station 2GB Pty. Ltd.; director of broadcasting Macquarie Broadcasting Services. Educated King's College, Canterbury. Took up farming in New Zealand at 18 years of age; studied accountancy. Appointed ac-

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Who's Who (contd.)

HORNER, H. G. (contd.)

countant and assistant secretary to Sun Newspapers in 1923. Commissioned by the board to investigate 2BL, and after re-organisation of the station remained as acting manager until 2FC and 2BL amalgamated; returned to Sun



Newspapers. Later appointed general secretary, and manager for New South Wales Australian Broadcasting Co. Ltd. When the Australian Broadcasting Commission was formed, was appointed N.S.W. manager in control of 2FC, 2BL and country relay stations. In 1937 accepted position of general manager Broadcasting Services Association Pty. Ltd., and Broadcasting Station 2GB Pty. Ltd. Later appointed director of broadcasting of the Macquarie Broadcasting Services Pty. Ltd. on the formation of the company. Has been actively associated with some notable broadcasts, including initial flight of the "Southern Cross," "The Southern Seas Broadcast" in 1933, and many prominent orchestral concerts and recitals. Was instrumental in the formation of Australian Broadcasting Commission Symphony Orchestra, and initiated many features of the Commission, such as first Grand Opera seasons and the importation of celebrity artists and conductors. Born: Beckenham, Kent. Recreation: Golf. Club: Lakes Golf Club.

HOSKING, A. P.: Sales Manager, Amalgamated Wireless Valve Co. Ltd., 47 York Street, Sydney, N.S.W. M.Inst. R.E. (Aust.) Joined South African Post and Telegraph, 1905. Beira and Mashonaland



Railways 1910, Rhodesian Post and Telegraph 1912, South Africa Forces August, 1914-October, 1915; R.A.N. Radio Service, 1916. Commercial side

of A.W.A. 1923, Sales Manager 1924, Sales Manager A.W. Valve Co. 1932, Chairman Aust. Valve Merchants' Association. Recreations: Golf, fishing, motoring.

HUME, Ernest J.: Chief engineer, 5DN Adelaide. Actively engaged in broadcasting since 1923, and associated with 5DN



since its inception. Has had experience in designing several complete installations. Educated at Scotch College, Adelaide.

HURNDSELL, Charles Alfred: Station manager 4WK. Four years radio officer A.W.A. Marine Branch. Served on E. & A. steamer "Nankin," freighters s.s. "Macedon," m.v. "Momba," s.s. "Caradale," s.s. "Burwah," s.s. "Era." Six years with P.M.G. Department. Holder of first-class certificate wireless operator, Madrid. Attached to technical staff 3BO Bendigo 1938. Born: Bendigo, Victoria, October 2, 1907. Educated: Griffith Intermediate High School, Griffith, N.S.W. Private address: 57 Pratten Street, Warwick. Recreations: Tennis, swimming, golf, photography.

HUSE, George John: Co-partner Griffiths Huse, Melbourne. Enlisted 1914, original 14th Batt., A.I.F., served Gallipoli, Egypt, France, Belgium, mentioned twice in despatches, gained commission on field. Intelligence Officer and Ass. Adjutant 14th Batt., France. Adjutant first ship to bring original Anzac on leave from France. Lectured throughout Vic., S.A. and W.A. with Australian War Museum. Two years manager plantation German New Guinea. Studied and practised advertising in N.S.W., S.A., Vic., Tas. and N.Z. Born: Stawell, Vic. State, Technical and Cambridge University education. Private address: 18 St. Vincent's Street, Caulfield, Vic. Recreations: Golf, cricket, football and debating. Clubs: R.S.S.I.L.A., Adelaide.

IRISH, Ronald Arthur: Chartered accountant (Aust.): treasurer, Macquarie Broadcasting Services Pty. Ltd.; secretary and director, World Broadcasting System of Australasia Pty. Ltd.; secretary, Australian Record Co. Pty. Ltd.,

Fig Tree Studios Pty. Ltd., Argosy Films Ltd., Mastercraft Film Corporation Ltd., etc. Recreations: Golf, tennis, cricket.

J

JEFFREY, L.: General manager, Coalfields Broadcasters Co. Pty. Ltd. (2CK Cessnock). Joined engineering branch P.M.G.'s Department Brisbane, 1917. Stationed in Brisbane for four years, then transferred to Toowoomba and later to relieving staff. Resigned in 1926 to enter business as news agent and stationer. In 1922 joined field staff of an insurance company. Entered the advertising field in 1934 on sales staff of Shipping Newspapers Ltd., after twelve months took up radio advertising with 4BC Brisbane, later transferring to 4BH Brisbane. Appointed to present position in July, 1938, took up duty on November 14, and opened the station on January 9, 1939. Born: Blackall, Queensland, June 7, 1900. Educated: State School, Blackall, Technical College and High School, Brisbane. Private address: Cnr. Maitland Road and Comfort Avenue, Cessnock. Recreations and hobbies: Tennis, gardening.

JOHNSON, Norman Keith: Publicity manager and news editor Macquarie Broadcasting Network. Early years spent in banking, South Australia and Queensland; transferred to journalism 1921, worked in three States until appointed news editor Sydney "Sun," 1932. Resigned 1936 to accept appointment as secretary to directors, David Jones Ltd., Sydney. Joined Macquarie, October, 1938. Born, 18/8/1900, Crystal Brook, Sth. Australia.

JOHNSON, William John: Secretary and advertising manager, Station 4IP, Ipswich. Saw service with A.I.F. at Gallipoli and in France. Partner in F. W. Johnson and Sons, motor traders, Ipswich. Born at Ipswich 10/11/03. Member of Rotary and Legacy Clubs. Ardent bowler.

JOHNSTON, Edward Allen, J.P., F.O.A.: Partner in Johnston Jones Advertising. Teaching at the Fortitude Valley State School, Brisbane, for nearly two years, passed two pupil teacher examinations. At 18 years of age joined Renter's service. At 21 was appointed manager at Charters Towers; at 24 manager at Coolgardie, and 26 manager at Adelaide. At 30 transferred to Brisbane as manager for Queensland. After 15 years service in Brisbane, opened own advertising agency and traded as Johnston Advertising Pty. Ltd. for 17 years, when the present firm of Johnston Jones Advertising was established. Born: South Pine, near Brisbane, January 17, 1874. Educated: Warner State School, South Pine, Fortitude Valley State School, Brisbane. Private address: "Montpellier," Wickham Terrace, Brisbane. Recreations: Golf. Club: Royal Queensland Golf Club.

JOHNSTON, William W.: Secretary 2HD, Newcastle. Has travelled in Africa, U.S.A. and Canada. Came to Australia in 1918. Broke into radio at Newcastle with 2HD, where he is well-known and popular. Born 26/10/1873. Recreation: Hiking.

JONES, John Henry, M.A. (Sydney): Partner in Johnston Jones Advertising. Civilian prisoner of war in Ruhleben (Germany) 1914-1918. Teacher in Department of Public Instruction (Queensland), and one-time lecturer in Economics and essay writing in the Workers' Educational Association (Queensland). In 1924 established the J. H. Jones Advertising Service, April, 1936. Amalgamated with Johnston Advertising Pty. Ltd. to form the present firm Johnston Jones Advertising, Brisbane. Member of Senate of University of Queensland since 1937. Born: Brisbane, February 26, 1888. Educated: Brisbane Grammar School, Sydney University, Berlin University. Private address: 305 Cavendish Road, Coorparoo, Brisbane, Queensland. Recreations and hobbies: Yachting and Golf, reading and music. Clubs: Royal Queensland Yacht Club, Brisbane Golf Club.

JOYCE, Donovan: Continuity manager 3KZ Melbourne. Educated Scotch College, Melbourne, followed with several years journalistic and advertising experience. Nine years in radio, seven of which have been in commercial radio. Wide experience country broadcasting with 3HS (now 3LK), 3MA, 2BH, and 5DN Adelaide, from where he was appointed to present position at 3KZ in 1935. Conducted station's Sunday morning broadcasts for 2 1/2 years and is author of many successful scripts and productions. Originator "Radio Cinema" in Australia. Hobbies: Collecting curiosities.

JOYCE, James: Production liaison officer, Macquarie Broadcasting Services Pty. Ltd., formerly sales promotion manager, Featuradio Sound Productions (N.S.W.) Pty. Ltd. Joined original Featuradio Melbourne Company 1934, later becoming manager for Victoria. Transferred to Sydney in 1936



to take charge of sales and production. Spent nine years in the professional theatre and nine years broadcasting and recording. Produced the first Australian electrical transcriptions and recorded announcements when operating the old Decca studios. Station manager for 3YB for two years, later with 3DB and 3AW. Also writes many radio scripts. Transferred to present position early in 1938.

Who's Who (contd.)

K

KAUPER, Henry Alexis, M. Inst.R.E. (Aust.), Technical Supervisor 3DB. 1918-19 re-



search branch, Royal Air Force. 1919-22 aircraft engineer. 1922-35 various radio activities, including 3 years chief engineer of 5CL. Born 12/3/1888.

KEMP, Sydney Joseph Albert: Superintendent manager, The Argus Broadcasting Services Pty. Ltd. Served during Great War with Royal Naval Volunteer Reserve. Five years Marconi International Marine Communication Co. (London). Private wireless operator to



late Viscount Leverhulme on yachting business expedition to West Africa, 1924. Associated with "The Argus" for 10 years, advertising staff, and from 1932-1936 as sales promotion manager. Manager 3SR, October, 1936, appointed present position, March 13, 1939.

KEMSLEY, A. N.: General manager Station 3UZ, Nilsen's Broadcasting Service Pty. Ltd., past-president of Legacy Club, and past vice-president of Australian Federation of Broadcasting Stations. Member of the State War Council of Vic.



and member of the advisory committee of the Toc H. for Vic. Four and a half years active service. Staff Captain "Q" Australian Corp Head-quarters, M.S.M. Member of

Trustees Victorian Shrine of Remembrance. Was secretary of the Metropolitan Town Planning Commission for 7 1/2 years. Born at South Australia.

KENNEDY, Stanley William: Secretary Tamworth Radio Development Co. Ltd. In March, 1930, joined the firm of Thomas Davis & Co., chartered accountants (Aust.) at Inverell. After four years, transferred to Tamworth branch same firm. September 26, 1938, joined Tamworth Radio Development Co. Ltd. as accountant, and in December of same year pro-



moted to position of secretary. Born: Inverell, August 10, 1912. Educated: Inverell Intermediate High School. Private address: 105 Carthage Street, Tamworth. Recreations: Golf, swimming. Clubs: Tamworth Aero Club (hon. treasurer), Tamworth Golf Club.

KENNEDY, T. St. John: Manager 6PR Perth since February, 1938; has been with Nicholson's Ltd., owners of 6PR, for 15 years, and for six years prior to present appointment was secretary of Nicholson's; covered Interstate Hockeys Carnival for 6WF in 1936, and the cricket Tests in 1936 for 6PR; delegate to W.A. Cricket Association, playing member and delegate East Perth Cricket Club, vice-president W.A. Hockey Association, member W.A. hockey teams 1932 and 1933. Born: Baert December 19, 1904. Educated: Christian Brothers' College, Perth. Private address: 5 Ventnor Avenue, West Perth. Recreations: Cricket and hockey. Clubs: East Perth Cricket Club, Guildford Hockey Club.

KERR, Alfred Dixon: Engineer, 3BA Ballarat. Has held experimental transmitting licence since 1926. Was one of the founders of 3BA and a director until the original company sold out to "The Courier." Is member of Wireless Institute of Australia and member R.A.F. Wireless Reserve.

KILPATRICK, Kenneth William: Program Director N.C.B.S. (New Zealand). Formerly with Associated Newspapers Ltd., 2UE, 2GB. First Director 2ZB Wellington, New Zealand. Held rank of Captain, Australian Military Forces. Born: Sydney, October 20, 1901. Educated: North Sydney High School. Private address: 17 Mitchell Street, Brooklyn, Wellington. Recreations: Tennis, swimming.

KING, Robert Arthur, M.L.C.: Secretary, 2KY, Sydney. Four years organising secretary and three years as secretary of the Labour Council of N.S.W. A member of the Legislative Council for 3 years and on the reconstruc-

tion of the Council was elected for 12 years. Born 10/4/86 in Launceston, Tasmania. Recreations: Swimming, football and athletics.

KINNEAR, Arthur Charles: General manager, "The Advertiser" Network. Joined State Hansard as junior. Shortly afterwards transferred to "The Register," and was deputy chief of staff when amalgamation with "The Advertiser" occurred. Then became deputy chief of staff and politician roundsman for "The Advertiser." During association with Press conducted motoring and football pages, rowing, yachting and radio features, being first to write regular wireless notes in South Australia. Was twice acting manager of the network for short periods during temporary absence of the late Mr. A. L. Holtze. Born: Adelaide, June 28, 1902. Educated: Unley Primary and High School of Mines, Muir-den's College. Private address: 51 Northcote Terrace, Medindie. Recreations: Colour cinematography, radio, boating, tennis. Club: Royal S.A. Yacht Squadron.

KNOX, L. Prouse: Manager, Fidelity Radio Pty. Ltd., 49 Market Street, Sydney. Born Melbourne, entered British Colonial Government Service, appointed Registrar-General's Department, Suva, Fiji; completed two years' service. On return, served eight years as



distributor and exhibitor in motion picture industry, Australian States and New Zealand. Seven years general manager in Japan, Universal Films (Japan) Ltd.; sales supervisor for Java and China. Opened India, Burma and Ceylon offices for Fox Film Corp., served six years as divisional managing director. 1936-7, studied radio in U.S.A., following return to Sydney, appointed to present position, August, 1938.

L

LAMBERT, Terence Edward: Manager 4IP. Served in R.A.N.R. For some years followed pastoral pursuits in New South Wales. Divers occupations; station bookkeeper; cartoonist, freelance journalist; 3 1/2 years announcer-actor 4BC. For short time (before accepting present position) was chief of radio productions at Country Press Campbell Advertising, Brisbane. Private address: Graceville, Brisbane. Recreations: Horseback riding and boxing.

LANE, Reginald Ewart: Advertising manager 2GB and Macquarie Broadcasting Network. Was Melbourne councillor of Australian Association of National Advertisers and assisted in formation of Audit Bureau of Circulations whilst advertising manager Ford Motor Co. of Australia 1928-31. Toured world on a journalistic commission 1931, and continued in journalism until entering

broadcasting as advertising manager 2CH, 1934-8. Former



Rugby international. Educated: Newington College, Stanmore. Born: Tenterfield, N.S.W.

LARKINS, Frederick William: Publicity manager, Amalgamated Wireless (A/sia) Ltd., 47 York Street, Sydney. Associate of Commonwealth Institute of Accountants. Associate of the Chartered Institute of Secretaries, holder of



Diploma in Economics and Commerce (Sydney University). Joined Australasian Wireless Co. Ltd., as accountant, July, 1912, appointed accountant to Amalgamated Wireless (A/sia) Ltd., on formation, July, 1913, until 1923, when he took over duties of publicity and advertising manager on the creation of that section of A.W.A. activities. Private address: 61 Wolseley Road, Mosman.

LARKIN, J. S.: Sales manager 5DN Adelaide. Is one of commercial radio's veterans, having joined 3UZ in 1930, following successful journalistic career with Melbourne & Sydney papers. Knowledge of technical side of radio, musical training, and newspaper ex-



perience, fitted him for radio, and enabled him to make the fullest use of his comprehensive tour of America to study broadcasting developments in 1937. Resigned as advertising manager of 3UZ, March, 1939, to join 5DN. Was one of founders of the Federation. Hobbies: Golf, tennis, swimming. Clubs: C.T.A. and City and Overseas. Born, 12/2/03.

Who's Who (contd.)

LAWRENCE, Arnold Eger-ton: Manager 4TO. Holder Washington Convention Certifi-cate, 1st Class, Madrid Validat-ing Certificate, Alexander Hamilton Business Course. Commenced radio career, 18th Government Transport Service 1918, as operator hospital ship "Marama." Served as radio operator at sea until 1925, transferred broadcasting de-partment A.W.A. and appoint-ed technical staff 2LO, ap-pointed receiving manager 3BO Bendigo, 1930. Transferred to A.W.A. Station 2AY in 1931, as station manager. 1935, in-stalled 50 watt transmitter at 4WK Warwick and appointed manager, The Warwick Broad-casting Co. Pty. Ltd. 1933, transferred to 4TO. Born: Christchurch, New Zealand, September 21, 1899. Educated: Normal Training College, Christchurch, New Zealand. Private address: 11A Hale Street, Stanton Hill. Recrea-tions: Hockey, bowls. Clubs: Rotary, R.A.C.G.

LEOPOLD, Ward: Record-ing department A.W.A. First appeared on stage at age of three. Experience of musical comedy and drama since 1915. Took up writing and produc-ing for the stage. Entered radio, writing own songs and



productions. Combined jour-nalism and radio, 1925-1935. Joined Trans-Radio News Oc-tober, 1935, as producer of Woman's Magazine of the Air. Joined Amalgamated Wireless and appointed present position early 1939. Born: Sydney, 1904. Recreations: Swimming, litera-ture, fishing, gardening.

LEVY, Francis Edward: Sales manager 2UW, Sydney. Educated Wellington College & Victoria University, N.Z. Stud-ied law in Wellington 1918-20;



Joined Goldbergs' Wellington office 1920, manager Auckland office January, 1924. Assistant manager Wellington, October, 1924; returned to Auckland,

1925; appointed a director 1926; director of Australian Com-pany with headquarters in Sydney 1930-34; joined 2UW September, 1934, as service manager, and was appointed sales manager July, 1935; president Auckland Advertis-ing Club, 1929. Born 5/2/02 in Wellington, N.Z.

LEWIS, Edwin James: Man-ager 3UL. Enlisted as private 7th Bat. A.I.F. 1914; returned Australia after service on Gal-lipoli, August, 1915; entered Home Service Corps until 1919. Accountancy and private sec-retarial work until 1924, when joined 3LO with Broadcasting Co. of Australia. Joined 3DB Hobart 1930; transferred to 4QG Brisbane, January, 1934; joined the "Argus" Broad-casting Services, March, 1937. Born: Ystradygynlais, Wales, Octo-ber 1, 1891. Educated: Cardiff, Wales. Private address: War-ragul, Victoria. Recreations: Gardening, motoring, fishing. Clubs: Rotary International.

LEWIS, Herbert James: Manager and engineer, Sta-tion 2GN, Goulburn Broadcast-



ing Company. Was electrical engineer and joined Amalg-amated Wireless 1925 as drafts-man at Radio Electric Works; became works buyer and then buyer for the company. Trans-ferred to broadcasting depart-ment, January, 1936.

LIPPMANN, L.: News Editor of "Broadcasting Business." Former newspaper journalist, N.S.W., Victoria and Queens-



land. Joined Australian Radio Publications Pty. Ltd., March, 1937. Recreation: Fishing.

LUNN, Lionel Joseph: An-nouncer "Dinner Divertisse-ments" 2KY. Announcer with 2GB 1931-32 (15 months). Man-ager 2UE 1932-35 (2 years and 5 months). On 2KY staff since March, 1938. Born: Sydney, August 12, 1902. Educated: Christian Brothers' High School. Private address: 79 Yarranabbe Road, Darling

Point. Recreations and hob-bies: Amateur movies, fishing, speed boating.

LYONS, Norman: Station manager 2UW. Educated Greenwood. Entered radio 1927. Conducted boys' sessions for 2FC and 2BL under the nom-de-plume of "Mr. Nor-man." Created Australian wide



interest in model aeroplanes. Joined the Australian Broad-casting Company when they controlled the National Sta-tions as officer-in-charge of outside broadcasts, and talks editor. Transferred from Na-tional Stations to 2UW as studio manager when it came under control of the Common-wealth Broadcasting Corpora-tion. Appointed present posi-tion January, 1937. Hobbies: Radio, aviation and golf.

Mc

McCAULEY, A. L.: Partner with G. E. McCauley, of McCauley & McCauley, consult-ing accountants & auditors, & company secretary, 53 Martin Place, Sydney. Director and secretary of: Transcontinental



Broadcasting Corporation Ltd., 2KA Ltd., Radio Kempsey Ltd., Everards Ltd., Searls Motor Service Ltd., Labor Motor Funerals Ltd., Searls (Blue Mountain) Tours Ltd., Bren-nans Theatres Ltd.

McCAULEY, George Edward: Managing director Transcon-tinental Broadcasting Corpora-



tion Ltd. Director 2KA Ltd. and Radio Kempsey Ltd. Part-ner McCauley and McCauley, public accountants, since 1926. Born Clifton, Q'ld. Married. Private address: 358 Edgecliff Road, Woollahra. Recreation: Golf.

McDONALD, Arthur Stephen: Chief engineer and assistant manager, Amalgamated Wire-less (A/sia) Ltd., 47 York St., Sydney. M.I.R.E. (America)



and M.Inst.R.E. (Aust.). Coun-cillor of Inst.R.E. (Aust.). Born Castle Donnington, now Swan Hill, Vic. Educated at public school and Melbourne Tech-nical College.

McDONALD, Ian: News Edi-tor 2KA and in charge news broadcasts and commentaries of 37 news services weekly. Also in charge program direc-tion, record purchases. Form-erly announcer and chief copy



writing staff 2WG. Has written short stories and comedy plays for radio presentation. Keen student foreign affairs and current events.

McGUIRE, Wm. S.: Con-struction engineer, Colville Wireless Equipment Co. Pty. Ltd. Technical training with Marconi School. Eleven years



Who's Who (contd.)

McNAIR, William Allan, M. Com., Dip.Soc.Sc., A.A.I.S., A.R.A.N.Z., director, secretary and research manager, J. Wal-ter Thompson (Aust.) Pty. Ltd., since 1932. Educated Auckland Grammar School and Auckland University College. Ten years business, legal and teaching experience in New Zealand before entering ad-vertising. In 1927 wrote exten-sive study of New Zealand's trade with the East. Joined J. Walter Thompson organisa-tion in 1930, as accountant and research manager, Wellington office. Since specialising in ad-vertising, has conducted num-erous market and media sur-veys and in April, 1937, pub-lished a comprehensive text book on advertising and broad-casting, entitled, "Radio Ad-vertising in Australia."



McNEIL, Thomas A. E.: Commenced radio March, 1918, with Marconi Company as marine operator. Broadcast experience dated from 1926. Joined 2BL as technician in 1927, and was made supervisor when P.M.G. took over the engineering side of "A" class stations in 1929. Left P.M.G.'s Department October, 1931, to take position as chief engineer of 2CH, which station opened



in February, 1932. Continued in this position until August, 1936, when transferred to A.W.A. transmitter installation work. Joined Station 2UW as chief engineer in December, 1936. Born London, February, 1901.

McQUILLAN, Cecil John: Chief radio systems engineer, Standard Telephones and Cables (A/sia) Ltd., 258 Botany Road, Alexandria, N.S.W. B.Sc. (Engineering) Honors London University, D.I.C. (Diploma of the Imperial College, London), Whitworth Exhibition, M.I.R.E. (America). Private address: "Cheddington," Elizabeth Bay Road, Sydney. 1923, joined Standard Telephones & Cables Ltd., London. 1933, visited England and the Continent to study latest technique and returned to Australia to carry out contract with Postmaster-General's Department for the manufacture, supply and in-stallation of seven new regional stations to be erected at Laun-ceston, Townsville, Grafton, Sale, Dubbo, Murtoa and Ka-talting.

M

MALONE, James J. M.C.: F.Inst.R.E. (Aust.), M.I.E.E. (Eng.), Mem.I.R.E. (U.S.A.), Chief inspector wireless Post-master-General's Department. 1911, telegraph testing officer, G.P.O., Sydney. 1912, engineer

perience in England, Europe and the Far East. On return to Australia entered 3KZ Mel-bourne for first commercial radio experience. Joined 3AW in same capacity, and in turn became feature announcer, continuity chief, studio man-ager, program manager, and finally, production manager. After four years intensive ex-perience with 3AW in every branch of commercial broad-casting, resigned November, 1936, to establish radio divi-sion for The Paton Advertising Service Pty. Ltd. Born Mel-bourne, 1907.



MATHER, Lezlle Garnet: Melbourne sales executive Macquarie Broadcasting Ser-vices Pty. Ltd. Educated Gil-ford Grammar School, Perth, and Melbourne University. Four years A.I.F. Australian factory representative for Eng-lish and French manufacturers; company manager and sales manager 1920-24. General storekeeper 1926-28, sales man-ager 3DB Melbourne 1928-34. Business visit overseas 1934-5, sales manager Stokes and Sons, Melbourne, 1935-6, and Mel-bourne representative stations 1936 onwards. Recreation: Golf.

MATTHEWS, George C. B.: General manager and director of Productions, British Austral-ian Programmes Pty. Ltd. (for-merly Broadcast Advertising Pty. Ltd.), Sydney. Reporter and sub-editor for seven years Melbourne "Herald" and "Sun News-Pictorial." Joined Vic-torian staff Australian Broad-casting Commission 1931 on re-turn from journalistic journey across Arabia. Awarded major prizes in Commonwealth com-petitions for plays, "Two White Gates" and "Down Through the

radio exclusively 1937. Born: Melbourne, March 10, 1900. Educated: Melbourne, Private address: "Lochiel," Orang Avenue, Pymble. Recreation: Breeding dogs.

MAXWELL, Sidney Aubert: Director and founder, Trans-Radio News and Sales Service. Was officer of Commonwealth Bank over 9 years. Prominent in automotive circles holding sales executive positions. Chairman Commercial Vehicle Division, Motor Traders' As-sociation. Member executive M.T.A., 1931. Sales executive experience in grocery and chemical industries. Prominent sportsman, captain of Leich-hardt Rowing Club for some



MARDEN, C. F. (See p. 74)

MARSH, Gordon W.: Manag-ing director Station 3UZ, since March, 1939. Formerly direc-tor 5DN Adelaide, and director 5RM. Prior to that was assist-ant manager 4BK Brisbane,



and before that with 3HA Hamilton. As a newspaper man was associated with "Daily Guardian," "Daily Tele-graph," "World," "Motor in Australia," and "Flying." Held executive positions in four States. Traveled abroad. Clubs: Amateur Sports, Naval and Military, United Services (Q.). Recreations: Squash racquets and golf.

MASSEY, Gordon Frederick: Radio manager, The Paton Ad-vertising Service Pty. Ltd., Capel Court, 375 Collins Street, Melbourne, C.I. Graduated to Queensland management of Commercial Investment Trust by way of Vacuum Oil and General Motors Acceptance Corporations. Obtained ex-

Years," and operette "Rasuli." Inaugurated dance band pre-sentations in association with Jim Davidson, later writing many musical revues for A.B.C. and commercial stations. Spent 12 months, 1937-38, studying radio production and transcrip-tion making, Hollywood, New York. Appointed B.A.P. pro-ducer May, 1938, and director January, 1939. Born: Southsea, England, 1906. Educated: Fel-stead, England.

years; hon. secretary of the N.S.W. Rowing Association. Born: 22/10/1900, Waverley, N.S.W. Club: Royal Automobile Club of Australia. Recrea-tions: Rowing, tennis, swim-ming, surfing and physical cul-ture.

MEANY, Right Rev. Monsi-gnor Jas.: Managing director 2SM Sydney. Parish Priest,



Archdiocese of Sydney. Domes-tic Prelate to His Holiness Pope Pius XII. President S (Continued next page)

Who's Who (contd.)

MEANY, Rt. Rev. (contd.)

Michael's Golf Club, patron Advertising Golf Club, member Concord Golf Club. Born: Blarney, County Cork, Ireland. Educated for the priesthood All Hallows College, Dublin.

MILLAR, Christopher Kenneth, M.C.: Accountant 2GZ Central N.S.W.—associate member Federal Institute of Accountants and Australasian Institute of Secretaries; Captain A.I.F. 1914-1919. Club: Imperial Service Club, Sydney. Hobby: Vegetable gardening.

MILLAR, George: Chartered accountant (Aust.), secretary Macquarie Broadcasting Services Pty. Ltd., and director of Broadcasting Service Association Pty. Ltd., formerly secretary of 3GB; general secretary to the Surf Life Saving Association of Australia. Clubs: Manly Golf Club, North Steyne Surf Club. Recreations: Golf and tennis.

MILLAR, Renn: Chief announcer, 3DB, Melbourne. Is the possessor of a fine baritone voice, which found him a job with various travelling companies. He was 7 years with the Scarlet Troubadours, during which time he travelled New Zealand. His radio debut was made as announcer of 3LO, from which he transferred to 3DB. Soon after, the "Herald" bought out the station and he has been there ever since.

MINGAY, Oswald Francis: F.Inst.R.E. (Aust.), M.I.R.E. (U.S.A.), M.Inst.E. Managing director Australian Radio Publications Pty. Ltd., managing editor and proprietor "Radio and Electrical Retailer of Australia," "Radio Trade Annual," "Broadcasting Busi-



ness," 30 Carrington Street, Sydney. Hon. general secretary Institution of Radio Engineers Australia, since its inception in 1932; hon. secretary R.I.F. (Radio Industry Functions) Club of Sydney. Served in Signals A.I.F. 1915-1919. Mentioned in despatches. Member Millions Club, Imperial Service Club, Sydney Legacy Club. Founded Australian Radio College 1930-33. Founded Australian Radio Publications 1930. Private address: 4 Woodside Avenue, Lindfield, N.S.W. Born 1/7/'95.

MITCHELL, V. F.: General sales manager J. B. Chandler and Co., 43 Adelaide Street, Brisbane. Served in A.I.F. Managing director 4BH Brisbane. Clubs: R.A.C.Q., Royal Aero Club. Born: Bendigo, Victoria.

MONKS, Cuthbert A.: Sydney representative for 2HD, 2PK, 2QN, 2XL, 2MG, 3KZ, 4AT, 5KA, 5AU, 7UV. Became



associated with radio in 1930 through 2HD. Born in the Riverina district. Recreations: Tennis and motoring.

MOONEY, Leo Joseph: Director Mooney-Webb Pty. Ltd. 1912, advertising manager retail departmental store. 1914, advertising manager footwear



manufacturer. 1920-1925, advertising manager Ackmans Ltd., furniture. 1925, opened and managed Goldbergs Advertising, Melbourne office. 1926, executive production Samson Clark Price Berry. 1928-1937, director Mooney-Webb Pty. Ltd. War service, gunner 1914, A.I.F. at Gallipoli (6 months), Lieut. Royal Field Artillery, Flying Officer in France and instructor Royal Flying Corps. Officer in Charge Supplies R.F.C. Army of Occupation. Born: July 25, 1891. Educated: Xavier College, Kew, Victoria. Private address: 56 Balcombe Road, Black Rock. Recreations and hobbies: Golf, photography. Clubs: Naval and Military Club, Kingston Heath G.C., Sandringham Club.

MORGAN, Sydney: Managing director 3KZ Broadcasting Co. Pty. Ltd., 64 Elizabeth Street, Melbourne. Member Victorian Institute of Advertising. Principal in firm of Val Morgan and Sons Pty. Ltd. Associated with advertising activities in

Melbourne since 1917. December, 1930, one of the founders and director of Station 3KZ. Appointed managing director,



June, 1932. Visiting overseas 1939. Vice-president Australian Federation of Broadcasting Stations 1938. Clubs: Yarra Golf and C.T.A.

MURRAY, Archibald James M.C.: Sales manager 3KZ Advertising Service Pty. Ltd. since July, 1936. Served A.I.F. for 3 1/2 years as Captain; Military Cross and mentioned in Despatches. Has had considerable experience in the commercial world, including a long connection with the Texas Oil Co. Whilst in America made an extensive survey of modern merchandising methods, and is a keen student of scientific selling.

MURRAY, John William: Director, Fidel-a-Tone Sound Productions. Formerly Hoyts Theatres sound technician; recording engineer Efftee Films 1931-36; recording engineer Efftee Broadcasters (3XY). Recorded first radio dramas on film for 3XY. Born 29/12/'05. Club: Old Scotch Collegians. Recreations: Tennis, boxing.

MYGATT, Philip F.: Radio director, J. Walter Thompson Australia Pty. Ltd., from January, 1939. Educated Princeton University. Five years radio department, J. Walter Thompson Co., New York and Hollywood. Handled following programs in United States: Lux Radio Theatre, Pond's Program (with Mrs. Franklin D. Roosevelt), Swift Program (with Sigmund Romberg and Lionel Barrymore), and J. B. Williams Company's "True or False" program. Associated with Standard Brand programs, Chase and Sanborn Hour, Rudy Valle, Shell Variety Program. Also experience in commercial work and copywriting. Has written original plays and adaptations performed on Lux Radio Theatre and Jimmy Melton's Hour Variety Show.

N

NEILL, Harold John: L.I.C.A., A.A.I.S., Amalgamated Wireless (A/sia) Ltd. Broadcast Dept. Joined A.W.A. Ltd., 1927. Associated with various departments in that period, and with Broadcast Advertising Department since 1934—was appointed as Melbourne representative on transfer of Mr. C. T. Sproule to

Sydney office, December, 1938. Born, Williamstown, 1907. Educated: Williamstown High School. Recreations: Yachting and golf. Clubs: Royal Yacht Club of Victoria (committee).

NICHOLAS, William R.: A.M.Inst.R.E. (Aust.). Engineer-in-charge Commercial Broadcasters Pty. Ltd. (7HO). Previously assistant engineer 7HO and private experimental work. Recreation: Motoring. Born: 16/11/'13 at Hobart, Tasmania.

NICHOLSON, Russell Malcolm, B.O.C.P., A.I.R.E., 1st Class I.C.C. (Internal Combustion Certificate): Managing director 4LG. Born: Rockhampton, August 9, 1909. Educated: Brisbane Boys' College, Brisbane. Private address: C/4LG Longreach. Recreations: Golf and swimming.

NILSEN, Oliver J.: Governing director, Station 3UZ—Nilsen's Broadcasting Service Pty. Ltd., Oliver J. Nilsen Pty. Ltd., Melbourne and Adelaide. Neon Electric Signs Pty. Ltd.; Nilsen Cromie Pty. Ltd. Private address: Elsternwick. Born Melbourne. Married. Melbourne City Councillor, Member Elec-



tric Supply Committee, Public Works Committee, Traffic and Building Regulations Committee, Properties Special Committee. City Council's representative on Victorian Civil Ambulance Service. Founder of first Victorian commercial broadcasting station, 3UZ Melbourne, which commenced operations March 8, 1935. Club: Rotary.

NILSEN, Oliver Victor: Manager of construction department of Oliver J. Nilsen Pty. Ltd., also director of Oliver J. Nilsen Pty. Ltd., Nilsen's Broadcasting Service Pty. Ltd., and Nilsen, Cromie Pty. Ltd. Private address: Kew, Victoria. Born: Melbourne. Club: Councillor Old Scotch Collegian Club. Recreations: Keen follower of all sport.

NIXON, Noel Vandervord: Proprietor N. V. Nixon & Co., advertising agencies, Melbourne, Sydney and Brisbane 1926-1935, before establishing his own business 1935. Born: Armidale, Victoria. Educated: Scotch College, Melbourne. Private address: 85 Berkeley Street, Hawthorn. Clubs: Public Schools, C.T.A.

Who's Who (contd.)

O

OGILVY, Clive: General sales manager Macquarie Broadcasting Services Pty. Ltd., program division. Also director Canberra Broadcasters Ltd.; alternate director Hunter River Broadcasters Pty. Ltd., and Wollongong Broadcasting Pty. Ltd. Director Figtree Studios



Ltd., and Argosy Films Ltd. Commenced radio career with 2GB, then joined Australian Broadcasting Federation as political officer. Arranged the purchase of 2CA Canberra for Denison Estates Pty. Ltd. Became attached to the latter company in a radio advisory capacity until the formation of Macquarie Broadcasting Services Pty. Ltd. Born: Sydney, 7/11/'08. Recreations: Golf, tennis, swimming, riding.

O'HALLORAN, Michael: Station manager, 2HD. Served for three years with New Zealand Expeditionary Forces in Lord Liverpool's Own (New Zealand Rifle Brigade); wounded, France, 4th September, 1918. Connected with radio for seven years, first at 2HD, then at 5KA as advertising salesman and later as advertising manager. Born: Invercargill, New Zealand, August 11, 1895. Educated: Marist Brothers, Invercargill. Private address: Maitland Road, Sandgate. Club: Member C.T.A.

O'KEEFE, Arthur John: Studio and advertising manager 2WL. Many years theatrical



experience; engaged political work 1927. Joined 2GZ as announcer 1935, appointed present position 1938. Recreations and hobbies: Golfing, surfing, tennis.

P

PADDISON, Alfred C., B.A.: Director Transcontinental Broadcasting Corporation and Radio Kempsey Ltd. General manager 2KA. Entered service New South Wales Edu-

cation Department 1919. President Assistant Teachers Association 1927-32. English master, Petersham High School 1928-1933. Transferred to journalism 1933 as associate editor



and leader writer "Labor Daily." Compiled and published first Australian Labor Year Book. Joined 2KA as general manager, November, 1938. Born: Adelaide, South Australia. Educated: Albury High, then Sydney University. Private address: 28 Seaview Street, Ashfield.

PALMER, Benjamin: Sales manager 2HR. Spent two years abroad, 1922-24, England, Ireland, South Africa. Formerly sales superintendent machinery manufacturers (8 years). Entered broadcasting with 2GB Sydney, and appointed present position soon after 2HR start-



ed operations. Born December 10, 1904. Private address: Stewart Street, Lorn, West Maitland. Recreation: Golf.

PARISH, H. R. (Cliffe): General manager 7DY Derby. Before entering commercial radio was wireless experimenter and holder of A.O.P.C. Was largely responsible for design and construction of original plant for 7BU, and in charge of installation at Burnie. Later became studio manager and chief announcer 7DY. Later transferred as general manager and chief announcer 7DY Derby. Born: Beaconsfield, Tasmania, November 6, 1914. Educated: Launceston State High School. Private address: Winnaleah, Tasmania. Hobby: Cinematography.

PEARCE, Frederick Reginald: Engineer-manager 4CA Cairns. In employ Amalgamated Wireless (A/sia) Ltd. since 1921, associated with broadcasting since its inception, took part in many notable broadcasts for 2FC and 2BL when those stations first commenced operations. With advent of commercial broadcasting, appointed engineer-in-charge 2AY Albury. Three

years later appointed engineer-manager 2GN Goulburn. After two years transferred on sales promotion activities to 3BO Bendigo and 2GF Grafton. In May, 1938, appointed to 4CA Cairns. Born: Petersham, N.S.W., October 14, 1906. Educated: Bondi Public School. Private address: 112 Digger Street, Cairns.

PEASTON, Hugh H.: Engineer-announcer, Station 2GF Grafton. Appointed present position 4/10/'37. Previously spent two years at 4WK Warwick in same capacity. Joined A.W.A. 1931. Recreation: Tennis. Born November 24, 1917.

PFEIL, Ronald William: A.Inst.R.E. (Aust.). Melbourne representative Australian Radio Publications Pty. Ltd., and Mingay Publishing Co., publishers of "Broadcasting Business" and "Radio & Electrical Retailer," etc. Hon. secretary Melbourne R.I.F. Club. Formerly sales manager, studio manager and announcer 7HT Hobart, advertising manager and announcer 5RM Murray Heights from station's incep-



tion until joining 3MA Mildura. Hon. secretary Victorian Microphone Club, hon. organizer Victorian Microphone Ball. President Amateur Photographic Society of Victoria. Born: Adelaide, South Australia. Recreations: Golf, squash and photography.

PHILLIPS, Isaac William, A.I.C.A.: Sydney representative Major Broadcasting Network. In newspaper work for 30 years, was advertising manager of the "Age," Melbourne, for 15 years. Member of Accreditations Bureau of the Australian Newspaper Conference for 10 years. Associate of Commonwealth Institute of Accountants. Four years' war service, Egypt, France with 5th Infantry Battalion A.I.F. Born: Gippsland, Victoria. Educated: Melbourne. Private address: 7 Gloucester House, Aston Gardens, Bellevue Hill. Recreations: Rifle shooting, swimming. Club: Millions Club.

PICKHOVER, Harold: Production manager, Station 2KO. Starting in the motor industry, in which he worked up to sales manager, joined up with a radio selling organization. Seven years ago went into commercial broadcasting, where he has had experience in all branches of work. Born: 3/11/1909, Lancs., England. Recreations: Swimming and golf.

PILE, Richard Norwood: Manager 2MW. Oyster farming on Port Stephens for nine years, sandwiched between political party organising and free-lance journalism. Twelve months 2TM as salesman announcer, 16 months 4BH as

announcer. Joined 2MW November, 1938. Born: Sydney, May 5, 1903. Educated: Newington College. Private address: Condong Street, Murwillumbah. Recreations and hobbies: Oyster culture and bowls. Clubs: Schools Club and Apex Club.

PINKERTON, Harold Richard: Managing director Saverys Pianos Ltd., managing director Radio wholesalers Ltd., director Hume Broadcasters Ltd. (5DN). Music and radio business twenty-seven years.

POWER, Ralph L., B.A., M.B.A., Ph.D. D.C.S.: U.S. rep. Macquarie Broadcasting Services. One time Coll. Prof. Economics and Librarian (Boston U., Coll. of William and Mary, U. Southern Cal., etc.); with Am. Ex. Forces yr. and a half; since 1922 in broadcasting as radio editor (Los Angeles Times, Examiner, Record, Post-Record and Long Beach Sun); as announcer, prog. dir. and asst. station manager (KWH, KFI, and KHJ); conducted promotion campaigns (KFWB, KMPC, KRELW, KTM, KGER). Now U.S. rep. for Macquarie and All-Canada Radio Facilities.

PRINCE, Arthur Lionel: Sales manager 4BC Brisbane. Has been manager 4RO, manager 4BH, manager radio division Goldbergs, Sydney. Born: England, 1890. Educated: Oxford, England. Private address: "San Renio," Kangaroo Point, Brisbane. Recreations and hobbies: Golf, photography. Club: Tattersall's.

Q

QUIRK, Lancelot, Paul: Advertising manager 2SM since October, 1933. Prior to that,



with Weston Advertising Company for 12 years (manager for last 5 years). Born 1902.

R

RADFORD, John Arundel, M.C.: General manager 2HR. Served with Imperial Forces during Great War. Entered broadcasting 1927. Associated with 3DB Melbourne, 2GB Sydney and 4BC Brisbane (sales manager). Held present position since inception of 2HR. Born: Epsom, Surrey, England, April 24, 1893. Private address: Hampton Court Flats, West Maitland. Recreations: Cricket and golf.

REED, Joseph Griffiths: A.M.I.E. (Aust.). Design engineer, Amalgamated Wireless (A/sia) Ltd. Transferred from professional division P.M.G.'s radio service 1922. Carried

(Continued next page)

Who's Who (contd.)

REED, J. G. (contd.)

out experimental radio telegraph transmissions in association with R.A.N. Reserve at Newcastle in 1914. Visited England 1935 in connection with large transmitter design. Recreations: Model making and photography. Born June 30, 1897.

RHEUBEN, Ernest J.: General manager 4RO. Has had considerable commercial experience. Ten years with Thomas McLaughlin & Co., wine and spirit merchants. Later went into business of his own for three years, successfully marketed radio receivers and electrical appliances. Born Brisbane, 1901. Educated: Brisbane High School. Private address: Reaney Street, North Rockhampton. Recreations: Motoring and yachting. Club: Past Commodore of Fitzroy Motor Boat Club.

RICHARDSON, Daniel L.: General manager 7LA, and Tasmanian Broadcasting Network. Fourteen years in newspaper advertising field with Launceston "Examiner." Holder of London Diploma



Complete Advertising (Gold Seal). Past foundation secretary Tasmanian Advertising Club and Mowbray Golf Club. Member C.T.A. and Mowbray Golf Club. Born: Launceston. Educated: Launceston Church Grammar School. Private address: 13 Ramsay Street, Launceston. Recreations: Golf and fishing. Clubs: C.T.A., Mowbray Golf Club, Launceston Gun Club.

RIDLEY, Alan: Sales manager, Country Broadcasting Services Ltd. Joined Country Broadcasting Services Ltd.



August, 1935, as country salesman—appointed country representative December, 1936—appointed sales manager and returned to Sydney June, 1938. Born: Gulargambone, N.S.W. July 18, 1910. Educated: Queanbeyan Intermediate High School. Private address: 4 Hinkler Street, Brighton-le-

Sands. Recreations: Golf, surfing, motoring. Clubs: Long Reef Golf Club, Duntryleague, Orange-R.A.C.A.

RIDLEY, John Edward: General manager, Country Broadcasting Services Ltd. Director



Northern Broadcasters Pty. Ltd. Managing director The Provincial Network Pty. Ltd. Commenced business as accountant. Entered radio commercially 1929. Joined "The Age" Broadcasting Service, 3HA Hamilton, October, 1931 as manager and secretary. Joined 2GZ, August, 1935, as advertising manager, assistant manager, July, 1936. General manager 2GZ, May, 1938. Born: Sydney, September 4, 1902. Educated: Fort Street Boys' High School. Private address: 53 Nelson Road, Killara.

ROBERTS, E. V., M.A., B.S.C.: Managing director Riverina Broadcasting Pty. Ltd. Chairman of directors Bathurst Broadcasters Pty. Ltd. Entered radio industry in 1928—installed 2WG 1932, installed 2BS 1936. Sole proprietor (in conjunction with Mrs. Roberts) of 2WG and 2BS. Became interested in radio while abroad in British Colonial Service. On return to Australia opened up several Riverina retail radio stores. Obtained Wagga licence in 1931. Born: Melbourne. Educated: Melbourne University. Private address: "The Haven," Hunters Hill, Sydney. Recreations and hobbies: Shooting and fishing.

ROBERTS, Mrs. Ida A.: Co-Director 2WG and 2BS. Actively engaged full time in broadcasting station management since 1932. Only woman delegate to Jervis Bay Conference 1938. Entered radio retail business after her marriage in 1928 and has taken every type of staff duty. Now acting as general manager of 2WG.

ROBERTS, Russell R.: Manager 4BC Brisbane. Musical training Trinity College of Music, London, and Matthay



Pianoforte School, London. Business training London Stock Exchange. After responsible positions theatrical world and sales manager W. H. Paling & Co., on opening of 4BC Brisbane's first commercial broadcasting station. Organised some of Queensland's largest radio stunts, charity picnics, etc. Clubs: Tattersall's, Royal Queensland Aero Club Committee, Oxley Golf Club. Hobbies: Golf and fishing.

ROBERTSON, A. (See p. 74)

ROBERTSON, Ivan Vallance: Melbourne Representative 2WG, 2BS, 2KY, 2CK. Served with A.I.F., R.H.A. England, R.F.A. India, R.A.A. Australia. Resigned from Staff Corps 1923. Associated with Advertising and Publishing since 1927. Advertising Manager "Women's World," 4 years. Born: Longwood, Victoria. Educated: Royal Military College, Duntroon. Private address: Red Blieff Street, Black Rock. Recreations: Fishing and gardening. Clubs: Naval and Military, Hardware.

ROWE, E. W.: Program Director and Studio Manager, 2HD, Newcastle; known as



"Uncle Pete" and very popular. Native of London and received musical education at Bourne-mouth.

RUBENSTEIN, Samuel J.: M.Inst.R.E.(Aust.), Assoc.I.R.E.(U.S.A.). Chief Engineer Transmission Department, Philips Lamps (A/sia) Pty. Ltd., 69-73 Clarence Street, Sydney. Eleven years N.Z. Posts and Telegraph Depart-



ment; general engineering, specialising in radio communication systems, including radio-phone development work, two years Radio Corporation of N.Z. Ltd., chief engineer, supervising technical manufacture of receivers, components, sound systems, inter-communication systems, etc. Joined Philips as engineer, August, 1937. Hon. Secretary Sydney Division I.R.E., 1938. Recreations: Tennis, golf, music. Born: London, England, 17/10/1907.

RUSSELL, Roy McCowan: A.O.A. Assistant Manager 3DB-3LK. A.I.F. 1916-1919. Joined E. A. Price Advertising 1920. Paton Advertising Service 1922. Foundation member Price-Berry Pty. Ltd. until 1930—then joined 3DB. Born: Coburg, Victoria. Educated: State School, Preston. Private address: 135 Riversdale Road, East Camberwell, E.6. Recreations: Golf. Clubs: Naval and Military Club of Victoria, Emerald Country Club.

RYAN, Albert John: M.Inst.R.E. (Aust.), Assoc. I.R.E. (U.S.A.). Director and Chief Engineer Canberra Broadcasters Ltd. (2CA) Canberra. For 7 years was with electrical engineer's branch P.M.G.'s Dept.; 5 years municipal power supply management: 8 years



radio retailing and broadcasting. Private address: Teuch Street, Kingston, Canberra. Born: Chiltern, Victoria, 1897. Clubs: Royal Aero, Royal Canberra Golf Club, Rotary, Royal Automobile Club.

RYAN, John: M.Inst.R.E. (Aust.). Chief Engineer 3AW, Melbourne. Served with R.A.N., attached to H.M.A.S. "Sydney"; in action on November 9, 1914, with "Emden" at Cocos Island. Was mentioned in despatches. January, 1924, attached to engineering staff of 3AR, and 1927 transferred to 5CL Adelaide. In 1929 joined 7ZL Hobart as Chief Engineer, and in 1932 joined 3AW in that capacity.

RYCROFT, James Lumley: Sales Manager 7HO. Playwright and Radio Actor 7ZL 1928, been with 7HO since inception 1930. Born: Grimsby, England, 1894. Educated: Stamford College, England. Private address: 3 Lynton Av., Hobart. Recreations and hobbies: Yachting, motoring, philately. Clubs: Old Stamfordians, Royal Yacht Club of Tasmania, United Services.

S

SAMUEL, Bryn: Station Manager, W.A. Broadcasters Ltd., Perth, W.A. Originally members of commercial staff "West Australian" Newspapers Ltd.; joined Musgrove's Ltd. in 1924; appointed Station Manager 6ML 1930; on foundation of W.A. Broadcasters Ltd. March 3, 1933, appointed Station Manager for Company, which operates Stations 6ML, 6IX, and 6WB. Born: Monmouthshire, 30/6/01.

Who's Who (contd.)

SAUNDERS, George Ambrose: Announcer 2KY Begun Radio in November, 1923, 2BL, then 2GB, and now 2KY. Served in 1st Batt. as Lieutenant. Born: May 16, 1896. Educated: Cleveland Street and Sydney Grammar. Recreations and hobby: Golf, fishing, radio. Clubs: Masonic Class Automobile.

SCHNEIDER, W. K.: Manager 5KA Adelaide; obtained operating ticket 1910, 3 1/2 years at sea; 2 years war service, 49th Batt. A.I.F. Manager and engineer 2HD Newcastle 1930-1932. Joined Sport Radio Broadcasting Co., June, 1932; director 1933, assistant manager 1936, appointed to present position November, 1938. Born: London, January 19, 1893. Educated: Faling Grammar School. Private address: 43, Fifth Av., St. Peters, S.A. Recreations: Tennis, reading, bridge.

SCHULTZ, L. N.: Chief Engineer 2GB. Broadcast Consultant. M.Inst.R.E. (Aust.). First took up radio as a hobby at school. Visited America, England and Germany. Joined 2GB and appointed Chief Engi-



neer. During 1934 supervised the building of a complete new transmitter for 2GB capable of transmission in line with High Fidelity Standard. Designed and constructed new 2GB Station in 1937-8. Hobby: Flying & gliding; hon. flying instructor Royal Aero Club; won N.S.W. Aero Club Championship 1934. Born: 24/9/1906.

SCRIMGEOUR, Colin Graham, Minister of Religion. Controller, National Commercial Broadcasting Service, New Zealand. Late City Missioner, Auckland, N.Z., 1926-32. Director, Friendly Road Organisation, 1932-36. First Chaplain N.Z. Air Force (now resigned). Captain Auckland Aero Club. Inaugurated Commercial Broadcasting Service for N.Z. Government, 1936, extending from 12B Auckland as first station to present network. Permanent head of State Department, controlling six stations and 300 employees. Born: Wairoa, N.Z., January 30, 1903. Educated: Gisborne Public School. Private address: Wellington, N.Z. Recreation: Golf. Club: Civil Service Institute.

SELLERS, Oswald Powell: Company director; Australian agent for Columbia recordings of George Edwards' Radio Productions. Principal of The Sellers Co. Born 1900. Clubs: Manly Golf Club, Tattersall's and C.T.A.

SERVICE, C. Don: Director of Macquarie Broadcasting Services Pty. Ltd. Educated at Fort Street High School; practices as solicitor at 14 Martin Place, Sydney. Born: Sydney, September 30, 1897. Clubs: Royal Australian Golf and Tattersall's. Recreations: Golf and surfing.

SHARP, Christopher Stephen: B.A. (Hons). General Manager 2CA. Served approximately 3 years 40th Btn. in France. Commenced career as school teacher; enlisted 1916; after War completed course in anthropology; went to Fiji 1924; appointed to British Colonial Service as Principal T.T.C., and later as Officer in Charge of Administration, Kandavu Province. Appointed G.M. at Station 2CA August, 1937. Born: April 7, 1893, Newcastle. Educated: Church of England Grammar School, Launceston, University of Tasmania and London University. Private address: Broadcasting House, Canberra. Recreation: Golf and tennis. Clubs: R.A.C.A. and Defence Club.

SHARP, J. A.: Manager 4BU, known to North Coast listeners as "Sunny Jim," was formerly associated with IYA Auckland for three years; played with B.S.A. Players, 2GB, and Old Favourites' Review, 2CH Sydney; straight announcing 4BC and 4BH Brisbane; joined 2LM Lismore October 12, 1936, as announcer-program arranger; was appointed salesman-in-charge of local advertisers. As "Sunny Jim" conducted the Good Companions' Club, appointed manager 2MW July, 1938. Born: November 2, 1905, Auckland, New Zealand. Recreations: Music and horse riding.

SHAW, Reginald Albert (Rex): Founder Radio Associated Services and musical director. Wrote original theme music for the Australian talkies "Mystery Island" and "Phantom Gold." Practised as an architect (Fellow of Institute of Architects) for 22 years. Musical Director Radio 2UE for 7



years. For same period Assistant Secretary, N.S.W. branch British Astronomical Association and corresponding secretary to the B.A.A. Journal, London. Born: Rockhampton, Q., 1885. Recreation: Motoring.

SHEIL, Beaumont Tudor: Deputy Controller N.C.B.S. (New Zealand). Seven years Vacuum Oil Co. Ltd. Aviation and advertising Australia and

New Zealand. Held commission rank in Air Force. Holds commercial pilot's licence. Personal assistant to late Sir Charles Kingsford-Smith. Director Trans-Tasman Air Service Development Co. Ltd. Born: Melbourne April 13, 1904. Educated: Melbourne University College. Private address: 3 Kinross Street, Wellington. Recreations and hobbies: Golf, flying. Clubs: Imperial Service Club, various aero clubs.

SHEPPARD, Alexander William: M. Com. (Sydney Uni.). Exhibition in Economics. General Secretary-Treasurer, Professional Radio Employees' Institute of Australasia. Commenced career in journalism.



Was with A.W.A. as clerk, and afterwards announcer Station VK3ME. Born: 2/6/1910. Welbeck, England. Recreations: Riding, motoring.

SIMPSON, John: A.S.T.C., J.M.I.E. (Aust.). Engineer in charge transmitter testing A.W.A., Ashfield. Holds electrical engineering diploma, Sydney Technical College. Jun. Inst. Engineers. Ed. Sydney Tech. College. Joined A.W.A. 1925. Private address: 710 Parramatta Road, Croydon. Recreations: Swimming, tennis, golf.

SMITH, F. Langford: B.Sc., B.E. (First Class Honours), A.M.I.E. (Aust.), A.M.I.E.E. (London), M.Inst.R.E. (Aust.), M.I.R.E. (U.S.A.). Chartered Electrical Engineer, London, Cht. Eng. Aust. Councillor I.R.E. (Aust.). Development engineer and unified sales engineering service, Amalgamated Wireless Valve Co. Ltd., Sydney. 1928-29 Metropolitan



Vickers, Manchester, England. 1929-32 Cosmos Lamp works, England (factory engineer and development engineer for valves). Joined A.W. Valve Co. 1932. Visited U.S.A. and Canada 1934-35. Private address: Wyvern Avenue, Chatswood.

SMITH, Robert E.: Chairman of Directors 2CK. Prominent Cessnock business man for 16 years. Takes active interest in civic and sporting life of town and district. Nine years Alderman Cessnock Council, Mayor in 1934, Deputy Mayor 1938-39. Chairman Cessnock Technical Education Advisory Committee, member Cessnock Ambulance Committee, patron Cessnock Cricket Association and Cessnock Rugby League for current and past years. President Cessnock Jockey Club. Born: Croydon, Queensland, Feb. 12, 1898. Educated: Marist Brothers' High School, Darlinghurst. Private address: Wentworth Hotel, Vincent Street, Cessnock. Recreation: Golf. Club: Cessnock Rotary.

SMYTH, Walter J.: Sydney representative 4BH Brisbane, Chandler's Broadcasting Services, 2MW and 2CK, Australia House, Carrington Street, Sydney; 17 years with J. Iot, advt. agency N.Z. (15 years manager Christchurch branch), later branch manager P. N. Barrett, Johannesburg. Appointed present position May, 1938. Author of several novels. Born: Norwich, England, 17/6/1891.

SOMMERLAD, The Hon. Ernest Christian, C.B.E., M.L.C.: Managing Director of Gotham (Australasia) Pty. Ltd. and Country Press Ltd., Sydney. Past president N.S.W. Country Press Association; member executive Australian Provincial Press Association, Director Australian United Press; chairman publicity committee, Australia's 150th Anniversary Celebrations; member Government Tourist Advisory Committee; Trustee N.S.W. Public Library and Mitchell Library. Member of Legislative Council for six years. Born: Tenterfield, N.S.W. Recreations: Gardening and motoring. Clubs: National and Millions.

SOUTHEY, Reginald V.: M. Inst.R.E. (Aust.); Radio and Recording Engineer, Columbia Graphophone (Aust.) Ltd., Homebush. 1919-23 with General Electric Company of London. 1923 to date with Columbia Graphophone Co., London and Sydney. Also with Standard Telephones, London and Bell Telephones Labs., New York. Educated: Albyn's College, Dulwich, London. Born: 4/8/1903.

SPENCER, Thomas: Assist. manager Broadcasting Department A.W.A. Joined Amalgamated Wireless (A/sia) Ltd.,



in Melbourne in 1927, and held position of Traffic Accountant to Beam Wireless and Coastal Radio Service. Received present appointment in November,

(Continued next page)

Who's Who (contd.)

SPENCER, T. (Contd.)

1936. War record includes service at Gallipoli, Egypt and France. Born: Ayrshire, Scotland, 1/5/1893. Recreation: Golf.

SPROULE, Cyril Thomas: Advertising Manager, Broadcasting Department, A.W.A., Sydney. Ten years A.W.A. Beam Dept., publicity and



broadcasting; two years A.I.F.; ten years P.M.G.'s Department. Born: 18/5/1893. Recreations: Golf, fishing, gardening.

STAPLETON, Bernard B.: Assistant Advertising Manager 2SM. Joined 2SM November, 1933, as Salesman; appointed Assistant Advertising Manager May, 1933. Prior to that a com-



mercial traveller. President and founder of the Advertising Golf Club. Born: Mudgee. Private address: 10 Powell Street, Coojee. Recreations: Swimming and golf.

STELLING, Leslie Wilhelm: Melbourne sales executive Macquarie Broadcasting Service Pty. Ltd. From 1913 to 1931 with the Music House-Aeolian Company. December, 1931, joined sales division 3DB. 1937 became a partner of Mather and Stelling, Melbourne. Recreations: Golf and gardening. Born: 1893, Ballarat, Vic.

STEVENS, Frederick Sylvester: Chief engineer 2CH. Marine operator Naval Transport Service, 1916; served during the Great War at Fanning Island Naval Station. In charge of all studio equipment at 3LO in 1924. Visited England in 1934; in 1937 went to 2CH in charge of all studio technical equipment. Born: Bonnie Doone, Victoria. Recreations: Gardening and swimming.

STEVENSON, Cecil Vincent: Founder and managing director Radio 2UE Sydney Pty. Ltd. Director of Broadcasters Sydney Ltd. in 1923. Was one of the first to take out a "B" Class licence and started an independent station in 1924. Prior to this had an experimental



licence under the call sign of 2IY. Opened the first all radio store (Electrical Utilities Ltd., Radio House) now carried on by his sons; was one of the co-founders of the first Australian station (2BS, now 2BL), the transmitter for which was built by staff under his supervision. Married Ella Mildred Pieremont 2/9/1902. Born Sydney 16/8/1878. Club: Millions Club. Recreations: Fishing, motor boating.

STEVENSON, Murray H.: Chief Engineer 2UE Sydney. M.Inst.R.E. (Aust.). Educated Sydney Technical High School.



Construction and maintenance of original 2UE. Appointed present position 1/1/32. Visited U.S.A. 1938. Born: 17/5/05.

STEVENSON, Norman: Service Supervisor for 2UE. Born and educated N.S.W. Entered commercial life in 1928 on joining 2UE in association with his father and brother. Has been through every phase of broadcasting as Assistant to Advertising Manager, Programme Arranger, Control Monitor, etc.

STRANGE, C. Anthony: Manager 3YB. Commenced commercial career with G. J. Coles and Co., Melbourne. Took up advertising sales representation for Dunham Displays, then joined sales and circulation staff "The Argus," transferred after 3 1/2 years' service to Argus Broadcasting Services as studio and acting manager of 3WR (later 3SR) at Shepparton. Took over management of 3YB, May, 1938. Born: Verviers, Belgium. Educated: "Oratory

College," Birmingham, England. Private address: 45 Raglan Parade, Warrnambool. Recreations and hobbies: Singing, swimming and golf. Clubs: Rotary Warrnambool.

SUTTON, Frederick George: Managing Director and Founder of Featuradio Sound Productions Pty. Ltd., 32 Market Street, Melbourne. Director, Suttons Pty. Ltd.; Director, Carbon Adjuster Systems Pty.



Ltd., Australian Representative Hutchinson & Co. (Publishers) Ltd., and associated companies, London. Born: 28/3/1894, Melbourne, Vic. Clubs: Athenaeum, Racu, Sandringham. Recreations: Dogs, cricket, tennis, theatres, all outdoor.

SYME, David F.: Managing Director Victorian Broadcasting Network. Grandson of the late David Syde, founder and proprietor of the Melbourne "Age." Managing Director of 3HA since its inception; took over 3TR Sale in May, 1936, and



3SH Swan Hill April, 1937. Studied Commercial Broadcasting overseas. Born: Melbourne, Victoria. Educated: Geelong Grammar and Melbourne University. Private address: "Sunnyside," Toorak Road, Kooyong. Recreation: Tennis, fishing and motorring. Clubs: Athenaeum, Yorrick.

shall Chang Tso Lin, Dictator of China. Sales Manager National Flying Service Ltd., England. Foreign rep.: Westland Aircraft Works, England. Broadcasting experience Canada, America, Australia, New Zealand since 1933. Born: London, 3/11/97. Club: Imperial Service, Sydney. Recreations: Flying, sailing, fishing.

TAPP, Charles Ernest: Electrical engineer and patent expert. Secretary to Philips Lamps (A/sia) Pty. Ltd., and Philips Radio Works (Aust.) Pty. Ltd., and in charge Patent and Legal Dept. Philips Lamps (A/sia) Pty. Ltd., Sydney. Was with Aust. Radio Coastal Service 10 years in charge installation, operation, various coast stations. With A.W.A. 11 years, technical research and b/cast receiver devel. Transf. patent field when broadcast patent litigation began in Aust. Later in charge of Patent Depts. A.W.A. and Neutrodyne, Melb. Joined Philips 1937. Visited Europe and U.S.A. 1925-23 and 1933. Born 2/2/1894. Educated, Glen Innes Public School. Recreations: Swimming and tennis. Private address: Pipiriki, Caledonian Street, Rosé Bay, Sydney.



1919. Organised first British Newspaper Service on Pacific ships for A.W.A., 1923. Resigned 1924 and commenced own business representing American and Continental manufacturers. 1927 designed and built theatre talking picture equipment. Travelled extensively overseas, studying latest radio and broadcasting practice. April, 1935, established Sound Recording Studios Ltd., Sydney. Born: 4/4/1896. Recreations: Golf, swimming and motoring.

TAYLOR, Charles E.: Programme Director 3DB Melbourne. Well-known journalist. Edited Sydney "Sun" for seven years and Melbourne "Sun Pictorial" for two years. Held newspaper jobs all over Australia. Federal Director of Publicity for National Party in 1925. Born at Mount Barker, S.A. Sports: Golf, tennis.

TAYLOR, Clem Richard: F.O.A. Managing Director Clem Taylor Advertising Service Ltd. Held present position for 20

(Continued next page)

Who's Who (contd.)

TAYLOR, C. R. (contd.)

years; previously was Australasian Sales Manager—Australian United Paint Co. Ltd., and Sales Manager, Clarkson Ltd., Adelaide. Born: Adelaide, January 25, 1896. Educated: Pulteney Grammar School and Hayward's Academy. Private address: 103 Moseley Street, Glenelg, South Aust. Recreations and hobbies: Bowls, fishing, photography. Clubs: Rotary.

TAYLOR, John T.: General Manager, 3AW Broadcasting Co. Pty. Ltd., Melbourne since



1936. Advertising Manager 2CH, Feb.-Oct., 1932, appointed General Manager October, 1932 to 1936. Born: 1904. Recreations: Golf and surfing.

TAYLOR, T.: Chief engineer 2CK. Entered service of H.D.W.S. & S. Board in 1919. Conducted radio experimenting since 1922. Associated with radio receiver constructing, servicing and merchandising in Cessnock since 1926. Inventor of radio circuits described in two Australian Letters Patents. Foundation member and Associate Member Grade of I.R.E. At present full member of same body, also Diploma of Radio Engineering, I.C.S. and P.M.G. Certificates for Broadcast Station Operation. Born: East Maitland, August 3, 1904. Educated: Maitland Commercial Continuation School. Recreation: Golf.

THOMAS, Richard Charles: Manager 7HT since inception. Previously with A.B.C. for six years. Held several important executive positions with Fuller-Hayward theatre circuit in New Zealand prior to taking up residence in Australia. N.Z.A.C. 1917-18. Born: Wellington, New



Zealand, 1895. Educated: Wellington and Waitaki. Private address: Westbrook Street, Bellerive. Recreations: Tennis and music.

TILLEY, Claude: General Manager 3XY; 30 years in Flinders Lane, Melbourne. Interstate travelling 15 years. Born: Melbourne May 4, 1891. Educated: All Saints' Grammar School. Private address: 691 Mount Alexander Road, Moonie Ponds. Recreations and hobbies: Fishing, motoring. Clubs: C.T.A., Tattersall's.

TOWNER, Arthur Danesbury: Fellow Institute of Inventors (Lon.). Director and general manager 7BU Burnie & director 7DY Derby. Medical instrument manufacturer for 27 years (Eng.), connected with Sales organisation Sydney and Hobart. Aircraft manufacturer during war. Interested radio since inception, inaugurated 7BU Burnie, Director and General Manager since opening of station. Born: Sussex, England, 1883. Educated: London. Private address: Westgate, Burnie, Tasmania. Recreations: Gardening, fishing, bowls. Clubs: Burnie Club.

TOZER, Jack: Sales manager 6AM Broadcasters Ltd. Captain A.I.F.; awarded M.C. and M.M. Has been seven years in commercial broadcasting. Born: Melbourne, Victoria, 1892. Private address: Thomas Street, Nedlands, W.A. Club: C.T.A. Recreation: Sport.

TRENAM, Harold C.: Managing Director, Standard Telephones and Cables (A/sia) Ltd., 253 Botany Road, Alexandria, N.S.W. Educated Manchester Technical College, M.Inst.R.E. (Aust.). Qualified City and Guilds, London. Up to 1906



Engineer British Post Office. To 1926 Superintendent of Installations Western Electric Co. Ltd., 1928-30, Deputy Manager, Standard Telephones and Cables Ltd., London. To 1932, managing director, Creed & Co. Ltd., London. Director, Standard Telephones and Cables Ltd., London. Director International Telephone and Telegraph Co. Ltd., 1933; came to Australia in present position.

TUPPER, Frederick Cyril: Sporting and Racing Commentator, 3AW Melbourne. Visited India 1917, N.Z. 1922, Straits Settlement 1923, America 1924. Joined 3AW 22/2/32. Recreations: Golf and motoring. Born: 11/3/03.

TYLER, C. F.: Record sales manager, Columbia Graphophone (Aust.) Pty. Ltd. Joined The Gramophone Co. Ltd. ("His Master's Voice"), London, 1926. Gained experience

retail shops, education department, sales department, and artists and recording departments. Came to Australia at end of 1929, and now in charge of record sales for the Columbia, "His Master's Voice," and Parlophone companies. Recreations: Tennis, golf.

W

WALLS, June, L.A.B.: Secretary, Western Province Radio Pty. Ltd., Broadcast Entertainment Pty. Ltd., Central Murray Broadcasters Pty. Ltd. Born: 15/9/15, Coleraine. Recreations: Tennis, skating, music, swimming.

WALPOLE, Francis S.: Manager 2DU Dubbo. Served 3 years A.I.F. with 4th Australian Machine Gun Squadron. Invalided home 1918. Joined Studebaker sales organisation as Country sales rep., and later joined Atlantic Union Oil Co.



where he remained until appointed Manager 2DU. Born: St. Kilda, Melbourne, Victoria. Educated: C. of E. Grammar School, Melbourne. Private address: Cobborah Street, Dubbo. Recreation: Gardening, swimming and reading. Clubs: Tattersall's.

WARD, Ronald E.: Manager 7QT. Commenced commercial career as school teacher South Australian Education Department. Came to Tasmania 1930. Sports master at Launceston Church Grammar School for 6 years. Interested in radio during spare time, conducted sporting session from 7LA. Organised 7LA Boys' Club. Appointed manager 7QT June, 1938. Has had a successful sporting career, having represented Tasmania in cricket and football. Born: May 7, 1905, Adelaide, South Australia. Educated: Woodville High School, South Australia. Private address: Conlan Street, South Queenstown. Recreations and hobbies: Cricket, tennis, golf, dramatic art.

WEBB, Edward James: Director of Mooney-Webb Pty. Ltd. Has been engaged in retail and agency work for past 10 years. Born: Malvern, Victoria. Educated: Melbourne Grammar. Private address: 47 Denbigh Road, Armidale, Victoria. Recreation: Golf. Clubs: Kingston, Heath Golf Clubs.

WELCH, Eric: Sporting commentator, 3DB, Melbourne. Served with A.I.F. two years. On return took up science course at University, then went to New Guinea with the Commonwealth Service Department for two years. Newspaper work for the next five years, then special turf writer for the "Argus." Became sporting commentator for 3LO for six years prior to becoming sporting and special commentator for 3DB. Hobbies: Racing and tennis.

WELLS, Harold R.: Program manager, 6AM Broadcasters Ltd. Private address: 92 Herbert Road, Shenton Park, W.A. Married. Was for 5 1/2 years with 6WF, being original announcer (1924) in W.A., also 5 years program director; 2 years manager of High Flyers' Concert Party, London; 18 months Editor "Wireless News," Perth. Interested in D.X. work.

WHISTLER, Anchtel, Hubert: Manager 2MO. Studied for engineering career, but gave it up in 1918 to train for military service. Came to Australia 1919 and some years in North Queensland on cattle stations and for seven years managed sheep properties in N.S.W. Joined staff of the Prudential Assurance Co. Later became northern representative for A.H.P. Started to write plays and features for "the man on the land" in radio 1936. Joined staff of 2MW Murrumbidgee 1937, and later appointed acting manager. In November, 1938, appointed manager 2MO. Born: December 3, 1901. Educated: Over-slade, Rugby, England, and Oundle Engineering College. Private address: Barber Street, Gunnedah. Recreations: Shooting, fishing, tennis and surfing.

WHITCOMB, T.: Director and chief engineer, 2TM Tamworth. Originally with B.G.E.,



joining radio department in 1925. In 1928 joined A.G.E., resigned 1938 to construct 2TM transmitter.

WHITE, David: Secretary, 6AM Broadcasters Ltd. Born: Kalgoorlie, W.A., 1900. Private address: 25 St. Leonard's Av., West Leederville. Recreations: Swimming, tennis.

Who's Who (contd.)

**WHITE, Randal M., M.A.** (T.C.D.); General manager Station 5DN Adelaide. Gov. director 5RM. Previously assistant manager 5DN for 3½ years.



Prior to entering the radio field was sales manager for South Australia General Motors (Aust.) Pty. Ltd. World tour 1928, U.S.A., Great Britain, Europe, studying merchandising and sales promotion methods. Hobby: Philately.

**WHITFORD, Archer P. H.:** Chairman of directors 6AM, 6PM, 6KG. Has been in commercial advertising 30 years. Born: Moonta, South Australia, 1888. Private address: "Novar," Bellevue Hill, Sydney. Recreations: Golf and swimming.

**WHITFORD, Frank Roy:** Managing director 6AM, 6PM, 6KG. Born: Moonta, South Australia, 1890. Recreations: Gardening, fishing, golf.

**WHITMORE, John W.:** service manager, 2TM. Graduated from motor carrying business. In January 1935 appointed



works manager, Tamworth Machine Brick Co. Holds rank of captain in A.M.F. and for 3 years commanded 2nd (O) Ann. Coy., A.A.O.C. Joined 2TM June, 1935, as salesman, subsequently announcer-copywriter, musical director, publicity officer. Educated Drummoynes, N.S.W. Public School. Born, August 19, 1905, Greenwich, N.S.W.

**WHYKES, Ernest J. W.:** Secretary and advertising manager 3BA Ballarat since inception. Is public accountant in Ballarat and member of Commonwealth Institute of Accountants and A/sian Institute of Secretaries, and Licensed Companies Auditor. Appointed advertising manager 3BA 1935. Born 6/4/03. Recreation: Bowls and cine-photography.

**WILSON, Warne A.:** M.Inst. R.E. (Aust.); M. Wireless Inst. Aust. Marconi Diploma. Manager and station engineer 3BA Ballarat since inception 1930. Served apprenticeship as elec-



trical winder and fitter, engaged in radio work and experiments from 1920. Well-known amateur transmitter since 1922—A3RY and VK3WA. Born: 12/12/1900 at Auburn, Victoria. Hobby: Amateur movies.

**WISHART, Robert Alfred** (Solicitor of Supreme Court of Queensland): Transcription Sales O. P. Sellers, formerly manager radio division Noble Bartlett Advertising, Brisbane. Four years draftsman in Titles Office, Brisbane. Tutor in Real Property and Constitutional Law to Queensland Law Students' Association. Sales manager of Gardiner Gasket Co., Sydney, 1933-1934. Manager radio division National Advertising Pty. Ltd., Brisbane, 1935-1936. Joined Noble-Bartlett Advertising as radio division manager 1936. Born: Brisbane, May 18, 1909. Educated: Brisbane Grammar School. Private address: Akuna, North Quay, Brisbane. Recreations: Golf, tennis, surfing, fishing.

**WOODLAND, Cecil Valentine:** Manager 2LM. Served with A.I.F. for two years. Occupied positions as sales manager and manager in commercial sphere (furniture trade) before entering broadcasting. Chief announcer and children's entertainer at 4QG, Brisbane, 4BC Brisbane, 4GR Toowoomba and 4BK Brisbane. Manager of 4BU Bundaberg, before accepting present position. Engaged in radio since 1926. Born: Melbourne, February 14, 1899. Educated: Queensland primary and secondary schools. Private address: C/- Northern Rivers Hotel, Lismore. Recreations and hobbies: Literature, cricket, angling, motoring.

**WOOLLETT, Norman H.:** Publicity Manager, Philips Lamps (A/sia) Pty. Ltd., 69-73 Clarence Street, Sydney. Educated at Sydney Church of England Grammar School, Nth. Sydney. Commenced business activities in 1923. Spent three years in shipping, and one year retail advertising. Joined Philips Lamps, 1927. Private



address: 2 Stratton Hall, Simpson Street, Bondi, N.S.W. Recreations: Golf, tennis.

**WORRAL, David Thomas:** Manager 3DB. Past president Australian Federation of Commercial Broadcasting Stations. Served Australian Field Artillery 1915-18. Journalist, Sydney "Sun," Newcastle "Sun," Melbourne "Sun," "News Pictorial," 1913-1925; New York newspaper representative 1925-1928, Melbourne "Herald" 1928-29, manager 3DB since 1929.



Born: Parramatta, 1894. Private address: 73 Amerway, Camberwell, Victoria. Recreations: Golf, tennis, swimming.

**WYNNE, Alfred Percy:** Proprietor Wynne's Music Store, Maryborough. Managing director 4MB; 17 years W. H. Paling & Co., Brisbane, as apprentice, town tuner, country salesman, sales manager. Past 20 years conducted own music store in Maryborough, Q'land. Managing director of Maryborough Broadcasting Co. Pty. Ltd. for past seven years. Born: Warwick, Queensland, April 24, 1885. Educated: Old Normal School, Brisbane. Private address: Kent Street, Maryborough. Recreation: Golf. Hob-

by: Business Clubs: Maryborough and Wide Bay Club, Rotary Club, Golf Club, Past-president Bisteddof Council



of Queensland, Chamber of Commerce (Maryborough), Maryborough branch R.A.C.Q.

Y

**YELDON, Russell Arthur, J.P.:** General manager and director 2WL. Electrical engineer, was associated with Engineers' Branch, R.A.N.C., during latter part of war. Went to Wollongong 1922 in employ of company installing town lighting.



Subsequently contracts engineer during installation of town lighting at Kiama. Established own electrical engineering business Wollongong 1925. Early 1931 secured broadcasting licence for 2WL and conducted it as a privately owned venture until December, 1936, when present company was formed. From December, 1936, director and general manager of Wollongong Broadcasting Pty. Ltd. Born: Sydney. Educated: Burwood and Sydney Technical High School. Private address: "Maroomba," Church and Edward Streets, Wollongong. Recreations and hobbies: Golf and ocean fishing. Clubs: Royal Automobile Club of Australia, and N.S.W. Masonic Club.

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Broadcasting Station Personnel

The following list of names is taken from information supplied by the various commercial stations. Every endeavour has been made to keep the list up-to-date at the time of going to press, but staff changes at stations are occurring so frequently that the publishers cannot accept any responsibility for omissions or inaccuracies which might be brought about in this section by such changes.

NOTE.—Announcer, anncr.; sales staff, sales st.; program staff, prog. st.; technician, tech.; executive, exec.

A

- Abrahams, Max, anncr. 2PK.
- Abramowski, O. W., sales st. 3UZ.
- Adams, W., sales st. 3UZ.
- Aked, E. J., tech. 2LM.
- Alenson, J., prog. st. 3KZ.
- Allen, Frank, director 3AW.
- Allen, H., tech. 2CH.
- Allen, M., prog. st. 4BH.
- Anderson, A., sports editor 2UW.
- Anderson, B., prog. st. 2NZ.
- Anderson, J., anncr. 4BC.
- Anderson, G. H., assist. manager 2GB.
- Anderson, Val. J., manager 3MA.
- Andrew, A., anncr. 3AK.
- Andrews, N., tech. 2KO.
- Angles, C., sport commentator 2UW.
- Anthony, R., prog. st. 5DN-RM.
- Archibald, L., tech. 3UZ.
- Arnold, C. J., prog. st. 2UW.
- Armistead, A. K., ch. engineer 4AT.
- Armistead, J., anncr. 4AT.
- Ashley, R. A., anncr. 5KA.
- Atholwood, R., anncr. 3BA.
- Atkinson, F., anncr. 6IX-WB.
- Auchterlonie, A., assist. manager, anncr. 5KA.
- Austwick, E. D., tech. 2UW.
- Ayling, Russel, anncr., tech. 2DU.

B

- Backhouse, S., tech. 3XY.
- Badger, F., sales manager 4TO.
- Baeyertz, C. N., sales st. 2UE.
- Baggs, R., anncr., tech. 2GF.
- Bailey, J., tech. 4IP.
- Bairnsfather, Capt. T., anncr. 2KY.
- Balk, D., prog. st. 5DN-RM.
- Balmain, W. H., ch. director 2BE.
- Balmer, N. E., anncr. 3KZ.
- Banney, J. P., stn. manager, ch. engr. 3BO.
- Banks, A., sales st. 3KZ.
- Banks, N., anncr. 3KZ.
- Barker, E. M., dir., gen. mangr. 6PR.
- Barlee, Roly, anncr. 3UZ.
- Barlin, G., tech. 2CA.
- Barnes, J., anncr. 3XY.
- Barrie, Susan, sales anncr. 7HO.
- Barry, H. G., anncr. 2KA.
- Bartle, O., tech. 2NZ.
- Barwick, E., tech. 3KZ.
- Barwick, W., sales st. 7HT.
- Battye, N., anncr. 2CA.
- Baume, S. E., sales st. 2SM.
- Bayley, H. M., secty. 4BK-AK.
- Beard, B., anncr. 5AD-PI-MU.
- Beaton, A., tech. 3BA.

- Beatson, R. J., ch. engr. 4MB.
- Beattie, R., anncr. 4GR.
- Beatty, W., anncr. 2SM.
- Beaver, H. E., manager 2KY.
- Beck, Chas., anncr. 4RO.
- Beckett, M., anncr. 7UV.
- Bell, Gordon, anncr. 3SR.
- Bennett, F., anncr. 2KO.
- Bennett, Lewis, studio mangr. 2TM.
- Benson, E., prog. st. 5AD-PI-MU.
- Bermingham, R., anncr. 2GZ.
- Bernard, B., anncr. 2HD.
- Berry, Rae, prog. st. 4RO.
- Berryman, L., anncr. 6IX-WB.
- Bessemer, Eric, anncr. 2CK.
- Biggins, J., tech. 2LM.
- Billing, Miss, anncr. 5SE.
- Bills-Thompson, G., manager 7HO.
- Bini, Stephani, anncr. 3UZ.
- Binks, Colin, anncr. 3TR.
- Binns, C., tech. 2CH.
- Bischoff, C., tech. 2KA.
- Bishop, N., ch. engr. 4GR.
- Blackney, L., tech. 3GL.
- Blackshaw, G., anncr. 3XY.
- Blake, L. Roy, gen. mangr, sec. 2AD.
- Blanford, M., anncr. 3DB.
- Bleazby, C., anncr. 3XY.
- Blee, N., anncr. 3HA.
- Blight, Lillian, prog. st. 2DU.
- Boargest, W., anncr. 7BU.
- Bodyeet, W., tech. 7BU.
- Bondfield, Leisha, anncr. 4BC.
- Bonner, D., tech. 7EX.
- Bonser, M., prog. st. 7LA.
- Bowie, W., anncr. 3SH.
- Bradford, A. W., sales, anncr. 4WK.
- Bradshaw, C. V., stn. mangr. 3HA.
- Brady, Clive, sports anncr. 2MO.
- Bray, G. A., sales mangr. 7UV.
- Brearley, R., mangr. 7EX.
- Brednor, J., anncr. 3GL.
- Breed, C., tech. 2GZ.
- Brentnall, M., prog. st. 2WG.
- Brewer, E. H., sales st. 2GB.
- Brewin, H. R., sales mangr. 3DB.
- Bridges, B., prog. st. 3XY.
- Briggs, —, anncr. 2WG.
- Bright, Pam., anncr. 3YB.
- Broad, E. M., anncr. 6AM-PM.
- Broadbent, J., anncr. 3HA.
- Brosie, H., tech. 2HR.
- Broughall, E., anncr. 2WG.
- Brown, B., sales st. 2BH.
- Brown, H. R., anncr. 5AD-PI-MU.
- Brown, H. W., ch. engr. 2BH.
- Brown, J. H., ch. engr. 2KY.
- Bruer, V. J., secty. 5AD-PI-MU-SE.
- Brundle, R., tech. 7HO.
- Budd, A. A., ch. directors 2MW.
- Bunton, C., anncr. 2AY.
- Burdon, B., prog. st. 4BH.
- Burgess, J., anncr. 5AD-PI-MU.
- Burnett, Helen, prog. st. 2AY.
- Burridge, J., tech. 3SR.

- Butler, J., tech. 7HO.
- Butterfield, G., tech. 6IX-WB.
- Button, B. C., sales, anncr. 2CH.
- Buzacott, H., tech. 4GR.
- Buzzacott, N., ch. engr. 3LK.
- Byrne, F. R., sales mangr. 2QN.
- Byrne, W., racing comtr. 3MA.
- Byron, J. A., secty. 2CA-WL, B.A.P.

C

- Caddy, D., anncr., 7LA.
- Callard, M., anncr. 3DB.
- Calley, W. C., accountant 2GB.
- Callow, M., tech. 2GB.
- Cameron, A., anncr. 4TO.
- Cameron, Enid, anncr. 3SH.
- Cameron, J. stn. mangr. 5SE.
- Cameron, Reg, prog. st. 4BH.
- Cameron, R., tech. 2UE.
- Campbell, B., sales st. 3XY.
- Campbell, Joan, sales st. 3XY.
- Campbell, K. M., sales mangr. 3XY.
- Campbell, W. R., secty. 6GE.
- Campbell-Jones, A. A., sales st. 2UE.
- Carlin, A., tech. 2KY.
- Carr, Arthur, prog., exec. 2UE.
- Carson, C. R., manager 4BH.
- Carswell, A., anncr. 4LG.
- Carter, B., anncr. 6IX-WB.
- Carter, C., accountant 2UW.
- Carter, Geoff., anncr. 6AM-PM.
- Carter, Spencer, prog. st. 2GF.
- Cartwright, Vera, sales st. 3GL.
- Carvosso, A. J., secty. 5DN-RM.
- Cayley, Frank, anncr. 2GZ.
- Cecil, E., anncr. 3UZ.
- Chaloner, A. R., secty. 2GZ-NZ.
- Chamberlain, F., manager 3TR.
- Chamberlain, H., anncr. 3SH.
- Chamberlain, W., tech. 3XY.
- Chandler, J. B., ch. directors. 4BH.
- Chandler, G., tech. 3SH.
- Chaplin, A., anncr., tech. 2PK.
- Chapman, M. D., sales mangr. 5AD-PI-MU.
- Chappell, L. A., anncr., tech. 7QT.
- Charlesworth, G., anncr. 3UZ.
- Chatfield, M. J., tech. 2NZ.
- Chineer, H., tech. 2KO.
- Chippendall, E., tech. 4BU.
- Chisholm, G., anncr., tech. 2KM.
- Choate, R., tech. 6AM-PM.
- Churchward, E. C., sales mangr. 6IX-WB-ML.
- Clark, S. O., sales st. 2GB.
- Clarke, R., anncr. 3CV.
- Clarke, S., prog. st. 3DB.
- Clark, H. P., sales mangr. T.P.N.
- Clayton, A., anncr. 7HT.

(Continued next page)

## Station Personnel (contd.)

Clough, E., anncr. 2WG.  
 Clyne, E. M., ch. engr. 3UL.  
 Coates, Eileen, anncr. 2CA.  
 Coburn, A., anncr. 7LA.  
 Cochrane, A. S., anncr. 2CH.  
 Coe, K., anncr. 7LA.  
 Coffey, Mrs., anncr. 3UZ.  
 Coldwell-Smith, C. E., anncr. 2GN.  
 Cole, G., tech. 2UE.  
 Collibee, E., sales, anncr. 2UW.  
 Collings, L. C., anncr. 2GZ.  
 Colman, Eric, ch. anncr. 2CA.  
 Condon, —, sports anncr. 2NZ.  
 Connolly, G., anncr. 4BC.  
 Coofier, H., tech. 7EX.  
 Cook, C., anncr. 3UL.  
 Cookson, M., tech. 3AW.  
 Coombes, G., sales st. 3SH.  
 Coombes, T., tech. 2UE.  
 Cooper, E., tech. 7HT.  
 Corley, A., anncr. 6AM-PM-KG.  
 Cortez, J., tech. 7EX.  
 Cossins, D., anncr. 7EX.  
 Cossins, R., anncr. 7EX.  
 Cottrell, B. Clarke, tech. 3XY.  
 Cottrell, F. Clarke, pub. mangr. 2UW.  
 Cottrell, E. L., secty. 3UZ.  
 Cottrell, W., tech. 2CH.  
 Cousins, C. H., anncr. 2GB.  
 Cowan, G., tech. 3TR.  
 Cowan, J., tech. 2KO.  
 Cox, E. T., sales mangr. 2KO.  
 Crago, C. J., anncr. 2HD.  
 Crago, G., anncr. 2BH.  
 Craig, N., prog. st. 4BC.  
 Craig, O., prog. st. 4BH.  
 Crawcour, J. A., anncr. 2UW.  
 Croke, Terry, anncr., tech. 2BS.  
 Cross, C. J., sales mangr. 7HT.  
 Cross, L., anncr. 4WK.  
 Crossman, Ken., prog. mangr. 5DN-RM.  
 Crouch, E. C., ch. engr. 2GZ-NZ.  
 Crowdan, A., prog. st. 2WG.  
 Cruickshank, N. W., ch. engr. 4SB.  
 Culliman, C. A., ch. engr. 7EX.

## — D —

Dahl, E. M. L., dir., secty. 4AT;  
 dir., gen. mangr. 4AY.  
 Daley, Les., prog. st. 4BH.  
 Daniell, F. W. H., dir. 2GB, 2WL,  
 3AW, 5DN-RM.  
 Darke, H. S., sales man. 2KA, 2KM.  
 Darken, K., anncr. 2PK.  
 Davey, J. H., gen. mangr., dir. 3BA.  
 Davidson, R., sales st. 2TM.  
 Davidson, W., anncr. 2KO.  
 Davies, E. W., anncr. 7LA.  
 Davies, R. R., tech. 5DN-RM.  
 Dawe, R., prog. st. 5AD-PI-MU.  
 Dawson, D., tech. 2TM.  
 Day, Donald, anncr. 3XY.  
 Dear, A., anncr. 3AW.  
 Decent, L. S. Syd., sales st. 2WG.  
 Dempsey, Myra, anncr. 2KY.  
 Denby, W., sales st. 3DB.  
 Devereaux, R. K., anncr. 3CV.  
 Diamond, W. A., sales mang. 4BU.  
 Dibley, Stuart, anncr. 2WL.  
 Dickson, L., anncr. 3GL.  
 Dinneny, V. M., mangr. 3SR.  
 Dixon, A. L., ch. engr. 4BK-AK.  
 Dixon, Neville F., sales mangr.  
 3HA, 3TR, 3SH.  
 Dodds, J. S., tech. 7HO.  
 Donald, D. G., sales st. 2CH.

Donovan, Bob, anncr. 2QN.  
 Douglas, Roderick, anncr. 2NZ.  
 Dowder, J., mangr., ch. engr. 2AY.  
 Dowling, Peggy, anncr. 7BU.  
 Downie, Mora, anncr. 2HR.  
 Drake, H., sales st. 4BH.  
 Drew, Betty, anncr. 2DU.  
 Drew, W., anncr. 7EX.  
 Duff, D., sales st. 3AW.  
 Duffy, M. B., secty. 3KZ.  
 Dukes, W. J., tech. 2UE.  
 Duncan, H. W., secty. 4BH.  
 Dunlop, K. Miss, prog. st. 3KZ.  
 Dunn, J., sales st. 2KY.  
 Dunne, John S., st. mangr. 2SM.  
 Dunzoon, Z., anncr. 3KZ.  
 Dunstan, D., tech. 4BC.

## — E —

Earl, H., anncr. 3AK.  
 Ebrall, Herbert N., mangr. 6GE.  
 Eden, K., anncr. 3DB.  
 Edmonds, M., prog. st. 2NZ.  
 Edwards, D., anncr. 5AD-PI-MU.  
 Edwards, George, 2UW.  
 Edwards, H. E., tech. 2KY.  
 Edwards, Stewart, anncr. 7UV.  
 Edwards, Stuart, anncr. 2UE.  
 Egan, Peter, J., secty. 2SM.  
 Elliott, D., anncr. 3KZ.  
 Elliott, F. E., supervising engr. 4BC.  
 Elliott, L., anncr. 7BU.  
 Elliott, S., prog. st. 4GR.  
 Ellis, A., tech. 2CA.  
 Elphinstone, L., tech. 2CK.  
 England, L., prog. st. 5AD-PI-MU.  
 Enticknap, L., tech. 4BC.  
 Errington, Betty, anncr. 3BO.  
 Errington, Kathleen, anncr. 3SR.  
 Evans, E., ch. engr. 3SH.  
 Evans, W. A., gen. mangr. 2XL.  
 Everett, Sydney, prog. st. 4BH.  
 Eynstone, Rex, anncr. 3SR.

## — F —

Faber, W., ch. engr. 4AY.  
 Fair, Dick, anncr. 2GB.  
 Fair, Roger, sales mangr. 4BK-AK.  
 Fairhall, Allan, man. director 2KO.  
 Fairweather, K., dir., ch. engr. 4IP.  
 Falknemer, June, anncr. 4VL.  
 Falknemer, J., mangr. 4VL.  
 Farrelly, J., anncr. 2KY.  
 Farris, E. C., sales st. 2SM.  
 Faulkner, Allan D., secty. 2KO.  
 Fawcett, G. S., sales st. 3UZ.  
 Feather, D. Miss, prog. st. 4TO.  
 Ferguson, John, anncr. 2AD.  
 Fidler, D., prog. st. 3AK.  
 Filmer, Mrs., anncr. 2UE.  
 Findlay, Mollie, anncr. 7HO.  
 Findlay, S. H., dir., gen. mangr. 7HO.  
 Firth, W., sales st. 2GB.  
 Fisher, A. F., tech. 5DN-RM.  
 Fisher, J., sales st. 5AD-PI-MU.  
 Fitts, D., prog. st. 3HA.  
 Fitts, R. A., supt. mangr. V.B.N.  
 Fleming, L., anncr. 2CH.  
 Flemming, Claude, producer 2CH.  
 Fletcher, C. A., advtg. mangr. 2GB.  
 Folie, M., ch. engr. 3MA.  
 Foote, R., service dept. 2UW.  
 Forgan, Bruce, tech. 5SE.  
 Forsyth, T., anncr., tech. 4IP.  
 Forsythe, G. G., sales st. 4BH.  
 Foster, George, mangr. 2BS.

Foster, Mollie, anncr. 6GE.  
 Foulkes, A., prog. st. 4BH.  
 Fowles, N., prog. st. 4BH.  
 Fox, A. E. R., anncr., ch. engr. 2GF.  
 Fox, John, anncr. 2KY.  
 Francis, Maurice, author 2UW.  
 Frank, K., mangr., ch. engr. 4PM.  
 Franklin, G., prog. st. 5AD-PI-MU.  
 Franks, R., tech. 2HD.  
 Frawley, Jack, sports comm. 3YB.  
 Frazer, N., prog. st. 2GZ.  
 Freeman, C. A., anncr., tech. 5KA.  
 French, C. G., prog. st. 3XY.  
 Frewin, W., sales st., anncr. 2MG.  
 Friswell, Pat., anncr. 3CV.  
 Frittesy, P. A., secty. 7DY.  
 Furley, P. C., sales st., anncr. 2CA.  
 Furlong, Ted, anncr. 3YB.

## — G —

Galloway, G. E., sales st. 6AM-PM-KG.  
 Gainford, Rod., anncr. 2UE.  
 Garden, H. M., anncr. 2KY.  
 Gardiner, A., tech. 2NZ.  
 Gardiner, J., prog. st. 5AD-PI-MU.  
 Gardner, A., tech. 4BH.  
 Garrett, A. E., secty. 7LA, 7QT.  
 Gaze, R., anncr. 3BO.  
 Gelling, G., prog. st. 4CA.  
 Gibbons, A., tech. 2GB.  
 Gibbs, Elma, anncr. 2KO.  
 Gibson, G., prog. st. 2CH.  
 Gibson, Grace, prog. hqrs. M.B.S.  
 Gibson, L. H., anncr. 5KA.  
 Gilder, C., sales st. 2UW.  
 Gilmour, Wyn., anncr. 2CA.  
 Gipps, G., tech. 4BH.  
 Giraud, C. H., sales st. 6IX-WB-ML.  
 Glew, L. S., ch. engr. 3UZ.  
 Glendhill, R., anncr. 6IX-WB.  
 Godfrey, Knox, anncr. 6IX-WB.  
 Gold, D., tech. 4GR.  
 Gold, E. E., man. dir. 4GR;  
 ch. of dirs. 4ZR.  
 Goldman, W., prog. st. 4BH.  
 Good, Alex, prog. st. 3XY.  
 Gooding, D. M., ch. engr. 5AD-PI-MU.  
 Gordon, Laurie, mangr. 2NZ.  
 Gordon, Peg., anncr. 2AD.  
 Goss, R., prog. st. 4BU.  
 Gough, D., anncr. 7DY.  
 Gough, John T., advtg. mangr. 7LA.  
 Gower, E. L., sales st. 6IX-WB-ML.  
 Goynes, K., sales st. 7EX.  
 Grace, A., ch. engr. 3KZ.  
 Grace, Hilda, anncr. 2NZ.  
 Graham, R., sales, st. 4BC.  
 Grahame, David, anncr. 4BC.  
 Grant, P. L., tech. 4BK-AK.  
 Gray, A., sales st. 3KZ.  
 Gray, J., secty. anncr. 4TO.  
 Gray, J., tech. 2WL.  
 Gray, L., anncr. 2WL.  
 Gray, Philip, anncr. 6AM-PM.  
 Gray, W., studio mangr. 3GL.  
 Green, H., ch. engr. 4BU.  
 Greenhalgh, J., tech. 2KO.  
 Greenhalgh, K. N., ch. engr. 2KO.  
 Greenham, I., anncr. 3KZ.  
 Greer, N. C., tech. 6WB.  
 Greeves, P., anncr. 2CH.  
 Greg, S., secty. 7EX.  
 Gregory, H., anncr. 2UW.  
 Grey, Mrs., anncr. 2KY.  
 Grice, L., anncr. 3AW.  
 Gridden, E.P., secty. 4MB.  
 Griel, P.A., secty. 7BU.  
 Griffin, E. P., secty. 4BC, 4GR.  
 Griffiths, Scott, anncr. 3BO.  
 Grist, S., sales st. 3DB.

## Station Personnel (contd.)

Grose, F., organiser 2GB.  
 Gross, R., anncr. 4BU.  
 Gunn, Kevin, anncr. 4BK-AK.  
 Guthrie, —, tech. 4RO.

## — H —

Haddy, H., secty. 5AU.  
 Haiburg, C. H., anncr. 4LG.  
 Haines, F., sales st. 2GZ.  
 Halle, E., sales st. 2HR.  
 Hallsworth, N., anncr. 2HR.  
 Ham, G., tech. 4BH.  
 Hambly, Eric, anncr. 3XY.  
 Hamfrey, Louise, anncr. 3DB.  
 Hammer, C., tech. 2UW.  
 Hanna, F., tech. 2GZ.  
 Hannam, H., tech. 2GZ.  
 Hardman, George, anncr. 4BH.  
 Hardy, W., sales st. 2UW.  
 Harland, W., stn. mangr. 4AK.  
 Harmer, M., tech. 2KY.  
 Harnett, Dom., anncr. 2SM.  
 Harper, Bernard, anncr. 4CA.  
 Harper, E., prog. st. 4BM.  
 Harper, Harry, prog. st. 4BK-AK.  
 Harper, J., anncr., sales st. 2KY.  
 Harrington, G. R., sales mangr. 4GR.  
 Harris, Hector, secty. 3AW.  
 Harris, L., tech. 7LA.  
 Hart, B., prog. st. 2GB.  
 Hart, W., tech. 2GZ.  
 Harte, Bernard, tech. 4SB.  
 Harty, F. S., anncr. 2GB.  
 Harvey, Norman S., anncr. 4BU.  
 Harvey, W. J., ch. directors 4BU.  
 Hastie, H., anncr. 4BK-AK.  
 Hatherley, Frank, anncr. 4BH.  
 Hawkins, R., tech. 2CA.  
 Hay, Hugh, anncr. 6AM-PM.  
 Hay, A. C. R., mangr. 2BH.  
 Haycroft, Vern., anncr. 3YB.  
 Hayward, K. P., sales st. 6IX-WB-ML.  
 Healy, Ian, anncr. 2HR.  
 Heath, H. H., tech. 5KA.  
 Heath, L. R., sales st. 2GR.  
 Heighway, Kay, anncr. 3UL.  
 Hemery, Peter, prog. st. 3SR.  
 Hender, R. G., sales, anncr. 6PR.  
 Henderson, Jim, anncr. 3SR.  
 Henry, John, anncr., 3GL.  
 Henwood, R., tech. 6AM-PM.  
 Henzell, L., prog. st. 4BH.  
 Herring, W. G., sales st. 2WL.  
 Hibbert, C., tech. 2GB.  
 Higginbotham, E., man. dir. 2TM.  
 Hillyard, D., tech. 7HT.  
 Hill, Billy, anncr. 2CK.  
 Hill, F. T., tech. 5DN-RM.  
 Hill, W., sales st. 2CK.  
 Hillman, L., anncr. 3BA.  
 Hipwell, R., tech. 2BH.  
 Hitch, A. V., sales anncr. 4AY.  
 Hoad, Arthur, tech., anncr. 2AY.  
 Hodgman, Brian, anncr. 7HO.  
 Hogg, S., tech. 6KG.  
 Holland, Claude, anncr. 2UE.  
 Holland, F., tech. 7EX.  
 Holland, J., sales, anncr. 5KA, 2HD.  
 Holloway, E., man. dir. 3CV.  
 Holmes, D. E., dir., ch. engr. 2DU.  
 Holmes, D. W., sales st. 2DU.  
 Holmes, Francis, sales, anncr. 7BU.  
 Holt, T., mangr. 3XY.  
 Honeyfield, C., anncr. 2UE.  
 Hooke, L. A., gen. mangr. 2CH,  
 director 2CH, 4WK.  
 Hooker, Hal, anncr. 2CK.  
 Hooper, M., ch. engr. 3DB.  
 Hopton, A., ch. engr. 3CV.

Horner, H. G., gen. mangr. 2GB.  
 Hosking, C., anncr. 3HA.  
 Hosking, W., tech. 2HD.  
 Howard, Brian, anncr. 2KY.  
 Howard, Ken, racing comm. 2KY.  
 Howie, C. R., tech. 5DN-RM.  
 Hudson, K., anncr. 3CV.  
 Hugh, Errol, racing anncr. 2NZ.  
 Hume, E. J., ch. engr. 5DN-RM.  
 Humphrey, Harry, anncr. 4BK-AK.  
 Hunter, H., sales mangr. secty. 5KA.  
 Hurndell, C. A., mangr., ch. eng. 4WK.  
 Hussey, C., sports anncr. 2MO.  
 Hutchinson, Val, mangr. 2KM.  
 Hynes, M., anncr. 5DN-RM.

## — I —

Illidge, Mrs., anncr. 6KG.  
 Irving, Wilson, prog. st. 4BH.  
 Israel, M., tech. 3AW.

## — J —

Jack, Bill, tech. 4BC.  
 Jackson, F. G., secty. 2LM.  
 Jackson, G. J., prog. st. 2GB.  
 Jackson, J. Basil, gen. mangr. 2QN.  
 Jacques, V., sales st. 5AD-PI-MU.  
 James, C., anncr. 2UW.  
 James, Don, anncr. 3TR.  
 James, D. (Mrs.), anncr. 6PR.  
 James, Edwin, mangr. 2BE.  
 James, H., tech. 3UZ.  
 James, R. P., ch. anncr. 2BH.  
 James, R. P. (Mrs.), anncr. 2BH.  
 James, W., tech. 4MB.  
 Jamieson, M., prog. st. 2GZ.  
 Jardine, W., sales, anncr. 2BE.  
 Jarvis, V., ch. engr. 2KG.  
 Jay, Tommy, anncr. 2SM.  
 Jeffrey, L., mangr. 2CK.  
 Jenkins, D., anncr. 2WG.  
 Jenkins, R., sales mangr. 2WG.  
 Jennings, G., anncr. 2CH.  
 Jessen, V., prog. st. 2NZ.  
 Johnson, N., pub. dir. 2GB.  
 Johnson, W. J., secty. 4IP.  
 Johnston, Ken, anncr. 2UE.  
 Johnston, Maude, anncr. 2HD.  
 Jones, M. L., man. director 2RG.  
 Jordan, D., anncr. 2GB.  
 Joyce, D., prog. st. 3KZ.  
 Joyce, J., production Liaison  
 officer M.B.S.  
 Joyce, N., anncr. 6WB.  
 Judd, N. A., anncr. 2HR.

## — K —

Kahle, Eunice, anncr. 2KM.  
 Kay, Miles, anncr. 2WG.  
 Kaye, R., tech. 6WB.  
 Kean, E. A., anncr. 6PR.  
 Keir, Graham, anncr. 4RO.  
 Keirans, M., anncr. 2WG.  
 Kelly, Reg, sales, anncr. 2HR.  
 Kemp, A., tech. 4BH.  
 Kemp, S. J. A., superintendent  
 manager Argus Network.  
 Kemsley, A. N., gen. mangr. 3UZ.  
 Kenby, E. T., anncr. 7DY.  
 Kennedy, S. W., secty. 2TM.  
 Kennedy, T. St. J., mangr. 6PR.  
 Kermond, L., engr. 3YB.  
 Kerr, A. D., ch. engr. 3BA.  
 Kerr, J., tech., sales, anncr. 2PK.  
 Keyworth, F. L., secty. 2DU.  
 Kidd, Ray, dir., tech., sales,  
 anncr. 4TO.  
 King, R. A., M.L.C., secty. 2KY.  
 King, T., anncr. 2KO.  
 Kingdom, R., tech. 2AD.  
 Kinnear, A. C., gen. mangr.

## Advertiser Network.

Kinley, R., tech. 7UV.  
 Kitto, T. C., ch. engr. 7UV.  
 Klemm, B. W., prog. st. 4BH.  
 Knight, C., tech. 2CA.  
 Knowles, F. G., sales st. 2CH.  
 Krimmer, Ailsa, anncr. 4BC.  
 Kruger, V., tech. 2UE.  
 Kurts, A. C., sales, anncr. 6PR.  
 Kuskie, D., tech. 4MB.

## — L —

Lakey, P., sales st. 2GZ.  
 Lakin, J. S., sales mangr. 5DN-RM.  
 Lambert, T., dir., mangr. 4IP.  
 Lammass, G., prog. st. 2UW.  
 Lamprill, Mary, prog. st. 7HO.  
 Lane, M., tech. 2GB.  
 Lane, R. E., sales mangr. 2GB.  
 Langborne, Kitty, anncr. 2GF.  
 Lanyon, C. D., secty. 3MA.  
 Larke, L., anncr. 3BA.  
 Larkin, J. S., sales mangr. 5DN-RM.  
 Lawrence, A. E., tech. anncr. 4TO.  
 Lawrence, C., sports comm. 2UW.  
 Lawson, F. A., anncr. 7QT.  
 Lay, D., anncr. 7LA.  
 Layton, Ivan, anncr. 2GF.  
 Layton, K., anncr. 2CH.  
 Le Brun, Peter, stn. mangr. 4SB.  
 Lee, G., anncr. 4BK-AK.  
 Leen, Noreen, anncr. 6GE.  
 Leiper, J., sales st. 2TM.  
 Lennan, A. M., tech. 3UL.  
 Levy, F. E., sales mangr. 2UW.  
 Lewis, A., prog. staff 2TM.  
 Lewis, E. J., sales mangr. 3UL.  
 Lewis, Gordon, anncr. 3UL.  
 Lewis, H. J., mangr., ch. engr. 2GN.  
 Lewis, H. S., mangr. 2GN.  
 Lewis, L., anncr. 6IX-WB.  
 Lilburne, G., anncr. 3KZ.  
 Lindren, Miss, anncr. 3AW.  
 Ling, J. Thomas, ch. engr. 2BE.  
 Linke, E. L., prog. st. 5KA.  
 Linton, Murray, anncr. 3MA.  
 Lisle, V., anncr. 2UW.  
 Littleton, Edgar, prog. st. 4BC.  
 Little, E. C., ch. engr. 4BH.  
 Llewellyn, A. H., tech. 2UE.  
 Lloyd, K. P. G., sales st. 3UL.  
 Loneragan, W. H., tech. 6PM.  
 Long, E., prog. st. 2TM.  
 Longhurst, J. S., secty. 2BE.  
 Lord, Tasman, ch. engr. 7BU-DY.  
 Lourer, C. K., tech. 2GB.  
 Lovegrave, A. E., sales st. 6PR.  
 Low, L., tech. 7EX.  
 Lowe, J. K., ch. engr. 4WK.  
 Lucas, V., prog. st. 2MO.  
 Lunn, L., sales, anncr. 2KY.  
 Lynton, Mayne, prog. st. 3XY.  
 Lyons, N., mangr. 2UW.

## — M —

Mac, June, anncr. 2CK.  
 Macartney, prog. st. 2CK.  
 Macdougall, Ann, anncr., 2KA.  
 Macgregor, Duncan, sales man. 2HD.  
 Makin, P., ch. engr. 2WL.  
 Mangham, F., tech. 3DB.  
 Manion, Geoff., anncr. 6AM-PM.  
 Manning, Pam., anncr. 2BS.  
 Mannix, Miss, anncr. 3AW.  
 Mantle, P. D., anncr. 6PR.  
 Marden, C. F., dir. 4BC-4RO,  
 gen. mangr. 2UW, 4BC.  
 Marple, D., tech. 2HD.  
 Marriott, W., anncr. 7EX.  
 Marshall, D., anncr. 2GN.  
 Martin, L. H., sales, anncr. 2MW.  
 Mason, C., anncr. 3AK.  
 Masters, John, prog. st. 3AW.

## Station Personnel (contd.)

Mitchell, V. F., gen. mangr. 4BH.  
 Mather, A. S., ch. engr. 2HR.  
 Mather, W., tech. 3BA.  
 Maxwell, Brian, prog. st. 2GZ.  
 Meakins, S. J., mangr. 5AU.  
 Meany, Mons. J., mangr. dir. 2SM.  
 Merchant, John, anncr. 2WL.  
 Meredith, Si, anncr. 2UE.  
 Meredith, Keith, tech. 4BU.  
 Middlemass, H., sales st., 2SM.  
 Mikkelsen, M., anncr. 4BU.  
 Miles, G., ch. engr. 7HT.  
 Millan, R., anncr. 3DB.  
 Millar, G., secty. 2GB.  
 Millard, Harry, anncr. 4BC.  
 Millen, —, anncr. 2WG.  
 Miller, E., secty. 2RG.  
 Miller, F., tech. 5MU.  
 Milton, E. E., dir., mangr. 2MG.  
 Milton, H., mangr. 2MG.  
 Minto, J., sales st. 2CH.  
 Mitchell, A., tech. 2CA.  
 Mitchell, E., anncr. 3BA.  
 Mitchell, V. F., man. dir. 4BH.  
 Mogg, F. R., secty. 3XY.  
 Mognie, K., anncr. 2TM.  
 Moloney, C. J., anncr. 2MG.  
 Monaghan, V., tech. 3HA.  
 Money, J., tech. 2CK.  
 Moore, D., anncr. 3KZ.  
 Moore, Maxwell, anncr., tech. 2DU.  
 Moore, W. S. M., tech. 3BO.  
 Moran, C., tech. 4BH.  
 Moran, Geraldine, prog. st. 4RO.  
 Moran, R., sales mangr. 2XL.  
 Morgan, John, anncr. 5SE.  
 Morgan, S., mangr. 3KZ.  
 Morley, J. K., anncr. 2KY.  
 Morris, F. L., tech. 2KY.  
 Morris, Leslie, anncr. 3SR.  
 Morris, J., sales st. 2KA.  
 Morrissey, Kathleen, anncr. 2HD.  
 Morrison, A., tech. 7LA.  
 Morrison, C., ch. engr. 6GE.  
 Morrison, W., tech. 7HO.  
 Morrow, J., tech. 2GB.  
 Morse, Hilda C., anncr. 2UW.  
 Mountney, Philip, tech. 4BU.  
 Muhling, Clubb, anncr., prog. st. 6AM-PM.  
 Muir, H. Ron, sports anncr. 6GE.  
 Munnings, B., tech. 2UE.  
 Munro, M., sales st. 7EX.  
 Murphy, J., ch. engr. 3HA.  
 Murray, A. J., sales mangr. 3KZ.  
 Muston, Henry C., secty. 4SB.  
 Myers, A., prog. st. 2MW.  
 Myers, L., anncr. 2CH.

## — Mc —

McArthur, Marion, anncr. 2AD.  
 McCann, J., sales st. 4BH.  
 McCarron, F., prog. st. 5AD-PI-MU.  
 McCaskill, A., prog. st. 6KG.  
 McCauley, A. L., dir. 2KA, K.M.T.,  
 secty. 2KA.  
 McCauley, G. E., dir. 2KA, K.M.T.,  
 secty. 2KM.  
 McConnell, F., sales st. 5AD-PI-MU.  
 McConnell, J., sales st. 2UW.  
 McCormack, N., anncr. 4MB.  
 McDonald, Ian, anncr. 2KA.  
 MacDonald, K., anncr. 5AD-PI-MU.  
 McDonald, S., anncr. 3TR.  
 McEachern, M. M., anncr. 7QT.  
 McFarland, V., anncr. 2BS.  
 McGhie, Barbara, anncr. 2GZ.

McGrath, J., anncr. 4AT.  
 McGregor, Allan, anncr. 2BE.  
 MacGregor, Peter, anncr. 2GZ.  
 McGregor, R. R., tech. 3UL.  
 McGregor, R., anncr. 6IX-WB-ML.  
 McGregor, Tom, anncr. 4BC.  
 McGuinness, G. C., sales st. 2CH.  
 McKay, Doreen, anncr. 2SM.  
 McKay, J., sales st. 2UW.  
 McKensie, James, mangr. 3GL.  
 MacKenzie, Douglas, prog. st. 3XY.  
 McKillop, Gordon, anncr. 7HO.  
 McKinnon, Roger, sales st. 2UW.  
 McLean, R., tech. 7LA.  
 McLean, N., tech. 2QN.  
 McMahon, John, anncr. 3UZ.  
 McMahon, L., anncr. 4IP.  
 McMahon, R., sales st. 2UW.  
 McMaster, Reg, anncr. 2QN.  
 McNeil, T. A., ch. engr. 2UW.  
 McNeilly, —, anncr. 3MA.  
 McNeilly, J., sales mangr. 2HD.  
 McNicol, R., tech. 4BH.  
 McRae, E., sales st. 3SR.  
 McSperrin, Meg, anncr. 2CH.

## — N —

Nash, W. R., tech., anncr. 4CA.  
 Negri, T., anncr. 3BA.  
 Neill, Catherine, anncr. 3XY.  
 Neilson, Max, tech. 3GL.  
 Netterfield, —, anncr. 4BU.  
 Nicholas, W., ch. engr. 7HO.  
 Nicholls, C., anncr. 3AW.  
 Nicholson, D., anncr. 5DN-RM.  
 Nicholson, J. M., secty. 4LG.  
 Nicholson, R. M., dir., mangr. 4LG.  
 Nilsen, Oliver J., dir. 3UZ.  
 Nixon, A., anncr. 3AW.  
 Nolte, G., ch. engr. 3TR.  
 Noonan, Mollie, anncr. 2LM.  
 Norris, Max, tech. 3CV.  
 Norton, C., anncr. 5AD-PI-MU.  
 Nowlan, W., anncr. 4IP.  
 Nulley, G. F., ch. engr. 5KA.

## — O —

Oakley, R. A., ch. engr. 2HD.  
 O'Brien, B., stn. mangr. 7BU.  
 O'Brien, J., sports anncr. 2HR.  
 O'Brien, J., anncr. 2WG.  
 O'Brien, Margaret, anncr. 7EX.  
 O'Donnell, K., anncr. 2RG.  
 O'Hagan, J. F., sales mangr. 3AW.  
 Ogilvy, C., sales mangr. M.B.S.,  
 dir., mangr. 2CA.  
 O'Halloran, M., dir. 5KA, mangr. 2HD.  
 O'Keefe, A., advtg. mangr. 2WL.  
 Oliver, C., Boys' Club Organiser 2GB.  
 Oliver, J., sales st. 3AK.  
 Omodei, C., tech. 2HD.  
 Omond, N., sales st. 5AD-PI-MU.  
 Orchard, Joan, prog. st. 2GZ.  
 Ordell, Robin, prog. st. 2GB.  
 O'Sullivan, P., tech. 2LM.  
 O'Sullivan, S., prog. st. 5DN-RM.  
 Oxley, —, tech. 4BC.

## — P —

Paddison, A. C., gen. mangr.,  
 dir. 2KA-KM.  
 Palmer, B., sales mangr. 2HR.  
 Palmer, Joyce, anncr. 2MW.  
 Panes, W. R., prog. st. 2HD.  
 Parasiers, R., tech. 5AD-PI-MU.  
 Parish, R. E., mangr. 7DY.  
 Parish, L. E., anncr. 7DY.  
 Parker, Ken, tech. 3MA.  
 Parker, N., tech. 6IX.  
 Parkinson, G., sales st. 2GZ.

Parrant, E. G., anncr. 6PR.  
 Parris, J., ch. engr. 2QN.  
 Parris, J. E., mangr., ch. engr. 2PK.  
 Parry, Betty, anncr. 4RO.  
 Paton, R., secty. 7HO.  
 Paton, Jack, anncr. 3YB.  
 Patton, J. F., sales st. 6AM-PM.  
 Patton, J. F., sales st. 6KG.  
 Payne, H., tech. 2UE.  
 Pearce, D., prog. st. 5AD-PI-MU-SE.  
 Pearce, E., anncr. 2CH.  
 Pearce, F. R., mangr., ch. engr. 4CA.  
 Pearse, H., prog. st. 2NZ.  
 Peaston, Hugh, anncr., tech. 2GF.  
 Pengilly, L., tech. 2TM.  
 Pengilly, M., prog. st. 2TM.  
 Penny, W. L., anncr. 2TM.  
 Peterson, R., prog. st. 5AD-PI-MU.  
 Petters, H. A., sales st. 2SM.  
 Phillips, J., tech. 2UW.  
 Phillips, J. P., tech. 2UW.  
 Phillips, Stan, anncr. 4BC.  
 Phillpot, Allan, tech. 3GL.  
 Phipps, W., tech. 6PM.  
 Pickhover, H., dir., ch. engr. 2KO.  
 Pieremont, B., tech. 2UE.  
 Pieremont, N. S., tech. 2UE.  
 Pieremont, R. M., tech. 2UE.  
 Pile, Richard, mangr. 2MW.  
 Pither, G., anncr. 3HA.  
 Poggioli, Peter, anncr. 2AD.  
 Porter, L. G., tech. 6PI.  
 Potter, F., tech. 2TM.  
 Powell, J. B., anncr. 2RG.  
 Prentice, J. M., anncr. 2UW.  
 Prince, A. L., sales mangr. 4BC.  
 Prior, J. O., secty. 2CK.  
 Proust, John, ch. engr. 2AY.  
 Puddicombe, Merle, anncr. 2LM.  
 Pullan, J., tech. 2KY.  
 Pullman, E., anncr., sales st. 5DN-RM.

## — Q —

Queale, W., ch. dir. 5DN-RM.  
 Quick, D., tech. 3CV.  
 Quirk, L. P., advtg. mangr. 2SM.

## — R —

Radcliffe, J., tech. 3HA.  
 Radford, L. J., sales st. 2GZ.  
 Radford, J. A., mangr. 2HR.  
 Ratcliffe, Gordon, tech., anncr. 2GZ.  
 Raymond, Betty, anncr. 7BU.  
 Raynor, W. F., sales st. 2CH.  
 Read, A. L., tech. 6AM.  
 Read, John, tech. 2UE.  
 Rees, L. I. M., sales st. 5KA.  
 Reeve, Goodie, anncr. 2GB.  
 Reidy, H., prog. st. 3DB.  
 Reilly, Dianne, anncr. 2QN.  
 Reilly, V. John, stn. mangr. 2QN.  
 Rheuben, E. J., mangr. 4RO.  
 Richards, K., anncr. 3AK.  
 Richardson, A. T., prog. st. 2DU.  
 Richardson, D. L., mangr. 7LA.  
 Riches, S. W., tech. 3UZ.  
 Ridley, Alan, sales mangr. 2GZ.  
 Ridley, J. E., gen. mangr. 2GZ,  
 dir. 2NZ.  
 Ringland, H., sales st. 2UW.  
 Ritchie, D., anncr. 7BU.  
 Roberts, A. Mrs., mangr. 2WG.  
 Roberts, E. V., man. dir. 2WG.  
 Roberts, P., ch. engr. 2WG.  
 Roberts, R. M., prog. mangr. 2CA.  
 Roberts, Russell, mangr. 4BC.  
 Robertson, Alec., mangr. 4BK-AK.  
 Robertson, D., anncr. 2GN.  
 Robertson, G. Wilfred, sales  
 mangr. 4ZR.  
 Robertson, J., anncr. 6IX.  
 Robinson, A. B., sales st. 3XY.

## Station Personnel (contd.)

Robinson, K., dir., secty. 2HR.  
 Robinson, W., tech. 2UE.  
 Robson, C., tech. 6IX.  
 Rodda, W., tech. 6PR.  
 Rogers, B., tech. 6WB.  
 Rooke, Sheila, sales st. 6GE.  
 Rose, C., sales st. 3KZ.  
 Rosman, E. H., secty. 6WB-ML-IX.  
 Ross, David Percy, anncr. 4WK.  
 Rowland, John, anncr. 2MW.  
 Rowland, W. E., tech. 3XY.  
 Rudd, R., anncr. 3BO.  
 Ruler, Frank, anncr. 3SR.  
 Russell, F., sales st. 3AW.  
 Rutherford, Ruth, anncr. 4BC.  
 Ryan, A. J., dir., ch. engr. 2CA.  
 Ryan, M., prog. st. 2NZ.  
 Rycroft, G., sales st. 7HO.  
 Rycroft, J. L., sales mangr. 7HO.

## — S —

Samuel, B., mangr. 6IX-WB.  
 Sanders, A., anncr. 3AW.  
 Sarah, D., anncr. 3MA.  
 Saunders, B. F. B., anncr. 6WB-ML-IX.  
 Saunders, Chas., anncr. 7DY.  
 Saunders, George, anncr. 2KY.  
 Saunders, Margaret, anncr. 2GF.  
 Sautelle, C. B., tech. 2WL.  
 Sayle, W., secty. 2UW.  
 Scamist, R., tech. 3TR.  
 Scarlett, J., tech. 3AW.  
 Scettrine, B., tech. 3BA.  
 Scholes, Norman, prog. st. 2HD.  
 Schneider, W., dir., mangr. 5KA.  
 Schultz, L. N., ch. engr. 2GB.  
 Scott, Dulcie, prog. st. 4BH.  
 Scott, E., anncr. 2UW.  
 Scott, Ron, anncr. 2NZ.  
 Scrivener, P., sales st. 4IP.  
 Searle, A., tech. 2KA.  
 Searle, B., mangr. 4VL.  
 Searle, C., anncr. 4PM.  
 Searle, L., anncr. 4AY.  
 Seaton, P., tech. 2UE.  
 Sellars, Vernon, anncr. 2KY.  
 Semfel, E., ch. engr. 4RO.  
 Sharland, A. B., tech. 2CH.  
 Sharland, Wallace, sports anncr. 3XY.  
 Sharp, C. S., mangr. 2CA.  
 Sharp, J. A., mangr. 4BU.  
 Shaw, Grace, anncr. 2UE.  
 Shaw, H., tech. 4GR.  
 Shean, J. P., secty. 2PK.  
 Shearstone, V., anncr. 2GN.  
 Sheath, E., prog. st. 2MG.  
 Shepherd, L., ch. engr. 3XY.  
 Sherriff, C., sales st. 3AK.  
 Shortell, R., ch. engr. 3SR.  
 Siemond, A. J., sales st. 4BC.  
 Simme, E. O., anncr. 6WB-ML.  
 Simmonds, A. G., tech. 2MW.  
 Simmons, H. T., ch. eng. 6IX-WB-ML.  
 Simpson, D. H., sales mangr. 4AY.  
 Sirl, C., tech. 6WB.  
 Slater, Marion, prog. st. 6PR.  
 Sleath, H., prog. st. 4BH.  
 Sleeps, M., tech. 3DB.  
 Small, Carl, sports anncr. 2LM.  
 Small, T. A., ch. engr. 2MW.  
 Smith, A., tech. 3YB.  
 Smith, A. B., anncr. 2UE.  
 Smith, E. M., anncr. 5AU.  
 Smith, K., tech. 4GR.  
 Smith, Nada, anncr. 4GR.  
 Smith, R., tech. 4BC.  
 Smith, R., anncr. 4BK-AK.  
 Smith, Ron., tech. 3BO.

Smith, S. D., tech. 4BC.  
 Smyth, P. A., sales st. 5DN-RM.  
 Snell, Eric, anncr. 3XY.  
 Snell, G., anncr. 3AK.  
 Solomon, J., anncr. 2BE.  
 Solomons, Harry, racing comm. 3XY.  
 Southwell, N., tech. 2KY.  
 Spence, E., anncr. 3AK.  
 Spencer, Keith, anncr. 4AY.  
 Spencer, J., anncr. 7HT.  
 Spencer, T., mangr. 2CH.  
 Spencer, T. A., secty. 7HT.  
 Spicer, F. W., man. dir. 2PK.  
 Spicer, Gordon, anncr. 2MW.  
 Spinner, L., tech. 2KY.  
 Spitzowsky, M., tech. 2KO.  
 Sproule, C. T., advtg. mangr. 2CH  
 and A.W.A.

Stallard, Herbert, anncr. 4BC.  
 Stanley, C., anncr. 2CH.  
 Stapleton, B. B., asst. advtg.  
 mangr. 2SM.  
 Stelzer, E. M. (Mrs.), anncr. 2GB.  
 Stelzer, W. J., sales st. 2GB.  
 Stephens, L., prog. st. 5DN-RM.  
 Stephenson, B., tech. 2UW.  
 Stephenson, Pat., anncr. 7HT.  
 Stevens, D., Prog. st. 5DN-RM.  
 Stevens, E. S., tech. 2NZ.  
 Stevens, F., ch. engr. 2CH.  
 Stevens, J., anncr. 2CA.  
 Stevenson, C. V., man. dir. 2UE.  
 Stevenson, Lorna, sales, exec. 2UE.  
 Stevenson, Murray, ch. engr. 2UE.  
 Stevenson, Norman, ser. superv. 2UE.  
 Stewart, Gwen, prog. st. 2TM.  
 Stewart, J., tech. 2KY.  
 Stewart, K., tech. 2CH.  
 Stewart, R. B., tech. 2TM.  
 Stewart, William, anncr. 3GL.  
 Stirling, Nell (George Edwards'  
 Productions), 2UW.  
 Stock, C., sales st. 5AD-PI-MU.  
 Stokes, G., sales st. 4BH.  
 Stokes, R. M., anncr. 4BK-AK.  
 Stone, N., tech. 7HT.  
 Storey, O. J., sales man., anncr. 4MB.  
 Storr, John, anncr. 3XY.  
 Strange, C. A., mangr. 3YB.  
 Stuart, J., anncr. 3DB.  
 Sullivan, R., anncr. 5DN-RM.  
 Swain, N., anncr. 3KZ.  
 Sydes, V., ch. engr. 7LA.

## — T —

Tail, G. L., prog. st. 3AW.  
 Talbot, W. E., sales st. 6AM-PM-KG.  
 Tapper, J. R., tech. 6ML.  
 Tareha, C. A., dir., ch. engr. 5KA.  
 Taylor, A., tech. 6KG.  
 Taylor, B. R., secty. 4ZR.  
 Taylor, H. V. L., ch. engr. 2AD.  
 Taylor, J. T., mangr. 3AW.  
 Taylor, N., anncr. 6ML.  
 Taylor, R. B., secty. 2BH.  
 Taylor, T., ch. engr. 2CK.  
 Temby, K., tech. 3AK.  
 Terfell, N., tech. 3BA.  
 Theyer, John, secty. 2MW.  
 Thomas, D., tech. 2CA.  
 Thomas, F. S., sales st. 4BK-AK.  
 Thomas, H. R. R., tech. 2GB.  
 Thomas, Madge, anncr. 3XY.  
 Thomas, P. V., secty. 4WK.  
 Thomas, R. C., stn. mangr. 7HT.  
 Thomas, S., sales st. 3XY.  
 Thompson, E. J. K., dir., secty.  
 3UL-YB-SR.

Thompson, M., tech. 3DB.  
 Thorn, H. A., anncr. 5KA.  
 Thurling, S., tech. 3KZ.  
 Tibbett, E., ch. engr. 2MO.  
 Tilley, C., mangr. 3AK.  
 Timson, Frank, anncr. 3XY.  
 Toakley, T., tech. 2KA.  
 Tomlinson, Audrey, prog. st. 4BH.  
 Tonkin, S., ch. engr. 2LM.  
 Toohy, Allan, anncr. 2UE.  
 Towner, A. D., dir. 7DY, gen.  
 mangr., dir. 7BU.  
 Tozer, J., sales mangr. 6AM-PM-KG.  
 Tredrea, F., ch. engr. 6AM-PM-KG.  
 Trethewise, James, tech. 7BU.  
 Trotman, B., anncr. 3BA.  
 Try, R. K., ch. engr. 2XL.  
 Tuendemann, S. J., sales st. 5KA.  
 Tupper, Fred, anncr. 3AW.  
 Tuson, H., tech. 2CH.  
 Tyson, R., sales st. 4BH.

## — U —

Unsworth, Geo., sales mangr. 2HD.  
 Urquhart, M., tech. 6ML.

## — V —

Vallantyne, J. D., sales st. 7EX.  
 Varley, Miss, anncr. 3AW.  
 Vertigan, J., sales mangr. 7LA.  
 Vertigan, R., anncr. 7HT.  
 Vidor, Ann, anncr. 2WL.  
 Vincent, J., prog. st. 4BH.  
 Virgona, W., tech. 3UZ.

## — W —

Waine, Elsie, anncr. 2SM.  
 Walker, Eric, anncr. 2KY.  
 Walker, J., anncr. 2UW.  
 Walker, J., ch. engr. 4ZR.  
 Walker, Keith, anncr. 4GR.  
 Walker, Margaret, anncr. 3YB.  
 Walkers, Ray, anncr. 2RG.  
 Wallace, W. J., anncr. 2GF.  
 Walls, June, secty. 3HA-TR-SH.  
 Walsh, Ernest, anncr. 2UE.  
 Walpole, Frank S., gen. mangr. 2DU.  
 Walters, D. G., tech. 2GB.  
 Walters, Mona, prog. st. 4IP.  
 Walters, L. A., mangr. 4AT.  
 Warburton, M., prog. st. 5AD-PI-MU.  
 Ward, Geo., anncr. 7HO.  
 Ward, R. E., mangr. 7QT.  
 Ward, Tom, sales, anncr. 2LM.  
 Wardle, T. R., sales st. 3AW.  
 Wateking, —, prog. st. 5KA.  
 Watson, Ron, prog. st. 2GB.  
 Wearne, V., anncr. 2PK.  
 Webb, D., tech. 7HO.  
 Webb, Eric, tech. 3AK.  
 Webb, S. R., sales st. 4BK-AK.  
 Webber, A., anncr. 2HR.  
 Webber, Fred, anncr. 2SM.  
 Weir, Allan, prog. st. 6KG.  
 Weir, W., anncr. 2TM.  
 Weiss, C., sales mangr. 3AK.  
 Welch, Col., anncr. 4GR.  
 Welch, E., anncr. 3DB.  
 Weldon, Dan, producer 2KY.  
 Weller, J., tech. 4BC.  
 Welling, T., ch. engr. 5SE.  
 Wells, G., anncr. 3HA.  
 Wells, R. F., tech. 5DN-RM.  
 Wharf, Harry, sales mangr. 2LM.  
 Wharton, R., sales st. 2KY.  
 Wheeler, J., sales, anncr. 2UW.  
 Whistler, A. H., mangr. 2MO.  
 Whistler, Hillery, anncr. 2MO.  
 Whitcomb, T., dir., ch. engr. 2TM.  
 White, D., secty. 6AM.

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## Station Personnel (contd.)

White, J., tech. 2KY.  
 White, R. M., gen. mangr. 5DN,  
 man. dir. 5RM.  
 White, S., tech. 3AW.  
 Whiteman, R. K., sales st. 4BC.  
 Whitford, F. R., man. dir. 6AM-PM.  
 Whitmore, J. anncr., ser. mangr. 2TM.  
 Whitham, H. D., man. dir. 2LF,  
 dir. 2RG.  
 Whykes, E. J. W., secty., sales  
 mangr. 3BA.  
 Wilby, D. M., anncr. 3UL.  
 Wilde, F., sales, anncr. 4IP.  
 Wilkinson, D. A., tech. 5DN-RM.  
 Wilkinson, Les, sales mangr. 3MA.  
 Willesden, Peggy, anncr. 4IP.  
 Williams, A., tech. 2WG.  
 Williams, Esme, prog. st. 2KY.  
 Williams, N., sales, anncr. 7HT.  
 Williams, N., sales st. 7BU.  
 Williams, J., prog. st. 5AD-PI-MU.  
 Willing, Judy, anncr. 3TR.  
 Willis, W. L., secty. 2HD.  
 Wilson, Harper, prog. dir. 3UZ.  
 Wilson, H. B., tech. 5AD-PI-MU.  
 Wilson, J., tech. 7HT.  
 Wilson, J. E., secty. 4CA.  
 Wilson, Joan, anncr. 7UV.  
 Wilson, W., sales, anncr. 7UV.  
 Wilson, W. A., ch. engr. 3BA.  
 Witt, Fred, record librarian 2KY.  
 Woolf, R., secty. 2UE.  
 Wodd, Miss C. H., secty., to gen.  
 mangr, 2UW.

Wood, D., tech. 6IX.  
 Wood, E. A., mangr. 7UV.  
 Wood, Ivy, anncr. 7UV.  
 Woodland, C. V., mangr. 2LM.  
 Woods, Ray, prog. st. 3XY.  
 Worrall, Dave, gen. mangr. 3DB-LK.  
 Woolley, H. P., anncr. 5DN-RM.  
 Wright, L., ch. engr. 3AK.  
 Wynne, A. P., dir., mangr. 4MB.

— Y —

Yates, H. N., sales st. 2UE.  
 Yeldon, Russell, dir., gen mangr. 2WL.  
 Yelberton, M. W., secty. 6PR.  
 Yew, Colin D., anncr. 4CA.  
 Young, H., tech. 2CH.  
 Young, J., anncr. 5AD-PI-MU.  
 Young, N., anncr., prog. st. 7LA.  
 Young, N., tech. 2HR.

## STATION SLOGANS

Station slogans are used in conjunction with the call-sign by most Australian Commercial Broadcasting Stations.

2AD—"The Voice of New England."  
 2AY—"The Albury Station."  
 2BE—"The Voice of the Far South."  
 2BH—"The Barrier Minder Broadcasting Station."  
 2BS—"Clarion of the West."  
 2CA—"Radio Canberra."  
 2CH—"Entertains the Whole Family."  
 2CK—"The Voice of the Coalfields."  
 2DU—"The Weston Station."  
 2GF—"The North Coast Station."  
 2GZ—"Country Service."  
 2HD—"The Voice of Friendship."  
 2HR—"The Hunter River Station."  
 2KA—"The Voice of the Mountains."  
 2KM—"The Macleay Station."  
 2KO—"The Voice of Industry."  
 2KY—"The Brightest Station on the Air."  
 2MG—"Voice of the Tablelands."  
 2MO—"First Station in the North-West."  
 2MW—"The Friendly Station."  
 2NZ—"Northern New South Wales."  
 2PK—"The Voice of the Golden West."  
 2QN—"The Riverina Station."  
 2RG—"The Voice of the Murrumbidgee."  
 2SM—"The Modern Station."  
 2TM—"Northern New South Wales."  
 2UW—"From the Top of the State."  
 2WG—"The Riverina Broadcasting Station."  
 2WL—"The South Coast Station."  
 2XL—"The Southern Tablelands Station."  
 3AK—"The Voice of the Night."  
 3AW—"The Feature Station."  
 3BA—"The Courier Station."  
 3BO—"The Friendly Voice of the North."  
 3CV—"The People's Station."  
 3DB—"The Herald Station."  
 3GL—"The Voice of Victoria's Oldest Morning Journal."  
 3HA—"Radio Western 3HA."  
 3KZ—"Brighter Broadcasting Service."  
 3MA—"The Sunraysia Station."  
 3SH—"The Border Feature Station."  
 3SR—"The Heart of Victoria."  
 3TR—"Radio Gippsland."  
 3UL—"Central Gippsland"—An Argus Station.  
 3UZ—"The Voice of Victoria."  
 3XY—"The Quality Station."  
 4AK—"The Brighter Broadcasting Service."  
 4AT—"Voice of Tablelands."  
 4BC—"The Radio Voice of Queensland."  
 4BH—"A Chandler Station."  
 4BK—"The Courier-Mail Station."  
 4BU—"The Voice of the Burnett."  
 4CA—"At the Top of Australia."  
 4GR—"The Voice of the Downs."  
 4IP—"The Radio Voice of West Moreton."  
 4GL—"In the Midst of the Golden Fleece."  
 4MB—"Voice of the Wide."  
 4RO—"The Key to Central Q'land."  
 4TO—"The Townsville Station."  
 4VL—"The Voice of the Far West."  
 4WK—"The Listeners' Companion."  
 4ZR—"The Voice of the West."  
 5AD—"Premier Station in the State."  
 5AU—"The Voice of the North."  
 5DN—"First Station in the State."  
 5KA—"Voice of South Australia."  
 5MU—"Premier Station in the State."  
 5PI—"Premier Station in the State."  
 5RM—"First Station in the State."  
 6AM—"The Happy Station."  
 6GE—"The Featured Station."  
 6PR—"The Centre of the Dial, the Centre of Attraction."  
 7BU—"First for ole Coast."  
 7EX—"On Top in Tasmania."  
 7HO—"Hobart's Original Station."  
 7HT—"The Feature Station."  
 7LA—"The Voice of Northern Tasmania."  
 7UV—"The Voice of the Island State."

## A Review of Commercial Broadcasting in New Zealand

The broadcasting situation in New Zealand is unique, inasmuch as both services, commercial and non-commercial, are owned and operated by the New Zealand Government.

As in every country, radio was pioneered in New Zealand by amateurs engaged in experimental transmission, or reception. There were nearly 3,000 operating in 1924, when the Government put them under licence, together with a few low-powered units playing gramophone records.

In 1925 a company with a capital of £20,000 built four 500 watt stations in the four capital cities, and operated under Government supervision, on a five year contract. Listeners were charged a licence fee of 30/-, annual licences jumping from 4,000 in 1926 to 70,000 in 1931, aided by the building of a new 5,000 watt station at Wellington. In 1932, the Government bought the company out for £58,600, and set up a Broadcasting Board to administer the service under the control of the Minister for Post and Telegraph. The service was non-commercial.

Elected for the first time in 1935, a Labour Government abolished the Broadcasting Board, placed the National Broadcasting Service in charge of Professor J. Shelley, and instituted the National Commercial Broadcasting Service, under Mr. C. G. Scrimgeour. Opening at 12B Auckland, on October 29, 1936, commercial broadcasting was instantly successful.

Its introduction was strongly opposed by the Press and other quarters, but despite these and other obstacles, rapid progress was made and a National Network of four major stations situated in the principal cities was established within the first year of operation. In the following year (1938), the first year of the National establishment of the service, the major National advertisers conducted experimental campaigns with a view to testing pulling power, and results were such as to warrant extensive increase in advertising appropriation and the establishment of the Commercial Service on a profit-producing basis in the short period of two years. Licence fees at 25/- per annum have increased at the rate of 40,000 a year, the

figures for 1935 being 152,808, compared with 287,507 at the end of 1938. This means that 76.5 of homes in the entire country are equipped with receiving sets, and that New Zealand in respect of licences per hundred of population is now one of the world's most radio-minded countries, with 19.4 per cent.

Advertising is not permitted on Sundays, and liquor and political advertisements are banned.

Commercial radio is entirely self-supporting, and receives no revenue from licences.

The National Commercial Broadcasting Service has made many contributions to the improvement of commercial broadcasting in New Zealand, the most notable of which was the institution of a system of reserve National time bands, whereby National advertisers automatically receive the same time placement over the whole network.

### N.Z. Radio Licences in force as at December 31, 1938

CLASS OF LICENCE	DISTRICTS				Total
	Auckland	Cant'bury	Otago	Wellington	
Receivers . . . . .	99,666	57,451	42,639	111,990	311,746
Dealers . . . . .	437	214	170	452	1,253
Experimental (Amateur)	290	207	130	439	1,074
Experimental (Research)	—	—	—	1	1
Multiple . . . . .	4	6	—	3	13
Special . . . . .	2	—	—	2	4
Free . . . . .	324	178	149	337	988
Broadcasting	1	1	2	3	7
Totals . . . . .	100,724	58,051	43,090	113,227	315,086

### Leading National Advertisers who used the N.C.B.S. during 1938

Amalgamated Wireless (Radiotrons).	Clements Tonic Ltd.	Knox Co.
Amber Tips Tea.	Clever Mary.	Kolynos.
Anti-Acido.	Colgate Palmolive Pty. Ltd.	Kraft Walker Cheese.
Armstrong, R. H. & Co. Ltd.	Cook, Thomas & Son.	Kruschen Salts.
B.A.L.M. (Paints).	Cudahy.	Lazarus Rosenfeld Pty. Ltd.
Baxter's Lung Preserver.	Cystex.	Lever Bros. (Rinso).
Bayer Pharma.	De Reszke Cigarettes.	Lusteroid.
Bayer's Aspirin.	Douglas Drug (Bidomak).	Marshall's Phosphorine.
Beatty Washing Machines.	Fassett & Johnson (Carter's Pills).	Maconochie's Herrings, Etc.
Beechams Pills (Phylosan).	Firestone Tyre Rubber Co.	Maltexo.
Berger, Lewis & Sons (N.Z.) Ltd.	Frederick Stearns & Co.	National Celebrations Ltd.
Bidomak.	Fynnon Salt.	National Magazines.
Bismag.	Germoline.	Nazol.
Blau Robert "4711."	Gibbs, D. & W.	Nestles Anglo-Swiss Condensed Milk Co.
Bosch Radio.	Gibbs Dentifrice.	Nicholas Pty. Ltd.
British General Electric.	Hansells Laboratories Ltd.	Nugget Boot Polish.
Bull, John.	Horlicks Pty. Ltd.	Ovaltine.
Bushells Pty. Ltd. (Tea).	Hudson Cars.	Pyraden Pty. Ltd.
Cadbury Fry Hudson Ltd.	Johnson's Baby Powder	Sanitarium Health Co.
Carter's Little Liver Pills.	Kellogg Aust. Pty. Ltd.	Sunshine Products.
Chesdale Cheese.	King Oscar Sardines.	Wrigley (A/sia) Ltd.
	Kiwi Polish.	

# Complete List of New Zealand Broadcasting Stations

- 2YA** The National Broadcasting Service, Featherston Street, Wellington, C.1. 60 kW., 570 kC., 526 m. Transmission hours: Monday to Saturday, 7—9 a.m., 10 a.m.—11 p.m.; Sunday, 9 a.m.—noon, 1—4.30 p.m., 6—10 p.m.
- 1YA** The National Broadcasting Service, Shortland Street, Auckland, C.1. 10 kW. 650 kC. 461.3 m. Transmission hours: Monday to Saturday, 7—9 a.m., 10 a.m.—11 p.m.; Sunday, 9 a.m.—noon, 1—4.30 p.m., 6—10 p.m.
- 4YZ**—The National Broadcasting Service, Invercargill. 5kW, 680 kC., 441.2 m. Transmission hours: Monday to Saturday, 7—9 a.m., 11 a.m.—2 p.m., 5—10 p.m.; Sunday, 11 a.m.—1 p.m., 2—4 p.m., 6.30—10 p.m.
- 3YA** The National Broadcasting Service, Gloucester Street, Christchurch, C.1. 10 kW., 720 kC., 416.4 m. Monday to Saturday, 7—9 a.m., 10 a.m.—11 p.m.; Sunday, 9 a.m.—noon, 1—4.30 p.m., 5.30—10 p.m.
- 2YH** The National Broadcasting Service, Dalton Street, Napier. 5kW. 760 kC/5. 394.8 m. Hours: Week days: 7 a.m.—9 a.m., 11 a.m.—2 p.m., 5—10 p.m.; Sundays, 11 a.m.—1 p.m., 2—4 p.m., 6.30—10 p.m.
- 2YB** The North Taranaki Radio Society, King Street, New Plymouth. 100 watts. 810 kC., 370.4 m. Transmission hours: Monday, Tuesday, Thursday, 7—10 p.m.; Wednesday, 6.30—10 p.m.; Friday, 8—10 p.m.; Saturday, 6.30—10 p.m.; Sunday, 7—10 p.m.
- 4YA** The National Broadcasting Service, Stuart Street, Dunedin, C.1. 10 kW. 790 kC. 379.5 m. Transmission hours: Monday to Saturday, 7—9 a.m., 10 a.m.—11 p.m.; Sunday, 9 a.m.—noon, 1—4.30 p.m., 5.30—10 p.m.
- 2YC** The National Broadcasting Service, Featherston Street, Wellington, C.1. 5kW., 840 kC., 356.9 m. Transmission hours: Week-days, 5—6 p.m., 7—10.30 p.m.; Sundays, 6—10 p.m.
- 1YX** The National Broadcasting Service, Shortland Street, Auckland, C.1. 150 watts, 880 kC., 340.7 m. Transmission hours: Week-days, 5—6 p.m., 7—10.30 p.m.; Sundays, 6—10 p.m.
- 2YN** The National Broadcasting Service, Nelson. 50 watts. 920 kC. 325.9 m. Transmission hours: Daily 7—10 p.m.
- 3ZR** The West Coast Radio Society, Greymouth. 175 watts. 940 kC. 319 m. Transmission hours: Monday to Friday, 7.30—8.30 a.m., 9—10 a.m., noon—2 p.m., 3—5 p.m., 6—10 p.m.; Saturday, 7.30—8.30 a.m., 9—10 a.m., noon—2 p.m., 3—5 p.m., 6—11 p.m.; Sunday, noon—1.30 p.m., 2—5 p.m., 5.30—6.15 p.m., 7—10 p.m.
- 2ZJ** C.T.C. Hands, 229 Gladstone Road, Gisborne. 200 watts. 980 kC. 306 m. Transmission hours: Monday, Friday, Saturday, 7—10 p.m.; Tuesday, Wednesday, noon—1.30 p.m., 7—10 p.m.; Thursday, 7—8 p.m.
- 2YD** The National Broadcasting Service, Featherston Street, Wellington, C.1. 250 watts. 990 kC. 302.8 m. Transmission hours: Daily, 7—10 p.m.
- 4ZD** Otago Radio Association, Rattray Street, Dunedin. 20 watts. 1,010 kC. 296.9 m. Transmission hours: Wednesday, Thursday, 6—11 p.m.; Sunday, 10 a.m.—noon.
- 1ZB** The National Commercial Broadcasting Service, Queen's Arcade, Auckland, C.1. 1 kW. 1,070 kC., 280.4 m. Transmission hours: Daily, 6 a.m.—midnight.
- 2ZB** The National Commercial Broadcasting Service, Dixon Street, Wellington, C.1. 1kW. 1,130 kC. 265.5 m. Transmission hours: Daily, 6 a.m.—midnight.
- 4YO** The National Broadcasting Service, Stuart Street, Dunedin, C.1. 200 watts. 1,140 kC. 263 m. Transmission hours: Week-days, 5—6 p.m., 7—10.30 p.m.; Sundays, 6—10 p.m.
- 2ZM** Atwater Kent Radio Service Ltd., 258 Gladstone Road, Gisborne. 15 watts. 1,180 kC. 254.2 m. Monday, Saturday, 9.15—10 a.m., 8—10.30 p.m.; Tuesday, Wednesday, 9.15—10 a.m.; Thursday, 9.15—10 a.m., 8—11 p.m.; Sunday, noon—1 p.m., 7—11 p.m.
- 3YL** The National Broadcasting Service, Gloucester Street, Christchurch, C.1. 250 watts. 1,200 kC. 249.9 m. Transmission hours: Week-days, 5—6 p.m., 7—10.30 p.m.; Sundays, 6—10 p.m.
- 4ZB** The National Commercial Broadcasting Service, Princes Street, Dunedin, C.1. 1 kW. 1,220 kC. 245.8 m. Transmission hours: Daily, 6 a.m.—midnight.
- 1ZM** The National Broadcasting Service, Shortland Street, Auckland. 750 watts. 1,250 kC. 239.9 m. Transmission hours: Monday to Friday, 5—10 p.m.; Saturday, 1—4 p.m., 5 p.m.—midnight; Sunday, 10 a.m.—6 p.m., 7—10 p.m.; (holidays, 8 p.m.—midnight).
- 3ZB** The National Commercial Broadcasting Service, Christchurch, C.1. 1 kW. 1,430 kC. 209.7 m. Transmission hours: Daily, 6 a.m.—midnight.

# NATIONAL ADVERTISERS

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1939

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**Firestone Tyres**  
Present *PICCADILLY on PARADE*

**Cadbury's**  
*The LONE RANGER*  
THREE NIGHTS WEEKLY

**LEVER BROS**  
MAMA BLOOM'S BROOD  
*Love stories \* Racing drama*  
8½ HOURS WEEKLY

**LUX**

**SANITARIUM HEALTH FOODS**  
*Hymns of all Churches!*  
DAILY

**IZB · 2ZB**  
**2ZA · 3ZB · 4ZB**

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. . . more and more advertisers realise that radio is the key to sales success in this Dominion.

## New Zealand Commercial Stations

### 1ZB AUCKLAND.

Operated by New Zealand Government. Station slogan: The Feature Station. Address: Private Bag, Auckland. Studios located: Queen's Arcade. Transmitter located: Waterview, Auckland. Telegraphic address: Comradio, Auckland. Telephones: 32.165.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 280.2 metres, 1,070 kilocycles.

Commenced operations: October 29, 1936.

Network affiliation: N.C.B.S. of New Zealand.

Station director: Walter E. Elliot. Chief engineer: W. Illingworth. Other technical staff: S. L. Cottam, C. N. Edwards, W. B. Fitzwilliam, W. A. Williams, R. A. Patchett, E. W. Stringer, J. D. Llewellyn, H. L. Martin, S. J. Murray, B. C. W. Spackman, R. F. Carr, B. G. Reese. Sales manager: K. G. Kearney. Other sales staff: D. G. S. Sheard, A. H. Hanlon, M. D. Laurenson, Mrs. G. A. G. Newton. Announcers: A. B. Collyns, G. Vryer, A. D. Bathurst, P. P. Hutt, U. Paora, H. D. Lock, R. G. W. Nixon, G. S. Lloyd. Program production staff: H. D. Wrathall (program organiser), J. N. Gordon (production supervisor). Total full time staff: 59.

Australian representative: Radiovision Pty. Ltd., 61 Hunter Street, Sydney, N.S.W., Australia.

Daily transmission hours: 6 a.m. to midnight.

Type of transmitter used: Collins Radio Type 20c transmitter. Type of aerial system: Quarter-wave vertical radiators shunt fed. Number of studios: Three.

Type of recording plant: Presto portable recorder.

### 2ZB WELLINGTON.

Operated by New Zealand Government. Station slogan: The Feature Station. Address: Private Bag, Wellington. Studios located: Hope Gibbons Buildings, Dixon Street, Wellington. Transmitter located: Mt. Victoria, Wellington. Telegraphic address: Comradio, Wellington. Telephones: 54.290 (5 lines).

Licensed power: One kilowatt. Operating power: One kilowatt. Wavelength: 265.5 metres, 1,130 kilocycles.

Commenced operations: April 28, 1937.

Network affiliation: N.C.B.S. of New Zealand.

Station director: Merton S. Bullivant. Chief engineer: R. Neate. Other technical staff: D. L. Rushworth, H. A. Berry, J. D. Fraser, P. R. Hoare, O. W. Martin, E. C. Petherick, G. W. D. Ryrie, E. Lawrence, B. J. N. Petrie, K. G. Hustwick, O. T. Gray. Sales manager: S. C. Asquith. Other sales staff: A. Scott, L. G. Cope, T. Danks, Miss T. von Keisenberg. Announcers: J. Batten, K. T. A. G. Tahiwai, R. P. Whitchurch, L. F. Aldridge, B. R. O'Brien, L. P. Forlong, A. P. H. Shone, R. H. C. Pollard, H. G. Hill, G. R. Gardener. Program production staff: E. C. L. Bell (program organiser), I. K. Mackay (production supervisor). Total full time staff: 57.

Australian representative: Radiovision Pty. Ltd., 61 Hunter Street, Sydney, N.S.W., Australia.

Daily transmission hours: 6 a.m. to midnight.

Type of transmitter used: Collins Radio, Type 20c transmitter. Type of aerial system: Quarter-wave vertical radiators shunt fed. Number of studios: Two.

Type of recording plant: Presto portable recorder.

### 3ZB CHRISTCHURCH.

Operated by New Zealand Government. Station slogan: The Feature Station. Address: Private Bag, Christchurch. Studios located: Columbo Street. Transmitter located: New Brighton, Christchurch. Telegraphic address: Comradio. Telephones: 34.816.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 209.7 metres, 1,430 kilocycles.

Commenced operations: September 28, 1938.

Network affiliations: 1ZB, 2ZB, 4AB, 2ZA.

Station director: Stewart Hector James Duff. Chief engineer: W. A. Penton. Other technical staff: D. S. Bell, W. D. Nicholl, B. J. Will, A. A. G. McKnight, J. Younger, L. A. Elliott, R. G. Holmes, V. E. Robinson, B. Sword, J. R. Tabley, R. G. Kennard, J. A. R. Watson. Sales manager: E. J. Thompson. Other sales staff: P. G. Parker, R. Harris, F. A. S. Ball. Announcers: K. S. M. Waterhouse, T. A. Pitama, E. E. Chivers, D. Combridge, A. A. Grundy, J. A. Bremner, L. B. McGoverne, J. L. Bickerdike, R. B. Spiers, B. H. Murphy, G. W. Green, M. G. Jennings. Program production staff: L. E. Hunter (program organiser), E. E. Lloyd (production supervisor). Total full time staff: 61.

Australian representative: Radiovision Pty. Ltd., 61 Hunter Street, Sydney, N.S.W. Australia.

Daily transmission hours: 6 a.m. to midnight.

Type of transmitter used: Collins Radio Type 20c transmitter. Type of aerial system: Quarter-wave vertical radiators shunt fed. Number of studios: Three.

Type of recording plant: R.C.A. 32B.

### 4ZB DUNEDIN.

Operated by New Zealand Government. Station slogan: The Feature Station. Address: Private Bag, Dunedin. Studios located: G.P.O. Building Dunedin. Transmitter located: Highcliff, Dunedin. Telegraphic address: Comradio, Dunedin. Telephones: 11.186.

Licensed power: 1,000 watts. Operating power: 1,000 watts. Wavelength: 245.8 metres, 1,220 kilocycles.

Commenced operations: October 12, 1937.

Network affiliation: N.C.B.S. of New Zealand.

Station director: Len. J. Greenberg. Chief engineer: A. E. Foster. Other technical staff: W. V. Macaulay, J. L. Anderson, J. Dine, C. J. McCarthy, W. T. Smith, H. E. Phillips, F. W. A. Barnett, L. Gibb, H. F. Tattersfield, M. O. Johnstone, H. T. Pearse. Sales manager: G. P. Brodie. Other sales staff: W. R. M. Shaw, M. E. Donnelly. Announcers: L. C. Bates, W. P. Dawson, K. W. Donaldson, P. L. Fowler, J. B. McConnell, C. A. McDowell, J. Y. Dixon, B. V. McCawe, R. S. Johnson, Miss A. T. Gale, J. A. Harmer. Program production staff: L. R. Sceats (production supervisor), M. L. A. Tozer (program organiser). Total full time staff: 41.

Australian representative: Radiovision Pty. Ltd., 61 Hunter Street, Sydney, N.S.W., Australia.

Daily transmission hours: 6 a.m. to midnight daily.

Type of transmitter used: Collins Radio Type 20c transmitter. Type of aerial system: Quarter-wave vertical radiators, shunt fed. Number of studios: Three.

## New Zealand Commercial Broadcasting (contd.)

### 2ZA PALMERSTOWN NORTH.

Operated by New Zealand Government. Station slogan: The Feature Station. Address: Private Bag, Palmerstown North. Studios located: A.M.P. building, Broadway Avenue. Transmitter located: A.M.P. Building, Broadway Avenue. Telegraphic address: Comradio. Telephone: 7794.

Licensed power: 250 watts. Operating power: 250 watts. Wavelength: 214.2 metres, 1,400 kilocycles.

Commenced operations: October 10, 1938.

Network affiliation: N.C.B.S. of New Zealand.

Station director: J. R. Brown. Chief engineer: M. Sherwood-King. Sales staff: R. J. Bollard, K. G. S. James. Announcers: J. H. Cope, M. J. Miles, L. Hardie. Total full time staff: Six.

Australian representative: Radiovision Pty. Ltd., 61 Hunter Street, Sydney, N.S.W., Australia.

Daily transmission hours: 6 a.m. to 10 p.m.

Type of transmitter used: N.C.B.S. Type of aerial system: Quarter-wave Marconi "L." Number of studios: Two.

## Agencies in N.Z. Handling Radio Accounts

**CATTS-PATTERSON CO. (N.Z.) LTD.**, Colonial Mutual Life Building, Custom House, Quay, Wellington. Telephones 45-125. Interstate or overseas representatives: Catts-Patterson Co. (N.S.W.) Pty. Ltd., Sydney; Catts-Patterson Co. (Vic.) Pty. Ltd., Melbourne; T. Campbell, Northcroft, Shell Mex House, London. Directors: N. S. H. Catts, C. W. Shortridge, E. R. Dymock. Executive staff: C. W. Shortridge, R. E. Murray, G. C. Cuming, L. L. du Chateau, C. F. Collett. Radio division executives: R. E. Murray, L. L. du Chateau.

Radio accounts handled: E. Griffiths Hughes Ltd., Manchester Prestige New Zealand Ltd., Rothmans Ltd., London; Timaru Milling Co. Ltd., New Zealand; Morris Industries Exports Ltd., New Zealand Cheese Ltd., British Herring Industry Board, J. R. Butland Pty. Ltd., New Zealand; Dominion Compressed Yeast Co. Ltd., New Zealand; Kelvinator, Harris Langton Ltd., New Zealand; Johnson & Johnson (Great Britain) Ltd., Middows Bros. & Taylor Ltd., New Zealand; C. & E. Morton Ltd., England; A. S. Paterson & Co. Ltd., New Zealand; The Scoular Co. Ltd., New Zealand; Wilson Malt Extract Co. Ltd., New Zealand.

**DORMER-BECK ADVERTISING LIMITED**, 12 O'Connell Street, Auckland, New Zealand. Telephones: 42-988. Associate House: J. Inglis Wright Ltd., Auckland, Wellington, Christchurch, Dunedin. Directors: R. C. Dormer, R. Trenchard Smith, L. M. Beck. Radio division executive: A. M. Brown.

Radio accounts handled: Barfoot Bros., Shorters Rental Cars, Andrews & Clark, Auckland Co-op. Term. Bldg. Society, Guthrie Bowron Ltd., Cordocks Drapery Service, Krump Collar and Harness Co., F. W. Lucas Ltd., Hill & Plummer, Auto Cars Ltd., N.Z. Distributors Ltd., W. J. Stevens, East Tamaki Dairy Co., Silknit (N.Z.) Ltd., Wilton Collieries, S. Meltzer Ltd., Para Rubber Co., Druleigh College, Hugh Wright Ltd., Lusteroid Pty. (N.Z.) Ltd., James Pascoe Ltd., Jewel Casket, Bradstreets Ltd., R. Jaffe Ltd., Bridgers Denture Co., Hallenstein Bros., Winston Ltd., Warnock Bros., Geo. Walker Ltd., Pam's Products Ltd., Stormonts Ltd., Prince's Furnishing Co., T. Clark Shoe Stores, Porters Dye Works, Reid N.Z. Rubber Mills, Sails & Covers Ltd.

**W. B. FITCHETT LTD.**, Wellington, New Zealand. Phone No. 41-465. Branch address: Auckland, New Zealand. Director: W. B. Fitchett (managing director).

**J. INGLIS WRIGHT LIMITED**, P.O. Box 1462, Prudential Building, Wellington. Phone No. 41-100. Address (branches): National Insurance Building, 12 O'Connell Street, Auckland. Tel. 42-989. Commerce Building, Christchurch (Box 305). Queen's Building, Dunedin. Tel. 12-125.

**RADIO FEATURES LIMITED**: South British Building, 326 Lambton. Telephone: 41-114. Address (branch): P.O. Box 412, Auckland, Wellington, P.O. Box 889, Christchurch, P.O. Box 839, Dunedin. Directors: Sinclair Carruthers, H. H. Sterling, G. E. Stock, A. Sutherland. Radio Division executives: J. A. Watson, general manager; K. A. Fowles, production manager.

Radio Accounts Handled: Colgate-Palmolive Peet Co., D.I.C. Ltd., Dominion Motors, Firestone Tire Co., Govt. Transport Dept., Hansells Laboratories, Lever Bros. (N.Z.) Ltd., Kolynos Ltd., National Distributors Ltd., Reckitts (Overseas) Ltd., Scholl Manufacturing Co., Turnbull & Jones Ltd., Amber Tips Tea, Internat. Harvester Co., Govt. Internal Marketing, Lichfield Shirts Ltd., Sanitarium Health Food Co., H. C. Urlwin Ltd., Cadbury Fry Hudson Ltd., Summitt Shirts Ltd., Bjelland & Co., Farmers Trading Co. Ltd., Berlei (N.Z.) Ltd., H. M. Marler & Co., Nestle's & Anglo-Swiss Milk Co. Ltd., Potter & Birks Ltd., Paget Mfg. Co., Prestige Millinery Ltd., W. F. Tucker Ltd., Waitemata Breweries Ltd., Govt. Tourist & Publicity Dept., Whittome Stevenson Ltd., A.M.P. Society, Beatty Bros. Ltd., Lewis Berger & Sons, Bonds Hosiery Ltd.

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'Phone B 7188 Sydney; Central 442 Melbourne.

## Directory of Recording Organisations, Transcription Producers, Talent and Program Services

NOTE.—In addition to the organisations contained in this directory as program and transcription producers, certain advertising agencies have their own recording equipment and special departments for the purpose of producing transcriptions. For information regarding these refer to the section of Advertising Agencies Handling Radio Accounts.

### Amalgamated Wireless (Australasia) Ltd.

Address: 47 York Street, Sydney. Box 2516-B.B., G.P.O. Telephone: BW2211.

Executive staff: F. M. Brooker, manager broadcasting department. Sales staff: C. T. Sproule, sales manager. Production staff: E. R. Howell, producer.

Recording equipment: A.W.A. Processing and pressing equipment: A.W.A.

Interstate representatives: Amalgamated Wireless (A/sia) Ltd., 167 Queen Street, Melbourne. H. E. Cox, 289 Queen Street, Brisbane.

Overseas representatives: A.W.A., Wellington, New Zealand. A.W.A., London, England. N.B.C., New York, U.S.A.

Transcriptions released last year: Continuing "Fred and Maggie Everybody" 293-510 episodes, "Coronets of England" 81-105 episodes, "Personal Column" 19-79 episodes. New releases: "Nigger Minstrels" 1-46 episodes, "Cleopatra" 1-78 episodes, "News in a Nutshell" 1-26 episodes.

### Australian Radio Transcriptions Pty. Ltd.

Address: 484 George Street, Sydney. Telephone: M2635-6.

Directors: J. A. Meaney, H. M. Sheffer, John Dunne, G. L. King, L. P. Quirk. Sales director: H. M. Sheffer. Sales manager: H. O. Harrington. Production directors: John Dunne, Dom Harnett. Recording director: Geoff L. King. Chief engineer: R. W. Miatt.

Recording equipment: Regular studio and line, specialised dubbing with effect equalising including to and from standard and 16mm film. Processing and pressing equipment: Let on contract.

Interstate representatives: Victoria, Chas. W. Donne, 118 Queen Street, Melbourne.

Overseas representatives: South Africa, Colin Gale, Durban.

Transcriptions released last year: "All That Glitters" (13 episodes), commercial and audition recordings.

### Australian Record Co. Pty. Ltd.

(Successors to Featuradio Sound Productions N.S.W. Pty. Ltd.)

Recording studios and general offices: 29 Bligh Street, Sydney. Branch studios: 296 Pitt Street, Sydney. Factory for processing: 2-8 Harrington Street, Sydney. Telephones: Offices, B7887; Branch Studio, M3652; Factory, B5213.

Recording studios and general offices at 29 Bligh Street, with branch studios at 296 Pitt Street and factory for the processing of all types of sound on disc records at Nos. 2-8 Harrington Street, Sydney (B 5213).

Directors: F. Daniell (chairman), Chas. H. Gendle (general manager), M. H. Stevenson. Secretary, R. A. Irish.

Recording: Studios are equipped with every modern appliance for securing high quality sound recording and reproduction.

Factory: Plant and machinery necessary for the modern treatment of recorded master wax or discs, the making of copper matrices therefrom, and the manufacture of records in diameters 10 to 16 inches, for use on radio broadcast stations and/or home entertainment.

Sole manufacturing and selling agents in Australasia for Macquarie-Bosworth and Macquarie-Boosey and Hawkes gramophone records, comprising the recorded musical copyrights of Bosworth & Co. Ltd. and Boosey & Hawkes Ltd., of London.

**PRESTO**  
RECORDING CORPORATION

TWO WORLD FAMOUS NAMES



REPRESENTED IN AUSTRALIA BY

**A. M. CLUBB & CO. PTY. LTD.**

76 Clarence Street, Sydney.

Suppliers of everything for Instantaneous Disc Recording, including

THE FAMOUS

**PRESTO "Q" GREEN SEAL DISCS**

THE FAMOUS

**TELEFUNKEN PERMANENT  
SAPPHIRE NEEDLE PICKUPS**

*The Acme of Perfection;  
A.W.A. High Fidelity Recording*



#### COMMERCIAL RECORDINGS

Recorded commercial announcements, skilfully presented and faultlessly produced, ensure the best delivery of sales messages on any station, anywhere. The A.W.A. Recording Department offers a complete service for the production of all types of commercial recordings.

#### CUSTOM-BUILT PROGRAMMES

For custom-built radio features A.W.A. will supply producer, artists, scripts and all facilities enabling the production of every type of recorded entertainment. The most recent example of A.W.A. high fidelity custom-built entertainment is found in the new Ponds programme, "Those we Love," now featured on stations throughout Australia.

*For all particulars...*

BROADCASTING DEPARTMENT

**AMALGAMATED WIRELESS (A'SIA) LTD.**

47 YORK ST. SYDNEY... PHONE BW 2211



## Recording, Program and Transcription Organisations

(continued)

### Blanks, Chas. E. Pty. Ltd.

Address: Kelvin House, 15 Castlereagh Street, Sydney. Telephone: B 6748 (3 lines).

Directors: Charles Edward Blanks (managing director), Executive staff: Charles C. King (manager, recording department). Sales staff: J. T. Gell, Cecil Scott. Production staff: Charles C. King, Miss A. Evesleigh, Fred. Goswell. Technical staff: D. Stacey Green, Ronald Bolton.

Recording equipment: Four Stage P.P. Recording Amplifiers on standard racks with associated mixers and faders, "Presto" Commercial Recorders, Amperite and Crystal Microphones.

Interstate representatives: Monks and Blanks Ltd., Adelaide, S.A.

### British Australian Programmes Pty. Ltd. (Formerly Broadcast Advertising Pty. Ltd)

Address: Recording studios and general offices, City Mutual Building, 60 Hunter Street, Sydney. Telephone: (BW 4111).

Directors: C. H. Willmott (chairman), F. Daniell, E. Badgery-Parker, G. C. B. Matthews (general manager and director of productions), J. A. Byron (secretary).

Recording Equipment: S.T.C., Presto and Western Electric.

Interstate representatives: Rickards Advertising Service, 145 Collins Street, Melbourne; Cossey Advertising Service, 108 Creek Street, Brisbane.

Transcriptions released recently: "Marie Antoinette," "East Lynne," "It's a Fact," "Cavalcade of Empire," "Dramas of the Deep," "Lorna Doone," "Conflict," "The Cripple in Black," "Wings Above the Diamantina."

### Broadcast Enterprises Ltd., London

Directors: Oswald Anderson, E. R. Voigt, E. H. Gossling. Studios and offices: Abbey House, Westminster, S.W.1, and at Regent Street, Piccadilly, W.1.

The exploitation of English and Continental talent programs, etc.

Australian representative: Oswald Anderson, 29 Bligh Street, Sydney.

### Broadcast Services

Address: Teachers Building, 81 Elizabeth Street, Brisbane. Telephone: B9659.

Directors: Charles Porter, Eric Roush, William Farmer. General manager: Charles Porter. Merchandising department: Violet Condie. Programs: Roy Mackenzie. Contracts: Dr. A. Stiffler. Production staff: Reginald I. Mitchell (producer).

Recording equipment: Presto recorder, with Presto amplifier and pre-amp., using high velocity microphones.

### Columbia Graphophone (Australia) Pty. Ltd.

Address: 2 Parramatta Road, Homebush. Telephone: UM6671.

Managing director: W. A. Donner, Esq. Secretary: J. M. Burnett. Sales manager: C. F. Tyler. Recording manager: R. V. Southey.

Columbia Graphophone (Australia) Pty. Ltd. is a branch of the parent company in England, which in turn is owned and controlled by the huge organisation known as Electric and Musical Industries Limited. In the record world, Columbia is a name which has had world-wide public acceptance for more than 40 years, and is as well-known as "His Master's Voice," with whom it is now amalgamated. The combination of these two great names, the companies they own and control, and their affiliations overseas makes the most powerful record producing organisation in the world to-day. A large variety of records under many different trademarks are produced by these companies, of which the following are a few examples:—Columbia, "His Master's Voice," Parlophone, Regal-Zonophone, Pathe, Electrola, Odeon, Victor, Bluebird, Brunswick, Decca, and many more.

Columbia's Australian factory is unique in Australia and New Zealand and is the largest and most comprehensively equipped in this part of the world. Practically every make of record which has any sales volume on the Australian market is manufactured in this factory, and the turnover from the press rooms and through the selling organisations is millions of records a year.

The factory organisation is a very complete one, as in addition to the press room, which contains 26 modern high speed presses and the plant necessary to supply them with steam, cold water and hydraulic power, there is also a mill mixing and preparing raw material, processing plant capable of handling the production and issue of up to 200 new double-sided records each month, and the stockroom and shipping facilities that go hand in hand with a factory organisation of this kind.

In addition to these activities, Columbia has entered very largely into the electrical transcription field, and their association with George Edwards and Company has resulted in the production of many famous radio presentations.

Transcriptions released during 1938:—

By George Edwards & Company:

"Drama in Cameo" (52 episodes), "Every Walk of Life" (52), "Great Expectations" (13), "Half-Hour Unit Plays" (78), "Henry Hardcastle Learns How" (26), "John Halifax—Gentleman" (52), "Mittens" (1st and 2nd series) (52 1st, 52 2nd series), "Nicholas Nickleby" (13), "Oliver Twist" (13), "Rich Uncle from Fiji" (104), "Scott of Scotland Yard" (4th series) (13 cases), "Woman in White" (52 episodes), "Greyburn of The Salween" (52), "His Lordship's Memoirs" (52), "His Last Plunge" (52), continuation of the famous "Dad and Dave" program.

By James Raglan & Company:

"Exploits of the Black Moth" (26 episodes), "Old Dictionary" and "War Memorial" (2 parts each), "Singapore Spy" (26 episodes), "Soldier of Fortune" (26), "Tales of the Silver Greyhound" (26).

In addition to the above output, recordings were carried out for a large number of Australian advertisers, advertising agents and other clients who make use of Columbia's recordings studios and facilities. So much did this business increase during 1938 that towards the latter end, the construction of additional studio space began and is now complete.

The studio buildings, big as they were (in fact they contain the largest recording studio in the Southern Hemisphere), are now with the addition of the new building, most impressive, housing three recording studios, two control rooms, reception rooms and offices, engineers' quarters and other technical process rooms. The equipment used in these studios is developed largely in the Columbia Company's Research Laboratories in England and the gear is capable of making high-class recordings,

(Continued page 110.)

# B. A. P.

Australia's Premier Producers of  
Quality Transcriptions

PRESENT THE BEST ON RECORD:—

#### MARIE ANTOINETTE

52 perfect quarter-hours detailing the progress from girlhood to the guillotine of France's most tragic queen. With Queenie Ashton and a cast of 100.

#### EAST LYNNE

Mrs. Henry Wood's immortal story of murder, mystery, and mother love. In modern language. 52 quarter-hours with an all-star cast headed by Harvey Adams.

#### THIS IS TRUE

Amazing stories culled from the Archives of Authenticity. Volume 1 (26 quarter-hours, each a complete episode) lately released.

#### DRAMAS OF THE DEEP

78 four-minute true sea stories told by Radio's Prince of Narrators, Ronald Morse. Ideal for sessions of short duration.

#### THEATRE BOX

Magnificent comedies, dramas, and musical scenes by top-line artists—52 quarter-hours each complete in itself. The show of the year!

#### IT'S A FACT!

144 four-minute programmes, each giving a series of astonishing truths collected from every corner of the globe.

Programmes of all kinds built to order for individual advertisers and Agencies. High Fidelity Recordings! Star Artists! Superb production! Outstanding scripts!

## BRITISH AUSTRALIAN PROGRAMMES PTY. LTD.

(Formerly Broadcast Advertising Pty. Ltd.)

60 HUNTER STREET, SYDNEY

Telephone: BW 4111. Cables and Telegrams: "Mandmor," Sydney

#### Notable Achievements

MUTINY OF THE BOUNTY  
THE QUEEN'S NECKLACE  
CAVALCADE OF EMPIRE  
LORNA DOONE  
LITTLE WOMEN  
TRILBY  
THE BLACK TULIP  
CRIPPLE IN BLACK  
CONFLICT  
WINGS ABOVE THE  
DIAMANTINA, Etc.

## Recording, Program and Transcription Organisations

(continued)

### COLUMBIA (Continued).

in either wax or acetate originals. The position of the studios adjacent to the factory, process plant and stockroom, is a great advantage not only in the actual production of the records, but also in the convenience of stock rooms containing thousands of records from the Company's catalogues from which can be drawn theme music, effects records and the like, and also excellent shipping facilities in providing service for Columbia's clients.

### Country Broadcasting Services Ltd.

Address: Main Offices and Studios, Hosking house, Hosking Place, Sydney, N.S.W. Country Studios and Offices, Union Bank Building, Summer Street, Orange, N.S.W. Telephones: BW1428, Orange 413.

Technical staff: E. C. Crouch (chief engineer), C. Breed. Recording equipment: A.W.A.

### Du Maurier Productions Pty. Ltd.

Address: 201 Macquarie Street, Sydney, N.S.W. Directors: I. Du Maurier, N. Du Maurier. Production staff: Ellis Price.

Interstate representative: Thomas Shearman, 12 Spring Street, Sydney, N.S.W.

Overseas representatives: Broadcast Enterprises, Abbey House, Westminster, London.

Transcriptions released last year: "Tale of Two Cities" 52 episodes, "Robin Hood" 26 episodes, "The Double Event" 52 episodes.

### Featuradio Sound Productions Pty Ltd.

Address: "Featuradio House," 32 Market Street, Melbourne, C.I. Telephone: M5701-2.

Directors: Geo. Sutton, J. M. Sayer, W. H. Berry. Executive staff: Geo. Sutton (managing director), W. H. Berry (general manager). Sales Staff: R. Mackley. Production staff: John Ormiston Reid. Technical staff: R. Roseblade.

Overseas representatives: Iotts Ltd., New Zealand; P. N. Barrett Co. Pty. Ltd., South Africa.

Transcriptions released last year: "Grand Hotel" (13 half-hours), "Emile Zola" (13 half-hours), "David Copperfield" (52 quarter-hours), "The Elusive Pimpernel" (26 quarter-hours), "World Cavalcade" (unlimited number of episodes), "Tower of London" (52 half-hours).

### Federal Transcriptions and Television Pty. Ltd.

Address: 251A Pitt Street, Sydney. Phone, MA4111. Directors: H. C. Parish, S. H. Mapes, E. H. B. Travers. Transcription agency. Sole Australian agents for Mark Hanna, of New York.

### Fidel-a-Tone Sound Productions

Address: 5th floor Druid's House, 407-9 Swanston Street, Melbourne. Telephone: F1735.

Director: John Murray. Recording equipment: Presto Heavy Duty Recorder. High-fidelity Cutter R.C.A. Microphone and accessories.

### International Sound Recordings

Address: Second Floor, Sirius House, Macquarie Place, Sydney. Telephone: BW5443.

Directors: F. M. Clarke, D. Bowes-Kelly, M. Lesley. Sales staff: G. Ray, C. Parkinson. Production staff: M. Lesley, D. Bowes-Kelly. Technical staff: D. Bowes-Kelly. Recording equipment: Presto standard. Overseas representatives: New Zealand, E. Rogers, 160 Featherston Street, Wellington. U.S.A., Constance Hope, Associates Inc.

### Jack Davey Productions Pty. Ltd.

Address: Manchester Unity Building, Castlereagh Street, Sydney. Program service.

### Legionnaire Sound Productions Pty. Ltd.

Address: 68-70 King Street, Melbourne, C.I. Telephone: MU6171 (2 lines).

Directors: L. L. Wathen (chairman of directors), W. T. Curnow, F. Cocks (Sydney), K. L. Corr. Executive staff: K. L. Corr (managing director), Athol Reilly (studio manager and dispatch). Sales staff: N. W. Dickson (sales manager). Production staff: Associated in production—Hal. Percy, Arundel Nixon, Mayne Lynton, Syd. Hollister. Technical staff: J. Stewart (chief engineer), A. Reilly.

Recording equipment: Presto. Interstate representatives: Fidelity Radio Pty. Ltd., N.S.W. and Queensland; Hume Recording Studios, Adelaide.

Overseas representatives: H. M. Watson, Bombay; V. S. Lloyd, Wellington, New Zealand.

Transcriptions released last year: "The Broken Idol" (Lawrence of Arabia) 52 episodes, "Homestead on the Rise" 52 episodes, "Sons of Sandy Mac" 52 episodes, "Olmes and H'Entwhistle" 104 episodes, "Edgar! How Could You?" 104 episodes, "Rhythm Revels" (half-hour musical) 13 episodes, "Rhythm all the Time" 52 episodes, "Beau Geste" 52 episodes, "Imperial Intrigue" (half-hours) 52 episodes, "Fragrant Memories" 52 episodes, "Under the Big Top" 78 episodes, "The Dark Invader" 26 episodes, "Little Man" 78 episodes.

## International Sound!

Sirius House, Macquarie Place Sydney  
Tel. BW5443

Comedies

Commercials

Serials

Dramas

Glee Singers

The Gateway to the Ultimate

... in ...

## RADIO TRANSCRIPTIONS!



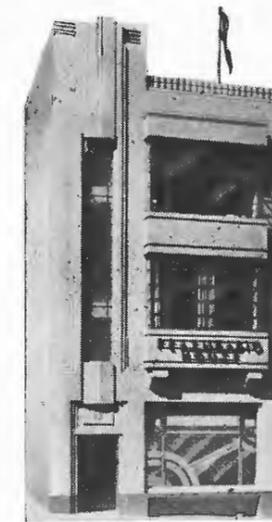
STUDIO A.



STUDIO B.



SECTION OF CONTROL ROOM AND RECORDING TABLES.



FEATURADIO HOUSE, MELBOURNE.



SECTION OF CONTROL ROOM AND DUBBING TABLES.

Studios and recording units, technical equipment, etc. Housed in modern surroundings, the most up-to-date recording unit in Victoria, and comparable with any set-up in Australasia!

## FEATURADIO SOUND PRODUCTIONS PTY. LTD.

32 Market Street, MELBOURNE, C.I.

Telegrams, "Featuradio" Melb.

'Phone M 5701 (Two Lines)

- ... DRAMATISED SPOT TRANSCRIPTIONS.
- ... COMPLETE PRODUCTIONS.
- ... QUALITY RECORDINGS.

A few of the advertisers using "Featuradio" Recordings—

Commonwealth Government, Shell Co., Vacuum Oil Co., C.O.R., Scott's Emulsion, Clement's Tonic, Kayser Hosiery, Pepsodent Co., Oldsmobile, G.M., Ford Co., Metropolitan Gas Co., Aspro, Rhu Pills, Brockhoff's, Dunlop Perdriau Co., Etc., Etc.

**THESE ADVERTISERS CAN'T BE WRONG!**

Write for particulars regarding Featuradio recorded programme service

# Recording, Program and Transcription Organisations

(continued)

## Macquarie Broadcasting Services Pty. Ltd. "Program Headquarters"

(Incorporating Macquarie Players and American Radio Transcription Agencies.)

Address: 3rd Floor, 29 Bligh Street, Sydney. Telephone: B 7887. Cables: "Macradio," Sydney. Melbourne Office: 37-41 Queen Street; Telephone: F 4878. Cables: "Macradio," Melbourne.

Acting Executive Director: R. E. Denison. Acting general manager: H. G. Horner. General sales manager: Mr. C. Ogilvy. American Radio Transcription Agencies manager: Miss G. Gibson. Production Liaison Officer: Mr. J. Joyce. Treasurer: Mr. R. A. Irish. Secretary: Mr. G. Millar.

Studios: 29 Bligh Street. Disc recording equipment developed and patented by its own engineers following a world-wide investigation. Processing and instantaneous recordings.

Macquaries transcriptions released last year: "Sacrifice" 52 episodes, "Thrills" 26 episodes, "I Want a Divorce" 45 episodes, "A. M. Pooley Chats at the Club" 52 episodes, "Australia Felix" 156 episodes (7½ minutes), "Old Time Theatre" 26 episodes, "Here's a Queer Thing" 52 episodes, "Covered Waggon" 13 episodes, "Famous Australians" 52 episodes, "Grimm's Fairy Tales" 26 episodes, "Our Neighbours" 52 episodes (5 minutes), "Three Minute Mysteries" 52 episodes (5 minutes), "True Stories" 26 episodes, "Behind Those Walls" 52 episodes, "Toy Shop Tales" 26 episodes.

American Radio Transcriptions released last year:

"Black Flame of the Amazon" 156 episodes, "Secret Diary" 65 episodes, "The Star Theatre" 39 episodes, "Crime Does Not Pay" 39 episodes, "Charlie Chan" 130 episodes, "Fu Manchu" 78 episodes, "Chosen Three" 56 episodes, "Dramatic Mysteries" 36 episodes, "Musical Weavers" 36 episodes, "Daredevils of Hollywood" 26 episodes, "Dog Stories" 26 episodes, "Donald Novis Sings" 56 episodes, "Lady of Millions" 105 episodes, "Hollywood Spotlight" 39 episodes, "Lady Courageous" 78 episodes, "Love Story Girl" 26 episodes, "Lucky Breaks" 70 episodes, "Melody Meeting" 26 episodes, "One Girl in a Million" 78 episodes, "Sunny-side" 39 episodes, "We, The Jury" 39 episodes, "Wings Over the World" 13 episodes.

## Radio Theatre Guild

Studios and general office at Pacific House, 296-300 Pitt Street, Sydney. Phone: M 3652.

Chief instructor: Mr. Leonard Bennett. Organiser: Miss D. Gowland.

The Radio Theatre Guild has been in operation for a number of years as a talent finding and training organisation. Macquarie Broadcasting Services Pty. Ltd. have now extended the Guild to cover not only radio but also film talent and development.

The object of the Guild is to coach students in dramatic and microphone technique, music, and all other classes of broadcasting and film work.

## Sellers, O. P.

(Agent for Columbia Recordings of George Edwards' Productions.)

Address: Suite 201, Second Floor, Grace Building, 77 York Street, Sydney. Telephone: M4141-2-3.

Transcription released during 1938: "Every Walk of Life," 52 quarter-hours; "Half Cnit Plays," 39 half-hours; "Drama in Cameo," 52 quarter-hours; "Frankenstein," 43 quarter-hours; "The Dickens' Series," 52 quarter-hours; "Mitten," 104 quarter-hours; "Robinson Crusoe," 52 ten-minute episodes; "His Lordship's Memoirs," 26 half-hours; "The Rich Uncle from Fiji," 104 ten-minute episodes; "Henry Hardcastle Learns How," 26 ten-minute episodes; "John Halifax, Gentleman," 52 quarter-hours.

## Sound Recording Studios Pty. Ltd.

Address: 160 Castlereagh Street, Sydney, N.S.W. Phone MA4035.

Directors: R. R. Allison, H. J. Brigden, K. A. Fraser, S. E. Tatham.

Executive staff: S. E. Tatham, managing director; C. Godfrey Hill, secretary.

Equipment: Universal acetate-instantaneous or processed discs of 10in., 12in., or 16in. size at either 33 1/3 or 78 r.p.m. cut at course, medium or fine pitch.

Processing and pressing: Complete equipment installed to handle all standard sizes of pressed records.

## "The Advertiser" Broadcasting Network

Address: Waymouth Street, Adelaide, South Australia. Telephone: C7440.

Directors: Mr. J. F. Downer (chairman), Sir Keith Murdoch, Sir Lavington Bonython, W. B. Carr, Lloyd Dumas, W. Crookwall. Executive staff: A. C. Kinnear (manager), M. D. Chapman (advertising manager), D. M. Gooding (chief engineer), K. Macdonald (program manager), V. Jacques (continuity manager), Miss D. Edwards (commercial supervisor). Sales staff: Mr. M. D. Chapman

(Continued opposite page)

# Recording, Program and Transcription Organisations

(continued)

## THE ADVERTISER NETWORK (contd.)

(advertising manager), C. Stock, N. Omond, F. McConnell, V. Jacques (continuity), Mrs. J. Fisher (women's). Production staff: Mr. K. Macdonald (director), Misses E. Benson, L. England (effects), G. Franklin, M. Warburton (publicity) and four assistants for filing, indexing, etc. R. Dawe, J. Gardiner, J. Williams, R. Peterson, F. McCarron (recorded features). Technical staff: D. M. Gooding (chief engineer), H. B. Wilson, B. Forgan, T. Welling, L. Porter, H. W. Tostevin, R. Parasiers, F. Miller, R. Withall, E. Halliday, W. Gill, A. Smythe, L. Schaumloffel, N. Growden, R. Grundy.

Recording equipment: A.W.A. Interstate representatives: F. Thompson, Warwick Building, Hamilton Street, Sydney, N.S.W.

Overseas representatives: A. J. Chard, 92 Fleet Street, London. Joshua B. Powers, Inc., 220 East 42nd Street, New York.

Transcriptions released last year: "Bringing Up Sally" 45 episodes, "Fourth Form at St. Percy's" 97 episodes, "Lord and Lumme" 31 episodes.

## Trans-Radio Advertising and Program Service

Address: Asbestos House, 65 York Street, Sydney. Telephone: B5407 and B2892.

Director: S. A. Maxwell. Executive staff: W. L. Harris, S. J. Moran, J. Sing.

Recording equipment: Presto—direct cut. Interstate representatives: Melbourne, S. J. Moran. Brisbane, A. Campbell. New Zealand, J. Iott's.

Transcriptions released last year: "Fatal Tenth" 13 episodes, "Antique Shop by the Grand Canal" 13 episodes.

## Victorian Broadcasting Network (RECORDING DIVISION)

Address: 239 Collins street, Melbourne, Victoria. Telephone: MX4731.

Directors: David F. Syme, Maisie A. Syme. Executive staff: R. A. Fitts (general manager). Sales Staff: N. Dixon (sales manager). Production staff: Arundel Nixon, W. Bennetts. Technical staff: G. Nolte, W. Bennetts.

Recording equipment: Presto Wide Range. Processing and pressing equipment: W. & G.

Interstate representatives: Macquarie Broadcasting Services.

Overseas representatives: R. B. Brett and Son, 30 New Bridge Street, London, E.C.4.

Transcriptions released last year: "This England" 26 episodes, "Lone Hand" 26 episodes.

## V.O.A. Sound Productions

251a Pitt Street, Sydney; Telephone, MA 1140.

# Late Shopping Nights

Late shopping nights are observed in numerous cities and towns throughout Australia, and the following tabulation of cities and leading towns shows which nights are observed for "late shopping," and should prove of interest and value if studied in conjunction with the information contained in the Country Merchandising Data section on earlier pages.

## NEW SOUTH WALES.

(Late closing 8.30 p.m.)

Sydney . . . . .	Friday	Inverell . . . . .	Friday
Albury . . . . .	Friday	Katoomba . . . . .	Saturday
Armidale . . . . .	Saturday	Kempsey . . . . .	Friday
Bathurst . . . . .	Friday	Lithgow . . . . .	Friday
Bega . . . . .	Friday	Lismore . . . . .	Friday
Broken Hill (Wed. and Sat. half holiday) . . . . .	Friday	Maitland . . . . .	Friday
Canberra . . . . .	Friday..	Moss Vale . . . . .	Friday
Cessnock . . . . .	Friday	Mudgee . . . . .	Friday
Cooma . . . . .	Saturday	Murwillumbah . . . . .	Friday
Deniliquin . . . . .	Saturday	Newcastle . . . . .	Friday
Dubbo . . . . .	Saturday	Orange . . . . .	Friday
Goulburn . . . . .	Friday	Parkes . . . . .	Saturday
Grafton . . . . .	Friday	Singleton . . . . .	Friday
Griffith . . . . .	Saturday	Tamworth . . . . .	Friday
Gunnedah . . . . .	Friday	Wagga . . . . .	Saturday
		Wollongong . . . . .	Friday
		Young . . . . .	Saturday

## VICTORIA

Melbourne . . . . .	Friday
Ballarat . . . . .	Friday
Bendigo . . . . .	Friday
Charlton . . . . .	Friday
Geelong . . . . .	Friday
Hamilton . . . . .	Friday
Horsham . . . . .	Friday
Lubeck . . . . .	No late night
Mildura . . . . .	Saturday
Sale . . . . .	Friday
Shepparton . . . . .	Saturday
Swan Hill . . . . .	Saturday
Warragul . . . . .	Friday
Warrnambool . . . . .	Friday
Colac . . . . .	Friday

## QUEENSLAND.

(No late shopping night).

## SOUTH AUSTRALIA.

(Friday late shopping, all centres.)

## WEST AUSTRALIA.

(Late closing 9 p.m.)

Perth . . . . .	Nil
Geraldton . . . . .	Friday
Kalgoorlie . . . . .	Friday
Katanning . . . . .	Saturday
Northam . . . . .	Friday

## TASMANIA

Hobart . . . . .	Friday
Launceston . . . . .	Friday
Queenstown . . . . .	Friday
Burnie . . . . .	Friday

# COMPLETE RECORDING SERVICE!

★ FEATURES ★ ACTORS  
★ RECORDED ANNOUNCEMENTS

## LEGIONNAIRE

**Sound Productions Pty. Ltd.**  
(K. Lin Corr, Managing Director)  
**68-70 KING ST., MELBOURNE**  
**MU 6171**

**Audition Rooms Available for Agents and Advertisers**

N.S.W. REP. Fidelity Radio Pty. Ltd. State Shopping Block 49 Market St., Sydney	Q'LAND REP. Fidelity Radio Pty. Ltd. Winter Garden Theatre Queen St., Brisbane	N.Z. REP. Staradio Wellington
--	---	-------------------------------------

## FIDELITY RADIO PTY LTD

Telephone MA 8928  
Telegrams and Cable Address: FIDRAD, SYDNEY

MELBOURNE OFFICE:  
18 Queen Street.  
Telephone MU 2818.

BRISBANE OFFICE:  
Station 4 B.C.  
Queen Street.  
Telephone BO 333.

DISTRIBUTORS FOR:  
RADIO TRANSCRIPTION CORP.  
ATLAS RADIO CORP.  
LEGIONNAIRE SOUND PRODUCTIONS.  
STANDARD RADIO.  
Including  
Standard Sound Effects.  
Standard Tailored Transcription Service and Standard Library

ELECTRICAL TRANSCRIPTIONS  
Including—  
MUSIC  
COMEDY  
DRAMA  
ROMANCE  
ADVENTURE  
TRAVEL  
THRILLERS  
EDUCATIONAL

DISTRIBUTORS FOR TRUETONE  
Blank Recording and Processing Discs.

At your Service

# Accredited Advertising Agencies

## A.F.C.B.S. FEDERAL ACCREDITATION BUREAU

During 1938 the Australian Federation of Commercial Broadcasting Stations, Federal Accreditation Bureau for advertising agencies, came into full operation, and the following lists of agencies show those which were granted accreditation between June 1, 1938, and the close of the year, for periods of 12 months. Complete details of the accreditation scheme appeared in BROADCASTING BUSINESS YEAR BOOK 1938.

In respect of several accreditations granted the proviso was made that accreditation was subject to the restriction that their accounts must be paid within 30 days of rendering, otherwise accreditation would cease automatically. Such instances are specifically noted on the official lists supplied by the Federation to member stations. At the time of going to press a proposal for the operation of this scheme was under consideration of the New South Wales executive:—

Ad-Craft Services, 13 James Street, Perth.  
Aerial Publicity Co., Angel Place, Sydney.  
Anivitti-Schey Pty. Ltd., 44 Margaret Street, Sydney.  
Amalgamated Wireless (A/sia) Ltd., 167 Queen Street, Melbourne.

Bartlett, L. V. & Co., 26 O'Connell Street, Sydney.  
Beresford, Kingsbury Co., 247 George Street, Sydney.  
Broadcast Services, Cnr. George & Turbott Sts., Brisbane.  
Brown, T. B. Ltd., George and Margaret Streets, Brisbane.  
Becket-Thomson Advertising Pty. Ltd., 485 Bourke Street, Melbourne.

Catts-Patterson Co. (N.S.W.), 60 Hunter Street, Sydney.  
Catts-Patterson (Vic.) Pty. Ltd., 450 Little Collins Street, Melbourne.  
Country Press Campbell Advertising, 177 Edward Street, Brisbane.

Consolidated Advertising Services, 44 Market St., Sydney.  
Claude Mooney Advertising Service, 314 Collins Street, Melbourne.  
Cumming-Wright Advertising Service, 239 Collins Street, Melbourne.

Fox Advertising Service, 115 Pitt Street, Sydney.  
Fergus Canny Advertising Co., 66 Pitt Street, Sydney.

Gotham Ltd., 67 York Street, Sydney.  
Goldberg Advertising Pty. Ltd., Bank Place, Melbourne.  
Graves, Richard Pty. Ltd., 88 Pitt Street, Sydney.  
Griffith Huse, 145 Collins Street, Melbourne.  
Griffin Advertising Service, Howey Court, Collins Street, Melbourne.

Goldberg Advertising (Aust.) Ltd., 15 Hunter St., Sydney.  
Gordon & Gotch Ltd., Barrack Street, Sydney.  
Hansen Rubensohn Co., 15 Hamilton Street, Sydney.

Hyam, George R., Kembla Bldg., Margaret St., Sydney.  
Haysom, W. John, 247 Collins Street, Melbourne.  
Hawkins Advertising, 16 Hunter Street, Sydney.

Johnston Jones Advertising, Exton House, Queen Street, Brisbane.  
Johnson, J. W. Advertising, National Bank Building, Queen Street, Brisbane.

Le Grand Advertising, 293 Queen Street, Brisbane.  
Leonard, F. P., 156 Castlereagh Street, Sydney.  
Lintas, Pty. Ltd., York Street, Sydney.

Marsh Pty. Ltd., 44 Margaret Street, Sydney.  
Maynard Advertising, R. S., 39 Park Street, Sydney.  
Marginson Publicity, Rowos Building, Edward Street, Brisbane.

Martin, Alan, Advertising Service, 28 Twin St., Adelaide.  
Maurice Len, 10 Martin Place, Sydney.  
Mooney-Webb Pty. Ltd., 349 Collins Street, Melbourne.

National Advertising, Inns of Court, Adelaide Street, Brisbane.

Nixon, N. V. & Co., 39 Queen Street, Melbourne.  
Noble Bartlett Advertising, Penny's Building, Adelaide Street, Brisbane.

O'Brien Publicity Co., 56 Young Street, Sydney.

Paton Advertising Services, 133 Pitt Street, Sydney.  
Percival, J. B. Pty. Ltd., 44 Margaret Street, Sydney.  
Patterson, Geo. Hy. Ltd., 24 Jamieson Street, Sydney.  
Patterson, Geo. & Co., 59 William Street, Melbourne.

R. & K. Powell Advertising, The, 58 Margaret Street, Sydney.

Reuters Ltd., 66 Pitt Street, Sydney.  
Richardson Cox Pty. Ltd., 130 Exhibition St., Melbourne.  
Rickards Advertising Service, 145 Collins St., Melbourne.

Smyth, Arthur and Sons, 18 Martin Place, Sydney.  
Samson-Clark, Price-Berry, 67 York Street, Sydney.  
Stevenson Advertising Service, 175-177 Collins Street, Melbourne.

Sullivan Advertising Service, T. & G. Building, Adelaide Street, Brisbane.

Thompson (Aust.) Pty. Ltd., J. Walter, 65 York Street, Sydney.

Thompson and Associates, 73 Pitt Street, Sydney.  
Trans-Radio Advertising and Program Service, Asbestos House, York Street, Sydney.

Unsted Jackson & Haines, 30 Carrington Street, Sydney.

Vincent, H. Freeth, Cnr. George and Margaret Streets, Sydney.

White, A. N. Pty. Ltd., King and York Streets, Sydney.  
Williams, A. J., St. George Terrace, Perth.

Wylie, B. Jones Advertising, 16 Barrack Street, Sydney.  
Willmotts Advertising, Chamber of Commerce Building, Grosvenor Street, Sydney.

Weston Co., The, Grosvenor Street, Sydney.  
Webb Roberts McLelland Pty. Ltd., 47 Waymouth Street, Adelaide.

Williams, McFerran Pty. Ltd., 90 Queen St., Melbourne.

## State Accreditation

### NEW SOUTH WALES.

Austral Press, 335 Kent Street, Sydney.  
Shield Advertising Service, 58 Margaret Street, Sydney.  
Smith, W. E. Ltd., 310 George Street, Sydney.

(Continued next page)

# Accredited Advertising Agencies (contd.)

## State Accreditation (contd.)

### VICTORIA.

F. J. O'Halloran & Sons, 59 William Street, Melbourne.  
Successful Advertising Service, 434 Collins St., Melbourne.

### QUEENSLAND.

Cossey Advertising Service, 108 Creek Street, Brisbane.  
Forster Advertising Co., Union Bank Chambers, Queen Street, Brisbane.  
James Hall Advertising Service, 50-52 Queen St., Brisbane.  
Vinnicombe Advertising Service, Union Bank Chambers, Queen Street, Brisbane.

### WESTERN AUSTRALIA.

Crownson, S. Cohen, 87 William Street, Perth.  
Green, R. W. Advertising Agency, Goldborough House, Mount N.C.S., St. George's Terrace, Perth.  
Successful Advertising Co., Perth.

## OVERSEAS AGENCIES

### NEW ZEALAND.

Carlton-Carruthers Ltd., Southern Cross Building, Brandon Street, Wellington.  
Goldberg Advertising Agency Ltd., National Bank Chambers, Wellington.  
Gordon & Gotch (A/sia) Ltd., Wellington (also at Auckland, Christchurch and Dunedin).  
Fitchett, W. B. Ltd., Evening Post Chambers, Willis Street, Wellington.  
Haines, Charles, Adv. Agency Ltd., The Dominion Building, Wellington.  
McWhannell & Spanjer, 90 Hereford Street, Christchurch.

### DUTCH EAST INDIES.

V. V. Reclamebrijf Aneta, Aneta Building, Weltevreden.

### BRITISH ISLES.

Algar, F., 58 Gracechurch Street, London E.C. 3.  
Ashburners Ltd., 103 Portland Street, Manchester 1.  
Barker, Chas. & Sons Ltd., 31 Budge Row, Cannon Street, London.  
Bench, T. C. Ltd., Craham House, 3 Tudor St., London.  
Brown, T. B. Ltd., 163 Queen Victoria Street, London.  
Carlton Publicity Ltd., Carlton House, Great Queen Street, Kingsway, London, W.C. 2.  
Central News Ltd., 5 New Bridge Street, London, E.C. 4.  
City General Advertising Service, 16a John Street, Adelphi, London, W.C. 2.  
Clarke, Son & Platt Ltd., 317 High Holborn, London, W.C. 1.  
Clayton, Chas. D. Ltd., 19 Charing Cross Road, London, W.C. 2.  
Crawford, W. S. Ltd., 233 High Holborn, London, W.C. 1.  
Curtis Advertising Ltd., 14 Regent Street, London, S.W. 1.  
Dixons Westend Adv. Agency Ltd., 195 Oxford Street, London.

Dorland Advertising Agency, Dorland House, 14 Regent Street, London, S.W.

Eason & Son Ltd., P.O. Box No. 42, Dublin, C. 91.  
Emmett, W. H. & Co., 30 Bouverie Street, London, E.C. 4.  
Erwoods Ltd., 30 Bouverie Street, London, E.C. 4.  
Gilbert Advertising Ltd., 10 Norfolk Street, Strand, W.C. 2.  
Godbolds' Ltd., 1 Clements Inn Strand, London, F.C. 2.  
Gordon & Gotch Ltd., 75 Farringdon Street, London.  
Greenly's Ltd., 5 Chancery Lane, London, W.C. 2.  
G. W. Advertising Service Ltd., 7 Bank Street, Bolton, England.

Haddon, J. & Co., Salisbury Square, Fleet Street, London.  
Harwood, E. W. & Co., 21 Warwick Lane, London.  
Havas Advertising Agency, Brettenham House, Lancaster Place, London.

Imperial Advertising Agency, 429 Strand, London, W.C. 2.  
Jackson, R. H. Ltd., 26 Cooper Street, Manchester.  
Jarvis, L. J. & Son, Clun House, Surrey Street, London, W.C. 2.

Keymer, D. J. & Co. Ltd., Australia House, London, W.C. 2.  
McKim, A. Ltd., 376 Strand, London, W. C. 2.

Mather & Crowther Ltd., Brettenham House, Lancaster Place, Strand.

Mitchell & Co. Ltd., 1-2 Snow Hill, London, E.C. 1.  
Muller, Blatchly & Co. Ltd., 84 Queen Victoria Street, London, E.C. 4.

Needham, Martin & Co., Hemel Hempstead, Herts, England.

Overseas Publicity & Service Agents, 33 Chancery Lane, London.

Osborne-Peacock Co. Ltd., 11 Piccadilly, Manchester.  
Pemberton, Alfred Ltd., 187 Piccadilly, London, W. 1.  
Pethick, V. Ltd., 184 Fleet Street, London.

Porteous, W. & Co., 9 Royal Exchange Place, Glasgow.  
Potter, F. E. Ltd., Aldwych House, Aldwych, London, W.C. 2.

Pratt & Co. (Advtg.) Ltd., 329 High Holborn, London, W.C. 1.

Robertson & Scott, 73 Hanover Street, Edinburgh.  
Saward, Baker & Co. Ltd., 27 Chancery Lane, London, W.C. 2.

Samson Clark & Co. Ltd., 57 Mortimer Street, London.  
Sharland Advertising Lt., Eldon Street House, London, E.C. 2.

Smedley Service, Copeland Chambers, Copeland St. Stoke on Trent, England.

Smith Advertising Agency Ltd., 100 Fleet Street, London.  
Sells Ltd., Brettenham House, Lancaster Place, Strand.  
Smith, W. H. & Son Ltd., Strand House, London, W.C. 2.  
Southcombe, W. J. Adv. Agency, 167 Strand, London, W.C. 2.

Steele's Advertising Agency, Norfolk House, Norfolk Street, Strand.

Street & Co. Ltd., 8 Serle Street, Lincoln's Inn, London.  
Technical & General Adv. Agency Ltd., 84 Queen Victoria Street, London.

Tremayne, Arthur Ltd., 26-28 Old Street, London, E.C. 1.  
Vernon, C. & Son., 38 Holborn Viaduct, London.

Waller Publicity Ltd., 7 Hanover Square, London, W. 1.  
Watkinson & Co., 114 High Holborn, London, W.C. 1.  
White & Carter Ltd., Carlton House, Lower Regent Street, W.C. 1.

Willing Service, 362 Gray's Inn Road, King's Cross, W.C. 1.  
Wills Ltd., Lincoln House, 296 High Holborn, W.C. 1.

### AMERICA AND CANADA.

Ayer, N. W. & Son Inc., Philadelphia, U.S.A.  
Brandt Advertising Co., Tribune Tower, Chicago.  
Bowman Deute Cummings Inc., Petroleum Securities Building, Los Angeles.

Brewer-Weeks Co., 564 Market Street, San Francisco.  
Brown, T. B. Ltd., 551 Fifth Avenue, New York.

Desbarats Advertising Agency, Montreal, Canada.  
Dorland International Corporation, R.C.A. Building, Rockefeller Centre, N.Y.

Export Advertising Agency, Transportation Building, Chicago.

Export Advertising Agency, 285 Maddison Avenue, New York.

Foreign Advertising and Service Bureau, 525 6th Avenue, New York.

Gotham Advertising Agency, 250 Park Avenue, New York.  
Kay, J. Roland Inc., 100 East Ohio Street, Chicago.

Lord, Thomas & Logan, 247 Park Avenue, New York.  
McKim, A. Ltd., Confederation Building, Montreal.

Proctor & Collier Co., Cincinnati, Ohio, U.S.A.  
Steward Davis Advertising Agency, 400 North Michigan Avenue, Chicago.

Small, Lowell & Seiffer, Inc., 17 East 45th Street, New York.

Thompson, J. Walter Co., 224 Maddison Avenue, New York.

Walker Advertising Agency, Russ Building, San Francisco.

### HOLLAND.

"Sell More" Netherlands Publicity Service, 687 Keizersgracht, Amsterdam.

### CEYLON.

Norman Blande & Co., 35 Queen Street, Colombo.

# AGENCIES HANDLING RADIO ACCOUNTS

## NEW SOUTH WALES.

**ANIVITTE-SCHEY PTY. LTD.**, 44 Margaret Street, Sydney. B3946. Directors: H. A. Schey, C. F. Anivitti, C. F. Linaker. Executive staff: P. Hallard (secretary). Radio division executives: L. Nunn.

Radio account handled: Moffat-Virtue Ltd., C. Winkworth and Sons Ltd., A.R.C. Engineering Co., Imex Manufacturing Co.

**BARTLETT, L. V. PTY. LTD.**, 26 O'Connell St., Sydney. Telephone: BW3168. Overseas representatives: England, Lessli Hutcheon Ltd.; New Zealand, Spanjer Advertising Agency Ltd. Director: L. V. Bartlett. Executive staff: L. V. Bartlett, G. T. Farroll, R. W. Sampson. Radio division executives: L. V. Bartlett, R. W. Sampson.

**BECKET-THOMSON ADVERTISING PTY. LTD.**, Chancery House, 485 Bourke Street, Melbourne, C.I. Telephone: MU4155. Address (branch): Shell House, 2-12 Carrington Street, Sydney. Telephone: B3655. Interstate and Overseas Representatives: All States, England and U.S.A. Directors: John D. Becket, C.A., A. W. Thomson.

**CATTS-PATTERSON CO. (N.S.W.) PTY. LTD.**, City Mutual Building, 60 Hunter Street, Sydney. BW4141. Associated companies: Catts-Patterson Co. (Victoria) Pty. Ltd., Melbourne, and Catts-Patterson Co. (N.Z.) Ltd. Interstate or overseas representatives: T. Campbell-Northcroft, Shell Mex House, Victoria Embankment, London W.C.2, England. Directors of company: N. S. H. Catts, A. E. Collins, H. J. R. Clayton.

**FERGUS CANNY ADVERTISING PTY. LTD.**, "S.M. Herald" Building, 66 Pitt Street, Sydney. BW7534. Directors: Fergus F. Canny. Executive staff: P. C. Stephensen.

Radio accounts handled: Penfolds Wines Ltd., Roseman Brush Co., Cyclops Toys Pty. Ltd., Kingsford Smith College Pty. Ltd.

**FOX ADVERTISING SERVICE PTY. LTD.**, Dalton House, 115 Pitt Street, Sydney. B3679. Interstate and overseas representatives: Campbell-Ewald Ltd., Toronto, Canada; also U.S.A. and England. Director: Matt. J. Fox (managing director). Radio executive staff: Roger Welch.

Radio accounts handled: Tooheys Ltd., the N.S.W. Fresh Food and Ice Co. Ltd., Ice Manufacturers' Association, Lea and Perrins (Aust.) Pty. Ltd.

**GOLDBERG ADVERTISING (AUSTRALIA) PTY. LTD.**, 15 Hamilton Street, Sydney. Telephone: BW4281 (6 lines). Address (branches): Goldberg Advertising Pty. Ltd. Bank House, Bank Place, Melbourne; Goldberg Advertising Agency Ltd., Wellington, Auckland, Christchurch, Dunedin, New Zealand. Interstate and overseas representatives: Webb, Roberts, McClelland Pty. Ltd., Adelaide, S.A.; Country Press Campbell Advertising, Brisbane, Queensland; Graham Advertising Agency, Perth,

W.A. Directors: Frank Goldberg, Agolda Goldberg, William Joseph Brooks. Executive staff: Frank Goldberg, governing director; N. A. Richardson, manager for N.S.W.; W. J. Brooks, secretary. Radio division executive: Albert Russell, Thora Prince.

**GOTHAM (A/SIA) LTD.**: Address: Asbestos House, York Street, Sydney. Telephone: BW4521.

Radio Accounts Handled: W. E. Woods Ltd., Prudential Assurance Co. Ltd., B. Seppelt & Sons Ltd., Victorian Government Tourist Bureau, Pioneer Tourist Service, Qantas Empire Airways, Twin Soda Laboratories, R.U.R. Pty., New Feet Ltd., Sunbeam Shavemaster, Rural Bank of N.S.W., Commonwealth Bank, Smith Copeland & Co. Pty. Ltd., Banana Marketing Board, Butter Publicity Council, Eat More Fruit Publicity, Mountain Maid Cider, Dried Fruits Board, Sydney Grocery Service, Triple Ads., O.T. Ltd., Cottee's Passiona Ltd., Lowes Ltd., Ron McKellar Pty. Ltd., Highgates Ltd., Douglas Stores Pty. Ltd., Weldrest Pty. Ltd.

**RICHARD GRAVES PTY. LTD.**, 88 Pitt Street, Sydney. BW1748-49. Directors: Sir Arthur Rickard, K.B.E., Major A. L. Rickard, M.C., Richard Graves. Executive staff: Richard Graves (managing director), S. Mercer-Smith, H. C. Crauford. Radio division executives: Nancy Musgrove, D. J. M. Brown.

Radio accounts handled: Cerebos Ltd., Gibbs Bright and Co., Arthur Rickard and Co. Ltd., Security Erection Co., The Clyde Engineering Co. Ltd.

**HANSEN-RUBENSOHN COMPANY**, Warwick Buildings, Hamilton Street, Sydney. Telephones: BW4087 (4 lines). Branches: 72 Hunter Street, Newcastle. Director: S. Rubensohn. Executive staff: J. M. Bristow, P. Cogger, E. Millerston, J. Watts, A. J. Whitmore, W. Charles. Radio division executives: P. Cogger, J. McRae.

Radio accounts handled: A.G.E., Biber Furs Pty. Ltd., Burrinjuck Electricity Supply, Better Light Better Sight, Bonkora Company of Aust., David Cohen & Co., "Century" Newspaper, Newcastle Electric Supply Department, Sydney County Council, Electric Light & Power Supply Corp. Ltd., European Laboratories, R. M. Hardy & Co., Lustero Pty. Ltd., Simpson Lee & Co. Ltd., J. R. Love & Co., Metropolitan Water, Sewerage & Drainage Board, Samuel Taylor Pty. Ltd., Philips Lamps (A/sia) Ltd., Paget Manufacturing Co. Pty. Ltd., Associated Sales Ltd., Frederick Stearns & Co.

**HARTFORD ADVERTISING AGENCY PTY. LTD.** (late Wylie B. Jones), 16 Barrack Street, Sydney. Telephone: BW3066. Directors: W. T. McClelland, managing director; A. H. Byatt, director. Executive staff: C. Brown, — Pooley, Miss Green, H. Gellatley. Radio division executive: A. de Reya.

Radio accounts handled: Clinton Williams Pty. Ltd., Australian Motorists Petrol Co. Ltd., Airzone (1931) Ltd., Eichorn's Remedies Pty. Ltd.

## Agencies Handling Radio Accounts

(continued)

**HAWKINS ADVERTISING**, 12 Spring Street, Sydney. BW1928, BW1929. Director: Eric R. Hawkins. Executive staff: R. South, P. Hendrichs, I. Macrae.

Radio accounts handled: Valvoline Oil, Nash Cars, June Russell Pty. Ltd., Brico Piston Rings, Safeway Matches, Selfridges (A/sia) Ltd., Len Langford.

**LEN MAURICE ADVERTISING**, 9th Floor, Challis House, 10 Martin Place, Sydney. B1319.

Radio accounts handled: Blainey's Pty. Ltd., Morley Johnson Ltd., Conklin Pen Co., Royal Art Furnishing, Matron Walker, Anderson and Co., Sydney Snow Ltd., J. B. Croft Pty. Ltd., Richmond Brewing (N.S.W.) Pty. Ltd., Hunt and East Pty. Ltd., Klexema, Hygienic Jam Co. Pty. Ltd., Hotel Astra, Sydney Ferries Ltd., Neptune Oil Co. Pty. Ltd., R. C. Hagon.

**F. P. LEONARD**, 156 Castlereagh Street, Sydney. M3401 and MA1871. Executive staff: F. P. Leonard, J. McCallum.

Radio accounts handled: Ford Sherington Ltd., D. and W. Murray Ltd., Swift and Co. Pty. Ltd., David Dawn, R. H. Armstrong and Co. Pty. Ltd., Joyce Biscuits, Thomson Bros. Pty. Ltd., F. Ferguson and Sons, Walter Cavill Pty. Ltd.

**MARSH PTY. LTD.** Address: 44 Margaret Street, Sydney. Telephone: BW3171-2. Branches: Marsh Associates, 807 Mining Building, Vancouver, B.C., Canada. Overseas representatives: U.S.A. Affiliation, Erwin Wasey and Co. Directors: F. W. Marsh, Gordon G. Allard, C. H. Dowling.

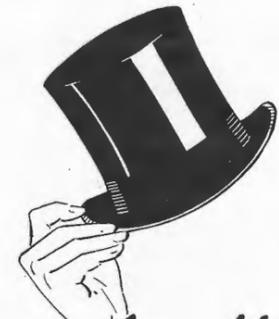
Radio accounts handled: Vincent Chemical Co. Pty. Ltd., Maxam Cheese Products Pty., A. W. Anderson, Paterson, Laing and Bruce Ltd., D. Mitchell and Co. Pty. Ltd., Home Benefits Pty. Ltd., Bushells Pty. Ltd., Howard Auto Cultivators Ltd.

**MAYNARD R. S. ADVERTISING**, 39 Park Street, Sydney. Telephone: MA3721. Partners: Ralph S. Maynard, C. A. McMillan.

**PATON ADVERTISING SERVICE PTY. LTD., THE**, Stanton House, 133 Pitt Street, Sydney.

**GEORGE PATTERSON PTY. LTD.** Address: Turner House, 24 Jamieson Street, Sydney. Branches: 59 William Street, Melbourne; Aldwych House, Aldwych, London; and at Christchurch and Dunedin, N.Z.; Brisbane, Adelaide and Perth. Telephone: BW1261. Directors: George Patterson (governing director), L. W. Farnsworth, L. K. Mason, L. C. H. Shave. Other executive staff: J. K. Carr, G. Seagrove. Secretary: Miss E. M. Porte. Radio account executives: Stephen Farrell, Sylvia Tree.

Radio accounts handled: Colgate Palmolive Pty. Ltd., Peek Frean (Aust.) Pty. Ltd., Cadbury Fry Pascall, Mynor Fruit Cordials, Clements Tonic Pty. Ltd. (for S.A. and N.Z.), Gibb and Beeman Pty. Ltd., Lustre Hosiery Ltd., Phipson and Co. Pty. Ltd.



*We take off our Hat*

to any agency which can equal our record over the last twelve months

—61 Products

advertised over

81 Stations!

FOR that agency has planned its radio campaigns with the same skill, originality, and thoroughness as we have. All our campaigns, large or small, are designed to give our clients the highest possible results.

Our experience helps us in selecting those stations and times giving maximum coverage — programmes appealing to the masses — merchandising tie-ups — and copy which promotes action and sales.

Over these 81 stations we have used every type of programme, recorded and otherwise — serials, musical comedy, sport descriptions, "outside" broadcasts, lectures, music, comedy and drama, "stunts," and commercial theme songs and dramatised "spot" announcements.

The same specialists who have accomplished all this can solve your problems of publicity, merchandising, contracts or production.

**THE WESTON COMPANY  
PTY. LIMITED**

ADVERTISING . . . . . MERCHANDISING  
Since 1901

Chamber of Commerce Building  
George Street, Sydney

Phones: BW 1337-8-9 & B 4686

## Agencies Handling Radio Accounts (contd.)

**SMYTH, ARTHUR & SONS**, 18 Martin Place. Telephone: B7996 (3 lines). Address (branch): Temple Court, 422 Collins Street, Melbourne. Directors: R. M. F. Smyth, L. W. Ashbolt.

**SMITH, W. E., LTD.** (Merchandising and sales promotion division), 310 George Street, Sydney. BW2715. Directors: S. E. Busher, H. Russell Crane, R. S. Norris, W. A. Anderson. Executive staff: W. G. Campbell (sales manager). Radio division executive: Murray Evan.

Radio accounts handled: Nettleton, Son & Co., Lockett Brothers, Brent Windeyer & Co., New Feet Pty. Ltd., Laferme Laboratories, Geo. Fielder & Co. Pty. Ltd.

**STEELE'S ADVERTISING SERVICE LTD.**, Norfolk Street, London, W.C.2. Address (branch): Nickson Street, Surry Hills, N.S.W. Interstate or overseas representatives: Capetown, South Africa. Director: A. G. Steele (managing director). Radio division executive: D. W. Todd (manager, Sydney office).

**THOMPSON & ASSOCIATES**, 77 Pitt Street, Sydney. B1028.

**J. WALTER THOMPSON, AUSTRALIA PROPRIETARY LTD.**, Asbestos House, 65 York Street, Sydney. B7707. Address (branches): Albany Court, 232 Collins Street, Melbourne, Central 5619 (manager, E. L. Jarvis). Interstate or overseas representatives (other than branches): The company is associated with the world-wide J. Walter Thompson organisation, which has offices in New York, London, Chicago, San Francisco, Hollywood, St. Louis, Los Angeles, Seattle, Montreal, Toronto, Paris, Bucharest, The Hague, Antwerp, Copen-

# GOTHAM

AN IMPRESSIVE NAME IN  
THE WORLD OF RADIO

Remember . . . .

"COUNT OF MONTE CRISTO."

"CHARLIE CHAN."

"SENTIMENTALIST IN  
MUSICLAND."

"SHADOW OF FU MANCHU."

These are some of the many outstanding features which have established the reputation of GOTHAM as a dominating force in the field of radio selling and merchandising.



**GOTHAM (A/sia) PTY. LTD.**

Advertising and Selling Counsellors

ASBESTOS HOUSE, YORK STREET, SYDNEY.

Sydney : Melbourne : New York : London  
Wellington (N.Z.)

hagen, Sydney, Melbourne, Johannesburg, Capetown, Buenos Aires, Sao Paulo, Bombay, Amsterdam. Directors: S. Beardsley Dobbs (managing), E. L. Jarvis, W. A. McNair. Executive staff: Secretary and research manager, W. A. McNair; (art director), Reginald Walker; (media manager), T. R. Carruthers. Radio division executives: (radio manager) Phillip F. Mygatt, (assistant radio manager) E. R. Webster.

Radio accounts handled: Bonnington and Co., Bryant and May, Emerson Drug Co., Guest, T. B. and Co., Horlicks Pty. Ltd., Kellogg (Aust.) Pty. Ltd., Kolynos Incorporated, Kraft Walker Cheese Co. Ltd., Lever Bros., Pond's Extract Co., Taubman Ltd., Wrigley's (A/sia) Pty. Ltd.

**TRADERS ADVERTISING SERVICE**, Grace Building, 77 York Street, Sydney. Telephone: M4143. Director: John Heney (proprietor).

Radio accounts handled: J. A. D. Gibson & Co. Ltd., Traders Pty. Ltd.

**TRANS-RADIO ADVERTISING AND PROGRAM SERVICE**, Asbestos House, York Street, Sydney. B5407, B2892. Address (branches): Trans-Radio Advertising and Program Service, C/- Mr. S. J. Moran, Room 27, Floor 5, Auditorium Buildings, Collins Street, Melbourne. Interstate or overseas representatives: Queensland, Country Press Campbell Advertising, Edward Street, Brisbane; Melbourne, Richardson Cox Pty. Ltd.; New Zealand, J. Iott's Ltd. Directors: S. A. Maxwell. Executive staff: W. L. Harris (media manager), Miss N. Hopkins, J. Sing.

Radio accounts handled: Drug Houses of Australia, Clements Tonic, Elliott & Australian Drugs, Australian Chemists' Alliance, British General Electric, Cereal Foods Ltd., Purina Grain Foods, S. A. Law Ltd., Derrin Bros., W. H. Lober & Co. Ltd., McDowell Ltd., Royal Automobile Club of Australia, Independent Oil Industries, Crundall's Ltd.

**UNSTED, JACKSON, HAINES PTY. LTD.** Address: Lisgar House, 30 Carrington Street, Sydney. Directors: K. J. Unsted, J. Jackson, C. J. Coudrey. Telephones: B 7117-8, B 4131. Overseas representative: Charles Haines, N.Z.

Radio accounts handled: Wm. Angliss & Co. (Aust.) Pty. Ltd., C. P. L. Pty. Ltd., Douglas Drug Co., Edinburgh Laboratories, Nut Foods Pty. Ltd., Pacific Potash Ltd., U.B.O. Co. Pty. Ltd.

**WESTON COMPANY PTY. LTD., THE**, Chamber of Commerce Building, Grosvenor Street, Sydney. BW1337-8-9, B4686. Directors: W. O. Richards (managing director). Radio executive: A. D. Hannam.

Radio accounts: Australian Soaps Ltd., Australian Fixed Trusts, Lewis Berger & Sons (A.) Pty. Ltd., James Barnes Pty. Ltd., Beckers Pty. Ltd., Bearne & Ley, E. Beer, Bennett & Wood Ltd., Buatone Company, Commercial Discounters Adelaide Ltd., Catholic National Insurance Approved Society of N.S.W., Jack Cooper, David Jones Ltd., E. Gordon, R. H. Gordon & Co. Ltd., Grace Bros. Pty. Ltd., S. Hoffnung & Co. Ltd., Hillcastle Pty. Ltd., Ilminster Pty. Ltd., Inglis Pty. Ltd., Kleeners Pty. Ltd., Lambert Pharmacal Co. (A.) Pty. Ltd., Manchester Unity I.O.O.F., McWilliam's Wines Pty. Ltd., Mark Mayne Pty. Ltd., Matthews, Thompson & Co. Ltd., N.S.W. Mont de Pieter D. & I. Co. Ltd., Peapes & Co. Ltd., John Paynter, Pick-Me-Up Condiment Co. Ltd., Parsons Bros. & Co. Pty. Ltd., Rogers Paint & Varnish Co., Scott & Bowne (A/sia) Ltd., Slazengers (A.) Pty. Ltd., Sports Arena Ltd., W. H. Soul, Pattinson & Co. Ltd., E. R. Squibb & Sons, Sherwin Williams Co., Tarzan's Grip Mfg. Co., Tillock & Co. Ltd., John Vost Pty. Ltd., Wonder Wool Pty. Ltd., Warmans Pty. Ltd.

## Agencies Handling Radio Accounts (contd.)

**WHITE, A. N., PTY. LTD.**, 66 King Street, Sydney. BW4077 (3 lines). Interstate or overseas representatives: W. John Haysom, Advertising Agent, 145 Collin Street, Melbourne. Directors: Arthur N. White (governing director), W. A. McDermott (managing director).

**WILLMOTT'S ADVERTISING AGENCY PTY. LTD.**, Chamber of Commerce Building, 36 Grosvenor Street, Sydney. BW7191-4, BW6482. Interstate overseas representatives: Associate Houses in Melbourne, New Zealand, England and America. Directors: C. H. Willmott (chairman), E. R. Badger-Parker (governing director), C. F. Horley, R. Willmott, A. G. Palmer, R. A. Walters.

Radio accounts handled: Johnson & Johnson Pty. Ltd., S. C. Johnson & Son Ltd., Truth & Sportsman Ltd., Better Brakes Ltd., Chamber of Manufacturers, H. A. Barracough Ltd., T. Jones & Co., C.P.L. Pty. Ltd., H. Meggitt Ltd., Hecla Electrics (Sydney) Ltd., Sutex Ltd., E. R. Chambers, James Stedman-Henderson Sweets Ltd., Dadd Gifts Pty. Ltd., Vick Chemical Co., Langridge School of Physical Culture.

### VICTORIA.

**BECKET-THOMSON ADVERTISING PTY. LTD.** Address: 485 Bourke Street, Melbourne. Telephone: MU4155. Branch: Shell House, Carrington Street, Sydney. Interstate and overseas representatives: In Brisbane, Perth, Adelaide, New Zealand, London and New York. Directors: John D. Becket, C. A., A. W. Thomson.

**GOLDBERG ADVERTISING PTY. LTD.**, Bank House, Bank Place, Melbourne C.1. Telephones: M5628, M5629, M5620. Branches: Sydney (head office), Wellington (N.Z.), Auckland, Christchurch and Dunedin (N.Z.); associate houses in Brisbane, Adelaide, Perth, London, Paris, New York. Directors: Frank Goldberg, F. W. Mothes, A. A. Levy, B. G. Carden, P. R. Clark. Radio division executives: R. C. Hickling (manager), C. H. Lucas. Secretary: E. Parker.

**GORDON & GOTCH (AUSTRALASIA) LTD.**, 511-515 Little Collins Street, Melbourne. Address (branches): Sydney, Melbourne, Brisbane, Adelaide, Perth, Launceston, Wellington, Auckland, Christchurch, Dunedin and London, and throughout the world.

Radio accounts handled: Various national accounts.

**GRIFFITHS-HUSE**, 145 Collins Street, Melbourne. Telephone: F6285. Directors: A. R. Griffiths, G. J. Huse. Radio accounts handled: Neptune Oil Co., Belworth Hosiery Mills, Reiova Laundry, Greatheads, Phillips Knitting Mills.

**W. JOHN HAYSOM ADVERTISING AGENCY**, Newspaper House, 247 Collins Street, Melbourne. Tel. Central 1511 (2 lines). Interstate or overseas representatives: Sydney (N.S.W.), Auckland, Christchurch, Wellington (New Zealand), London (England). Director: W. John Haysom (principal). Radio division executives: E. Martyn Foster, Donald L. Haysom.

Radio accounts handled: Kill-a-mite Co. (Australia) Pty. Ltd., McGregor Wheel Grip & England Pty. Ltd., K. L. Engines & Tractors Pty. Ltd., R. Werner & Co. Pty. Ltd., Draffin Bros. Pty. Ltd., Alcock & Pierce Pty. Ltd., Iona Products Pty. Ltd., Alfred Lawrence & Co. Ltd., Southern Motors Pty. Ltd., Paramount Baby Carriage Co., Protest-

ant Alliance Friendly Society, Hawaiian Club of Australia, Newport & Bowes Pty. Ltd., Victorian Local Option Alliance, Palmer's Emporium Pty. Ltd.

**CLAUDE MOONEY ADVERTISING**, 314 Collins Street, Melbourne. Telephone: MU1430. Director: Claude C. Mooney. Interstate representatives: Thompson & Associates, 77 Pitt Street, Sydney. Executive staff: R. D. Orr, F. H. Cordner. Radio division executives: C. C. Mooney, R. D. Orr.

Radio accounts handled: H. C. Sleigh, Stephen King Pty. Ltd., Ansett Airways.

**MOONEY-WEBB PTY. LTD.**, 349 Collins Street, Melbourne, C.1. Telephones: M3731-2. Directors: L. J. Mooney, E. J. Webb.

**N. V. NIXON & CO. ADVERTISING**, 39 Queen Street, Melbourne C.1. MU6674. Executive staff: N. V. Nixon, S. Hunt, J. Philip, Miss G. J. Lottkowitz, P. V. Waddell.

Radio accounts handled: Alba Petroleum Co., Alexander Fergusson Pty. Ltd., John Connell & Co., Dudgeon & Aenell Pty. Ltd., Make-lips Pty. Ltd., Melbourne Sports Depot, Pioneer Tourist Bureau, Queen's Bride Motors, Richmond (N.Z.) Brewery Co., Royal Agricultural Society of Victoria, J. P. Sennitt & Son Pty. Ltd., Sanitarium Health Food Co., Victoria Palace Ltd., Wallpaper Merchants Association, Alexander Patent Racket Co., Geo. Raitt & Co. Pty. Ltd., Strachan Bros.

**PATON ADVERTISING SERVICE PTY. LTD., THE**, Anzac House, 4 Collins Street, Melbourne.

(Continued next page)

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Sydney Offices and Studios: Asbestos House, York Street. Telephones: B 5407, B 2892.

## Agencies Handling Radio Accounts (contd.)

**GEORGE PATTERSON PTY. LTD.**, 59 William Street, Melbourne. Telephone M1431. Address (branches): Sydney, Auckland, Christchurch, Wellington, Dunedin, London. Directors: W. L. Chapman (director), J. E. Vincent, D. J. Riddle. Radio division executive: R. R. Walker (radio manager).

Radio accounts handled: Clensel Products, John Dewar & Sons Ltd., B. R. Radio, New Systems Telephones, A. J. Veall, Cadbury-Fry-Pascal, A. M. Bickford, Carreras Ltd., Colgates, Dickies, Eagley Mills, Felton Grimwade, Industrial Chemicals, Kiwi, Knox Drug Co., Metropolitan Gas Co.

**RICHARDSON COX PTY. LTD.**. Address: 130 Exhibition Street, Melbourne. Telephone: F9058. Directors: B. R. Richardson, Lionel Bruce. Overseas representatives: Inglis Wright Ltd., Wellington, New Zealand.

**RICKARDS ADVERTISING SERVICE PTY. LTD.** Address: 145 Collins Street, Melbourne. Telephones: Cent. 842, 843, J 4964. Interstate and overseas representatives: Italy; Pubblicita'D'Oggi, Sydney; Willmotts Advertising Agency Pty. Ltd., Perth; A. J. Williams, New Zealand; J. Inglis Wright Ltd. Directors: F. S. B. Rickards, G. D. Rickards, G. M. F. Walch. Radio division executives: G. M. F. Walch, E. Vidor, F. V. Kellow.

Radio Accounts Handled: Peters American Delicacy Co. (Vic.) Ltd., Qualcast (Aust.) Ltd., Phoenix Biscuit Co. Pty. Ltd., Australian National Airways, Fynnon Health Salts.

**STEVENSON ADVERTISING SERVICE**, 175-177 Collins Street, Melbourne, C1. Tel. Central 10565. Interstate or overseas representatives: Messrs. Stronachs Ltd., 346 Strand, London, W.C.2. Directors: A. V. G. Stevenson, F. O. A. executive staff: A. R. Stevenson, R. I. McKillop. L.O.A. radio division executive: R. I. McKillop, L.O.A.

Radio accounts handled: Sunshine Biscuit Co. Pty. Ltd., H. C. English Pty. Ltd., John Robertson, F. H. Brunning Pty. Ltd., London Baby Carriage Manufacturers Pty. Ltd., The Sanax Co., Associated Ice Manufacturers, American Blacking Co., Cenovis Yeast Pty. Ltd., L. Ribush, The Foam Salon, Tim the Toyman.

**WILLIAMS-McFERRAN PTY. LTD.**, 90 Queen Street, Melbourne, C.1. Telephones: M1188, M1189. Associated Houses in New South Wales, Queensland, and South Australia. Directors: W. R. McFerran, A. R. McFerran.

Radio accounts handled: Rosella Preserving and Manufacturing Co., Gollin & Co. Pty. Ltd., A. H. McDonald & Co., Martin & Pleasance, Ovo Pty. Ltd., Grocery Distributors Pty. Ltd., Gippsland & Northern Co-op. Co. Ltd., Chas E. Kennett, Gifford Bros. Pty. Ltd.

### QUEENSLAND.

**BROADCAST SERVICES**, 81 Elizabeth Street, Brisbane. B9659. Directors: Charles Porter, Eric Roush, William Farmer. Executive staff: Charles Porter (general manager). Radio division executives: Charles Porter (general manager), Violet Condie (merchandising), Roy Mackenzie (programmes), Dr. A. Stiffler (contracts), Reginald I. Mitchell (productions).

Radio accounts handled: John Campbell Pty. Ltd., Ironised Yeast Laboratories, Eric A. Roush, Lifesavers (Aust.) Ltd., D. Stewart, Serftin Scatters Co., Regent

Studios, Bush & Co., Wilson's Optical Service, Pryce & Read, City Coaching College, Model Manufacturers of Queensland, Revue Salon, Palmer's Silk Store, Frederick L. Thomson, F. W. Nissen, Trevor Henderson, Shirley Shoe Store.

**COUNTRY PRESS CAMPBELL ADVERTISING**, 177 Edward Street, Brisbane. B3106 (2 lines) and M7242. Interstate or overseas representatives: Goldberg Advertising Pty. Ltd., Melbourne, Sydney, Adelaide, London, Wellington (N.Z.), and throughout the world; Trans-Radio Advertising & Program Service, Sydney, Newcastle, Melbourne, Perth, Adelaide, Hobart, New Zealand. Directors: A. J. Campbell, F.O.A. (principal). Executive staff: D. W. Roberts (production dept) Radio division executive: H. L. Seymour.

Radio accounts handled: Independent Oil Industries Pty. Ltd., Taylors Elliotts & Australian Drug, Pty. Ltd., C.O.D. Fruit Marketing, Queensland Storage Batteries, Trevor Henderson, Pauls Polar Perfections Ltd., Pike Brothers, Stuart the Suit Specialist, G. Nolan, Golden Investments, Commonwealth Treasury, Queensland Government Railways, Jas. Campbell & Sons. Pty. Ltd., Safe Brakes Pty. Ltd., Trocadero, Sharp & Musgrave, T. Tristram, Bruce Small Pty. Ltd., Doree Quick Mending Services, Adams Cakes, Queensland Central Executive, Dura Cycles, New-Way Food Canners Ltd.

**FORSTER ADVERTISING CO.**, Union Bank Chambers, Queen Street, Brisbane, Queensland. B9224. Directors: Brigadier J. Craven.

Radio accounts handled: United Australia Party, McWilliams Wines.

**JOHNSTON JONES ADVERTISING**, Exton House, Queen Street, Brisbane, Queensland. B2978 (2 lines). Directors: E. A. Johnston, F.O.A., J. H. Jones, M.A. Executive staff: R. S. Adams (production department), Roy Dalgarno (art director). Radio division executive: A. R. Harris.

Radio accounts handled: Queensland Brewery, Waldron, Golden Casket Art Union, Ockelford the Chemist, Charles Gilbert, Bengol Chutney Co., Warten Snelling, Charles Gamin, Australian Soccer Football Association, Dalgety & Co. Ltd., Gollen & Co. Ltd.

**MAYNARD, R. S. ADVERTISING**, A.M.P. Building, Queen Street, Brisbane. Telephone: B6579. Partners: Ralph S. Maynard, C. A. McMillan.

**NOBLE-BARTLETT ADVERTISING**, Penney's Building, Adelaide Street, Brisbane. Telephone: B3148. Interstate representative: Geo. Patterson Pty. Ltd. Executives: W. H. Noble, A. T. Bartlett (principals). Account executive: R. A. Jesson. Recording facilities: Presto.

Radio accounts: Anderson & Cameron, Wallace Bishop & Son, Wm. Brooks & Co. (Q.) Pty. Ltd., B.C.C. Stores, Bruce Pie & Co., L. G. Burley, Brett & Co. Pty. Ltd., Cashmans, E. G. Eager & Son, Philip Frankel Pty. Ltd., Greer & Jamison, Grand Central Hotel, A. P. Greenfield & Co. Pty. Ltd., Greenfield Bros. Pty. Ltd., Hartleys Pty. Ltd., S. Hillman & Co., Houghton & Byrne, J. Jackson & Son, Jennings Rubber Co., Josephson & Sons, Kiwi Polish Co., Lowes Dry Cleaners, Maxam Cheese Products Pty., Metropolitan Milk Supply, (G.B.) Ltd., Penney's, Peters Arctic Delicacy Co. Ltd., Hector Power, Rhoades & Co. Ltd., Rothwell's Outfitting Ltd., Roubins Superior Suits, E. Sachs & Co. Pty. Ltd., Siemons Pty. Ltd., Trackson Bros., B. B. Whitehouse & Co. Ltd., Wiley Home Furnishers.

## Agencies Handling Radio Accounts

(continued)

### SOUTH AUSTRALIA.

**OWEN L. GELLERT ADVERTISING SERVICE**, Trustee Building, Grenfell Street, Adelaide. Telephone: C1520.

**ALAN A. MARTIN ADVERTISING SERVICE**, 28 Twin Street, Adelaide. Central 5622. Director: A. Martin (proprietor). Executive staff: Lloyd Wilson, A. Churches, R. Allanson, Radio division executives: A. Martin, L. Wilson.

Radio accounts handled: W. Menz & Co., S.A. Government Tourist Bureau, F. H. Faulding & Co., Wenots, Harris, Scarfe Ltd., Dalgety & Co.

**WEBB-ROBERTS McCLELLAND PTY. LTD.**, Norwich Union Building, 47 Waymouth Street, Adelaide. C3939 (2 lines). Interstate or overseas representatives: The Paton Advertising Service Pty. Ltd. (Melbourne), Goldberg Advertising Pty. Ltd. (Melbourne), Goldberg Advertising Pty. Ltd. (Sydney). Directors: Maurice P. McClelland, Ainslie Roberts. Executive staff: G. Love, W. Wardrop, A. Bainton, E. J. Roberts. Radio division executive: Charles W. Batten.

Radio accounts handled: George Adams Pty. Ltd., Burden Ltd., Flinders Motor Co., Foy & Gibson, Hardy Thomas & Sons Ltd., Martindale Ltd., Mexico Cereal Co. Ltd., Moore Charles & Co., Pioneer Bastin, Savery's Pianos Ltd., Silver Top Taxis, Storer, T. G. & Sons, Wiper John Ltd., Waymouth Motor Co. Ltd.

### WESTERN AUSTRALIA.

**AD-CRAFT ADVERTISING SERVICE**, 13 James Street, Perth, W.A. B9331 (2 lines). Directors: C. McKinlay, E. K. McKinlay. Executive staff: J. F. Cushen (manager), J. A. Mercer (assistant manager). Radio division executives: Miss P. Reynolds, V. Pocklington (assistant). Radio accounts handled: Attwood Motors (1934) Ltd., Michelides Ltd., Selfridge's (W.A.) Ltd., Walsh's Limited, Bon Marche Ltd., Burtol Dry Cleaners, Royal Agricultural Society, Superior Knitting Mill, Robur Tea Co.

**COHEN, S. CROWNSON**, 87 A.M.P. Chambers, William Street, Perth. B6584. Address (branch): Associate House, Messrs. Samson Clark Price-Berry Pty. Ltd. Executive staff: Arthur Frederick Collett, Kenneth Thomas Hamblett. Radio division executives: Carlyle & Co., W. J. Lucas Ltd.

**GRAHAM ADVERTISING (AUSTRALIA) LIMITED**, C.M.L. Building, St. George's Terrace, Perth, W.A. B8641. Director: George Burton Graham.

Radio accounts handled: C. S. Baty & Co., Charlie Carter Ltd., Levinson & Sons, Powell Gas Producers, O. T. Abrahams, Plaistowe & Co. Ltd., Elliott & Kieseey Ltd., Ronfred & Co., W. E. Sainsbury & Co., Royal Manufacturing Co., Gwendolyn Frock Shop.

**WILLIAMS, A. J., ADVERTISING SERVICE**, Goldsbrough House, Perth, B1810. Interstate representatives: George Patterson Pty. Ltd., J. Iott (Aust.) Ltd., Rickards Advertising Service, (Associated Houses), Executive staff: A. J. Williams, F.O.A., Miss P. M. Peacock. Radio division executive: James Cumpston.

Radio accounts handled: F. H. Faulding & Co. Ltd. Watson's Supply Stores, Sydney Atkinson Motors Ltd., MacRobertson (W.A.) Ltd., Swansea Cycles.

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# National Advertisers Who Used Broadcast Time During 1938

*Analysed by Products Advertised*

The following comprehensive list of Australian National Advertisers used the broadcast medium in one form or another during 1938. The station call-signs after each advertiser's name do not necessarily represent all the stations used during the year by the advertiser, but represent the stations notifying the use of air time by the particular advertiser. Of the total 96 commercial stations in operation at the time the information was sought by questionnaire early this year, 68 stations complied with the request for this detailed information. In this list of National accounts subdivided by products advertised there is a total of 330.

## Automobile, Accessories, Etc.

Brico (Aust.) Pty. Ltd.: 2BE, 2GB, 2GZ, 2HD, 2KO, 2LM, 2NZ, 2TM, 2UW, 2WL, 3HA, 3KZ, 3SR, 3TR, 3UL, 3YB, 4BC, 4BK-AK, 4GR, 5AD-PI-MU-SE, 5KA, 6AM-PM, 6IX-WB, 6KG.  
Diesel Engineering College: 2LM, 2UW, 2KY, 3XY, 4BC, 6PR.  
Dunlop Perdriau Rubber Co. (Tyres and Rubber Goods): 2GZ, 2HD, 2KO, 2LM, 3XY, 4BU, 5DN, 6IX-WB, 7LA.

## Batteries, Etc.

Clyde Engineering Co.: 2GZ, 2TM, 4GR.  
E.R.G. Battery Co.: 2MG.  
Ever Ready Battery Co.: 2BH, 2GN, 2GZ, 2LM, 2NZ, 2TM, 3HA, 3SH, 4BC, 4BU, 4GR, 4MB, 5DN, 6AM, 6IX-WB, 6KG, 7BU, 7QT.  
Exide Batteries of Aust. Ltd.: 2GN, 2GZ, 2LM, 2NZ, 3GL, 3HA, 3SR, 3UL, 3YB, 6AM, 6ML.  
Impex Ltd., Melbourne: 3DB, 3HA, 3SR.  
Masse Batteries: 2BH, 2GF, 2HD, 2TM, 2WL, 4BH, 4GR, 4MB, 6AM, 6IX.  
Widdis Diamond Dry Cells: 2GZ, 3DB, 3HA, 3TR, 3UL, 4BH, 4GR, 4MB, 4TO, 4ZR, 5AD-PI-MU-SE, 6IX, 7BU.

## Bicycles.

Small, Bruce, Pty. Ltd.: 2BH, 2GF, 2GZ, 2HD, 2KO, 2LM, 2RG, 3GL, 3HA, 3XY, 4BC, 4BU, 4GR, 4MB, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6IX-WB, 6KG, 7HT.

## Confectionery.

Allen, A. W., Ltd. (Ace Chewing Sweets, Gum Jubes, Butter Menthol, Steamrollers, etc.): 2SM, 2WL, 3HA, 3SH, 5DN.  
Griffiths Bros.: 3UL, 3XY.  
Headleys Ltd.: 3XY, 5AD-PI-MU-SE.  
Life Savers (Aust.) Ltd.: 2GB, 3XY, 4BU, 5KA, 6KG, 6ML, 6PR, 7BU,

Nestles and Anglo Swiss: See Nestles schedule under Food and Groceries.  
MacRobertson's Sweets: 2GB, 2SM, 3KZ, 3XY, 4BH, 5AD-PI-MU-SE, 6AM-PM, 6ML.  
N.S.W. Fresh Food and Ice Co.: 2CH, 2GZ.

Peters American Delicacy Co.: 2HD, 2KO, 2MO, 2TM, 2UW, 3XY, 4BC, 4BH, 6AM-PM, 6KG, 6PR, 7BU, 7LA.  
Rowntree and Co.: 3HA, 3SR.  
Stedman-Henderson Sweets Ltd.: 2BH, 2GB, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6IX-WB, 7HT.  
Wrigley's (Aust.) Ltd.: 2BH, 2DU, 2GZ, 2KO, 2LM, 2PK, 2QN, 2TM, 2WL, 3DB-LK, 3GL, 3MA, 3SR, 3TR, 3UL, 4BK-AK, 4IP, 4MB, 4RO, 5AD-PI-MU-SE, 6AM, 6IX-WB, 6KG, 7BU, 7LA-7DY, 7HT, 7QT.

## Cosmetics, Etc.

Bells Products: 2GZ, 2TM.  
Christy's Products: 2TM, 4BH, 5AD-PI-MU-SE.  
Court, Kathleen: 2GZ, 2HD, 4BC, 5AD-PI-MU-SE.  
Cyclex Aust. Ltd.: 2GB.  
Dearborn Pty. Ltd.: 2GB, 2SM.  
Hillcastle Pty. Ltd.: 2KO, 3DB.  
Max Factor Products: 5AD-PI-MU-SE, 6IX1WB.  
Ponds Extract Co.: 3DB, 4BC, 4BK-AK, 5AD-PI-MU-SE, 6ML, 6WB.  
Potter and Moore: 3HA.  
Russell, June: 2DU, 2GN, 2GZ, 2UE, 2TM, 2WL, 4BC.

## Electrical and Household Appliances.

A.G.E.: 2BH, 2GB, 2GF, 2GZ, 2KO, 2LM, 2MG, 2TM, 3BA, 3HA, 3MA, 3SR, 3TR, 4BC, 4BU, 5AD-PI-MU-SE, 7LA-7DY, 7QT.  
Aladdin Industries: 6GE, 6WB.  
B.G.E.: 2MO, 6IX.  
Hecla Ltd.: 2KO.  
Kelvinator (Aust.) Ltd.: 5DN.  
Noyes Bros.: 7HT.

## Farms, Station, Gardening Equipment.

Chuck, T. N., Fence and Gate Co. Pty. Ltd.: 3HA, 3SR.  
Cyclone Fence and Gate Co.: 2GZ, 2KO, 2TM, 3DB-LK, 4BC-SB, 4GR, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6IX-WB, 6ML.  
Dangar Gedye and Malloch: 2GZ, 2HD, 2TM.  
Farm and Pastoral Supplies Ltd.: 3HA, 3SR, 7LA.  
Gippsland and Northern Co-op.: 3SR.  
Gloria Light Co.: 3HA, 3MA, 3SR.  
Goldsborough Mort Ltd. (Vita-Lick): 6AM.  
Howard Auto Cultivators: 2GZ.  
International Harvester Co.: 2GZ, 2TM.  
McGregor Wheel Grip and Engineering Pty. Ltd.: 5AD-PI-MU-SE.  
McKay, H. V., Massey Harris Ltd.: 6AM-PM, 6WB.  
Meggitts Ltd.: 2GZ, 3DB-LK, 4BC-SB, 4GR, 5AD-PI-MU-SE, 6IX-WB.  
Moffatt-Virtue Ltd.: 2DU, 2GN, 2GZ, 2LM, 2MO, 2NZ, 2TM, 2BS.  
New Zealand Loan and Mercantile Agency: 3SR, 3TR, 4ZR.  
Nitrogen Fertilisers Ltd.: 2GZ, 3SR.  
Pacific Potash Ltd.: 2GN, 2LM, 3MA.  
Qualcast (Aust.) Ltd.: 4BU, 4TO, 6IX-WB.

## Finance and Banking.

A.M.P. Society: 2BE, 2QN, 3KZ, 3XY.  
Australian Loan Council: All stations.  
Australian Natives Association: 2GZ, 2KO, 2LM, 2SM, 2TM, 3BA, 3DB, 3MA, 3SH, 3SR, 3TR, 3UL, 3XY, 3YB.  
M.U.I.O.O.F.: 2BH, 2GF, 2GZ, 2KO, 2QN, 2TM, 2WL, 3DB, 3HA, 3SH, 3TR.  
N.S.W. Mont de Piete: 2GN, 2HD, 2KO, 4BK-AK, 4BH.  
New Zealand Perpetual Forests: 2GN, 2LM, 3SR, 3YB, 6ML, 6PR, 6WB, 7DY.

(Continued page 124)

# U.S.A. RADIO ANNUAL

Takes its place as Radio's recognised reference work



**The March of Radio is a story that can only be told in the printed pages of a Journal that marches abreast the Industry. That journal in America is "RADIO DAILY" published daily in New York**

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## Prominent National Advertisers on the Air during 1938 (contd.)

## Food and Groceries.

Anderson, A. W.: 2GZ, 2KO, 2KY, 2TM.  
 Angliss, Wm., and Co.: 2BH, 2KO, 3GL, 5AD-PI-MU-SE.  
 Apple and Pear Council: 2GB, 3XY, 5AD-PI-MU-SE.  
 Arnott, William, Ltd.: 2GZ, 2LM, 2TM, 5AD-PI-MU-SE, 5DN, 7BU.  
 Barnes, James, Pty. Ltd.: 2GB, 2KO, 5AD-PI-MU-SE, 5DN, 6ML.  
 Befine Pty. Ltd.: 3XY.  
 Berry, Henry, and Co. Pty. Ltd.: 2MO, 3GL, 3HA, 3SR, 3TR, 3UL, 3XY, 3YB, 6IX, 6ML, 7LA, 7HT, 7QT.  
 British Herring Industry Board: 3DB, 5AD-PI-MU-SE, 6AM-PM.  
 Brockhoff, A. F., and Co.: 3HA, 3MA, 3SH, 3SR, 3TR, 3UL, 3YB, 7BU, 7HT.  
 Bushells Tea: 2BH, 2GF, 2GN, 2GZ, 2HD, 2KO, 2LM, 2NZ, 2TM, 3DB, 3HA, 3MA, 3SH, 3TR, 3XY, 4BC, 4BH, 4BK-AK, 4BU, 4GR, 4SB, 4TO, 4ZR, 5KA, 5DN, 6IX-WB, 6ML, 7BU, 7HT, 7LA.  
 Butter Publicity Board: B4C, 4BK-AK, 5AD-PI-MU-SE.  
 Cereal Foods Ltd.: 2GF, 2GZ, 2HD, 2LM, 2NZ, 2TM, 2WL, 6AM.  
 Cerebos Salt and Bisto: 3DB, 3XY, 7HT.  
 Champion Vinegar Co.: 2GB, 2GF, 2GZ, 2KO, 2LM, 2NZ, 2SM, 2WL, 3DB, 3HA, 3MA, 3TR, 5AD-PI-MU-SE, 5DN, 6AM, 6ML, 6PR.  
 Connell, John, and Co. Pty. Ltd.: 2NZ, 2SM, 2TM, 3HA, 3MA, 3KZ, 3SH, 3SR, 3TR, 3UL.  
 Douglass, W. C., Ltd.: 2BE, 2GB, 2KO, 2LM, 2TM, 4BC, 4TO, 7BU.  
 Foggitt Jones Pty. Ltd.: 2GB, 2GZ, 2KO, 3MA.  
 Foley Bros. Ltd.: 2GZ, 2KY.  
 Gibson, J. A. D., and Co.: 2HD, 2WL.  
 Grocery Distributors Pty. Ltd.: 2GZ, 2KO, 3SR, 3YB, 4BC, 5AD-PI-MU-SE, 6ML.  
 Groves, McVitty Pty.: 3SR.  
 Guest, T. B.: 3DB, 3HA, 3MA, 3SR, 3TR.  
 Hodgson and Co. (Ally Salmon, etc.): 2GZ, 2HD, 3BA, 3HA, 3KZ, 3SH, 3TR, 3XY.  
 Horlicks Pty. Ltd.: 2BH, 2GZ, 2KO, 2LM, 2TM, 3DB, 3SR, 3TR, 4BC, 4BK-AK, 5AD-PI-MU-SE, 5KA, 6AM, 6IX-WB, 6KG, 7HT, 7LA.  
 Inglis Pty. Ltd.: 2GZ, 2HD, 2LM, 2SM, 4BC, 4BH, 4GR, 4TO.  
 Joyces Biscuits Ltd.: 2GZ, 2KO, 2TM.  
 Kelloggs (Aunts) Ltd.: 2GB, 2GZ, 2KO, 2LM, 2SM, 2TM, 3DB, 3KZ, 3SR, 3TR, 4BK-AK, 4IP, 5AD-PI-MU-SE, 6IX-WB, 7BU, 7HT.  
 Kornie Food Co.: 3XY.  
 Kraft Walker Cheese Co.: 2GZ, 2KO, 2LM, 2TM, 3DB, 3KZ, 3SR, 3TR, 3XY, 4BC, 5AD-PI-MU-SE, 6IX-WB, 6ML, 7BU.  
 Lockett Bros. (Amaki Sauce): 2GZ, 2HR, 2KO, 2KY, 2TM, 2WL.  
 Longmore, Francis, and Co.: 3DB, 3XY.  
 Love, Clifford, and Co.: 3GL, 4BU, 6IX, 6ML, 7BU, 7HT.

Love, J. R., and Co. Ltd.: 2GB, 2GZ, 2HD, 2KO, 2RG, 2WL.  
 Maize Products Pty. Ltd.: 2CH, 2HD, 3XY, 4BH, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX, 6ML.  
 Maxam Cheese Products: 8GB, 2HD, 2KO.  
 Menz and Co. Ltd.: 2BH, 3MA, 5AD-PI-MU-SE, 5DN.  
 Mitchell, D., and Co. Ltd.: 2GZ, 2KO, 2NZ, 2WL.  
 Moran and Cato: 2GZ, 2RG, 2SM.  
 Mums Products Pty. Ltd.: 2GZ, 2KO, 2KY, 2LM, 2TM.  
 Nestles and Anglo Swiss Milk Co. (Condensed Milk, Chocolates, Malted Milk, Cocoa, Cream, etc.): 2BH, 2DU, 2GB, 2GN, 2GZ, 2HD, 2KO, 2KY, 2LM, 2NZ, 2SM, 2TM, 2WL, 3DB, 3GL, 3HA, 3KZ, 3SR, 3XY, 4BH, 4BK-AK, 4SB, 4ZR, 6AM, 6IX, 6KG, 6ML, 7BU, 7HT.  
 Nut Foods Pty. Ltd.: 2BH, 2BS, 2GB, 2GF, 2KO, 2WL, 4BC, 4BH, 4GR, 4MB, 6PR, 7HT.  
 Parsons Bros. Pty. Ltd.: 2GB, 2GZ, 2KO, 2LM, 2TM, 4BC.  
 Peek Frean: 2GB, 2WL.  
 Phoenix Biscuit Co. Pty. Ltd.: 3SR, 3TR, 7BU, 7DY, 7LA.  
 Pick-Me-Up Condiment Co. Ltd.: 2HD, 2KO, 2SM, 3DB, 3KZ, 4BH, 6AM-PM.  
 Pro Vita Mills Ltd.: 3BA, 3HA, 3MA, 3SH, 3SR, 3TR, 3UL, 3YB.  
 Purina Grain Foods Pty. Ltd.: 2GF, 2KO, 3BA, 3BO, 3HA, 3SR, 3PR, 3XY, 4GR, 4MB, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6KG, 6PR, 7BU, 7BY, 7QT.  
 Robur Tea Co.: 3GL, 3MA, 6AM-PM, 6IX-WB, 6ML.  
 Rosella Preserving Co.: 2GB, 2GZ, 2HD, 3XY, 5AD-PI-MU-SE, 7BU.  
 Salda Products: 2GB.  
 Sanitarium Health Food Co. (Marmite, Cerex, Granoes, Weet Bix, etc.): 2BH, 2DU, 2GB, 2GZ, 2KO, 2LM, 2MO, 2NZ, 2RG, 2SM, 2TM, 2WL, 3BO, 3DB, 3HA, 3SR, 3TR, 3YB, 4BC, 4BK-AK, 4GR, 4MB, 4TO, 5AD-PI-MU-SE, 5DN, 5KA, 6IX-WB, 7HO, 7LA.  
 Sunshine Biscuits Co.: 3BA, 3BO, 3SR, 3UL, 3YB.  
 Swallow and Ariell: 2GB, 3SR, 3UL, 3YB, 4BH, 4MB, 5AD-PI-MU-SE, 5DN, 6AM, 6IX-WB, 6ML, 7BU, 7BY, 7QT.  
 Tea Marketing Expansion Bureau: 2GB, 2KO, 3DB, 3XY.  
 Tillock and Co.: 2GB, 2GF, 6AM, 6KG, Trufood Milk: 6IX-WB.  
 Traders Pty. Ltd. (Aeroplane and B.M.I. Jelly): 2HD, 2SM, 3SR, 3XY.  
 Wander, A., Ltd. (Ovaltine): 5AD-PI-MU-SE.

## Footwear.

Fostars Shoes: 2HD, 2HR, 2KY, 2WL, 4BH, 4BU, 4CA, 4GR, 4RO, 4TO.  
 Williams, The Shoeman: 3BA, 3BO, 3DB, 3HA, 3SH, 3SR, 3TR, 3UL.

## Hosiery, Lingerie, Etc.

Australian Knitting Mills: 2GF, 2GZ, 2KO, 2LM, 2NZ, 2TM, 3WL, 4BU, 4MB.  
 Beau Monde (Aust.) Ltd.: 2BH, 2GZ, 2HD, 2TM, 2WL, 3GL, 3HA, 3MA, 3SH, 3SR, 3UL, 3YB, 4BC, 4BH, 4BU, 4GR, 4MB, 6GE, 6KG, 7BU, 7DY, 7QT.  
 Bellworth Hosiery Mills: 3HA, 3TR, 3XY.  
 Holeproof Ltd.: 3GL, 5DN.  
 Kayser, Julius (Aust.) Pty. Ltd.: 2BE, 2BH, 2BU, 2GB, 2GF, 2GZ, 2HD, 2KO, 2LM, 2MO, 2NZ, 2QN, 2RG, 2SM, 2TM, 2WL, 3GL, 3HA, 3MA, 3SH, 3SR, 3UL, 3XY, 4BC, 4BH, 4BK-AK, 4BU, 4IP, 4MB, 4ZR, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX, 6KG, 6ML, 6GE, 6PR, 7BU, 7DY, 7HT, 7QT.  
 Lustre Hosiery: 2BU, 2GB, 2GF, 2GZ, 2HD, 2KO, 2KY, 2LM, 2MO, 2TM, 2WL, 3GL, 4BC, 4BK-AK, 4BH, 6AM-PM, 6IX-WB, 6ML, 6PR.  
 Mignon Distributors Pty. Ltd.: 4BH.  
 Prestige Ltd.: 2BU, 2GB, 2GF, 2GZ, 2KY, 2LM, 3DB, 3GL, 4BC, 4BH, 4BK-AK, 4GR, 5AD-PI-MU-SE, 5DN, 6IX-WB, 6PR, 7HT.

## Household Utilities.

Alexander, J. B., and Sons (Suprem Polish): 5DN.  
 Armstrong, R. H. and Co. Pty. Ltd. (Stello): 2TM.  
 Brent Wyndham and Co. (Ant Killer): 2GZ, 2TM, 4BH.  
 Bryant and May Pty. Ltd.: 3BA, 3HA, 3SR, 3UL, 5AD-PI-MU-SE, 5DN.  
 Clensel Products Pty. Ltd.: 3HA, 3MA, 3TR, 3SR.  
 Collins Bros. Ltd. (Blankets): 3DB, 4BK-AK, 5AD-PI-MU-SE, 6IX-WB.  
 Farley (Aust.) Ltd. (Vermex): 2BH, 2BU, 3HA, 3PR, 4BC, 6GE, 6IX-WB, 6ML.  
 Fisher Pty. Ltd. (Polishing Wax): 2GZ, 2KO, 2KY, 2LM, 2NZ, 2TM, 2WL, 3GL, 3KZ, 5KA.  
 Flytox: 2GZ, 2KO, 2LM, 2NZ, 6AM-PM, 6IX-WB.  
 Fowlers Vacola Mnf. Co. Ltd.: 5DN, 6WB.  
 Hecht, H. and Co. (Jex): 4BH, 5DN.  
 Johnson, S. C., and Son Ltd. (Glo-coat): 5AD-PI-MU-SE, 6AM-PM.  
 Kill-A-Mite Co. Ltd.: 3SR, 4BC, 4BH, 6AM-PM, 6PR.  
 Kiwi Polish Co.: 4BH, 4BU, 4GR, 4IP, 4MB, 4TO, 7BU, 7HT, 7LA-DY, 7QT.  
 Duncan Preston Ltd. (Kleen Bath): 2SM, 4BH, 6IX-WB, 6ML.  
 Lusteroid Products (Shu-Milk): 2GZ, 4BH, 4GR.  
 McIntosh & Co. (Wunderwax): 3BA, 3UL, 3XY.  
 Mowling, G., and Sons: 3DB.  
 Nettleton Co. Ltd. (Netsonia): 2GZ, 2KO, 2TM.  
 Nightingale Supply Co. Ltd.: 2GZ, 2HD, 2KO, 2LM, 2SM, 2TM, 3HA, 3XY, 5DN, 6AM, 6PR, 7LA.

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## Prominent National Advertisers on the Air during 1938 (contd.)

Nugget Polish Pty. Ltd.: 2BE, 2BH, 2DU, 2GB, 2GF, 2GZ, 2HD, 2KO, 2LM, 2MO, 2NZ, 2QN, 2SM, 2TM, 2WL, 3DB, 3GL, 3HA, 3MA, 3SH, 3SR, 3TR, 3UL, 3XY, 3LB, 4BK-AK, 4BU, 4IP, 4MB, 4SB, 4ZR, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB, 6GE, 6KG, 6ML, 6PR, 7BU, 7LA-DY, 7HT, 7QT.  
 Ovo Pty. Ltd.: 3HA, 3SR, 5AD-PI-MU-SE, 6AM-PM, 6IX-WB.  
 Paget Mnf. Co. (Clever Mary and Shinoleum): 2BH, 2GZ, 2KO, 2LM, 2TM, 3DB, 3HA, 3SR, 3SH, 3TR, 3XY, 4BH, 7LA.  
 Piccanniny Wax Mfg. Co.: 4BC.  
 Presevive Pty. Ltd.: 2GB, 3SR, 3UL, 5AD-PI-MU-SE, 7BU, 7HT.  
 Reckitts Pty. Ltd. (Zebra Stove Polish): 2GZ, 2HR, 2KO, 2TM, 3MA, 3SR, 3UL, 3YB, 6PR.  
 Roseman Brush Pty. Ltd.: 2GN, 2HD, 4BC.  
 Tarzan Grip Mfg. Co. Ltd.: 2TM, 4BU, 4IP, 4MB, 4TO.  
 Taylor, Samuel, Pty. Ltd. (Mortein): 2GZ, 2KO, 2LM, 2NZ, 2TM, 3DB, 3GL, 4BC, 4BH, 5AD-PI-MU-SE, 6AM, 6IX, 6ML, 7HT, 7LA.  
 Vulcanol Co.: 4GR, 4MB, 5AD-PI-MU-SE, 5DN.

## Jewellers.

Omega Watches: 2GN, 2KO, 2LM, 3MA, 3SR, 3UL, 3YD, 4BC, 4BK-AK, 4MB, 5AD-PI-MU-SE, 6KG, 6ML, 6HT.

## Liquor, Cordials, Etc.

Cascade Ale: 2UW, 2KO, 2HT.  
 Cottees Passiona Ltd.: 2CH, 2GB, 2HD, 2KO.  
 Dewar, John, and Sons Ltd.: 2GB, 2GZ, 2KO, 2TM, 3DB, 3HA, 3SR, 3TR, 3XY, 4BC, 6PR.  
 Gilbey, W. and A. Ltd.: 2BH, 2GF, 2KO, 2LM, 2MO, 2NZ, 2TM, 3UL, 4BC-AK, 7BU, 7HT.  
 Gramp, G. and Sons Pty. Ltd. (Orlando Wines): 2HD, 2KY, 2SM, 2TM, 4BK-AK, 5DN, 6IX-WB, 6ML.  
 Hardy, Thomas, and Sons Ltd. (Tintara Wines): 2TM, 3GL, 5DN.  
 Harbottle Brown Pty. Ltd. (G.K. Whiskey): 2HD, 2LM, 2TM, 4BC.  
 King George IV. Whiskey: 2HD, 3GL, 4AY, 4CA.  
 McWilliams Wiles Ltd.: 2GF, 2GN, 2RG, 2UW, 4MB.  
 Mynor Products: 2GZ, 2LM, 2PM, 4BC, 4SB, 4BH.  
 O.T. Ltd. (50-50 Kia-ora): 2CH, 2GZ, 2LM, 2NZ, 2SM, 2TM, 2WL, 3XY, 4BC, 4BH, 4SH, 4TO.  
 Penfolds Wines: 2GB, 3XY, 5DN.  
 Richmond Brewing Co.: 2UW, 3GL, 3HA, 3SH, 3TR, 3XY, 3YB, 6KG.  
 Schwepes Ltd.: 2GZ, 3XY.  
 Seppelt, D. and Sons Ltd.: 2GB, 2GF, 2GZ, 2KO, 2LM, 2NZ, 2SM, 2TM, 5DN, 7LA-DY.  
 Tucker and Co. Ltd. (Chateau Tanunda Brandy): 2GN, 2GZ, 2KO, 2SM, 2TM.  
 United Distillers Ltd. (Corio Whiskey, Old-Court Whiskey, Vickers

Gin): 2GB, 2HD, 2KO, 2SM, 3HA, 3SR, 3UL, 3XY, 3YB, 4BH, 4BK-AK, 4BU, 4GR, 4MB, 4SB, 4TO, 5DN, 6AM-PM, 6IX-WB, 6GE, 6ML.

## Medicines, Medical, Etc.

Australian Chemists Alliance: 2BS, 2DU, 2MG, 2TM.  
 Arnold Bros. (A.B. Tonic Wine): 3SR, 3UL, 3XY, 3YB, 7BU, 7LA-DY.  
 Nicholas Ltd. (Aspro): 2BH, 2GZ, 2ML, 2NZ, 2SM, 3AK, 3KZ, 3XY, 4BC, 4BK-AK, 4MB, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB, 6KG.  
 Associated Sales Ltd. (Shumann Salts): 2GB, 2GZ, 2KO, 2KY, 2SM, 3KZ, 4BC, 4BK-AK, 4MB, 4TO, 4GR, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6IX, 6ML.  
 Bayer Pharma Ltd.: 2GB, 2NZ, 3DB.  
 Beckers Pty. Ltd.: 2BH, 2BU, 2DU, 2GZ, 2HD, 2KO, 2LM, 2NZ, 2SM, 2TM, 4BK-AK, 4BU, 4IP, 4MB, 5AD-PI-MU-SE, 5DN, 5KA, 6AM, 6IX-WB, 6GE, 6KG.  
 Beechams Pills Ltd.: 2HD, 2KO, 3BO, 3XY, 4BK-AK, 5AD-PI-MU-SE, 6IX-WB.  
 Best and Gee Ltd. (Lantogen, 5-in-1 Tooth Paste): 2GB, 2GZ, 2KO, 2LM, 2MG, 2RG, 2TM, 3SR, 3UL, 3YB, 5AD-PI-MU-SE.  
 Bickford, A. N. and Sons Ltd. (Sal Vital): 2SM, 4BK-AK, 4TO, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB, 6KG, 6ML.  
 Bonkora Co.: 2GZ, 2KO, 2KY, 3KZ, 4BC, 5AD-PI-MU-SE.  
 Bunnings Irish Moss: 2GB, 2GZ, 2KO, 2LM, 2TM, 3KZ, 3SR, 3UL, 3XY, 4BC, 4BK-AK, 5AD-PI-MU-SE, 5KA, 6AM, 6IX-WB, 6ML.  
 British Col. and Eastern Chemicals Ltd. (Bartz Salts): 2HD, 2LM, 2TM, 2UW, 2KY, 2WL.  
 Carters Little Pills: 2BE, 2BH, 2BS, 2DU, 2GB, 2GF, 2GN, 2GZ, 2KA, 2KY, 2LM, 2MG, 2NZ, 2SM, 2TM, 2WL, 3AK, 3GL, 3HA, 3KZ, 3MA, 3SH, 3TR, 3SR, 3XY, 4BC, 4BH, 4BK-AK, 4BU, 4IP, 4GR, 4MB, 4TO, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB, 6GE, 6KG, 6ML, 6PR, 7BU, 7LA, 7HT.  
 Cenovis Yeast Pty. Ltd.: 3AK, 3XY.  
 Clements Tonic Pty. Ltd.: 2BH, 2GB, 2GZ, 2HD, 2KY, 2LM, 3KZ, 3MA, 3XY, 4BH, 4BK-AK, 4GR, 4IP, 5AD-PI-MU-SE, 5DN, 5KA, 6IX-WB, 6ML.  
 DeWitt, E. C., and Co.: 2GB, 2KO, 2UW, 3BO, 3DB, 3GL, 3KZ, 3SR, 3UL, 4BC, 5DN, 5KA, 6IX-WB, 7HO-QT, 7LA-DY.  
 Doans Pills: 6IX-WB, 6ML.  
 Douglas Drug Co. (Bidomak): 2AD, 2BH, 2DU, 2GB, 2GF, 2GN, 2GZ, 2HD, 2KO, 2KY, 2LM, 2NZ, 2RG, 2SM, 2TM, 3DB, 3GL, 3KZ, 3MA, 3SR, 3TR, 3UL, 3XY, 3YB, 4BH, 4BK-AK, 4BU, 4GR, 4IP, 4MB, 4TO, 5KA, 5SE, 6AM-PM, 6IX-WB, 6KG, 6PR, 7BU, 7HT, 7DY, 7QT.  
 Eichorn's Remedies Pty. Ltd.: 2GZ, 4BC.

Elliotts and Australian Drug Co.: 2BE, 2GZ, 2KO, 2HD, 2MO, 2NZ, 2TM, 2WL, 2SM, 3DB, 3HA, 3SR, 3SH, 3TR, 4BC, 4BU, 5DN.  
 Eno, J., Pty. Ltd. (Eno's Fruit Salts): 2GF, 2GZ, 2KO, 2NZ, 2TM, 2WL, 2RG, 3DB, 3MA, 4BK-AK, 4BU, 4GR, 4MB, 4TO, 5AD-PI-MU-SE, 5KA, 6IX-WB.  
 Fisher and Co. (Fishaphos and Phospherine): 2GB, 2LM, 2NZ, 2SM, 2WL, 3DB, 3PR, 4BH, 4BK-AK, 4GR, 4MB, 4TO, 5DN, 5KA, 5SE, 6AM, 6IX-WB, 6KG, 6ML, 6PR, 7BU.  
 Hardy's Indigestion Remedy: 2GZ, 2HD, 2UW, 4BC, 4GR, 5AD-PI-MU-SE.  
 Hean's Essence Pty. Ltd.: 2KY, 4BH, 5DN, 6AM-PM.  
 Herco Chemical Co.: 2KY.  
 Head-Aids Co.: 2HD, 2KO, 2KY.  
 Hutuwai Distributing Co.: 2BH, 2GZ, 2HD, 2KO, 2KY, 2LM, 2NZ, 2TM, 2WL, 3GL, 3HA, 3BA, 3KZ, 3SR, 3TR, 4BC, 4BH, 4BU, 4MB, 4TO, 5KA, 6PR, 7BU.  
 Iona Products (Dr. Jenner's Balsam): 3XY, 7HT.  
 Knox Co. (Cystex): 2BH, 2GZ, 2KO, 2TM, 2WL, 4BC, 4BK-AK, 4RO, 4TO, 6PR, 7HO.  
 Kruschen Salts: 2BH, 2GZ, 2LM, 2NZ, 2QN, 2RG, 3SR, 3UL, 3YB, 4GR, 4MB, 4SB.  
 Laxette Mfg. Co.: 2GZ, 2SM, 4GR, 5AD-PI-MU-SE, 6AM-PM, 6ML.  
 Junipah Mineral Spring Salts: 2BH, 2BS, 2GZ, 2KO, 2KY, 2TM, 3GL, 3MA, 3XY, 4BC, 4BU, 4GR, 4IP, 4MB, 4RO, 5AD-PI-MU-SE, 6AM-PM, 6IX, 6PR, 7HT.  
 Rhu Pills Ltd.: 2BH, 2GZ, 2KO, 3BA, 3HA, 3SR, 3PR, 3ZY, 5AD-PI-MU-SE, 5DN.  
 Roche Thompson and Co. Pty. Ltd.: 2BH, 5AD-PI-MU-SE.  
 Saunders Malt Extract: 3SR, 4BH, 5DN, 7HT.  
 Scott and Bowne Pty. Ltd. (Scotts Emulsion): 2KO, 2SM, 5AD-PI-MU-SE, 7HT.  
 Sheldon Drug Co.: 2BE, 2KO, 2KY, 2SM, 2TM, 3BA, 3BO, 3KZ, 3SR, 4AY, 4BK-AK, 4BH, 4BU, 4CA, 4RO, 6AM-PM, 7BU, 7HT.  
 Stearns, Frederick, and Co. (Nyall Products): 2BH, 2GB, 2GZ, 2KO, 2LM, 2NZ, 2TM, 3HA, 3MA, 3SR, 3TR, 4BC, 4BU, 4IP, 4TO, 4MO, 5AD-PI-MU-SE, 5KA, 6IX-WB, 6PR, 7HO, 7HT, 7LA.  
 Thermo Ray Institute: 2GZ, 4BC.  
 Twin Soda Laboratories: 2BH, 2DU, 2GZ, 2HD, 2KY, 2LM, 2MG, 2MO, 2NZ, 2TM, 2WL, 3GL, 4GR.  
 Vincent Chemical Co.: 2BE, 2BS, 2CK, 2DU, 2GF, 2GN, 2GZ, 2HD, 2KO, 2KY, 2LM, 2MG, 2MO, 2NZ, 2SM, 2TM, 2WL, 2RG, 3XY, 4BC, 4BH, 4BK-AK, 4BU, 4GR, 4MB, 4TO, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 7BU, 7HT, 7LA-DY, 7QT.  
 Wawn's Wonder Wool: 2GB, 3KZ, 4BH.

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Prominent National Advertisers on the Air during 1938 (contd.)

Woods, W. E., Ltd. (Woods Great Peppermint Cure): 2GB, 2KO, 2SM, 2TM, 3DB, 3KZ, 3SR, 3UL, 3XY, 3YB, 4AY, 4BH, 4BC, 4GR, 4MB, 4TO, 5OD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB.

**Paints, Lacquer, Builders' Materials**  
B.A.L.M.: 2BE, 2BH, 2DU, 2GF, 2GZ, 2HD, 2KO, 2KY, 2LM, 2NZ, 2SM, 2TM, 2RG, 3BA, 3GL, 3MA, 3SR, 3KG, 3TR, 3XY, 4AY, 4BC, 4BK-AK, 4BU, 4CA, 4GR, 4MB, 4RO, 4TO, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB, 6KG, 6PR, 7BU, 7HT, 7LA-DY, 7QT.

Berger, Lewis and Sons (including Sherwin Williams Paints): 2GB, 2GZ, 2KO, 2LM, 2SM, 2TM, 3DB, 3GL, 3KZ, 3TR, 4BC, 4BK-AK, 4BU, 4CA, 4MB, 4RO, 4TO, 5AD-PI-MU-SE, 6AM, 6IX-WB, 6GE, 7LA.

Fergusson, Alexander: 3DA, 3XY.  
Major Bros. and Co.: 2GZ, 2HD, 2NZ, 3HA, 3SH, 3SR, 5AD-PI-MU-SE, 5KA, 6IX-WB.

Sterling Varnish Co.: 2HD.  
Taubmans Ltd.: 3DB, 3KZ, 3SR, 4BC, 4BK-AK, 5AD-PI-MU-SE, 5DN, 7BU, 7HT, 7LA.

Taylor's Paints Pty. Ltd.: 2GZ, 2HD, 2PK, 2TM.

**Petrol, Oils, Etc.**

Alba Petroleum Co.: 3DB, 3HA, 3MA.  
Atlantic Union Oil Co.: 2BE, 2BS, 2DU, 2GF, 2GN, 2GZ, 2LM, 2MO, 2NZ, 2TM, 3YB.

Australian Motorists Petrol Co. Ltd. (A.M.P.): 2BE, 2GB, 2GZ, 2KO, 2KY, 2HD, 2LM, 2TM, 2WL.

Commonwealth Oil Refineries Ltd. (C.O.R.): 2GZ, 2TM, 3GL, 3HA, 3SR, 4BU, 4GR, 4IP, 4MB, 4ZR, 6AM, 6IX, 6KG, 7BU, 7HT, 7LA-DY, 7QT.

Independent Oil Industries Pty. Ltd. (Purr Pull): 2KY, 4BH, 4BK-AK.

Kerosene Development Board: 2BS, 2MG.

Neptune Oil Co.: 2BE, 2GN, 2GZ, 2KO, 2RG, 2TM, 3HA, 4BC, 4BK-AK, 4MB, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6KG, 6ML, 6PR, 7BU, 7HT.

Pacific Oil Co.: 3AK, 3MA, 3XY.

Pennsylvanian Oils (A/sia) Ltd.: 2BS, 2TM.

Shell Co. of Australia Ltd.: 2BE, 2BH, 2BS, 2GB, 2GF, 2GN, 2GZ, 2DU, 2HD, 2HR, 2KO, 2KY, 2LM, 2MO, 2NZ, 2QN, 2SM, 2TM, 2WL, 3AK, 3BO, 3DB, 3GL, 3HA, 3KZ, 3MA, 3SH, 3SR, 3TR, 3UL, 3XY, 3YB, 4BH, 4BK-AK, 4BU, 4GR, 4MB, 4TO, 4ZR, 5DN, 5KA, 6AM-PM, 6KG, 6GE, 6ML, 6PR, 6WB, 7BU, 7HT, 7LA-DY, 7QT.

Sleigh, H. C. (Golden Fleece): 2KO, 2SM, 2WL, 3BA, 3MA, 3TR, 5AD-PI-MU-SE, 5DN, 5KA.

Texas Co. (A/sia) Ltd.: 4MB, 4ZR, 6KG, 6GE, 6WB, 7BU.

Vacuum Oil Co. Pty. Ltd.: 2BE, 2BH, 2GB, 2GF, 2GN, 2GZ, 2DU, 2HD, 2KO, 2LM, 2MG, 2NZ, 2TM, 2WL, 3AK, 3GL, 3HA, 3KZ, 3MA, 3SH, 3SR, 3TR, 3XY, 4BK-AK, 4GR, 4BC, 4BU, 4IP, 4MB, 4TO, 4ZR, 5AD-PI-MU-SE, 5KA, 6AM-PM, 6GE, 6IX-WB, 6KG, 6ML.

Carrigan J. (Valvoline Oil): 2BH, 2GZ, 2HD, 2TM.  
Wakefield, C. C. and Co. Ltd. (Castrol): 6AM, 6IX, 6ML.

**Publications.**

Argus and A/sian Ltd., Melbourne: 3SR, 3UL.

Associated Newspapers Ltd., Sydney: 2GF, 2GZ, 2KO, 2KY, 2NZ, 2TM, 3BA, 3MA, 4BC, 4BH, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6IX-WB, 6ML.

Consolidated Press Ltd. (Australian Women's Weekly): 3BA, 3HA, 3KZ, 3MA, 3SR, 3UL, 3YB, 3XY, 4BC, 4BH, 4MB.

Smith's Newspapers Ltd. (Smith's Weekly): 2BH, 2GZ, 2KO, 2LM, 2PM, 3HA, 3KZ, 3MA, 3SR, 3XY, 4BC, 4MB, AD-PI-MU-SE, 5KA, 6AM, 6IX-WB, 7BU, 7DY, 7HT, 7QT.

Truth and Sportsman Ltd.: 2DU, 2GF, 2MG, 2NZ, 4BC.

**Radio, Music, Etc.**

Airzone: 2GN, 6AM-PM, 7HO, 7HT.

Allan and Co. (Music Warehouse): 3BO, 3HA, 3SH, 3PR, 5AD-PI-MU.

Amalgamated Wireless Valve Co. Ltd. (Radiola): 2DU, 2MG, 2PK, 2SM, 3HA, 3SR, 3XY, 4BH, 4IP, 5AD-PI-MU-SE, 6AM, 6PR, 7LA-DY.

Amalgamated Wireless Valve Co.: 2BH, 2GF, 2GN, 2HD, 2KO, 2LM, 2MO, 2TM, 3HA, 3SR, 3TR, 3UL, 4BC, 4BU, 4TO, 5AD-PI-MU-SE, 6AM-PM, 6PR, 7BU, 7DY, 7QT.

B.G.E.: 2BE, 2GF, 2GZ, 2MG, 2MO, 2RG, 3SR, 6AM, 6ML, 6WB.

Chandler, J. B. Pty. Ltd.: 2GZ, 4AY, 4BH, 4BU, 4CA, 4GR, 4MB, 4RO, 4TO.

Electricity Meter and Allied Industries Ltd. (Philco Radio): 2GF, 2GN, 2GZ, 2SM, 3DB, 3KZ, 3SR, 4BC, 4BH, 6IX-WB.

"H.M.V." Radio: 4BC, 7BU, 7LA, 7QT.

Hawaiian Clubs: 2MO, 2NZ, 2TM, 3BA, 3DB, 3HA, 4MB.

Healing, A. G., Ltd.: 3XY, 3YB.

Howard Radio Pty. Ltd.: 3HA, 3SR, 3YB, 7HT.

Kriesler Aust. Pty. Ltd.: 3KO, 6GE.

Paling, W. H., and Co. Ltd.: 2BE, 2HR, 4BC.

Phillips Lamps (A/sia) Pty. Ltd. (Radio Valves and Lamps): 2BE, 2GF, 2GB, 2GZ, 2KO, 2NZ, 2QN, 2TM, 2WL, 3HA, 3MA, 6AM-PM, 6GE, 6KG, 6WB, 7BU, 7HT.

Sheffe College of Music: 4BC, 4BH, 5KA.

Stromberg-Carlson (A/sia) Pty. Ltd.: 3HA, 5DN, 6ML, 6WB, 7LA, 7QT.

Thom and Smith Ltd. (Tasma Radio): 2NZ, 4BC, 4GR.

**Sport Requisites.**

Alexander Patent Raquet Co.: 3MA.  
Slazengers (Aust.) Pty. Ltd.: 2SM.  
Charters Ltd. (Eversharp Pencils, Etc.): 2DU, 2GZ, 2HD, 2KO, 2LM, 2MG, 2NZ, 2TM, 3DB, 3BC, 6IX-WB.

Conklin Pen Co.: 2GB, 4BH, 5KA.

**Stores.**

Coles, G. J. and Co. Pty. Ltd.: 5DN, 6AM-PM, 7BU.

Cox Bros.: 3DB, 5KA, 6AM-PM, 6GE, 6IX-WB, 6KG, 7HT.

Edments Pty. Ltd.: 3HA, 3XY, 5AD-PI-MU-SE, 6ML, 6PR, 7HT.

Fosseys Pty. Ltd.: 2BE, 2BS, 2GN, 2MG, 2WL.

Maples Pty. Ltd.: 3BA, 3BO, 3GL, 3HA, 3KZ, 3MA, 3SR, 3TR, 3XY, 3YB.

Morley Johnsons Ltd.: 2GB, 2KY, 3BO.

Patersons Pty. Ltd. (including Pears Pty. Ltd., and Richmond Furnishing Co.): 2QN, 3BA, 3DB, 3HA, 3KZ, 3MA, 3SH, 3SR, 3UL, 3XY, 3YB.

Woolworths Ltd.: 2KY, 2TM, 4MB, 6PR.

**Tailors, Wearing Apparel, Etc.**

**Textiles.**

Berlei Ltd., 2GB, 2GZ, 2KO, 2LM, 3HA, 3XY, 4BC, 4BK-AK, 5AD-PI-MU-SE, 5DN, 6KG, 6PR.

Crundall's Ltd. (Black Lance Swim Suits): 2SM, 3XY.

Hardie Rubber Co. (Raincoats, Sandshoes, etc.): 2GZ, 2HD, 2KO, 3DB, 3DR, 3XY, 6AM.

Hendersons Hats: 7HO, 7LA.

Hollins, Wm. & Co. Ltd. (Rittso Shirts and Viylla Yarn): 2BH, 2GZ, 2KO, 2LM, 2TM, 3UL, 5AD-UI-MU-SE, 7HT.

King Gee Clothing Co. Ltd.: 2HD, 2WL, 4BC.

Murray D. & W. Ltd. (Gripu Trousers, etc.): 2DU, 2GN, 2GZ, 2KO, 2TM, 2WL, 3DB, 3HA, 3MA, 3SR, 3XY, 4BH, 4BU, 4TO, 7BU, 7DY, 7QT.

Patterson Laing & Bruce (Bramac Coats, etc.): 2LM, 2NZ, 2WL.

Pelaco Ltd.: 2KO.

**Textiles.**

Sargood Gardiner Pty. Ltd. (Top Dog): 7HT.

Alexandria Spinning Mills Ltd. (Sun-Glo): 2KO, 2TM.

Felt & Textiles of Australia Ltd.: 2GZ, 2KO, 2SM, 2TM, 3GL, 4BC, 4BK-AK, 5AD-PI-MU-SE, 5DN, 5KA, 6IX, 6ML, 6PM, 6PR.

Kelsall & Kemp Ltd. (Dr. Flannel): 2GB, 3DB, 4BC, 5AD-PI-MU-SE, 6PR.

Paton & Baldwins (Knitting Wool): 2GB.

Phillips Knitting Mills: 3KZ, 4BK-AK, 5DN, 6IX-WB.

Walton F. S. & Co. Ltd. (Cesarine & O.B. Leader Sheets): 2DU, 2GB, 2GZ, 2LM, 2NZ, 2TM, 3SR, 4BH.

**Tobacco, Cigarettes, Etc.**

Carreras Ltd.: 3DB, 3SR, 5AD-PI-MU-SE, 6ML, 6WB.

Dudgeon & Arnell (Perfection Tobacco): 3BO, 3DB, 3GL, 3HA, 3TR, 3XY, 5DN.

Godfrey Phillips (Australia) Ltd.: 2GB, 2GZ, 2KO, 2LM, 2NZ, 2TM, 3BA, 3DB, 3HA, 3KZ, 3SR, 3XY, 3YB, 4BC, 4BH, 4BK-AK, 5AD-PI-MU-SE, 5DN, 6AM, 6IX-WB, 6KG, 6ML, 6PR, 7BU, 7HT.

Prominent National Advertisers on the Air during 1938 (contd.)

Gollin & Co. Pty. Ltd. (Zig-Zag Cigarette Papers): 2GZ, 2HD, 2KO, 2SM, 4BK-AK, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB, 6PR.

Hunt, J. E., & Co. Pty. Ltd. (Boomerang Cigarette Papers): 3MA, 7LA.

Wills, W. D. & H. O. (Aust.) Ltd.: 2BH, 2DU, 2GF, 2GN, 2HD, 2KO, 2KY, 2LM, 2MG, 2MO, 2RG, 2SM, 2TM, 2WL, 3DB, 3HA, 3KZ, 3MA, 3SR, 3TR, 3XY, 3YB, 4BC, 4BH, 4BK-AK, 4MB, 5AD-UI-MU-SE, 5DN, 5KA, 6IX-WB, 6ML, 6PR, 6GE, 7BU, 7HO, 7LA, 7QT.

**Toilet Requisites.**

Bristol Myers Co. Pty. Ltd. (Ipana Tooth Paste): 2GB, 2KY, 2WL, 3DB, 3XY, 4BC, 4BK-AK, 5AD-PI-MU-SE, 6AM-PM, 6IX-WB, 6PR, 7QT.

Colgate Palmolive Pty. Ltd.: 2DU, 2GB, 2GF, 2GZ, 2HD, 2KO, 2KY, 2MG, 2NZ, 2SM, 2TM, 2WL, 3DB, 3GL, 3HA, 3KZ, 3TR, 3UL, 3XY, 4BC, 4BH, 4GR, 4TO, 4ZR, 5AD-PI-MU-SE, 5DN, 6AM-PM, 6IX-WB, 6PR, 6KG, 7HT.

Faulding, F. H., & Co. Ltd.: 2KO, 2KY, 4BC, 5AD-PI-MU-SE, 5DN, 5KA, 6AM-PM, 6IX-WB, 6KG, 6ML, 6PR.

Hoffnung, S. S., & Co., Ltd. (Gem Blades, etc.): 2GZ, 2KO, 2SM, 2WL, 3DB, 4BC, 5AD-PI-MU-SE, 6AM, 6IX-WB, 6ML.

Kolynos Inc.: 3TR, 4BC, 6IX-WB.

Johnson & Johnson (Tek Toothbrushes): 2KY, 5AD-PI-MU-SE, 6AM-PM, 7HT.

Lambert Pharmaceutical Co. (Listerene): 2KO, 2SM, 3DB, 3GL, 4BK-AK, 5AD-PI-MU-SE, 6ML, 7BU.

Lever Bros. Pty. Ltd.: 2BH, 2GZ, 2KO, 2LM, 2TM, 2WL, 3DB, 3HA, 3KZ, 3MA, 3SR, 3TR, 3UL, 4BC, 4BH, 4BK-AK, 4MB, 5AD-PI-MU-SE, 5DN, 5KA, 6AM, 6IX-WB, 6KG, 6ML, 7BU, 7HT, 7LA.

Woods, W. E., Ltd. (Nivea Cream): 2GZ, 4SB, 3MB, 4ZR.

Pepsodent Co. (Aust.) Pty. Ltd.: 2GB, 2HD, 3DB, 3KZ, 3XY, 4BC.

Petersen, Valdemar (Pyrex Tooth Powder): 4BC.

Spink, David (Swing Razor Blades): 3AK, 6IX-WB.

Spruso Co.: 2GF, 2GN, 2GZ.

Squibb, E. R., & Sons: 2GB.

Williams, Clinton, Pty. Ltd.: 2DU, 2GB, 3DB, 3HA, 4BC, 4BK-AK, 5AD-PI-MU-SE, 5KA, 6IX-WB, 7HT.

**Toys.**

Cyclops Toys Pty. Ltd.: 2KO, 2KY.  
Meccano Ltd.: 2GN, 2LM, 2SM, 3GL, 3MA, 3TR, 3XY, 3YB, 4BH, 4MB, 5AD-PI-MU-SE, 5DN, 6IX, 6KG.

**Travel Goods, Tours, Hotels, Etc.**

Australian National Airways: 3LA.  
Ansett Airways: 2GB, 3HA, 3XY.  
Commonwealth Government Railways: 6KG.

Ford Sherrington Ltd.: 6PM.  
McDonald Hamilton & Co.: 7QT.

Orient Steam Navigation Co. Ltd.: 2GF, 2GN, 2GZ, 2HD, 2KO, 2MO, 2WL, 3SR, 4BC, 4MB, 4GR, 5AD-PI-MU-SE, 6AM, 6ML, 6PR, 7BU, 7LA, 7QT.

P. & O. Steam Navigation Co. Ltd.: 5AD-PI-MU-SE, 7BU.

Pioneer Tourist Bureau: 2BE, 2SM, 3DB, 3GL, 3KZ, 5DN.

Queensland Government Tourist Bureau: 2BH, 2GN, 2HD.

Victorian Government Tourist Bureau: 2GB, 2KO, 3MA, 3SR, 3XY, 4BC, 4BH, 5AD-PI-MU-SE, 5DN, 6IX, 7HT.

Victorian Coffee Palace, Melbourne: 2GZ, 2NZ, 3SR, 5DN, 7BU.

Types of Program for Broadcast Advertising used by Leading National Advertisers during 1938

Advertiser	Product	Type of Program	Agency
Allen, A. W., Ltd.	Confectionery	L.A., Mus., Ann.	Mooney Webb
A.W.A.	Radiola, Valves	L.A., Tr., Ann.	A.W.A.
Arnotts, Wm., Ltd.	Biscuits	Mus., Ann.	J. B. Percival
Associated Newspapers	Publications	Ann.	Samson Clark, Price-Berry
Atlantic Union Oil	Petrol, Oil	Tr., Ann.	Goldberg Advtg. Agency
A.G.E.	Wireless and Elect.	Tr.	Hansen Rubensohn
A.M.P. Petrol	Petrol	Ann.	Hartford Advtg.
A. K. Mills	Hostery, Lingerie	Ann.	Goldberg Advtg. Agency
Beau Monde (Aust.) Ltd.	Hosiery	L.A., Tr., Mus., Ann.	Mooney Webb
Beckers Ltd.	A.P.C.	Tr., Mus., Ann.	Weston Co.
Beechams Pills	Pills	Tr., Mus.	A.W.A.
Berger, Lewis, & Sons Ltd.	Paints	Tr., Ann.	Weston Co.
Berlei Ltd.	Corsets	Ann.	Catts Patterson
Berry, Henry, & Co.	Groceries	L.A., Ann.	Gordon & Gotch
Bickford, A. M. & Sons Ltd.	Sal Vital	Ann.	Geo. Patterson
Bonkora Co.	Medicine	Mus., Ann.	Hansen Rubensohn
Bonnington & Co.	Cough Medicine	Ann.	J. Walter Thompson
Brico (Aust.) Ltd.	Piston Rings	Mus., Ann.	Hawkins Advtg.
Brockhoff, A. F., & Co.	Biscuits	Tr., Mus., Ann.	Goldberg Advtg. Agency
Bristol Myers Co. Pty. Ltd.	Ipana Toothpaste	Ann.	L. V. Bartlett Ltd.
B.A.L.M.	Paints	Tr., Ann.	Samson Clark, Price-Berry
B.G.E.	Electrical, Radio	Tr., Ann.	Transradio
Bryant & May	Matches	L.A., Tr., Ann.	Marsh Pty. Ltd.
Bushells Ltd.	Tea	Tr., Mus., Ann.	J. Walter Thompson
Bush, W. J. & Co.	Ponds Cream	Tr., Mus., Ann.	C. Mitchell & Co., London
Fassett & Johnson	Carters Liver Pills	Ann.	Geo. Patterson
Carreras Ltd.	Tobacco, Cigarettes	L.A., Tr.	A. N. White
Champion Vinegar Co.	Vinegar	Ann.	J. Walter Thompson
Consolidated Press	Publications	Ann.	Catts Patterson
Chartres Ltd.	Stationery	Tr., Ann.	Transradio & Geo. Patterson
Clements Tonic	Medicine	Tr., Ann.	Geo. Patterson
Colgate-Palmolive Pty. Ltd.	Toilet Requisites & Cosmetics	L.A., Tr., Mus., Ann.	Hartford Advtg.
Clinton Williams	Medical	Tr., Ann.	Catts Patterson
C.O.R.	Petrol, Oil	L.A., Mus., Ann.	

(Continued next page)

Types of Program used by Leading National Advertisers (contd.)

Sponsor	Product	Types of Program	Agency
Connell, John, & Co. Ltd.	Groceries	L.A., Tr., Mus.	N. V. Nixon
Cox Bros.	Departmental Stores	L.A., Tr.	Richardson Cox
Cyclone Fence & Gate Co.	Wire Fences	Ann.	Samson Clark, Price-Berry
Dewar, John, & Sons Ltd.	Whisky	L.A., Tr., Ann.	Geo. Patterson
De Witt, E. C., & Co.	Pills & Indigestion Remedy	Tr., Ann.	W. H. Emmett & Co. (London)
Douglas Drug Co.	Bidomak	L.A., Tr., Ann.	Unsted Jackson Haines Ltd.
Dunlop Perdriau Rubber Co.	Tyres, Rubber Goods, etc.	Tr., Ann.	Goldberg Advtg. Agency
Electricity Meters & Allied Industries	Philco Radio	L.A., Ann.	Geo. Patterson
Elliotts & Aust. Drug Co.	Medical	L.A., Tr., Mus., Ann.	Transradio
Edments Ltd.	Department Stores	L.A., Tr., Ann.	Mooney Webb
Eno, J. C., & Co. Ltd.	Eno's Fruit Salts	Ann.	T. B. Browne Ltd.
Eve Ready Battery Co. Ltd.	Batteries	Tr., Ann.	Thompson & Assoc. & Goldberg Advtg. Agency
Exide Batteries	Batteries	L.A., Tr., Ann.	Catts Patterson
Farley, E. O.	Vermex	Tr., Ann.	Aerial Publicity
Faulding, F. H., & Co. Ltd.	Toilet Requisites	Mus., Ann.	Alan A. Martin (Adelaide)
Fishers Wax	Floor Wax	L.A.	A. J. Williams (Perth)
Fisher & Co.	Phosphorine, etc.	Ann.	Richardson Cox
Felt & Textiles of Aust. Ltd.	Floor Coverings	Tr., Ann.	J. B. Percival
Flytox Co.	Insect Spray	Ann.	Goldberg Advtg. Agency
Postars Shoes	Footwear	L.A., Tr., Mus., Ann.	Willmott Advtg. Agency
Gilbey, W. & A., Ltd.	Liquor	Mus., Ann.	A.W.A.
Gollin & Co.	Cigarette Papers, etc.	Ann.	O'Brien Publicity Co.
Godfrey Phillips	Tobacco, Cigarettes	L.A., Tr., Ann.	Williams McFerran
Gramp, G., & Sons Ltd.	Orlando Wines	Tr., Ann.	Goldberg Advtg. Agency
Griffiths Hughes	Kruschen Salts	Tr., Ann.	Catts Patterson
Hardie Rubber Co.	Rubber Goods	Tr., Ann.	
Hodgson & Co.	Ally Salmon	L.A., Mus., Ann.	T. B. Browne Ltd.
Hoffnung, S. S., & Co.	Gem Blades, etc.	Ann.	Weston Co.
Hollins, Wm., & Co. Ltd.	Viyella & Ritzo	Mus., Ann.	Goldberg Advtg. Agency
Horlicks Ltd.	Malted Milk	Ann.	J. Walter Thompson
Hutuwai Dist. Co.	Tonic	L.A., Tr., Mus., Ann.	Becket-Thompson
Inglis & Co.	Goldenia Tea	Ann.	Weston Co.
Johnson & Johnson	Tek Toothbrushes	Mus., Ann.	Willmott Advtg. Agency
Kayser, Julius (Aust.) Pty. Ltd.	Hosiery, Lingerie	Tr., Ann.	Samson Clark, Price-Berry
Kelloggs (Aust.) Ltd.	Breakfast Food	L.A., Tr., Ann.	J. Walter Thompson
Kelsall & Kemp	Doctor Flannel	L.A., Tr., Mus.	
Kiwi Polish Co.	Boot Polish	L.A., Mus., Ann.	Geo. Patterson, Noble Bartlett
Knox Co.	Cystex	L.A., Tr., Ann.	Geo. Patterson
Kraft Walker Cheese Co.	Cheese, Foodstuffs	L.A., Tr., Ann.	J. Walter Thompson
Lantigen	Inc. 5-in-one Toothpaste	Mus., Ann.	Unsted Jackson Haines Ltd.
Lambert Pharmacal Co.	Listerine	Tr., Mus., Ann.	Weston Co.
Laxette Co.	Medical	L.A., Tr., Ann.	Samson Clark, Price-Berry
Lever Bros. Ltd.	Soaps	Ann.	J. Walter Thompson
Life Savers Ltd.	Confectionery	L.A., Tr., Ann.	Paton Advtg.
Lustre Hosiery Ltd.	Hosiery	L.A., Ann.	Geo. Patterson
Major Bros. & Co. Ltd.	Paints	Ann.	L. V. Bartlett Ltd.
MacRobertsons Ltd.	Confectionery	L.A., Tr., Mus., Ann.	Geo. Patterson
M.U.I.O.O.F.	Nat. Insurance	Tr., Ann.	Weston Co., Mooney Webb
Maples Ltd.	Furniture	L.A., Tr.	
Masse Batteries Pty. Ltd.	Car Batteries	L.A., Ann.	Catts Patterson
Meccano Ltd.	Toys	L.A., Ann.	Catts Patterson
Meggitts Ltd.	Stock Foods	Mus., Ann.	Samson Clark, Price-Berry
Moffatt Virtue Ltd.	Farm Machinery	Tr., Ann.	Anivitti-Schey
Murray, D. & W., Ltd.	Grip-U Trousers	Tr., Ann.	F. P. Leonard
Nestles & Anglo Swiss Milk Co.	Confectionery, Milk, etc.	L.A., Tr., Ann.	Goldberg Advtg. Agency
New South Wales Mont de Piete	Financiers	Tr., Ann.	Weston Co.
Nicholas Ltd.	Aspro	Tr., Ann.	Gothams, Goldberg Advtg.
Nightingale Supply Co.	Insect Spray	Tr., Mus., Ann.	Aerial Publicity
Nugget Polish Co.	Boot Polish	L.A., Tr., Mus., Ann.	Samson Clark, Price-Berry
Nut Foods Pty. Ltd.	Jellex	Mus., Ann.	Unsted Jackson Haines Ltd.
Neptune Oil Co.	Petrol, Oil	L.A., Tr., Mus., Ann.	Griffiths Huse
Omega Watches	Jewellery	L.A., Ann.	T. Tracy Advtg.
Orient Steam Navigation Co.	Cruises, etc.	Ann.	Geo. R. Hyam
O.T. Ltd.	Solft Drinks	L.A., Ann.	
Paget Mnftg. Co.	Clever Mary and Shinoleum	Tr., Mus., Ann.	Hansen Rubensohn
Patersons Pty. Ltd.	Furniture	L.A., Tr., Ann.	Beresford Kingsbury
P. & O. Steam Navigation Co.	Cruises, etc.	Ann.	Arthur Smythe & Sons
Peters American Delicacy Co.	Ice Cream	L.A., Tr., Mus., Ann.	Hansen Rubensohn
Phillips Lamps (A/sia) Pty. Ltd.	Radio, Lamps, etc.	Tr., Ann.	Weston Co.
P.M.U. Condiment Co.	Sauces, etc.	Ann.	Goldberg Advtg. Agency
Potter & Birks Ltd.	Junipah Salts	Tr., Ann.	Catts Patterson; V. Freeth.
Prestige Ltd.	Hosiery	Ann.	A.W.A.
Purina Grain Foods	Weeties	L.A., Tr., Mus., Ann.	A. N. White
Reckitts Ltd.	Zebra Stove Polish	Mus., Ann.	Goldberg Advtg. Agency

Types of Program used by Leading National Advertisers (contd.)

Rhu Pills	Medical	Tr., Mus., Ann.	Gotham (Aust.) Ltd.
Rosella Preserving Co. Ltd.	Food-stuffs	L.A., Ann.	Williams McFerran
Rural Bank of N.S.W.	Banking	Tr., Mus., Ann.	Gotham (Aust.) Ltd.
Sanitarium Health Foods	Marmite, Cerex, etc.	L.A., Tr., Mus., Ann.	Catts Patterson
Schumann Salts	Medical	Tr., Mus., Ann.	Hansen Rubensohn
Seppelt, B. Ltd.	Wines	Tr., Mus., Ann.	Gotham (Aust.) Ltd.
Sheldon Drug Co.	Eucalyptus	Tr., Mus., Ann.	Pacific Ad. Service
Shell Co. of Aust.	Petrol, Oil	L.A., Tr., Ann.	
H. C. Sleigh Ltd.	Golden Fleece Motor Spirit	L.A., Tr., Ann.	Claude Mooney
Small, Bruce, Pty. Ltd.	Bicycles	L.A., Tr., Mus., Ann.	Goldberg Advtg. Agency
Smith's Newspapers Ltd.	Publications	Ann.	J. Walter Thompson
Stearns, Frederick & Co. Ltd.	Nyal Products	Tr.	Hansen Rubensohn
Stedman-Henderson Sweets	Throaties, etc.	Tr., Ann.	Willmott Advt. Agency
Stromberg-Carlson	Radio	Tr., Mus.	Gordon & Gotch
Swallow & Ariell	Biscuits, Puddings	L.A., Tr., Ann.	O'Brien Publicity Co.
Taylor, Samuel Pty. Ltd.	Mortein	Tr., Mus., Ann.	Hansen Rubensohn
Taubmans Ltd.	Paints	Mus., Ann.	J. Walter Thompson
Texas Oil Co.	Petrol, Oil	Tr., Ann.	Catts Patterson
"Truth and Sportsman"	Publications	Tr., Ann.	Willmott Advtg. Agency
United Distillers Ltd.	Liquor	Ann.	Goldberg Advtg. Agency
Vacuum Oil Co.	Petrol, Oil	Tr., Ann.	Samson Clark, Price-Berry
Victorian Gov. Tourist Bureau	Travel	Tr., Mus.	Paton Advtg. Service
Vincent Chemical Co.	A.P.C.	Tr., Ann.	Paton Advtg. Service
Walton, F. S.	Cesarine, and O.B. Leader Sheets	Ann.	Marsh Pty. Ltd.
Widdis Diamond Dry Cells	Dry Batteries	Tr., Ann.	Transradio
Wills, W. D. & H. O.	Tobacco, Cigarettes	L.A., Tr., Mus., Ann.	Thompson & Associa., and Goldberg Avtg. Agency
Woods, W. E. Ltd.	Peppermint Cure and Nivea Cream	Tr., Mus., Ann.	A.W.A.
Wrigleys (Aust.) Ltd.	Confectionery	Tr.	Gotham (Aust.) Ltd.
			J. Walter Thompson

RADIO LISTENER CLUBS

Following are the names of well-known listener clubs associated with various commercial broadcasting stations throughout Australia. All radio listener clubs are not necessarily included, the information being extracted from completed questionnaires returned from the stations.

A1 Club	5KA Happiness Club	2GB Radio Service Club	2KA
Amazons Club	3MA Happiness Club	3KZ Radio Social Club	2MG
Area Sunbeamers	2RG Happy Companions' Club	2CH Radio Youth Club	2GB
Auburn Club	4MB Happy Hour Club	6AM-PM Smile Club	2CH
Australian Women's League	2CH Home Circle Club	5PI Smile Club	2MW
Birthday League	3AK Homecraft Club	5SE Smile Club	3BO
Blue Birds Club	3BA Home Makers Club	2CH Smile Club	4TO
Bobby Bear Club	3UZ Joy Club	2HD Smilers' Club	2BH
Boys' Club	2CA Joy Club	6GE Smilers' Club	2MO
Boys' Club	3YB Joyster Club	2HD Smiles Club	4IP
Boys' Club	7LA Junior Country Service Club	2GZ-NZ Smile-away Club	3DB
Breakfast Club	3AW Kangaroo Club	5AD-PI-MU-SE Stamp Club	4BK-AK
Breakfast Club	3UL Kipling Boys' Club	5DN-RM Sunpolishers' Club	7BU
Breakfast Club	3YB Kiwi Club	4TO Sunpolishers' Club	7DY
Bridge Club	4BH Kiwi Club	7HT Sunraysia Club	3MA
Busy Bees Club	2AD Koala Club	2BE Sunshine Club	2RG
Call to Youth Club	2UE Koala Club	2PK Sunshine Club	3HA
Chatterbox Corner Chums	3AW Koala Club	3TR Sunshiners' Club	7HT
Cheerio Club	2KO Kookaburra Club	7UV Tailwaggers' Club	2WL
Cheerio Club	2QN Kookaburra Club	2BS Tailwaggers' Club	6PR
Cheerio Club	3UL Kookaburra Club	4BH Waggon Wheels Club	2DU
Cheerio Club	6GE League of Young Airmen	7EX Women's Association	3AW
Children's Glee Club	2WG Listeners' League	2BE Women's Association	7EX
Children's Smile Club	2GF Listeners' League	3AK Women's Association	7HT
Children's Smile Club	4WK Look Up and Laugh Club	3UZ Women's Association	7LA
Commander Singing Club	4TO Lone Ranger Club	4BH Women's Club	2QN
Country Service Club	2GZ Merrymakers' Club	3SH Women's Club	2WG
Country Service Club	2NZ Merrymakers' Club	5KA Women's Club	3CV
Fishermen's Club	3XY Merrymakers' Club	7LA Women's Club	3HA
Friendly Circle	3UL Night Owls' Club	2CA Women's Club	3SH
Friendship Circle	3BA Old King Cole's Court	3GL Women's Club	3TR
Friendship Circle	3KZ Pals' Children's Club	3XY Women's Club	4TO
Friendship Club	2WL Pals' Club	4BC Women's Correspondence Club	2AD
Gardening League	7EX Pals' Club	7HO Women's Home Forum Club	3BO
Good Companions' Club	2LM Possum Club	2TM Women's League	2CH
Good Companions' Women's Club	3XY Pyjama Parade Club	2MO Women's Radio Club	2TM
Grub Club	3UZ Radio Club	2HR Women's Theatre Circle	7HO
Gumnut Club	2KM Radio Correspondence Club	2KO Younger Set Club	3CV
		2GB 7EX Army	2CA
			7EX

## Manufacturers and Suppliers of Broadcasting Station Equipment

### Transmitting Equipment

AMALGAMATED WIRELESS (A/SIA) LTD., 47 York Street, Sydney, N.S.W. 'Phone, BW2211; 167 Queen Street, Melbourne, 'Phone M4161. (Complete, and components).

AUSTRALIAN ENGINEERING EQUIPMENT CO. PTY. LTD., 415-19 Bourke Street, Melbourne, Vic. 'Phone MU2315. (Condensers).

COLVILLE WIRELESS EQUIPMENT CO. PTY. LTD., 8 Smail Street, Broadway, Sydney, N.S.W. 'Phone MA3172. (Complete, and components).

DUCON CONDENSER PTY. LTD., Bourke Street, Waterloo, N.S.W. 'Phone MA6104. (Condensers).

LEKMEK AUSTRALASIA LIMITED, 75 William Street, Sydney, N.S.W. 'Phone FL2626. (Complete, and components).

McLELLAN, WM., J. & CO., 55 York Street, Sydney. 'Phone BW2385.

PHILIPS LAMPS (A/SIA) LTD., Philips House, Clarence Street, Sydney, N.S.W. 'Phone BW2121; and 590 Bourke Street, Melbourne, 'Phone MU6091. (Complete, and components).

STANDARD TELEPHONES AND CABLES (A/SIA) LTD., Botany Road, Alexandria, N.S.W. 'Phone MX1161. (Complete, and components).

TRANSMISSION EQUIPMENT PTY. LTD., 390 Spencer Street, Melbourne. 'Phone F4495. (Complete, and components).

### Instruments and Measuring Equipment

AMALGAMATED WIRELESS (A/SIA) LTD., 47 York Street, Sydney. 'Phone BW2211; and 167 Queen Street, Melbourne, 'Phone M4161.

GENERAL RADIO (Hayward C. Parish), 251a Pitt Street. 'Phone M3531.

PATON ELECTRICAL INSTRUMENT CO., The, 90 Victoria Street, Ashfield, Sydney. 'Phone UA1960.

PHILIPS LAMPS (A/SIA) PTY. LTD., Philips House, 69-73 Clarence Street, Sydney. 'Phone BW2121. 590 Bourke Street, Melbourne. 'Phone MU6091.

SIEMENS (AUST.) PTY. LTD., 131 York Street, Sydney. 'Phone M4161.

SLADES RADIO, 61a Lang Street, Croydon, Sydney. 'Phone UJ5381.

STANDARD TELEPHONES AND CABLES PTY. LTD., 258-274 Botany Road, Alexandria, Sydney. 'Phone MX1161.

WARBURTON FRANKI LTD., 307 Kent Street, Sydney. 'Phone BW1251.

W. G. WATSON AND CO. PTY. LTD., 279 Clarence Street, Sydney. 'Phone M4331.

### Studio Equipment

AMALGAMATED WIRELESS (A/SIA) LTD., 47 York Street, Sydney, 'Phone BW2211; 167 Queen Street, Melbourne, 'Phone M4161.

CLUBB, A. M. & CO., 76 Clarence Street, Sydney. 'Phone B3908. (Pick-ups and microphones).

COLVILLE WIRELESS EQUIPMENT CO. PTY. LTD., 8 Smail Street, Broadway, Sydney. 'Phone MA3172.

E.T.C. INDUSTRIES LTD., 470 Elizabeth Street, Sydney. 'Phone MX1121. (Microphones and pick-ups).

INTERNATIONAL RADIO CO. PTY. LTD., 254 Castlereagh Street, Sydney. 'Phone M4896. (Microphones and pick-ups).

LEKMEK AUSTRALASIA LIMITED, 75 William Street, Sydney. 'Phone FL2626.

McLELLAN, WM. J. & CO., 55 York Street, Sydney. 'Phone BW2385.

PHILIPS LAMPS (A/SIA) PTY. LTD., Philips House, 69-73 Clarence Street, Sydney, 'Phone BW2121; 590 Bourke Street, Melbourne, 'Phone MU6091.

STANDARD TELEPHONES AND CABLES PTY. LTD., 258-274 Botany Road, Alexandria, Sydney. 'Phone MX1161.

TRANSMISSION EQUIPMENT PTY. LTD., 390 Spencer Street, Melbourne. 'Phone F4495.

### Recording and Reproducing Equipment

AMALGAMATED WIRELESS (A/SIA) LTD., 47 York Street, Sydney, 'Phone BW2211; 167 Queen Street, Melbourne, 'Phone M4161.

CLUBB, A. M. & CO., 76 Clarence Street, Sydney. 'Phone B3908. (Agent for Presto Corporation of America, recorders and discs).

DIAMONDPOINT SERVICES PTY. LTD., 83 Pitt Street, Sydney. 'Phone BW7490. (Agents for Fairchild recorders).

E.T.C. INDUSTRIES LTD., 470 Elizabeth Street, Sydney. 'Phone MX1121.

INTERNATIONAL RADIO CO. PTY. LTD., 254 Castlereagh Street, Sydney. 'Phone M4896.

PHILIPS LAMPS (A/SIA) PTY. LTD., Philips House, 69-73 Clarence Street, Sydney, 'Phone BW2121; 590 Bourke Street, Melbourne, 'Phone MU6091.

RAYCOPHONE PTY. LTD., 62 Booth Street, Annandale, Sydney. 'Phone MW1834.

**AWA**

**Modern Broadcast Equipment**

FROM MICROPHONE TO AERIAL

3000 WATT TRANSMITTER

LIMITING AMPLIFIER

TABLE MICROPHONE

STUDIO INSTALLATION

PORTABLE AMPLIFIER

FREQUENCY CONTROL UNIT

The latest range of A.W.A. broadcasting transmitters sets a new standard of performance, appearance and economy in commercial broadcasting equipment. Units provide for power ratings from 100 to 3,000 watts. The keynote of all studio installations is simplicity, accessibility and utility. A.W.A. engineers have recently completed the design of a new equipment in which all units are of the plug-in type on sliding trays \* \* \* Accurate frequency control in modern broadcasting transmitters is essential and to meet these requirements the A.W.A. 3R3357 frequency control unit has been developed \* \* \* Portable amplifiers for outside broadcasting pick-ups are compact, light in weight and adapted for either A.C. or battery operation, as the equipment illustrated \* \* \* Outstanding progress has been made in the development of new R.C.A. microphones, including the general purpose type, having three independent characteristics, i.e., uni, bi or non-directional properties, the utility of which will appeal to all whose work is concerned in sound engineering \* \* \* Other new equipments include Peak Limiting amplifiers and Transcription equipment.

Address enquiries to Commercial Engineering Department

**AMALGAMATED WIRELESS (A/SIA) LTD., 47 YORK ST., SYDNEY**

FREQUENCY/WAVELENGTH CONVERSION CHART

Table with 16 columns (M, KC, M, KC) showing frequency and wavelength conversions for various stations.

SHORT WAVE STATIONS OF THE WORLD

Locations and Frequencies arranged in order of Frequency and Wavelength

(Note: This list is comprised of station and frequencies actually in use on April 30, 1939, when it was compiled.)

Main table listing stations, call signs, frequencies, wavelengths, and power levels. Includes entries for Cheribon, Bandoeng, Batavia, Soerabaja, etc.

(Continued next page)

# Short-Wave Station Locations and Frequencies (contd.)

Station	Sign Call	kC. Freq.	Metres W.L.	kW. Power	Station	Sign Call	kC. Freq.	Metres W.L.	kW. Power
Moscow (U.S.S.R.)	RW96	9,600	31.25	20	Radio-Nations (Switz.)	HBJ	14,530	20.64	20
Capetown (S. Africa)	ZRK	9,600	31.25	7	Moscow (U.S.S.R.)	RKI	15,080	19.89	25
Rome (Italy)	I2RO3	9,630	31.13	25	Lisbon (Portugal)	CSW4	15,100	19.87	10
Vatican City (Vat. State)	HVJ	9,660	31.06	25	Zeesen (Germany)	DJL	15,110	19.85	5-40
Buenos Aires (Argentine)	LRX	9,660	31.06	7	Vatican City (Vat. State)	HVJ	15,120	19.84	25
Bound Brook (U.S.A.)	W3XAL	9,670	31.02	15-35	Paris (Radio-Mondial)				
Zeesen (Germany)	DJX	9,670	31.02	5-40	(France) TPB6		15,130	19.83	25
Guatemala City (Guatemala)	TGWA	9,830	30.98	10	Boston (U.S.A.)	W1XAL	15,130	19.83	20
Madrid (Spain)	EAQ	9,860	30.43	20	Daventry (Great Britain)	GSF	15,140	19.82	10-50
Dairen (China)	JDY	9,920	30.24	10	Delhi (India)	VUD3	15,150	19.80	10
Lisbon (Portugal)	CSW3	9,940	30.18	5	Guatemala City (Guatemala)	TGWA	15,170	19.78	10
Marapicu (Brazil)	PSH	10,220	29.35	12	Skamleback (Denmark)	OZH	17,170	19.78	6
Ruyselede (Belgium)	ORK	10,330	29.04	9	Daventry (Great Britain)	GSO	15,180	19.76	10-50
Buenos Aires (Argentine)	LSX	10,350	28.99	12	Moscow (U.S.S.R.)	RW96	15,170	19.76	100
Kootwijk (Holland)	PDK	10,420	28.79	80	Ankara (Turkey)	TA9	15,200	19.74	20
Taihoku (Japan)	JIB	10,530	28.48	10	Zeesen (Germany)	DJB	15,200	19.74	5-40
Lisbon (Portugal)	CSW6	11,040	27.17	10	Pittsburgh (U.S.A.)	W8XK	15,210	19.72	18
Radio-Nations (Switz.)	HBO	11,400	26.31	20	Huizen (Holland)	PCJ2	15,220	19.71	60
Warsaw (Poland)	SPD	11,530	26.01	20	Podebrady (Prague)				
Motala (Sweden)	SBP	11,710	25.63	0.7-12	(Czechoslovakia) OLR5A		15,230	19.70	30
Moscow (U.S.S.R.)	RIA	11,710	25.62	15	Paris (Radio-Mondial)				
Paris (Radio-Mondial)					(France) TPA2		15,240	19.68	12
(France) TPA4		11,720	25.60	12	Boston (U.S.A.)	W1XAL	15,250	19.67	20
Paris (Radio-Mondial)					Daventry (Great Britain)	GSI	15,260	19.66	10-50
(France) TPA6		11,720	25.60	25	Wayne (U.S.A.)	W2XE	15,270	19.65	10
Huizen (Holland)	PHI	11,730	25.57	25	Zeesen (Germany)	DJQ	15,280	19.63	5-40
Boston (U.S.A.)	W1XAL	11,730	25.57	20	Buenos Aires (Argentine)	LRU	15,290	19.62	7
Vatican City (Vat. State)	HVJ	11,740	25.55	25	Daventry (Great Britain)	GSP	15,310	19.60	10-50
Daventry (Great Britain)	GSB	11,750	25.53	10-50	Schenectady (U.S.A.)	W2XAD	15,330	19.57	18
Podebrady (Prague)					Zeesen (Germany)	DJR	15,340	19.56	5-40
(Czechoslovakia) OLR4B		11,760	25.51	30	Budapest (Szekesfehervar)				
Zeesen (Germany)	DJD	11,770	25.49	5-40	(Hungary) HAS3		15,370	19.52	6
Boston (U.S.A.)	W1XAL	11,790	25.45	20	Djibouti (Somaliland)	FZES	17,280	17.38	5
Tokio (Japan)	JZJ	11,800	25.42	50	Hicksville (U.S.A.)	W2XGB	17,310	17.33	10
Zeesen (Germany)	DJO	11,800	25.42	5-40	Zeesen (Germany)	DJE	17,760	16.89	5-40
Vienna (Germany)	DJZ	11,800	25.42	50	Wayne (U.S.A.)	W2XE	17,760	16.89	10
Rome (Italy)	I2RO4	11,810	25.40	25	Huizen (Holland)	PHI	17,770	16.88	25
Daventry (Great Britain)	GSN	11,820	25.38	10-50	Bound Brook (U.S.A.)	W3XL	17,780	16.87	15-35
Wayne (U.S.A.)	W2XE	11,830	25.36	10	Daventry (Great Britain)	GSG	17,790	16.86	10-50
Lisbon (Portugal)	CWS5	11,840	25.34	10	Daventry (Great Britain)	GSV	17,810	16.84	10-50
Podebrady (Prague)					Rome (Italy)	I2RO8	17,810	16.84	25
(Czechoslovakia) OLR4A		11,840	25.34	30	Paris (Radio-Mondial)				
Zeesen (Germany)	DJP	11,850	25.31	5-40	(France) TPB3		17,810	16.84	25
Daventry (Great Britain)	GSE	11,860	25.20	10-50	Buenos Aires (Argentine)	LSY3	18,110	16.56	5
Pittsburgh (U.S.A.)	W8XK	11,870	25.26	24	Ankara (Turkey)	TAR	18,300	16.38	60
Paris (Radio-Mondial)					Radio-Nations (Switz.)	HBH	18,480	16.23	20
(France) TPB7		11,880	25.24	25	Bangkok (Siam)	HS8PJ	19,020	15.77	5
Paris (Radio-Mondial)					Zeesen (Germany)	DJS	21,450	14.00	5-40
(France) TPA3		11,880	25.24	12	Boston (U.S.A.)	W1XAL	21,460	13.99	20
Lyndhurst (Australia)	VLR	11,880	25.24	2	Daventry (Great Britain)	GSH	21,470	13.97	10-50
Moscow (U.S.S.R.)	RNE	12,000	25.00	20	Schenectady (U.S.A.)	W2XAD	21,500	13.95	18
Reykjavik (Iceland)	TFJ	12,230	24.52	7-5	Wayne (U.S.A.)	W2XE	21,520	13.94	10
Warsaw (Poland)	SPW	13,630	22.00	10	Daventry (Great Britain)	GSJ	21,530	13.93	10-50
Amateurs		14,000	21.42		Pittsburgh (U.S.A.)	W8XK	21,540	13.92	10-50
		to	to						
		14,400	20.83						

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*For all Transmitting Valve enquiries, refer*

COMMERCIAL ENGINEERING SECTION

## AMALGAMATED WIRELESS (A/SIA) LIMITED

47 York Street,  
SYDNEY



167 Queen Street,  
MELBOURNE

# Experimental World-wide Short-wave Broadcasting Stations

## VK2ME, Sydney

**T**HE most powerful broadcasting station operating in Australia is VK2ME, the short-wave long-distance station of Amalgamated Wireless, located at Pennant Hills, fourteen miles from Sydney.

VK2ME is known as "The Voice of Australia," and has been heard in every country of the world where radio is known.

The studio is situated in Sydney, and the programmes cover the whole range of music, with the exception of jazz, interspersed with talks dealing mainly with the characteristic industries and life of Australia.

The transmissions of VK2ME are divided into four sections. The first covers Australia, the western portions of North and South America, and England. The second is intended for the southern and eastern portions of Australia, Tasmania, New Zealand, Papua, New Guinea, Fiji, New Caledonia, the New Hebrides, and other Pacific Islands. The third provides for Western Australia, China, Japan, the Philippine Islands, the Straits Settlements, U.S.A., and most of India, South Africa, and Rhodesia. The fourth transmission is received best in Great Britain, Western Europe, and India.

Perhaps the feature of VK2ME which has made it best known in overseas listening circles, is the laugh of Australia's national bird, the kookaburra, or laughing jackass, with which each programme starts and ends.

Considerable interest has been created in outside countries by talks on the Australian merino wool industry, agriculture, wheat, meat, dairying, and timber enterprises, and, particularly, by talks on Australia's tourist resorts. Tasmania has become more popular on the part of overseas visitors partly, it is known, through talks from VK2ME. Jenolan Caves, Mount Kosciusko and the surf beaches, for which Australia is famous, have become known abroad in a way that is very gratifying in official circles.

Amalgamated Wireless (A/sia) Ltd. is carrying out a National service in bringing before residents of overseas countries the advantages of Australia as a tourist resort, and keeping them informed of our resources and National development.

Some idea of the publicity value to Australia of a high-powered long-distance broadcasting station may be gathered from the fact that during two and a half years Amalgamated Wireless received 15,103 letters reporting on reception of VK2ME. The number of letters received averaged 116 a week.

The transmitter of VK2ME was designed and manufactured by Amalgamated Wireless. It has a power of 20 kilowatts in the aerial and operates on a carrier frequency of 9,590 kilocycles (31.28 metres), which is generated by a high precision valve oscillator and amplified through a series of valve magnifiers. The transmitter utilises 22 oil and air-cooled valves mounted in seven separate units.

Australians are becoming more and more interested in international affairs, a fact accounted for partly by reason of Australia being a member of the League of Nations, and partly on account of the large number of movements in Europe having a reaction upon Australia's financial and economical position. Just as we can listen in Australia to transmission in English from Germany and Hol-

land, A.W.A. has made it possible for European residents to hear broadcast announcements from VK2ME in French, German, Dutch, Spanish, and Italian as well as English. It is believed that this will still further enhance the station's popularity and usefulness abroad, especially in European countries.

## VK3ME, Melbourne

**V**K3ME is the Victorian short-wave overseas experimental station of Amalgamated Wireless (A/sia) Ltd. The transmitter is housed at the A.W.A. Transmitting Centre, Braybrook, six miles west of Melbourne on the Ballarat Road.

VK3ME commenced experimental world-wide broadcasts in 1927. The services have been gradually extended and the station now operates from Monday to Saturday, from 7 to 10 p.m., Eastern Australian Standard time (0900 to 1200 G.M.T.).

Every overseas mail contains appreciative letters of the reception of the station's programmes. The items broadcast comprise entertainment interspersed with interesting and informative lectures and talks on Australian affairs.

The studio is located at the offices of Amalgamated Wireless (A/sia) Ltd., "Wireless House," 167 Queen Street, Melbourne, and is equipped for A.C. working throughout with the usual facilities for relaying and for duplex telephony.

The transmitter was designed and manufactured at the Radio-Electric Works of Amalgamated Wireless. It operates on 9,510 kilocycles and has an aerial power of 1.5 KW. It consists of four units and two high-tension double-wave three-phase rectifiers. The high-power method of modulation is used.

The aerial is of the halfwave vertical type arranged for low angle uniform radiation, and is remotely fed by a conventional high-frequency feeder line about 250 feet long.

## VK6ME, Perth

On March 22, 1937, Amalgamated Wireless (A/sia) Ltd. inaugurated a short-wave experimental broadcasting service of world range at Perth, Western Australia.

The station, known as VK6ME, operates on a frequency of 9,590 kilocycles with a power of 200 watts unmodulated in the aerial.

Reports on the reception of VK6ME have been received by A.W.A. from all parts of the world.

## Commercial Station VPD2, Suva, Fiji

Amalgamated Wireless (A/sia) Ltd., also operates the short-wave broadcasting station, VPD2, at Suva, Fiji. This station has a frequency of 9,540 kilocycles, with a power of 500 watts. It is expected that this power will be increased to 10 KW. before the end of 1939.

VPD2 is the only commercial short-wave station in the Southern Hemisphere. Confirmatory letters of the station's reception have been received from all parts of the world.

# Use of Long Distance Telephones for Broadcasting

**T**HE year 1938 brought a substantial increase in the extent to which broadcasting organisations, national and commercial, used telephone trunk lines for the simultaneous radiation of programs of special interest. During the year the long distance system was utilised on 19,726 occasions for broadcasting purposes and the growing demand for service of this nature is shown by the following figures:—

Year	No. of transmissions over trunk lines
1932	2,118
1933	3,478
1934	7,679
1935	9,997
1936	12,497
1937	14,279
1938	19,726

Of the total relays which were completed in 1938, 2,542 extended to two States, 1,381 to three States, 1,291 to four States, 2,390 to five States, and 1,452 to six States. The remaining 10,670 relays concerned only stations in the State of origin. The total time for which channels were occupied for broadcasting purposes was approximately 35,000 hours. A variety of programmes is transmitted over trunk lines, and the following is a broad analysis of the items dealt with in 1938:—

- Race descriptions.
- Talks and speeches.
- News sessions.
- Musical programmes.
- Stock Exchange, Market and Corn reports.
- Programmes from overseas stations.
- Operas, plays, musical comedies and revues.
- Sporting events.
- Concerts.
- Miscellaneous items.

The largest number of broadcasting stations joined together for a simultaneous broadcast during 1938 was 111 on the occasion of the Commonwealth Government's appeal to seek Divine guidance for peace. 27,000 miles of telephone trunk lines were required to link these stations, which, up to the end of the year under review, was the greatest number which had participated in any simultaneous broadcast.

The realisation of the value of the maximum audience from the entertainment and advertising viewpoints is responsible for the more frequent linking up of groups of stations to broadcast programmes of particular importance and interest. The problem of providing communication channels suitable for the transmission of broadcast programmes is becoming an increasingly difficult one, and it receives the closest consideration in the design, construction and maintenance of aerial routes and underground cables.

With the growth in the number of National regional stations and the association of interests of many commercial broadcasting organisations with city and country stations, many communication channels are now in constant and exclusive use by the Australian Broadcasting Commission and by commercial stations for the transmission of programmes from the city and country stations. The aggregate mileage of these channels is 5,074 miles and, in addition, interstate channels totalling an additional 3,923 miles are reserved specially for itinerant relays. Normal telephone channels are diverted also for programme transmissions as occasion arises.

An interesting feature of the broadcasts in 1938 was the fact that, for the first time, the resources of the

# Australian Short-Wave Experimental Transmission Schedules

## VK2ME (SYDNEY). Sundays only, 31.28 Metres, 9,590 K/Cs.

Month of Session 1939	Sydney Time	G.M.T.	E.S.T. (America)
<b>July</b>			
1st	3.0 p.m.—5.0 p.m.	0500—0700	Mdt. — 2.0 a.m.
2nd & 3rd	7.30 p.m.—11.30 p.m.	0930—1330	4.30 a.m.—8.30 a.m.
4th	2.30 a.m.—4.30 a.m.	1630—1830	11.30 a.m.—1.30 p.m.
<b>August</b>			
1st	3.0 p.m.—5.0 p.m.	0500—0700	Mdt. — 2.0 a.m.
2nd & 3rd	7.30 p.m.—11.30 p.m.	0930—1330	4.30 a.m.—8.30 a.m.
4th	1.30 a.m.—3.30 a.m.	1530—1730	10.30 a.m.—12.30 p.m.
<b>September</b>			
1st	3.30 p.m.—5.30 p.m.	0530—0730	12.30 a.m.—2.30 a.m.
2nd & 3rd	7.30 p.m.—11.30 p.m.	0930—1330	4.30 a.m.—8.30 a.m.
4th	12.30 a.m.—2.30 a.m.	1430—1630	9.30 a.m.—11.30 a.m.
<b>October</b>			
1st	3.30 p.m.—5.30 p.m.	0530—0730	12.30 a.m.—2.30 a.m.
2nd & 3rd	7.30 p.m.—11.30 p.m.	0930—1330	4.30 a.m.—8.30 a.m.
4th	12.30 a.m.—2.30 a.m.	1430—1630	9.30 a.m.—11.30 a.m.
<b>November</b>			
1st	4.0 p.m.—6.0 p.m.	0600—0800	1.0 a.m.—3.0 a.m.
2nd & 3rd	7.30 p.m.—11.30 p.m.	0930—1330	4.30 a.m.—8.30 a.m.
4th	Mdt. — 2.0 a.m.	1400—1600	9.0 a.m.—11.0 a.m.
<b>December</b>			
1st	4.0 p.m.—6.0 p.m.	0600—0800	1.0 a.m.—3.0 a.m.
2nd & 3rd	8.0 p.m.—Mdt.	1000—1400	5.0 a.m.—9.0 a.m.
4th	Mdt. — 2.0 a.m.	1400—1600	9.0 a.m.—11.0 a.m.
<b>1940</b>			
<b>January</b>			
1st	4.0 p.m.—6.0 p.m.	0600—0800	1.0 a.m.—3.0 a.m.
2nd & 3rd	8.0 p.m.—Mdt.	1000—1400	5.0 a.m.—9.0 a.m.
4th	Mdt. — 2.0 a.m.	1400—1600	9.0 a.m.—11.0 a.m.
<b>February</b>			
1st	4.0 p.m.—6.0 p.m.	0600—0800	1.0 a.m.—3.0 a.m.
2nd & 3rd	8.0 p.m.—Mdt.	1000—1400	5.0 a.m.—9.0 a.m.
4th	Mdt. — 2.0 a.m.	1400—1600	9.0 a.m.—11.0 a.m.
<b>March</b>			
1st	4.0 p.m.—6.0 p.m.	0600—0800	1.0 a.m.—3.0 a.m.
2nd & 3rd	8.0 p.m.—Mdt.	1000—1400	5.0 a.m.—9.0 a.m.
4th	12.30 a.m.—2.30 a.m.	1430—1630	9.30 a.m.—11.30 a.m.
<b>April</b>			
1st	4.0 p.m.—6.0 p.m.	0600—0800	1.0 a.m.—3.0 a.m.
2nd & 3rd	8.0 p.m.—Mdt.	1000—1400	5.0 a.m.—9.0 a.m.
4th	12.30 a.m.—2.30 a.m.	1430—1630	9.30 a.m.—11.30 a.m.
<b>May</b>			
1st	4.0 p.m.—6.0 p.m.	0600—0800	1.0 a.m.—3.0 a.m.
2nd & 3rd	8.0 p.m.—Mdt.	1000—1400	5.0 a.m.—9.0 a.m.
4th	1.30 a.m.—3.30 a.m.	1530—1730	10.30 a.m.—12.30 p.m.
<b>June</b>			
1st	3.0 p.m.—5.0 p.m.	0500—0700	Mtd. — 2.0 a.m.
2nd & 3rd	8.0 p.m.—Mdt.	1000—1400	5.0 a.m.—9.0 a.m.
4th	2.30 a.m.—4.30 a.m.	1630—1830	11.30 a.m.—1.30 p.m.

## VK3ME (MELBOURNE) 31.5 Metres (9,510 K/Cs.)

Nightly, Monday to Saturday (inclusive)	Melbourne Time	G.M.T.	E.S.T. (America)
	7.0 p.m.—10.0 p.m.	0900—1200	4.0 a.m.—7.0 a.m.

## VK6ME (PERTH). 31.28 Metres (9,590 K/CS.)

Nightly, Monday to Saturday (inclusive)	Perth Time	G.M.T.	E.S.T. (America)
	7.0 p.m.—9.0 p.m.	1100—1300	4.0 a.m.—6.0 p.m.

## VPD2 (SUVA). (9,540 K/Cs.)

Nightly, Monday to Saturday (inclusive)	Suva Time	G.M.T.	E.S.T. (America)
	10.30 p.m.—Mdt.	1030—1200	5.30 a.m.—7.0 a.m.

Australian Broadcasting Commission and commercial broadcasting organisations were pooled in connection with the broadcast in Australia of details of the Test Cricket Matches played in England. For the first time also an actual ball-by-ball description of the play in these games was broadcast by the Empire Short-wave Station and picked up in Sydney and Melbourne, the receiving equipment of the Postmaster-General's Department and of Amalgamated Wireless (A/sia) Ltd. being utilised to secure the best results.

# Technical Progress in Australian Commercial Broadcasting

(As Supplied by P.M.G.'s Department)

THE following Commercial Stations were placed in operation during the year ended December 31, 1938:—

Call Sign.	Power in Watts.	Date placed in Service.
7EX	500	5/2/'38
2LF	300	16/2/'38
†7DY	200	26/2/'38
4SB	2000	11/3/'38
*3CV	200	31/3/'38
†5AU	200	25/5/'38
2MG	100	2/7/'38

†Commenced on 100 watts but authorised for 200 watts later on in year.

\*Replaced 3MB Birchip.

Thus, the total power of new stations placed in service in 1938 was 3,500 watts.

Outstanding improvements during the year can be classified under the following headings:—

- (a) Radiating system.
- (b) Protection of operating personnel.
- (c) Audio equipment.

The radiating systems, generally speaking, have been increased in height to approach true quarter-wave condi-

tions. Where improvements of this nature have been effected, considerable advantage has been obtained by an increased area for primary coverage. Those licensees who have not availed themselves of such improvements have generally had reasons of an economic nature or those arising from difficulties associated with the location of the transmitter.

The department has always been awake to the hazards in the operation of high tension circuits without adequate precautions for the safety of operating personnel. Such matters have been repeatedly represented to the licensees and engineers responsible for the various installations, and improvements during the year have been most marked. There still remains much to be accomplished in this direction, but all things considered, the position can be regarded as reasonably satisfactory.

Apart from the continued improvement of amplifier designs in the audio systems for broadcasting stations, together with microphone circuits and landline systems, the outstanding development of the year is perhaps the use of peak limiting amplifier circuits. Publicity regarding the use of these units overseas has reached the Commonwealth during the year and has created great interest among engineers in this country. Some stations are already using the equipment, and it is most likely that early in the next year apparatus of this type will be installed at many commercial stations throughout the Commonwealth. The big advantage of peak limiters is that by automatic means, the percentage of modulation is prevented from becoming excessively high, and thus the control operator is able to maintain a higher average depth of modulation. To maintain a satisfactory depth of modulation means, of course, better use of the allotted carrier power, and therefore improved efficiency generally.

The Postmaster-General's Department, as the department administering the Wireless Telegraphy Regulations, controls the operations of Commercial Broadcasting Stations. Rules for the Guidance of Licensed Broadcasters have been developed and made available to all concerned, so that official technical requirements may assist as a standard for these services. The dissemination of such information has proved of great value, and facilitated a better understanding of the department's requirement on the part of station licensees.

Early in 1938 an International Conference was held at Cairo, and among the important decisions reached were those effecting the frequency bands for broadcasting services. A comparison of the allocations at Madrid, 1932, with those of Cairo, 1938, is as follows:—

MADRID		CAIRO	
Frequency Bands	kC/s.	Frequency Bands	kC/s.
500—1,500		550—1,600	
550—1,500		500—1,600	
6,000—6,150		6,000—6,200	
		7,200—7,300	
9,500—9,600		9,500—9,700	
11,700—11,900		11,700—11,900	
15,100—15,350		15,100—15,350	
17,750—17,800		17,750—17,850	
21,450—21,550		21,450—21,750	
25,600—26,600		25,600—26,600	

Every Station Manager wants:—

## "Increased Coverage"

So why not take advantage of this outstanding development in broadcasting engineering immediately.

## THE COLVILLECO PEAK LIMITING AMPLIFIER

offers you, without additional running costs:—

- A practical increase in Power Output.
- A service in present, poor or dead areas.
- Improved reception in secondary areas.
- Higher signal to noise level in remote areas.
- Improved quality and volume generally.

The inclusion of a Colvilleco Peak Limiting Amplifier in your station eliminates constant supervision of monitoring and prevents over modulation.

Prices . . . . . from £45/-/- plus tax.

Details and specifications upon request.

**Colville Wireless Equipment Co. Pty. Ltd.**

8 Smail Street, Broadway, SYDNEY.

# Technical Progress in Australian Commercial Broadcasting (contd.)

In addition to the above, the Cairo Convention has provided the following bands for use in tropical regions:—

- 2,300—2,500 kC/s.
- 3,300—3,500 kC/s.
- 4,770—4,965 kC/s.

Of particular interest is the extension of the normal or medium wave band from 1,500 to 1,600 kC/s. The department will not allot services to the extended portion until such time as a reasonable percentage of listeners is equipped for reception on the additional channels. In this regard it is noteworthy that many receiver manufacturers are providing for reception on the extended ranges in their latest products. The provisions of the Cairo Convention in regard to wavelength allocations are not effective until September 1, 1939.

	Aerial Power in watts	Operating Frequency in kC/s.
N.S.W. and A.C.T.		
2DU Dubbo . . . . .	100 <sup>(3)</sup>	660
2HR Singleton . . . . .	300	680
2KA Katoomba . . . . .	1,000	780
2BH Broken Hill . . . . .	100	860
2GB Sydney . . . . .	1,000	870
2XL Cooma . . . . .	100	880
2LM Lismore . . . . .	500	900
2UE Sydney . . . . .	1,000	950
2KM Kempsey . . . . .	100	980
2GZ Orange . . . . .	2,000	990
2KY Sydney . . . . .	1,000	1,020
2CA Canberra . . . . .	2,000	1,050
2RG Griffith . . . . .	100 <sup>(3)</sup>	1,070
*2LT Lithgow . . . . .	100	1,080
2UW Sydney . . . . .	750	1,110
2AD Armidale . . . . .	150 <sup>(3)</sup>	1,130
2HD Newcastle . . . . .	500	1,140
2WG Wagga . . . . .	2,000	1,150
2NZ Inverell . . . . .	2,000	1,170
2CH Sydney . . . . .	1,000	1,190
2GF Grafton . . . . .	200	1,210
2SM Sydney . . . . .	1,000	1,270
2TM Tamworth . . . . .	2,000	1,300
2LF Young . . . . .	300	1,340
2MO Gunnedah . . . . .	100	1,370
2GN Goulburn . . . . .	200	1,390
2PK Parkes . . . . .	200	1,400
2KO Newcastle . . . . .	500	1,410
2WL Wollongong . . . . .	500	1,430
2QN Deniliquin . . . . .	100	1,440
2MG Mudgee . . . . .	100	1,450
2CK Cessnock . . . . .	300 <sup>(2)</sup>	1,460
2MW Murwillumbah . . . . .	100	1,470
2AY Albury . . . . .	200	1,480
2BE Bega . . . . .	100	1,490
2BS Bathurst . . . . .	100	1,500

### VICTORIA.

3UL Warragul . . . . .	200	900
3UZ Melbourne . . . . .	600	930
3BO Bendigo . . . . .	300 <sup>(4)</sup>	970
3HA Hamilton . . . . .	750	1,010
3DB Melbourne . . . . .	600	1,030
3LK Lubeck . . . . .	2,000	1,090
3KZ Melbourne . . . . .	600	1,180
3YB Warrnambool . . . . .	200	1,210
3TR Sale . . . . .	1,000	1,240
3SR Shepparton . . . . .	2,000	1,260
3AW Melbourne . . . . .	600	1,280
3BA Ballarat . . . . .	500	1,320
3SH Swan Hill . . . . .	200	1,330
3GL Geelong . . . . .	500	1,350

3MA Mildura . . . . .	200	1,360
3XY Melbourne . . . . .	600	1,420
3AK Melbourne . . . . .	200	1,500
3CV Charlton . . . . .	200	1,470
*3CS Colac . . . . .	200 <sup>(1)</sup>	

### QUEENSLAND AND PAPUA.

4VL Charleville . . . . .	100	570
4AT Atherton . . . . .	500	680
4TO Townsville . . . . .	200	780
4AY Ayr . . . . .	500	860
4WK Warwick . . . . .	100	880
4GR Toowoomba . . . . .	500	1,000
4CA Cairns . . . . .	200	1,000
4SB Kingaroy . . . . .	2,000	1,060
4RO Rockhampton . . . . .	100	1,080
4LG Longreach . . . . .	500 <sup>(5)</sup>	1,100
4BC Brisbane . . . . .	1,000	1,120
4AK Oakey . . . . .	2,000	1,220
4BK Brisbane . . . . .	500	1,290
4BU Bundaberg . . . . .	500	1,330
*4GY Gympie . . . . .	200	1,350
4PM Port Moresby . . . . .	100	1,360
4BH Brisbane . . . . .	1,000	1,380
4MK Mackay . . . . .	100	1,390
4MB Maryborough . . . . .	200	1,400
4IP Ipswich . . . . .	100	1,440
4ZR Roma . . . . .	100	1,490

### SOUTH AUSTRALIA.

5RM Renmark . . . . .	1,000 <sup>(6)</sup>	800
5DN Adelaide . . . . .	500	960
5PI Crystal Brook . . . . .	2,000	1,040
5KA Adelaide . . . . .	500	1,200
5AD Adelaide . . . . .	500	1,310
5SE Mt. Gambier . . . . .	100	1,370
5AU Port Augusta . . . . .	200	1,400
5MU Murray Bridge . . . . .	100	1,450

### WESTERN AUSTRALIA.

6PR Perth . . . . .	500	880
6AM Northam . . . . .	2,000	980
6WB Katanning . . . . .	2,000	1,070
6ML Perth . . . . .	500	1,130
6KG Kalgoorlie . . . . .	500	1,210
6IX Perth . . . . .	500	1,240
*6TZ Collie-Bunbury . . . . .	500	1,340
6GE Geraldton . . . . .	500	1,370
6PM Fremantle . . . . .	500	1,390

### TASMANIA.

7BU Burnie . . . . .	200	660
7QT Queenstown . . . . .	300	680
7HO Hobart . . . . .	500	860
7EX Launceston . . . . .	500	1,000
7HT Hobart . . . . .	500	1,080
7LA Launceston . . . . .	500	1,100
7DY Derby . . . . .	200	1,400
7UV Ulverstone . . . . .	300	1,460

- \* Projected Station.
- † Night Service Station.
- (1) Frequency not yet assigned.
- (2) At present on 200 watts.
- (3) Approval granted to increase to 200 watts.
- (4) Approval granted to increase to 500 watts.
- (5) Approval granted to increase to 1,000 watts.
- (6) Approval granted to increase to 2,000 watts.

# Wireless Control in Australia

Wireless activities in Australia, as in all other countries, are under Federal Government control. With wireless transmission recognising no national boundaries it is obvious that some form of control is necessary. Consequently the various nations of the world work together under a form of agreement—the International Tele-communication Convention and its Regulations.

(Supplied by the P.M.G.'s Dept.)

IN the Commonwealth, the Postmaster-General's Department administers the required control and supervision under the powers of the Wireless Telegraphy Act and Regulations. The Act places the responsibility on the Postmaster-General of conducting wireless services or licensing other people to do so. Therefore, no person is permitted to erect, establish or maintain apparatus capable of transmitting or receiving wireless signals unless he is in possession of a licence from the Postmaster-General. The Wireless Telegraphy Regulations published herein set out the detailed conditions under which licences are obtained.

There are various types of licences covering the activities of the different classes of services. The licences issued by the Postmaster-General's Department are:—

Coast Station	Broadcast Listeners' Portable
Ship Station	Land Station
Land Station	Experimental Station
Broadcasting Station	Aircraft Station

and

Special licences covering such services as the Beam Service and other services for which specific licences are not provided.

With the exception of Broadcasting Station Licences and Special Licences, the applicant meets with scarcely any difficulty, provided that the required conditions are complied with. The name of the licence generally indicates the type of service to be covered which, with the exception of Broadcasting Station Licences, refer mainly to commercial wireless-telegraph or wireless-telephony services.

It is very important, however, for all persons contemplating the installation of wireless apparatus to obtain full particulars from the Senior Radio Inspector in each State.

The issue of Broadcasting Station Licences is a matter of greater complexity because the number of such licences is necessarily limited by technical considerations. In accordance with an International agreement only a certain number of broadcasting frequencies or wave-lengths is available for broadcasting services if interference, both national and international, is to be avoided. In the interests of listeners it is essential that the wave-lengths of the different stations have a minimum frequency separation compatible with the performance of average broadcast receivers. Consequently, the obligation rests on the Department, and it is viewed very seriously, to see to it that the stations are properly placed within the spectrum of frequencies comprising the broadcast band. And as the first demands on these frequencies must necessarily come from the national stations, it follows that only a limited number of broadcasting channels or wave-lengths are left for the stations established by private enterprise, known as Commercial Broadcasting Stations. Therefore, the grant of such a licence gives to the licensee something of a monopoly and consequently the Department must select very carefully from the applicants those to whom licences are to be granted, keeping in view the essential factor that service to listeners must be the paramount consideration.

## Inspection and Observation of Stations.

When licences are granted regular inspections are made by officers of the Department in order to ensure that the conditions of the licence are complied with. Those conditions may be referred to shortly as the stipulated service to be given and precautions to be taken to avoid interference with other services. Moreover in the case of broadcasting stations field studies are undertaken to ensure that an adequate service is rendered to listeners.

## Frequency Measurements.

The Department also conducts regular measurements of the frequencies of stations and takes immediate steps to have any errors rectified.

It is also of interest to note that the tolerances relating to the frequency control of all types of stations were considerably tightened under the Cairo Regulations. As a result, improvements have been effected at the Department's frequency measuring centres to meet the more exacting requirements. The following table gives some idea of the degree of accuracy maintained at the measuring centres:—

Location.	Bands of frequencies covered by the installations.	Imprecision of measurements at present.	Remarks.
Melbourne	50 kC. - 30,000 kC.	No. of parts in 1,000,000 ±2 to ±4	Primary measuring-centre.
Sydney	50 " - 30 "	±5 to ±100	Secondary measuring centre.
Brisbane	50 " - 30 "	±5 to ±100	Secondary measuring centre.
Adelaide	*50 " - 30 "	±5 to ±100	Secondary measuring centre.
Perth	*50 " - 30 "	±5 to ±100	Secondary measuring centre.

\*The band is at present completely covered, with the exception of a gap between 400 and 500 kC/s. The latter will be covered from June, 1939.

These measurements are referred back to the absolute frequency standard installed at Melbourne, which has at present an inaccuracy less than two parts in one million (2/1,000,000). The Australian Administration is thus in a position to collaborate with other Administrations in the measurement of frequencies of stations which are capable of being received in Australia.

It is hoped in the near future to equip all centres with apparatus permitting measurements of a precision equal to that of the most progressive Administrations in the world.

The Department sincerely appreciates the earnest co-operation which plant manufacturers, station licensees and engineers have given in improving the standard and

(Continued opposite page)

## Wireless Control (contd.)

stability, of frequency for the various services. Such factors can, of course, influence to a marked degree the range and quality of transmissions, if any departure from the recognised standards arise as a result of inattention to design or maintenance of plant.

## Operators' Certificates of Proficiency.

Under the international and local wireless laws, the Department stipulates the conditions pertaining to the issue of Operators' Certificates of Proficiency. These certificates are issued, after appropriate examinations have been passed, to candidates who desire to operate particular types of stations; the examination being conducted with the object of allowing the candidates to demonstrate their possession of the required knowledge of proficiency. Examinations are held periodically for the following certificates:—

First Class Commercial Operator's Certificate of Proficiency in Wireless Telegraphy and Wireless telephony.

Second Class Commercial Operator's Certificate of Proficiency in Wireless Telegraphy.

Third Class Commercial Operator's Certificate of Proficiency in Wireless Telegraphy or Wireless Telephony, or both.

First Class Aircraft Operator's Certificate of Proficiency in Wireless Telegraphy and Wireless Telephony.

Second Class Aircraft Operator's Certificate of Proficiency in Wireless Telegraphy.

Third Class Aircraft Operator's Certificate of Proficiency in Wireless Telegraphy.

Broadcast Station Operator's Certificate of Proficiency.

Amateur Operator's Certificate of Proficiency.

Interested persons should communicate with the nearest Senior Radio Inspector for full details.

The annual fee of 21/- for Broadcast Listeners' Licences applies to all listeners situated within an area of about 250 miles from a National Broadcasting Station; that area is known as Zone 1. Outside that area, in Zone 2, the annual fee is 15/- per annum.

The licence fee is divided between the Australian Broadcasting Commission, which receives 12/- for the provision of programs, and the Postmaster-General's Department, which retains the balance for:—

- The provision of the technical services of the National Broadcasting Stations (installation, erection and operation);
- The inter-connecting telephone circuits between the various National Stations;
- Other technical services, including the investigation of radio inductive interference and research; and
- Administrative costs in connection with the issue and recording of licences.

Despite the obligation on listeners to obtain a licence, it is unfortunately necessary for the Department to maintain a permanent staff in each State for the purpose of locating unlicensed listeners. When these listeners are detected they are brought before the Police Magistrates, and during the year 1938 there were nearly 2,700 convictions for this offence.

## Payment of Listeners' Licence Fees by Postage Stamps.

Provision may be made for the payment of broadcast listeners licence fees by purchasing postage stamps and affixing them to cards which are provided for the purpose. The following notes, printed on the back of the card, state the conditions under which the Department permits licence fees to be paid in this manner:—

Postage stamps not otherwise used or defaced, of an individual face value of 6d. or more, when affixed in the spaces provided on this card, will be accepted at any Post Office Licence Issuing Office in partial or full payment for a new listener's licence or for the renewal of any existing licence.

(Continued next page.)



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## Wireless Control (contd.)

Stamps to the value of more than 21/- should not be affixed to this card.

This card does not take the place of a listener's licence, and, even if it contains stamps to the value of a licence, it is illegal to use a receiving set until the actual licence has been obtained.

If, after certain stamps have been affixed, the owner of this card does not wish to purchase a broadcast listener's licence, the stamps so affixed will be re-purchased at the G.P.O. in any State, but a discount of 10 per cent. (minimum 2d., maximum 2/-) will be charged.

No wireless set may be used until the user is actually in possession of a Broadcast Listener's Licence.

### Free Broadcast Listeners' Licences for the Blind.

Broadcast listeners' licences are issued free to any blind person over the age of 16 years. These licences are granted to—

- Blind pensioners;
- Blind soldiers in receipt of a pension;
- Any other person over the age of 16 years on production of a Certificate from a qualified medical practitioner stating that he or she has no useful vision.

Forms of application may be obtained from the Senior Radio Inspector.

### Demonstrations by Radio Dealers.

A broadcast listener's licence obtained by a radio dealer in respect of a particular address does not entitle the dealer to demonstrate or in any other way use a receiver in the home of a prospective buyer. This is a point which many dealers have overlooked. The Department, however, has always endeavoured to assist radio dealers in the conduct of their business, recognising that the radio trade has a very important part to play in the development of broadcasting.

It is recognised that the dealers must give demonstrations away from their shops, and the Department grants the concession of allowing these demonstrations to be conducted without the obligation of obtaining a licence. The conditions under which these special arrangements can be made may be learned by consultation with the Senior Radio Inspector. Generally, it is the practice to permit a demonstration period of three days in the metropolitan area and one week in country districts.

The Department has been reluctantly compelled to take action against several dealers who failed to comply with its conditions covering the demonstration of receivers. In some instances receivers were seized and forfeited to the Commonwealth.

### Radio Inductive Interference.

**I**NTERFERENCE with broadcast reception caused by electrical appliances has developed in Australia, as in other countries, somewhat seriously. The Department was fully alive to this development, and during the past ten years has undertaken the work of investigation into the interference. Information concerning listener's difficulties is invited by the Department, and questionnaire forms for the purpose are provided at Post Offices. All such complaints are investigated and, where necessary, Radio Inspectors visit the localities, carry out investigations with the object of locating the cause of the interference, and demonstrate to the people concerned methods of fitting suppressors whereby the interference may be reduced or eliminated.

A considerable amount of co-operation in this matter is given promptly by Electric Supply Authorities, radio dealers and Listeners' Leagues, with the result that the growth of the interference has been checked.

With the establishment of further stations, thereby ensuring a higher signal strength in the different localities, the menace of radio inductive interference becomes less serious, but, nevertheless, the Department is continuing its work of helping the broadcasters and listeners in this problem.

Radio dealers can be of great assistance in this connection, particularly in country districts where they are familiar with the conditions and have business or other contacts with the listeners and the owners of electrical equipment. By a recognition of a reasonable community spirit, the co-operation could be fostered by the tactful action of radio dealers, whose interests, of course, would be served by listeners generally being more satisfied with their broadcasting services.

The Department is anxious to hear from listeners who are experiencing any trouble in connection with radio inductive interference and invites them to inform the Department of their conditions by filling in a Wireless Reception Questionnaire Form, obtainable from any Post Office, and sending it completed to the Senior Radio Inspector. In every case the Senior Radio Inspector communicates with the complainant and it is pleasing to note that in most cases a satisfactory result has followed.

The technical staff of the Department has been considerably augmented to deal with complaints from listeners, and equipment of the most modern design has been provided to enable the source of the interference to be speedily located.

Many towns in the Commonwealth have been made interference-free by the co-operative efforts of machine owners, power supply authorities and in some cases the listeners themselves, in conjunction with the Department's experts, by arranging for offending appliances and devices to be fitted with an appropriate suppressor.

## Station Engineers and Technicians . . .

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# New Rules for the Control of American Broadcasters

During the past twelve months or so, a committee of the F.C.C. (U.S.A.) has been investigating the operation of broadcasting stations in the United States and has issued a voluminous Report containing its recommendations for the formulation of new Rules and Standards of operation. This Report was issued early in April of this year and, at the time of going to press, no information concerning the adoption of the Report is to hand.

However, the data included in the Report are of general interest and, for the benefit of those Australian stations who believe in keeping an eye on overseas practice, we present below the proposed new F.C.C. Rules concerning the licensing and operation of broadcasting stations. These Rules (31... to 36..., inclusive) are, of course, only a section of the complete Report.

## Rules Governing Standard Broadcasting Stations

### Definitions<sup>1</sup>

**30.01** The term "standard broadcast station" means a station licensed for the transmission of radiotelephone emissions primarily intended to be received by the general public and operated on a channel in the band 550 to 1,600 kilocycles inclusive.

**30.02** The term "standard broadcast band" means the band of frequencies extending from 550 to 1,600 kilocycles, inclusive, both 550 kilocycles and 1,600 kilocycles being the carrier frequencies of broadcast channels.

**30.03** The term "standard broadcast channel" means the band of frequencies occupied by the carrier and two side bands of a broadcast signal with the carrier frequency at the centre. Channels shall be designated by their assigned carrier frequencies. Carrier frequencies assigned to standard broadcast stations shall begin at 550 kilocycles and be in successive steps of 10 kilocycles.

**30.04** The term "dominant station" means a Class I. station, as hereinafter defined, operating on a clear channel.

**30.05** The term "secondary station" means any station except a Class I. station operating on a clear channel.

**30.06** The term "daytime" means that period of time between 6 a.m. local standard time and local sunset.

**30.07** The term "nighttime" means that period of time between local sunset and 12 midnight local standard time.

**30.08** The term "sunset" means, for each particular location and during any particular month, the average time of sunset as specified in the licence of a broadcast station. (For tabulation of average sunset time for each month at various points in the United States see "Average Sunset Time.")

**30.09** The term "broadcast day" means that period of time between 6 a.m. and 12 midnight, local standard time.

**30.10** The term "experimental period" means that period of time between 12 midnight and 6 a.m.. This period may be used for experimental purposes in testing and maintaining apparatus by the licensee of any standard broadcast station, on its assigned frequency and with its authorised power, provided no interference is caused to other stations maintaining a regular operating schedule within such period. No station licensed for "daytime" or "specified hours" of operation may broadcast any regular or scheduled program during this period.

<sup>1</sup> Other definitions which may pertain to Standard Broadcast Stations are included in Rules 21.01 to 21.35 and the Communications Act of 1934, as amended.

### 30.11 Service Areas.

(1) The term "primary service area" of a broadcast station means the area in which the ground wave is not subject to objectionable interference or objectionable fading.

(2) The term "secondary service area" of a broadcast station means the area served by the sky wave and not subject to objectionable interference. The signal is subject to intermittent variations in intensity.

(3) The term "intermittent service area" of broadcast station means the area receiving service from the ground wave but beyond the primary service area and subject to some interference and fading.

**30.12** The term "main studio" means, as to any station, the studio from which the majority of its local programs originate, and/or from which a majority of its station announcements are made of programs originating at remote points.

**30.13** The term "portable transmitter" means a transmitter so constructed that it may be moved about conveniently from place to place, and is in fact so moved about from time to time, but not ordinarily used while in motion. In the standard broadcast band, such a transmitter is used in making field intensity measurements for locating a transmitter site for a standard broadcast station. A portable broadcast station will not be licensed in the standard broadcast band for regular transmission of programs intended to be received by the public.

**30.14** The term "auxiliary transmitter" means a transmitter maintained only for transmitting the regular programs of a station in case of failure of the main transmitter.

## Allocation of Facilities

### 31.01 Three Classes of Standard Broadcast Channels.

(1) A "clear channel" is one on which the dominant station or stations render service over wide areas and which are cleared of objectionable interference, within their primary service areas and over all or a substantial portion of their secondary service areas.

(2) A "regional channel" is one on which several stations may operate with powers not in excess of 5 kilowatts. The primary service area of a station operating on any such channel may be limited, as a consequence of interference, to a given field intensity contour.

(3) A "local channel" is one on which several stations may operate with powers not in excess of 250 watts. The

(Continued next page)

## F.C.C. Recommendations (contd.)

primary service area of a station operating on any such channel may be limited, as a consequence of interference, to a given field intensity contour.

### 31.02 Classes and Power of Standard Broadcast Stations.

(1) A "Class I. Station" is a dominant station operating on a clear channel and designed to render primary and secondary service over an extended area and at relatively long distances. Its primary service area is free from objectionable interference from other stations on the same and adjacent channels, and its secondary service area free from interference, except from stations on the adjacent channel, and from stations on the same channel in accordance with the channel designation in Rule 31.05 or in accordance with the "Engineering Standards of Allocation." The operating power shall be not less than 10 kW. nor more than 50kW. (also see Rule 31.05 (a) for further power limitation).

(2) A "Class II. Station" is a secondary station which operates on a clear channel (see Rule 31.05) and is designed to render service over a primary service area which is limited by and subject to such interference as may be received from Class I. stations. A station of this class shall operate with power not less than 0.25 kilowatts nor more than 50 kilowatts. Whenever necessary a Class II. station shall use a directional antenna or other means to avoid interference with Class I. stations and with other Class II stations, in accordance with the "Engineering Standards of Allocation."

(3) A "Class III. Station" is a station which operates on a regional channel and is designed to render service primarily to a metropolitan district and the rural area contiguous thereto. Class III. stations are subdivided into two classes:

(a) A "Class III-A Station" is a Class III. station which operates with power not less than 1 kilowatt nor more than 5 kilowatts and the service area of which is subject to interference in accordance with the "Engineering Standards of Allocation."

(b) A "Class III-B Station" is a Class III. station which operates with a power not less than 0.5 kilowatt nor more than 1 kilowatt night and 5 kilowatts daytime and the service area of which is subject to interference in accordance with the "Engineering Standards of Allocation."

(4) A "Class IV. Station" is a station operating on a local channel and designed to render service primarily to a city or town and the suburban and rural areas contiguous thereto. The power of a station of this class shall not be less than 0.1 kilowatt nor more than 25 kilowatt and its service area is subject to interference in accordance with the "Engineering Standards of Allocation."

### 31.03 Time of Operation of the Several Classes of Stations.

The several classes of standard broadcast stations may be licensed to operate in accordance with the following:

(1) "Unlimited time" permits operation without a maximum limit as to time.

(2) "Limited time" is applicable to Class II. (secondary Stations) operating on a clear channel only. It permits operation of the secondary station during daytime, and until local sunset if located west of the dominant station on the channel or if located east thereof, until sunset at the dominant station, and in addition during night hours, if any, not used by the dominant station or stations on the channel.

(3) "Daytime" permits operation during the hours between 6 a.m. and average monthly local sunset. (For exact time of sunset at any location, see "Average Sunset Time.")

(4) "Sharing Time" permits operation during hours which are so restricted by the station licence as to require a division of time with one or more other stations using the same channel.

<sup>2</sup> Formal application required for change in time of operation of existing broadcast station. See "Standards of Good Engineering Practice" for form number.

(5) "Specified Hours" means that the exact operating hours are specified in the licence.

(The minimum hours that any station shall operate are specified in Rule 34.1.)

**31.04** An authorisation for a new standard broadcast station or increase in facilities of an existing station<sup>3</sup> will be issued only after a satisfactory showing has been made in regard to the following, among others:

(1) That the proposed assignment will tend to effect a fair, efficient and equitable distribution of radio service among the several States and communities.

(2) That objectionable interference will not be caused to existing stations or that if interference will be caused the need for the proposed service outweighs the need for the service which will be lost by reason of such interference. That the proposed station will not suffer interference to such an extent that its service would be reduced to an unsatisfactory degree. (For determining objectionable interference, see "Engineering Standards of Allocation" and "Field Intensity Measurements in Allocation.")

(3) That the applicant is financially qualified to construct and operate the proposed station.<sup>4</sup> That in case of a station to be supported by sponsored programs, adequate commercial support is available for the station. That in case of a station to be supported in other manner, adequate finances are available to support such service.

(4) That the applicant is legally qualified. That the applicant (or the person or persons in control of an applicant corporation or other organisation) is of good character and possesses other qualifications sufficient to provide a satisfactory public service. That an applicant (or the person or persons in control of an applicant corporation or other organisation) for a Class IV. station is a resident in, and familiar with the needs of, the community to be served.

(5) That the technical equipment proposed, the location of the transmitter, and other technical phases of operation comply with the regulations governing the same, and the requirements of good engineering practice. (See technical regulations herein and "Locations of Transmitters of Standard Broadcast Stations.")

(6) That the facilities sought are subject to assignment as requested under existing international agreements and the Rules and Regulations of the Commission.

(7) That the public interest, convenience, and necessity will be served through the operation under the proposed assignment.

**31.05** The frequencies in the following tabulation are designated as clear channels and assigned for use by the classes of stations as given:

(a) To each of the channels below there will be assigned one Class I. station and there may be assigned one or more Class II. stations operating limited time or daytime only: 640, 650, 660, 670, 700, 720, 740, 750, 760, 770, 800, 810, 820, 830, 850, 860, 870, 930, 990, 1,000, 1,070, 1,090, 1,130, 1,150, and 1,190 kilocycles. The power of the Class I. stations on these channels shall not be less than 50 kW.

(b) To each of the channels below there may be assigned Class I. and Class II. stations: 680, 710, 790, 970, 1,020, 1,040, 1,050, 1,060, 1,080, 1,100, 1,110, 1,140, 1,160, 1,170, 1,180, 1,460, 1,470, 1,480, and 1,490 kilocycles.

**31.06** The following frequencies are designated as regional channels and are assigned for use by Class III-A and Class III-B stations<sup>5</sup>: 550, 560, 570, 580, 590, 600, 610, 620, 630, 780, 880, 890, 900, 920, 930, 940, 950, 1,010, 1,120, 1,220, 1,230, 1,240, 1,250, 1,260, 1,270, 1,280, 1,290, 1,300, 1,320, 1,330, 1,340, 1,350, 1,360, 1,380, 1,390, 1,400, 1,410, 1,430, 1,440, 1,450, 1,530, and 1,550 kilocycles.

**31.07** The following frequencies are designated as local channels and are assigned for use by Class IV. stations: 1,200, 1,210, 1,310, 1,370, 1,420, and 1,500 kilocycles.

(Continued next page)

<sup>3</sup> Formal application required. See "Standards of Good Engineering Practice" for form number.

<sup>4</sup> See "Money Required to Construct and Complete Electrical Tests of Stations of Different Classes and Powers."

<sup>5</sup> See alternate Rules 31.05, 31.06, 31.07, 31.08, 31.09 and 31.14 to comply with the North American Regional Broadcasting Agreement.

<sup>6</sup> See Rule 31.09 in regard to assigning Class IV. stations to regional channels.

<sup>7</sup> See alternate Rules 31.05, 31.06, 31.07, 31.08, 31.09 and 31.14 to comply with the North American Regional Broadcasting Agreement.

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31.08<sup>7</sup> The individual assignments of stations to channels shall be made in accordance with the standards of good engineering practice prescribed and published from time to time by the Commission for the respective classes of stations involved. (For determining objectionable interference see "Engineering Standards of Allocation" and "Field Intensity Measurements in Allocation," Section C.)

31.09<sup>7</sup> On condition that interference will not be caused to any Class III. station, and that the channel is used fully for Class III. stations and subject to such interference as may be received from Class III stations, Class IV. stations may be assigned to regional channels.

31.10 (a) Each standard broadcast station shall be considered located in the State and city where the main studio is located.

(b) The transmitter of each standard broadcast station shall be so located that primary service is delivered to the city in which the main studio is located, in accordance with the "Standards of Good Engineering Practice," prescribed by the Commission.

31.11 The licensee of a standard broadcast station shall not move its main studio outside the borders of the city, State, district, Territory, or possession in which it is located without first making written application<sup>9</sup> to the Commission for authority to so move, and securing written permission for such removal. A licensee need not obtain permission to move the main studio from one location to another within a city or town, but shall promptly notify the Commission of any such change in location.

31.12 (a) Special Experimental Authorisations<sup>8</sup> may be issued to the licensee of a standard broadcast station in addition to the regular licence upon proper application thereore<sup>9</sup> and satisfactory showing in regard to the following, among others:

(1) That the applicant has a program of research and experimentation which indicates reasonable promise of contribution to the development and practical application of broadcasting, and will be in addition to and advancement of the work that can be accomplished under its regular licence.

(2) That the experimental operation and experimentation will be under the direct supervision of a qualified engineer with an adequate staff of engineers qualified to carry on the program of research and experimentation.

(3) That the public interest, convenience and necessity will be served by granting the authorisation requested.

(b) In case a Special Experimental Authorisation permits additional hours of operation, no licensee shall transmit any commercial or sponsored program or make any commercial announcement during such time of operation. In case of other additional facilities, no additional charge shall be made by reason of transmission with such facilities.

(c) A Special Experimental Authorisation will not be extended after the actual experimentation is concluded.

(d) The program of research and experimentation as outlined in the application for a special experimental authorisation shall be adhered to in the main unless the licensee is authorised to do otherwise by the Commission.

(e) The Commission may require from time to time a broadcast station holding such experimental authorisation to conduct experiments that are deemed desirable and reasonable.

(f) A supplement report shall be filed with and made a part of each application for an extension of a special experimental authorisation and shall include statements of the following:

(1) Comprehensive summary of all research and experimentation conducted.

(2) Conclusions and outline of proposed program for further research and development.

(3) Comprehensive summary and conclusions as to

<sup>8</sup> Special authorisations which do not involve experimental operation may be granted pursuant to Rule 15.15.

<sup>9</sup> Formal application required. See "Standards of Good Engineering Practice" for form number.

the social and economic effects of its use.

31.13 (a) No application for authority to install a directional antenna<sup>10</sup> will be accepted unless a definite site and full details of the design of the directional antenna are given with the application. (See "Data Required with Applications Involving Directional Antenna Systems.")

(b) No application for an authorisation to operate a directional antenna during the broadcast day will be accepted unless proof of performance of the directional antenna taken during equipment test period is submitted with the application. (See "Field Intensity Measurements in Allocation," Section B.)

31.14<sup>11</sup> All standard broadcast station licences will be issued so as to expire at the hour of 3 a.m., Eastern Standard Time and will be issued for a normal licence period of one year, expiring as follows:

(1) For stations operating on the frequencies 640, 650, 660, 670, 680, 700, 710, 720, 740, 750, 760, 770, 790, 800, 810, 820, 830, 850, 860, 870, 970, 980, 990, 1000, 1020, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1130, 1140, 1150, 1160, 1170, 1180, 1190, 1460, 1470, 1480, 1490 kilocycles February 1.

(2) For stations operating on the frequencies 550, 560, 570, 580, 590, 600, 610, 620, 630, 780, 880, 890, 900, and 920 kilocycles March 1.

(3) For stations operating on the frequencies 930, 940, 950, 1010, 1120, 1220, 1230, 1240, 1250, 1260, 1270, 1280, and 1290 kilocycles April 1.

(4) For stations operating on the frequencies 1300, 1320, 1330, 1340, 1350, 1360, 1380, 1390, 1400, 1410, 1430, 1440, 1450, 1530, and 1550 kilocycles November 1.

(5) For stations operating on the frequencies 1200, 1210, and 1310 kilocycles December 1.

(6) For stations operating on the frequencies 1370, 1420, and 1500 kilocycles October 1.

Equipment

32.01 The maximum rated carrier power of a standard broadcast transmitter shall not be less than the authorised power nor shall it be greater than the value specified in the following table:

Class of station	Maximum power authorised to station	Maximum rated carrier power permitted to be installed <sup>12</sup>
Class IV . . . . .	100 or 250 watts	250 watts
Class III . . . . .	500 or 1,000 watts	1,000 watts
	5,000 watts	5,000 watts
Class II . . . . .	250, 500 or 1,000 watts	1,000 watts
	5,000 or 10,000 watts	10,000 watts
	25,000 or 50,000 watts	50,000 watts
Class I . . . . .	10,000 watts	10,000 watts
	25,000 or 50,000 watts	50,000 watts

32.02 The maximum rated carrier power of a standard broadcast transmitter shall be determined as the sum of the applicable power ratings of the vacuum tubes employed in the last radio stage.

(1) The power rating of vacuum tubes shall apply to transmitters employing the different classes of operation or systems of modulation as specified in "Power Rating of Vacuum Tubes," prescribed by the Commission.

(2) If the maximum rated carrier power of any broadcast transmitter as determined by subsection (1) of this Rule, does not give an exact rating as recognised in the Commission's plan of allocation, the nearest rating there-to shall apply to such transmitter.

(3) Authority will not be granted to employ, in the last radio stage of standard broadcast transmitter, vacuum tubes from a manufacturer or of a type number not listed until the manufacturer's rating for the class of operation or system of modulation is submitted to and approved by the Commission. These data must be supplied by the manufacturer in accordance with "Requirements for the Approval of the Power Rating of Vacuum Tubes," prescribed by the Commission.

<sup>10</sup> Formal application required. See "Standards of Good Engineering Practice" for form number.

<sup>11</sup> See alternate Rules 31.05, 31.06, 31.07, 31.08, 31.09 and 31.14 to comply with the North American Regional Broadcasting Agreement.

<sup>12</sup> The maximum rated carrier power must be distinguished from the operating power (See Rules 21.18 and 21.20).

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32.03 No licensee shall change, in the last radio stage, the number of vacuum tubes to vacuum tubes of different power rating or class of operation, nor shall it change system of modulation without the authority of the Commission.<sup>13</sup>

32.04 Other changes except as provided for in these Rules or "Standards of Good Engineering Practice," prescribed by the Commission, which do not affect the maximum power rating or operating power of the transmitter or the operation or precision of the frequency control equipment may be made at any time without authority of the Commission, but in the next succeeding application for renewal of licence such changes must be shown in full.

32.05 (a) All applicants for new, additional, or different broadcast facilities and all licences requesting authority to move the transmitter of an existing station shall specify a radiating system the efficiency of which complies with the requirements of good engineering practice for the class and power of the station. (Also see "Use of Common Antenna by Standard Broadcast Stations or Another Radio Station.")

(b) The Commission will publish from time to time specifications deemed necessary to meet the requirements of good engineering practice. (See "Minimum Antenna Heights or Field Intensity Requirements" and "Field Intensity Measurements in Allocation," Section A.)

(c) No broadcast station licensee shall change the physical height of the transmitting antenna, or supporting structures, or make any changes in the radiating system which will measurably alter the radiation patterns except upon written application to and authority from the Commission.<sup>14</sup>

(d) The antenna and/or supporting structure shall be painted and illuminated in accordance with the specifications supplied by the Commission pursuant to Section 303(q) of the Communications Act of 1934, as amended. (See "Standard Lamps and Paints.")

(e) The simultaneous use of a common antenna by two standard broadcast stations or by a standard broadcast station and a station of any other class or service will not be authorised unless both stations are licensed to the same licensee. (See "Use of Common Antenna by Standard Broadcast Stations or Another Radio Station.")

32.06 (a) The transmitter proper and associated transmitting equipment of each broadcast station shall be designed, constructed, and operated in accordance with the standards of good engineering practice in all phases not otherwise specifically included in these regulations.

(b) The transmitter shall be wired and shielded in accordance with good engineering practice and shall be provided with safety features in accordance with the specifications of Article 37 of the current National Electrical Code as approved by the American Standards Association.

(c) The station equipment shall be so operated, tuned, and adjusted that emissions are not radiated outside the authorised band<sup>15</sup> which cause or are capable of causing interference to the communications of other stations. The spurious emissions, including radio frequency harmonics and audio frequency harmonics, shall be maintained at as low level as required by good engineering practice. The audio distortion, audio frequency range, carrier hum, noise level, and other essential phases of the operation which control the external effects shall at all times conform to the requirements of good engineering practice.

(d) Whenever, in this Rule, the term "good engineering practice" is used, the specifications deemed necessary to meet the requirements thereof will be published from time to time. (See "Construction, General Operation and Safety of Life Requirements.")

<sup>13</sup> Formal application required. See "Standards of Good Engineering Practice" for form number.

<sup>14</sup> Informal application may be made, except in controversial cases or directional antenna; then formal application shall be made.

<sup>15</sup> See "Construction, General Operation and Safety of Life Requirements."

Technical Operation

33.01 The operating power of broadcast stations will be determined either by:

(1) Indirect measurement by means of the plate input power to the last radio stage.

(2) Direct measurement of the antenna, power, or

(3) Radiated power measurement computed from field intensity measurements.

33.02 Unless specifically authorised by the Commission to do otherwise, the licensee of a broadcast station shall compute its operating power by indirect method by means of the plate input power to the last radio stage.

33.03 Any licensee who has at any time been authorised by the Commission to compute operating power by any other method (e.g., by antenna input direct measurement, or radiated power measurement computed from field intensity measurements) shall upon making any change in the antenna system or in the antenna current measuring instruments, or any other change which may change the characteristics of the antenna, revert to the use of the indirect measurement of power determination until authorised to do otherwise by the Commission.

33.04 The operating power shall be determined by indirect measurement from the plate input power of the last radio stage by multiplying the plate voltage (E<sub>p</sub>) by the total plate current of the last radio stage (I<sub>p</sub>) and by the proper factor (F) given in the following tables: that is

$$\text{Operating power} = E_p \times I_p \times F$$

A. Factor to be Used for Stations Employing Plate Modulation in the Last Radio Stage.

Maximum rated carrier power of transmitter <sup>16</sup> Watts	Factor (F) to be used in determining the operating power from the plate input power.
5000 and over	0.65
100-1000	0.70

B. Factor to be Used for Stations of all Powers Using Low-Level Modulation.

Class of Power Amplifier in the Last Radio Stage	Factor (F) to be used in determining the operating power from the plate input power.
Class B	0.33
Class BC <sup>17</sup>	0.60

C. Factor to be Used for Stations of all Powers Employing Grid Modulation in the Last Radio Stage.

Type of tube in the Last Radio Stage	Factor (F) to be used in determining the operating power from the plate input power
Table C <sup>18</sup>	0.22
Table D <sup>18</sup>	0.33

33.05 In computing operating power by indirect measurement, the above factors shall apply in all cases, and no distinction will be recognised due to the operating power being less than the maximum rated carrier power. (See "Plate Efficiency of Last Radio Stage.")

33.06 The antenna input power determined by direct measurement is the square of the antenna current times the antenna resistance at the point where the current is

(Continued next page)

<sup>16</sup> The maximum rated carrier power must be distinguished from the operating power (See Rules 21.19 and 21.20).

<sup>17</sup> All linear amplifier operation where efficiency approaches that of Class C operation.

<sup>18</sup> See "Power Rating of Vacuum Tubes."

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measured and at the operating frequency. Direct measurement of the antenna input power will be accepted as the operating power of the station, provided the data on the antenna resistance measurements are submitted under oath giving detailed description of the method used and the data taken. The antenna current shall be measured by an ammeter of accepted accuracy.<sup>19</sup> These data must be submitted to and approved by the Commission before any licensee will be authorized to operate by this method of power determination.<sup>20</sup> The antenna ammeter shall not be changed to one of different type, maximum reading or accuracy without the authority of the Commission. If any change is made in the antenna system or any change made which may affect the antenna system, the method of determining operating power shall be changed immediately to the indirect method. (See "Further Requirements for Direct Measurements of Power.")

33.07 The operating power of a broadcast station determined by the radiated power computed from field intensity measurements may be accepted in lieu of antenna input power, provided a sufficient number of measurements are taken to insure accuracy and an analysis of the antenna system is submitted indicating the relative distribution of the radiation (i.e., ground and sky wave radiation). The data on the antenna resistance, complete description of the antenna system with dimensions and method of taking field intensity measurements and of relating these measurements to the operating power shall be submitted to and approved by the Commission before any licensee will be authorized to operate by this method of power determination. If any change is made in the antenna system or any change made which may affect the antenna system, the method of determining operating power shall be changed immediately to the indirect method. (See "Field Intensity Measurements in Allocation," Section D.)

33.08 (a) A license of a broadcast station will not be authorized to operate a transmitter unless it is capable of delivering satisfactorily the authorized power with a modulation of at least 85 per cent. When the transmitter is operated with 85 per cent modulation, not over 10 per cent combined audio frequency harmonics shall be generated by the transmitter.

(b) All broadcast stations shall have in operation a modulation monitor approved by the Commission.

(c) The operating percentage of modulation of all stations shall be maintained as high as possible consistent with good quality of transmission and good broadcast practice and in no case less than 85 per cent on peaks of frequent recurrence during any selection which normally is transmitted at the highest level of the program under consideration.

(d) The Commission will, from time to time, publish the specifications, requirements for approval, and a list of approved modulation monitors. (See "Approved Modulation Monitors" and also "Requirements for Approval of Modulation Monitors".)

33.09 A licensee of a broadcast station claiming a greater percentage of modulation than the fundamental design indicates can be procured, shall submit full data showing the antenna input power by direct measurement and complete information, either oscillograms or other acceptable data, to show that a modulation of 85 per cent or more, with not over 10 per cent combined audio harmonics, can be obtained with the transmitter operated at the maximum authorized power.

33.10 The licensee of a broadcast station shall maintain the operating power of the station within the prescribed limits of the licensed power at all times except that in an emergency when, due to causes beyond the control of the licensee, it becomes impossible to operate with the full licensed power, the station may be operated at reduced power for a period not to exceed 10 days, provided that the Commission and the Inspector

in Charge<sup>21</sup> shall be notified in writing immediately after the emergency develops. (See "Operating Power Tolerance.")

33.11 Each broadcast station shall be equipped with suitable indicating instruments of accepted accuracy to measure the antenna current, direct plate circuit voltage, and the direct plate circuit current of the last radio stage. These indicating instruments shall not be changed or replaced, without authority of the Commission, except by instruments of the same type, maximum scale reading, and accuracy. (See "Indicating Instruments Pursuant to Rule 33.11".)

33.12 The operating frequency of each broadcast station shall be maintained within 50 cycles of the assigned frequency until January 1, 1939, and thereafter the frequency of each new station or each station where a new transmitter is installed shall be maintained within 20 cycles of the assigned frequency, and after January 1, 1942, the frequency of all stations shall be maintained within 20 cycles of the assigned frequency.

33.13 The licensee of each standard broadcast station shall have in operation at the transmitter a frequency monitor independent of the frequency control of the transmitter. The frequency monitor shall be approved by the Commission. It shall have a stability and accuracy of at least 5 parts per million. (See "Approved Frequency Monitors" and also "Requirements for Approval of Frequency Monitors".)

33.14 The Commission will authorize the installation of new transmitting equipment in a broadcast station or changes in the frequency control of an existing transmitter only if such equipment is so designed that there is reasonable assurance that the transmitter is capable of maintaining automatically the assigned frequency within the limits specified in Rule 33.12.

33.15 New automatic frequency control equipment and changes in existing automatic frequency control equipment that may affect the precision of frequency control or the operation of the transmitter shall be installed only upon authorization<sup>22</sup> from the Commission. (See "Approved Equipment".)

33.17 Upon showing that a need exists for the use of an auxiliary transmitter<sup>23</sup> in addition to the regular transmitter of a broadcast station, a license therefore may be issued provided that:

(1) An auxiliary transmitter may be installed either at the same location as the main transmitter or at another location.

(2) A licensed operator shall be in control whenever an auxiliary transmitter is placed in operation.

(3) The auxiliary transmitter shall be maintained so that it may be put into immediate operation at any time upon failure of the main transmitter, or upon request by a duly authorized Government representative.

(4) The auxiliary transmitter shall be tested at least once each week to determine that it is in proper operating condition, and that it is adjusted to the proper frequency. A record shall be kept of the time and result of test. Tests shall be conducted only between 1 a.m. and 6 a.m., local standard time.

(5) The auxiliary transmitter shall be equipped with satisfactory control equipment which will enable the maintenance of the frequency emitted by the station within the limits prescribed by these regulations.

(6) An auxiliary transmitter which is licensed at a geographical location different from that of the main transmitter shall be equipped with a frequency control which will automatically hold the frequency within the limits prescribed by these regulations without any manual adjustment during operation or when it is being put into operation.

(7) The operating power of an auxiliary transmitter may be less than the authorized power but in no event shall it be greater than such power.

<sup>19</sup> See "Field Offices of the Commission."

<sup>20</sup> Formal application required. See "Standards of Good Engineering Practice" for form number.

<sup>21</sup> All regulations as to safety requirements and spurious emissions applying to broadcast transmitting equipment shall apply also to an auxiliary transmitter. (See "Use of Frequency and Modulation Monitors at Auxiliary Transmitter".)

<sup>22</sup> See "Indicating Instruments Pursuant to Rule 33.11."  
<sup>23</sup> Formal application required. See "Standards of Good Engineering Practice" for form number.

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33.18 The licensee of a Standard Broadcast Station may be licensed for duplicate main transmitters provided that a technical need<sup>24</sup> for such duplicate transmitters is shown and that the following conditions are met:

(1) Both transmitters are located at the same place.

(2) The transmitters have the same power rating.

(3) The external effects from both transmitters is substantially the same as to frequency stability, reliability of operation, radio harmonics and other spurious emissions, audio frequency range and audio harmonic generation in the transmitter.

33.19 Within two days after each use of the auxiliary transmitter, except for testing, the Commission and the Inspector in Charge shall be notified in writing of the date, time, and power at which the auxiliary transmitter was operated, and the reasons for each use.

### Operation

34.01 Except Sundays, the licensee of each standard broadcast station shall maintain a minimum regular operating schedule of two-thirds of the total hours that it is authorized to operate during each broadcast day (both day and night), except that in an emergency when, due to causes beyond the control of the licensee, it becomes impossible to continue operating, the station may cease operation for a period of not to exceed 10 days, provided that the Commission and the Inspector in Charge<sup>25</sup> shall be notified in writing immediately after the emergency develops.

34.02 The licensee of each standard broadcast station shall operate or refrain from operating its station during the experimental period as directed by the Commission in order to facilitate frequency measurement or for the determination of interference. (Stations involved in the after-midnight frequency monitoring programs are notified of their operating and silent schedule.)

34.03 If the licence of a station specifies the hours of operation, the schedule so specified shall be adhered to except as provided in Rules 34.1 and 34.2.

34.04 If the licences of stations authorized to share time do not specify hours of operation, the licensees shall endeavour to reach an agreement for a definite schedule of periods of time to be used by each. Such agreement shall be in writing and each licensee shall file the same in triplicate original with each application to the Commission for renewal of licence. If and when such written agreements are properly filed in conformity with this rule the file mark of the Commission will be affixed thereto, 1 copy will be retained by the Commission, 1 copy forwarded to the Inspector in Charge, and 1 copy returned to the licensee to be posted with the station licence and considered as a part thereof. If the licence specifies a proportionate time division, the agreement shall maintain this proportion. If no proportionate time division is specified in the licence, the licensees shall agree upon a division of time. Such division of time shall not include simultaneous operation of the stations unless specifically authorized by the terms of the licence.

34.05 For the purpose of determining the proportionate division of time of the broadcast day for sharing time stations one night hour shall be considered the equivalent of two day hours.

34.06 If the licence of a station authorized to share time does not specify the hours of operation, the station may be operated for the transmission of regular programs during the experimental period provided an agreement thereto is reached with the other stations with which the broadcast day is shared and further provided such operation is not in conflict with Rule 34.02. Time sharing agreements for operation during the experimental period need not be submitted to the Commission.

<sup>24</sup> Such as licensees maintaining 24-hour schedule and needing alternate operation for maintenance, or development work is being carried on requiring such alternate operation.

<sup>25</sup> See "Field Offices of the Commission."

34.07 Departure from the regular operating schedule set forth in a time-sharing agreement will be permitted only in cases where an agreement to that effect is reduced to writing, is signed by the licensees of the stations affected thereby and filed in triplicate by each licensee with the Commission prior to the time of the proposed change. If time is of the essence, the actual departure in operating schedule may precede the actual filing of written agreement, provided appropriate notice is sent to the Commission and the Inspector in Charge.<sup>26</sup>

34.08 If the licensees of stations authorized to share time are unable to agree on a division of time, the Commission shall be so notified by statement to that effect filed with the applications for renewal of licences. Upon receipt of such statement the Commission will designate the applications for a hearing and, pending such hearing, the operating schedule previously adhered to shall remain in full force and effect.

34.09 If the licensee of a broadcast station is required to cease operation of the station at the time of sunset at some point within the United States, the licence will specify the hour of the day during each month of the licence period when operation of such station shall cease. (See "Average Sunset Time".)

34.10 The licensee of a secondary station authorized to operate limited time and which may resume operation at the time the dominant station or stations on the same channel ceases operation shall, with each application for renewal of licence, file in triplicate a copy of its regular operating schedule signed and approved by the licensee of the dominant station or stations. Upon receipt of such operating schedule, properly executed, the Commission will affix its file mark, retain 1 copy, forward 1 copy to the Inspector in Charge, and return 1 copy to the licensee authorized limited time, which shall be posted with the station licence and considered as a part thereof. Departure from said operating schedule will be permitted only in accordance with the procedure set forth in Rule 34.07.

34.11 If the licensee of a secondary station authorized to operate limited time and a dominant station on a channel are unable to agree upon a definite time for resumption of operation by the station authorized limited time, the Commission shall be notified by the licensee of the station authorized limited time. After receipt of such statement the Commission will designate for hearing the application of both stations for renewal of licence, and pending the hearing the schedule previously adhered to shall remain in full force and effect.

34.12 In all cases where a station licensee is required to prepare and file an operating schedule, any deviation or departure from such schedule, except as herein authorized, shall be considered as a violation of a material term of the licence.

34.13 All references herein to standard time or local standard time refer to local standard time as determined and fixed by the Interstate Commerce Commission.

34.14 If local time is changed from standard time to daylight saving time at the location of all stations sharing time on the same channel, the hours of operation of all such stations on that channel shall be understood to refer to daylight-saving time, and not standard time, as long as daylight-saving time is observed at such locations. This provision shall govern when the time is changed by provision of law or general observance of daylight-saving time by the various communities, and when the time of operation of such stations is specified in the licence or is mutually agreed upon by the licensees: **Provided, However,** that when the licence specifies average time of sunset, local standard time shall be observed and in no event shall a station licensed for daytime only operate on regular schedule prior to 6 a.m. local standard time or shall a station licensed for greater daytime power than nighttime power operate with the daytime power prior to 6 a.m. local standard time.

34.15 Where the local time is not changed from standard time to daylight-saving time at the location of all stations sharing time on the same channel, the hours of

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<sup>26</sup> See "Field Offices of the Commission."

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operation of such stations shall be understood to have reference to standard time, and not daylight-saving time, unless said licensees mutually agree upon a new schedule which shall be effective only while daylight-saving time is observed at the location of some of these stations.

34.16 The time of operation of any broadcast station which does not share time with other stations on the same channel shall be understood to have reference to local standard time unless modification of such licence with respect to hours of operation is authorised by the Commission.

34.17 The station licence and any other instrument of authorisation or individual order concerning construction of the equipment or the manner of operation of the station shall be posted in a conspicuous place in the room in which the transmitter is located in such manner that all terms thereof are visible and the licence of the station operator shall be posted in the same manner (see Rule 22.13).

34.18 The licensee of each station shall have a licensed operator or operators of the grade specified by the Commission on duty during all periods of actual operation of the transmitter at the place where the transmitting equipment is located (see Rule 22.14).

34.19 The licensed operator on duty and in charge of standard broadcast transmitter may, at the discretion of the licensee, be employed for other duties or for the operation of another radio station or stations in accordance with the class of operator's licence which he holds and by the rules and regulations governing such other stations: **Provided, However,** that such duties shall in no wise interfere with the proper operation of the standard broadcast transmitter.

34.20 The licensee of each broadcast station shall maintain program and operating logs and shall require entries to be made as follows:—

## (1) In the program log,

(a) An entry of the time each station identification announcement (call letters and location) is made, with an indication of the type of announcement.

(b) An entry briefly describing each program broadcast, such as "music," "drama," "speech," etc., together with the name or title thereof, by whom presented, and the sponsors name, with the time of the beginning and ending. If a mechanical record is used, the entry shall show the exact nature thereof such as "record," "transcription," etc., together with the name or title of each, and the time it is announced as a mechanical record. If a speech is made by a political candidate, the name and political affiliations of such speaker shall be entered.

(c) An entry showing that each sponsored program broadcast has been announced as sponsored, paid for, or furnished by the sponsor.

## (2) In the operating log,

(a) An entry of the time the station begins to supply power to the antenna and the time it stops.

(b) An entry of the time the program begins and ends.

(c) An entry of each interruption to the carrier wave, its cause and duration.

(d) An entry of the following each 30 minutes.

1. Operating constants of last radio stage (total plate current and plate voltage).
2. Antenna current.
3. Frequency monitor reading.
4. Modulation monitor reading for maximum and average for the past half-hour period.
5. Temperature of crystal control chamber if thermometer is used.

(e) Log of experimental operation during experimental period (if regular operation is maintained during this period, the above logs shall be kept).

1. A log must be kept of all operation during the experimental period. If the entries required above are not applicable thereto, then the entries shall be made so as to fully describe the operation.

34.21 Logs of standard broadcast stations shall be retained by the licensee for a period of two years except when required to be retained for a longer period in accordance with the provisions of Rule 22.15.

34.22 (a) A licensee of a standard broadcast station shall make station identification announcement (call letters and location) at the beginning and ending of each time of operation and during operation on the hour and half hour as provided below.

(b) Such identification announcement during operation need to be made when to make such announcement would interrupt a single consecutive speech, play, religious service, symphony concert or operatic production of longer duration than thirty minutes. In such cases the identification announcement shall be made at the first interruption of the entertainment continuity and at the conclusion of such program.

(c) In case of variety show programs, baseball game broadcasts, or similar programs, of longer duration than thirty minutes, the identification announcement shall be made within five minutes of the hour and half hour.

(d) In case of all other programs (except provided in subsections (b) and (c) of this rule) the identification announcement shall be made within two minutes of the hour and half hour.

(e) In making the identification announcement, the call letters shall be given only on the channel of the station identified thereby.

34.23 Each broadcast program consisting of a mechanical record, or a series of mechanical records, shall be announced in the manner and to the extent set out below:

(1) A mechanical record, or a series thereof, of longer duration than fifteen minutes shall be identified by appropriate announcement at the beginning of the program, at each fifteen minute interval, and at the conclusion of the program: **Provided, However,** that the identifying announcement at each fifteen minute interval is not required in case of a mechanical record consisting of a single, continuous, uninterrupted speech, play, symphony concert or operatic production of longer duration than fifteen minutes.

(2) A mechanical record, or a series thereof, of a longer duration than five minutes and not in excess of fifteen minutes, shall be identified by an appropriate announcement at the beginning and end of the program.

(3) A single mechanical record of a duration not in excess of five minutes shall be identified by appropriate announcement immediately preceding the use thereof.

(4) In case a mechanical record is used for background music, sound effects, station identification, program identification (theme music of short duration), or identification of the sponsorship of the program proper, no announcement of the mechanical record is required.

(5) The exact form of the identifying announcement is not prescribed but the language shall be clear and in terms commonly used and understood by the listening public. The use of applicable identifying words such as "a record," "a recording," "a recorded program," "a transcription," "an electrical transcription," will be considered sufficient to meet the requirements hereof. The identifying words shall accurately describe the type of mechanical record used, i.e., where a transcription is used it shall be announced as a "transcription" or an "electrical transcription" and where a phonograph record is used it shall be announced as a "record" or a "recording."

34.24 (a) The term "rebroadcast" means reception by radio of the program<sup>27</sup> of a radio station, and the simultaneous or subsequent retransmission of such program by a broadcast station<sup>28</sup>.

(b) The licensee of a standard broadcast station may, without further authority of the Commission, rebroadcast the program of a United States standard broadcast station, provided the Commission is notified of the call letters of each station rebroadcast and the licensee certifies

<sup>27</sup> As used in Rule 34.24 "program" includes any complete program or part thereof, or any signals if other than A<sub>3</sub> emission.

<sup>28</sup> In case a program is transmitted from its point of origin to a broadcast station entirely by telephone facilities in which a section of such transmission is by radio, the broadcasting of this program is not considered a rebroadcast.

## F.C.C. Recommendations (contd.)

that express authority has been received from the licensee of the station originating the program<sup>29</sup>.

(c) No licensee of a standard broadcast station shall rebroadcast the program of any other class of United States radio station without written authority having first been obtained from the Commission upon application accompanied by written consent or certification of consent of the licensee of the station originating the program<sup>30</sup>.

(d) In case of a program rebroadcast by several standard broadcast stations such as a chain rebroadcast, the person legally responsible for distributing the program or the network facilities may obtain the necessary authorisation for the entire rebroadcast both from the Commission and from the person or licensee of station originating the program.

Attention is directed to Section 325(b) of the Communications Act of 1934, which reads as follows:

"No person shall be permitted to locate, use or maintain a radio broadcast studio or other place or apparatus from which or whereby sound waves are converted into electrical energy, or mechanical or physical reproduction of sound waves produced, and caused to be transmitted or delivered to a radio station in a foreign country for the purpose of being broadcast from any radio station there having a power output of sufficient intensity and/or being so located geographically that its emissions may be received consistently in the United States, without first obtaining a permit from the Commission upon proper application therefore"<sup>31</sup>.

36.01 No station licensee is required to permit the use of its facilities by any legally qualified candidate for public office, but if any licensee shall permit such candidate to use its facilities, it shall afford equal opportunities to all other such candidates for that office to use such facilities, provided that such licensee shall have no power of censorship over the material broadcast by any such candidate.

36.02 The following definitions shall apply for the purposes of Rule 36a 1:

(a) "A legally qualified candidate" means any person who has met all the requirements prescribed by local, state or federal authority, as a candidate for the office which he seeks, whether it be municipal, county, state, or national, to be determined according to the applicable local laws.

(b) "Other candidates for that office" means all other legally qualified candidates for the same public office.

36.03 The rates, if any, charged all such candidates for the same office, shall be uniform and shall not be rebated by any means, directly or indirectly; no licensee shall make any discrimination in charges, practices, regulations, facilities or services for or in connection with service rendered pursuant to these rules, or make or give any preference to any candidate for public office or subject any such candidate to any prejudice or disadvantage; nor shall any licensee make any contract or other agreement which shall have the effect of permitting any legally qualified candidate for any public office to broadcast to the exclusion of other legally qualified candidates for the same public office.

36.04 Every licensee shall keep and permit public inspection of a complete record of all requests or broadcast time made by or on behalf of candidates for public office, together with an appropriate notation showing the disposition made by the licensee of such requests, and the charges made, if any, if request is granted.

<sup>29</sup> The notice and certification of consent shall be given within three (3) days of any single rebroadcast, but in case of the regular practice of rebroadcasting certain programs of a standard broadcast station several times during a licence period, notice and certification of consent shall be given for the ensuing licence period with the application for renewal of licence, or at the beginning of such rebroadcast practice if begun during a licence period.

<sup>30</sup> The broadcasting of a program relayed by a relay broadcast station (Rule 1000) is not considered a rebroadcast.

<sup>31</sup> Informal application may be employed.

<sup>32</sup> Formal application required. See "Standards of Good Engineering Practice" for form number.

## ALTERNATIVE RULES

## Assignment of Channels in Compliance with the North American Regional Broadcasting Agreement

31.05A The frequencies in the following tabulation are designated as clear channels and are assigned for use by the classes of stations as given:

(1) To each of the channels below there will be assigned one Class I station and there may be assigned one or more Class II stations operating limited time or daytime only: 640, 650, 660, 670, 700, 720, 750, 760, 770, 780, 820, 830, 840, 850, 870, 880, 890, 1020, 1030, 1040, 1100, 1120, 1160, 1180, and 1210 kilocycles. The power of the Class I stations on these channels shall not be less than 50 kw.

(2) To each of the channels below there may be assigned Class I and Class II stations: 680, 710, 810, 940, 1000, 1060, 1070, 1080, 1090, 1110, 1130, 1140, 1170, 1190, 1200, 1500, 1510, 1520, 1530, 1550, and 1560 kilocycles.

(3) For Class II stations located not less than 650 miles from the nearest Canadian Border and which will not deliver over 5 microvolts per meter ground wave or 25 microvolts per meter 10 per cent. time sky wave at any point on said border, 690, 740, 860, 990, 1010<sup>33</sup>, and 1580 kilocycles.

(4) For Class II stations located not less than 650 miles from the nearest Mexican Border and which will not deliver over 5 microvolts per meter ground wave or 25 microvolts per meter 10 per cent. time sky wave at any point on said border, 730, 800, 900, 1050, 1220, and 1570 kilocycles.

(5) For Class II stations located not less than 650 miles from the nearest Cuban Border and which will not deliver over 5 microvolts per meter ground wave or 25 microvolts per meter 10 per cent. time sky wave at any point on said border, 1540 kilocycles.

31.06A The following frequencies are designated as regional channels and are assigned for use by Class III-A and Class III-B stations<sup>34</sup>: 550, 560<sup>35</sup>, 570<sup>35</sup>, 580, 590<sup>35</sup>, 600, 610, 620, 630<sup>35</sup>, 790, 910, 920, 930, 950, 960, 970, 980, 1150, 1250, 1260, 1270<sup>35</sup>, 1280, 1290, 1300, 1310, 1320, 1330, 1350, 1360, 1370, 1380, 1390, 1410, 1420, 1430, 1440, 1460, 1470, 1480( 1590, and 1600 kilocycles.

31.07A The following frequencies are designated as local channels and are assigned for use by Class IV stations: 1230, 1240, 1340, 1400, 1450, and 1490 kilocycles.

31.08A (a) The individual assignments of stations to channels which may cause interference to other United States stations only, shall be made in accordance with the standards of good engineering practice prescribed and published from time to time by the Commission for the respective classes of stations involved. (For determining objectionable interference see "Engineering Standards of Allocation" and Field Intensity Measurements in Allocation," Section C.)

(b) In all cases where an individual station assignment may cause interference with or may involve a channel assigned for priority of use by a station in another North American country, the classifications, allocation requirements and engineering standards set forth in the North American Regional Broadcasting Agreement shall be observed.

31.09A On condition that interference will not be caused to any Class III station, and that the channel is used fully for Class III stations and subject to such interference as may be received from Class III stations, Class IV stations may be assigned to regional channels.

<sup>33</sup> A station on 1010 kilocycles shall also protect a Class I-B station at Havana, Cuba.

<sup>34</sup> See Rule 31.09 in regard to assigning Class IV. stations to regional channels.

<sup>35</sup> See North American Regional Broadcasting Agreement for special provision concerning the assigning of Class II. stations in other countries of North America to these regional channels. Such stations shall be protected from interference in accordance with Appendix II., Table I., of said Agreement.

# Eighth Annual Convention of the Australian Federation of Commercial Broadcasting Stations.

## Report of Proceedings, Jervis Bay, November, 1938



C. F. Marden, elected President for 1939.

The eighth annual convention of the Australian Federation of Commercial Broadcasting Stations took place at Jervis Bay (A.C.T.), commencing on Monday, November 7, and terminating on Thursday, November 10, 1938.

Senator A. J. McLachlan, the then Postmaster-General, declared the Convention open. It was one of the last official duties performed by the Postmaster-General before his resignation from the Federal Cabinet became effective.



D. T. Worrall, Retiring President.

Forty-one delegates actually attended in person this year, many of them accompanied by their wives. Those present included: Messrs D. T. Worrall (3DB), C. F. Marden (2UW), A. N. Kemsley (3UZ), S. Morgan (3KZ), W. J. Harvey (4BU), B. Samuel (6IX-ML-WB), A. Robertson (4BK), V. M. Brooker (A.W.A. stations 2CH and 2SM), A. L. Holtze (5AD), J. E. Ridley (2GZ), A. Fairhall (2KO), T. Holt (3XY), H. B. Witham (2LF), G. B. Rolph (7EX), R. F. Roberts (4BC), E. J. Rheuben (4RO), E. E. Gold (4GR), C. V. Stevenson (2UE), H. E. Beaver (2KY), A. P. H. Whitford (6AM), A. C. Paddison (2KA), G. E. McCauley (2KA-KM), E. M. L. Dahl (4AY), Mrs. E. V. Roberts (2BS), Messrs E. V. Roberts (2WG), N. S. Sheppard (3UL), A. P. Wynne (4MB), D. Richardson (7LA), M. O'Halloran (2HD), E. Wood (7UV), A. P. Findlay (7DY), N. A. Findlay (7QT), S. H. Findlay (7HO), H. F. Dyball (2TM), H. G. Horner (2GB), G. H. Anderson (Macquarie), C. Ogilvy (2HR), C. S. Sharp (2CA), A. J. Ryan (2CA), R. A. Yeldon (2WL), A. D. Towner (7BU), and Prowse-Knox (of C.B.N.). The station call-signs after the names are not necessarily those stations represented by the delegates, but indicate the stations with which they are generally associated.

This gathering was claimed as the largest Broadcasting Convention ever held in Australia, and although Jervis Bay is about 120 miles south of Sydney, and not directly connected by train, the large attendance further justifies the decision to hold conven-

tions away from the big capital cities.

The conference assembled for business on Tuesday morning, under the chairmanship of Mr. D. T. Worrall (1938 president of the Australian Federation of Commercial Broadcasting Stations), and quickly got down to business.

Secretary R. Dooley reported that 60 stations were directly represented, and 15 represented by proxy, and that all representation arrangements were in order.

The minutes of the seventh annual convention having been circulated to members, were taken as read and confirmed.

**Vote at Meetings:** A notice of motion submitted by Mr. Kemsley, of 3UZ, "That it be provided in the new constitution that the value of votes at future conventions, wherever financial matters are involved, shall be:—

Stations with annual fees up to £24 . . . . . 1 vote  
Stations with annual fees up to £25 to £60 . . . . . 2 votes  
Stations with annual fees which exceed £60 . . . . . 3 votes

This did not evoke much discussion, but it was generally thought that the existing arrangement was the best basis by which each member had a vote, and the motion was lost.

### Appointment of Committees

**Finance Committee** appointed consisted of: Kemsley (convener), Roberts (2WG), Horner, Roberts (4BC), Holtze, and S. H. Findlay.

**Constitution Committee** appointed consisted of: Paddison (2KA), McCauley (2KM), together with Secretary Dooley and N.S.W. secretary (Brown), with Mr. Paddison as convener.

**Propaganda and Publicity Committee:** Messrs. Morgan and Marden proposed—"That the Sydney and Melbourne executive committees consider the best ways and means of circulating statements of value to the industry at suitable opportunities." Carried unanimously. It was generally considered that the Federation should use every means to protect the broadcasting industry and that irresponsible or incorrect statements should be quickly corrected. It was also urged that the broadcasters did not use their own medium sufficiently, and that self-preservation required a definite policy. The "security of tenure" problem should be dealt with over the air. One delegate said that the broadcasters should go on the air and sell the public on the service that commercial broadcasting was rendering, and in that way they would do much to sell the advertisers. Mr. Marden's contribution to this subject was received with great applause.

**Sales Tax:** Considerable attention has been given to the subject of depreciation and sales tax by the Federation executive and individual members. Without much discussion the following was agreed to: "That the Federation appoint a taxation expert to advise on the question of sales tax on recordings made by stations."

## Federation Eighth Annual Convention Proceedings (contd.)

### Accreditation

Since the previous Convention (see 1938 Year Book), as a result of negotiations with the National Council of Accredited Advertising Agents, the scheme of Federal accreditation had been put into operation. The rules in most respects being similar to those suggested during the previous year. One of the features associated with the establishment of the accreditation scheme was the reversion to the uniform rate of 12½ per cent. commission.

The practice of agencies in taking over agreement contracts which were obtained from the stations and claiming commission for the balance of the contract was earnestly discussed, with the result that the commission is to be divided into two. The following was agreed to unanimously:—

"That, as from February 1, 1939, the rates of commission to accredited agents shall be as follow:—

- 5% provided the agency signs the contract, and
- 7½% provided the agent services the contract and attends to the payment of the account.
- 7½% on the value of features purchased from the station on behalf of the client."

Other phases of accreditation were very much discussed, and delegates from all over the Commonwealth expressed themselves in no uncertain terms in respect to the agitation from advertising agents for "free time" in respect of a special feature, and sometimes even expecting the station to pay land-line charges. It was pointed out by one delegate that advertising agents are too prone to regard themselves as not in the employ of the broadcasting stations despite the fact that the latter pay the commission. Another delegate claimed that the practice would be the same as an agent proposing to newspapers that the client get advertisements free providing the client provided the pictures. The breaking of the Federation accreditation rules by agents in trying to encourage stations to break down their official rate schedules, was very much deplored. One prominent delegate said that the matter was largely in the hands of the stations themselves for allowing any agent to "get away with it." Another delegate contended that the Convention should take a firm stand and discipline any agent disregarding the rules.

The following motion was unanimously agreed to: "Member stations agree not to provide advertisers with free time or any rebate of charges in return for feature programs, and any accredited agency attempting to place advertising on that basis shall have its accreditation reviewed, and that member stations shall not give the time free for sponsored or featured sessions."

While delegates were loath to take any drastic action at this stage in cancelling the accreditation of any agent who broke the rules laid down by the Federation, the tone of the discussion indicated that stations were rapidly being forced to the point where they would definitely take this action and make an example of some offending agency.

**Credit Control:** The need for proper credit control of agencies and advertisers was stressed and general discussion given on this subject. It was finally agreed:—"That stations advise the Federation monthly of agencies or advertisers whose accounts are in arrears, and that the Federation circulate the information to members."

**Press Publicity:** Delegates complained of the growing practice of agents and advertisers requesting, and in some cases demanding, that a station should provide at its own expense newspaper publicity or advertising on behalf of the radio advertiser. Upon discussion it was ruled by the chairman that this was covered by Rule 12 of the Federation Rules of Accreditation.

### Appointment of New Postmaster-General

The chairman announced that he had just been advised that the Hon. A. G. Cameron, M.H.R., had been appointed Postmaster-General in place of Senator McLachlan, who had resigned. The Convention decided that a congratulatory telegram be sent to the new Postmaster-General.

### Government Control of Broadcasting

At the Southport Convention the previous year it was agreed that the Federation would push forward for the appointment of a board to regulate commercial broadcasting, and that this board would hear evidence in open meeting on the question of new licences, revision of licences, fixing of wavelengths and power, making regulations and arbitrating on disputes of a general nature associated with commercial stations. The board to consist of three members, one technical member from the P.M.G.'s Dept., one nominated by the commercial station, and the chairman to be a man of legal training. Delegates voiced their disappointment at the Federal Government not having taken action on this matter up to date, although the subject had been referred to in the speech by the Governor-General at the opening of the Federal Parliament last year. One delegate said that he was under the impression that the Government would only appoint an Appeal Board and that any decision would still be left to the Postmaster-General. Another delegate contended that the commercial stations should not be administered by the P.M.G.'s Dept.,

which already controlled the national service, because the latter was in competition with the former, and one does not usually have one's business controlled by one's largest competitor. He suggested that the control of commercial broadcasting should come under the auspices of the Prime Minister's Department.

One delegate was most forceful in his remarks against some members who were prone to accept with fatalism the idea that control could not be removed from the P.M.G.'s Department.

The need for every member and station manager to educate the Government and members of the Federal Parliament along the lines of giving them a greater appreciation of the value of broadcasting, was forcefully put to the Convention and received with great applause. The leaving of everything to the executive to do was deplored, and delegates were urged to play their part on every occasion and to lose no opportunity in "selling" broadcasting to the politicians of the country.

It was finally agreed unanimously—"That policy approved at the 1937 Annual Convention be re-affirmed and that it be left to the executive committee to bring pressure on the Postmaster-General to introduce legislation along these lines."

A further resolution on this subject was carried unanimously.—"That members agree to co-operate with the executive committee in giving effect to the above resolution by representations to parliamentary representatives, and, in order to assist members in this direction, that a memorandum setting out the policy of the Federation and the reason therefore be circulated by the secretary as soon as possible."

**Short-wave Transmission:** The use of short-wave transmitters by commercial stations in Australia for outside broadcast pick-up purposes was brought forward because of the present necessity to obtain a permit from the P.M.G.'s Department on every occasion that a short-wave transmitter was required to operate with the station. The Convention unanimously agreed—"That permission be sought from the Postmaster-General to allow of the use of short-wave transmitters in connection with any licensed transmitter, to allow of facilities for outside broadcasts, as is done in America, without reference to the Postmaster-General."

**Duplication of Wavelengths:** The subject of sharing wavelengths appeared to be very vexatious, and a number of Convention delegates discussed the subject. It was alleged that the P.M.G. had promised that no further dual wavelengths would be allotted. On the other hand it appeared quite definite that the policy

(Continued next page)

## Federation Eighth Annual Convention Proceedings (contd.)

of the P.M.G.'s Department was to share every wavelength in Australia, and that the city stations would be dealt with early. One delegate said that it was quite evident that the Department had no intention of sharing National stations, and also the policy of urging commercial stations to possess vertical radiators indicated that the sharing of channels was a definite policy of the Department.

Convention unanimously agreed,—“That the attention of the new Postmaster-General be drawn to the promise given by the former Postmaster-General that no further duplication of wavelengths would be approved pending the passing of the postponed legislation and that a renewal of this promise be sought.”

**Interference from N.Z. Stations:** It was pointed out that there are instances of definite interference between Australian and New Zealand broadcasting stations. That at least one New Zealand station was on the same wavelength as a high-powered commercial station on the East coast of Australia. This, Convention thought, indicated the lack of co-operation and the following motion was unanimously agreed to:—“That both the Australian and New Zealand Governments be approached with a view to their co-operating with the allocation of wavelengths so as to ensure a minimum of interference with stations in their respective countries, and also that steps be taken to ensure the maintenance of assigned frequencies, particularly by sharing stations.”

**Wednesday Session**

Conference assembled on Wednesday morning until lunch time, and proceeded to discuss probably the most contentious item of the whole convention, namely, A.P.R.A. (Australian Performing Rights Association).

The then existing agreement between A.P.R.A. and the various commercial broadcasting stations was due to expire on December 31, 1938, and the question of a new agreement had already received the attention of the executive committee and various members.

A committee, consisting of Messrs. Worrall, Holtze, Paddison, Kemsley and Secretary Dooley was appointed to meet representatives of A.P.R.A. the following day. When this conference between the Federation and A.P.R.A. delegates took place on Thursday (A.P.R.A. being represented by Messrs. Grant, Cooper and Edwards), they reported back to the Convention at about 10.30 p.m., with recommendations which were to be the subject of consideration by A.P.R.A.'s Board.

**Thursday Session**

**Constitution of Federation:** The chairman of the constitution committee, Mr. A. C. Paddison (2KA-KM)

submitted a comprehensive report dealing with the draft rules and regulations.

Clause 7 of the Objects dealing with the establishing and maintaining publications, libraries, etc., calculated to benefit the members, was deleted.

In Clause 17 the latter part from the words, “provided always,” were deleted.

Additional objects added included those to secure registration as an industrial organisation of employers throughout the Commonwealth; to secure for all those engaged in commercial broadcasting the benefits of any industrial or other legislation, etc.; to provide and encourage technical education for employees; to print, publish books, journals, periodicals, etc.; to act as an office for the collection of useful data for the use of members; to look after legal proceedings necessary for the Federation or its members.

As explained by Mr. Paddison, the constitution and the regulations would be merged into one. Clause 9 of the standing regulations was added to, to provide for the acceptance or the rejection of applicants for membership. Rule 10 was altered to provide that a member could give 30 days' notice of his intention to resign. Clause 11 provided that the Federal Council could remove a member from the register. Clause 15 was amended to give the president or the Federal Council authority to convene special meetings. Clause 18 provides for at least 15 days' notice of a resolution. In Clause 22 the chairman only has a deliberative vote and not a casting vote. Clause 23 is amended so that in the case of a vacancy for presidency and/or senior vice-president, one of the other vice-presidents shall step up. A quorum at meetings is provided for in Clause 29 but there must be 20 members personally present.

Members in arrears with their subscriptions for more than three months will not be entitled to vote under Clause 37. Clause 38 was amended that a proxy shall be in writing under the hand of the appointer, and may be for a specified meeting or for all or any meetings that may be desired.

Clause 41, which read “no individual shall hold at any meeting more than one proxy of any other member,” was substantially altered, and it is interesting to note that this was the first and only question before the Convention this year that called for the proxy votes to be counted. It was finally agreed,—“That voting power for all such stations in which a controlling interest is held by the member for whom the proxy is exercised.”

On the motion being put to the vote and the ballot counted, the motion was carried by 39 votes to 30. Two dissenters being Messrs.

Holtze (on behalf of the Adelaide “Advertiser” group) and Brooker (on behalf of A.W.A.).

The rules were altered to arrange for the appointment of trustees.

**Finance Committee**

This committee recommended and the Convention approved of secretarial allowances to Mr. R. Dooley and the N.S.W. secretary being increased. Mr. Dooley was also granted a bonus and convention delegates generally expressed their pleasure at Mr. Dooley's conduct in the office of secretary.

It was also decided that the sum of £1,000 would be refunded to members as part of the money received from the favourable verdict of the Racing Case. No alteration was made in the membership subscription except for one or two minor anomalies. The committee reported and the Convention agreed that the Federation was in a strong position, and that a substantial surplus is being budgeted for during the ensuing year. The administrative arrangements now operating in Melbourne and Sydney were recommended for continuance. Convention decided that members who were in arrears must meet their obligations without delay, otherwise they would forfeit their membership. Owing to the vastly changed character in representation at annual conventions, it was agreed that the general expenses (not travelling or personal expenses of the delegates) of the Convention be a charge against Federation funds, and this to include the 1938 Convention.

Convention agreed to a presidential allowance of £50 per annum.

A vote of thanks to the Finance committee for its work in the preparation of the report, and to Mr. Kemsley for his presentation of the report was unanimously agreed to.

Other matters such as international copyright convention, the amendment of the Copyright Act, Patents, etc., were not dealt with, as no further development had occurred to warrant Convention action at this juncture.

**Industrial Matters:** In respect to announcers, the secretary explained the position in regard to negotiations on that subject, and that as soon as the Announcers' Association was registered as an industrial union of employees, a log would be served on the Federation or its members.

In respect to technicians, the secretary reported on the position in regard to existing awards, and Convention decided that an industrial committee, consisting of Messrs. Anderson, Witham and Fitts, with power to co-opt, be formed to prepare and advise upon the case to be prepared for the next log before the court.

**Overseas News Bulletin**

Mr. Paddison reviewed the situation created by the September inter-

## Federation Eighth Annual Convention Proceedings (contd.)

**Election of Federation Officials**

T. Holt, Senior Vice-President.



A. Fairhall, Country Vice-President.



A. Robertson, Junior Vice-President.

national crisis with special reference to the withdrawing of the B.B.C. permission for re-broadcasting of the news service. It was contended that the Postmaster-General should arrange for amending regulations to provide that Australian broadcasting stations could pick up wireless non-copyright news service from overseas. Convention decided to appoint a deputation to wait on the Postmaster-General on this subject.

**Press Rates:** Convention decided to make representation to the P.M.G. for press rates to apply to international and internal telegrams to and from broadcasting stations as from January 1, 1939.

**News Services:** Mr. Paddison explained negotiations that had taken place with the independent cable service associated with the Sydney “Daily Telegraph” and the Melbourne “Argus,” etc., with particular respect to country broadcasting stations in N.S.W. He said that the “Daily Telegraph” service could be made available at a base rate of £10 per annum per station. It was not a Federation matter, but one for individual station action. He said that the scheme provided for an excellent service quite as good as the opposition. No motion was moved on this question, but Mr. Paddison's negotiations and his report were received enthusiastically by the Convention.

**Recorded Announcements**

This question of recorded announcements, particularly of recorded advertisements, raised quite a lot of comment from the delegates. It was obvious that the stations were far from pleased at the bad recordings that are made by some so-called recording studios or record makers. The need for some control of this was voiced on many sides. The difficulty seemed to be just how to evolve an effective scheme. Some announcements contained many more words than the station was led to believe, and, as many of these were not accompanied by a script of the recorded message extra work was involved in auditioning the record to ascertain exactly what it contained. The non-maintenance of a constant level in relation to the particular material used in the record brought forth bitter denunciations from many of the delegates.

It was finally decided,—“That a sub-committee of Federation members be formed to consider the accreditation of manufacturers of recorded announcements.” It is felt that this scheme if properly instituted and carried out will undoubtedly rectify a lot of the troubles, particularly if the maker of transcriptions finds himself taken off the official list because of faulty work. This was a very important subject, and a very valuable action on the part of the Convention.

At the close of the Eighth Annual Convention, the officers for the ensuing year to control the destinies of the Federation were elected. Mr. C. F. Marden, senior, vice-president, was unanimously elected president unopposed. In proposing Mr. Marden for this position, Mr. Dave Worrall, who was relinquishing the position of president, expressed satisfaction at the loyal support he had received during his 12 months of office.

In acknowledging his election, Mr. Marden said he appreciated the compliment paid him, and trusted that he would make half as good a job of it as Mr. Worrall had made. He felt that the Federation was a body that must exist for the protection of the industry, and although the office entails a lot of work and sometimes reacts against the person or his organisation, nevertheless somebody had to do the job, even if he did take the kicks. The industry was growing at such a pace that it required a united front by all the Federation members on all matters. He congratulated the members on their broadminded way of tackling all the problems, and finally expressed the necessity for freedom of thought on the part of the Federation in respect to the members' management of their own stations. He again thanked the Convention for the honour they had conferred upon him, and with that Mr. Worrall invited Mr. Marden to take the chair amid much applause.

The new president then called for nominations for senior vice-president, and Mr. Tom Holt, of 3XY Melbourne, was elected unopposed. It was explained that Mr. Sid Morgan, who was “a moral certainty” for the job would be going on a world tour during 1939, and preferred to stand down on this occasion.

Allen Fairhall, of 2KO Newcastle, was unanimously elected country vice-president.

The next surprise nomination was that of Mr. Alec Robertson, 4BK Brisbane, as the junior vice-president. Mr. H. G. Horner, of 2GB, was also nominated for this position, but in a very nice speech he declined the

nomination, as he thought that he could well sit back for a little while yet and get more used to commercial broadcasting conventions. Mr. Robertson was duly elected junior vice-president.

Two trustees were appointed, Messrs. C. V. Stevenson (2UE) and A. N. Kemsley (3UZ) being the successful and popular appointments.

A vote of thanks was unanimously carried by Convention to the retiring president (Mr. D. T. Worrall), vice-presidents (Messrs. Marden, Morgan and Anderson). In the early part of the Convention the chairman announced that Mr. George Anderson had tendered his resignation as country vice-president on account of his now being associated with a city station.

**1939 Convention**

The question of where the 1939 Federation Convention would be held was naturally of much interest to all concerned. It will probably be held in Hobart.

A vote of thanks was passed by Convention to the ladies' committee, and particularly Mrs. Marden, Mrs. Horner and Mrs. Anderson for their excellent work in connection with the social side of the Convention.

Conference also unanimously agreed to an appreciation of the retiring president's services being recorded in the minutes of the Convention.

(Continued opposite page)

**Manager of 5KA dies on way to Convention**

The sudden death of Mr. R. Lincoln, general manager of 5KA Adelaide, at an hotel in Melbourne on Friday, November 4, on his way to attend the Convention, was sadly recorded.

The Broadcasting Conference adjourned for a brief period out of respect for the memory of the late Mr. Lincoln, when delegates assembled for the opening.

## Federation Eighth Annual Convention Proceedings (contd.)

## Retiring President Points to Problems in Broadcasting Industry

In the course of a vigorous presidential address at the opening of the Eighth Annual Convention of the Australian Federation of Commercial Broadcasting Stations at Jervis Bay on November 8, 1938, Mr. David Worrall reviewed what had proved to be a most successful year in commercial broadcasting in Australia.

The presidential address also contained a warning to station owners against any moves which might be made to impose censorship of program material by any authority other than the various station managements. Freedom of speech, he said, should be affirmed in the Broadcasting Act, and let the weight of public opinion be the guide as was the case in the newspaper industry.

"Broadcasting has had a very good year, and most of us look back on it with a good deal of satisfaction. Licences have increased by more than 10 per cent. during the year. The number of radio sets sold during the year exceeds 250,000, which means that between £3,000,000 and £4,000,000 has been spent by the Australian public this year on new radio receivers. The number of commercial radio stations has grown to 95, and a great many country stations have been allowed to increase their power and have extended their operating hours, so that a much better service is now being given throughout Australia than was the case 12 months ago. All this means that a great deal more capital has been put into new transmitters.

"The standard of entertainment broadcast by the commercial stations definitely has improved, and is continually improving. Competition among the commercial stations was never keener than at present. Every month more money is being spent on programs, and such satisfactory results are being obtained by advertisers that it is becoming easier to persuade them to increase their appropriations for better features.

"The staffs of all stations are being increased continually, and the rising tide of costs in the management of all stations would be alarming if we were all happily not enjoying increasing revenues.

"The competition with the Broadcasting Commission is healthy. We are glad to see the improvement that has taken place in many of the national programs, but we are gladder to know, as we do surely know, that in every State we continue to hold the interest of the majority of listeners. To some of our critics this is one of the great mysteries. One of the reasons I believe is that we are more human and informal. The commercial stations have discovered that listeners prefer homely, informal broadcasts to the more dignified presentations. They like announcers and

entertainers to be natural and human, even if they make mistakes, or because they make mistakes. We know that the public appreciates a touch of humanity much more than it does the most edifying program. We can still remember very vividly the tones of our late beloved King when he said "Good night and God bless you all." I am sure that long after the most marvellous B.B.C. Symphony Concert is forgotten we will all remember how 'the fleet was lit up.'

"Another reason why commercial radio more than holds its own in public estimation is because so many minds are brought to bear on the presentation of our programs. The programs broadcast by the Commission must of necessity be produced or approved by a comparatively limited number of people. We have program experts also on the commercial stations, but a great many programs come from non-experts.

"Advertisers exercise a considerable influence over programs; some come from extremely competent and intelligent people in advertising agencies; others from advertising agencies which are not so competent nor expert; while others again come from the minds of salesmen who know nothing about program construction, whose ideas are extremely novel and unconventional. A great many of these programs are all wrong from the program director's point of view. They do outrageous things—musically and dramatically—there is no proper balance whatever in the material they supply, while a great many crazy ideas in ill-digested form are submitted to the long-suffering public. In other words, a great many minds are brought to bear on the presentation of programs for commercial stations, and it is a fact that a great many of these completely impracticable and badly arranged programs definitely have a wide appeal. This brings one to a general conclusion that a system by which programs are provided or

edited by a small number of people, however competent, is usefully supplemented by one where many minds are brought to play upon the problem of general entertainment.

**"Be Fearless"**

"In recent times alarm has been expressed by some people because so many agencies outside of radio are producing features. They are afraid that an advertiser who owns the rights to a program produced outside of the radio stations will demand to have it broadcast free or for cheaper rates because it has turned out to be a success.

"It seems to me that no properly conducted station should have any fear of this. No matter how popular a program might be there should be no question of cutting prices for it, and we should welcome all the best brains into radio that we can attract to it.

"In his election speeches Mr. Lyons promised us an amending radio Act to give us security of tenure. We can appreciate why there has been delay in fulfilling this promise, but we should urge upon the Government not to let another Session go by without attending to this very important matter.

"A great deal of nonsense is always being talked about radio, which is only natural. Radio plays such an important part in the lives of so many millions of people that it is probably discussed more than any other form of entertainment, and it is not surprising that a lot of uninformed people should from time to time give expression to queer ideas about it; but a lot of nonsense we hear from members of Parliament is inexcusable because they have every opportunity of securing proper information on the subjects they discuss.

**"Fantastic" Monopoly Talk**

"Every little while somebody attacks the Government or the Postmaster-General, alleging that they have given a monopoly of radio to newspapers. The facts are that out of 95 stations in Australia 17 are owned by newspapers; and newspapers or newspaper owners have some sort of interest in 16 more. Of the 22 stations in the capital cities four only are owned completely by newspapers.

"A lot of nonsense, too, is talked about the monopoly of the chains.

"In Australia there are three important commercial broadcasting chains. Everybody knows, or should know, if they make the least enquiry, that most of the members of these chains are loosely united, mainly to finance the common purchase of program material and for more economical sales representation in Sydney and Melbourne, where the main national business is to be had.

## Federation Eighth Annual Convention Proceedings (contd.)

## Presidential Address (contd.)

"As one who organised Australia's first chain some eight years ago, and has wrestled with its problems ever since, I speak very feelingly when I say it is just as difficult to get a camel through the eye of a needle as to get unanimity of action from the members of any Australian chain.

"There is no monopoly in an economic sense, and if there is no monopoly in an economic sense it is difficult to see how such could arise in any other sense. The talk of monopoly becomes all the more fantastic when one considers the attitude of the typical broadcaster towards matters of controversy and politics. Practically every radio commercial broadcaster in Australia regards his function as one of entertainment. Editorially, he has no opinions, and is prepared to have all views on any question discussed over his station. As the manager of a station which is completely owned by the largest newspaper house in Australia, I declare to you that never in the nine years that we have owned this station have we ever refused permission for any political view to be broadcast over our station. In election times we are particularly careful to endeavour to arrange that all parties be given equal opportunities of expressing their views.

**Freedom of Speech**

"In the light of what has happened in New Zealand where one party in power took possession of radio to the exclusion of all other groups, and in order to deal a final blow to the nonsense that is talked about monopoly, I suggest that when the Government is amending the Broadcasting Act, it should affirm that in the periods prior to elections all broadcasting stations should be compelled to sell time or provide facilities in equal terms to all political parties.

"I feel, too, that an affirmation should be made by the Government that freedom of speech should be fostered on the air just as jealously as it is in newspapers. The press, the motion pictures, and radio perform an identical social service—the purveying to the public of entertainment and information. In a democratic State it is assumed that the public is sufficiently protected from abuse of the free press principle by the common law and by the power of public opinion. There should be no need for any special authority to be set up to censor and supervise the information or entertainment broadcast by any commercial station. Public opinion can most effectively deal with any station which errs in good taste in these matters. Because it is necessary for the Government to act in a regulatory fashion to prevent

chaos on the air by allotting wavelengths and supervising the technical facilities of all stations is no reason why the Government ever should set itself up as a censor of morals or of the standard of entertainment broadcast.

"We are content to let the Government act as a traffic cop as far as the technical facilities are concerned, but it would be a retrograde step if ever the Government should decide that it must tell us just what kind of entertainment we must provide, and we should view with suspicion any trend in this direction.

"Up-to-date the Government and the Postmaster-General's Department have handled their wide regulatory powers very wisely and well, and we have little to complain of in this direction; but there may be other Governments with other ideas and it would be a relief to us all, and to all who cherish democratic ideals, if the Broadcasting Act could in some way affirm the principle of freedom of speech on the air, and we should be ready at all times to strenuously oppose any move to more closely regulate our programmes.

"At the same time such an attitude throws a heavy responsibility upon the managements of commercial stations to keep our standards at as high a level as possible. We need to watch very carefully all advertising copy submitted to us, particularly in regard to patent medicines and other advertising which may contain exaggerated claims and material liable to offend against good taste. It is in the interests of the industry as a whole for all stations resolutely to refuse to carry business likely to drive listeners from any particular station.

**Problem of Poor Transcriptions**

"Lately, following the introduction of cheap acetate recorders the market has been flooded with mediocre drama. Some of this is purchased by advertisers direct and the station managements are faced with the problem of whether to lose revenue by refusing to accept these programs or to risk the loss of listeners by having them broadcast. I am glad to say that most of our stations have no hesitation in refusing obviously bad programs. It is the border-line cases which give us most trouble. At the same time some splendid local productions have been released to us in the last year.

"We are also greatly perturbed by the number of recorded advertisements coming to us, many of which are badly recorded and contain voices which are harsh and unattractive. It is difficult for the Federation as a whole to deal with this problem, but

we wish particularly to appeal to service agents to support us in improving the standards of this advertising matter.

"To return to my theme of a few minutes ago—I suggested that we were quite happy about the Government, through the Postmaster-General's Department or some other authority, acting as a technical traffic cop of the air. We feel, however, that there should be some right to appeal against the decisions of this authority in cases where, in our opinion, they are opposed to the best interests of radio. Two stations can give a better service to the community than one. Conceivably three or four in a city will give a wider range of service than will two; but there comes a point in every area where additional licences issued merely represent another noise on the air and no further useful service to listeners—the air is cluttered up to no useful purpose and the additional competition weakens the existing stations, rendering it more difficult for them to obtain revenue to improve their standards of entertainment.

**Cricket Broadcasts**

"During the year the Federation officers co-operated with the Australian Broadcasting Commission in organising the Test match broadcasts. This was a great success and resulted in substantial savings to all concerned and an improved service to listeners. I wish to thank Mr. Moses for his generous co-operation with us, and to congratulate the Commission on having such a genial and capable executive in charge of their affairs. We will continue to compete vigorously with the Commission, but hope that when common actions are called for we will be able to associate with them to our mutual advantage.

"During the year we have been able to conclude arrangements by which it is possible for stations to obtain cable news services at an economical price, and on what I consider a satisfactory basis.

**A.P.R.A. Agreement**

"We have entered into negotiations with the Australian Performing Rights Association for a new agreement covering the right to use their music, and these negotiations have been carried to a point where there is not a great gap between the ideas of both sides, and I hope that following this Convention it will be possible to conclude on a friendly basis an agreement which will be reasonably satisfactory. At the same time I think we should again pay tribute to the very valuable way in which Mr. Moses conducted the case for the Commission against the Performing Rights Association. I am sure it is as a result of this case that A.P.R.A. is more in a mood to negotiate a new agreement than it is to

(Continued next page)

## Federation Eighth Annual Convention Proceedings (contd.)

### Presidential Address (contd.)

go to Arbitration. Personally, I believe that a friendly agreement is better than a forced one, even if it costs us a little more than would be the case if we had prolonged legal proceedings.

"During the year Mr. Duffy, the secretary-general of the Federation, felt that this body was sufficiently well organised as to render his service a little superfluous, and he handed in his resignation. I would like to thank him for his past efforts on our behalf and to wish him well in his future activities.

#### Accreditation Bureau

"Perhaps the most important task carried out by the Federation during the year was the formation of a Federal Accreditation Bureau. You will remember that last year we were unable to reach agreement with the Advertising Agents' Associations, but not long after the last Convention we were able to meet the agents' representatives in Sydney and Melbourne, and soon were able to effect a highly satisfactory arrangement as a result

of which the Federal Accreditation Bureau was formed and has since been functioning satisfactorily.

#### Tribute to Colleagues

"I would like to pay tribute to the splendid work of the secretary, Mr. Dooley, during the year. He has carried out his duties quietly and efficiently, and I have formed the highest opinion of his efficiency.

"During the year the Sydney executive was asked to appoint a secretary to handle the Sydney office. They selected Mr. Brown, and we should all congratulate Sydney on this excellent appointment. The new office is working very well indeed.

"Awards concerning announcers and engineers have been made by the Arbitration Court during the year and have given a great deal of work to our secretary, Mr. Dooley. In addition, he undertook the organisation of the Test Match Syndicate, which also involved him in a great deal of extra work. We congratulate Mr. Dooley on the way he handled the Federation affairs in these cases.

"During the year the Racing Case was taken to the Privy Court, and was concluded successfully so far as we are concerned. We have a substantial surplus left in the defence fund as a result of the conclusion of this case, together with a surplus resulting from the economical administration of the Federation's affairs, making a total of approximately £2,000. My strong recommendation is that this money be left in the defence fund against any future contingencies.

"As a result of the reorganisation of the Federation's business affairs, it should be possible for us to reduce the annual subscription for next year by 40 per cent.

"In conclusion, I would like to thank the vice-presidents, Mr. Frank Marden, Mr. Sid Morgan and Mr. George Anderson, for their splendid support and help. None of us have been much good as politicians; we have not been called upon to make any spectacular public appearances; but I hope you will agree with me that the affairs of the Federation have been conducted in a sensible and business-like manner, and you have to thank the vice-presidents as well as the business officers for most of this."

## A Real Radio Drama

(By L. Lippmann in "Broadcasting Business," March 23, 1939)

The scene opens with one of the city's biggest and busiest business men in the course of a final interview with a newspaper space salesman. The problem confronting the Big Busy Businessman for several weeks has been whether to use radio or newspapers for the main proportion of his advertising allocation.

**Big Busy Businessman:** "Well, I think now my mind is clear and made up. From what you have told and from what others have told me I must make use of the press for the main campaign."

**Space Salesman:** "There's no doubt about it, sir. The fact cannot be refuted. The printed word is a lasting record of your sales message . . . it works for you over and over again . . . it carries more conviction . . . it has a realness about it, and of course you must agree that the brain is more receptive to what the eye sees than it is to what the ear hears."

**B.B.B.M.:** "Yes, yes. You have convinced me of that, indeed, and er . . . as I have said there seems no reason why I should not concentrate on press advertising. The printed word, yes it must be the best after all. Bring me around your contracts in the morning and we'll settle the whole matter."

Space Salesman triumphantly departs. Sound of gay whistle,

Sound door firmly closing, swell theme . . . fade out.

Fade in theme for 30 sec. and fade out to sound inter-office telephone buzz.

**B.B.B.M.:** "Yes? What? I don't want to see any more salesmen! What? Oh! Yes, then all right, bring him in."

Sound of door opening, admitting Station Time Salesman to inner sanctum of Big Busy Businessman.

**B.B.B.M.:** "Now look here, it's no use our going into all this matter again. I've made up my mind to use press. I'm satisfied it's the best medium. The printed word you know. You can't beat it. Sells every time . . . lasting record of my sales message . . . working for me over and over again . . . carries more conviction, too . . . the brain, you know, must be more receptive to what the eye sees than it is to what the ear only hears!"

**Time Salesman:** "You appear to be so thoroughly convinced upon the subject, sir, that it would be useless for me to take up more of your time, putting to you facts which would prove that radio, properly used, and for your particular products, could do an infinitely bigger job for you than any other medium, and that radio used in conjunction with a certain amount of

press advertising would make the 100 per cent. campaign. However, before I go, I would be interested to know how my competitors in this case so thoroughly turned you against the broadcast medium and implanted their story in your mind."

**B.B.B.M.:** "I make up my own mind in these matters, my friend, though I'll admit I've had every newspaper space salesman pestering me for weeks."

**Time Salesman:** "Oh, and didn't any of them write out their sales story to you in 'the printed word'? Did they all make personal contact with you?"

**B.B.B.M. (mystified):** "But . . . but, why?"

**Time Salesman (rising to leave):** "Well, I was just thinking. They used the medium I represent to sell you on the idea of using their medium!"

**B.B.B.M.:** "What do you mean?"

**Time Salesman:** "I mean they convinced you by word of mouth selling!"

Sound of door opening.  
**B.B.B.M.:** "Just a minute, young man . . . just a minute. I believe you've got something there . . ."

Gong, swell theme and fade out.

**Announcer:** "You've just been hearing the first episode of a radio drama the subsequent episodes of which, the author sincerely hopes, will be written on contract forms of broadcasting stations all over Australia."

## Extracts from Sixth Annual Report, Australian Broadcasting Commission, Year Ended June 30, 1938

### Extent of Service.

Three new stations were added to the National Network in the past year (1937-8) as follows:—

5AN Adelaide, opened on October 15, 1937.

4QR Brisbane, opened on January 7, 1938.

7ZR Hobart, opened on June 22, 1938.

With the exception of Perth, where it is expected 6WN will open in October, 1938, the Commission now has a second station in each capital city of Australia from which it is enabled to provide an alternative programme.

The number of National stations is now 24, including the short-wave station VLR, the call-sign of which was previously 3LR.

### Broadcasting Hours:

The establishment of alternative stations in Adelaide and Brisbane brought about a revision of the hours of operation, with a view to making the most effective use of the facilities available and especially to providing alternatives during those hours of the day when the maximum potential listening audience is thought to be available. The revised hours are:—

### World Broadcasting Statistics.

The six countries which headed the list of listeners for the year 1936-7 are still undeposed. Australia again occupies sixth place. New Zealand has moved above Sweden, and has now the fourth highest ratio of licences (or set-owners) to population. Canada has dropped from seventh to fourteenth place. South Africa has dropped from twelfth to sixteenth place. In the latter case it should be noted that here, as in a number of other cases, there has been a new census since the previous year's figures were published.

(Note: List referred to above appears at foot of page 15.)

### Programmes:

For the year 1937-38, the Commission's total broadcasting time for all stations amounted to 108,157 hours. This total was made up of 502,755 program items, of which 234,715 were "live performances," and 268,040 recorded.

### (Local Times Throughout)

Transmitters.	Programmes.	Sundays.	Week Days.
2BL-2NR-2CO 3AR-3GI 4QG 5AN-5CK 7ZL VLR	No. 1 (4QG takes No. 4 programme after 6 p.m.).	8 a.m. to 1.30 p.m. 3 p.m. to 10.30 p.m. Exceptions: (a) 4QG closes 10 p.m. (b) 5AN, 5CK operate half hour earlier on local time to synchronise with Eastern transmitters, i.e., 7.30 a.m. to 1 p.m. 2.30 p.m. to 10 p.m.	6.30 a.m. to 10.15 a.m. 12 noon to 11.30 p.m. Exceptions: (a) 4QG closes 10.30 p.m. Saturday midnight. (b) 5AN, 5CK are closed from 9.45 a.m. to 11.30 a.m. (c) VLR opens 12.25 p.m. to 5 p.m., and 6.30 p.m. to 11.30 p.m. Saturdays midnight. 6.30 a.m. to 8.15 a.m. 10 a.m. to 11.30 p.m. 10 a.m. to 10.30 p.m. Saturdays midnight.
4RK-4QN 7NT 2FC 3LO 4QR	Nos. 1 or 4 Nos. 1 or 7 No. 2 No. 3 No. 4, No. 1 after 6 p.m.	as above 9.30 a.m. to 12.15 p.m. 1.30 p.m. to 10 p.m.	Exceptions: (a) 4QR closes 10.30 p.m. (b) 5CL opens 10 a.m. closes 10.30 p.m. 6.30 a.m. to 8.15 a.m. 10 a.m. to 11.30 p.m. 6.30 a.m. to 9 a.m. 10.30 a.m. to 2 p.m. 3 p.m. to 4.45 p.m. 5.15 p.m. to 11.30 p.m. Saturdays. 6.30 a.m. to 8.30 a.m. 11 a.m. to 11.30 p.m.
5CL 7ZR	No. 5 No. 7	as above	Exceptions: (a) 4QR closes 10.30 p.m. (b) 5CL opens 10 a.m. closes 10.30 p.m. 6.30 a.m. to 8.15 a.m. 10 a.m. to 11.30 p.m. 6.30 a.m. to 9 a.m. 10.30 a.m. to 2 p.m. 3 p.m. to 4.45 p.m. 5.15 p.m. to 11.30 p.m. Saturdays. 6.30 a.m. to 8.30 a.m. 11 a.m. to 11.30 p.m.
2NC-2CR 3WV 6WF-6WA-6GF	No. 2 No. 3 Nos. 1 and 6	8 a.m. to 12.15 p.m. 1.30 p.m. to 10 p.m. 9 a.m. to 2 p.m. 3 p.m. to 10.30 p.m.	Exceptions: (a) 4QR closes 10.30 p.m. (b) 5CL opens 10 a.m. closes 10.30 p.m. 6.30 a.m. to 8.15 a.m. 10 a.m. to 11.30 p.m. 6.30 a.m. to 9 a.m. 10.30 a.m. to 2 p.m. 3 p.m. to 4.45 p.m. 5.15 p.m. to 11.30 p.m. Saturdays. 6.30 a.m. to 8.30 a.m. 11 a.m. to 11.30 p.m.

This represents an increase of regular programme time for all transmitters of 394 hours weekly compared with last year.

The total programme time of the abovementioned stations during the year under review amounted to 108,157 hours—an increase of 23,858 hours; brought about largely by the increase in the number of transmitters.

Subsequent to the period covered by this report, the programme numbers have been replaced by the actual names of the States in which the programmes are produced—the National No. 1 becoming Australian National Programme, the National No. 2 becoming New South Wales Programme, and so on.

VLR now operates week days 6.30 a.m. to 11.30 p.m., with a break between 10.15 and noon.

The time devoted to recordings was 19.9 per cent. of the total time, compared with 29.1 per cent. for the previous year.

The number of individual persons employed for "live performances" throughout the period under report, was 15,119, of whom the vast majority were Australians. This number was made up of 11,833 musicians; 2,102 of these were soloists, and the remainder took part in one or other of the 460 musical combinations broadcast during the year. Of non-musical performers, 2,577 gave talks, and 709 were employed in various dramatic productions.

In addition, 155 Australian orchestral players, and 108 bandmen, accompanists and choristers engaged in the Commission's orchestras and other combinations, were given full-time employment.

(Continued next page)

## Australian Broadcasting Commission Annual Report (contd.)

Musical items, as in previous years, accounted for more than half the total number of hours on the air, viz., 58.18 per cent., as against 53.79 last year. The increased programme allocation went chiefly to light music. There is little change in the proportionate allocation to classical and modern dance music.

The percentage of time allotted to sporting descriptions and commentaries was slightly less than last year, but there was little change in the time allotted to drama, talks, and other programme items.

The following table indicates the proportion of the total programme time of all National stations, including National regional stations, taken up by the various types of items:—

### Program Analysis:

Item	Hours	Percentage of Grand Tot. Hrs.	
		Group Total	Sec-tional Group
<b>MUSICAL:</b>			
Classical	8,431	7.30	
Light Classical	9,607	8.38	
Light Music (including Military and Brass Bands)	32,250	29.32	
Sacred Music and Oratorio	953	.88	
Operatic (Grand)	1,015	.94	
Operatic (Light) and Musical Comedy	2,275	2.10	
Dance Music	8,397	7.76	
	62,928	58.18	
<b>TALKS:</b>			
General Talks, Interviews	2,718	2.51	
Special Subjects:—			
News Commentaries	1,835	1.70	
Social Science and Foreign Affairs	1,047	.97	
Science and Philosophy	308	.28	
Music and Art	465	.43	
Technical (Farming, etc.)	578	.54	
Sport	1,168	1.08	
Descriptive (Non-Sporting)	337	.31	
Book, Reviews and Literary	320	.30	
Religious Subjects	172	.16	
Broadcasts to Schools	2,219	2.05	
Women's Session Talks	1,645	1.52	
Children's Session Talks	1,062	.98	
Election and Talks by Politicians	359	.33	
	14,233	13.16	
<b>DRAMATIC:</b>			
Plays:			
General: 1. Classic	364	.34	
2. Drama	1,424	1.31	
3. Comedy and Farce	918	.85	
Children's	335	.30	
Education	88	.08	
Serials:			
General	712	.66	
Children's	769	.70	
Dramatised Stories and Talks	1,287	1.20	
Feature Programmes	589	.55	
	6,486	5.99	
<b>SPORTING:</b>			
Running Descriptions	6,134	5.68	
Results and Commentaries	2,730	2.52	
	8,864	8.20	
<b>ESSENTIAL SERVICES:</b>			
News	5,919	5.48	
Reports (Weather, Markets, etc.)	4,390	4.06	
Announcements	1,698	1.56	
	12,007	11.10	
<b>DEVOTIONAL:</b>			
Church Services	2,416	2.24	
Studio Broadcasts	1,223	1.13	
	3,639	3.37	
Grand Totals	108,157	100	

### Music:

Music, in its almost infinite variety, provided, during the year under review, more than half of the Commission's programmes.

The enthusiastic response of the public to music in its higher forms has amply justified the expectations of the Commission and on every hand can be seen evidence of a growing appreciation of orchestral concerts, chamber music programmes, and of the higher forms of vocal and instrumental music.

It may fairly be claimed that the growth of public appreciation, with its attendant increasingly acute criticism of the standard of performance, is chiefly attributable to the high standard which the Commission has set in the

programmes provided not only by artists and conductors from overseas, but also by those native to Australia.

The Commission's activities have not been confined to what is commonly called "classical" music. Ample attention has been devoted to musical programmes of a lighter nature—military and dance bands, light opera, musical comedy and revue. In this sphere the raising of the standard presents an even more difficult problem, for the wider general public, nurtured by recordings and the "talkies," are most keenly critical.

### Australian Composers:

It has been a source of gratification to the Commission that Australian composers have been quick to realise its appreciation of their endeavours, and, if proof were needed, it is found in the steady increase in the numbers of manuscripts submitted.

The Commission believes that its programmes are enhanced by original works of high standard, and welcomes and appreciates the efforts of those Australian composers who have submitted their works.

the past year were:—

"Auster" (Opera)	Alfred Hill
"The Warriors" (Cantata)	Norbert Wentzel
"St. Bernard's Hymn"	Fritz Hart
Concerto for Piano and Orchestra	Miriam Hyde
Concerto for Piano and Orchestra	Frank Hutchens
Chamber Music	Dulcie Holland and Rebecca Clarke
Sonatas	Roy Agnew
Symphony in E Flat	Alfred Hill
Symphony in E Minor for Violin and Orchestra	Alfred Hill
"Bush Legend" (Opera)	Clive Douglas

Although many compositions received were not up to National broadcasting standard, all were carefully examined. The Commission is confident that in time local compositions will, on their merits, occupy an increasing percentage of programme time.

### Contemporary Composers:

The success which attended the institution of weekly recitals devoted to the works of contemporary composers (referred to in the last annual report), led to the extension of this series for the greater part of the year under review.

That a certain proportion of this music may be considered ephemeral does not detract from the interest in, and value of, such sessions, which enable the thoughtful musician to follow modern trends in the music of all countries. Included in the programmes—mostly as first Australian performances—were the following works:—

Sonata for 'Cello and Piano	Pizzetti
Sonata for Violin and Piano	Pizzetti
Sonata for Violin and Piano	Debussy
String Quartet	Bela Bartok
String Quartet	Honnegger
Sonata for Violin and Piano	Ravel
Sonata for Violin and Piano	Arnold Bax
Sonata for 'Cello and Piano	John Ireland
Clarinet and Strings Quartet	Arthur Bliss
String Quartet	Milhaud
Suite for Piano	Arthur Benjamin
String Quartet	Maliapiero
Rhapsody for Quartet and Piano	John Ireland
Sonata for Violin and Piano	Ivor Foster
Sonata for Piano	Arnold Bax
Sonata for Piano	Stravinsky
Sonata for Piano	N. Culnelli
String Quartet	Schonberg
Trio: Violin, Piano and 'Cello	E. J. Moeran
String Quartet	Szymanowski
Piano Sonata	Szymanowski
Pergolese Suite for Violin and Piano	Stravinsky
Piano Sonata	Busoni
Poeme Nocturne, etc.	Scriabine

(Continued next page.)

## Australian Broadcasting Commission Annual Report (contd.)

### Overseas Artists:

During the year under review, Australia was visited by a number of famous overseas artists, including seven native Australians (Lauri and Dorothy Kennedy, 'cellist and pianist; Essie Ackland, contralto; Sylvia Bernita, soprano; Reginald Morphew, baritone; and Victoria Anderson and Viola Morris, duettists), who toured the Commonwealth under engagement to the Commission.

Newcomers to Australia were:—Professor Georg Schneevoigt (conductor), Bronislaw Huberman (violinist), Artur Rubinstein (pianist), Lotte Lehmann (soprano), the Budapest String Quartet and the Comedy Harmonists, who were referred to in the last annual report. Later arrivals during the year were: Professor Georg Szell (conductor), Alexander Kipnis (basso), Dino Borgioli (tenor), Paul Schramm and Diny Soetermeer (Viennese pianists), Sigurd Rascher (saxophonist), Sydney de Vries (baritone), Grace Adams East (trumpeter), and Richard Tauber, the world-famous German tenor. Dr. Malcolm Sargent, the distinguished English conductor, is due to commence his second Australian tour for the Commission in Sydney during July of this year.

Another famous artist from abroad to visit Australia during the year was Mme. Kirsten Flagstad by arrangement with J. and N. Tait. This great soprano was heard over the National Network in four broadcasts in which she was associated with the Commission's Sydney and Melbourne orchestras.

Advantage was also taken of the presence in Australia during the year of other notabilities in the musical world; the late Sir Richard Terry, acknowledged as the greatest expert on church music in the world, and Felix Swinstead, well-known composer-pianist, appeared in the Commission's programmes, though their primary object in visiting Australia had been to conduct examinations for their respective Colleges of Music.

### Touring Artists:

As in past years, the artists from overseas toured the Commonwealth, appearing in the Federal capital, all State capitals, and in several other cities.

Forty-four tours were arranged in all, these comprising the overseas artists referred to and some 33 Australian artists, drawn from all States in the Commonwealth.

By this means not only were local programmes made more attractive, but opportunity for invaluable experience in widened musical contacts was given to those local artists who had not been abroad.

### Auditions:

Auditions were arranged in each State, to allow all who aspired to appear on the Commission's programmes the opportunity of proving their merit under normal broadcasting conditions. A Federal Auditions Committee visited Sydney, Melbourne, Perth, Adelaide and Hobart and will visit Brisbane during the coming year.

The percentage of those of a sufficiently high standard to warrant engagements is still disappointingly low; on the other hand, the successful applicants provide a welcome addition to the radio talent available to the Commission.

### Recordings:

Although "live artist" programmes occupy an ever-increasing proportion of programme time, it is unlikely that records, bringing, as they do, famous artists and combinations from overseas to the Australian listening public, will ever be eliminated from the programs. As with "live artist" programmes, the Commission's aim is to present recorded programmes having an appeal to a definite audience.

In the past year the Commission's recorded programmes included, in addition to thousands of light and popular works, many performances of complete symphonies, concerti, sonatas, etc., too numerous to mention.

### Public Concerts:

The Commission's policy of bringing to Australia outstanding personalities of the musical world of to-day was continued, and was attended with even greater success during the year under review.

Most of the performances were given in public. Without the offset provided by the receipts from such concerts, the cost of bringing overseas artists to Australia would be prohibitive. Their visits, apart from enriching the programmes, provided an opportunity for hundreds of Australia's young musicians to study at first-hand the technique of those who have already achieved fame and success in their art.

In all, the Commission presented 258 public concerts during the year. These concerts were not by any means confined to artists from overseas. Special mention should be made of tours arranged in connection with the N.S.W. 150th Anniversary Celebrations. The A.B.C. Sydney Symphony Orchestra visited several N.S.W. country centres, and Jim Davidson's A.B.C. Dance Band, with assisting artists, toured the Eastern States of the Commonwealth.

Once again, resident Australians were engaged to appear as assisting soloists with visiting celebrity conductors, and visiting celebrity soloists were associated with orchestras led by the resident conductors in the various States.

### Productions:

For the year ended 30/6/38 the steady stream of manuscripts submitted was maintained. Altogether over 1,500 plays, serial episodes, sketches, short stories, children's serial plays and stories, revues, musical works, etc., were read by the Federal Productions Department. Of these, the following were purchased:—Ninety-four "straight" plays (varying in length from 20 minutes to one hour), 89 serial episodes of plays, 16 musical features and revues, 17 short stories and 198 children's plays, stories and serial episodes; a total of 414 scripts. Further, seven children's serial features were commissioned from local authors, consisting of 204 episodes, whilst another 150 episodes which had already been produced in one State were purchased for use in all other States. In addition, regular members of the dramatic staff provided 102 scripts of original plays, revues and serial episodes, and 74 adaptations from novels and plays, musical comedies, and various feature programmes and continuities. Thus, a grand total of 944 plays, musical shows, serial episodes, both for main programmes and children's sessions, were provided by the staff and free-lance writers between 1/7/37 and 30/6/38. 578 evening programme periods were given to plays and serials, including productions which were repeated. Of these, 371 were filled by plays locally written, and 207 by plays from overseas, which means that 66 per cent. of the material used was by Australian authors. Of 101 musical comedy and revue productions, 75 were locally written. Plays by Shakespeare are not included in the foregoing figures, since Shakespeare may be regarded as belonging to all English-speaking peoples.

It is necessary to point out that the high proportion of overseas plays presented in the evening sessions is due to the fact that very few local authors are writing plays of the required length. A large number of the overseas scripts used have already been produced by the B.B.C. and should prove very useful as examples to Australian writers.

In addition to the libretti, all the music for locally written musical comedies and revues has been written by Australians.

In the children's sessions, only some 10 or 12 overseas plays were broadcast, and so at least 95 per cent. of the manuscripts used in this department were locally written.

The performances of the scripts referred to (local and overseas) include repeats, but do not include "The Three Diggers," written by E. V. Timms, nor features of the type of "Near and Far," "Sea Spray and Smokedrift," etc., nor the very many continuities for various sessions, all of which have been by Australian writers.

Last year it was claimed that 70 per cent. of production material was written by Australian authors; this year's figures show that this proportion has been increased.

Hundreds of letters of helpful criticism have been sent

(Continued next page)

## Australian Broadcasting Commission Annual Report (contd.)

with returned manuscripts, and interviews are given every week to authors who wish to discuss their work. In many cases the criticism has led to the revision and eventual acceptances of the manuscript.

The proportion of acceptable scripts received by the department has been maintained. Authors of successful plays of previous years have continued to supply us with work, and if the quality of their output can be kept up the percentage of Australian work used in production should not fall below its present high figure.

The Shakespearean productions for the year were: "A Winter's Tale," "Cymbeline," "Romeo and Juliet," "Two Gentlemen of Verona," "As You Like It," "Hamlet," "Coriolanus," "The Tempest," "Timon of Athens," "Anthony and Cleopatra" and "Henry VI," Parts 1 and 2, bringing the total of the Shakespearean plays performed to 33, the remaining four being programmed for July and August, 1938.

Outstanding among the year's plays were:—

(a) Local Compositions: "The Girl with the Tattered Glove," "A Touch of Silk," "Farewell to the Boss," "The People are My Children," "Ani's Mountain," "The Jackaroo," "Within these Walls," "Not without Honour" and "Jane Eyre."

(b) Overseas Compositions: "Cyrano de Bergerac," "The Path of Glory," "The Lady with the Lamp," "The Betrothal," "Kathleen na Houlihan," "Abraham Lincoln," "Caesar and Cleopatra," "The Bluebird," "The Coming of Christ," "Back to Methuselah," "The Romantic Young Lady," "James the First of Scotland," "Jenny Meade" and "Goodbye, Mr. Chips."

The most notable adaptations were Edmund Barclay's "The Idiot," taken from Dostoevsky's novel; some of the Henry Lawson stories; and a second series of the "Father Brown" stories, adapted by Max Afford. As to serials, "As Ye Sow" completed its run in September, and was followed late in January by another Edmund Barclay serial, "Into the Light," an interesting study of mediaeval Europe. A short six-part overseas serial, "Dead Reckoning," which was produced in several States, proved a successful experiment.

The second Australian Drama Week was held in May. This yearly feature does much to call attention to the work being done in encouraging Australian dramatic writing.

### Musical Comedy.

This year the Light Opera season took the place of the National Musical Comedy season of last year, but three of the operettas broadcast—"Land of Smiles," "Madame Pompadour" and "Good-night, Vienna" approximated to the musical comedy form and were the most outstanding productions of overseas work. Of local work, "Princess Prosperity," by Robert Money and Howard Carr, "Moon over Mexico" and "Daughter of the Dragon," by Bowes Kelly, and "A Misbehaving Legend," by Helene Barclay and Howard Carr, were the outstanding productions.

Miss Gladys Moncrieff was under contract for a good part of the year, and apart from productions on National relay, such as "Katinka" and "Wildflower," she also toured the States in company with Mr. and Mrs. Alfred Frith, appearing in "Country Girl," "Belle of New York" and "Ma Mia Rosette." Her first opera appearance in "Maritana" proved a great success.

### Revue, Vaudeville, Etc.

Three music writers and arrangers joined the staff during the year, and in addition to the original work on which they have been engaged, have begun the revision of all the useful revue scripts and music in State libraries, arranging these in suitable form for circulation to the other State branches. Outstanding productions in this section were the serial features "Antipasto," "At the Sign of the Maison Rouge," "Topical Revue" and "Emma and Erbert."

The "Diggers' Session," including the serial "The Three Diggers," talks, stories and dramatised anecdotes, was begun in January, and has been very favourably received in all States.

### Dramatic Auditions:

Dramatic auditions were held in Victoria, New South Wales and Brisbane by the Federal Controller of Productions and a local committee. A large number of aspirants were heard, but very few were outstanding.

Each State has now its full-time producer and production staff, and the Australian National programme includes plays from all States.

Continual experiment is being made both in the form of the play and in production methods, and the year has seen many interesting results from this.

### Broadcasts to Schools.

The development of school broadcasting throughout the Commonwealth led to the establishment of a separate Federal School Broadcasts Department at the beginning of the year under review. Previously talks and school broadcasts were administered by the same department.

The number of schools in the Commonwealth regularly listening to broadcasts increased from 1,214 to 1,565. In this connection it will be relevant to mention a notable increase in the number of schools listening to the British Broadcasting Corporation's school broadcasts. From June, 1936, to June, 1938, the number rose from 4,415 to 8,250. The chairman of the Central Council for School Broadcasting in England has stated that this increase is very largely due to the growing tendency of Local Education Authorities to meet the whole or part of the cost of installing and maintaining apparatus. Few English authorities now build new schools without wiring them for reception, and it is becoming a common practice to equip all the senior schools with radio receivers.

With one exception, the various Education Departments in Australia have not yet made any contribution towards the cost of purchasing receivers for schools. The exception is South Australia where the State contributes one-third of the cost.

The Commission has itself been instrumental in having a number of sets installed in country schools, funds having been raised by community singing concerts.

### Audio-Visual Education.

Audio-visual education, as foreshadowing television, is destined to play an important part in the future of school broadcasting. Teachers have realised for a long time the value of visual aids in education, and most modern schools are now equipped with pictures and photographs to assist in the teaching of subjects, such as history and geography, where the child's imagination can be stimulated by pictures illustrating the main points of the lesson.

Quite recently educational authorities in Australia have become interested in a new form of projector which works with a strip of film similar in appearance to a moving picture film. Like the old magic lantern, this projects still pictures, which are considered by many educationalists to be the most suitable, as well as the most economical, for general teaching purposes.

The advantages of combining the use of projectors in the schools with lessons broadcast from our studios were obvious, and in May of this year two experimental broadcasts of this nature were arranged in Victoria, the subjects chosen being Science ("The Life History of a Frog") and Geography ("A Dragon Hunt in Modern Times"). The first illustrated the development and structure of the frog; the second, the life of the giant dragon lizards of the island of Komodo, in the Dutch East Indies. Experienced school broadcasters were chosen to conduct the experiment.

A film-strip projector was placed in the studio and operated by the broadcaster. As he flashed the picture on the screen he gave a cue to the listening schools, which had projectors and duplicate strips of the film in the class rooms, and they in turn changed from picture to picture on his instructions.

More than seventy schools took part, in both metropolitan and country centres, some schools being as far as three hundred miles from Melbourne. In the opinion

## Australian Broadcasting Commission Annual Report (contd.)

of teachers and broadcasting officials the experiment was a success. For small schools in the country, in particular, there is an obvious advantage in having lessons, illustrated by carefully chosen film-strips, from expert specialist teachers.

The Victorian experiment was repeated before a large number of leading educationalists in Sydney. While audio-visual education in its present form may be regarded as but a foretaste of television, there is no doubt of its great value as a medium for imparting knowledge.

### Music Through Movement.

The introduction of "Music through Movement" broadcasts, for the first time in Australia, is a notable step in the Commission's endeavour to provide Australian children with the opportunity of understanding and appreciating good music.

These broadcasts are arranged in two courses, one for infants of 5 to 7, and the other for juniors of 7 to 9 years of age. The technique employed is based on an adaptation of Dalcroze Eurhythmics, combined with approved methods of Ear Training and Appreciation.

The aim is to lead the children through a variety of rhythms and movements connected with their daily life, to the foundation of a true appreciation of music. Since the actual movements to be used by the children cannot be dictated, the aim is to encourage and suggest those which the child observes in his environment. Thus the teacher should merely encourage the child to find his own way of performing movements that will be both descriptive and natural. In this way the child is led first to free his body by these movements so that he may be prepared to express later, in a spontaneous and individual manner, any movements suggested by music. Certain exercises are designed to induce absolute repose and relaxation of body, as well as strength, balance and control.

The experimental inauguration of Music Through Movement broadcasts took place in South Australia and Western Australia early in 1938 and proved very successful. Arrangements are being made for other States to participate in the relays.

With the establishment of these broadcasts for infants and juniors the Commission has now provided a graduated course of education in music for children of all ages.

### National Broadcasts to Schools:

The three series of National broadcasts to schools mentioned in the last report have continued to prove most successful. "The World We Live In" series has met with a particularly enthusiastic response from parents as well as from children. This series illustrates the special virtue of the school broadcast in linking parent, child and school in a common intellectual interest.

### Educational Broadcasts Booklets:

The Commission continued to issue booklets illustrating each series of broadcasts, and to distribute these free of charge to all school pupils on application by schoolmasters.

Throughout the Commonwealth, 391,675 booklets, including 92,925 relating to series of National broadcasts, were issued to school children in the three terms of the year under review.

### News Services:

The Commission's news service in all States supply listeners with a comprehensive review of overseas and Australian happenings. In the main, the times and periods of principal sessions were unaltered; but when news of special importance was available it was broadcast at the earliest opportunity. The principal sources of news continue to be the Australian daily papers; but the Commission has arranged for a week-end cable service from London, and has appointed correspondents at Darwin and Canberra to report unusual happenings of general interest.

The Sunday evening news services have been developed in all States by the engagement of local newsgatherers and by the relay from Sydney of the overseas news service at 6.55 p.m. and 10.15 p.m. Listeners in all

States were thus provided with morning and evening national news bulletins on every day in the week. A plan is being considered by which listeners in remote parts of Australia, who have to depend on short-wave reception during the greater part of the year, will be provided with an all-Australian news service each night.

At the close of the year under review negotiations (which it is anticipated will be satisfactorily concluded) were in progress with the Australian Associated Press and the Australian Newspapers Conference for a renewal of the agreements under which overseas and Australian news is available for broadcast through the National stations.

In addition to the commentaries given twice daily by the "Watchman," morning and evening news commentaries are relayed from Sydney to other States, and provide a survey of the most important overseas happenings. The morning commentary is prepared by the Commission's own staff, and the evening one is contributed by a panel of well-known students of foreign affairs.

### Religious Services:

Each State program contains the Daily Devotional Service, given during the morning at a time deemed most convenient for all concerned, and broadcast simultaneously from all transmitters. In addition to this daily Service, each State broadcasts a Morning and Evening Sunday Service, the percentage of broadcasts given to each Church being arranged in accordance with the percentage of its adherents in relation to the population of the Commonwealth.

Each quarter during the past twelve months the Commission has broadcast a Service from a historic Church, on National Relay. The Churches from which broadcasts have been given have included the first Australian Church of Bishop Marsden—St. John's, Parramatta—and the oldest remaining Presbyterian Church in the Commonwealth—that of Ebenezer on the Hawkesbury River.

### Performing Rights:

Reference was made in the last annual report to the then impending arbitration between the Commission and the Australasian Performing Rights Association Ltd. The enquiry, which occupied some six weeks during the months of April and May, disclosed that the payments which had hitherto been made by the Commission were on a much higher scale than those made by broadcasting organisations in other parts of the world, and the Arbitrator's award fixed a rate substantially lower than the existing one. This award only runs until the 31st December next. In the meanwhile negotiations will be carried on with the object of arriving at a mutually satisfactory arrangement to cover the position after that date.

The Commission renews the expression of opinion embodied in its last report, namely, that legislative action by the Australian Government is desirable in order to meet the unsatisfactory position which exists owing to the absence of any system of compulsory registration of copyright ownership and agency, and of compulsory arbitration in the event of the parties failing to agree upon terms or to go to voluntary arbitration.

### Finance:

The Balance Sheet at 30th June, 1938, certified by the Auditor-General for the Commonwealth, is appended, together with the Profit and Loss Statement. The 1937 figures are given for comparison.

Assets totalled £350,499 compared with £283,865 at 30th June, 1937, an increase of £66,634. Sundry Creditors amounted to £48,313, an increase of £16,611. This increase is due mainly to the fact that no payment was made to the Australasian Performing Right Association for the period 16th May, 1937, to 15th May, 1938, pending the result of the voluntary arbitration, and subsequent negotiations for a settlement as to the fees to be paid in respect of the period prior to the Arbitrator's award, dated 16th May, 1938. The amount provided in the Profit and Loss Statement has been computed on the basis of the old agreement which was terminated by the Commission on 15th May, 1937. (Continued next page)

## Australian Broadcasting Commission Annual Report (contd.)

The Reserve Fund, £142,325, is represented by fixed deposits totalling £105,000 at the Commonwealth Bank of Australia, and investments in the Commonwealth Loan, £37,325.

The Accumulated Fund, £159,860, is represented by assets in the nature of freehold land and buildings, furniture, musical instruments and other equipment, together with the excess of sundry debtors over sundry creditors.

Revenue from all sources increased by £83,843 to a total of £642,081. The revenue received from the Postmaster-General's Department as the Commission's proportion of Broadcast Listener's Licence Fees increased by £70,837 to £599,972. Other revenue consisting of receipts from public concerts, interest on investments and sundries, increased by £13,006 to £42,108.

The expenditure for the year increased by £47,117 to £592,059, leaving a credit balance of £50,021 as compared with the balance of £13,296 for the previous year.

The greater part of the increased expenditure has been reflected in the programs in payment to artists, orchestras, dance bands, productions, etc., to the extent of £33,629. There has also been increased expenditure in Copyright Fees, £3,774; Broadcasting Rights, £2,273, and Staff Salaries, £4,712.

From the surplus of £50,021 of Revenue over Expenditure the sum of £32,325 was transferred to the Reserve Fund, bringing the total to £142,325. The balance of £17,696 has been transferred to the Accumulated Fund, bringing it to £159,860.

The following table shows how the Commission's proportion of each licence fee was spent:—

Item.	% of Total Revenue	Prop. of Lic. Fees.
Artists' Fees and Program Expenses . . . . .	66.87	8/-29
Copyright Fees . . . . .	8.10	-/11.66
Broadcasting Rights . . . . .	2.50	-/3.60
Rent of Telephone Lines for Broadcasting and outside pick-up costs . . . . .	2.18	-/3.14
Commissioners' Fees . . . . .	.28	.40
Staff Salaries . . . . .	5.88	-/8.47
Rent of Offices and Studios . . . . .	.43	.62
Publicity . . . . .	.73	-/1.05
Depreciation . . . . .	1.05	-/1.51
Other Expenses . . . . .	4.19	-/6.04
Surplus . . . . .	7.79	-/11.22
	100%	12/-

It will be noted that the proportion of licence fees spent on programmes is twice that spent under all other headings.

Reference was made in the last report to the increased scale of expenditure necessary even to maintain, apart from improving programme standards, and the corresponding need for the improvement of the quality of transmission from the studios in order to do justice to the quality of the programme material. The report also pointed out that in default of advances from the Treasurer, or Legislative amendment to increase the amount which may be borrowed on debenture, it would be necessary for the Commission to delay important programme developmental work in order to increase its Reserve Fund (that is, for building purposes).

During the current year the Commission received from the Commonwealth Architect a plan and estimate for its proposed Head Office and New South Wales Branch administrative and studio building, the site for which—in Forbes Street, Darlinghurst—had already been acquired, with Ministerial approval, some time ago. Rough estimates were then made of the likely costs of new buildings in the other capital cities. A tentative building time-table, spread over a period of six or seven years, was then drafted to enable an estimate to be made of the annual capital requirements for the proposed building programme. Although the only matter requiring the immediate approval of the Minister was

the question as to whether the Commission might instruct the Architect to advance the preparation of final plans for the Sydney building to the stage when tenders could be called, the Commission considered that some policy should be adopted at this stage, if possible, in respect of the financing not only of the Sydney building but of the building proposals for all States. It recommended a scheme under which the complete programme would be financed as to about 64% by reserves from the Commission's revenue, and as to the remaining 36% by advances from the Treasury. This proposal was based on the view that to finance out of revenue such a large capital outlay (over £700,000), during the next six or seven years would not only prevent the continued improvement in programmes which listeners, especially in view of the annual increase in their numbers, would expect, but would even threaten a retrogression, because competition by local and overseas broadcasters for the very limited available talent in the way of creative material and performers is leading to an increase in the price demanded for most types of broadcasting programme units.

As a matter of interest it may be added that since the close of the period covered by this report the Minister has expressed his approval of the proposal to complete the plans for the Sydney building, but has informed the Commission that the Honourable the Treasurer has intimated that in view of the very heavy financial obligations with which the Government is now confronted in other directions, it would be unwise for the Commission to rely on the Commonwealth finances to assist it in the continuation of its building projects, and that the Commission should so arrange its finances as to permit of the setting aside of sufficient reserves to enable essential building projects to be carried out as and when the necessity arises without any assistance from Treasury funds, and without recourse to borrowing.

## F.C.C. Recommendations

(Continued from page 151.)

### Licence Periods

31.14A All standard broadcast station licences will be issued so as to expire at the hour of 3 a.m. Eastern Standard Time and will be issued for a normal licence period of one year, expiring as follows:

(1) For stations operating on the channels 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 800, 710, 820, 830, 840, 850, 860, 870, 880, 890, 900, 940, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, and 1580 kilocycles February 1.

(2) For stations operating on the channels 550, 560, 570, 580, 590, 600, 610, 620, 630, 790, 910, 920, 930, and 950 kilocycles March 1.

(3) For stations operating on the channels 960, 970, 980, 1150, 1250, 1260, 1270, 1280, 1290, 1300, 1310, and 1320 kilocycles April 1.

(4) For stations operating on the channels 1330, 1350, 1360, 1370, 1380, 1390, 1410, 1420, 1430, 1440, 1460, 1470, 1480, 1590, and 1600 kilocycles November 1.

(5) For stations operating on the channels 1230, 1240, and 1340 kilocycles December 1.

(6) For stations operating on the channels 1400, 1450, and 1490 kilocycles January 1.

# Australian Broadcasting Commission

## Balance Sheet as at June 30, 1938

Previous Year	Liabilities	1937-38	Previous Year	Assets	1937-38
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
31,702 0 6	Sundry Creditors . . . . .	48,313 18 9	70,320 12 1	Land and Buildings— Freehold . . . . .	70,598 18 3
110,000 0 0	Reserve Fund . . . . .	142,325 0 0		Less Depreciation . . . . .	347 10 8
142,163 9 1	Accumulated Fund (Capital Account) £142,163 9 1			Office Furniture, Musical Instruments and Equipment . . . . .	52,793 12 11
	Add Balance from Profit and Loss Statement . . . . .	17,696 13 5		Less Depreciation . . . . .	25,061 12 7
		159,860 2 6	23,745 4 0	Stores and Stationery . . . . .	27,732 0 4
			3,225 6 0	Sundry Debtors: Postmaster-General for Licence Fees . . . . .	58,806 9 0
				Other . . . . .	3,670 19 8
			62,522 4 1	Payments in Advance . . . . .	62,477 8 8
			3,001 11 2	Other Investments— Government Securities . . . . .	37,325 0 0
				Fixed Deposits . . . . .	105,000 0 0
					142,325 0 0
				Add Accrued Interest . . . . .	2,176 16 6
			111,154 5 0	Cash in Hand and at Bank . . . . .	144,501 16 6
			9,896 7 3		34,575 14 10
£283,865 9 7		£350,499 1 3	£283,865 9 7		£350,499 1 3

A. L. HOLMAN,  
Secretary

W. J. CLEARY, Chairman of Commission.  
Examined and found to be in accordance with the books and documents produced.  
R. ABERCROMBIE,  
Auditor-General for the Commonwealth.  
16/11/38.

## Profit and Loss Statement for Year Ended June 30, 1938

Previous Year	Expenditure	1937-38	Previous Year	Revenue	1937-38
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
395,710 12 7	To Artists' Fees and Programme Expenses . . . . .	429,339 1 10	529,135 6 6	By Revenue from Licence Fees . . . . .	599,972 7 0
	(Payments to artists, orchestras, dance bands, military band, lecturers, announcers, accompanists, producers, salaries of programme officers, and rent of studio accommodation.)		2,670 15 2	Interest on Investments . . . . .	3,647 6 9
	Copyright Fees . . . . .	52,023 15 2	26,432 8 5	Other Revenue . . . . .	38,461 18 0
	Broadcasting Rights . . . . .	16,063 9 2			
	Rental of Telephone Lines for Broadcasting and Outside Pick-up Costs . . . . .	13,976 10 6			
	Commissioners' Fees . . . . .	1,800 0 0			
	Staff Salaries . . . . .	37,743 11 6			
	Rent of Offices . . . . .	2,771 17 2			
	Publicity . . . . .	4,657 7 10			
	Depreciation . . . . .	6,732 7 6			
	Other Expenses: Printing and Stationery . . . . .	2,969 11 4			
	Telephones . . . . .	5,713 7 1			
	Travelling Expenses . . . . .	3,613 16 6			
	Stamps and Telegrams . . . . .	5,096 13 0			
	Sundry Expenses . . . . .	9,553 9 9			
27,421 5 10		26,951 17 8			
544,942 3 6		592,059 18 4			
13,296 6 7	Balance carried down . . . . .	50,021 13 5	£558,238 10 1		£642,081 11 9
£558,238 10 1		£642,081 11 9			
	To Transfer to Reserve Fund . . . . .	32,325 0 0			
	Balance to Accumulated Fund . . . . .	17,696 13 5	13,296 6 7	By Balance brought down . . . . .	50,021 13 5
10,000 0 0		£50,021 13 5	£13,296 6 7		£50,021 13 5
3,296 6 7					
£13,296 6 7					

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Published February 1, 1939.

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"Send Broadcasting Magazine to me. Check enclosed."

Name .....

Address .....

City ..... State .....

Trading Name .....

# Postmaster-General's 28th Annual Report (Period July 1937 to June 1938)

The 28th Annual Report of the Postmaster-General's Department of Australia, for the period July, 1937, to June, 1938, was released in Federal Parliament during April, 1939.

The Report showed that the capital value of fixed assets and plant for the whole of the Department at the close of the financial year at June 30, 1938, was £61,425,685, of which £79,786 was wireless equipment.

The net result for the year, after charging interest on capital was a surplus of £3,533,476.

The wireless activities showed a surplus of £82,211 as compared with a surplus of £87,718 for 1936-37. The receipts were £469,524, an increase of £60,283, or 14.63%. The expenditure, including interest charges, was £387,313, an increase of £65,790, or 20.46%. (Those figures have no relation to the total money collected in respect to the listener's licence fees).

Dealing with the utilisation of radio stations during periods of breakdown of land lines, the report said that negotiations were undertaken with the Department of Defence, with the object of utilising, during periods of breakdown of the public telegraph system, short-wave stations erected in Perth, Brisbane, Melbourne and Sydney, as well as those to be erected in the near future in Darwin and Adelaide. In addition to affording assistance in the disposal of telegraph traffic during periods of emergency, the plan will afford officers of the Defence Department valuable training in transmission and reception.

**Transmitting Stations.**—Under the provisions of the Australian Broadcasting Commission Act 1932, the Postmaster-General's Department is responsible for the provision of all technical services relating to the operation and maintenance of the National Broadcasting Service. Since the inception of broadcasting, the cities of Sydney and Melbourne have been provided with a dual service, i.e., each of these cities has had within its area two national broadcasting stations. By the opening of Stations 4QR in Brisbane, 5AN in Adelaide, and 7ZR in Hobart, dual program outlets have now been provided for these State capitals. Construction work on a corresponding station for Perth is proceeding. New transmitting equipment is also in process of installation to replace the existing stations 2FC and 3LO in Sydney and Melbourne, respectively, the new transmitters being of considerably higher power, with radiators of the half-wave length type, thus providing for a much improved service over that now existing, not only from the viewpoint of a signal strength but also in the extension of area in which a reliable non-fading service may be expected.

Construction work is proceeding on two new regional stations, both having a power of 10 kilowatts and provided with radiators of the half-wave type. One is situated near the national capital, Canberra, it being so located that the whole of the Australian Capital Territory and large portions of the surrounding districts of New South Wales will benefit considerably by its establishment; and the other at Dalby in Queensland, which will also serve a very wide area.

Because of the economic impracticability of extending the National Service to the large sparsely populated areas of the Commonwealth by stations in the standard medium-

wave frequency band, particular attention has been given to the extension and improvement of the short-wave services. Station VLR, near Melbourne, is being equipped with a new transmitter designed to radiate programs on different frequencies chosen to permit the wave length of the station being changed to give the best possible service throughout the whole of the 24 hours, and taking into consideration the effect on radiation due to seasonal changes. Work is proceeding on the provision of a similar short-wave station to be located in the vicinity of Perth for the purpose of transmitting Western Australian programs to the scattered population of the large areas of that State, and also to Northern and Central Australia.

Besides providing service to Australian listeners, the short-wave stations are performing a useful function in making programs available to many overseas countries, particularly to the Pacific Islands, the Dutch East Indies and the Far East. Evidence of the value of this service is given by the numerous favourable reports received from listeners in these areas, which indicate a growing tendency to rely upon the Australian stations for information and entertainment.

The progress made by the Department in extending the service of the National Broadcasting System is such that there are now over 6,000,000 people within the primary service area of a National Station, i.e., within an area where service from a medium-wave broadcasting station may be obtained with reliability. Following upon the opening of a second station in each of the capital cities, some 3,500,000 people are able to obtain a similar quality of technical service from at least two transmitters. The improved radiation resulting from the establishment of stations of much higher power equipped with non-fading type antennae has greatly improved broadcasting conditions generally, and there is consequently now a very small proportion of the population which is not able to receive a relatively good service from two or more transmitters.

The hours of service from the transmitting stations have been extended almost to the limit practicable without incurring undue maintenance and running costs. The transmitters are now operating on an average in excess of 100 hours each per week, giving in the aggregate over 126,000 hours of service per annum.

An interesting technical advance during the year has been the development of equipment to permit of the programs from the two 10 kilowatt stations 3AR and 3LO, operating on frequencies of 620 kilocycles and 770 kilocycles, respectively, being radiated from the one 700 feet vertical radiator. This innovation will result in considerable economies being effected. The installation of the new plant conforming to this modified design is now proceeding.

(Continued next page)

## P.M.G.'s 28th Annual Report (contd.)

### Broadcasting Studios.

The provision by the Department of modern technical facilities in all the capital city studios has been almost completed. The equipment now available conforms with the most modern practice, each studio being regarded as an individual unit for the purposes of program production, rehearsal or audition. Relay switching schemes have been installed, or are in process of installation, to permit of that rapid switching of studios to the various program outlets which is essential for any broadcasting system operating over such a wide network as that of the Australian National Service.

All capital city studios are now equipped with instantaneous recording apparatus of the disc type, and extended use of the service so provided is being made to assist in an ordered system of program building, particularly in connection with news services, sporting descriptions and important talks.

Continuous investigatory and development work is being undertaken in order that all the latest devices likely to be of assistance in improving program production may be incorporated in the National Broadcasting System. For example, during the year studios were equipped with the latest type of microphones; improved reproduction equipments for the broadcasting of records; the latest types of monitoring facilities to permit the program staff to fully appreciate the effect of their work; effects machines and such other facilities were provided.

The construction of a mobile studio is being proceeded with. This studio is being equipped with all essentials for the production of programs on sites remote from studios, including the latest type of disc recording apparatus. Used in conjunction with portable radio transmitting and receiving equipment which is already available, it will be possible for programs to be transmitted from any site which it may not be economical or practicable to connect to one or other of the permanent studios.

The Department's staff has investigated the acoustic problems associated with studio design, with a view to being able to furnish technical advice on this matter in relation to existing and new studios.

The use of public address equipment has been extended. The Department's interest in this apparatus was originally centred upon racecourse installations, but equipment is now used fairly regularly for sound-reinforcing in halls and theatres.

**Overseas Broadcast Programs.**—The Department's high-frequency radio receiving station at Mont Park is being used more and more extensively for picking up important broadcasts from overseas short-wave stations. Frequently these broadcasts are connected direct to the program network for instantaneous radiation over a group of stations. If, however, it is not convenient to make such connection owing to the disturbance of program plans or to the transmissions being made from overseas stations during the hours when the Australian stations are not open, the program material is recorded on disc equipment for subsequent re-broadcast during more opportune periods. Extended use has been made of this service, especially in relation to speeches, talks and announcements made by important Government authorities in overseas countries.

**Program Distribution Network.**—This program service is provided not only for the National Service but also for commercial broadcasting undertakings.

Program channels must provide a much higher quality of transmission than is required for ordinary telephone communication, and in a country such as Australia, where the population is small compared with the area, the provision of these circuits presents somewhat difficult economic problems. The networks are established almost solely on open wire lines which from their very nature are subject to more disturbances than are encountered on cable networks of the type extensively used in other

countries. The program channels are provided by two distinct methods—either by the use of a physical circuit or by a high quality carrier program system. Circuits of this latter type now connect the cities of Brisbane, Sydney, Melbourne, Adelaide and Hobart, and are also used as permanent channels for connecting some of the regional stations of the National Broadcasting System to their respective capital cities. During the year the inter-capital city network was augmented by the installation of a second circuit of this nature between Sydney and Brisbane.

The total number of circuit miles now used exclusively for program distribution for both the national and commercial networks exceeds 9,000 miles, but on special occasions this mileage is augmented considerably. The greatest length of channel that has been used to date for a simultaneous broadcast is 26,000 miles. On the occasion when this mileage of circuit was used, 106 broadcasting stations were linked to one common program source for the purpose of transmitting a special message to the nation from the Right Honourable the Prime Minister.

### Commercial System.

Fourteen additional commercial stations commenced service during the year.

The hours of service now given by the commercial stations exceed 380,000 per annum.

The commercial stations have continued to render a valuable service to listeners, and in many directions considerable technical improvements in stations and studios have been made. An important feature to which close attention has been given relates to the frequency control of the station carrier which, in most cases, is now being radiated with a high degree of stability and precision, ensuring a minimum of mutual interference between broadcasting services, particularly in regard to shared channel working.

### Use of Trunk Lines for Broadcasting.

The telephone trunk line system continues to be used extensively for the purpose of linking together broadcasting stations for the simultaneous radiation of items of outstanding interest and the increasing demands which are being made on the resources of the Department in this respect are indicated by the fact that the number of relays has increased from 4,933 in 1933-34 to 16,865 in 1937-38. Of this latter total, 2,423 relays were extended to two States, 1,460 to three states, 1,235 to four States, 1,965 to five States, and 1,056 to six States.

The period for which trunk channels were utilised in 1937-38 for broadcasting purposes totalled 30,866 hours, the Australian Broadcasting Commission employing them for 19,120 hours and commercial broadcasting organisations for 11,746 hours.

The programs transmitted over trunk channels cover a wide range. The following is a broad analysis of National Station relays completed during 1937-38 which extended to two or more States:—

Item.	Number of relays.
Musical programs . . . . .	1,678
Talks and speeches . . . . .	1,421
Race descriptions . . . . .	1,334
News sessions . . . . .	701
Stock exchange and market reports . . . . .	412
Cricket descriptions . . . . .	214
Other sporting events . . . . .	210
Operas, plays, etc. . . . .	192
Overseas programs . . . . .	33
Concerts . . . . .	26
Miscellaneous items . . . . .	5
	6,226

## P.M.G.'s 28th Annual Report (contd.)

### Broadcast Listeners' Licences.

Licences authorising the reception of broadcast programs increased during the year by 117,843, or 12 per cent., compared with 114,932, or 14 per cent. the previous year, the total for the Commonwealth at 30th June, 1938, being 1,057,911. This number represents 65 per cent. of the total dwellings. The greatest percentage increase was recorded in Tasmania, where the number of licences increased by 21 per cent., the actual figure being 6,242. The figures for each of the other States are as follows:—

	Per cent. increase.	Actual increase.
New South Wales . . . . .	13	45,734
Victoria . . . . .	9	26,747
Queensland . . . . .	16	16,173
South Australia . . . . .	13	12,757
Western Australia . . . . .	17	10,190

The greatest density exists in South Australia, where 111,966 homes or 78 per cent. of the total dwellings are licensed. The corresponding totals and percentages for the other States, in order of density, are:—

	Per Cent.
Victoria . . . . .	71
Western Australia . . . . .	65
Tasmania . . . . .	65
New South Wales . . . . .	64
Queensland . . . . .	51

Of the total licences in the Commonwealth, 61 per cent. are in the metropolitan area.

During the year 59,282 persons availed themselves of the plan whereby provision may be made for the payment of licence-fees by postage stamps affixed to a Departmental form supplied for the purpose.

Free licences issued to blind persons during the year numbered 1,988.

### Unlicensed Listeners.

Prosecutions during the year in connection with the use of unlicensed broadcast receivers totalled 3,142; the total amount of fines and costs being £6,890. From the commencement of broadcasting in Australia in 1923 until June 30, 1938, 18,340 persons were convicted for this offence, the fines and costs aggregating £42,130. The number of investigations by Licence Inspectors during the year exceeded 133,000.

### Radio Inductive Interference.

Details of the activities of the Department during 1937-38 in the investigation interference with broadcast reception are given hereunder:—

Cases reported during the year . . . . .	7,902	Cases in which interference eliminated as a result of departmental efforts . . . . .	7,955
Cases carried over from previous year . . . . .	935	Cases awaiting attention . . . . .	882
	8,837		8,837

In the course of their investigations, the officers engaged on the work made 24,248 inspections.

### Proficiency Certificates.

By an amendment to the Wireless Telegraphy Regulations gazetted on 1st December, 1937, provision was made for the issue of Aircraft Operators' Certificates of Proficiency.

During the year 876 candidates were examined for Operators' Certificates of Proficiency. The number of certificates issued during the year was—

Commercial—	
First Class . . . . .	48
Second Class . . . . .	55
Third Class—	
Wireless Telegraphy . . . . .	40
Wireless Telephony . . . . .	11
Wireless Telegraphy and Wireless Telephony . . . . .	32
Aircraft—	
First Class . . . . .	0
Second Class . . . . .	2
Third Class . . . . .	20
Broadcast Station . . . . .	61
Amateur . . . . .	219
	488

### Other Radio Services.

The total number of radio communication stations in operation in the Commonwealth and the Territories of Papua and New Guinea at 30th June, 1938, was 678 compared with 557 at the end of the previous year. The figures for the various classes are—

	Commonwealth	Papua	New Guinea	Total
Coast Stations . . . . .	19	2	7	28
Ship Stations . . . . .	215	3	—	218
Aircraft Stations . . . . .	39	2	—	41
Land Stations . . . . .	181	31	22	234
Portable Stations . . . . .	39	26	7	72
Special Stations . . . . .	85	—	—	85
Total . . . . .	578	64	36	678

Included in the land stations are 133 low powered stations which have been licensed to provide communication in the interior where telegraph and telephone facilities are not available.

Experimental stations increased during the year from 1,737 to 1,907.

### Research Laboratories.

The results of work carried out in the Research Laboratories during the year cover a wide field in theoretical and practical investigation of problems that arise in the technical services of the post office. The study of materials

(Continued next page)

### WIRELESS BRANCH SUMMARY OF FINANCIAL RESULTS FOR 1937-38

	Earnings	Working Exes. excl. of interest	Earnings compared with Working Expenses	Interest on Capital, incl. Exch. thereon	Result, after providing for Working Exes. and interest	Percentage of Working Exes. to Earnings
New South Wales . . . . .	179,808	120,497	59,311 Sur.	5,699	53,612 Sur.	67.01
Victoria . . . . .	145,800	91,494	54,306 "	5,746	48,560 "	62.75
Queensland . . . . .	49,997	56,146	6,149 Def.	2,644	8,793 Def.	112.30
South Australia . . . . .	48,223	34,899	13,324 Sur.	1,764	11,560 Sur.	72.37
Western Australia . . . . .	30,427	42,523	12,096 Def.	3,648	15,744 Def.	139.75
Tasmania . . . . .	15,269	20,736	5,467 "	1,517	6,984 "	135.81
Total C'wealth 1937-38 . . . . .	469,524	366,295	103,229 Sur.	21,018	82,211 Sur.	78.01
Total C'wealth 1936-37 . . . . .	409,241	304,302	104,939 Sur.	17,221	87,718 Sur.	74.36
" " 1935-6 . . . . .	344,036	244,204	99,832 "	13,648	86,184 "	70.98
" " 1934-5 . . . . .	371,604	193,507	178,097 "	15,754	162,343 "	52.07
" " 1933-4 . . . . .	269,640	170,711	98,929 "	11,694	87,235 "	63.31
" " 1932-3 . . . . .	192,480	153,199	39,281 "	16,485	22,796 "	79.59

## P.M.G.'s 28th Annual Report (contd.)

to be incorporated in apparatus and plant used for departmental purposes has been carried on with beneficial results. The improvement in the quality and suitability of supplies has been brought under more comprehensive control as a result of more precise and detailed specifications and revised methods of testing.

On the occasion of an interruption to the submarine telephone cable service between Tasmania and Victoria,

it was possible to provide a temporary radio service between the two States, as a result of experiments which have been carried out in the propagation of ultra high frequency electro-magnetic waves. Such ultra high frequency waves differ from the short and medium waves generally used for radio communication, in that they are most effective between points which are approximately within optical range. Elevated sites have been selected in Tasmania and Victoria to take advantage of this fact.

### PROFIT AND LOSS ACCOUNT OF WIRELESS BRANCH FOR YEAR ENDED 30th JUNE, 1938

EXPENDITURE	Percentages of Net Income		£ s. d.		
Upkeep and Operation of Broadcasting Stations .. .. .	18.26		85,749	9 4	
Upkeep and Operation of Broadcasting Studios .. .. .	9.52		44,703	11 8	
General Supervision and Cost of Issuing Licences .. .. .	19.51		91,610	8 5	
Telephone Circuits used for Broadcasting and Miscellaneous Expenditure .. .. .	19.69		92,410	6 5	
	66.98		314,473	15 10	
Proportion of General Administration Expenses .. .. .	1.52		7,123	0 0	
Depreciation .. .. .	8.11		38,099	19 11	
Proportion of Superannuation Liability and Pensions .. .. .	1.40		6,598	0 0	
	78.01		366,294	15 9	
Surplus, exclusive of Interest, carried down .. .. .	21.99		103,228	8 7	
	100.00		469,523	4 4	
Interest and Exchange charges .. .. .	4.48		21,018	0 0	
Surplus, inclusive of Interest, transferred to General Profit and Loss Account .. .. .	17.51		32,210	8 7	
	21.99		103,228	8 7	
REVENUE		£ s. d.		£ s. d.	
Gross Revenue .. .. .		1,069,495	11 4		
Less —					
Payments to Australian Broadcasting Commission .. .. .		599,972	7 0	469,523	4 4
Net Revenue: Licence Fees, Fines, etc. .. .. .				469,523	4 4
				469,523	4 4
	21.99		103,228	8 7	
	21.99		103,228	8 7	

### GENERAL PROFIT AND LOSS ACCOUNT—WIRELESS BRANCH

The results of working the Wireless Branch are as follow:—

	1937-38		1936-37	
	Surplus	Deficit	Surplus	Deficit
New South Wales .. .. .	53,612 7 8	—	52,598 17 5	—
Victoria .. .. .	48,559 12 3	—	47,054 13 8	—
Queensland .. .. .	—	8,793 6 9	—	5,799 7 6
South Australia .. .. .	11,559 9 8	—	8,707 3 6	—
Western Australia .. .. .	—	15,743 18 8	—	6,980 14 4
Tasmania .. .. .	—	6,983 15 7	—	7,862 11 0
	113,731 9 7	31,521 1 0	108,360 14 7	20,642 12 10
Total Net Surplus, 1937-38 .. .. .			£82,210 8 7	
Total Net Surplus, 1936-37 .. .. .			87,718 1 9	

### STATEMENT OF NET REVENUE

Radio Revenue	1937		1938	
Central Office .. .. .	6,488		6,634	
New South Wales .. .. .	162,700		185,314	
Victoria .. .. .	129,560		149,292	
Queensland .. .. .	44,045		52,336	
Sth. Australia (incl. Northern Territory) .. .. .	45,505		50,699	
Western Australia .. .. .	27,158		32,366	
Tasmania .. .. .	13,591		16,354	
Total .. .. .	429,047		492,995	

# The Commonwealth of Australia

## Wireless Telegraphy Act

1. This Act may be cited as the Wireless Telegraphy Act, 1905-1936.

2. In this Act,—

“Australia” includes the Territories under the authority of the Commonwealth and the territorial waters of the Commonwealth and of any such Territory;

“Territories under the authority of the Commonwealth” includes any Territory governed by the Commonwealth under a mandate.

“Wireless Telegraphy” includes all systems of transmitting and receiving telegraphic or telephone messages by means of electricity without a continuous metallic connexion between the transmitter and the receiver.

“Broadcasting Station” means a station on land for the purpose of broadcasting to licensed broadcast listeners’ stations;

“Broadcast Listeners’ Station” means a station used solely for the reception of programmes from broadcasting stations.

3. This Act shall not apply to ships belonging to the King’s Navy.

4. The Minister for the time being administering the Act shall have the exclusive privilege of establishing, erecting, maintaining, and using stations and appliances for the purpose of—

(a) transmitting messages by wireless telegraphy within Australia, and receiving messages so transmitted, and

(b) transmitting messages by wireless telegraphy from Australia to any place or ship outside Australia, and

(c) receiving in Australia messages transmitted by wireless telegraphy from any place or ship outside Australia.

5. Licenses to establish, erect, maintain, or use stations and appliances for the purpose of transmitting or receiving messages by means of wireless telegraphy may be granted by the Minister for the time being administering the Act for such terms and on such conditions and on payment of such fees as are prescribed.

6. (1) Except as authorised by or under this Act, no person shall—

(a) establish, erect, maintain or use any station or appliance for the purpose of transmitting or receiving messages by means of wireless telegraphy, or

(b) transmit or receive messages by wireless telegraphy.

Penalty: Five hundred pounds, or imprisonment with or without hard labour for a term not exceeding Five years.

(2) Sub-section (1) of this section shall not, except as prescribed extend to appliances maintained on any ship, arriving from any place beyond Australia, for the purpose of enabling messages to be transmitted from or received on that ship by means of wireless telegraphy but all such appliances shall, while the ship is within Australia—

(a) be subject to the control of the Minister for the time being administering the Act.

(b) only be used by his authority or as authorised by the regulations.

Penalty: Five hundred pounds.

7. All appliances erected, maintained, or used in contravention of this Act or the regulations, for the purpose of transmitting or receiving messages by means of wireless telegraphy, shall be forfeited to the King for the use of the Commonwealth.

8. (1) If a justice of the peace is satisfied by information on oath that there is reasonable ground for supposing that any appliance is established, erected, maintained, or used in contravention of this Act or the regulations, for the purpose of transmitting or receiving messages by means of wireless telegraphy he may grant a search warrant to any person.

(2) A search warrant under this section shall authorise the person to whom it is addressed to break and enter any place or ship, where the appliance is or is supposed to be, either by day or by night, and to seize all appliances which appear to him to be used or intended to be used for transmitting or receiving messages by means of wireless telegraphy.

9. (1) Proceedings for any offence against this Act may be instituted in any Court of Summary Jurisdiction, and any person proceeded against under this section may be dealt with summarily or may be committed for trial.

(2) The Court in dealing summarily with any accused person under this section may, if he is found guilty of any offence against this Act, punish him by imprisonment with or without hard labour for any period not exceeding six months or by a penalty not exceeding Fifty pounds.

(3) For the purposes of the application of this section in the Territories under the authority of the Commonwealth, “Court of Summary Jurisdiction” includes a court of any such Territory sitting as a court for the making of summary orders or the summary punishment of offences under the law of the Territory.

10. The Governor-General may make regulations, not inconsistent with this Act, prescribing all matters which by this Act are required or permitted to be prescribed or which are necessary or convenient to be prescribed for carrying out or giving effect to this Act.

# Commonwealth Wireless Regulations

## Under the Wireless Telegraphy Act, 1905-1919

Statutory Rules No. 101 of 1924 have been amended from time to time by No. 123 of 1925, No. 114 of 1926, Nos. 3, 24, 63, 153 of 1927, Nos. 79, 129 of 1928, No. 81 of 1929, No. 113 of 1930, No. 120 of 1935, No. 90 of 1936, and by Nos. 102 and 112 of 1937, and the following are the existing regulations as applicable to Broadcasting in Australia. Details of regulations governing other wireless stations are available from Government Printer, Canberra, F.C.T., or from the Radio Inspector in any capital city.

### Part III.—Broadcasting

#### Division I.—Broadcasting Stations.

45. (1) The Postmaster-General may grant to any applicant a Broadcasting Station License.

(2) A License shall not be transferred without the approval of the Postmaster-General.

(3) The Postmaster-General shall not recognise any vested interest in the License, and compensation shall not be payable to the Licensee on the termination of the License.

46. An applicant for a Broadcasting Station License shall state in his application the following particulars:—

- (a) Name and address of applicant (in the case of a company; (1) the name of the company and the address of the head office thereof; (2) the name and address of the secretary or other person authorised to act on behalf of the company);
- (b) Technical qualifications of the applicant or of the persons whom it is proposed will operate the licensed installation (where the applicant does not possess the necessary qualifications and proposes to engage an expert to control the station after the issue of the License, this should be stated);
- (c) Location of the proposed station;
- (d) Type of transmitter and character of modulation proposed;
- (e) Proposed normal operating power of transmitter;
- (f) Hours of service; and
- (g) Class of service to be broadcasted and particulars of average programme.

47. (1) A Broadcasting Station License shall be prepared in duplicate, one copy of which shall be retained by the Department and the other shall be issued to the Licensee.

(2) A Licensee shall make his License available for inspection by any authorised officer as and when required.

48. (1) A Broadcasting Station License may be granted for any period not exceeding three years as the Postmaster-General determines.

(2) The Postmaster-General if he deems it desirable may from time to time renew a License for a period not exceeding one year from the date of expiration of the current License.

(3) A Licensee who desires a renewal of his License shall make application for the renewal thereof at least six months before the date of the expiration of his current

license, except in cases where a license has been granted or renewed for a period of less than one year, when the application for a renewal shall be made at least one month before the date of expiration of the current license.

(Statutory Rules No. 120 of 1935 repealed Statutory Rules No. 104 of 1935, 23/10/35 and new regulations 48a read as follows:—)

48a. (1) Any person making application for the grant or renewal of a Broadcasting Station License shall supply such information as is required by the Postmaster-General, and shall lodge with the application a Statutory Declaration that the grant or renewal of the license will not result in the ownership by any person of more than—

- (a) one metropolitan broadcasting station in any State;
- (b) four metropolitan broadcasting stations in the Commonwealth;
- (c) four broadcasting stations in any one State; or
- (d) eight broadcasting stations in the Commonwealth,

and will not result in any person being in a position to exercise control, either directly or indirectly, of more than that number of stations.

(2) Where the applicant is a company, the Statutory Declaration referred to in the last preceding sub-regulation shall be made by a majority of the directors of the company and the manager or secretary of the company.

(3) Where the applicant is neither an individual or a company, the Statutory Declaration referred to in sub-regulation (1) of this regulation shall be made by such persons as the Postmaster-General determines.

(4) In this regulation—  
“metropolitan broadcasting stations” means a broadcasting station situated within a radius of 30 miles from the General Post Office in the capital city of a State;

“person” includes a firm, body corporate or association.

49. A Broadcasting Station Licensee shall commence a satisfactory service in accordance with these regulations within three months from the date of the issue of the License or within such further period as the Postmaster-General approves.

50. The licensed installation of a Broadcasting Station shall be equipped, designed and controlled to the satisfaction of the Postmaster-General and shall not be altered without his consent.

51. The power of a Broadcasting Station shall be as approved by the Postmaster-General and shall not be altered without his consent.

### COMMONWEALTH WIRELESS REGULATIONS (Continued)

52. (1) The frequency (wave length) on which each Broadcasting Station shall operate shall be determined by the Postmaster-General.

(2) The operating frequency shall be maintained to a constancy to the satisfaction of the Postmaster-General.

(3) For the purpose of the last preceding sub-regulation, the transmitting apparatus shall include such equipment for indicating the accuracy of the operating frequency as the Postmaster-General approves.

53. The location of a Broadcasting Station and the periods of operation thereof shall be subject to the approval of the Postmaster-General.

54. (1) The Postmaster-General reserves the right, during the currency of a Broadcasting Station License, to vary the conditions upon which the License is granted, especially in regard to the power, location, frequency (wave length) and periods of operation of the licensed installation.

(2) The Licensee shall, at his own expense and to the satisfaction of the Postmaster-General, give effect to any such variation.

55. The licensed installation of any Broadcasting Station shall only be operated by such persons as, in the opinion of the Postmaster-General, are competent to operate the installation.

56. The licensed installation of any Broadcasting Station shall, at all reasonable times, be open to inspection by any authorised officer, and every facility shall be given by the Licensee for ascertaining the conditions of the Station.

57. (1) A Broadcasting Station shall be connected by telephone with the public telephone exchange system of the area in which the Station is located.

(2) The Broadcasting Station Licensee shall enter into the usual telephone subscribers' agreement for the establishment of a service.

58. The Postmaster-General may require the licensee of a Broadcasting Station to include, without charge, such items of general interest or utility as the Postmaster-General, from time to time, determines.

Provided however that the requirements of the Postmaster-General shall not be such as to entail a period of occupation of the Station in excess of thirty minutes in each consecutive period of twelve hours.

59. (1) All matter including advertisements to be broadcasted shall be subject to such censorship as the Postmaster-General determines.

(2) The Broadcasting Station Licensee shall, before broadcasting any such matter which is of a controversial nature or likely to cause offence to any section of the community, direct the attention of the Postmaster-General or an authorised officer, to such matter.

60. (1) A Broadcasting Station Licensee may broadcast advertisements.

(2) A Licensee desiring to broadcast advertisements shall publish a tariff of advertising charges, and shall make his advertising service available without discrimination to any person or firm.

61. The Licensee of any Broadcasting Station may, to such extent as the Postmaster-General approves, by agreement with the Licensees of other Stations, relay or broadcast the programmes broadcast by these stations.

62. A Broadcasting Station Licensee shall:—

- (a) compile and maintain in a recognised business or commercial form, separate accounts in respect of his broadcasting activities;
- (b) make such accounts available for inspection by the Postmaster-General as required;
- (c) supply to the Postmaster-General as required duly audited annual balance sheets in detail for the year ending on the thirtieth day of June in each year or on some other date approved by the Postmaster-General; and

(d) keep such records relating to the broadcasting service, as the Postmaster-General, from time to time, directs, and supply copies thereof to the Postmaster-General as required.

63. (1) The programme transmitted from a Broadcasting Station shall, both in rendition and transmission, be to the satisfaction of the Postmaster-General.

(2) The general terms of any announcement, whether complete in themselves or referring to items to be transmitted, shall be to the satisfaction of the Postmaster-General.

(3) Every announcer employed by the Licensee shall be of good education, style and personality, and possessed of clear enunciation, as far as possible free from any characteristic dialect.

64. (1) The license fee for a Broadcasting Station License or any renewal thereof shall be £25 per year or part of a year payable in advance.

(2) This regulation shall be deemed to have come into operation on the first day of November, One thousand nine hundred and twenty-nine.

65. A Broadcasting Station Licensee shall at all times keep the Postmaster-General indemnified against any claim for royalties in respect of any equipment operated under his license, or against any claims whatsoever arising out of the Licensee's operations.

66. A Broadcasting Station Licensee shall not—

- (a) transmit any work or part of a work in which copyright subsists except with the consent of the owner of the copyright; or
- (b) send out news or information of any kind published in any newspaper or obtained, collected, collated or co-ordinated by any newspaper, or association of newspapers or any news agency or service except with the full consent in writing, first obtained, of, and upon such payment and conditions as are agreed upon by the licensee and, the newspaper, association of newspapers, news agency or service.

67. (1) A Broadcasting Station Licensee who supplies in advance to the proprietor of any registered newspaper programmes of the items to be broadcasted by his Station shall, on application in writing, supply in advance such programmes on equal terms to the proprietor of any other registered newspaper.

(2) The proprietor of such other newspaper may publish such programmes in any registered newspaper owned by him.

(3) In this regulation “registered newspaper” means a newspaper registered under the Post and Telegraph Act 1901-1923.

68. A person shall not publish any portion of the text of a broadcasted item without the consent of the Broadcasting Station Licensee and the approval of the Postmaster-General.

69. A Broadcasting Station Licensee shall not, without the permission of the Postmaster-General, transmit any message or other communication, the transmission of which would be in contravention of the provisions of the Post and Telegraph Act, 1901-1923 if the licensed installation were a telegraph within the meaning of that Act.

70. Except where any inconsistency exists, nothing in this Part shall affect the generality of the provisions of any other Part of these Regulations.

71. The decision of the Postmaster-General with regard to the interpretation or application of any of the provisions of this Division shall be final.

72. The Postmaster-General may, on such terms and conditions as he thinks fit—

- (a) make contracts for the establishment, erection maintenance or use of wireless broadcasting stations or appliances on his behalf; and
- (b) for the purpose of using any wireless broadcasting stations or appliances established, erected or maintained by him or on his behalf, make contracts for the provision of programmes by such stations or by such appliances.

(Continued next page)

## COMMONWEALTH WIRELESS REGULATIONS (Continued)

73. Any License for a Class B Station in force immediately prior to the commencement of this regulation shall be deemed to have been granted under and subject to the provisions of these Regulations.

74. Notwithstanding anything contained in this Division, any License for a Class A Station granted under the Regulations in force immediately prior to the commencement of this regulation shall not, on and from the commencement of this regulation, be renewed and those Regulations shall be deemed to apply to such License so long as it remains in force.

### Division II.—Broadcast Listeners' Licences.

75. A Broadcast Listener's License in accordance with Form 5 in the Schedule to these Regulations may be granted at any Money Order Office on payment of the prescribed fees.

76. (1) For the purpose of the granting of Broadcast Listeners' Licences and the payment of fees therefor, the Commonwealth and the Territories thereof shall be divided into two zones as follows:—

(i) Zone 1 shall include all the territory within an approximate radius of 250 miles from such Broadcasting Stations as the Postmaster-General determines; and

(ii) Zone 2 shall include all the territory of the Commonwealth and the Territories outside Zone 1.

(2) The Postmaster-General may determine the zone within which any Broadcast Listeners' Station is situated.

(3) The Postmaster-General may modify the boundaries of the Zones specified in sub-regulation (1) of this regulation, or establish additional Zones.

77. (1) The fees payable in respect of any Broadcast Listeners' License or any renewal thereof shall be as follows:

- (a) For Zone 1, 21/- per annum; and  
(b) Zone 2, 15/- per annum (from 6/8/'34).

(2) License fees shall be paid in advance.

78. Where a Broadcast Listeners' License is being granted in respect of receiving equipment which has been used prior to the grant of the License, the License may be given the date and shall be deemed to have been effective from the date the receiving equipment was first used without a current License.

79. A Broadcast Listeners' License shall not be transferred from one person to another.

80. (1) The user of receiving equipment, capable of being utilised for the reception of broadcast programmes or other wireless signals, shall be in possession of a current Broadcast Listeners' License.

(2) Where a current Broadcast Listeners' License is not held in respect of equipment installed or connected up or capable of being connected up for the purpose of receiving broadcast programmes or other wireless signals in any dwelling house, office, shop, premises or place, the occupier of any such dwelling house, office, shop, premises or place shall be guilty of an offence.

(3) It shall be a defence to a prosecution for an offence against the last preceding sub-regulation, if the occupier proves that he was not aware, or could not with reasonable diligence have become aware, of the existence in the dwelling house, office, shop, premises or place of the receiving equipment in question.

81. (1) Receiving equipment shall not, without the consent of the Postmaster-General, or an authorised officer, be used at a place other than that specified in the Broadcast Listeners' License.

(2) The Licensee shall notify the Department of any permanent change of address within two weeks of the change.

82. A Broadcast Listeners' License shall, at all reasonable times, be available at the address given thereon for inspection by an authorised officer.

83. A Licensee of a Broadcast Listeners' Station shall not divulge, except to an authorised officer or a legal tribunal, the contents of any commercial or defence wireless communications, other than those transmitted by a Broadcasting Station.

84. Any Licensee of a Broadcast Listeners' Station using reaction (back coupling) in such a manner as to cause interference to the reception at any other Station shall be guilty of an offence against these Regulations.

85. A person or firm shall not operate receiving equipment for the purpose of demonstration or test of receivers with the object of promoting the sale of receiving equipment without being in possession of a Broadcast Listeners' License.

Regulation 109 of the Wireless Telegraphy Regulations is repealed as from 2/10/'30 and the following regulation inserted in its stead:—

"109. The fee for an Experimental License shall be £1 10s. 0d. per annum."

"110. (1) Experimental licensees may use reaction (back coupling) in receivers, but every precaution shall be taken to prevent the interference with neighbouring stations that may be caused by re-radiation.

(2) Any experimental licensee who allows his receiver to energise his aerial to the extent that interference with neighbouring stations is caused, shall be guilty of an offence.

"111. Experimental Licensees shall be in possession of an Amateur Operator's Certificate of Proficiency:

"Provided that in certain cases as approved by the Postmaster-General or an authorised officer, a licensee may be exempted from the requirements of this regulation: in such event, the licensee shall undertake to have always in attendance during transmitting experiments and tests, a person in possession of an Amateur Operator's Certificate of Proficiency.

"112. (1) The power (measured in the High Frequency Generator Circuit) to be used in experimental transmitting station shall not exceed 50 watts except in such special cases as are approved by the Postmaster-General or an authorised officer.

"(2) Approved instruments for indicating the power used in the High Frequency Generator Circuit shall be installed in a manner satisfactory to the Postmaster-General or an authorised officer.

"113. Transmission by Experimental Stations shall be confined to such frequencies (wavelengths) as are approved by the Postmaster-General from time to time.

"114. During any transmitting tests extending in period over ten minutes, the call sign of the Experimental Station shall be signalled as frequently as practicable, and as a normal rule not less than once in every five minutes.

"115. The transmitting equipment operated in Experimental Stations must employ circuits loosely coupled to the radiating system and, in the case of telegraph experiments, devices or methods that will minimise the effect of key impacts, harmonics and anode supply modulation.

"116. An Experimental Licensee shall assure himself that the frequency (wavelength) on which transmissions are being carried out is accurate, and for that purpose a frequency meter (wavemeter) calibrated by comparison with standard instruments approved by the Postmaster-General or authorised officer shall be maintained in good order at the Experimental Station:

"Provided that the Postmaster-General or authorised officer may exempt an Experimental Licensee from the obligation of maintaining a frequency meter (wavemeter) for such period and in such circumstances as he determines.

"117. The use of licensed experimental installations shall be restricted to investigations, research, or instructional purposes in wireless telegraphy or telephony.

"118. (1) An Experimental Licensee shall not, without the express permission of the Postmaster-General or an authorised officer, transmit any message or other com-

## COMMONWEALTH WIRELESS REGULATIONS (Continued)

munication, the transmission of which would, if the licensed installation were a telegraph within the meaning of that Act, be in contravention of the provisions of the Post and Telegraph Act 1901-1923.

"(2) Notwithstanding anything contained in the last preceding sub-regulation, an experimental licensee may transmit and receive messages of an unimportant character in plain language relating to experiments, or consisting of remarks of a personal character:

"Provided that the exchange of such messages shall be prohibited with countries whose Administrations do not allow the transmission or receipt of such messages.

"(3) The transmission and receipt of messages for third parties, or of any message on payment in cash or kind is expressly forbidden.

"119. Normally transmissions will be limited to pure continuous wave and telephony. The transmission of damped wave (Spark transmission) will not be allowed except in special cases as approved by the Postmaster-General or an authorised officer. The transmission of telephony may be restricted to certain banks of frequen-

## Amendments of Wireless Regulations, July 1, 1936

### New Certificates.

6. Part VI. of the Wireless Telegraphy Regulations is repealed and the following Part inserted in its stead:—  
"Part VI.—Certificates of Proficiency in Wireless Telegraphy.

"126. A station (other than a Broadcast Listeners' Station) shall not be operated except by a person—(a) who holds such of the certificates referred to in this Part as is determined by the Postmaster-General or an authorised officer to be appropriate for that station; or (b) is qualified, to the satisfaction of the Postmaster-General or an authorised officer, to operate that station.

"127. (1) The Postmaster-General may issue certificates in accordance with Forms 11, 12, 13, 14, 14A, 14B, 14C and 14D in the First Schedule to these Regulations to persons who have reached the age of 18 years (or 15 years in the case of an Amateur Operator's Certificate of Proficiency) and who satisfy him, by examination or otherwise, that they possess the knowledge and qualifications referred to in those certificates respectively:

"Provided that a Commercial Operator's Certificate of Proficiency or an Aircraft Operator's Certificate of Proficiency shall not be issued to a person who is not a British subject unless—

- (a) the consent in writing of the Minister for Defence has first been obtained; or  
(b) the Postmaster-General is satisfied that the circumstances justify the issue of a certificate as a matter of urgency,

and any certificate issued under paragraph (b) of this proviso shall be in force in respect of one voyage only of the ship or aircraft upon which the holder of the certificate is to be carried.

"(2). In the event of a certificate being lost, the Postmaster-General may issue a duplicate certificate upon payment of the prescribed fee.

"(3). The fees specified in the Table contained in the Second Schedule to these Regulations shall be charged in connexion with—(a) the examination of candidates; (b) the issue of certificates without examination; and (c) the issue of duplicate certificates, under these Regulations.

"128. (1). The Director-General or an authorised officer may from time to time conduct examinations of applicants for certificates.

"(2). The examinations shall be held in such manner and subject to such conditions as the Director-General determines.

cies (wavelengths) as decided from time to time by the Postmaster-General or authorised officer.

"120. Any apparatus used or intended to be used by an Experimental Licensee shall be so erected, fixed, placed and used as not, either directly or by reason of the working or use thereof, to interfere with the efficient and convenient working of other transmitting or receiving stations.

"121. The Postmaster-General or an authorised officer may grant a temporary permit to an Experimental Licensee for the demonstration of wireless telegraphy or telephony in connection with lectures, or entertainments where it is desired to assist the development or public appreciation of the art.

### AMENDING REGULATION.

#### Free Licence to Blind.

Regulation 12 of the Wireless Telegraphy Regulations is amended by adding at the end of sub-regulation (1) the following proviso:—

1. (1) Provided also that a Broadcast Listeners' License or any renewal thereof may be granted free of charge to any blind person over the age of sixteen years.

(2) This regulation shall come into operation on the first day of January, 1934.

"129. The Examination for a First Class Commercial Operator's Certificate of Proficiency shall be such as to show that a successful candidate possesses the knowledge and qualifications specified in this regulation, namely:—  
(a) A knowledge of the general principles of electricity, of the theory of wireless telegraphy and wireless telephony, and of the regulation and practical working of the types of apparatus used in the mobile service. (b) A theoretical and practical knowledge of the working of the accessory apparatus used in the operation and adjustment of the apparatus referred to in paragraph (a) of this regulation. (c) The ability to effect, with the means available on board ship, repairs to damage which may occur to the wireless telegraph or wireless telephone installation during a voyage. (d) The ability to send correctly and to receive correctly, by ear, in Morse code, code groups at a speed of 20 groups per minute, and a message in plain language at a speed of 25 words per minute. (e) The ability to send and receive messages correctly by telephone. (f) A detailed knowledge of—(i) such of the Radiocommunication Regulations annexed to the Telecommunication Convention as relate to the exchange of radiocommunications and the assessment of charges in the mobile service; and (ii) that portion of the Safety Convention which relates to radiotelegraphy. (g) A knowledge of the general geography of the world, especially the principal navigation routes and the most important cable, telegraph, wireless telegraphy and wireless telephony routes.

"130. The examination for a Second Class Commercial Operator's Certificate of Proficiency shall be such as to show that a successful candidate possesses the knowledge and qualifications specified in this regulation, namely:—(a) An elementary theoretical knowledge of electricity and wireless telegraphy, and knowledge of the adjustment and practical working of the types of wireless telegraph apparatus used in the mobile service. (b) An elementary theoretical and practical knowledge of the working of the accessory apparatus used in the operation and adjustment of the apparatus referred to in paragraph (a) of this regulation. (c) The ability to effect minor repairs to damage occurring to the apparatus referred to in paragraphs (a) and (b) of this regulation. (d) The ability to send correctly, and to receive correctly by ear, in Morse code, code groups at a speed of 16 groups per minute. (e) A detailed knowledge of—(i) such of

**COMMONWEALTH WIRELESS REGULATIONS (Continued)**

the Radiocommunication Regulations annexed to the Telecommunication Convention as relate to the exchange of radiocommunications and the assessment of charges in the mobile service; and (ii) that portion of the Safety Convention which relates to radiotelegraphy. (f) A knowledge of the general geography of the world, especially the principal navigation routes and the most important cable, telegraph, wireless telegraphy, and wireless telephony routes.

"131. (1). A Third Class Commercial Operator's Certificate of Proficiency shall be issued in respect of proficiency in wireless telegraphy or wireless telephony, or both.

"(2). The examination for a Third Class Commercial Operator's Certificate of Proficiency shall be such as to show that a successful candidate possesses the knowledge and qualifications specified in this sub-regulation, namely:—(a) In the case of an examination for a Third Class Commercial Operator's Certificate of Proficiency in wireless telegraphy—(i) a practical knowledge of the working and adjustment of such type or types of wireless telegraph installation as is, or are, specified by the Director-General; (ii) ability to send correctly, and to receive correctly by ear, in Morse code, a message in plain language at a speed of 10 words per minute; (iii) a knowledge of the Radiocommunication Regulations annexed to the Telecommunication Convention relating to the exchange of radio-telegraph communications, to interference and to the Distress, Urgency, Alarm, and Safety Signals; and (iv) a knowledge of the precautions necessary for the safety of the installation referred to in subparagraph (i) of this paragraph. (b) In the case of an examination for a Third Class Commercial Operator's Certificate of Proficiency in wireless telephony—(i) a practical knowledge of the working and adjustment of such type or types of wireless telephone installation as is, or are, specified by the Director-General; (ii) ability to send and receive correctly messages by telephone; (iii) a knowledge of the Radiocommunication Regulations annexed to the Telecommunication Convention relating to the exchange of radiotelephone communications, to interference and to the Distress, Urgency, Alarm, and Safety Signals. (iv) a knowledge of the precautions necessary for the safety of the installation referred to in subparagraph (i) of this paragraph. (c) In the case of an examination for a Third Class Commercial Operator's Certificate of Proficiency in both wireless telegraphy and wireless telephony—the knowledge and qualifications specified in paragraphs (a) and (b) of this sub-regulation.

"131A. The examination for a First Class Aircraft Operator's Certificate of Proficiency shall be such as to show that a successful candidate possesses the knowledge and qualifications specified in this regulation, namely:—

- (a) A knowledge of the general principles of electricity, of the theory of wireless telegraphy and wireless telephony, and of the adjustment and practical working of the types of apparatus used in the mobile service.
- (b) A theoretical and practical knowledge of the accessory apparatus, such as motor-generator sets, accumulators, etc., used in the operation and adjustment of the apparatus referred to in paragraph (a) of this regulation.
- (c) The practical knowledge necessary to effect, with the means available on board, the repair of damage which may occur to the wireless telegraph or wireless telephone apparatus during a voyage.
- (d) The ability to send correctly, and to receive correctly by ear, in Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of 20 groups per minute, and a message in plain language at a speed of 25 words per minute, each code group to comprise five characters and each figure or punctuation mark to count as two characters and the message in plain language to average five characters to the word.

- (e) The ability to send and receive messages correctly by telephone.
- (f) A detailed knowledge of—
  - (i) such of the Radiocommunication Regulations annexed to the Telecommunication Convention as relate to the exchange of radiocommunications and the assessment of charges in the mobile service;
  - (ii) that portion of the Convention for the Safety of Life at Sea which relates to radio-telegraphy; and
  - (iii) The special provisions governing the radio-electric service of air navigation.
- (g) A knowledge of the general geography of the world, especially the principal air navigation routes and the most important telecommunication routes.

"131B. The examination for a Second Class Aircraft Operator's Certificate of Proficiency shall be such as to show that the successful candidate possesses the knowledge and qualifications specified in this regulation, namely:—

- (a) An elementary theoretical and practical knowledge of electricity and wireless telegraphy and a knowledge of the adjustment and the practical working of the types of apparatus used in the mobile service, particularly in relation to aircraft stations.
- (b) An elementary theoretical and practical knowledge of the working of the accessory apparatus, such as motor-generator sets, accumulators, etc., used in the operation and adjustment of the apparatus mentioned in paragraph (a) of this regulation.
- (c) A practical knowledge sufficient for effecting minor repairs in case of damage occurring to the wireless apparatus.
- (d) The ability to send correctly, and to receive correctly by ear, in Morse code, code groups (mixed letters, figures and punctuation marks) at a speed of sixteen groups per minute, each group to comprise five characters and each figure or punctuation mark to count as two characters.
- (e) A knowledge of—
  - (i) such of the Radiocommunication Regulations annexed to the Telecommunication Convention as relate to the exchange of radio communications and the assessment of charges in the mobile service;
  - (ii) that portion of the Convention for the Safety of Life at Sea which relates to radio-telegraphy; and
  - (iii) the special provisions governing the radio-electric service of air navigation.
- (f) A knowledge of the general geography of the world, especially the principal air navigation routes and the most important telecommunication routes.

"131C. The examination for a Third Class Aircraft Operator's Certificate of Proficiency shall be such as to show that the successful candidate possesses the knowledge and qualifications specified in this regulation, namely:—

- (a) A practical knowledge of wireless telephony, especially with a view to avoiding interference.
- (b) A knowledge of the adjustment and working of wireless telephone apparatus.
- (c) The ability to send and receive messages correctly by telephone.
- (d) The ability to send correctly, and to receive correctly by ear, in Morse code, a message in plain language at a speed of twelve words per minute.

**COMMONWEALTH WIRELESS REGULATIONS (Continued)**

- (e) A knowledge of—
  - (i) such of the Radiocommunication Regulations annexed to the Telecommunication Convention as relate to the exchange of radiotelephone communications and to the distress, urgency and safety signals; and
  - (ii) the special provisions governing the radio-electric service of air navigation.

"132. The examination for a Broadcast Station Operator's Certificate of Proficiency shall be such as to show that a successful candidate possesses the knowledge and qualifications specified in this regulation, namely:—(a) A knowledge of the general principles of electricity and of radio-technology and of all the electrical and wireless telephony equipment used by broadcasting stations. (b) A practical knowledge of the working and adjustment of all apparatus normally used by broadcasting stations. (c) Ability to adjust and carry out repairs to the apparatus referred to in the last preceding paragraph of this regulation. (d) A knowledge of the provisions of Division 1 of Part III. of these regulations.

"133. The examination for an Amateur Operator's Certificate of Proficiency shall be such as to show that a successful candidate possesses the knowledge and qualifications specified in this regulation, namely—(a) An elementary knowledge of wireless telegraphy and wireless telephony and electrical principles. (b) A knowledge of—(i) such of the Radiocommunication Regulations annexed to the Telecommunication Convention as relate to the operation of experimental stations; (ii) the principal abbreviations set out in Appendix 9 of those Regulations; and (iii) Part IV. of these Regulations. (c) Ability to send correctly, and to receive correctly by ear, in Morse code, a message in plain language at a speed of 12 words per minute.

"134. The Postmaster-General may cancel or suspend any certificate issued under this Part—(a) if the holder of the certificate is convicted of a criminal offence; or (b) if the Postmaster-General is of the opinion, on account of the incompetence of the holder of the certificate or for any other reason, that it is desirable that the certificate should be cancelled or suspended.

"135. The Postmaster-General may at any time, by notice in writing, require the holder of a certificate issued under this Part to satisfy him, by examination or otherwise, within the time specified in the notice that he possesses the knowledge and qualifications referred to in the certificate. If the holder fails so to satisfy the Postmaster-General, the Postmaster-General may, by notice published in the "Gazette," cancel the certificate.

"136. Nothing in these Regulations shall be construed as rendering the Minister liable or responsible for any infringement by a licensee in the exercise of his licence, of copyright in any work or of any patent for an invention, or for any breach of the law arising out of the exercise of the licence, and nothing in these Regulations shall affect the liability of the licensee in respect of any such act done by him.

"137. These Regulations shall not prevent the use, without licence, by the Defence Authorities of wireless telegraphy for Defence purposes:

"Provided that each wireless telegraphy installation (other than a mere temporary installation) to be used shall be authorised in writing by the Minister.

"138. If a justice of the peace is satisfied by information on oath that there is reasonable ground for supposing that a wireless telegraphy station has been established, or that any apparatus for wireless telegraphy has been installed or worked in any place or on board any ship within his jurisdiction, without a licence in that behalf, he may grant a search warrant to any police officer or officer appointed in that behalf by the Minister or authorised officer and named in the warrant, and a warrant so granted shall authorise the officer named therein to enter and inspect the station, place or ship, and to seize any apparatus which appears to him to be used or intended to be used for wireless telegraphy therein.

"139. Any person who acts in contravention of any provision of these Regulations or fails to comply with any condition of a licence shall be guilty of an offence against these Regulations. Penalty: Twenty pounds.

**"SECOND SCHEDULE "REGULATION 127  
TABLE OF FEES AND CLASS OF CERTIFICATE.**

	£	s.	d.
For examination for First Class Commercial Operator's Certificate of Proficiency . . . . .	£1	0	0
For examination for Second Class Commercial Operator's Certificate of Proficiency . . . . .		15	0
For examination for Third Class Commercial Operator's Certificate of Proficiency . . . . .		10	0
For examination for First Class Aircraft Operator's Certificate of Proficiency . . . . .	1	0	0
For examination for Second Class Aircraft Operator's Certificate of Proficiency . . . . .		15	0
For examination for Third Class Aircraft Operator's Certificate of Proficiency . . . . .		10	0
For examination for Broadcast Station Operator's Certificate of Proficiency . . . . .		15	0
For examination for Amateur Operator's Certificate of Proficiency . . . . .		7	6
For the issue of any certificate without examination . . . . .		2	6
For the issue of a duplicate certificate where original lost . . . . .		2	6

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# Australian Broadcasting Commission Act

An Act relating to Broadcasting. No. 14 of 1932. Assented to 17th May, 1932

## Part I.—Preliminary

1. This Act may be cited as the Australian Broadcasting Commission Act, 1932.
2. This Act shall commence on a date to be fixed by Proclamation.
3. This Act is divided into Parts, as follows:—
  - Part I.—Preliminary.
  - Part II.—Establishment and Constitution of Commission.
  - Part III.—Powers and Functions of the Commission.
  - Part IV.—Finance.
  - Part V.—Issue of Debentures by the Commission.
  - Part VI.—Miscellaneous.
4. In this Act, unless the contrary intention appears—
 

“Commission” means a member of the Commission.

“National broadcasting stations” means stations made available by the minister for the purpose of the transmission of the National Broadcasting Programmes;

“the Commission” means the Australian Broadcasting Commission appointed under this Act; and

“the Fund” means the Australian Broadcasting Commission Fund established under this Act.

## Part 2.—Establishment and Constitution of the Commission

5. (1) For the purposes of this Act, there shall be a Commission, to be known as the Australian Broadcasting Commission, which shall be charged with the general administration of this Act.
  - (2) The Commission shall be a body corporate with perpetual succession and a common seal, and may acquire, hold, and dispose of real and personal property and shall be capable of suing and being sued in its corporate name.
  - (3) All Courts, Judges and persons acting judicially shall take judicial notice of the seal of the Commission affixed to any document or notice and shall deem that it was duly fixed.
6. (1) The Commission shall consist of five Commissioners, one of whom shall be a Chairman, and one of whom shall be a Vice-Chairman.
  - (2) The Commissioners shall be appointed by the Governor-General, and shall hold office, during good behaviour, for the period for which they were appointed.
7. (1) Subject to this Act, the period for which the Commissioners first appointed under this Act shall hold office shall be, in the case of the Chairman, not exceeding five years, in the case of the Vice-Chairman, not exceeding four years, and in the case of each of the remaining Commissioners not exceeding three years.
  - (2) After the appointment of the five Commissioners first appointed under this Act, each further appointment shall be for a period not exceeding three years.
  - (3) Each person who is appointed a Commissioner shall, upon the expiration of the term for which he was appointed, be eligible for re-appointment.
8. (1) Subject to this section, the Commissioners shall receive such salaries and allowances as the Governor-General determines.

(2) The salaries of the Commissioners shall not exceed the following:—

in the case of the Chairman . . . . .	Five hundred pounds per annum;
in the case of the Vice-Chairman . . . . .	Four hundred pounds per annum; and
in the case of each other Commissioner . . . . .	Three hundred pounds per annum.

9. (1) In case of the illness or absence of the Chairman, the Vice-Chairman, if present, shall act as Chairman.

(2) In case of the illness or absence of both the Chairman and the Vice-Chairman, the Commissioners present may appoint one of their number to act as Chairman:

Provided that the Governor-General may, if he thinks fit, appoint a person to act as Chairman for such period as the Governor-General specifies.

(3) If the Governor-General appoints a person to act as Chairman the appointment shall be at such salary as is determined by the Governor-General, not exceeding the maximum salary fixed by section eight of this Act.

10. (1) In case of the illness or absence of any other Commissioner, the Governor-General may, if he thinks fit, appoint a person to perform the functions of the Commissioner during such illness or absence.

(2) The salary of any person so appointed shall be determined by the Governor-General but shall not exceed the maximum salary fixed by section eight of this Act in respect of that office.

11. In the event of the absence of any Commissioner, the Governor-General may determine the conditions as to remuneration or otherwise upon which leave may be granted.

12. The Governor-General may terminate the services of a Commissioner or any Commissioner for inability, inefficiency or misbehaviour, or for neglect or failure to carry out any of the provisions of this Act.

13. A Commissioner shall be deemed to have vacated his office—

- (a) if his appointment is terminated by the Governor-General in pursuance of this Act;
- (b) if he becomes bankrupt or compounds with his creditors or makes any assignment of his salary for their benefit or takes advantage of any provision of any Act relating to bankruptcy;
- (c) if he becomes of unsound mind;
- (d) if he resigns his office by writing under his hand addressed to the Governor-General and the resignation is accepted by the Governor-General;
- (e) if he absents himself (except on leave granted by the Governor-General) from all meetings of the Commission held during two consecutive months; or
- (f) if he, in any way, otherwise than as a member, and in common with the other members, of an incorporated company consisting of more than twenty-five persons—

## The A.B.C. Act (contd.)

- (i) becomes concerned or interested in any contract or agreement made by or on behalf of the Commission; or
- (ii) participates, or claims to participate, in the profits of any such contract or agreement or in any benefit or emolument arising therefrom.

14. (1) The Commission shall hold such meetings as, in the opinion of the Chairman or at least three other Commissioners, are necessary for the efficient conduct of its affairs.

(2) At meetings of the Commission three Commissioners shall form a quorum, and the Chairman shall have a deliberative vote, and, in the event of an equality of votes, a second or casting vote.

15. (1) The Commission shall appoint a general manager and such other officers and such servants as it thinks necessary.

(2) The salaries payable to the general manager and the next six most highly paid executive officers of the Commission shall be subject to the approval of the Governor-General.

(3) Officers and servants appointed by the Commission shall not be subject to the provisions of the Commonwealth Public Service Act, 1922-1931, but shall be subject to such conditions (including tenure of office) as are determined by the Commission.

## Part 3.—Powers and Function of the Commission

16. The Commission shall provide and shall broadcast from the national broadcasting stations adequate and comprehensive programmes and shall take in the interest of the community all such measures as, in the opinion of the Commission, are conducive to the full development of suitable broadcasting programmes.

17. For the purpose of the exercise of its powers and functions under this Act, the Commission may compile, prepare, issue, circulate and distribute, whether gratis or otherwise in such manner as it thinks fit, such papers, magazines, periodicals, books, pamphlets, circulars and other literary matter as it thinks fit (including the programmes of national broadcasting stations and other stations).

Provided that, prior to the publication of any programme in pursuance of this section, a copy of the programme shall be made available at an office of the Commission on equal terms to the publishers of any newspaper, magazine, or journal published in the Commonwealth.

18. (1) Subject to this Act, the Commission may—

- (a) acquire by lease or purchase any land, buildings, easements or other property, rights or privileges which it thinks necessary for the purposes of this Act; and
- (b) sell, exchange, lease, dispose of, turn to account or otherwise deal with any property, rights or privileges of the Commission.

(2) The Commission shall not, without the approval of the Minister—

- (a) acquire any property, the cost of acquisition of which exceeds the sum of Five thousand pounds, or in any manner dispose of any property having an original or book value exceeding the sum of Five thousand pounds; or
- (b) enter into any lease for a period exceeding five years.

19. (1) The Commission shall provide such studios, offices and other accommodation as it thinks necessary for the purposes of this Act, and such accommodation in relation to the studios as the Minister requires for the proper carrying out of the technical services to be provided by the Minister, and shall take over, as arranged by the Minister and at the valuation determined by him, any existing studios, buildings, sites, fittings, furniture or other assets controlled by the Minister which are used for broadcasting purposes, and shall accept an assignment of any leases relating thereto, and of the rights

and liabilities of the Minister under any agreements relating thereto.

(2) The location of any studios to be provided by the Commission in pursuance of this section shall be subject to the approval of the Minister.

20. (1) The Commission shall transmit free of charge from all of the national broadcasting stations, or from such of them as are specified by the Minister, any matter the transmission of which is directed by the Minister as being in the public interest.

(2) The Commission shall not, without the permission of the Minister, transmit or receive for transmission any message the transmission of which would, without the authority of, or licence granted by, the Minister administering the Post and Telegraph Act, 1901-1923, or the Wireless Telegraphy Act, 1905-1919, contravene the provisions of either of those Acts.

21. (1) The Commission shall not broadcast advertisements.

(2) Nothing in this section shall be constructed as preventing the Commission from broadcasting, if it thinks fit—

- (a) any announcements of its own future programmes;
- (b) a programme supplied by any organisation, firm or person engaged in artistic, literary, musical or theatrical production or in educational pursuits; or
- (c) a programme supplied by any organisation, firm or person, provided the programme is not, in the opinion of the Commission, being used as an advertisement.

22. The Commission may collect in such manner as it thinks fit news and information relating to current events in any part of the world and may subscribe to news agencies.

23. The Commission shall, as far as possible, give encouragement to the development of local talent and endeavour to obviate restriction of the utilisation of the services of persons who, in the opinion of the Commission are competent to make useful contributions to broadcasting programmes.

24. The Commission shall endeavour to establish and utilise, in such manner as it thinks desirable in order to confer the greatest benefit on broadcasting, groups of musicians for the rendition of orchestral, choral and band music of high quality.

25. The Commission may, if it thinks fit, appoint Committees to advise it in relation to all or any matters connected with the provision or rendition of broadcasting programmes, or the exercise of any powers, duties or functions conferred or imposed upon it by this Act.

## Part 4.—Finance

26. (1) There shall be an Australian Broadcasting Commission Fund into which shall be paid from time to time out of the Consolidated Revenue Fund, which is hereby appropriated accordingly, an amount which represents such portion of the fees received from broadcast listeners' licences as is fixed by or under this Act.

(2) For the year commencing on the first day of July, One thousand nine hundred and thirty-two, the amount referred to in the last preceding sub-section shall be twelve shillings in respect of each broadcast listener's licence fee received, and this amount shall continue to be paid in each subsequent year unless some other amount is fixed by the Minister.

(3) The payments provided for by the preceding provisions of this section shall be made monthly, and as soon as possible after the last day of each calendar month, and shall in each case represent an amount approximating the appropriate sum relating to the licences in force during the previous month.

(4) The final adjustments shall be made as soon as conveniently possible after the end of each quarter.

(5) Any account certified by such officer of his Department as is designated for that purpose by the Minister and forwarded by the Minister to the Commission purporting to set out the sum payable to the Commission in pursuance of the foregoing provisions of this section shall be final and conclusive for all purposes.

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(6) There shall also be paid into the Fund any other revenue or money received by the Commission.

(7) Income derived from the investment of any portion of the Fund shall form part thereof.

27. The moneys paid into the Fund shall be applied by the Commission as follows:—

- (a) In payment of the expenses, charges and other obligations incurred or undertaken by the Commission in the exercise of its powers, duties and functions under this Act;
- (b) In payment of the salaries, wages and allowances of Commissioners and of officers and servants of the Commission; and
- (c) In investment in any securities of, or guaranteed by, the Government of the Commonwealth or of any State.

28. Moneys held in the Fund, uninvested by the Commission, may be lodged either in an account at call or on fixed deposit, or partly in an account at call and partly in an account at fixed deposit, with the Commonwealth Bank, and while in such Bank shall be held to be moneys of the Crown.

29. Cheques drawn on any account referred to in the last preceding section shall be signed in such manner as the Commission directs.

30. (1) For the purpose of enabling the Commission to defray any expenses incidental to its establishment and operation, the Treasurer may advance, out of the Consolidated Revenue Fund, which is hereby appropriated accordingly, such amounts not exceeding in all the sum of Thirty thousand pounds as are, in the opinion of the Minister, required by the Commission.

(2) In addition to the moneys advanced in pursuance of the last preceding sub-section, the Treasurer may advance to the Commission such sums, if any, as are from time to time appropriated by Parliament for that purpose.

(3) The terms and conditions of any advances made in pursuance of this section, including the security and basis of repayment shall be as determined by the Treasurer.

31 (1) The accounts of the Commission shall be subject to inspection and audit, at least once yearly, by the Auditor-General of the Commonwealth.

(2) The Auditor-General shall report to the Minister the result of each inspection and audit.

32. The Commission shall, as soon as possible after the expiration of each financial year, prepare a profit and loss statement and balance-sheet in the form prescribed, and shall forward them, together with a report on the operations of the Commission during that year, to the Minister, for presentation to both Houses of the Parliament.

33. The payment by the Commission of compensation exceeding in any individual case, One hundred pounds to members of the Commission, its officers or servants, or other bodies or persons, shall not be made without the approval of the Minister.

34. The income, property, and operations of the Commission shall not be subject to any rates, taxes or charges, under any law of the Commonwealth or a State, to which the Commonwealth is not subject.

35.(1) The Commission shall exercise the powers and functions conferred and imposed upon it by this Act, in such a manner that its operations will be financially self-supporting.

(2) The Commission shall establish such sinking funds as are in the opinion of the Treasurer, necessary to enable the Commission to meet repayment of loans and

other obligations and to meet losses and depreciation in assets, and may set aside out of its revenue such sums as it thinks proper as a reserve fund for such purposes as the Commission deems desirable (not being purposes for which any sinking fund has been established).

### Part 5.—Issue of Debentures by the Commission

36. (1) Subject to this section, the Commission may, from time to time, issue debentures to such amount, bearing such rate of interest and subject to such conditions, as the Treasurer and the Minister approve.

(2) The total amount of debentures so issued, and current at any one time, shall not exceed Fifty thousand pounds.

37. Debentures shall be in accordance with the form approved by the Treasurer, and shall be under the seal of the Commission and shall be signed and countersigned in such manner as the Treasurer directs.

38. The Commonwealth by this Act guarantees the payment by the Commission of the principal and interest due in respect of any debenture issued by the Commission in pursuance of this Act, and the Consolidated Revenue Fund is hereby appropriated for the purpose of this section.

39. (1) Every debenture issued in pursuance of this Act shall be payable to the bearer thereof, and shall pass by delivery only without any assignment or indorsement, and the bearer of a debenture shall have the same rights and remedies as if he were expressly named therein.

(2) At the request of the bearer of a debenture the Commission may in lieu thereof issue to him inscribed stock of the same currency, and bearing the same interest, and transferable only in manner prescribed.

(3) At the request of the holder of any inscribed stock of the Commission, the Commission may in lieu thereof issue to him debentures of the same currency and bearing the same interest.

40. The Commission may sell debentures, or cause them to be sold, at such times and at such places and in such sums and on such conditions as the Treasurer approves.

41. A trustee, executor or administrator may invest any trust moneys in his hands in the purchase of debentures issued by the Commission.

42. (1) Any person who, with intent to defraud—

- (a) forges any security of the Commission, or
- (b) utters any forged security of the Commission, or
- (c) makes any instrument for forging any security of the Commission, or
- (d) has in his possession any such instrument, or
- (e) has in his possession any forged security of the Commission, shall be guilty of an indictable offence.

Penalty: Imprisonment for ten years.

(2) Any person who, without authority, proof whereof shall lie upon him—

- (a) makes any form of security of the Commission,
- (b) has in his possession any form of security of the Commission, or
- (c) makes or has in his possession any instrument or thing by which any distinctive mark or signature on any security of the Commission may be made or imitated, shall be guilty of an offence.

Penalty: Imprisonment for two years.

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(3) In this Part "security of the Commission" means any Commission debenture, Commission inscribed stock, or any coupon, warrant or document for the payment of interest thereon, and includes any transfer of any Commission inscribed stock, and any indorsement on any coupon, warrant or document for the payment of interest on any security of the Commission.

43. All forged securities of the Commission, and all unauthorised forms of security of the Commission, and all unauthorised instruments and things by which any distinctive mark or signature on any security of the Commission, may be unlawfully made or imitated, shall be forfeited to the King and may be seized by any member of the police force of the Commonwealth or of a State.

### Part 6.—Miscellaneous

44. The Postmaster-General shall undertake the provision and operation of all technical services associated with the transmission of programmes, including any transmission and reception for the interchange of programmes with other broadcasting administrations which is mutually agreed upon between the Commission and the Postmaster-General.

45. (1) For the purpose of providing and operating the technical services referred to in this Act, the Postmaster-General, or any person acting under the authority of the Postmaster-General, may—

- (a) erect, place and maintain any electric line which is in the opinion of the Postmaster-General, necessary for conveying electric current to a Broadcasting station, and in respect of the erection, placing and maintenance of any electric line, the Postmaster-General and any person acting under his authority shall have the same powers, and be subject to the same obligations, as are conferred or imposed under Part IV. of the Post and Telegraph Act, 1901-1923, in relation to the erection, placing and maintenance of telegraph lines; and
- (b) arrange for and obtain from any person the supply of any electric current which, in the opinion of the Postmaster-General, is necessary or advisable for the working of any broadcasting station or the operation of any apparatus for the transmission or reception of programmes.

(2) In this section "electric line" includes all means used for the purpose of conveying, transmitting, transforming or distributing electricity and any casing, coating, covering, tube, tunnel, pipe, pillar, pole, post, frame, bracket or insulator enclosing, surrounding, or supporting the same or any part thereof or any apparatus connected therewith.

46. The Postmaster-General shall provide free of cost to the Commission—

- (a) the transmissions emanating from recognised National Broadcasting Service studios which are to be radiated from the national broadcasting stations, including such simultaneous transmissions from two or more stations as are mutually agreed upon; and
- (b) microphones, pick-up equipment and all other necessary portable apparatus for occasional or periodical transmission from various places within the Commonwealth.

47. The Postmaster-General shall provide, at the expense of the Commission—

- (a) for the installation and operation of the apparatus referred to in paragraph (b) of the last preceding section;

(b) the circuits required to connect the various pick-up points with the recognised relevant studios; and

(c) Apparatus required permanently for pick-up purposes or for other purposes affecting the rendering of programmes where such apparatus is to be installed at any place other than a recognised National Broadcasting Service studio.

48. Notwithstanding anything contained in this Act, the Commission shall not be empowered to enter into any agreement involving any expenditure in excess of Five thousand pounds, or extending over a period of more than five years, unless the approval of the Minister thereto has first been obtained.

49. The Commission shall at all times indemnify and keep indemnified the Postmaster-General against any action claim or demand brought or made by any person against the Postmaster-General or against any officer of the Postmaster-General's Department in respect of any act done by the Postmaster-General or by such officer on behalf, at the request, or in the interests, of the Commission.

50. The control of the provision and rendition of broadcasting programmes by the Commission shall commence on the first day of July one thousand nine hundred and thirty-two, but the Commission may exercise, prior to that date, any powers or functions conferred on it by this Act for the purpose of enabling it to assume full control on that date.

51 (1) The Minister may from time to time, by notice in writing, prohibit the Commission from broadcasting any matter, or matter of any class or character, specified in the notice, or may require the Commission to refrain from broadcasting any such matter.

(2) The Minister may at any time revoke or vary any requirement made in pursuance of the last preceding sub-section.

52. The Commission shall have the power to determine to what extent and in what manner political speeches may be broadcast.

53. The Governor-General may, whenever any emergency has arisen, which, in his opinion, renders it desirable in the public interest so to do, authorise the Minister to exercise during the emergency complete control over the matter to be broadcast from the national broadcasting stations, and, thereupon and so long as the emergency continues such persons as are thereto authorised in writing by the Minister shall have access at all times to any premises controlled by the Commission and may exercise full authority over all rights and privileges possessed by the Commission.

54. Nothing in this Act shall be deemed to diminish or affect the rights of any person under any contract or agreement made prior to the commencement of this Act to which the Commonwealth is a party.

55. The Governor-General may make regulations, not inconsistent with this Act, prescribing all matters required or permitted to be prescribed, or which are necessary or convenient to be prescribed, for carrying out or giving effect to this Act and in particular for providing for the issue, inscription, transfer, transmission, and redemption of inscribed stock of the Commission, and all matters in relation thereto.

# LEGISLATION DURING 1938

## Two Important Measures Introduced in New South Wales Affect Broadcasting

### Medical Practitioners Act

The Medical Practitioners Act, 1938, was passed in the New South Wales Parliament during the latter part of 1938 and assented to December 22, 1938. It is a copious measure and bears specific reference to commercial broadcasting in that it imposes certain restrictions upon certain forms of broadcast and other advertising of medical services, patent medicines, etc.

Some relevant passages of the Act are quoted herewith. (Complete copies of the Act are obtainable from the Government Printer, Sydney).

#### Penalty for Posing as Medical Practitioner when not Registered

Section 42. (1) Any person, not registered under this Act, who takes or uses any name, initials, word, title, addition, description or symbol which having regard to the circumstances in which it is taken or used indicates or is capable of being understood to indicate or is calculated to lead people to infer that he possesses a degree, diploma, or other qualification of a nature which would entitle him to be registered as a medical practitioner, or that he is registered as a medical practitioner under this Act, shall be guilty of an offence and shall be liable on conviction of a penalty not exceeding fifty pounds.

#### ADVERTISING

(2) No person, shall, otherwise than in accordance with the regulations, advertise himself to be entitled, qualified, able or willing to practise medicine or surgery in any of its branches or to give or perform any medical or surgical advice, service, attendance or operation.

Any person who contravenes any of the provisions of this subsection shall be guilty of an offence and shall be liable on conviction to a penalty not exceeding fifty pounds.

This subsection shall not apply until the regulations relating to this subsection shall come into operation in accordance with section fifty-three of this Act.

(3) Subsection two of this section shall not apply to an advertisement of any member of a life-saving, ambulance or first-aid association, being a charitable institution, or by a member of a mine rescue corps, in relation to the lawful exercise of his functions or duties as a member of such association or corps, but shall apply to every advertisement by any other person whether or not registered under this Act.

#### Penalties for Certain Offences

Section 43. (1) Every person who:

(a) Causes, permits or suffers to be done for him or on his behalf or in relation to himself, any act, matter or thing which, if done by him personally, would render him liable to conviction for an offence against section forty-two of this Act; or

(b) does or causes, permits or suffers to be done for or on behalf of, or in relation to any other person, any act, matter or thing, which, if done by such other person personally, would render him liable to conviction for an offence of the nature referred to in paragraph (a) of this subsection.

shall be guilty of an offence and shall be liable on conviction to a penalty not exceeding twenty pounds.

(2) Every person who exhibits or publishes, or causes, permits or suffers to be exhibited or published any letter or any circular, handbill, placard, card, letter, paper, billhead, receipt form, or invoice, or any document or paper to be used in connection with any business, practice, or profession, or other advertisement of any kind whatsoever, whereby any person advertises or holds himself out contrary to any provision of section forty-two of this Act, or attempts so to do, shall be guilty of an offence and shall be liable on conviction to a penalty not exceeding twenty pounds.

Without prejudice to the generality of the expression "publishes" that ex-

pression shall, in this section, include publishing or caused to be published by spoken words whether directly or through the medium of any apparatus for the reproduction of sound.

Provided that this subsection shall not apply to any newspaper or magazine proprietor, publisher or printer publishing such advertisement before written notice to him from the Board of Health that such advertisement is contrary to the said section.

#### Advertisement to Promote Sale of Food, Drug or Appliance

Section 45. (1) Any person who publishes by any means whatsoever, or causes to be so published, any advertisement to promote the sale of any food, or drug whatsoever, or of any appliance, preparation, product, treatment of course of treatment for the prevention, alleviation, or cure of any human ailment or physical defect, and who, in such advertisement, uses concerning or in relation to the human ailment or physical defect, or to the food, drug, appliance, preparation, product, treatment or course of treatment any name or title purporting to be that of a medical practitioner, doctor of medicine, physician or surgeon or any name or title which, having regard to the circumstances in which it is so used, indicates or is capable of being understood to indicate or is calculated to lead persons to infer that it is the name or title of a medical practitioner, doctor of medicine, physician or surgeon shall unless he has obtained the approval of the Board of Health to such use be guilty of an offence and shall be liable on conviction to a penalty not exceeding twenty pounds.

This subsection shall not apply to or in respect of any such advertisement which is published exclusively to or amongst persons who are medical practitioners, registered pharmacists, registered dentists, registered veterinary surgeons, or are engaged in the business of selling by wholesale any foods or drugs whatsoever or any appliances, preparations, products, treatments or courses of treatment for the prevention, alleviation

## 1938 Legislation (contd.)

### Medical Practitioners' Act (contd.)

or cure of any human ailment or physical defect, whether such advertisement is contained in any journal the circulation of which is limited to such persons or is contained in any other document published exclusively to or amongst such persons.

(2) If any such advertisement is published in a newspaper printed and published in New South Wales, the proprietor, publisher, and printer of that newspaper shall severally (and without excluding the liability of any other person) be guilty of the offence and liable to the penalty referred to in the subsection one of this section.

(3) Where any person is charged with an offence against this section in respect of the publication or advertisement to promote the sale of food, drug, appliance, preparation, product, treatment or course of treatment it shall be a sufficient defence if such person proves that the advertisement to which the charge relates is in the same terms or is substantially to the same effect as advertisements, published on or before the fifteenth day of July, one thousand nine hundred and thirty-eight, to promote the sale of that food, drug, appliance, preparation, product, treatment or course of treatment.

(4) With prejudice to the generality of the expression "publishes by any means whatsoever, or causes to be so published" that expression shall, in this section, include publishing or causing to be published by spoken words whether directly or through the medium of any apparatus for the reproduction of sound.

#### Publication of Advertisements Containing False Statements Concerning Medicines, Etc.

Section 46. (1) Any person who publishes, by any means whatsoever, or causes to be so published, any advertisement which:—

(a) is intended or apparently intended by such person or any other person to promote the sale of any article as a medicine, preparation, product or appliance for, or of any treatment or course of treatment for the prevention, alleviation or cure of any human ailment or physical defect; and

(b) contains any statement which is false in any material particular relating to the ingredients, composition, structure, nature or operation of the medicine, preparation, product, appliance, treatment or course of treatment or to the effects which have followed or may follow the use thereof,

shall be guilty of an offence and shall be liable on conviction to a penalty not exceeding fifty pounds.

#### OFFENCE IN RESPECT OF PUBLICATION IN NEW SOUTH WALES

(2) If any such advertisement is published in a newspaper printed and published in New South Wales the printer, publisher and proprietor of that newspaper shall be severally (and without excluding the liability of any other person) be guilty of the offence and be liable to the penalty referred to in subsection one of this section.

#### PROVISO

Provided that no prosecution shall be instituted against the printer, publisher or proprietor of any newspaper printed and published in New South Wales or the proprietor or manager of a broadcasting station for the publication of any advertisement in contravention of this section unless he has been warned within a period of one year before such publication, by the Board of Health, that the falsity of the statement or of some other statement substantially to the same effect has been established in proceedings taken under subsection one of this section or under the provisions of any enactment in force in any other State or part of the Commonwealth which are substantially to the same effect as the provisions of that subsection and that the publication of the advertisement is an offence.

#### OFFENCE IN RESPECT OF SELLING IN NEW SOUTH WALES PUBLICATIONS, ETC., PUBLISHED ELSEWHERE

(3) Every person who sells or distributes any newspaper or publication printed outside New South Wales con-

taining any advertisement which:—  
(a) is intended or apparently intended to promote the sale of any article as a medicine, preparation, product or appliance for, or of any treatment or course of treatment for the prevention, alleviation, or cure of any human ailment or physical defect; and

(b) contains any statement which is false in any material particular relating to the ingredients, composition, structure, nature or operation of the medicine, preparation, product, appliance, treatment or course of treatment or to the effects which have followed or may follow the use thereof,

shall be guilty of an offence and shall be liable on conviction to a penalty not exceeding fifty pounds.

#### PROVISO

Provided that no prosecution shall be instituted against any such person unless he has been warned within a period of one year before such publication, by the Board of Health, that the falsity of the statement or of some other statement substantially to the same effect has been established in proceedings taken under subsection one of this section or under the provisions of any enactment in force in any other State or part of the Commonwealth which are substantially to the same effect as the provisions of that subsection and that the selling or distributing of any such newspaper or publication is an offence.

(4) Without prejudice to the generality of the expression "publishes by any means whatsoever, or causes to be so published" that expression shall, in this section, include publishing or causing to be published by spoken words whether directly or through the medium of any apparatus for the reproduction of sound.

## "S.P. Betting Act"

Following a hectic passage through the New South Wales Parliament, the Gaming and Betting (Amendment) 1938, was assented to October 4, 1938, and its far-reaching provisions for the suppression of starting price betting became law.

Through this measure the broadcasting of betting odds or betting information before the time of the start of the last race on any race program was prohibited. Similar restrictions are imposed upon the newspapers in the State regarding starting prices.

Section 47c and 47d of the Amendment Act deal more specifically with broadcasting, and set out the following provisions:—

(1) No house, office, room or other place shall be opened, kept or used

for the purpose of the owner, occupier or keeper thereof, or any person using the same or any person procured or employed by, or acting for or on behalf of such owner, occupier or keeper, or person using the same, or of any person having the care or management or in any manner conducting the business thereof making any oral statement—

(a) which is likely to lead to the belief or whereby it is made to appear that any person will, if required—(i) bet on any event or contingency or relating to any intended race contest or course to be held at any race meeting or meeting for coursing in any part of the Commonwealth of Australia; or (ii) communicate or convey by any means whatsoever,

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## 1938 Legislation (contd.)

## "S.P. Betting Act" (contd.)

either directly or indirectly, any information or advice as to the probable result of any such race contest or course; or (iii) communicate or convey by any means whatsoever, either directly or indirectly, any information or advice as to the betting or betting odds on any such race contest or course; or

(b) which is likely to lead to the belief or whereby it is made to appear that information or advice in relation to any of the matters referred to in subparagraphs (ii) and (iii) of paragraph (a) of this subsection has been given or will be given in any newspaper or document; or

(c) whereby any information or advice is given or purports to be given—(i) as to the probable result of any such race, contest or course; or (ii) as to the betting or betting odds on any such race, contest or course.

(2) Whosoever opens, keeps or uses any house, office, room or other place for any of the purposes mentioned in subsection one of this section, or knowingly permits the same to be opened, kept or used by any other person for any of such purposes, or has

the care or management of, or in any manner assists in conducting the business of any such house, office, room or place opened, kept or used for any of such purposes, shall, for a first offence, be liable to a penalty not exceeding one hundred pounds, and for a second or any subsequent offence to a penalty of not less than one hundred pounds and not exceeding two hundred and fifty pounds.

(3) This section shall not operate to prohibit a bookmaker from making any oral statement as to any betting or betting odds which he is prepared to accept or offer where such statement is made upon a licensed race-course or coursing ground approved by the Minister on a day upon which a race-meeting or meeting for coursing is being held upon such race-course or coursing ground, and is so made solely to persons present at such race-meeting or meeting for coursing.

(4) (a) In this section the expression "make any oral statement" includes every method of communicating by means of spoken words, whether directly or through the medium of any apparatus for the reproduction of sound.

(b) Any reference in subsection one of this section to "the betting or betting odds" shall extend to include a reference to probable totalisator dividends.

Section 47D. (1) Every person who for fee or reward gives any oral information or advice—

(a) as to the probable result of any intended race, contest or course to be held at any race-meeting, or meeting, or meeting for coursing, in any part of the Commonwealth of Australia; or

(b) as to the betting or betting odds on any event or contingency of or relating to any such race contest or course,

shall be liable for a first offence to a penalty not exceeding one hundred pounds, and for a second or any subsequent offence to a penalty of not less than one hundred pounds and not exceeding two hundred and fifty pounds.

(2) In any proceedings for an offence against this section the allegation in the information that any information or advice was given for fee or reward shall be prima facie evidence of the fact so alleged.

(3) In this section the expression "give oral information or advice" includes every method of communicating information by spoken words whether directly or through the medium of any apparatus for the reproduction of sound.

## First Australian Award for Announcers Agreement between Announcers' Association and Federation

Effective for one year from May 1, 1939, an agreement entered into between the Announcers' Association of Australia and representatives of the Australian Federation of Commercial Broadcasting Stations, which was registered in the Federal Arbitration Court, provides for minimum rates of pay and for general working conditions.

The agreement is as follows:—

This industrial agreement made pursuant to the Commonwealth Conciliation and Arbitration Act, 1904-1930, this fourth day of April, one thousand nine hundred and thirty-nine, between the Announcers' Association of Australia of the first part and the Employers who are enumerated in the schedule hereunder acting by and through the Australian Federation of Commercial Broadcasting Stations of the second part whereby it is agreed as follows:—

### 1. Agreement Binding Upon.

This agreement shall be binding upon the employers in respect of radio announcers being members of the Announcers' Association of Australia with not less than 12 months' previous experience as radio announcers and upon the said association and members thereof.

### 2. Rates of Pay:

The minimum rates of wages to be paid to adult employees being radio announcers, shall be set out hereunder, provided however that where the Federal

or State executive of the Announcers' Association of Australia agrees with any employer that for special reasons rates lower than those prescribed herein should be accepted by an employee, such lower rates may be agreed upon between the said association and the employer:—

(a) Within 20 miles of the G.P.O.'s Brisbane, Sydney, Melbourne and Adelaide:

1. Engaged by the week: Males, £6/5/-, Females, £4/5/-.
2. Engaged casually: Males, 4/- per hour, Females, 3/6 per hour, with a minimum payment as for four hours.

(b) Within the States of Western Australia and Tasmania, and 20 miles or more from the G.P.O.'s Brisbane, Sydney, Melbourne and Adelaide:

1. Engaged by the week: Males, £4/15/-, Females, £3.
2. Engaged casually: Males, 2/9 per hour, Females, 2/3 per hour, with a minimum payment as for four hours.

### 3. Definitions:

(a) "Engaged by the week" means being engaged for at least one week of employment.

(b) "Engaged casually" means being otherwise engaged than by the week.

(c) "Radio Announcer" means a person whose duties include the conducting of sessions or speaking before a microphone for broadcasting purposes.

(d) "Station" means a commercial broadcasting station in Australia.

### 4. Hours:

(a) The ordinary hours of employment of employees engaged by the week shall be 44 per week, excluding one hour time off for one meal each working day; hours to be worked in such periods as may be required by the employer. Such times shall be rostered and on such roster each employee shall be granted at least one day off in seven days.

(b) Breaks of duty of less than six hours shall be regarded as hours of employment and shall be paid for accordingly.

### 5. Overtime:

(a) All hours worked by employees engaged by the week over 44 per week shall be overtime and shall be paid for at the rate of time and a quarter.

### 6. Annual Leave: Employees Engaged by the Week:

(a) An employee shall not be entitled to receive additional payment for work done on Sundays and public holidays,

## Announcers' Agreement (contd.)

and the employer shall grant the employee leave of absence as follows on full pay once after each completed year of service:—

1. Employees engaged at stations within 20 miles of the G.P.O. at Brisbane, Sydney, Melbourne and Adelaide 21 days, inclusive of Sundays.

2. Employees engaged at other stations—14 days inclusive of Sundays.

(b) Employees shall if practicable be given at least one month's notice of the date of the commencement of their leave.

(c) Should the employment of an employee be terminated for any reason he shall be paid the wages due to him under this agreement up to the termination of his employment, and in addition for each three months' continuous employment shall be paid five and a quarter days' wages in the case of employees entitled to 21 days' annual leave and three and a half days' wages in the case of employees entitled to 14 days' annual leave:

1. During his first year of employment, from the date of the commencement of his employment.

2. During any other year of employment, from the date of the completion of his last year of service.

### 7. Travelling:

If an employee is forced to travel to and/or from his place of employment between the hours of 11.45 p.m. and 6.30 a.m., the employer shall provide and pay for proper transport.

### 8. Time and Wages Records:

(a) The employer shall keep records showing the name of each employee and his occupation; the hours worked each day and the wages and allowances provided for under this agreement paid each week.

(b) The records with all the entries therein, shall on demand, be produced by the employer for inspection at the place where it is kept, at any time between the hours of 10 a.m. and 1 p.m. during any day except pay day to an official of the Announcers' Association of Australia who has been authorised in writing to inspect the same by the general secretary or secretary of a State branch of the said association. One clear day's notice, setting out the grounds for desiring such inspection shall be given to the employer of any intended inspection. No authority to inspect shall be given by the said association unless the general secretary or State branch secretary has good reason to suspect that a breach of this agreement has been committed by the employer whose records are to be inspected.

### 9. Access for Union Representative:

The president or general secretary or any official of the Announcers' Association of Australia duly authorised in writing shall have access to any employer's premises to interview members of the association on union matters when they are off duty. Such interviews shall take place upon such days as may be agreed upon between the association and the employer concerned, and the association shall have the right within the week immediately preceding the day of the interview to put a notice on the notice board of the premises that the representative of the association will be at the premises on the day so agreed upon.

### 10. Discrimination:

The employer:—

(a) Shall not discriminate in the selection or retention of employees against members of the Announcers' Association of Australia on the ground of such membership.

(b) Shall neither directly nor indirectly seek to induce an employee who is a member of the said association to cease to become a member or to become a member of any other organisation, union or association;

(c) Shall not, as a condition of employment ask or require any person or

persons to say whether he belongs to the said association.

### 11. Definition:

For the purpose of this agreement the location of the transmitter of a station shall determine the wages and conditions of employment of employees.

### 12. Duration, etc., of Agreement:

This agreement shall come into operation on the first day of May, one thousand nine hundred and thirty-nine, and shall remain in force for a period of 12 months therefrom.

### SCHEDULE.

Canberra Broadcasters Ltd., Civic Centre, Canberra.

New England Broadcasters, 113 Faulkner Street, Armidale.

Radio Silver City Pty. Ltd., Blende and Sulphide Streets, Broken Hill.

Bathurst Broadcasters Pty. Ltd., 51 Keppell Street, Bathurst.

Coalfields Broadcasting Co. Pty. Ltd., 97 Vincent Street, Cessnock.

Western Broadcasters Pty. Ltd., Macquarie Street, Dubbo.

Country Broadcasting Services Ltd., 84½ Pitt Street, Sydney.

Airsales Broadcasting Co. Pty. Ltd., Maitland Road, Sandgate, Newcastle.

Hunter River Broadcasters Pty. Ltd., High Street, West Maitland.

2KA Ltd., Barrack Street, Sydney.

Radio Kempsey Ltd., 16 Barrack St., Sydney.

Newcastle Broadcasting Co. Pty. Ltd., 72 Hunter Street, Newcastle.

Young Broadcasters Pty. Ltd., 9 Bligh Street, Sydney.

Richmond River Broadcasters Pty. Ltd., Molesworth Street, Lismore.

Mudgee Broadcasting Co. Pty. Ltd., 100 Church Street, Mudgee.

2MO Gunnedah Ltd., Marquis Street, Gunnedah.

Tweed Radio and Broadcasting Co. Pty. Ltd., Commercial Road, Murwillumbah.

Northern Broadcasters Pty. Ltd., 84½ Pitt Street, Sydney.

Parkes Broadcasting Co. Pty. Ltd., 283 Clarinda Street, Parkes.

Deniliquin Broadcasting Co. Ltd., End Street, Deniliquin.

Irrigation Area Newspapers Pty. Ltd., Ulong Street, Griffith.

Tamworth Radio Development Co. Ltd., Peel Street, Tamworth.

Riverina Broadcasting Pty. Ltd., 16 Fitzmaurice Street, Wagga.

Wollongong Broadcasting Co. Pty. Ltd., Edward Street, Wollongong.

Ballarat Broadcasters Pty. Ltd., 56 Lydiard Street, Ballarat.

Central Victoria Broadcasters Pty. Ltd., Broadcasting House, Bendigo.

Geelong Broadcasters Pty. Ltd., James Street, Geelong.

Western Province Radio Pty. Ltd., 37 Gray Street, Hamilton.

Sunraysia Broadcasters Pty. Ltd., Deakin Avenue, Mildura.

Swan Hill Broadcasting Co., Campbell Street, Swan Hill.

"The Argus" Broadcasting Services Pty. Ltd., 365 Elizabeth Street, Melbourne.

Broadcast Entertainments Pty. Ltd., Raymond Street, Sale.

AVR Broadcasters Pty. Ltd., Airdmillan Road, Ayr.

Bundaberg Broadcasters Pty. Ltd., 117 Bourbone Street, Bundaberg.

Gold Radio Service Pty. Ltd., Queen Street, Brisbane.

Ipswich Broadcasting Co. Ltd., Brisbane Street, Ipswich.

Central Western Broadcasting Co. Pty. Ltd., Longreach.

Maryborough Broadcasting Co. Ltd., Queen Street, Brisbane.

Mackay Broadcasting Service Pty. Ltd., 64 Nelson Street, Mackay.

Rockhampton Broadcasting Co. Pty. Ltd., Queen Street, Brisbane.

South Burnett Broadcasting Co. Ltd., Alford Street, Kingaroy.

Edward Gold, Toowoomba.

Warwick Broadcasting Co. Pty. Ltd., King and Albion Streets, Warwick.

Maranoa Broadcasting Co. Ltd., Bowen Street, Roma.

Murray Bridge Broadcasting Co. Ltd., Waymouth Street, Adelaide.

Midlands Broadcasting Services Ltd., Waymouth Street, Adelaide.

River Murray Broadcasters Ltd., 45 King William Street, Adelaide.

South Eastern Broadcasting Co. Ltd., Waymouth Street, Adelaide.

6AM Broadcasters Ltd., St. George's Terrace, Perth.

Goldfield Broadcasters (1933) Ltd., 209 Hannan Street, Kalgoorlie.

6PM Broadcasters Ltd., St. George's Terrace, Perth.

W.A. Broadcasters Ltd. (6WB) Murray Street, Perth.

Findlays Pty. Ltd., Wilson Street, Burnie.

North East Tasmanian Radio Broadcasters Pty. Ltd., 67 Brisbane St., Launceston.

7EX Pty. Ltd., 74 Charles St., Launceston.

Findlay & Willis Broadcasters Pty. Ltd., 67 Brisbane Street, Launceston.

West Coast Broadcasters Pty. Ltd., 21 Paterson Street, Launceston.

Northern Tasmania Broadcasters Pty. Ltd., Reiby Street, Ulverstone.

New South Wales Council of Churches' Services, 77 York Street, Sydney.

Broadcasting Station 2GB Pty. Ltd., 29 Bligh Street, Sydney.

Catholic Broadcasting Co. Pty. Ltd., 60 Hunter Street, Sydney.

Radio 2UE Sydney Pty. Ltd., 29 Bligh St., Sydney.

Commonwealth Broadcasting Pty. Ltd., 49 Market Street, Sydney.

3AW Broadcasting Co. Pty. Ltd., 382 Latrobe Street, Melbourne.

"Herald and Weekly Times" Ltd., 36 Flinders Street, Melbourne.

3KZ Broadcasting Co. Pty. Ltd., 64 Elizabeth Street, Melbourne.

Nilsen's Broadcasting Service Pty. Ltd., 45 Bourke Street, Melbourne.

Station 3XY Pty. Ltd., Spring Street, Melbourne.

Commonwealth Broadcasting Corp. (Q'land) Ltd., Adelaide Street, Brisbane.

Broadcasters (Aust.) Pty. Ltd., Albert and Charlotte Streets, Brisbane.

Brisbane Broadcasting Pty. Ltd., 288 Queen Street, Brisbane.

"Advertiser" Newspapers Ltd., Waymouth Street, Adelaide.

Hume Broadcasters Ltd., 45 King William Street, Adelaide.

Sport Radio Broadcasting Co. Ltd., 99 Currie Street, Adelaide.

Western Australian Newspapers Ltd., St. George's Terrace, Perth.

W.A. Broadcasters Ltd., Murray St., Perth.

Nicholson's Ltd., Barrack Street, Perth.

Commercial Broadcasters Pty., Ltd., 82 Elizabeth Street, Hobart.

Metropolitan Broadcasters Pty. Ltd., 44 Elizabeth Street, Hobart.

### Prior Undertaking.

These conditions of the agreement are governed by a prior agreement entered into and disclosed in correspondence which passed between Mr. S. D. Ratner, solicitor for the A.A.A. and the Federation, but not made an actual part of the agreement registered in Court.

(1) That it is understood, though not contained in the Agreement that the Federation Executive will recommend for adoption to Country Broadcasting Stations operating with a power of 500 watts or over that they will as a minimum pay £5/5/- a week to their radio announcers and grant three weeks holiday per year, in addition to other benefits conferred by the agreement.

(2) As a condition precedent to the execution of the Agreement, but notwithstanding any clause contained in such Agreement, the conditions and salaries now operating and being enjoyed by members of the Association will not in any way whatever be altered to the detriment or loss of the radio announcer, and that if the conditions of the said Agreement in any way improves the conditions of radio announcers these latter will receive in full the benefits prescribed under the new Agreement.

## Industrial Awards for Broadcasting Station Technicians

Two awards governing the employment of broadcasting station technicians have been secured in the Federal Arbitration Court and as May 1, 1939, the Professional Radio Employees' Institute of Australasia, had filed a log of claims to incorporate both awards into one award (see particulars of P.R.E.I.).

Following is a precis of the awards:

### CITY AWARD.

Grade "A" station is a station employing a technical staff of eight or more other than juveniles.

Grade "B" station a staff of under eight but over four.

Grade "C" station three or four other than juveniles.

Grade "D" station with a technical staff of one or two.

The current wages as from June of this year are as follows:—

	£	s.	d.
"Grade A" Sydney	7	17	0
Technician in Charge	6	17	0
Technician	5	12	0
Cont. Op.			
"Grade B" Sydney	7	7	0
Technician in Charge	6	17	0
Technician	5	12	0
Cont. Op.			
"Grade C" Sydney	6	17	0
Technician in Charge	6	7	0
Technician	5	12	0
Cont. Op.			
"Grade D" Sydney	6	7	0
Technician in Charge	6	7	0
Technician	5	12	0
Cont. Op.			

Melbourne stations are 1/- less than Sydney stations in this respect, Brisbane stations 5/- less, Adelaide stations 4/- less, Perth and Fremantle 5/- less, Northam 4/- less, Hobart 5/- less, and Launceston 6/- less.

### COUNTRY AWARD.

The grade is the same as for the City Award with the exception that Grade "D" station is a station employing a technical staff of two, and Grade "B" is a station employing a technical staff of one or a station situate more than 20 miles from a General Post Office of a capital city employing a technical staff of one or two other than juveniles.

The wages for country stations Grades "A," "B," "C" and "D" are the same as for the city less the difference in the Basic Wage in the country. With few exceptions the Basic Wage in the country is 3/- less than in the city. The exceptions are Broken Hill, where the Basic Wage is 2/- higher than in Sydney, Port Kembla and Newcastle, where it is the same; in Victoria, Geelong, Warrnambool and the Mildura and Gippsland Districts are the same as the rate for Melbourne, and in South Australia the Whyalla and Iron Knob Districts are the same as Adelaide, and Launceston is 2/- below that for Hobart.

The hours of duty in both awards are fixed at 44 per week or 88 per fortnight or 132 hours per week according to a roster, which must be arranged mutually between the employer and the employee, and on such roster each employee must get off at least one day in seven. For all time worked in excess of these rostered hours the employee is entitled to overtime at the rate of time and a quarter for the first four hours, and time and a half thereafter. For all work performed on Sundays or holidays he is entitled to be paid at the rate of time and a quarter with a minimum payment as for four hours' work. All time worked in excess of ten hours on Sunday or a holiday is to be paid at double ordinary time. In the city the technicians are entitled to three weeks' leave per annum on full pay, and in the country a fortnight. Both awards provide

that employees with more than two years' service must be given one month's notice of termination of employment. Those with more than one year but not more than two years, two weeks' notice in writing, and those with less than one year's service, one week's notice in writing.

The Institute has filed a Log of Claims for an award for announcers, copywriters and studio staff, but up to the time of going to press this matter had not been finalised.

### Award for Radio Artists

An award to fix fees for artists, choristers, actors and actresses employed by the Australian Broadcasting Commission was announced from the Commonwealth Arbitration Court by Judge Beeby in December, 1938. The award was agreed to by the A.B.C. and the Actors' Equity of Australia.

The award provides for: The minimum rate for beginners (male and female), £4 a week; for experienced employees, male and female, £8; and for choristers, male and female, £5.

The award also provides that for children's plays, and children's serials, the rate for each performance shall be £1/1/- for adults and 10/6 for children.

The minimum fee to be paid to any artist for a broadcast engagement will be £2/2/-.

The agreement came into operation as from December 4 last.

In regard to actors and actresses, engaged casually in connection with plays, a basic fee of £2/2/- will be paid to include performance, and two rehearsals. Extra rehearsals will be paid for at the rate of 10/6 a rehearsal. In cases of exceptionally heavy leading parts, £1/1/- may be added to the fee, payable to not more than two artists in any one production.

A maximum of £2/2/-, to include all rehearsals, shall be paid to artists who are beginning radio work, and who are not established stage players.

# AUSTRALIAN RADIO CUSTOMS TARIFF SCHEDULE

"The Customs Tariff in force in Australia is the Customs Tariff 1933-1938 as proposed to be amended by Customs Tariff proposals of the 7th December, 1938, and provides for the collection of duties under three headings." Throughout the following the actual tariff rate is indicated by three sets of figures showing in the first BRITISH PREFERENTIAL RATE; second, INTERMEDIATE TARIFF RATE (not yet operative for radio); third, GENERAL TARIFF RATE, as an example (B.P. free), (I.T. 15%), (G.T. 15%).

### 179. ELECTRICAL MACHINES AND APPLIANCES (D)

(4) (a) Elements for electric current rectifier assemblies, other than rectifying valves covered by item 181 (A) (2), ad. val., B.P. free; I.T. 15%; G.T. 15%.

180. (E) WIRELESS RECEIVERS, PARTS THEREOF, AND ACCESSORIES THEREOF, viz.:

(1) Chargers, Battery, exceeding 1 ampere and up to and including 5 amperes, each \*15/- B.P.; \*24/- I.T.; \*26/6 G.T. And in respect of paragraph (1)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of \*2.4d. B.P.; \*2.4d. I.T.; \*2.4d. G.T.

(2) Condensers, fixed mica, each \*3d. B.P.; \*4d. I.T.; \*4½d. G.T. And in respect of paragraph (2)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of each \*.02d. B.P.; \*.02d. I.T.; \*.02d. G.T.

(3) Articles for tuning devices, viz.:—(a) Dials, complete, per unit \*2/- B.P.; \*2/6 I.T.; \*2/8 G.T. and in respect of sub-paragraph (a)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of, per unit \*.16d. B.P.; \*.16d. I.T.; \*.16d. G.T. (b) Dial or scale assembly per unit \*6d. B.P.; \*9d. I.T.; \*9½d. G.T. And in respect of sub-paragraph (b)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of, per unit \*.12d. B.P.; \*.12d. I.T.; \*.12d. G.T.

(4) Resistors, fixed, each \*¾d. B.P.; \*1d. I.T.; \*1½d. G.T. And in respect of paragraph (4)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of each \*.01d. B.P.; \*.01d. I.T.; \*.01d. G.T.

(5) Rheostats, potentiometers and variable resistances other than carbon type variable resistances, each \*6d. B.P.; \*8d. I.T.; \*8½d. G.T. And in respect of paragraph (5)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of each \*.06d. B.P.; \*.06d. I.T.; \*.06d. G.T.

(6) Sockets, valve, each \*2d. B.P.; \*3½d. I.T.; \*4d. G.T. And in respect of paragraph (6)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of, each \*.04d. B.P.; \*.04d. I.T.; \*.04d. G.T.

(7) Transformers, audio and radio, each \*1/6 B.P.; \*2/6 I.T.; \*2/9 G.T. And in respect of paragraph (7)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of, each \*¼d. B.P.; \*¼d. I.T.; \*¼d. G.T.

\*See provision after paragraph (8) of this sub-item for alternative ad valorem rates.

†See provision after paragraph (13) this sub-item for alternative ad valorem rates.

(8) Combined power transformers and chokes or any device for eliminating "AB," "BC" or "ABC" batteries, such as

power packs and similar devices, whether imported separately or incorporated in a wireless receiving set, each \*15/- B.P.; \*25/- I.T.; \*26/6 G.T. And in respect of paragraph (8)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of, each \*1½d. B.P.; \*1½d. I.T.; \*1½d. G.T.; or, as to all the goods covered by paragraphs (1) to (8) of sub-item (E) the following rates if same return a higher duty, viz.:—ad val. 30% B.P.; 50% I.T.; 57½% G.T. And for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of ad val. .6% B.P.; .6% I.T.; .6% G.T.

† (9) Choke coils suitable for use in connection with battery eliminating devices, each 5/- B.P.; 10/- I.T.; 10/- G.T.

† (10) Condensers, variable, of capacities exceeding .0001 microfarad, but not exceeding .001 microfarad—with gang or drum controls—per each condenser contained therein 1/6 B.P.; 3/- I.T.; 3/- G.T. Without gang or drum control each 1/6 B.P.; 3/- I.T.; 3/- G.T.

† (11) Condensers, variable, midget, of .0001 microfarad capacity or less, each 1/- B.P.; 1/6 I.T.; 1/6 G.T.

† (12) Loudspeakers and Parts thereof—

(a) Loudspeakers including transformers, each 10/- B.P.; 12/6 I.T.; 12/6 G.T.

(b) Parts of loudspeakers imported other than in complete loudspeakers, viz.:—(1) Field Coils each 2/- B.P.; 3/- I.T.; 3/- G.T.; (2) Field Coil Cores each 9d. B.P.; 1/3 I.T.; 1/3 G.T. (3) Field Coil Housings each 1/- B.P.; 1/6 I.T.; 1/6 G.T. (4) Cones with or without voice coils each 1/3 B.P.; 1/9 I.T.; 1/9 G.T. (5) Cone Housings each 1/9 B.P.; 2/3 I.T.; 2/3 G.T. (6) N.E.I. other than transformers ad val., 35% B.P.; 55% I.T.; 55% G.T. Provided, however, that in the case of combinations of any of the abovementioned parts duty shall be payable on such combinations as though the parts were imported separately.

† (13) Transformers, power, each 10/- B.P.; 15/- I.T.; 15/- G.T. or as to all the goods covered by paragraphs (9) to (13) of sub-item (E) with the exception of the goods covered by clause (6) of sub-paragraph (b) of paragraph (12) the following rates if same return a higher duty, viz.:—ad val. 35% B.P.; 55% I.T.; 55% G.T.

(14) Headphones; parts N.E.I. of wireless receivers, other than cabinets, ad. val. 30% B.P.; 50% I.T.; 57½% G.T. And in respect of paragraph (14)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of ad val. .6% B.P.; .6% I.T.; .6% G.T.

(15) Wireless receiving sets wholly assembled, partly assembled, or unassembled, excluding cabinets, valves, loudspeakers, headphones, batteries, or any device for eliminating batteries—per valve socket excluding sockets for valves forming part of any battery eliminating device, 12/6 B.P.; 25/- I.T.; 25/- G.T. or ad val. 35% B.P.; 55% I.T.; 55% G.T. whichever rate returns the higher duty.

Provided—(1) In the absence of valve sockets the sets shall be charged duty at the above rates on the basis of the number of valves for which they are constructed or designed. (2) In the instance of sets constructed or adapted for use

(Continued next page)

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## Customs Tariff (contd.)

with multiple purpose valves, the sets shall be charged duty equal to that payable on sets having an equal number of unit stages using unit function valves.

(16) Wireless receiving sets and gramophones combined, excluding cabinets, valves, loudspeakers, headphones, batteries, or any device for eliminating batteries, each 20/- B.P.; 25/- I.T.; 25/- G.T.; and in addition per valve socket excluding sockets for valves forming part of any battery eliminating device 12/6 B.P.; 25/- I.T.; 25/- G.T.; or as an alternative to the cumulative fixed rates provided above ad val. 35% B.P.; 55% I.T.; 55% G.T. whichever rate returns the higher duty. Provided—(1) In the absence of valve sockets the combined sets shall be charged duty at the above rates on the basis of the number of valves for which they are constructed or designed. (2) In the instance of combined sets constructed for use with multiple purpose valves, the combined sets shall be charged duty equal to that payable on combined sets having an equal number of unit stages using unit function valves.

180. (G) STORAGE BATTERIES AND PARTS THEREOF, viz.:

(1) Storage batteries for wireless receiving sets, whether imported separately or incorporated in or forming part of a wireless receiving set—ad val. 50% B.P.; — I.T.; 70% G.T.

(3) Composition parts including containers for storage batteries for wireless receiving sets and for storage batteries suitable for use in motor vehicles (other than motor cycles) otherwise than for propulsion purposes, per lb. 2d. B.P.; — I.T.; 2½d. G.T. and ad val. 40% B.P.; — I.T.; 60% G.T.

180. (I) DRY BATTERIES AND DRY CELLS.

Dry batteries and dry cells of all descriptions whether imported separately or incorporated in any article or appliance per lb. 2d. B.P.; 5d. I.T.; 5½d. G.T. or ad val. 25% B.P.; 42½% I.T.; 48½% G.T. whichever rate returns the higher duty. And in respect of sub-item (1)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of per lb. ½d. B.P.; ½d. I.T.; ½d. G.T. or ad val. 4% B.P.; 5% I.T.; 5% G.T., whichever is applicable.

180. (L) CONDENSERS, viz.:

(1) Electrolytic—30% ad val. (B.P.); 50% ad val. (I.T.); 8d. each or 57½% ad val., whichever rate returns the higher duty (G.T.), and in respect of the three ad valorem rates quoted—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of .6% B.P.; .6% I.T.; .6% G.T.

(2) N.E.I.—ad val.—30% (B.P.); 50% (I.T.); 57½% (G.T.), and in respect of paragraph (2)—for each £1 by which the equivalent in Australian currency of £100 sterling is less than £125 at the date of exportation—an additional duty of .6% B.P.; .6% I.T.; .6% G.T.

181. (A) (2) VALVES.

Valves for wireless telegraphy and telephony, including rectifying valves, each 2/3 B.P.; — I.T.; 4/- G.T.; or ad val. 20% B.P.; — I.T.; 40% G.T., whichever rate returns the higher duty.

NOTE: Under Excise Tariff Item 19, valves for wireless telegraphy and telephony including rectifying valves are subject to a duty of 1/9 each.

ARTICLES FOR MANUFACTURING PURPOSES—H/S

"The Radio Trade is also interested in certain goods prescribed for admission under By-Law Items 174(Y), 404 and 415A(2). The rates of duty applicable to all three items are—Free (British Preferential Tariff) and 15 ad valorem (General Tariff)."

GOODS PRESCRIBED UNDER ITEM 174(Y).

MOTOR MECHANISMS including motor, with or without magnetic pick-up, pick-up arm and volume control incorporated therein, imported separately, for use in gramophones, phonographs and other talking machines.

NEEDLES, RECORDING, sapphire pointed, specially designed for cutting gramophone records to be used for wireless broadcasting purposes.

NEEDLES, RECORDING, diamond pointed, specially designed for cutting gramophone records to be used for wireless broadcasting purposes.

NEEDLES, HIGH GRADE STEEL, stylus pointed, specially designed for cutting gramophone records to be used for wireless broadcasting purposes.

RECORD CHANGING DEVICES, assembled or unassembled, with or without motor magnetic pick-up, pick-up arm volume control mounting plate and turntable, imported separately, for use in gramophones, phonographs and other talking machines.

GOODS PRESCRIBED UNDER TARIFF ITEM 404.

This Tariff Item provides for the admission of materials and minor articles being of a class or kind not commercially produced or manufactured in Australia for use in the manufacture of goods within the Commonwealth.

The goods mentioned at the beginning of each paragraph in bold type are manufactured in Australia; the materials or minor articles used in the manufacture of these goods and admitted under Tariff Item 404 follow on in light type.

AMENDMENTS TO LIST OF GOODS PRESCRIBED

UNDER ITEM 404

ALL PURPOSES: Fireboard of a quality or kind which the Minister is satisfied is not being made in Australia. Aluminium sheets, plain, satin finished, and/or polished. Copper sheets and strips of gauges finer than No. 40 (I.S.W.G.). Mica.

ELECTRICAL APPARATUS AND APPLIANCES, ALL KINDS OF: Alloys, resistance, in the form of wire, bars, rods, sheets, or strips; beads, insulating, jet; beads, insulating, porcelain, of sizes less than ¾ in. diameter x ¾ in. long over-all measurement; discs, tungsten; paper, insulating, varnished, not exceeding 4 inches in width, in reels; rods, insulating, except of hard rubber; tubes, insulating, except cotton tubular braided or sleeving, bakelised paper, porcelain, hard rubber; wire, copper, cotton covered, finer than 30 gauge (I.S.W.G.).

APPLIANCES OF THE TYPE USED WITH MOTOR CAR RECEIVING SETS, FOR THE CONVERSION OF CURRENT FROM THE CAR BATTERY INTO CURRENT SUITABLE FOR THE PLATE SUPPLY OF THE VALVES OF THE SET; Bearings, self-lubricating, composed of graphite and brass, under security.

ARRESTERS, LIGHTNING (OUTDOOR TYPE): Resistances.

BATTERIES, RADIO "B," ALKALINE TYPE, TO BE FITTED INTO CABINETS, COMPLETE WITH CHARGING APPARATUS OF AUSTRALIAN MANUFACTURE; Connectors, under security; elements, under security; separators, under security.

BRAID, COPPER WIRE: Wire, copper, tinned of gauges No. 38 and No. 40 (S.W.G.), under security.

CABINETS, WIRELESS: Veneers, mahogany, under security.

CELLS, DRY: Caps, brass, with nuts, under security; carbons; flour, potato, or farina, under security; manganese in coarse powder form; manganese in lump form; terminals (including binding posts) or brass, and nuts and washers, but not including either terminals having metal strips or other metal attachments soldered thereto, or battery clips, under security.

CONDENSERS: Foil, metal, under security; paper, tissue, used as a dielectric, under security.

CONDENSERS FOR WIRELESS RECEIVING SETS: Hard rubber sheets, perforated, under security.

CONDENSERS, TRIMMING FOR WIRELESS RECEIVING SETS: Strips, phosphor bronze, tinned, up to and including 1 3/16 inch width, under security.

CONTROLS, VOLUME: Carbon rings, under security.

HOUSINGS, FIELD COIL, FOR LOUD SPEAKERS: Strips, steel, cold rolled bright, 3½ inches wide by 3/16 in. thick, under security.

LEADS OR CABLES, BRAIDED, FOR WIRELESS RECEIVING SETS: Yarns or threads, cotton, polished, single or two-ply, dyed or otherwise, under security.

LOUD SPEAKERS: Magnets, permanent, under security.

LOUD SPEAKERS, MAGNETIC TYPE: Speaker units, under security.

METERS, MILLIVOLT: Magnets, permanent, under security.

METERS, TESTING AND TUNING, FOR RADIO EQUIPMENT: Magnets, permanent, under security.

PICK-UPS: Magnets, permanent, under security.

## Customs Tariff (contd.)

POTENTIOMETERS: Carbon rings, under security.

RECTIFIERS, ELECTRIC CURRENT: Plates, copper-oxide, zinc-coated, with or without connectors affixed, when used in conjunction with Australian-made transformers, under security.

RESISTANCES, VARIABLE: Carbon rings, under security.

SWITCHES, WAVE CHANGE, FOR WIRELESS RECEIVING SETS: Strips, phosphor bronze, 2½ in. wide by 27 to 30 gauge (I.S.W.G.), under security.

TRANSFORMERS, RADIO FREQUENCY: Cores and slugs, wholly or partly composed of iron dust, colloidal, iron or magnetite.

VALVES, WIRELESS: Bases, valve, bakelite, with metal pins attached; bulbs, glass, soda or lime; condensers, under security; pellets, barium magnesium; sheets, pure iron, of gauges Nos. 18 to 46 (S.W.G.) both gauges inclusive; strips, magnesium; strips, metal, having a nickel content greater than 20 per cent., under security; strips, nickel chromium, in rolls, of gauges Nos. 18 to 46 (S.W.G.) both gauges inclusive. Valve parts, fabricated, of metal or mica, viz.: Caps, eyelets, filament clips and supports, getter cups and tabs, grid collars, grids, heaters and cathodes, mica spacers, plates, top shields, screens, welds and spuds; wire mesh, less than 120 holes per lineal inch, viz. a monel metal, nickel, pure iron; wire magnesium; wire, pure iron, of gauges Nos. 18 to 46 (S.W.G.) both gauges inclusive.

VIBRATORS: Vibrator parts, viz.: Base pins, phosphor bronze contact blades, steel armatures with tungsten contacts, bobbins with coil wound thereon, stator plates, under security.

WIRELESS RECEIVING SETS: Antenna, woven, i.e., serial tape without terminals, under security; cables, battery (not including terminals), consisting of several flexible cords contained in one braided cover; cords with or without terminals affixed thereto whether imported with loudspeakers or separately; tubes, barretter, regulating an output of 200 mA. or 300 mA.; wire, loop antenna, cotton covered, for inside aeriels, under security.

GOODS PRESCRIBED UNDER TARIFF ITEM 415A(2)

This item provides, inter alia, for the admission of manufacturers imported for use in the development of an Australian industry and which are of a class or kind not commercially manufactured in the Commonwealth.

The following radio goods and materials are admissible under this item.

ADMENTS TO LIST OF GOODS PRESCRIBED

UNDER ITEM 415A(2)

(a) omit the reference to boards, insulating, etc., and insert the following:

"Boards, insulating, other than Fibreboard of a quality or kind which the Minister is satisfied is not being made in Australia, for use in electrical apparatus and appliances, subject to security being given on boards of paper other than the following, viz.: "Elephantide," "Hippohide," "Leatheroid," "Presspahn," "Red Rope."

Braid, copper, made of wire of gauges finer than No. 30 (I.S.W.G.), for use in electrical apparatus and appliances.

Carbon being amorphous carbon or consisting principally of amorphous carbon which has been subjected to no other process of manufacture than the formation into plain blocks or plain rods.

Carbon being synthetic graphite or consisting principally of synthetic graphite which has been subjected to no other process of manufacture than the formation into plain blocks or plain rods.

Cells, thermionic photo electric, consisting of a tube socket or valve holder, amplifying tube, and resistance tube, for use in laboratories for testing purposes.

Condensers, calibrated for use as standards for testing purposes.

Cords, flat laid, cotton covered, with terminals affixed thereto, for use with radio head sets.

Generators, standard signal, being instruments for testing radio equipment.

Oscillators, beat frequency, and low frequency, being instruments for testing radio equipment.

Paper, insulating, for use in electrical apparatus and appliances, subject to security being given on insulating paper

other than the following viz.: "Elephantide," "Hippohide," "Mica," "Red Rope."

Picture transmitting and receiving apparatus, wireless or telegraph system.

Piece goods impregnated with an insulating substance, but not including waterproofed tape or textile strip (other than empire cloth in tape or strip form and oiled silk in tape or strip form) prepared with rubber, oil, celluloid, nitrocellulose, pitch or bitumen, provided that the importer declares on the face of the entry that such piece goods will be used in electrical apparatus and appliances only.

Testing appliances being combined signal generator oscillator and oscilloscope for use in connection with the testing of radio equipment.

PRIMAGE DUTIES. In addition to the duties imposed by the Schedule to the Customs Tariff, 1933-1938, in respect of radio goods and materials, ad valorem primage duties are imposed for revenue purposes. The duties imposed on each item may be summarised as follows:—

Tariff	Primage Duty	
	British Preferential Tariff	General Tariff
174(Y)	Free (B.P.T.)	4 per cent (G.T.)
179(D)(4)(a)	Free	4 per cent
180(E)	5 per cent	10 per cent
180(G)	5 per cent	10 per cent
180(I)	5 per cent	10 per cent
180(L)	5 per cent (B.P.T.)	10 per cent (G.T.)
181(A)(2)	10 per cent	10 per cent
404*	Free	4 per cent
415A(2)	Free	4 per cent

\*—ex Item 404. Manganese in coarse powder or lump form being the produce or manufacture of certain proclaimed countries and for use in the manufacture of dry cells and which is dutiable under the general Tariff (15%) of the Customs Tariff is free of primage duty.

EXCHANGE ADJUSTMENT. A Customs Tariff Exchange Adjustment Act is also in operation which provides for certain deductions from the amounts of duty payable on goods which qualify for admission under the British Preferential Tariff. The deductions are made in accordance with the following provision:—

(a) Whenever at the date of exportation of any such goods Australian currency is depreciated to the extent of not less than sixteen and two-thirds per centum in relation to the currency of the British country from which those goods are imported, a deduction from the amount of duty payable on those goods in accordance with any law of the Commonwealth for the time being in force imposing Duties of Customs (other than primage duty and duty imposed by the Customs Tariff (Industries Preservation) Act 1921-1936 or any Act amending or in substitution for that Act) or in accordance with Customs Tariff proposals shall be made of—

(i) one-fourth of that amount of duty; or  
(ii) twelve and one-half per centum of the value for duty, whichever is the less; and

(b) Whenever at the date of exportation of any such goods Australian currency is depreciated to the extent of not less than eleven and one-ninth per centum and less than sixteen and two-thirds per centum in relation to the currency of the British country from which those goods are imported, a deduction from the amount of duty payable on those goods in accordance with any law of the Commonwealth for the time being in force imposing Duties of Customs (other than primage duty and duty imposed by the Customs Tariff (Industries Preservation) Act 1921-1936 or any Act amending or in substitution for that Act) or in accordance with Customs Tariff proposals shall be made of—

(i) one-eighth of that amount of duty; or  
(ii) six and one-quarter per centum of the value for duty, whichever is the less.

The Customs Tariff Exchange Adjustment Act operates in respect of radio goods and materials admissible under Tariff Items 180(E)(9), 180(E)(10), 180(E)(11), 180(E)(12), 180(E)(13), 180(E)(15), 180(E)(16), and 180(G). The other

(Continued next page)

### Customs Tariff (contd.)

items under which radio goods and materials are admissible do not qualify for deductions under the Customs Tariff Exchange Adjustment Act as they are either not regarded as protective items or have provisions for automatic variations in duties in accordance with the provision to each item regarding fluctuations in the rate of exchange.

**TRADE RESTRICTIONS.** The importation of—

- (a) Wireless receivers, parts thereof and accessories therefor;
- (b) Valves for wireless telegraphy and telephony, including rectifying valves; and
- (c) Carbon manufactures of all kinds, including carbon blocks from all non-British countries is prohibited unless the consent of the Minister has first been obtained.

Applications for permits to import should be made to the Collector of Customs in the State into which the goods are to be imported.

At the date of issue of this publication permits were being freely issued in connection with the importation of the above-mentioned goods.

**VALVE EXCISE**

Excise Tariff, Item 19—Valves for wireless telegraphy and telephony, including rectifying valves. Rate, prior to May, 1938—2/-. On and after May 5—1/9.

**Effect on Radio Industry**

The result of this tariff in the radio industry affects two

principal items, (1) Condensers electrolytic, and (2) valves. On electrolytic condensers, whereas the tariff on American items was 57½ p.c., now the minimum tariff, under the new rates, on foreign condensers under the general tariff, is 8d. each, or 57½ p.c. duty, whichever pays the higher. This means that American condensers coming into Australia are going to be considerably affected.

On valves, it will be noticed that the tariff on British valves remains the same at 2/3 or 20 p.c., whichever is the higher, whilst valves coming under the general tariff, such as the American valves, did pay 3/6, will now pay 4/-. and, of course, the quota system will be lifted. Therefore, American valves can come into Australia providing they can stand the 4/- tariff or the increase of 6d. over the previous rate.

On valves made in Australia, the local excise has been reduced 3d., from 2/- to 1/9. This should substantially help the Australian valve manufacturers.

Realising the value of wireless apparatus to the national position of any country, the prime duty is, naturally, to have these things made in Australia, so that in the case of any trouble, we will have local manufacture "on the spot." That does not mean just local assembly, but the manufacture of the complete article wherever possible.

Australian manufacturers of electrolytic condensers are very pleased with the situation, quite naturally. It is understood that no increase in price is contemplated on the electrolytic condensers, and as the excise tariff has been reduced on Australian-made valves, no doubt their prices will not be increased either, but it is not known at this juncture whether there will be a decrease in the Australian-made valves.

### Apparatus and Materials Used in Connection with Transmitting and Recording

The Customs Tariff 1933-1938 as proposed to be amended by the Customs Tariff Proposals of December 7, 1938, provides for the admission of Recording Apparatus and Materials as follows:—

Tariff Item	Goods	Rates of Duty			Tariff Item	Goods	Rates of Duty		
		British Preferential Tariff	Intermediate Tariff	General Tariff			British Preferential Tariff	Intermediate Tariff	General Tariff
174(X) (45)	Masters, Matrix, and Mothers, but not including stamping matrices, for use in the manufacture of gramophone records—ad valorem and in addition Primage Duty at—ad val.	Free	—	15%	319(B) (1)	Gramophones, Phonographs, and other talking machines, n.i.e., including cases imported with machines— ad valorem and in addition Primage Duty at—ad val.	*50%	—	70%
181(A) (2)	Valves for wireless telegraphy and telephony, including rectifying valves— each or ad valorem whichever rate returns the higher duty and in addition Primage Duty at—ad val.	2/3 20%	—	4/- 40%	319(C)	Needles for Gramophones, Phonographs and other Talking Machines— ad valorem and in addition Primage Duty at—ad val.	25% 10%	—	42½% 10%
319(A) (1)	Records for Gramophones, Phonographs and other talking machines, viz.:— (b) other than for use in conjunction with films admissible under Item 320(C)(2)(b)— (1) Discs, six inches and under in diameter— each and in addition Primage Duty at— ad val. (2) Discs, over six inches in diameter— each and in addition Primage Duty at— ad val. (3) N.e.i.— ad val. and in addition Primage Duty at— ad val.	Free Free 5% *1/- 5% Free 5%	— — — — — — —	15% 4% 10% 10d 10% 1/6 10% 15% 10%	274(F)(1) RECORDING APPARATUS, comprising recording head, motor and turntable—ad valorem and in addition Primage Duty at—ad val. Under Tariff Item 180(A)(1)(b) MICROPHONES, imported separately and in addition Primage Duty at—ad val. Under Tariff Item 180(F) TRANSMITTING APPARATUS, Wireless complete AMPLIFIERS—ad valorem and in addition Primage Duty at—ad val.	*45% Free Free *27½% 5%	— — — — —	65% 20% 10% 47½% 10%	
319(A) (2)	Material prepared in slab, biscuit, or any other form, for the manufacture of talking machine records— per lb. and in addition Primage Duty at—ad val.	*3d.	—	4d					
319(A) (3)	Stamping matrices for use in connection with the manufacture of talking machine records— ad valorem and in addition Primage Duty at—ad val.	*45%	—	65%					

The rates of duty shown in the column headed British Preferential Tariff relating to the foregoing and marked with an asterisk (\*) are subject to an Exchange Adjustment of one quarter of the duty or one eighth of the value for duty which ever is the less. An explanation in connection with the method and conditions of Exchange Adjustment will be found elsewhere in this section.

### Customs Tariff (contd.)

#### Recording Apparatus (contd.)

Certain articles for use in connection with Transmitting and Recording apparatus are admissible under Customs Tariff By-law Items 174(Y), 404 and 415A(2), with rates of duty, viz.:— Free (British Preferential Tariff) 15 per cent. ad valorem plus 4 per cent. Primage Duty (General Tariff). A list of the goods admissible under these Items is as follows:—

**UNDER BY-LAW TARIFF ITEM 174(Y)**

Heads, cutting, for use in connection with the production of gramophone records.

Motor mechanisms including motor, with or without magnetic pick-up, pick-up arm and volume control incorporated therein imported separately, for use in gramophones, phonographs and other talking machines.

Record changing devices, assembled or unassembled, with or without motor magnetic pick-up, pick-up arm, volume control, mounting plate and turntable, imported separately, for use in gramophones, phonographs and other talking machines.

Needles, recording, diamond pointed, specially designed for cutting gramophone records to be used for wireless broadcasting purposes.

Needles, high grade steel, stylus pointed, specially designed for cutting gramophone records to be used for wireless broadcasting purposes.

Needles, recording, sapphire pointed, specially designed for

cutting gramophone records to be used for wireless broadcasting purposes.

Turntables with built-in motors for use in gramophones, phonographs and other talking machines.

**UNDER BY-LAW TARIFF ITEM 404**

Discs, aluminium, drilled, for use in the manufacture of blank coated records for use with gramophone record making and reproducing machines used in connection with wireless broadcasting, under security.

**UNDER BY-LAW TARIFF ITEM 415A(2)**

Records, gramophone, being recordings made abroad for test purposes of the reception of programs transmitted by Australian short-wave wireless stations.

Sound Boxes except magnetic pick-up, imported separately, for use in gramophones, phonographs and other talking machines.

Tone Arms, imported separately, for use in gramophones, phonographs and other talking machines.

Turntables other than those known as 12 inch, imported separately, for use in gramophones, phonographs and other talking machines.

**IMPORT STATISTICS**

1937-1938

Goods covered by Tariff Item	Statistical Item	Quantity	Value
181(A) (2)	534A	No. 731,376	£158,874
319(A) (1) (b)	1147	Gross 704	£21,519
319(A) (3)	1146B	Dozen 1	£23
319(B) (1)	1146	No. 4,098	£21,881
319(C)	1146A	—	£4,652

## Commonwealth Income Tax

Income of year ended June 30, 1938 (or substituted accounting period).

**STATUTORY EXEMPTION.**

£250, diminishing at the rate of £1 for every £2 by which the income exceeds £250 and disappearing at £750.

The deduction is made successively from income from property other than dividends, from income from dividends and from income from personal exertion.

**RATES OF TAX.—FIRST SCHEDULE.**

Personal Exertion: T = Taxable Income in pounds. For each £ of taxable income up to £6,900, rate = 87.975 ( T ) 3 + — d.

Example: Taxable Income £240, the rate is 87.975 ( 240 ) 3 + — = 3.95888d. and the tax is 100 ( 160 ) £240 × 3.95888 = £3 19 2.

When the taxable income exceeds £6,900, all in excess of that amount is taxed at a rate of 79.1775d. in the £.

Example: Taxable Income £7,700, the tax is 87.975 ( 6900 ) 3 + — = £1,166 12 7  
£6,900 @ 87.975 ( 6900 ) 3 + — = £1,166 12 7  
£800 @ 79.1775 ( 160 ) = £263 18 6  
£7,700 £1,430 11 1

**SECOND SCHEDULE.**

Property: T = Taxable Income in pounds. If the taxable income does not exceed £500, rate = 103.5 ( T ) 3 + — pence for each £ of taxable income.

Example: Taxable Income, £250. 103.5 ( 250 ) 3 + — d. = 5.69250d.  
Rate = 100 ( 100 )

If the taxable income exceeds £500, but does not exceed £1,500, rate = 103.5 ( T × 14 ) 1 + — d.

Example: Taxable Income £1,000, rate = 15.525d. If the taxable income exceeds £1,500, but does not exceed £3,700, rate = 103.5 ( T × 23 ) 4½ + — d.

Example: Taxable Income £3,000, rate = 40.62375d. If the taxable income exceeds £3,700, the rate of tax on the first £3,700 is 103.5 ( 3700 × 23 ) 4½ + — d. = 48.9555d.

and, on each £ in excess of £3,700, the rate is 93.15d.

The averaging provisions previously applicable to all taxpayers are now applicable only to primary producers.

**THIRD SCHEDULE.**

Income partly from Personal Exertion and partly from Property Income.

(Same as Third Schedule in 1937 edition).

**FOURTH SCHEDULE.**

Rate of Tax by Reference to an Average Income. (a) For every pound of the taxable income derived from personal exertion by a primary producer the rate of tax shall be ascertained by dividing the tax that would be payable under the First Schedule upon a taxable income from personal exertion equal to his average income by that average income.

(b) For every pound of taxable income derived by him from property the rate of tax shall be ascertained by dividing the tax that would be payable under the Second Schedule upon a taxable income from property equal to his average income, by that average income.

(Continued next page.)



## Clubs, Associations, Unions, etc. (contd.)

### Actors Equity of Australia

Headquarters: Manchester Unity Building, 160 Castle-reagh Street, Sydney. Phone MA 4613.

Registered in the Federal Arbitration Court and in New South Wales as an industrial union.

Secretary: Bertie Wright.

President: R. J. Conroy. Senior Vice-President, George N. Doran. Vice-Presidents: Ernest Pitcher, Carleton Stuart, Miss Loris Bingham.

Queensland representative: W. Vincent.

Victorian representative: Andrew S. Hodge, 408 High Street, Thornbury.

West Australian representative: T. J. Arthur, 15 Kingston Street, Shenton Park.

### Australian Association of Advertising Agents (N.S.W.)

Headquarters: 58 Margaret Street, Sydney. Phone: B 7669.

President: R. S. Maynard. Treasurer: E. Caldecoat. Secretary: G. Herbert Brown. Executive: S. Smith, K. J. Unsted, A. G. Palmer.

### Accredited Advertising Agents' Association of Victoria

Headquarters: 90 Queen Street, Melbourne. Phone: Cent. 8050.

President: W. L. Chapman. Vice-Presidents: F. W. Mothes, J. Barnes. Treasurer: F. S. B. Rickards. Secretary: W. R. McFerran. Executive: E. L. Jarvis, L. Mooney.

### Accredited Advertising Agents' National Council

Headquarters: 58 Margaret Street, Sydney. Phone: B 7669. For dealing with matters national in scope, the committee of the Australian Association of Advertising Agents, meets as the National Council of Accredited Advertising Agents. It is this body which negotiates with the Australian Newspapers' Conference and the Federation of Commercial Broadcasting Stations, after consultation with the Accredited Advertising Agents' Association of Victoria. In addition to consulting with the Victorian Association, two members of the latter association may join the N.S.W. Association to form the National Council.

### Advertising Association of Australia

Headquarters: 90 Queen Street, Melbourne.

President: R. S. Maynard. General Manager: W. McFerran.

Consists of the various affiliated Advertising Institutes and Associates throughout Australia.

### Australasian Performing Right Association Ltd.

Headquarters: A.C.A. Building, King Street, Sydney.

A.P.R.A. is an association consisting of members and associated members. The following details concerning the association were given in the Commonwealth Parliament in May, 1939.

The Australasian Performing Right Association consists of members and associate members. The list of members, which includes all the music publishers of Australia and New Zealand, is:—Albert and Son, Sydney; Boosey and Hawkes, Sydney; Chappell and Co., Sydney; Davis and Co., Sydney; Nicholson's Investments Ltd., Sydney; Paling and Co., Sydney; Sterling Music Publishing Co., Sydney; Allan and Co., Melbourne; W. Bassett, Melbourne; L. F. Collin and Co., Melbourne; Sam Fox Music Publishing Co., Melbourne; J. C. Williamson Ltd., Melbourne; A. Eady Ltd., Auckland; Chas. Begg and Co., Wellington; Performing Right Society, London. (The Australasian Performing Right Association states that the majority of members of the Performing Right Society, London, are authors and composers.)

There are 200 associate members (composers and authors).

Under an arbitration award made last year, the payment by the Australian Broadcasting Commission to the Australasian Performing Right Association was fixed at 6d. per licence. The award was for a period terminating on December 31, 1938, and conditions for the current year have not yet been fixed.

Payment by commercial stations is in accordance with an agreement between the Australian Federation of Commercial Stations and the Australasian Performing Right Association. The Federation estimates that the total payment for the year will average approximately 7d. per licence.

### Advertising Golf Club

Patron: Rt. Rev. J. Meany. President and Founder: B. B. Stapleton. Secretary: W. J. Brooks. Treasurer: F. H. McLeod. Captain: P. Messenger. Formed: 1936.

This club had a very humble beginning, but its steady progress and sound policy is rapidly bringing it to the front rank of Australian clubs of this nature. In view of the various unsuccessful attempts to maintain an ad. mens' club in Sydney the committee naturally were anxious to set the Advertising Golf Club on a sound foundation from the very beginning and adopted a stringent code of "unwritten law" amongst members which insured that the spirit of "share and share alike" on all club outings was always observed. A strong, healthy spirit of comradeship soon developed, and has proved one of the club's best assets. In May, 1938, the club was able to make arrangements with St. Michael's Golf Club at La Perouse, for permanent tenancy of a club room at that course, and which was comfortably furnished by the A.G.C. In 1937 the club handled the W. O. Richards Cup outing, which is one of the most important golf fixtures for the year in advertising circles. Again in 1938 the club organised the same fixture.

The constitution of the club provides for a fee of one guinea entrance and two guineas a year subscription, plus green fees.

### Announcers' Association of Australia

Address: 128 Pitt Street, Sydney.

President: Frank Cayley. Hon. Administrative General Secretary: Henry Gregory.

The Announcers' Association of Australia was registered as an industrial organisation in December, 1938, for radio announcers, program, continuity departments, employees of radio stations. The Association made an agreement in respect of wages, working conditions, etc., with commercial stations throughout Australia, and other employers which was registered in the Federal Arbitration Court in April, 1939. Full text of the agreement appears elsewhere in this Year Book.

### Australian Association of National Advertisers

Headquarters: Rofe Chambers, O'Connell Street, Sydney. Phone: B 1433.

Secretary: C. Roy Stanley, Esq.

President: F. L. Marcy, Esq. (Lambert Pharmacal Co. (Aust.) Ltd.)

Committee: J. D. Bambach, Esq. (British General Electric Co. Ltd.), A. R. Caughey, Esq. (Kraft Walker Cheese Co. Pty. Ltd.), L. Chirlain, Esq. (Lewis Berger and Sons (Aust.) Ltd.), H. Daniell, Esq. (Dunlop Perdiu Rubber Co. Ltd.), E. W. Foster, Esq. (Lustre Hosiery Ltd.), W. J. Giles, Esq. (Reckitts (Oversea) Ltd., Colman-Keen (A/sia) Ltd.), N. Griffiths, Esq. (Rural Bank of New South Wales), H. Flynn, Esq. (Paramount Film Service Ltd.), F. W. Larkins, Esq. (Amalgamated Wireless (A/sia) Ltd.), J. G. Lee, Esq. (Atlantic Union Oil Co. Ltd.), T. McClelland, Esq. (Tooth and Co. Ltd.), A. V. Meldrum, Esq. (Australian Gas Light Co. Ltd.), J. C. O'Neill, Esq. (Kellogg (Aust.) Pty. Ltd.), A. C. Shaw, Esq. (Clinton Williams Pty. Ltd.), A. A. Warner, Esq. (Exide Batteries of Aust. Ltd.), P. W. Warner, Esq. (Berlei Ltd.), N. H. Woollett, Esq. (Phillips Lamps (A/sia) Ltd.).

## Clubs, Associations, Unions, etc. (contd.)

### THE INSTITUTION OF RADIO ENGINEERS (AUSTRALIA)

Patron:

His Excellency the Governor-General  
The Right Hon. Lord Gowrie, V.C., K.C.M.C., C.B., D.S.O.

Head Office Executive Secretary: J. R. Edwards,

M.I.R.E. (Aust.)

30 Carrington Street, Sydney.

Box 3120, G.P.O., Sydney

THE Institution of Radio Engineers (Aust.) was incorporated in 1924 under the N.S.W. Companies Act, but did not commence active operations until 1932. It is now registered and operating in all States of Australia, with active divisions operating in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart, with Head Office in Sydney, N.S.W.

The object for which the Institution is founded (subject to Section 53 of the N.S.W. Companies Act, 1899) are as follows:—To promote the science and practice of radio telegraphy and radio telephony in all its branches and the usefulness and efficiency of persons engaged therein. To raise the character and status and advance the interests of the profession of radio telegraphy and radio telephony and those engaged therein. To increase the confidence of the mercantile and general community in the employment of recognised engineers and technical advisers by admitting to the Institution such persons only as shall have satisfied the Council of the Institution that they have a satisfactory knowledge of both the theory and practice of radio telegraphy and radio telephony. To promote honourable practice, to repress malpractice, to settle disputed points of practice, and to decide all questions of professional usage and etiquette among persons engaged in the profession of radio telegraphy and radio telephony. To collect and circulate statistics and other information relative to radio telegraphy and radio telephony in all its branches. To provide for the delivery and holding of lectures, exhibitions, etc. To encourage the study of radio in all its branches, and to improve and elevate the general and technical knowledge of persons engaged or about to be engaged in the profession of radio. To conduct examinations, to award prizes, distinctions, certificates, establish scholarships, etc. In general, to do all such other lawful things that the Institution may think incidental or conducive to the attainment of the objects of the Institution.

The control of the I.R.E. is as laid down in the Memorandum. The objects are, primarily, for the betterment of those engaged in the profession; and for the encouragement of all persons interested in radio arts and sciences.

The government of the Institution as a whole is in the hands of Council which is elected, by ballot, each year at the Annual General Meeting of the I.R.E. (Aust.), held in Sydney during April. The managing of lectures, papers and demonstration meetings and local domestic matters, etc., is under the control of the respective Committees of the Divisions in the capital city of each State. Meetings, etc., are held under the direction of the Division Committee of each State, as often as possible, and members resident in that State are notified by post.

An Examination Board is constituted to conduct examinations throughout Australia in respect of all applicants for membership referred to it by the Qualifications Board. The standard of examination is based on the Admiralty Handbook of Wireless Telegraphy, with modifications. The first examination was held in October, 1933, and annual examinations are held on the first Saturday in November of each year in all parts of Australia.

### Grades of Membership

There are eight grades of membership:—Honorary Members, Fellows, Full Members, Associate Members, Companions, Graduates, Students and Juniors.

In addition to Honorary Membership, persons of distinguished positions or attainments who have rendered valuable assistance to the Institution, or to radio science, may be elected Hon. Life Member. They shall be exempt from payment of fees and contributions and may attend meetings, take part in discussions, but shall not be entitled to hold office, to vote, or otherwise interfere in the business of the Institution.

A Fellow must not be less than 35 years of age, and have completed five years as a Full Member of the Institution, excepting in special cases approved by Council, and as a Member his technical or commercial career in, or contributions to, radio arts and industry shall have been of such order as, in the opinion of Council, to warrant him being invited to accept the grade of Fellow. Applications are not received for the grade of Fellow, as appointments are by invitation of Council only. Entrance fee, £1/1/-; annual subscription, £4/4/-.

A Full Member shall be not less than 26 years of age, with at least six years' experience by invention or practice in radio arts or radio literature. Entrance fee, £1/1/-; annual subscription, £3/3/-.

An Associate Member shall be not less than 24 years of age who, in the opinion of Council, has been engaged in radio or associated industry for a period of at least four years, and who possesses such technical knowledge and/or passed such examinations as is acceptable to Council. Entrance fee, £1/1/-; annual subscription, £2/2/-.

A Companion shall be admitted only at the invitation of Council and every nominee for admission to the grade of Companion shall be a person who, not being a radio engineer by profession, satisfies the Council that he has rendered important services to radio engineering in the fields of commerce, finance, law or science, or is so connected with the application of radio that his admission as a Companion would conduce to the interests of the Institution. Annual subscription, £3/3/-.

A Graduate shall be not less than 21 years of age, and shall, in the opinion of Council, have been engaged in radio or associated arts or industry for a period of not less than two years, and has possessed such technical knowledge and/or who has passed such examinations as are prescribed by Council. Entrance fee, £1/1/-; annual subscription, £1/11/6.

A Student shall be not less than 21 years of age, and shall be an acceptable person who, in the opinion of Council is connected with the application of radio science or radio art. Entrance fee, £1/1/-; annual subscription, £1/1/-.

A Junior shall be from 16 to 20 years of age, registered as a student in a university, technical school or place of recognised standing, who is pursuing a regular course of study in the science of radio, and is engaged in the technical application of radio. No entrance fee, annual subscription, £1/1/-. On reaching 21 years of age Juniors are elevated to the grade of Student unless their qualifications are such as to merit their advancement to the grade of Graduate.

### Total Membership

Membership at March 31, 1939, as contained in the 6th Annual Report given by the retiring president, Mr. N. S. Gilmour, showed that the total was 456, made up as follows:

N.S.W. . . . .	230
Victoria . . . . .	94
Queensland . . . . .	56
South Australia . . . . .	35
Western Australia . . . . .	21
Tasmania . . . . .	13
New Zealand and Overseas . . . . .	7

456

The growth of membership during 1938/39 was 56.

## Clubs, Associations, Unions, etc. (contd.)

### I.R.E. (Contd.)

#### Interstate Divisions

The Institution is now registered under the Companies Act in all States of the Commonwealth, and Divisions function in Sydney, Melbourne, Adelaide, Brisbane, Perth and Hobart.

Membership of the Institution is not confined to any one particular Division, but is of the Institution as a whole, but, for notification of Institution meetings, functions, etc., each member is allocated to the Division Headquarters in the State where he resides.

All moneys are payable to the Head Office of the Institution in Sydney, where the Council functions, while the Divisional branches Committees are responsible for the holding of meetings and functions in their respective territories.

#### Honorary Life Members

The Institution has seen fit to honour the following gentlemen with Honorary Life Membership of the Institution:—

Mr. W. P. (Phil.) Renshaw, Sydney, N.S.W.  
Major-General James G. Harbord (U.S.A.).  
Dr. Balth. van der Pol (Holland).  
Mr. John Logie Baird (England).  
Mr. F. S. Hayburn (England).  
Mr. Haraden Pratt (U.S.A.).  
Mr. R. Milward Ellis (England).  
Dr. J. D. McGee (England).  
Mr. J. Sanders (Java).  
Mr. E. S. Colling (U.S.A.).  
Capt. S. Toombs, Sydney, N.S.W.

### OFFICERS AND COUNCIL, 1939-40.

**President:** Sir Ernest Fisk.  
**Past President:** N. S. Gilmour.  
**Deputy President:** J. J. Malone.  
**Vice-Presidents:** D. G. Wyles, T. P. Court.  
**Hon. Treasurer:** C. H. Norville.  
**Hon. General Secretary:** O. F. Mingay.  
**Hon. Assistant General Secretary:** S. J. Rubenstein.  
**Executive Secretary and Editor of the Proceedings:** J. R. Edwards.  
**Councillors:** R. Allsop, W. T. S. Crawford, G. G. Hall, Major, C. H. Kappe, F. Langford Smith, A. S. McDonald, E. J. T. Moore, P. S. Parker, L. N. Schultz, M. H. Stevenson, C. W. Tyrrell.  
**Qualifications Board:** Ray Allsop, W. T. S. Crawford, A. S. McDonald, P. S. Parker, D. G. Wyles.  
**Examination Board:** E. G. Bailey, R. R. Chilton, F. Langford Smith, E. J. T. Moore, A. W. Scott, M. H. Stevenson.  
**Editorial Board:** T. P. Court, G. G. Hall, C. W. Tyrrell.  
**Annual Awards Committee:** Sir Ernest Fisk, N. Hayes, T. Armstrong, Professor Kerr Grant, W. H. Conry.

#### Sydney Division Officials

**Chairman:** N. S. Gilmour.  
**Vice-Chairmen:** T. P. Court, A. Scott.  
**Hon. Secretary:** S. J. Rubenstein.  
**Hon. Treasurer:** Graham Hall.  
**Hon. Social Secretary:** S. V. Colville.  
**Committee:** Messrs. E. E. Tree, W. E. Salmon, D. S. Lindsay, C. W. Tyrrell and T. A. McNeill.

#### Melbourne Division Officials

**Chairman:** N. W. V. Hayes.  
**Past Chairman:** S. H. Witt.  
**Vice-Chairmen:** J. Dobbryn, F. J. Henderson.  
**Hon. Secretary:** R. R. Mackay.  
**Hon. Treasurer:** E. Greig.  
**Social Committee:** R. K. Crow, R. Binnion.

**Auditor:** G. H. Busst, S.F.A.I., C.T.S.  
**Committeemen:** J. J. Malone, D. A. Grace, Wing-Commander C. S. Wiggins, Major R. Kendall, G. Apperly, R. W. Pfeil, R. Buring, M. Hooper, C. Allison.

#### Brisbane Division Officials

**Chairman:** T. Armstrong.  
**Vice-Chairman:** A. G. Brayne.  
**Hon. Secretary:** A. L. Dixon.  
**Hon. Treasurer:** E. C. Little  
**Lectures and Papers Committee:** P. Andrews, P. Grant, E. C. Littler.  
**Committeemen:** P. Andrews, P. Grant, F. Elliott, D. A. Laws.

#### Adelaide Division Officials

**Chairman:** Professor Kerr Grant.  
**Vice-Chairmen:** H. W. Harrington, J. P. Hale.  
**Secretary and Treasurer:** A. H. Garth.  
**Auditor:** E. J. Risely.  
**Publicity Officer:** H. B. Wilson.  
**Committeemen:** D. M. Gooding, G. J. White.

#### Perth Division Officials

**Chairman:** H. T. Simmons.  
**Vice-Chairman:** N. A. Parker.  
**Hon. Secretary-Treasurer:** S. C. Austin.  
**Assistant Secretary:** J. R. Tapper.  
**Committeemen:** W. G. Chapman, G. W. Butterfield.

#### Hobart Division Officials

**Chairman:** W. H. Conry.  
**Vice-Chairman:** H. F. Lovett.  
**Hon. Secretary:** G. T. Miles.  
**Treasurer:** C. A. Walch.  
**Committeemen:** J. S. Dodds, W. R. Nicholas, C. H. Batt.

### APPLICATION FOR MEMBERSHIP.

Application forms for those persons desiring to apply for membership are obtainable from the Hon. Secretary for each Division at the following addresses:—

**Sydney Division:** G.P.O. Box 3120, Sydney.  
**Melbourne Division:** R. R. Mackay, Melbourne Technical College, Latrobe Street, Melbourne, C.I.

**Adelaide Division:** A. H. Garth, Box 52, G.P.O., Adelaide, South Australia.

**Perth Division:** S. C. Austin, G.P.O. Box, F335, Perth, W.A.  
**Hobart Division:** G. T. Miles, Box 572F, G.P.O., Hobart.

**Brisbane Division:** A. L. Dixon, Box 1765W, G.P.O., Brisbane, Q.

Or from the General Secretary, Box 3120 G.P.O., Sydney.

Applicants must fill in the form in detail, and then post, accompanied by a cheque (plus exchange), postal note or money order covering the application fee (not required in the case of Junior applications), and a full year's subscription for the preferred grade to the General Secretary, Institution of Radio Engineers (Australia), Box 3120, G.P.O., Sydney. This application is investigated by the Qualifications Board, then further considered by the Council. If the applicant is successful his membership commences on the first day of the month following the acceptance of his application by Council, and the subscription paid is for the full 12 months thereafter. If the application is not acceptable the money is refunded in full.

(Continued next page.)

## Clubs, Associations, Unions, etc. (contd.)

### I.R.E. (Contd.)

All financial members of the Institution receive by post a copy of the printed Proceedings of the Institution, as published from time to time. Every effort is being made to publish these, if possible, every month.

As a guide to intending applicants, it is the policy of the Institution to admit to the grade of Associate Member those persons qualified by examination (such as P.M.G.'s Certificate, a University degree in Science and Engineering, a recognised Technical College Diploma, or the Institution's Examination, held on the first Saturday in November of each year), and possessing other qualifications such as at least four years' continuous technical experience in radio or associated sciences. Those admitted as Associate Members may later qualify for elevation to Full Membership by submitting a paper or delivering a suitable lecture or paper before any of the meetings of the Institution, and which meets with the approval of the Council.

Similar examinations will also be held for the grade of Graduate. Persons who cannot qualify, or who do not wish to qualify by a technical examination, may be admitted to the grade of Student.

### FEES AND SUBSCRIPTIONS.

	Application Fee	Subscription per annum
Fellow . . . . .	£1/1/-	£4/4/-
Full Member . . . . .	£1/1/-	£3/3/-
Associate Member . . . . .	£1/1/-	£2/2/-
Companion . . . . .	none	£3/3/-
Graduate . . . . .	£1/1/-	£1/11/6
Student . . . . .	£1/1/-	£1/1/-
Junior . . . . .	none	£1/1/-

After the first year of membership, all subscriptions are due on April 1 of each year, which is the commencement of the Institution's Financial Year. All fees and subscriptions are payable direct to the Head Office of the I.R.E.(Aust.) at 30 Carrington Street (G.P.O. Box 3120), Sydney, N.S.W.

### WORLD RADIO CONVENTION—

#### SYDNEY, 1938

**D**URING 1938, a World Radio Convention was held in Sydney, from April 4—April 14 inclusive, organised by the Institution of Radio Engineers (Australia), supported by the Government of New South Wales and the radio and broadcasting industries. This World Radio Convention was a huge success in every way. Many overseas guests visited Sydney and several of them visited other parts of Australia. These overseas visitors included Major-General James G. Harbord, from Radio Corporation of America; Dr. van der Pol, from Philips, Eindhoven, Holland; Mr. John Logie Baird, of the Baird Television Corporation, London; Mr. F. S. Hayburn, foreign envoy of the Marconi Company; Mr. R. Milward Ellis, of Pye Radio Co., England; Dr. J. D. McGee, of the Television Laboratories of E.M.L., London; Mr. J. Sanders, of the Department of Posts, Telegraphs and Radio of Bandoeng, Java; and Mr. E. S. Colling, Public Relations Officer of the Radio Corporation of America. Mr. Hayburn and Mr. Baird were both accompanied by their respective wives.

During the Convention over fifty-one papers were presented on many subjects dealing with the various fields of radio application.

Sir Ernest Fisk, who was then president of the I.R.E. (Australia), was chairman of the World Radio Convention. He was ably assisted by Lady Fisk, who acted as official hostess for the social side of the Convention activities, which also were most successful and very well reported upon.

This World Radio Convention was organised as the radio industry's contribution to Australia's 150th Anniversary Celebrations. Considerable publicity from broadcasting stations all over the world was obtained on behalf of the Celebrations and Australia generally. It was the means of assembling together hundreds of people interested in radio development, and bringing under the notice of the public of Australia and other parts of the world, some idea of the part that radio plays in both private and commercial life of the country.

### Musicians' Union of Australia

**Federal office:** 188-192 Little Collins Street, Melbourne. 'Phone Central 3295.

#### OFFICE BEARERS, 1939.

**President,** Frank Kitson; **Vice-presidents,** A. R. Bushell (Adelaide), F. Pforr (Queensland); **Treasurer,** W. Harrison (Victoria).

**Trustees:** Messrs. Rawlin, Robb and Caddy; **Auditors,** W. N. Robertson.

The organisation functions throughout the whole of the Commonwealth and is a union of employees registered as such in the Arbitration Court.

#### LEADING BRANCHES:

**New South Wales District:** 122 Castlereagh Street. 'Phone M 3992. (F. Kitson, secretary).

**Newcastle:** 21 Chatham Street Nth, Hamilton. 'Phone Hamilton 656. (S. Alder, secretary).

**Broken Hill:** 164 Cobalt Street, Broken Hill. (A. G. Thomas, secretary).

**Brisbane:** Albert House, Albert Square. Phone B 9685. (F. Pforr, secretary).

**South Australia:** 10 Pirie Street, Adelaide. 'Phone Central 3700. (A. Bushell, secretary).

**Kalgoorlie:** 89 Dugand Street, Kalgoorlie. Phone Kal. 316. (G. Salas, secretary).

**Tasmanian District:** 182 Elizabeth Street, Hobart. 'Phone Hob. 4183. (B. McCann, secretary).

### Professional Radio Employees' Institute of Australasia

**Headquarters:** 10 Martin Place, Sydney. General secretary, A. W. Sheppard.

The Professional Radio Employees' Institute of Australasia is an organisation of employees registered under the Commonwealth Conciliation and Arbitration Act, 1904-1930, and the Industrial Arbitration Act of N.S.W. Its registration dates from 1916, when it was formed by Radio Officers in the Australian Mercantile Marine. In 1922, when the Coastal Radio and Island Radio Services were taken over by Messrs. Amalgamated Wireless (Australasia) Limited, the operators on these stations were also taken into the Institute. In 1927, when A.W.A. commenced the Beam Service and other technical services, the employees on these new services were mainly recruited from Marine or Coastal Radio sections, and thus the Institute covered a new sphere of employment. In 1934 it changed its old name of "Radio Telegraphists' Institute" and took on its present title. Just prior to this change of name it began organising in the broadcasting field, and it now has awards and agreements covering technicians in that field.

(Continued next page.)

Clubs, Associations, Unions, etc. (contd.)

P.R.E.I. (contd.)—

Other awards and agreements secured by the Institute are those covering Radio Officers in the Mercantile Marine and on Trawlers; Telegraphists and Technicians in the Beam Wireless Service, Coastal Radio Service, and A.W.A. Technical Services, and an agreement covering the Australian Aerial Medical Service.

At the present moment there are two awards in the broadcasting field, one for city stations and one for country stations (see Industrial Award). The Institute has (as at May 1, 1939) filed a Log of Claims to incorporate both awards into one award and to make certain alterations in the grading of stations.

At the present time the awards grade stations according to the number of technicians employed on those stations.

R.I.F. Club of Sydney

(Registered under the N.S.W. Charitable Collections Act)

Headquarters: 30 Carrington Street, Sydney. Phone B 7188.

Club was formed in 1937 for the purpose of carrying out special functions in the entire radio field—R.I.F. standing for Radio Industry Functions—and in so doing any residue of funds to be used for such charitable and other purposes as the Board of Management in its discretion, deems advisable. The club entertains at luncheon any visitor concerned with radio or broadcasting; holds periodical luncheons and other functions, invites prominent speakers on all subjects for luncheon addresses. Conducted R.I.F. Ball 1937, 1938, and 1939 Radio Ball. Also conducts annual golf tournament.

At the second annual meeting of the club held at the Mayfair Hotel, Sydney, March 21, 1939, the following Board of Management was elected for the 1939-40 period:

Messrs. J. L. Mulholland (A.W.A.), A. R. Allen (Vesta), G. H. Anderson (2GB), A. F. O. Brown (E.R.D.A.), C. Gittos (Ducon), W. Godley (Airzone), G. K. Herring (Eveready), J. Calder (A.W. Valve Co.), D. G. Wyles (Briton), H. I. Hobden (E.T.C. Industries), Eric Dare (Mullard), C. F. Marden (2UW), and John Martin (John Martin Pty. Ltd.).

At a subsequent meeting of the Board the following officers were elected for the ensuing period: President, A. R. Allen; Vice-Presidents, C. F. Marden, Eric Dare; Hon. Treasurer, A. P. Hosking; and O. F. Mingay Hon. Secretary.

The Board of Management of the R.I.F. Club of Sydney functioned with the following members during the year 1938-1939:—

Messrs. J. L. Mulholland, A. R. Allen (Vesta), G. H. Anderson (2GB), A. F. O. Brown (E.R.D.A.), C. Gittos (Ducon), W. Godley (Airzone), G. K. Herring (Eveready), J. Calder (A.W. Valve Co.), D. G. Wyles (Briton), H. I. Hobden (E.T.C. Industries), Eric Dare (Mullard), C. F. Marden (2UW), and John Martin (John Martin Pty. Ltd.).

During the year Mr. A. Freedman resigned and Mr. John Martin was elected to the vacancy.

Radio Industry Functions Club of Melbourne

(A Social Club Conducted by those Engaged in the Radio and Broadcasting Industry.)

Address: 239 Collins Street, Melbourne. Central 442.

1939 Board of Management: President: J. J. Malone, Chief Inspector of Wireless. Vice-presidents: T. J. Holt (3XY), J. H. Cooper (A. G. Healing Ltd.). Committee: P. H. Walsh (A.G.E), K. L. Corr (Legionnaire Sound Production), L. A. Pogonowski (International Radio Co.), W. J. Haysom (W. John Haysom Advertising), A. Parcell (A. J. Veall Pty. Ltd.), E. C. Haynes (A.W.A.), S. Gibson (Homecrafts Pty. Ltd.), W. S. Taylor (Vesta Battery Co.), S. M. Allan (3MA, 3GL, 3BA rep.). Hon. Treasurer: V. G. Byrne ("Listener In").

Hon. Secretary: R. W. Pfeil, Mingay Publishing Co., 239 Collins Street, Melbourne, C.I. Phone: Central 442.

During the first year of the club's existence, 1938, luncheons were conducted fortnightly throughout the year and many notable speakers addressed these gatherings, covering a variety of subjects, each and every one interesting in its own sphere.

Four golf tournaments were staged during 1938, at which good attendances made these functions particularly popular with golfing members. The winner of the Mingay Perpetual Trophy for 1938 was C. L. Badge, of Vealls, who succeeded in holding off his fellow worker, S. G. Homberg, in the final for the trophy which carried a replica for the R.I.F. golf champion each year.

A cricket match was staged between members of the club and "Radio Times," at which the club was successful at winning by a narrow margin of seven runs.

Membership reached 119 during the first year of the club's life, representing all sections of the radio manufacturing, broadcasting and associate industries, and it is hoped that the number will be added to even further during the current and succeeding years. Luncheons are to be held fortnightly.

Annual subscription to the club is 5/-.



IMPORTANT STATISTICS OF THE COMMONWEALTH OF AUSTRALIA

POPULATION AND VITAL STATISTICS.

States and Territories	Area Square Miles	Population Estimated 30/6/38			Popn. Capital Cities
		Males	Females	Persons	
N.S.W.	309,432	1,371,759	1,347,142	2,718,901	1,279,080
Victoria	87,884	922,515	944,532	1,867,047	1,024,000
Queensland	670,500	525,117	478,055	1,003,172	318,430
South Aust.	330,070	296,156	296,136	592,292	318,190
West Aust.	975,920	242,651	217,510	460,161	215,700
Tasmania	26,215	119,013	115,165	234,178	62,450
North Terr.	523,620	3,908	1,861	5,769	1,730
A.C.T.	940	6,286	5,276	11,562	9,390
Total	2,974,531	3,487,405	3,405,677	6,893,082	3,228,970

ESTIMATED INCREASE OF POPULATION.

ADJUSTED IN ACCORDANCE WITH THE RESULTS OF THE CENSUS OF THE 30th JUNE, 1933

States and Territories	1934	1935	1936	1937	1/1/'37 to 30/6/'37		1/1/'38 to 30/6/'38	
					to	to	to	to
N.S.W.	22,684	21,463	24,070	29,002	10,923	8,163	10,923	8,163
Victoria	12,011	5,533	8,570	7,894	3,688	7,560	3,688	7,560
Queensland	10,466	11,222	11,415	11,327	9,957	9,711	9,957	9,711
South Australia	1,617	2,149	2,869	1,839	634	1,091	634	1,091
West Australia	2,346	5,135	3,812	5,554	2,674	3,050	2,674	3,050
Tasmania	663	1,661	2,220	3,662	2,635	4,112	2,635	4,112
North Territory	126	147	214	49	150	415	150	415
A.C.T.	61	127	468	461	439	1,314	439	1,314
Total	49,526	47,437	53,638	59,838	24,612	26,492	24,612	26,492

NOTE.—Minus sign (-) denotes decrease.

WOOL (as in the Grease) PRODUCED.

SEASON ENDED 30th JUNE.

	lbs. in 1934	lbs. in 1935	lbs. in 1936	lbs. in 1937	lbs. in 1938 (c)
N.S.W. (a)	486,152,493	496,876,837	474,359,226	505,375,065	496,824,150
Victoria	161,146,436	156,761,979	163,397,896	163,048,510	177,847,229
Queensland	169,989,516	174,088,413	142,793,328	153,766,368	160,626,000
South Aust.	79,288,903	77,790,933	81,709,440	76,604,296	86,606,338
West Aust. (b)	85,118,808	95,836,161	92,458,673	69,935,210	70,684,855
Tasmania	14,200,000	14,035,000	16,300,000	14,067,000	14,000,000
North Terr.	35,000	35,000	35,000	35,000	35,000
Total	995,931,156	1,015,424,373	971,053,563	982,831,449	1,006,623,622

(a) Including A.C.T.; (b) For year ended previous 31st December; (c) Provisional.

ESTIMATED GROSS VALUE OF ALL PRODUCTION.

	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38 (b)
Agricultural	£75,562	£70,731	£68,587	£75,383	£91,403	£86,000
Pastoral	64,851	95,613	74,556	91,286	105,499	91,600
Dairy, Poultry and Bee Farming	39,622	40,306	44,763	47,533	49,836	52,600
Forestry & Fisheries	8,470	9,605	10,856	11,624	11,765	12,000
Mining	15,583	17,608	19,949	23,243	27,331	32,300
Manufacturing (a)	114,136	123,355	137,638	155,891	170,811	187,000
Total	318,224	357,218	356,349	404,970	456,745	461,500

(a) These amounts differ from those given in the tables on the next page owing to the inclusion in those tables of certain products which in this table are included with Dairy Farming and Forestry. (b) Preliminary.

PRINCIPAL CROPS—AUSTRALIA.

	AREA UNDER CROPS.				
	1933-34 Acres	1934-35 Acres	1935-36 Acres	1936-37 Acres	1937-38 Acres
Grain—					
Wheat	14,901,271	12,544,178	11,956,966	12,316,862	13,734,970
Oats	1,373,921	1,561,553	1,564,171	1,524,861	1,408,483
Maize	308,761	294,981	297,616	317,710	320,207
Hay	3,080,680	3,178,173	3,007,470	3,100,876	2,970,823
Sugar Cane	328,839	322,457	334,910	359,107	358,187
Total area under crops	22,454,327	20,428,799	19,974,042	20,602,595	21,956,259

	TOTAL PRODUCTION.				
	1933-34 Bushels	1934-35 Bushels	1935-36 Bushels	1936-37 Bushels	1937-38 Bushels
Grain—					
Wheat	177,337,803	133,393,232	144,217,769	151,389,952	187,255,666
Oats	16,922,031	16,906,022	18,720,774	16,662,279	17,165,088
Maize	7,494,080	8,100,827	7,467,705	7,246,383	6,816,612
Hay (tons)	3,582,748	3,810,708	3,497,677	3,447,647	3,420,193
Sugar Cane (tons)	4,898,040	4,498,804	4,500,907	5,445,740	5,494,610
Cane Sugar (tons)	666,145	640,589	646,541	782,834	798,242

# Important Statistics of Australia (contd.)

## BIRTHS, DEATHS AND MARRIAGES.

States and Territories	BIRTHS—NUMBER...			1/1/'37 to 30/6/'37		1/1/'38 to 30/6/'38	
	1935	1936	1937				
N.S.W.	44,676	46,193	47,497	23,676	23,410	23,676	23,410
Victoria	27,884	28,883	29,731	14,451	14,817	14,451	14,817
Queensland	17,688	18,755	19,162	9,601	9,462	9,601	9,462
South Australia	8,270	8,911	8,985	4,456	4,633	4,456	4,633
West. Australia	8,119	8,479	8,609	4,196	4,539	4,196	4,539
Tasmania	4,456	4,581	4,841	2,323	2,425	2,323	2,425
North Territory	84	113	99	46	44	46	44
A.C.T.	148	158	207	103	86	103	86
Total	111,325	116,073	119,131	58,852	59,416	58,852	59,416
DEATHS—NUMBER.							
N.S.W.	24,547	24,376	25,235	12,048	12,145	12,048	12,145
Victoria	18,456	18,778	18,613	8,823	8,621	8,823	8,621
Queensland	8,851	8,593	9,006	4,315	4,426	4,315	4,426
South Australia	5,163	5,464	5,247	2,527	2,558	2,527	2,558
West. Australia	4,118	4,230	4,065	2,015	2,061	2,015	2,061
Tasmania	2,353	2,387	2,225	1,025	1,105	1,025	1,105
North Territory	70	60	63	27	39	27	39
A.C.T.	41	44	42	18	27	18	27
Total	63,599	63,932	64,496	30,798	30,982	30,798	30,982
MARRIAGES—NUMBER.							
N.S.W.	22,361	22,873	23,188	11,479	12,767	11,479	12,767
Victoria	15,409	15,915	16,226	8,157	8,838	8,157	8,838
Queensland	8,280	8,306	8,353	4,080	4,480	4,080	4,480
South Australia	4,845	5,182	5,340	2,621	2,843	2,621	2,843
West. Australia	3,940	4,242	4,169	2,192	2,176	2,192	2,176
Tasmania	1,875	2,073	2,042	1,039	1,122	1,039	1,122
North Territory	42	41	69	28	33	28	33
A.C.T.	74	77	61	29	40	29	40
Total	56,826	58,709	59,448	29,625	32,299	29,625	32,299

## BASIC WEEKLY WAGE RATES FIXED BY STATE INDUSTRIAL TRIBUNALS.

State.	Males.	Females.	Date of Operation.	Family Unit (for Male Rate).
N.S.W.	£ s. d. 4 1 0	£ s. d. 2 3 6	1/3/'39	Man, wife and child.
Victoria	(b)	(b)	(b)	(b)
Queensland	4 1 0	2 3 0	1/4/'38	Man, wife and three children.
South Australia	3 18 0	(d) 1 18 0	5/1/'39	Man, wife and three children.
West. Australia	(c) 4 1 1	2 3 9	30/7/'33	Man, wife and two children.
Tasmania	(b)	(b)	(b)	(b)

(a) Plus child allowances. (b) None declared, but follow Federal rates to a large extent. (c) Metropolitan area. Basic wage for Goldfields Areas and other portions of State, exclusive of the S.W. Land Division: Males, £4/15/2; Females, £2/11/5; Agricultural Areas and S.W. Land Division: Males, £4/2/2; Females, £2/4/4.

## TAXATION—Commonwealth and State per Head. Year Ended 30th June.

	1934	1935	1936	1937	1938
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Taxation by Commonwealth Government (a):					
Customs and Excise	4 19 11	5 2 11	6 2 9	6 6 4	7 1 0
Other (c)	3 10 0	3 6 7	3 5 9	2 18 2	3 0 2
Total	8 10 0	8 9 6	9 8 6	9 4 6	10 1 2
Taxation by State Governments (b)	5 13 3	5 3 7	6 1 8	6 13 11	7 5 2
Total Taxation (a)	14 3 1	13 12 11	15 9 11	15 18 1	17 6 0

(a) Based on mean population of Commonwealth for each financial year.  
 (b) Based on aggregate population of the six States, mean for each financial year.  
 (c) Inclusive of Sales Tax, £1/6/2 in 1933-34; £1/5/4 in 1934-35; £1/7/11 in 1935-36; £1/3/6 in 1936-37, and £1/3/4 in 1937-38; also Flour Tax, 3/9 per head in 1933-34, 2/5 in 1934-35, and 3/5 in 1935-36.

## MANUFACTURING INDUSTRIES.

Percentage of each item of outlay on value of Total Output, 1937-38.

Particulars	N.S.W.	V.	Q.	S.A.	W.A.	Tas.	Ttl.
	%	%	%	%	%	%	%
Wages (a)	19.00	21.72	17.14	20.77	22.70	19.83	19.35
Fuel and light	3.35	2.58	2.31	2.43	5.13	3.84	3.00
Materials used	56.84	56.28	65.28	61.98	51.48	50.12	57.67
Margin for profits and miscellaneous expenses and charges	20.81	19.42	15.27	14.77	20.69	26.21	19.38
Total output	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Per cent. of wages on value of production	47.74	52.78	52.89	58.45	52.32	48.08	50.72

(a) Exclusive of amounts drawn by working proprietors.  
 NOTE.—Production figures for 1937-38 are not available.

(Continued next page)

# Important Statistics of Australia (contd.)

## Manufacturing Industries (continued)

### AVERAGE AMOUNT OF SALARIES AND WAGES PAID PER EMPLOYEE (a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
1933-34—							
Males	206.98	191.45	208.23	185.58	206.27	182.05	199.82
Females	91.88	88.54	82.77	73.43	86.43	81.41	88.69
1934-35—							
Males	208.57	193.31	219.93	190.22	210.66	183.68	202.48
Females	90.40	90.27	84.51	80.64	87.30	77.93	89.17
1935-36—							
Males	212.35	198.85	221.90	193.56	212.76	190.86	206.55
Females	91.30	93.58	85.80	80.70	86.84	85.33	91.19
1936-37—							
Males	216.29	205.93	225.78	205.31	218.47	198.06	212.44
Females	92.71	96.97	86.58	83.21	90.59	86.10	93.52

(a) Exclusive of working proprietors and amounts drawn by them.

### AVERAGE NUMBER OF MALES AND FEMALES EMPLOYED, 1936-37.

Sex.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Males	152,064	128,457	33,970	33,400	18,466	10,055	381,412
Females	56,433	62,926	9,246	7,310	4,245	2,376	142,536

### MANUFACTURING TOTALS.

	1933-34	1934-35	1935-36	1936-37
	No.	No.	No.	No.
Number of establishments	23,297	24,211	24,894	25,668
Hands employed	405,909	449,598	492,771	523,948
Value of Plant, Machinery, Land and Buildings	£64,444,660	£72,824,549	£82,098,288	£96,123,132
Value of Materials used	227,714,293	233,481,612	239,840,993	£246,203,232
Value of Production	189,827,264	209,047,017	238,974,797	£260,578,903
Value of Output	129,091,915	143,816,160	162,437,263	£177,684,645
	330,134,060	365,201,384	414,688,455	£451,829,278

(a) Exclusive of amounts drawn by working proprietors.

### MOTOR VEHICLES REGISTERED IN AUSTRALIA, 1937-38.

State and Territories	Motor Cars	Commercial Vehicles	Motor Cycles	Total	Drivers' and Riders' Lic. Issued
N.S.W.	205,802	73,569	24,032	303,403	430,189
Victoria	145,179	77,943	27,333	250,455	340,438
Queensland	72,225	38,737	7,846	118,808	269,410
South Australia	56,882	23,206	10,048	90,136	137,627
West. Australia	36,386	22,596	7,079	66,061	83,564
Tasmania	16,648	4,511	3,646	24,805	29,000
North Territory	354	835	44	1,233	1,313
A.C.T.	1,487	354	86	1,927	2,556
Total	534,963	241,751	80,114	856,828	1,294,017

### ALL SAVINGS BANK DEPOSITS (including Commonwealth)

	30/6/'35	31/12/'35	30/6/'36	31/12/'36	30/6/'37	31/12/'37	30/6/'38	31/12/'38
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
N.S.W.	77,906	78,524	80,000	79,467	81,952	82,319	86,016	86,645
Victoria	72,019	72,256	73,890	73,272	75,721	76,580	78,877	80,142
Queensland	26,197	27,029	27,132	27,347	27,304	28,195	28,206	29,112
South Australia	24,203	24,569	25,308	25,434	26,506	26,357	27,244	27,146
West. Australia	10,929	11,286	11,517	11,517	11,835	11,821	12,037	12,217
Tasmania	6,430	6,569	6,818	6,859	7,215	7,402	7,692	8,012
A.C.T.	230	222	239	240	259	268	292	300
N. Territory	53	60	58	58	59	68	76	76
Total	217,972	220,525	224,962	224,194	230,851	233,501	240,432	243,650

### AVERAGE DEPOSIT PER HEAD OF POPULATION.

	30/6/'35	31/12/'35	30/6/'36	31/12/'36	30/6/'37	31/12/'37	30/6/'38	31/12/'38
	£ s. d.	£ s. d.						
N.S.W.	29 9 2	29 11 0	30 0 3	29 13 0	30 8 9	30 11 2	31 12 9	31 13 7
Vic.	39 3 8	39 4 1	40 0 2	39 10 10	40 16 1	41 3 11	42 4 11	42 15 9
Qld.	27 1 3	27 16 11	27 13 3	27 15 10	27 10 5	28 7 11	28 2 4	28 19 11
S.A.	41 7 1	41 17 11	43 1 10	43 3 8	45 0 6	44 10 5	45 19 11	45 12 6
W.A.	24 10 5	25 4 2	25 11 7	25 9 7	26 1 1	25 18 6	26 3 2	26 8 11
Tas.	28 2 3	28 3 10	29 14 1	29 6 3	31 1 2	30 19 5	32 16 11	33 7 8
A.C.T.	23 17 0	22 16 0	23 3 0	23 1 0	23 11 10	24 18 11	25 5 11	24 19 11
N.T.	10 9 6	11 14 10	10 17 2	11 10 5	10 16 10	10 13 9	11 15 6	12 12 9
Total	32 8 3	32 13 1	33 4 1	32 18 9	33 15 10	34 0 4	34 17 7	35 3 6

### BASIC WEEKLY WAGE RATES FIXED BY COMMONWEALTH COURT OF CONCILIATION AND ARBITRATION FOR EACH CAPITAL CITY.

	1/12/'35	1/12/'36	1/6/'37	1/9/'37	1/12/'37	1/12/'38	1/3/'39
	(a)	(a)	(a)	(b)	(b)	(b)	(b)
Sydney	70 0	10 0	72 0	75 0	78 0	81 0	81 0
Melbourne	66 0	69 0	69 0	73 0	77 0	79 0	79 0
Brisbane	64 0	66 0	68 0	70 0	74 0	75 0	75 0
Adelaide	67 0	69 0	69 0	71 0	74 0	76 0	76 0
Perth	68 0	71 0	71 0	73 0	75 0	76 0	76 0
Hobart	69 0	69 0	69 0	73 0	75 0	76 0	76 0

Weighted Average—  
 Six Capitals . . . . . 68 0 68 0 70 0 73 0 76 0 78 0 78 0  
 (a) "C" Series Index Nos.—Commonwealth Arbitration Court's "Restoration" wage of the 17th April, 1934. The family unit associated with this wage consists of man, wife and two children.  
 (b) "Court" Series Index Nos.—Commonwealth Court's Judgment of 23rd June, 1937, includes "prosperity loadings" granted by Judgment.

# BROADCAST LISTENERS' LICENCES IN FORCE IN AREAS WITHIN 25 AND 50 MILES OF PRINCIPAL CITIES AND TOWNS

**QUARTER ENDED MARCH 31, 1939**

(Note: In each case the 25 miles figure appears above the 50 miles figure.)

## NEW SOUTH WALES AND AUSTRALIAN CAPITAL TERRITORY.

Locality	Licences	Population	Ratio of Lic. to 100 of	
			P'lition	Dw'lings
Sydney	265,333	1,366,912	19.41	82
	279,975	1,479,817	19.19	81
Albury	4,130	30,588	13.50	59
	8,839	68,808	12.85	56
Armidale	2,070	16,138	12.82	57
	2,905	31,562	9.20	40
Bathurst	3,332	27,114	12.28	52
	11,950	93,390	12.79	55
Bega	1,151	10,323	11.24	50
	2,325	20,321	11.93	51
Broken Hill	4,499	27,532	16.34	69
	4,504	28,257	15.93	64
Canberra	2,709	15,738	17.21	75
	4,660	33,586	13.87	60
Cessnock	37,239	216,905	17.16	74
	42,484	259,535	16.36	70
Cooma	602	5,290	11.56	50
	2,132	15,828	13.46	59
Corowa	2,075	23,646	8.77	38
	10,347	81,131	12.75	55
Cumnock	836	10,230	8.13	35
	8,506	71,758	11.84	53
Deniliquin	748	6,550	11.42	50
	4,385	38,225	11.47	50
Dubbo	2,080	16,559	12.56	56
	4,552	31,277	14.55	64
Goulburn	3,031	23,573	12.84	60
	7,075	61,541	11.49	51
Grafton	2,981	20,335	14.65	65
	4,798	42,314	11.33	50
Griffith	1,321	13,364	9.88	44
	3,596	34,831	10.32	48
Gunnedah	1,125	10,190	11.03	51
	4,952	47,214	10.48	48
Inverell	1,484	13,383	11.08	51
	4,208	38,502	10.92	49
Katoomba (25)	6,460	38,761	16.66	67
(50) Inc. Metro.				
area	148,901	810,165	18.37	78
Exc. Metro.				
area	23,212	168,687	13.76	57
Kempsey	2,178	18,827	11.56	53
	3,970	40,180	9.88	45
Lismore	7,953	59,611	13.34	62
	11,382	96,492	11.79	53
Lithgow	5,530	34,967	15.81	63
	12,463	100,730	12.37	51
Moss Vale	2,972	22,917	12.96	54
	16,412	114,179	14.37	62
Mudgee	1,488	13,473	11.04	44
	3,788	35,694	10.61	44
Murwillumbah	4,730	38,615	12.25	54
	13,123	106,250	12.35	55
Newcastle	35,878	198,069	18.11	77
	41,602	242,606	17.14	74
Orange	3,726	30,058	12.39	56
	8,228	79,855	10.30	44
Parkes	2,235	17,577	12.71	58
	4,230	43,808	9.65	44
Singleton	5,705	52,955	10.77	47
	40,241	242,662	16.58	72
Tamworth	2,859	21,613	13.25	61
	5,654	50,312	11.23	50
Wagga	3,685	27,672	13.31	61
	8,211	73,086	11.23	52

Locality	Licences	Population	Ratio of Lic. to 100 of	
			P'lition	Dw'lings
Woll'gong (25)	10,544	57,415	18.36	77
(50) Inc. Metro.				
area	275,205	1,430,030	19.24	81
Exc. Metro.				
area	23,826	147,073	16.20	68
Young	2,019	17,039	11.84	54
	7,125	56,728	12.56	57
<b>VICTORIA.</b>				
Melbourne	220,808	1,109,495	19.90	82
	241,416	1,231,140	19.60	81
Ballarat	9,623	66,485	14.39	57
	28,210	161,826	17.43	70
Bendigo	8,019	53,605	14.96	58
	16,390	126,454	12.96	50
Charlton	1,763	15,567	11.33	50
	5,788	45,168	12.81	55
Geelong (25)	10,666	63,596	16.77	70
(50) Inc. Metro.				
area	242,772	1,184,284	20.49	85
Exc. Metro.				
area	32,760	156,164	20.97	87
Hamilton	2,387	16,464	14.49	63
	7,732	55,555	13.91	60
Horsham	2,889	16,047	18.00	77
	6,872	44,380	15.48	65
Lubeck	3,405	20,857	16.32	72
	7,668	55,451	13.82	61
Mildura	3,830	22,962	16.68	70
	4,086	27,560	14.82	63
Sale	2,302	16,563	13.89	60
	7,474	49,869	14.98	60
Shepparton	4,058	33,435	12.13	52
	10,359	85,566	12.10	52
Swan Hill	1,654	13,425	12.32	55
	4,085	35,073	11.64	50
Warragul (25)	6,396	41,645	15.35	60
(50) Inc. Metro.				
area	34,439	220,576	15.61	62
Exc. Metro.				
area	20,789	152,760	13.60	53
Warrnambool	3,658	27,505	13.29	59
	8,331	50,119	16.62	73
<b>QUEENSLAND.</b>				
Brisbane	75,213	370,581	20.30	87
	80,131	422,388	18.97	82
Atherton	1,343	17,625	7.62	32
	4,964	52,404	9.47	41
Ayr	1,403	12,375	11.34	51
	5,636	41,529	13.57	61
Bundaberg	2,916	22,518	12.95	54
	5,467	46,421	11.78	49
Cairns	2,611	23,745	11.12	49
	4,746	48,850	9.72	42
Charleville	464	3,742	12.39	58
	552	5,067	10.90	51
Gympie	1,836	24,390	7.53	33
	6,779	68,492	9.90	43
Ipswich (25)				
Inc. Met. area	75,398	370,279	20.36	88
Exc. Met. area	6,439	48,778	13.20	59
Ipswich (50)				
Inc. Met. area	84,152	451,465	18.64	81
Exc. Met. area	15,193	129,964	11.69	52
Kingaroy	2,105	16,092	13.08	63
	3,588	35,789	10.03	47

Locality	Licences	Population	Ratio of Lic. to 100 of		Locality	Licences	Population	Ratio of Lic. to 100 of	
			P'lition	Dw'lings				P'lition	Dw'lings
Longreach	652	4,041	16.13	78	Collie	2,162	11,430	18.91	72
	655	5,062	12.94	63		5,505	35,470	15.52	59
Mackay	2,888	22,860	12.63	57	Fremantle (25)				
	3,268	29,065	11.24	49	Inc. Met. area	48,716	236,441	20.60	88
Maryborough	2,601	20,190	12.88	51	Exc. Met. area	1,160	17,450	6.64	27
	6,751	53,527	12.61	52	(50) Inc. Metro.				
Oakey	6,111	47,928	12.75	59	area	49,460	246,991	20.02	86
	9,808	83,064	11.81	55	Exc. Metro.				
Rockhampton	6,542	41,908	15.61	70	area	1,904	28,000	6.80	28
	6,966	47,944	14.53	64	Geraldton	911	7,270	12.53	58
Roma	715	5,045	14.17	60		1,096	9,984	10.97	50
	1,187	8,492	13.98	60	Kalgoorlie	3,780	21,390	17.67	74
Toowoomba	6,793	53,241	12.76	59		3,780	23,257	16.25	63
	16,254	123,059	13.21	60	Katanning	1,277	6,010	21.24	92
Townsville	4,201	28,533	14.72	66		2,664	14,537	18.32	77
	5,624	40,055	14.04	63	Merredin	724	5,170	14.03	59
Warwick	2,158	21,209	10.17	46		2,167	15,031	14.41	61
	10,586	88,339	11.98	54	Narrogin	1,063	6,016	17.66	75
						2,601	15,847	16.41	71
<b>SOUTH AUSTRALIA.</b>									
Adelaide	80,674	356,479	22.63	91	Northam (25)	1,723	12,782	13.47	61
	87,039	399,210	21.80	87	(50) Inc. portion				
Crystal Brook	4,912	25,349	19.34	84	Met. area	15,784	92,530	17.05	73
	9,404	50,128	18.76	81	Exc. Metro.				
Mt. Gambier	1,680	13,147	12.78	55	area	3,895	37,782	10.30	43
	3,921	25,103	15.62	66	Wagin	674	4,387	15.36	66
Murray Bridge						3,072	17,767	17.29	73
(25)	3,773	18,696	20.8	85	<b>TASMANIA.</b>				
(50) Inc. Metro.					Hobart	17,036	84,875	20.07	86
area	85,857	391,686	21.92	89		18,391	101,829	18.06	78
Exc. Metro.					Burnie	4,004	27,236	14.70	65
area	10,876	72,910	14.92	61		7,314	48,377	15.12	66
Port Augusta	1,168	6,012	19.43	86		1,186	9,009	13.16	55
	2,287	13,778	16.51	73	Derby	9,319	55,828	16.69	71
Port Lincoln	890	4,352	20.40	85		5,048	31,603	15.97	70
	1,501	7,196	20.86	90	Devonport	14,293	86,597	16.50	71
Renmark	2,422	11,159	21.70	91		2,513	18,804	13.36	57
	3,026	21,501	14.07	58		14,404	90,769	15.87	70
<b>WESTERN AUSTRALIA.</b>					Launceston	9,114	51,497	17.70	76
Perth	48,797	237,078	20.58	88		13,064	82,196	15.89	68
	50,488	249,137	20.26	87	Queenstown	1,607	6,932	23.18	98
Albany	987	5,539	17.81	71		1,886	9,719	19.41	78
	1,707	9,416	18.12	67	Ulverstone	5,081	32,794	15.49	68
Bunbury	2,194	15,086	14.54	57		7,400	47,864	15.46	68

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- 4BU Bundaberg (Pages 8 and 48), delete Major Network.  
 2BH Broken Hill (Pages 6 and 25), delete Major Network.  
 Major Network (Page 64), add 7HT Hobart, delete 4BU Bundaberg and 2BH Broken Hill.  
 7HT Hobart (Pages 8 and 61), add Network Affiliation, Major.  
 Commercial Stations (Page 8), add 4RO Rockhampton; see Page 50.  
 5PI Crystal Brook (Page 55), change transmitter location to Crystal Brook.  
 5MU Murray Bridge (Page 55), change transmitter location to Murray Bridge.  
 2KM Kempsey (Pages 7, 10 and 30), change power to 300 watts.  
 2AD Armidale (Pages 7 and 9), operating power, alter to 200 watts.  
 Late Shopping Nights (Page 113), add Ulverstone and Derby, Friday. Late closing all centres 9 p.m., except Hobart, 9.30 p.m.  
 2BS Bathurst (Page 6), delete C.B.N. Network.  
 3CV Charlton (Pages 7 and 42), add Argus Network.  
 5RM Renmark (Pages 8 and 11), operating power, alter to 2,000 watts.  
 2CK Cessnock (Page 6), change power to 300 watts.  
 2QN Deniliquin (Page 35), alter Network Affiliation to E.S.N.  
 2XL Cooma (Page 38), add Network Affiliation, E.S.N.  
 3YB Warrnambool (Page 46), add Network Affiliation, Argus.  
 7HO Hobart (Page 61), add to Network Affiliation, Tasmania.  
 7QT Queenstown (Page 62), add to Network Affiliation, Tasmania.  
 Empire State Network (Page 64), add 2XL Cooma.  
 Victorian Broadcasting Network (Page 68), alter 'phone No. to MX 4731.  
 Argus—3UZ Network (Page 68), add 3CV Charlton.  
 4MK Mackay (Page 50), alter hours of transmission to read: Monday to Saturday, 6.30 a.m. to 8.30 a.m., 10 a.m. to 11 a.m., 12 noon to 2 p.m., 3 p.m. to 5 p.m., 6 p.m. to 10 p.m.; Sunday, 9 a.m. to 1 p.m., 6 p.m. to 9.30 p.m.

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*Memoranda*


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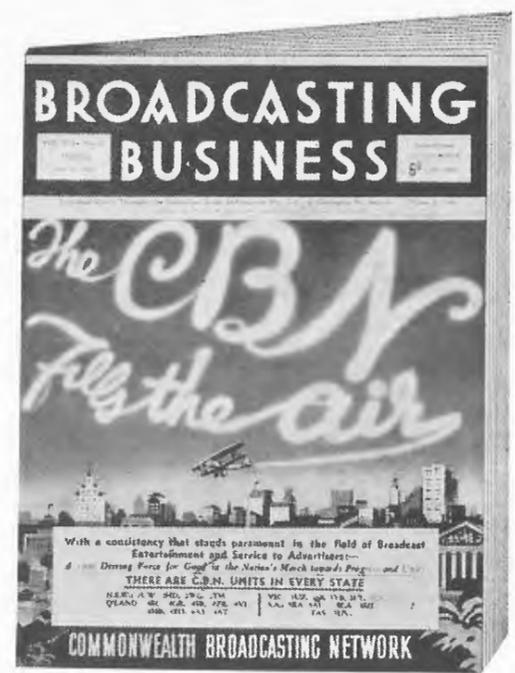
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From 1930, when Australian Radio Publications Pty. Ltd. was founded to publish the RADIO RETAILER, now the RADIO AND ELECTRICAL RETAILER, and subsequently throughout the years the RADIO REVIEW, the RADIO TRADE ANNUAL AND SERVICE MANUAL, the RADIO TECHNICIAN, the RADIO RECEIVER QUARTERLY PRICE LIST and the RADIO RECEIVER OFFICIAL TRADE-IN HANDBOOK, it was felt that there was urgent need for a publication devoted exclusively to the requirements of commercial broadcasting, quite distinct from the above publications, which dealt mainly with the manufacturing, servicing and merchandising side of radio.

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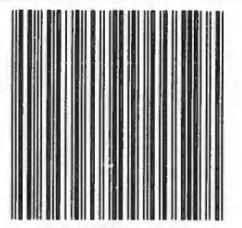
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