

Ray Allsop and Don. B. Knock — Technical Editors.

Wireless Weekly

12 APR 1929

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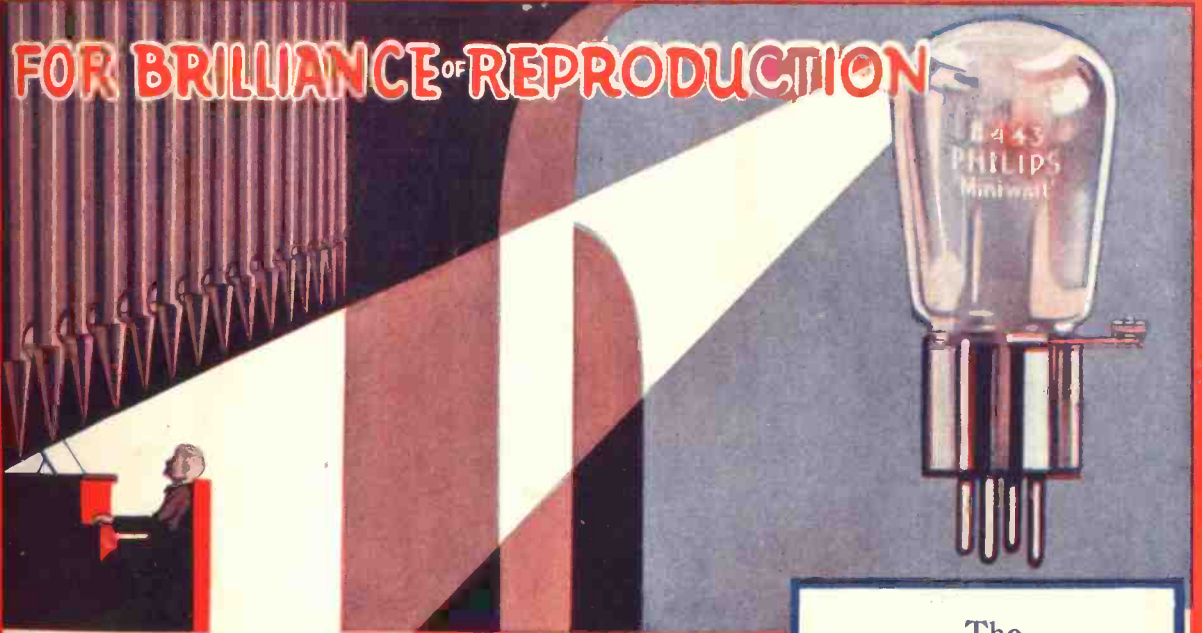
INCORPORATING "RADIO IN AUSTRALIA & NEW ZEALAND"

VOL. 13. NO. 16.

FRIDAY, APRIL 12, 1929.

(Registered at the G.P.O., Sydney, for transmission by post as a newspaper.)

FOR BRILLIANCE OF REPRODUCTION



THE PHILIPS PENTHODE

PHILIPS

"MINIWATTS"

The
Southern Cross
Radio Outfit

By Ray Allsop

New Competition

Programme
Building

The "Go-Getter"

S.W. Receiver

By D. B. Knock

Stromberg-Carlson ELECTRIC 3

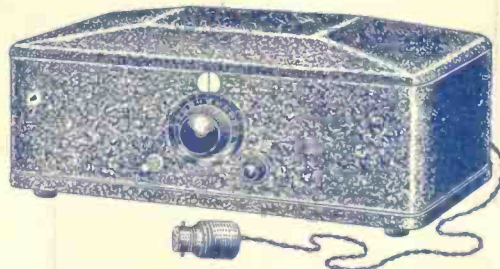
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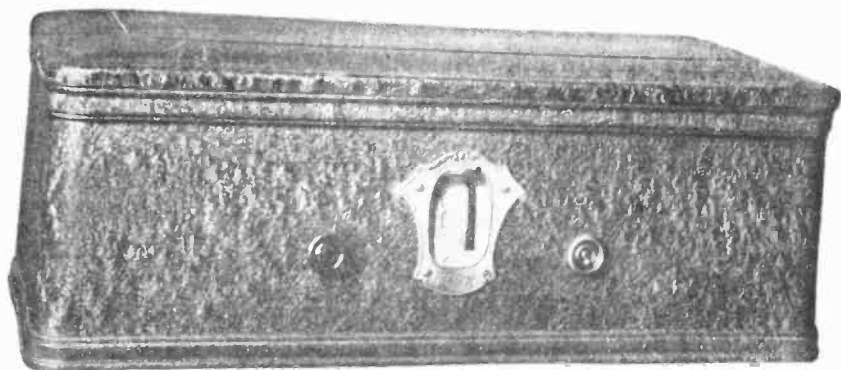
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W.W. 12.4.29.

Are You a Judge of Character?



1.—CARLTON FAY
Italian



2.—JOE CAHILL
Irishman



3.—BRUNTON GIBB
Coster



5.—LAWRENCE MACAULAY
Scotsman



4.—MONTGOMERY STUART
Frenchman

Tune in to 2FC at 8.32 on
Thursday night.

For Voting Coupon
See Page 4



6.—H. W. VARNA
Englishman

HERE is a unique competition to be presented at 2FC on April 18 by WIRELESS WEEKLY in co-operation with the N.S.W. Broadcasting Co. Each of the artists pictured above will broadcast an interpretation of a chosen character. Listeners are asked to judge which performance they regard as the most successful.

To the listener who, in the coupon on page 6, guesses or most nearly guesses the correct order of popularity of each of the performances, will be awarded a prize of £2/2/. In the event of there being more than one listener who successfully places the interpretations, the winner will be drawn for.

BETWEEN YOU AND ME AND THE MICROPHONE

Listening-in Types

THE National Broadcasting Company of America has found five varieties of listener. There is the group which thinks there is too much jazz; and the group which thinks there is too much classical music; and the group which dislikes so many educational talks; and the group which thinks there is not enough of anything; and the group which thinks there is too much of everything. We must add to these varieties the critical listener-in who doesn't listen in; and we think the enumeration is practically complete.



Easier Numbers

IN the dear old town of Hull, in England, the telephone operators consider the loud speaker the best antidote to "phone headache." Sets are to be installed in their recreation rooms. Yes; but what is the best antidote to loud speaker headache. Why, trying to get a number on a telephone exchange; because in the one case the loud speaker talks and you are silent; while in the other case,

To be Continued

MR. MOORE MacMAHON, great friend of everyone at 2BL, was leading a quartette which was being broadcast from the Conservatorium. "What's after this?" queried Uncle Bas, as the music ceased. The weary operator looked at a long string of movements yet to be performed. "Moore," he answered laconically.

Aunt Willair

AUNT WILLA went to Lord Howe Island for her Easter holidays; and, before she went, said good-bye to Mr. Charles Lawrence. "YOU going to Lord Howe Island?" exclaimed Mr. Lawrence. "I suppose you're one of 2BL's special messages." This was in allusion to the often-heard announcement: "We have a special message to broadcast to Lord Howe Island"; and we think that the vision of Aunt Willa wobbling to Lord Howe Island by air is positively aetherial, what? Aunt Willa, during her stay, will wear the native costume. We thought this might interest you.



Shirts and Pants.

5000 Jokes!

ACCORDING to Charles Nuttall, whose witty and entertaining talks have been so greatly enjoyed from 3LO during the last three years, a sense of humor is a priceless possession. He had ample opportunity of proving this soon after he arrived in America, and was commissioned to write five thousand jokes for a comic paper. At first he thought it was an impossible task, until he hit upon the idea of going through the dictionary, and making a joke about every word he encountered en route—soap, sugar, or sago, nothing came amiss. Mr. Nuttall was heard from 3LO on April 1 (!) on "A Sense of Humor."

National Anthems

A FEW Sundays ago, Captain Stevens gave a tiny talk on national anthems, with illustrations by Mr. Carlton Fay. We had never guessed there were so many nations in the world; and we fear that many of them, when they were writing their national anthems, could not have been feeling very well. However, handsome is as handsome does; and look what they all succeeded in doing during the great war. Anyhow, we liked Captain Stevens' musical League of Nations for its originality—that is, while it didn't do anything, it didn't do any harm.



Song of the Shirt

MR. G. VERN BARNETT appeared one Sunday evening to the control room staff of 2BL in a beautiful new grey shirt with white stripes. With trousers complete, of course. We don't mean to imply. "What do you think of my beautiful new grey shirt with white stripes?" asked Mr. G. Vern Barnett. "Beautiful," answered Mr. Jack Barnett, who had come up to hear Mr. Browning Mummery; "but you should see some of Fred. Scholls new shirts! Beautiful colors! He got them at bargain prices, too!" "They couldn't be as beautiful as this one," said Mr. G. Vern Barnett. "I'm going to wear it to-morrow night so that Charles Lawrence can see it. He won't be so perky after he's seen this." For Mr. Charles Lawrence also has an eye for a delicate shirt. "But Mr. Lawrence won't be here to-morrow night," said Mr. Jack Barnett. "He may not be until next Saturday night." "That will be all right," said one of those people who never seem to be able to keep their noses out of a conversation. "That will be quite all right. So long as he calls one night in the week." Mr. Vern Barnett's answer was lost in the corridor as he went in to accompany Mr. Browning Mummery in one of those delicate little songs which so delighted us all.

Musical Bears

THE favorite pianoforte music of the operating staff is Rackthingumbob's Prelude. While we don't wish to impeach their musical taste or ability, we think that their partiality for this prelude is occasioned by the extreme ease with which the first three chords may be thumped out on the piano. They can't play any more than the first three chords; but they make up for a slight lack of variety in their playing with a most intense and feeling execution of the aforesaid first three chords. One of these young virtuosos was practising the other day in Mr. Vern Barnett's presence; and Mr. Barnett, ever anxious to help the Young Hopeful, began the prelude. Everything went well until the three chord combinations were exhausted; and then it was a race. Young Hopeful led after the first three seconds; but Mr. Barnett held a slight advantage, as he was running in the usual Rachmaninoff course. The race ended in a dead-heat; but Young Hopeful was disqualified for having put too many notes on it; and Mr. Vern Barnett was acclaimed the winner by an enthusiastic stoo-dy. Mr. Barnett attributes his victory to the fact that he has never eaten porridge at midnight.



"Smithy" and Ulm Sign "Mike"

TWO BL has added two more famous signatures to its microphones, those of Squadron-Leader Kingsford Smith and Flight-Lieutenant Ulm. Mr. Eric Bessemer is the hero; and the occasion was the dinner tendered to the flyers by the Chairman of National Airways. Mr. Bessemer, by the way, was not quite satisfied with Kingsford Smith's first signature; so he asked him to have another try. Both these signatures have been engraved, and the microphone constitutes one of 2BL's showpieces.

Scott's Lament

IT is reported that several Aberdonians, who had to buy new coils to cope with a reduction in their station's wave length, have written to the B.B.C. and claimed a rebate on their license fees. We once met an Aberdonian who had spent sixpence in stamps, trying to persuade his local station to lower its wave length; as he wished to save money on his aerial. He was unsuccessful; so he was put to the labor of separating the two strands of his aerial wire to make the full length.



By
RAY ALLSOP

(Our Associate Technical Editor spent nearly 50 hours' continuous work helping to install the radio apparatus on the Southern Cross, the Canberra, and the Widgeon, which he describes below.)

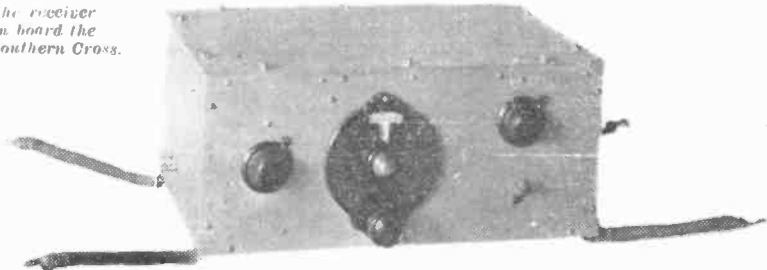


Equipping the SOUTHERN CROSS the CANBERRA and the WIDGEON

How radio apparatus in these 'planes was installed in record time by a party of four engineers—working right round the clock, is told in this article. Unfortunately, owing to this sudden demand on his time Mr. Allsop was unable to complete the article on electrical amplification which is further postponed.

"Have been hopelessly lost in dense rain for ten hours. Now going to make forced landing at place we believe to be 150 knots from Wyndham, in rotten country. Stop. Wish us luck. Will communicate as soon as possible. Cheerio.—Ulm."

The receiver on board the Southern Cross.



EVERYBODY knows now the last words of the Southern Cross radio. For forty minutes afterwards the buzzer was heard, and then it suddenly ceased.

What happened? Did the 'plane crash? Conjecture has been rife, but, at the time of writing, no further word has been received.

Why?
The receiver and transmitter of the Southern Cross was made so that it could stand a good shock. In the event of a bumpy landing, or even a forced landing, it was not likely to have been damaged. That portion of the 'plane containing the radio instruments would have had to have been very badly damaged, indeed, in order to put the instruments out of commission. It would have had to be a very big shock to break

the filaments or valves, and, in any case, spares were carried.

In the event of a forced landing the generators, which are air-driven, would have ceased to deliver "juice." This would have meant that M'Williams would have had to rig a transmitter with a receiving tube with the batteries off his receiver. As the batteries carried were of the latest and lowest capacity obtainable, the life of the transmitter would have been very short, and he would, therefore, not be able to transmit for

very long, even supposing the 'plane to have descended and the receiving valves to be undamaged.

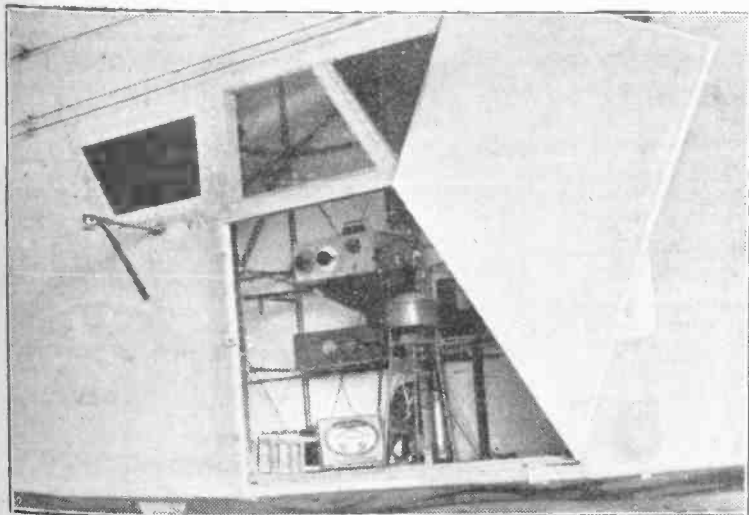
What does this leave us? By the time this is printed, of course, every reader may know what did happen. But, writing now, we can only do so with a heavy heart and great foreboding.

We worked on the Southern Cross with great hopes—and now what has happened? The success of the Southern Cross in past flights made us optimistic. We replaced the original receiver with a locally-manufactured one, with wave length ranging from 10 to 2500 metres. We had expected to hear this on the way to England.

The aerial used in conjunction with the receiver was approximately 300ft. long, a separate aerial being used from the transmitting aerial. (The receiving aerial was later lost). The set was manufactured by James Manufacturing Company, in conjunction with New Systems Telephones, Burgess Batteries, and Osram valves. The interchangeable coils provided for the various wave bands from the 10-2500 metres, a special cut-out arrangement being provided on the condenser to bring in the short-wave band.

Receiving morse signals in aeroplanes is difficult, owing to the interference caused by the magnetos on the engines, six of these being on the Southern Cross—two on each engine. To overcome this difficulty the set was provided with transformers peaked to 1000 cycles.

The set complete weighed approximately 8lb. the whole being mounted in an aluminium container, as shown in the diagram. The complete receiver was slung on rubbers into the framework provided on the 'plane, to carry the radio apparatus.



A view of the wireless end of the Southern Cross, showing complete installation.

THE CANBERRA.

ON Tuesday evening (2/4/29) it was decided by the National Airways to send

the Canberra to join in the search, equipped with wireless. Within the next twenty-four hours, the transmitter was built, the circuit and lay-out being similar to the Southern Cross instruments.

The greatest difficulty met with was obtaining a suitable air-driven generator. After an exhaustive search, one was obtained from the Royal Air Force, which was made in 1920, for aeroplane sparks sets alone. This machinery had to be re-conditioned, and adapted to work the continuous wave valve transmitter.

The generator was so small, however, that a UX210 had to be used in place of the 50-watt shield, as in the Southern Cross.

The installation of this apparatus in the Canberra under these difficulties in the short space of time available, involved continuous work on the part of the four engineers, and the assistance of the R.A.A.F. wireless officers.

Particularly praiseworthy were the efforts of Sergeant Studley, who incidentally has supervised the installation of radio on every long-distance plane, which has left Richmond Aerodrome. Working through the whole twenty-four hours, Sergeant Studley was probably responsible for the successful installation of the apparatus which requires careful attention where applied to aviation.

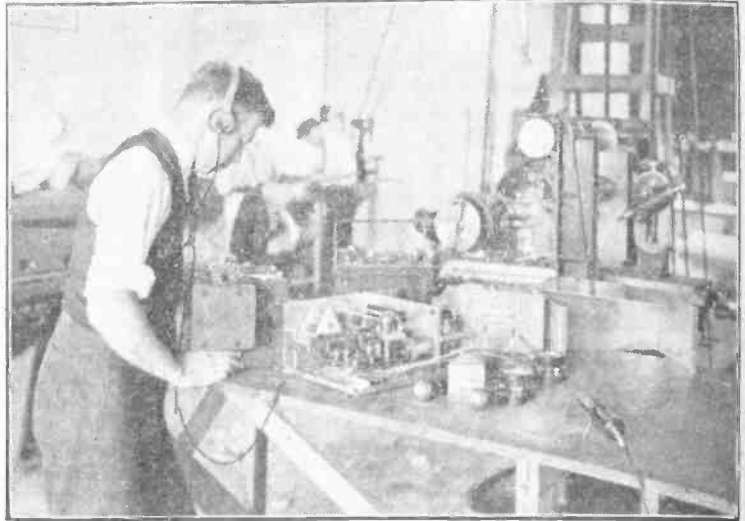
The receiver on the Canberra was a receiver of Philips' design, with a wavelength of 10 to 2500 metres.

The operator, Stannage, has had considerable experience with aeroplane transmission in America, being once connected with Helntz and Kaufmann, the designers of the Southern Cross installation, and has had eight years' commercial operating, his last ship being the Moeraki. Leaving his clothes aboard this ship, he signed on to the Canberra in a few minutes and next morning (Wednesday) was on his way.

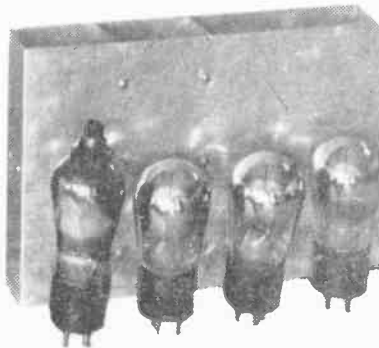
His signals should be regularly heard on 29.9 metres—VMZAG. In the event of the Canberra making a forced landing, there are sufficient batteries for the plate supply, and accumulators for which filaments are being carried, together with a spare aerial, so that signals may be sent out from the ground.

WIDGEON.

THE Widgeon is carrying a small battery-driven transmitter, using a Colpitt's cir-



Testing the Southern Cross transmitter and receiver before the "hop off."



The valves used with the metal screen in the receiver.

cuit, in case of a forced landing, or in any other emergency.

This set will not be used in the air. The valve used is an Osram DEL410. This set will operate on 33 metres, and it is proposed by Wing-Commander Wackett to use the

name Wyndham in place of a call sign. In the event of any experimenter hearing these signals, the signals will be DC, and the sending will be slow.

The noting of the signals from the Canberra will be slightly higher pitched than the Southern Cross, as the frequency of the alternator is a 500 circuit.

It is requested that all amateurs refrain as much as possible from transmitting on these wavelengths during this period.

Captain's Advice to Comrados

FOOTBALL BOOTS.

SPECIAL football boots are not really necessary. I mean that ordinary school boots which, though a bit worn and shabby for daily use, still have a sound sole, are better than any new boot. They are comfortable, and fit the foot better, and will not hurt the feet or make you tire quickly. Take a strip (or possibly two strips) of leather off the heel. Heels and soles should be level for speed and quick turning on the soft turf. Keep the leather soft with a little vaseline well rubbed in and well rubbed off. Once a week will do nicely, and keep the leather from becoming water-soaked.



An interior view of the Southern Cross, showing the arrangement of the apparatus.

INTERPRETATIVE COMPETITION

Vote in the order of your preference for each interpretation.

CARLTON FAY

Italian

MONTGOMERY STUART

Frenchman

JOE CAHILL

Irishman

LAWRENCE MACAULAY

Scotsman

BRUNTON GIBB

Coster

H. W. VARNA

Englishman

NAME _____

ADDRESS _____

Cut out this coupon and forward to "Wireless Weekly," 51 Castlereagh Street, Sydney, plainly endorsed on front of envelope: "Interpretative Competition."

VMZAB

These ill-fated letters constituted the call sign of the radio installation in the Southern Cross here described. The details have been kindly supplied by the manufacturer and were the specifications from which the outfit was built.

THE diagram of the transmitter on the Southern Cross, illustrated herewith, shows all circuits in schematic form. The set employs what is known as the Heintz modification of the tuned-grid, tuned-plate circuit. The grid receives its excitation within the valve. The necessary energy passing through the small natural plate grid capacity of the valve itself.

SPECIFICATION.

The following are the specifications which were used in its construction.

The frequency on which the set is intended to operate is chosen beforehand, and the component parts of the set are constructed to result in maximum efficiency at the chosen frequency. The air plate condenser C1 for this reason may be of fixed capacity, and the plate and grid coils (L1 and L2) may also be of fixed value. The grid is made variable in order to accommodate valves of greatly varying characteristics. Control is effected through the variable air condenser, C2, actuated by the dial on the front of the set. The locking screw is fastened to a pig-tail which binds the rotor of the condenser to the case when the screw is locked. The knob drives a split friction wheel, which, in turn, drives a large friction wheel fastened to the condenser shaft.

The scale is engraved on the face of this large wheel. Being a friction drive, the small driving wheel can, of course, be rotated if the large one is locked. Be sure the lock screw is slacked when the set is being tuned, watching the scale for movement, and be equally sure that the lock screw is tight when the set is finally tuned.

The condensers, C3 and C4, are the plate locking condensers, two being connected in series so that, should one fail, the remaining one will continue to function. The condensers, C5 and C6, serve a similar purpose in the grid, and are connected in series for the same reason.

The grid-leak is a brass-tipped porcelain enamelled unit of 10,000 ohms resistance. A spare unit is supplied. The condenser, C8, is a power factor controlling device to correct power factor of the generator and transformer. This may be removed from the circuit should there be failure from any cause, with a decrease in output. This is strictly an emergency measure.

The condenser, C7, is simply a filament by-passing condenser to equalise the flow of radio frequency between both sides of the filament. The radio frequency choke, RFC, is used to conduct the plate current to the plate and exclude a return flow of radio frequency current from the plate. A broken lead or turn of wire at this point will cause failure of operation.

The aerial coil is insulated at both ends from the case by means of bakelite bushings in the bottom of the transmitter case. The end of the aerial coil nearest the plate coil terminates in a screw connection at the bottom of the case. This is the terminal of the lead connecting the aerial unit with the transmitter. The other end of the aerial coil is connected by a short lead to the radiation meter, which is, in turn, connected to the case completing the circuit to the ground or fuselage framework.

GENERATOR.

The generator has two separate units, each generating current independently of the

other. The two separate generator coils are common at one end, this common junction being also common with the case of the generator, which, in turn, is connected by means of one of three strands between the generator and the set to the case of the set. The black strand should then be connected to the case of the generator and led without interruption to the case of the set, the transformer lead marked "ground" being also connected to this line, either to the line itself or directly to the case of the set. The generator is governed by hysteric lossing, the amperage at a given voltage being constant, irrespective of speed. This makes it possible to use the current from one generator directly for lighting the filament. The current, however, is in excess of that required by the filament, and for this reason a small shunt resistance is used in parallel with the filament of the valve. This shunt resistance takes the form of a 6 c.p. 12-16 volt automobile lamp, which also serves to illuminate the aerial meter.

INSTALLATION. GENERATOR.

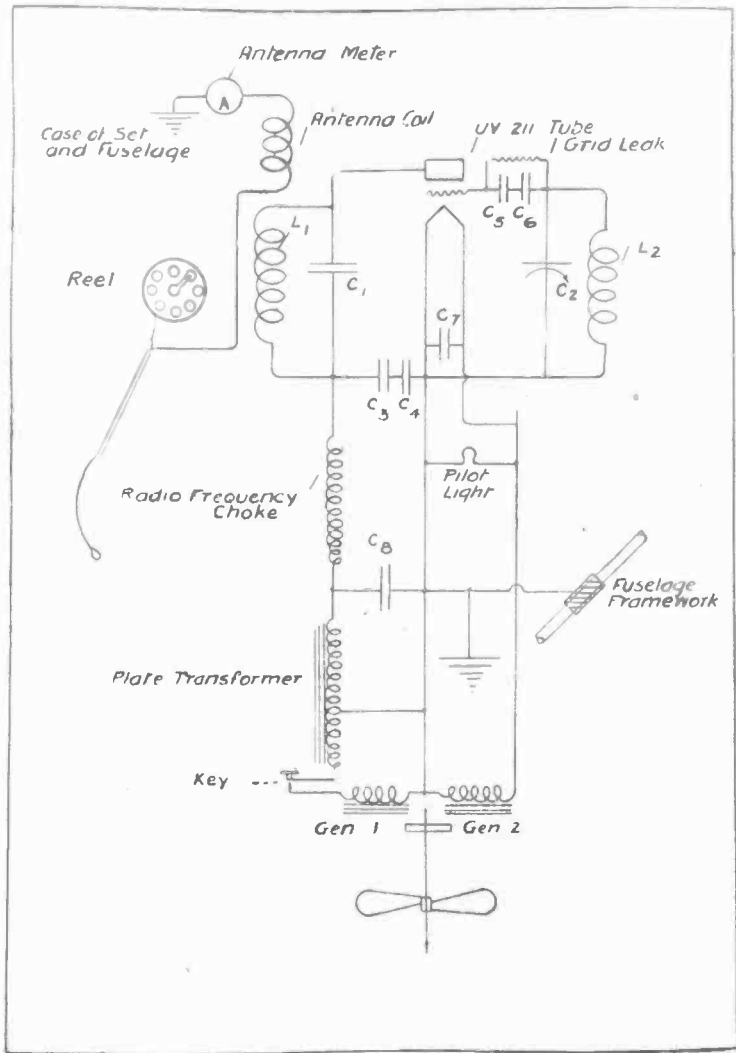
The generator is the only difficult unit to install and should, for that reason, be tackled first.

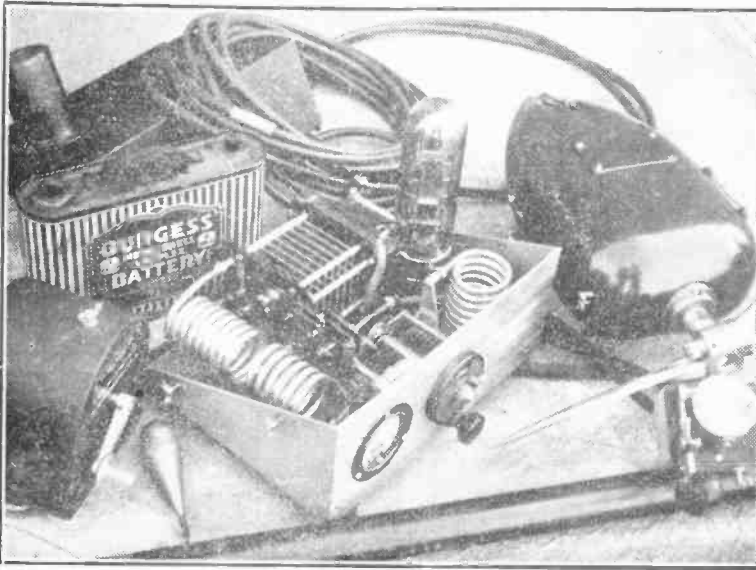
The cast case has four short legs or bosses, which are intended to be screwed to the generator foundation plate. This foundation plate generally takes the form of a steel

plate, the edges of which are turned up 3-8in. to provide stiffening. To this plate are welded short stream-lined tubing struts which terminate in clamps which pass around the longeron valves. The legs should be sufficiently high to permit the impeller blades to clear the fuselage by at least 2in. The base should be made of at least 10 gauge steel and the struts at least 1 1-8in. tubing of at least 20 gauge. The oil holes in the generator case should, of course, be up. The foundation resulting should be extremely rigid, as vibration of the generator may result. The blades are shipped set at 55 degrees, which is an average setting for 90 to 100 mile air speed, and should result in an impeller speed of 2000 to 2200 r.p.m. The graduations are six degrees apart, and should the speed require variation alterations in pitch can be made.

No special precautions are necessary in the care of the generator, except that it should be freely oiled. Over lubrication is impossible, and the oil holes should be filled before each long flight. In addition, the gear case should be filled to the height of the oiler. Ordinary aeroplane motor cylinder oil will serve for lubrication at all these points. As there are no revolving windings, slip rings, commutators, or brushes, there is nothing to be damaged by excess oiling.

The generator is provided with bar mag-





A photograph of the airplane radio outfit described in the accompanying article.

nets on either side of the case. These should never be removed, nor should the rotors be pulled out, or the halves of the case separated, as this will cause the magnets to become depleted. The bearings can be replaced without removing the rotors by loosening the set screws and sliding them out.

The bearings are made of "Durex," a porous material which permits the oil to pass through the bearings; so no oil holes are provided in the bearings themselves. Instead an annular groove is provided in the bearing carrier. This groove connects with the oil hole and serves to conduct oil around the outside of the bearing, permitting the oil to constantly seep through.

The thrust of the impeller is taken by a combined radial and thrust ball bearing. This bearing is packed with lubricant, which should be replaced from time to time.

TRANSMITTER.

The transmitter is supplied with shock cord which should be removed from the set and stretched tightly to form a cross upon which the sets rests, the clamps serving to hold the set snugly on the shock cords. The set should be well cushioned, but the cords should be stretched sufficiently tight to prevent sagging or too free movement of the shock cords.

The set should be hung near the floor or the fuselage, just aft of the aerial reel, making the aerial lead as short as possible without interfering with the reel or removal of the reel cover.

AERIAL REEL.

The aerial reel should be mounted on the side of the fuselage about 18 inches from the floor. The fairlead is provided with a slip cover which serves to cover the large hole near the reel. This hole is for the purpose of passing the aerial fish should it be necessary to replace the aerial while flying. The reel should be sufficiently high to permit the slide cover to be slid down the fairlead and completely uncover this hole.

The fairlead should slant aft at about 30 degrees from the vertical, as this is the position normally taken by the wire while in flight.

The hole should be a snug fit for the fairlead to prevent vibration or chafing at this point. After installing, the excess fairlead should be cut, permitting six to eight inches of free fairlead to project below the fuselage.

A chromium plated bronze bell is provided, which should be riveted to the end of the

fairlead, the rivets being filed flush inside.

The fish should pass freely in and out of the fairlead, and care should be taken that there are no obstructions to prevent such free movement.

The resulting installation should be reasonably rigid, especially while cranking the aerial reel.

The aerial wire should next be threaded through the contact block and passed through the hole in the reel drum and out the side hole. A knot at the end of the wire provides the necessary fastening. The wire should be all reeled in, noting that contact clamp is free in the reeling position. The fish normally is pulled inside the fairlead to prevent chafing when not in use.

KEY.

The key may be mounted at any convenient point, either on a bracket from the fuse-

lage wall or on a table. It may be conveniently screwed through the bottom of the case, or additional holes may be drilled in the side of the case.

The base of the key holds two switches for shorting the two halves of the generator separately, so that the set may be shut off while receiving, when not in use, or when changing valves. The generators may be short-circuited without damage, thus providing safe method of switching.

WIRING.

The aerial terminal on the base of the transmitter is a continuation of the aerial coil at the end nearest the plate coil. This should be connected by means of a rubber-covered automobile ignition cable, which is already connected to the aerial unit.

The case of the transmitter should be connected to a well-cleaned place on the fuselage. It is important that this contact be as good as possible, and should, if possible, be made to one of the main longerons.

Attached to the set will be found a length of triplex wire, which should be run to the key box and from the key box to the generator. The same color code is used throughout. The same three conductor cable is used to connect the generator with the key box. The black wire is the ground connection throughout. The black wire at the generator should be connected to the ground post on the gear cover. The red and white should be connected to the binding posts on the generator, and as the generators are identical the red and white wires may be connected to either post. The key and transmitter are shipped properly connected.

2BL Relays the Message from Byrd

ON SUNDAY AFTERNOON, March 31, at

4.10 o'clock, 2BL accomplished a very interesting relay. The American station, KDKA, had received a message from Commander Byrd to the American people, and the announcer requested him to repeat it, or send another one so that they could start up the long wave transmitter at KDKA to let American listeners hear the message from the famous explorer being relayed in the Morse code. At 4.10, when 2BL commenced the relay, the KDKA announcer was explaining his wishes to Commander Byrd. Both sides of the conversation were relayed by 2BL, KDKA in voice, and the replies from Byrd, WFA, Antarctic Station, in Morse, these signals being relayed by KDKA, the Morse signals travelling from the Polar regions to KDKA, Pittsburgh, Pennsylvania, and then back to 2BL.

G.P.S. Regatta

THE GREAT PUBLIC SCHOOLS' RE-

GATTA will be described through 2FC service on the afternoon of April 24, when the heats are contested, and 2BL will take up the finals on Saturday, April 27.

Popular Station Quartette

THE Station Quartet, Bertha Jorgensen and Myrtle Robertson (violins), Dorothy Roxburgh (viola), and Tasma Tiernan (cello), will give a light classical programme from 3.10 on April 17, which will include an adaptation of "Sally in our Alley," and some Scottish dances. Bertha Jorgensen will contribute a violin solo, with vocal items from Dawn Harding and Cecil Thompson.

RESULT LAUGHING COMPETITION

THE most popular competitor in the Laughing Competition, which was held at 2FC on March 28, was Mr. C. R. Hall—his laugh being voted as the best by the largest number of readers. The following was the order of preference:—

- C. R. Hall.
- Wally Baynes.
- Carlton Fay.
- R. A. Bartleman.
- Dorothy Dewar.

A large number of readers, however, guessed the order of popularity, and from these was drawn the entry of Mr. David Bussey, of 36 Northcote Street, Haberfield. The prize, of £2/2, will be forwarded to Mr. Bussey.

The second Laughing Competition appears to have been even more successful than the first competition, held at 2BL, entries having been received from every part of New South Wales, Victoria, and Queensland.



A corner of the Programme Department of the N.S.W. Broadcasting Co., where the programmes are arranged.

How Programmes are Built Up

The art of the entrepreneur has taken a big step forward with the development of the broadcast programme. How duplicate entertainment is arranged for 12 hours a day for every day in the year is told in this article.

OFTEN the listener has wondered what kind of sacred pundits design the New South Wales Broadcasting Company's programmes. What immortal hand or eye dared frame this dreadful symphony? Why do they never give exactly what is wanted, when it is wanted?

Perhaps the best method of answering these questions is by showing how programmes are built up by those simple souls who endeavor to work out entertainment for six sessions each day in the week, each week in the month, and each month in the year for the A class stations in Sydney.

The programmes are first considered in conference, as a skeleton ensemble of projected programme arrangements, in the form of headings. This must be just over five weeks before the date of the performance of the first week's programmes, but the programmes for that week have been growing for some weeks previously, in the form of advance notices of special events, such as important concerts, theatrical performances, sporting events, and other outside broadcasts.

Notifications of those are entered in the diary sometimes months in advance, and prior to the programme conference those advance pencillings, together with each station's minor commitments, and certain routine arrangements, are surveyed by the programme department, and worked up into a week's projected programmes. These programmes are then considered and confirmed, care always being taken to leave a number of elastic items which can be removed, or altered, in the event of some outstanding features suddenly arising for the date upon which any programme is being presented to the public.

It is interesting to note here that the New South Wales Broadcasting Co., Ltd., differs from the usually accepted plan of English, Continental, American, and most Australian stations. Practically all these fix definite programmes, and no matter what subsequently comes along, they will not alter their booked items. The Sydney stations, however,

feel that to give the best service to their listeners they must be prepared, even if it does mean wrecking their originally-arranged programmes, and additional work to the staff, to absorb every topical event that may be available for broadcasting. This is why experts who have visited Sydney are astounded at the number of outside points from which the A stations here pick up performances. If the listening public knew just what has been made available to them in the way of topical broadcasting as a result of this policy, the occasional complaint which reaches the studios in regard to non-adherence to the advance programmes which have been circulated would never be made.

It might be thought that five weeks of preparation covers too long a period, but those who have been connected with the older branches of the concert and entertainment industry know of the difficulties that have to be faced. Forward booking of artists who may be in demand in other directions presents a problem even greater in the case of the New South Wales Broadcasting Co., Ltd., than with other stations where the practice of multiple bookings is in vogue. Those controlling the Sydney station programmes set their faces against putting the same artist before the public time after time throughout one week, preferring to book at regular intervals spread throughout each year.

The first step in carrying into effect the projected programme is to decide what type of artists will be wanted, and what individual artist will be engaged, what special items, if any, and what amendments and alterations will be attempted as they arise. Both the type of artist and the actual artist engaged have to be watched from the point of view of frequency and repetition. It is frequently found that when a particular artist is wanted for a special feature the artist finally chosen is a third or fourth choice, owing to the others not being available.

One of the greatest tasks that has to be faced, after the artists have accepted, is the scrutinising of items sent in, censoring them when required, correlating them with the

necessities of the programme timing, and with items already accepted from other artists for the same week. Time and again items have to be deleted owing to the distinct tendency of most artists wishing to sing the works of some composer who has become fashionable for the moment. The correct timing of programmes in itself is a work that would stagger the average listener if shown the complications which arise when an attempt is made to prevent duplication from the two stations.

It often happens that practically no details are available when the programme department sets out to have many of the advance programmes typed. This means an enormous amount of time wasted in beating up. Negotiations have to be carried out very often in regard to copyrights covering musical productions, plays, and sketches, and personal jealousies and differences between temperamental artists have to be considered.

After the programmes have been typed in what is hoped to be their final form, they are circulated to the various sections interested in their production. In the case of the music, productions, education, children's, sporting, and talks sections, the survey takes the form of a check of any detail with which that section is concerned, and secondly, general comments on any subject with which that section may be assumed to speak with authority. Very often a programme has to be dismantled when it is shown upon a second examination that from the point of view of balance and other general considerations it has failed to present an acceptable ensemble.

When the programme has been finally accepted, each section has to map out its plans for production. The studios have to be allotted, times given for rehearsals, both in rehearsal room and studios, men have to be appointed to the outside shows, both for production and mechanical transmissions, transit arranged to the various sports grounds, and, above all, the testing of lines to all the points for which transmissions are to be taken.

(Continued on Page 20)

World-wide Reception of 3LO on 31.55 Metres

How the short-wave transmissions of 3LO have become world-famous is indicated in the short article below. Other Melbourne notes.

(By Our Melbourne Correspondent)

FROM almost every country in the world regular reports are received by 3LO Melbourne, of satisfactory reception of the weekly short-wave broadcasting from that station, which takes place on a wave length of 31.55 metres every Monday morning from 5 to 6 o'clock, Melbourne time (corresponding to 19.00 to 20.00 o'clock G.M.T. (Sunday).

Hinkler Listens

Recently Captain Bert Hinkler, the famous aviator, startled the world by listening to 3LO from an aeroplane flying high over London, and other listening stunts have been carried out in the centre of the Empire by Mr. C. G. Allen, who tuned in 3LO whilst driving in a saloon motor car in the noise of the traffic outside St. Paul's, London, and afterwards in The Strand.

In Ice-bound Alaska

A listener at Nome, Alaska, reports regular reception of loud-speaker strength not only of the short-wave service of 3LO but of the ordinary long-wave transmissions from that station and at a lonely mission outpost in Tananarika. Specialized listeners gather to hear the special Government news bulletin issued from Copenhagen exclusively for broadcasting by 3LO—the importance of the world broadcasting being thereby officially recognised.

The Prince of Siam

His Royal Highness Prince Purachetra of Siam is an enthusiastic listener to 3LO and evinces great interest in broadcasting generally, especially as an important medium for bringing about a better international understanding. Reports come to hand from the Pacific slopes of California and from the deserts of Asia and Africa whilst from 3LO voices from the south are listened to in Northern Scandinavia and in the Holy Land at Jerusalem, and also at Damascus and Baghdad. Japanese and other Eastern radio journals frequently refer to excellent reception, and in America 3LO is regarded as one of the foremost short-wave services in the world.

Germany and Spain Re-broadcast

Re-broadcasting of the 3LO programmes is carried out in Munich and Berlin, in Germany, and also at Barcelona in Spain. Australia by its peculiar geographical position is admirably situated for world broadcasting trials. It has been said by a prominent scientist that 3LO is becoming an important link between the nations. This fact is abundantly demonstrated by every overseas inward mail, which brings to the big Australian station hundreds of letters in almost every language, from the four corners of the earth, indicating that the world listens to 3LO Melbourne.

Seymour Broadcast

A SPLENDID programme, which will be broadcast by 3AR, has been arranged to mark the opening of the Seymour Town Hall on April 17. The famous trial scene from "The Merchant of Venice" will occupy the greater portion of the programme, and will be interspersed with appropriate vocal and instrumental numbers.

Cinders

A VERY human little one-act play, "Cinders," will be broadcast from 3AR on April 18 by those two popular artists Mr. and Mrs. Maurice Dudley. The play concerns the fortunes of Jack Warren, a briefless barrister, who is in love with a charming girl, and who is silently worshipped by the little maid of all work, Mary Ann, or "Cinders." Two lottery tickets are sent to Jack, who gives one to Cinders in return for many little kindnesses she has shown him. As may be guessed Cinder holds the winning number, but she changes the tickets in order that her hero may become rich, and marry the girl of his heart.

Football Again

THE talk to be given by Rod McGregor from 3AR on April 18 will be eagerly anticipated by hundreds of listeners, for it will mark the opening of the football season. Rod will give a brief resume of past football and anticipate the prospects of the coming season. The first match to be described over the air is the Victorian Football Association match, Northcote v. Preston, which will be played at Northcote Park, and described by 3LO.

Successful Conductor

FREDERICK EARP, the conductor of the Heidelberg District Musical Society, which is broadcasting from 3LO on April 15, was for some years musical director of the Victorian Education Department, and was well known on the Melbourne concert platform as a baritone vocalist. He received his early musical training in England, and claims to be a co-founder, with Mr. Gibson Young, of community singing in Melbourne, and was the first community conductor.

A Canny Scot

NAMMY SHIELDS, popularly known as the Canny Scot Comedian, will be commencing a short season at 3LO on April 15, when his original type of humor will be much appreciated by the hundreds of his fellow countrymen who will be listening. He has been before the public for over twenty-eight years.

Radio Festival Special Broadcast

IN connection with the Radio Festival which is being held at the Melbourne Exhibition Buildings from April 13 to April 20, 3LO has arranged for some attractive programmes to be broadcast "on the spot," so that country visitors to the festival may see how affairs are conducted in a broadcasting studio. On the Monday and Friday of the festival week community singing and items from the Radio Revelers, under the baton of Ern. Hall, will be given from 8 to 8.30, and on Wednesday Dawn Harding and John Hobbs will contribute vocal numbers.

Musical Society

A PROGRAMME of choral music will be broadcast from 3LO on April 15 by the Heidelberg District Musical Society, under the conductorship of Frederic Earp. A cycle "Song of the English Peasantry," with Frederic Earp as soloist singing "Widdicombe Fair," will be followed by a setting of old madrigals by Purcell, composed in 1676, and sung unaccompanied. The Ladies' Choir will render the Irish Folk Song, "Follow me down to Carlow," and the full choir will be heard in a choral arrangement of "Come to the Fair." Appropriate instrumental items by Bertha Jorgensen (violin) and Agnes Fortune (piano) will complete the programme.

Beethoven Recital

A GRAMOPHONE recital will be given from 3AR of Beethoven's Symphony No. 7 (Opus 92), played by Felix Weingartner and the Royal Philharmonic Orchestra at La Scala Theatre, London. This is one of the most popular of all the master's works, and, as an accepted masterpiece, has been placed among the first symphonies in the world of music. It may be recalled that it was composed in 1812, and was first performed the following year at a concert arranged for the benefit of soldiers wounded in the Napoleonic wars. The composer conducted, and the work made a great impression. In lighter vein, the recital will conclude with vocal selections from Edward German's "Merric England."



THE CHEER-UP SOCIETY, organised and conducted by Frank Grose, of the Y.M.C.A. through 2FC, now numbers hundreds of children, who have formed a choir, an orchestra, and whose catchword is "Cheer-up" to everyone and everything. The Society is heard through 2BL children's sessions on the second and fourth Sundays of the month.

The Sverjensky Instrumental Ensemble, which will be heard from 2FC during lunch-hour sessions this month. Right to left: Louis Blitz, Jules Van der Klei, Alexander Sverjensky, Robert Wood, V. Beresniakoff, A. Podinovski.



:- Can Poetry Be Broadcast? :-

An interesting article on a subject which is suggested by a recent experiment at 2FC.

AT varying periods throughout the year requests reach the New South Wales Broadcasting Company, Limited, asking why the presentation of poems occupies such a small space in its programmes. Following the presentation of the fantasy written round the picture, "Ménin Gate at Midnight," in which the poems of Rupert Brooke were so appropriately blended, another batch of requests have reached the company asking for more frequent use of such beautiful verse. The great difficulty, however, is that poetry is seldom well read. For this reason, and because the present age is inclined to view any emotional performance with disfavor, the poetry reader finds small scope for his abilities. The art has atrophied by disuse, and the misuse of it by some soulful people who passionately misinterpret the poets has resulted in a reaction against all forms of poetry-reading. Yet poetry is written to be spoken; and, although there will always be some who maintain that it can best be appreciated by the eye, the vast majority will only respond to its beauty when the voice gives life and coherence to thought, phrase, and rhythm.

A reader is faced with many difficulties. The appreciation of poetry is in itself largely an affair of mood and temperament, whilst the criticism of a reading will depend not only upon the reader's voice and personality but also upon the response awakened by the poems selected in the mood and attitude of mind of his audience. Visual imagery, for instance, will evoke a reader's appreciation than abstract poetry; the ballad will probably prove more popular than the sonnet; and always the criticism of a reader will be colored by the personal tastes of his listeners.

Styles of poetry-reading range in an infinite number of gradations from the declama-

tory to the intimate, from passionate emotionalism to the well-bred monotone, which, in the opinion of some, "lets a poem speak for itself." Somewhere within these extremes lies what Yeats has called "the subtle monotony of voice, which runs through the nerves like fire"—the perfect harmony of voice, rhythm, and expression which interprets and vitalises a poem. If poetry is to be read at all, the microphone provides an ideal medium. The listener is under no compulsion to hear it, he is not tied to his chair by the fact that he has paid for it, or by politeness to a poetically-minded friend. He can listen to as much or as little as he pleases, and his attention is not distracted by unusual surroundings—if he is held at all, he is held only by the beauty of the poem conveyed by the reader's voice. Here the ideal is postulated: voices which can fully convey the beauty of poetry without disturbing the listener's conceptions are unfortunately few and far between.

The reader at the microphone must, however, be possessed of certain qualities which to the ordinary reader are not essential. In the first place, he must remember that he is a voice, and a voice only, no trick of gesture—though readers at the microphone frequently, from sheer force of habit, waste their energies in gesticulation—no advantage of appearance, no facial expression will further his cause one whit; all he conveys must be conveyed only by the subtleties of tone within the register of his voice. Just as a blind man will be quick to detect a false note in music, so the wireless listener will unflinchingly respond to the slightest lack of conviction, hesitation, nervousness, or boredom in a reader's voice. Should he dislike a poem ever so slightly, his listeners will be aware of it, should he not fully grasp the

meaning of a line, the sense of it will be lost upon his audience; should his attention waver but for a moment, the attention of his hearers will be immediately distracted. The point cannot be too strongly emphasised. It is the reader whose attention is passionately concentrated upon his subject, whose sense of it is so strong that a constant series of visual images are called up to his mind as he reads, who will send a spark across the ether and set fire to the minds of his listeners.

As far, then, as one can dogmatise on so thorny a subject, the qualities of a good reader are: firstly, the ability to read fluently and with restraint; secondly, a love and understanding of the subject; thirdly, a pleasant voice; and lastly "voice-personality." The combination of these qualities is unfortunately rare, and until "voice-personality" is developed to a far greater degree than at present time poetry will remain a rare item in programmes.

"Mary Rose"

THE H. W. VARNA COMPANY is producing Sir James Barrie's play, "Mary Rose," at 2BL on the evening of April 24. In this Barrie makes another fairy-like incursion into the realm of fantasy in which we are introduced to a Scottish Isle—"The Island that likes to be visited"—and the kindly folk, Mr. and Mrs. Morland, a genial old acquaintance, Mr. Amy, and the hard-headed gillie, Cameron. "Mary Rose" is taken by Meg Service, and Simon by H. W. Varna. A chain of eerie incidents is welded in the forge of Barrie's master brain, and under Mr. Varna's careful supervision this should prove one of the best radio plays the company has yet produced.



Mr. Frank Ryan

WHEN Mr. Frank Ryan is in evening dress he reminds us of nothing so much as a perky little willy-wagtail with a sense of humor. He hops gaily about, from one story to story, anxiously holding his head to side for your approval, which always comes spontaneously, for when Mr. Ryan's stories are good, they are very, very good; and when they are bad, they are even better.

Mr. Ryan began in the fool business by producing plays at Lewisham, a suburb of Sydney noted for its gardens, its graces, and its girls (same things). His first show was the Irish "Handy Andy." Afterwards he played with Repertory Societies in a series of Pirero's comedies, and others, and became principal comedian with the Petersham Choral Society, the Railway Musical Society, the Eastern Suburbs Musical Society, and the Sydney Operatic Society. Then he played in several costume comedy companies; eventually producing a show known as "The Light Blue Dandies." For the past fifteen or sixteen years he has been well known as a concert artist, and during this time he has managed to appear in every big town in New South Wales, and in Melbourne and South Australia. Four years ago Sydney artists gave a concert in special recognition of his services to charity.

He has been in the broadcasting antennae for two years, and one half; and has become remarkable chiefly for his excellent dramatic stories, his cockney character studies, and his marvellous and (we hope) intuitive knowledge of the habits of the human mind while under the table or the influence of fermented and spirituous liquors. From which there hangs a tale: Mr. Ryan was to appear at a concert in St. James Hall. Instead of walking on to the stage in a sober and respectable manner, he staggered on, and began, in his most maudlin style, to entertain his audience. Whereupon, a certain Sydney Knight, who was sitting with the committee on the stage, disappeared hurriedly into the wings. Mr. Ryan finished his act, and proceeded to the dressing room, where he met the knight. "My dear Mr. Ryan," said the knight, "I have to apologise to you. When I saw you reeling on to the stage I thought you were drunk, and went immediately to the secretary to have you removed; but he assured me that you were absolutely sober. I am very sorry that I made such a mistake." Which was, in fact, a most knightly apology; and one which made Mr. Ryan, as an artist, very proud.

"It is very hard to put humor on the air," says Mr. Ryan. "You don't see your

PROGRAMME PERSONALITIES

audience, and you can't tell whether you're touching your audiences' funny-bone or not. When you have rows of faces in front of you, you can tell whether your jokes are going over; and if they aren't, you can re-emphasise the point or switch on to a different kind of story.

"On the air, I find that the serious side of humor—the character side—has most appeal. People seem to be more interested in the human comedy of character studies based on life than in the mere smartness of a witty story. This kind of humor touches everyone, both in the town and in the country; and I have always found it hardest to please the country people. Also, I think that music provides a very necessary background to broadcast monologues. It is impossible to over-rate the merits of a good accompanist." As he said this, Mr. Ryan smiled at Mr. Vern Barnett, who had just come in. "My halo on straight?" inquired Mr. G. Vern Barnett.

Perhaps Mr. Ryan's most eager listener is his little son, Lawrence, of whom he is very proud. Whenever Daddy begins a story, Lawrence begins to laugh. As he says, "If Daddy tells it, it MUST be funny."

Donald M'Beath

MR. DONALD M'BEATH was once a small boy, and lived in Tasmania, although we understand his birthplace to be Sydney, New South Wales, in this fair land of ours. Honor where honor is due.

But it was in Tasmania that his abilities to tame the muses with a fiddlestick commended themselves to some visiting musicians who advised his parents to send him to Melbourne. He studied and stayed with Alberto Zelman for some years; and then became the first pupil of the Scandinavian professor, Felix Gade, whom he still regards as the greatest violin teacher to visit Australia. Under the Gade guidance he gained several Ormond Exhibitions, of which we know nothing more than that they enabled him to continue his studies at the University, and gave him an opportunity to appear at some of the successful University Conservatorium concerts.

Mr. John M'Cormack, a singer of some note, heard him play at one of these concerts, and was so impressed by his musical ability that he asked Mr. M'Beath to tour with him as solo violinist. The partnership lasted twelve years.

Mr. M'Beath has appeared everywhere—in England, on the Continent, and in America. He has appeared with Caruso, Tetrizinni, Galli Curci, and, as he puts it, other lesser lights.

"John M'Cormack and Caruso," says Mr. M'Beath, "were wonderful pals, a thing not usual between tenors. Caruso would have

given anything to have been able to produce the soft head notes of M'Cormack; and M'Cormack would have sacrificed everything but his soft head notes to be able to produce the swelling volume of Caruso. John M'Cormack's top notes, by the way, are not falsetto, as is generally believed."

Mr. M'Beath's pleasantest memories are of America, where he spent many musical hours in the company of Kreisler, Casals, the 'cellist-conductor, Harold Bauer, the pianist, and the Prelude Rachmaninoff—we mean to say—rather a gathering of talent and all that sort of thing, you know. And he was with Kreisler when Kreisler was composing many of his shorter pieces. Mr. M'Beath played the violin parts while Kreisler corrected the accompaniments at the piano.

He was the first Australian to broadcast to America. That was in 1920; and even then, the American radio world was well advanced, and most of the cafes had installed loud-speakers.

"I haven't played in public very much since the war," said Mr. M'Beath. "My little finger, you see, the tendon is severed." He held out his hand, and his little finger stuck out stiffly. But anyone who has heard him through 3LO or 2FC will be very surprised to hear this, we feel certain; because it has certainly not affected the quality of his playing.

Famous Australian Pianist

LINDSAY BIGGINS, the clever young Australian pianist, who will be giving a series of recitals from 3AR and 3LO, has just



Lindsay Biggins

returned from his musical studies in Germany, and draws a vivid little word picture of the musical home life of the average German family. "The first thing that struck me," he said, "was the entire absence of anything approaching 'jazz.' When men or women wish to sing about their work, they select an extract from opera or a German folk song. In the family circle, it is just the same, particularly in Bavaria: even the youngest members join in the folk songs that are sung every evening, and are steeped in the history of their national folk lore. Every home, however humble, has a very real and distinctive musical atmosphere which is most contagious." Mr. Biggins played at many concerts in Germany, creating a most favorable impression, and listeners will be glad to welcome him to his Australian home.

THE MICROPHONE PRESENTS

Anzac Day Arrangements—2FC-2BL

Shakespeare

TO CELEBRATE THE SHAKESPEAREAN ANNIVERSARY on April 23. Mr. G. Vern Barnett is arranging a special programme featuring the immortal bard's works which have been set to music. Mr. S. H. Bowden has discovered a considerable number of interesting features to include in his address. "Shakespeare once again," and the artists to be associated with Mr. Barnett are Leonore Gotsch, Lance Jeffree, Amy Ostinga, Raymond Beatty, Bryce Carter, Lloyd Davies.

For the Bigger Boys

THE NEW SESSION which has been introduced at 2BL on Tuesday of each week, at 6.15 p.m., when Mr. Norman talks to the bigger boys, has created widespread interest. It is Mr. Norman's intention to arrange for visits to various points of interest, provided there is sufficient response from his young listeners, but it will be necessary to obtain the co-operation of at least two hundred boys before the scheme can be put into effect. The first trip proposed is to a motor car factory, and the young people will be asked to write an essay on their impressions, for which a prize will be offered. All boys who would like to participate are invited to write to Mr. Norman, and he will let them know through the session what arrangements have been made.

Luncheon Hour Recitals

ON APRIL 15 the Sverjensky Instrumental Ensemble will inaugurate a series of weekly lunch-hour chamber music recitals, to be held each Monday in the Aeolian Hall.



Alexander Sverjensky, leader of the new Instrumental Ensemble.

Pitt Street, from 1 p.m. to 1.50 p.m. The object of this talented combination, which consists of A. Podinovski (first violin), N. Beresniakoff (second violin), Robert Wood (viola), Jules Van der Klei (cello), Louis Blitz (double bass), and Alexander Sverjensky (pianist), is to perform an entire work at each recital, and on April 15 Schubert's Trout Quintette will be given. This is one of the most melodious quintettes ever written.

The vocalist is Miss Gwen Selva, who will sing some of Schubert's songs. 2FC listeners will therefore have an opportunity of hearing a first-class Schubert concert.

Alexander Sverjensky and Jules Van der Klei are already well known on the air. Podinovski and Beresniakoff are talented violinists, who have travelled extensively in Russia, China, Japan, and Java. Robert Wood was principal viola of the late Williamson-Melba Grand Opera orchestra. Louis Blitz, who is Professor at the Sydney Conservatorium, was a member of the Queen's Hall orchestra (London) and the San Francisco Symphony Orchestra. His work as double bass soloist is acclaimed as outstanding in Sydney's musical circles.



Major-General Sir Charles Rosenthal.

All-Australian Programme "Wireless Weekly" Competition

ON ANZAC DAY, the national day of the Australian people, the offerings through both 2BL and 2FC will be as nearly "All Australian" as possible. In pursuance of this object, the morning will be devoted to important official ceremonies.

The inauguration of the Australian War Memorial at Canberra, commencing at approximately 10.30, will be broadcast by 2FC, and 2BL will undertake the function at Queen's Square, between 12.0 and 2.0. Captain A. C. C. Stevens, in association with Mr. Y. Tilton Brown, who has devoted considerable time and thought to their radio tribute to the memory of the men of Anzac, and Major-General Sir Charles Rosenthal, K.C.B., C.M.G., D.S.O., etc., has courteously consented to give an address on "The Spirit of Anzac" which is timed approximately for 1.5 (2BL service).

The function under the auspices of the Anzac Fellowship of Women, to be held in the basement of the Town Hall, will be broadcast by 2FC in the afternoon. In the evening it is aimed to include only Australian compositions in the programme. The Hon. the Prime Minister (Mr. Bruce) will address 2FC listeners from Canberra at 9.0 p.m.

Through 2BL service a unique "Anzac" Competition will be held, in association with "Wireless Weekly." Listeners are invited to send an authentic story in connection with Gallipoli, sufficient to cover the back of a postcard, and there will be three prizes for the three best stories received. These will be read by Scott Alexander, who has also written a sketch typical of the occasion.

Through 2FC Lillian Frost and Esther Kahn will give an organ and piano recital of Australian music; and Marsh Little, the well-known composer of "Boys of the Dardanelles" and other popular Australian songs, will contribute to 2FC's programme. The favorite 2BL artists, W. E. Lewis and Dorrie Ward, are busy preparing songs characteristic of the famous day.

D.J. Ball

THE SHAKESPEAREAN BALL, to be held at David Jones' on the evening of April 22, will be described through 2BL service. The vivid pageant should provide excellent material, and through the magic of the microphone and 2BL's capable announcer, country listeners many hundreds of miles away will have an opportunity of visualising the brilliant spectacle. Cec. Morrison's Band will provide the dance music.

Organ Recitals

JESLIE HARVEY'S CHRISTIE ORGAN

RECITALS are proving one of the most acceptable features of 2BL's programmes. Apart from his artistic merit, as a broadcaster Mr. Harvey is unique. He arranges his items with meticulous care, and exercises a nice discretion in the matter of radio suitability, with the result that listeners to a man are clamoring for more. He submits each programme, timed to the minute, long before it is required, thus earning the heartfelt gratitude of the programme department, which spends half its harassed days in pursuit of temperamental artists who never know what they will feel like doing. Mr. Harvey is devoting special care to his numbers for Anzac Sunday, April 21. The recital will commence at 8.30 p.m.

Southern Choral Society

A SACRED programme will be broadcast from 3LO by the Southern Choral Society, under the direction of Graham Burgin on April 14. In addition to a brief talk on the history of the three beautiful hymns, "Tell me the old old story," "Lead Kindly Light," and "The Sands of Time," the choir will give the Gloria from Mozart's "Twelfth Mass," and, in conjunction with the Brunswick City Band, under the baton of Hugh Niven "The Hallelujah Chorus."



Graham Burgin.

Classical Programme

THE CLASSIC PROGRAMME arranged by Frank Hutchens and Cyril Monk on the evening of Wednesday, April 24, offers 2FC listeners a musical treat. The assisting artists are Mr. Clement G. Williams, Florence Yates, and Rosamund Cornford. Mr. Hutchens and Mr. Monk, both artists of long broadcasting experience, and well known to 2FC listeners, have arranged this programme with a view to obtaining the best results over the air, and a really artistic offering will be presented. In the short interval between the first and second parts of the programme, "The Storyteller" will do much to disprove the theory that the spoken word on the air is a lost art.

Wireless Weekly

Incorporating "Radio in Australia and New Zealand."

FRIDAY, APRIL 12, 1929.

VMZAB

WHAT happened to the Southern Cross's radio?

This question has been on the lips of a thousand people during the past week, and has begged as many replies. Did it just peter out? Was the power supply suddenly cut off? Were the valve filaments merely broken by a bumpy landing? Did the 'plane crash?

"I have been hopelessly lost in dense rain for ten hours. Now going to make forced landing at place we believe to be 150 knots from Wyndham, in rotten country. Stop. Wish us luck. Will communicate as soon as possible. Cheerio.—Ulm."

The signals then stopped and hundreds of short-wave fans as well as the official operators were held silent in an agony of suspense. But nothing more was heard.

The suggestion that the trouble was merely located in the radio set was soon dismissed. Mr. Allsop, who helped to install the outfit, points out in his article on the Southern Cross radio in this issue, that, in a forced or even bumpy landing, the radio would have been undamaged.

The radio outfit was specially constructed for 'plane emergencies, and its design was complete only after exhaustive tests in a famous laboratory. It is similar to that used by Byrd in both his expeditions, to that of McMillan, of Hurley, and many others. Unfortunately this knowledge can only confirm that which we all fear, but which we will not accept until all hope has been extinguished.

One thing is certain. Whatever happened we would have had no idea that anything at all was amiss as soon as we did without radio. The sudden, unannounced, unexpected cessation of the radio signals, which up to that time had been constant, was probably the most dramatic and foreboding pause in the history of Australian radio communication. But it called the attention of everyone to the accident, whether large or small, and drew help in the shortest possible time.

That much at least we have to thank radio for.

CRITICISM A COMPLIMENT

IT is really a compliment to the popularity and success of the broadcasting services that there is always ready criticism to be found of the programmes. Indeed, it would not be a good sign if the services were accepted without comment or criticism.

Of course, there is useful comment and worthless criticism. Not that such a condition is surprising; to be able intelligently and constructively to criticise the preparation and rendition of the programmes calls for a good general knowledge and balanced judgment. If the programmes consisted of one type, dealing with music of a particular character, or of talks and lectures alone, the opportunities for criticism, even severely adverse criticism, would probably be easier. But when we reflect on the subject and examine the diversity and number of items contained in the programmes of a station like 3LO, Melbourne, it will be at once manifest that a fair and reasoned judgment would have to be given by not one, but a number of observers in consultation.

The services are necessarily comprehensive. In order to cater for the desires and preferences of the widely differing listening audience. There is no comparison in any similar service, if, indeed, there is a similar service; no other activity is designed to serve all classes, all types of intelligence regularly. And in the maintenance of a service prepared for all and sundry the broadcaster must constantly and carefully see that in catering for one section or class, he does not offend or irritate another group of listeners. Occasionally an isolated item is taken out of the constantly changing programmes and objected to by a listener. His criticism may even be reasonable if it could be judged without due relation to the other items. But therein lies the seat of the

trouble; one cannot reasonably pick out this or that item, and, on the score of its unsuitability to an individual listener, condemn wholesale the service of the station. Yet that is exactly what some critics do.

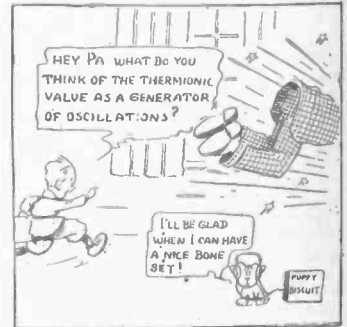
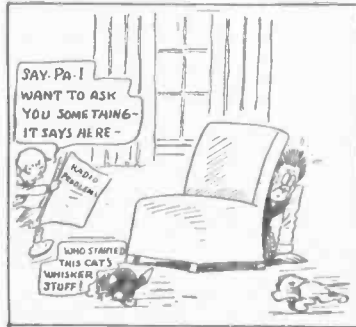
The broadcasters apparently are not worried about the critics; and fortunate it is if they go on with their work undeterred by any criticisms other than that which contains useful suggestions. If they were to be influenced by the opinions expressed, and endeavored to adjust the programmes to suit the critics there would be confusion and stagnation.

It is the portion of all broadcasters to have numerous critics. Australian listeners are not singular in their active interest in the programmes. The British Broadcasting Corporation, with the efficiency of the services it can render, owing to the availability of talent and the revenue to make use of the talent, is not free from criticism. The English newspapers have their letters complaining of the programmes, just as we have in Australia; in Germany and America, similarly, the listener-critic rushes into print and airs his opinions of the services. Apparently it is everyone's privilege to condemn or praise the broadcasting services from his individual standpoint. Likewise, it is the privilege of the broadcasters to realise their obligation to the community at large, and not to cater preferentially to a section.

Inter-State Relays Abandoned

OWING TO THE INABILITY of the New South Wales Broadcasting Company to secure satisfactory land lines through which to carry out the inter-State relays, which were programmed for various dates throughout the month of April, these have been regretfully abandoned.

The Young Idea "Gets" Radio - - - No. 5



THE SAFETY VALVE



Readers are urged to express their opinions on matters pertaining to broadcasting. If you have some grievance, if you have some constructive criticism to offer, here is your chance for expression—your safety valve. The

editor assumes no responsibility for statements made by readers and published on this page, as opinions of correspondents do not represent our editorial policies or beliefs. Anonymous letters are not considered.

International Radio Speech

Sir,—From time to time one has one's attention drawn to the important question of a common language for the world in general and for radio in particular, i.e. a common auxiliary language for international use. The language problem in this special sphere of international communication is made the subject of articles from various writers and contributors; and these literary endeavors may be perused in any one of the numerous radio publications.

In some articles honest attempts to relieve the present strained situation are discernible, while in others lack of knowledge (combined with, in many cases, a desire to misrepresent) obviously nullifies the endeavors. As an Esperantist, I am naturally attracted to such articles; and being so, firmly believe that the international language, Esperanto, will finally settle the argument connected with international radio speech, as it will solve the same linguistic problems in many other fields. Many writers when dealing with the question of international radio speech support this view, but, on the other hand, many would, by unfair implication, have the public opine that this splendid language, admirably suited for the purpose, is unworthy of serious consideration and further mention. Space does not permit of my putting forward all the points in the defence of Esperanto, but it will suffice to say that from 177 radio stations in 33 countries, Esperanto items have, up to a year ago, been broadcast to the radio public, and this number has been augmented since then.

This is merely one indication—there are scores of others—of the growth and the universality of Esperanto, which has been rightly termed the radio language; and the fact mentioned is sufficient proof that radio enthusiasts would be well advised to think for themselves and to investigate the question thoroughly, before accepting as bona fide every statement issued. The problem on account of its importance merits this.

Supported by the findings of the world's most important organisations of all kinds which have pronounced in favor of Esperanto, I have little doubt, as a free-thinking Britisher and an Esperantist, of the logical conclusion at which any serious investigator would arrive.

WM. H. KING.

Wellington, N.Z.

Murderer !!

Dear Sir,—I noticed in last week's Safety Valve an outcry about station 2KY's announcer. Well, I listen a good deal to this station, as I find it better than the stations which receive our listeners' fees, and I can safely say that Mr. Herbert Beaver is as good an announcer as in the whole Commonwealth.

Possibly "Bo Buer" tuned in to this station when Mr. Beaver was absent, and did not know that it was not the regular announcer. I, too, have cause for complaint at this murderer of King's English, who takes Mr. Beaver's place. Just a few examples: "I'm

gonna play a number, and I 'opes you like it." "I was walking down the street the other day, and I sees a suit on a man what stands out from any other I 'ave seen." I think that this person should be given a situation as far away from a microphone as possible.—Yours, etc.,

Ultimo.

"ONLOOKER."

He Didn't Know It

Dear Sir,—I listen-in most nightly to station 2FC. To 2KY and 2BL, and also 2GB. I have a go at Hobart and Adelaide and Perth; I'm quite sure I once got Holland, or some such place on earth. But wireless fans, like anglers, they tell such awful crams—How they played a ten pound schnapper and then the reel it jams. I tried for Mars with one valve, but static was too bad; Perhaps if I'd got them I should not have known I had. I like the local stations—the "Hello Man's" a treat. And Charlie Lawrence holds a crowd—his wit is hard to beat. The man who gives the health talks, he surely takes the egg; He never really seems to know that they just pull his leg.—Yours, etc.,

Ashfield.

P.D.O.

Dose of Poison

Dear Sir.—I disagree with License No. 99331, who advises one of your good readers to take liver pills. Most normal people who listened in to 2FC on Sunday night (24/3/29) between 7 and 8.30, possibly felt like taking a nice, refreshing dose of poison.

These Sunday programmes are absolutely "horror"; if it is not a dreary, sleep-producing church service, it is some ultra heavy stuff that makes life dismal. When one hears an occasional light number (invariably from the Manly Band) it has the effect that monkey glands would on a centenarian.

Unfortunately, we have no alternative. Surely these religious people would be content with one station on church services. With due respect, I do not expect jazz or comic opera, but give us something of interest, or at least something of educational value, history, travel, etc.

With reference to the ballot conducted some time ago, no doubt religion did top the poll, but it would be of interest to know what effect it had on outsiders, who had anticipated taking out a license. I fancy much to the detriment of radio finance.—Yours, etc.,

"6261",
Naremburn.

Played at a Cemetery

Dear Sir,—In reply to J. J. Vincent. I think he must be a banjo player; with such a saintly name he should play a harp. Vincent says banjos sparkle you up a little. I think they should be played at a cemetery; otherwise there are no good players being broadcast. Mr. Vincent is right about tuning in another station, as I do; but I like 3LO as well as the rest, except for the beastly banjos.

As for the chess Mr. Vincent is quite wrong. It would not take up a page, but only one-eighth of it. It is also a good game, and makes one think a lot, which is good for radio fans. I am not crazy about the chess problems, but made only a suggestion. I would just as soon have technical matter if there is no space in "Wireless Weekly." You must also know I am not an old man, and do not care for bowls just yet, as I am only 21 years old. Perhaps I could send you some marbles to play with, or next Christmas I'll send you a Jew's harp. "Good music," Mr. Vincent.

Now regarding "Fed-up." I quite agree with him on what he says about Mr. Pim and Miss Pam at 2BL. We hear enough nagging at any time without the rubbish they speak; cut them out altogether. "Also horseracing." It's the same with 4QG. They mag every night until 8 o'clock, giving such rot as lectures on photography, etc. Cut them out, too.—Yours, etc.,

LEWIS HAZELL.

Nasal Rendition

Dear Sir.—Several listeners have appropriately replied to the "Fed-ups," etc., but still they rise. So I am one who is willing to close down my set for a period of seven days, and ask the broadcasting stations to present the following programmes for "Fed-ups," etc.

Station to open up at 6 a.m., and without announcement to play the following records:—"Hallelujah, I'm a Bum." "Francie and Albert." "The Prisoner's Song." "Get Away, Old Man." "It Ain't Gonna Rain No Mo." and as many Yankee nasal renditions of rag as can be found to be repeated until midnight, continuing the same throughout the seven days. Then we shall see and know all the "Fed-ups," etc., by the dawn of intelligence on their features.—Yours, etc.,

Glebe. LICENSE No. 195312.

Best Announcers

Dear Sir.—Have noticed a lot of complaints in "Wireless Weekly" about announcers. With regard to G.D.S. (Greenwich), it is my opinion that such people are not worth bothering about.

I have listened to every station, and without any boasting, 2FC is best, and has the best announcers. They never alter or put airs on.

Their transmission is always clear. I wish they would put that imp of a "Mike" on again. I hope that others will suggest the same. He was better than all the entertainers they can get.—Yours, etc.,

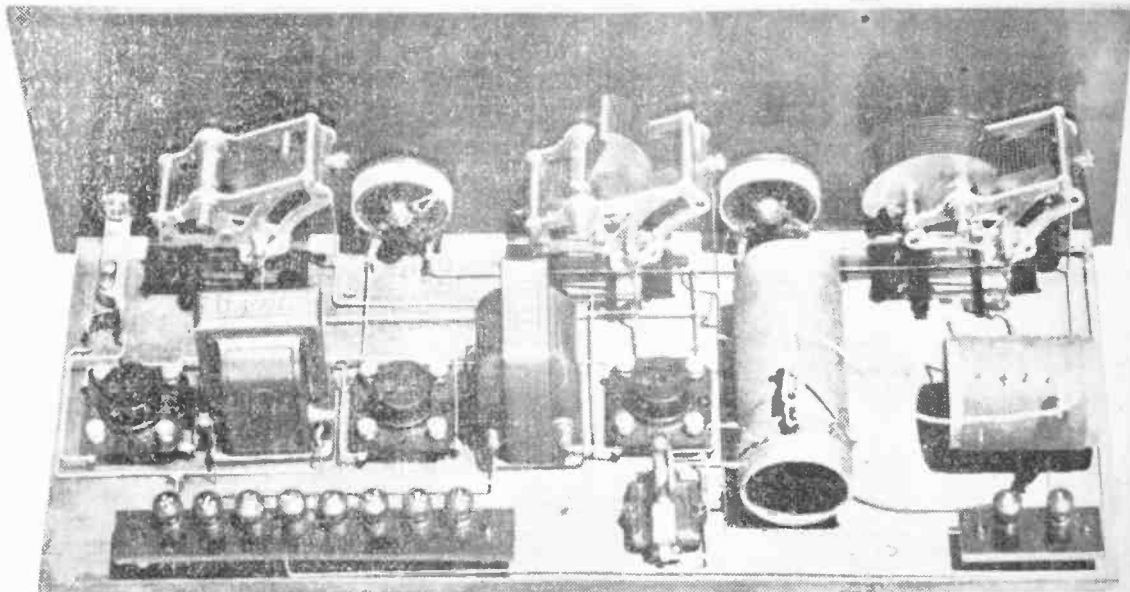
CONTENTED LISTENER.

Beverly.

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Pilot .00025 Centraline Condensers	12	0	
Midget Diora Vernier Dials	4	6	
W.R.C. 30 ohm Rheostats	2	0	
A.W.A. Ideal Transformers	18	0	
Ferranti AF3 Transformers	2	5	0
Royalty Resistors, 1500 to 100,000 ohms	11	0	
Radiokes Radio Frequency Chokes	8	6	
B.M.S. Jacks double, 2/2. Single	1	7	
Tinned Copper Bus wire, '16 gauge, round, doz			11

10

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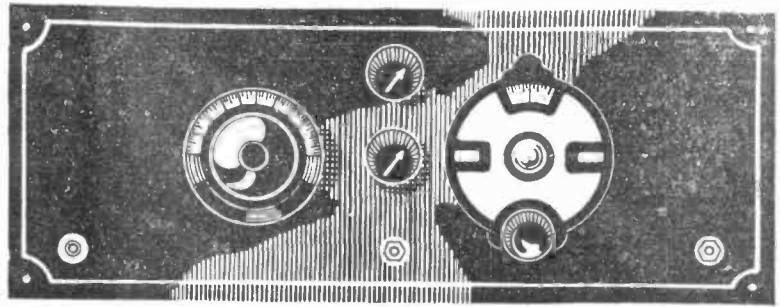
NEWCASTLE
13 Union Street,
off
Hunter Street West.
'Phone, New. 1622.

PARRAMATTA
Corner Church and
Macquarie Streets.
'Phone, UW 9601.

ORANGE
120A Summer Street.
'Phone, Orange 735.

The front panel design of the "Go Getter."

How to Build the



GO-GETTER

Hundreds of readers have written during the last few months requesting details of the ever-popular Go-getter short-wave receiver. The Go-getter is a proved receiver, and the intending constructor will find the building and operation extremely simple.

By **DON B. KNOCK**
Associate Technical Editor

HAVING been literally swamped during the last four months with piles of correspondence asking for back copies containing data for the Go-Getter receiver, and not being able to meet readers' demands, we are once again placing before them the full details of what has been one of the most popular of all WIRELESS WEEKLY sets.

It is one of the easiest to construct, and when completed will lay the world at your feet. The original article describing the Go-Getter first appeared in "Radio" in Australia and New Zealand, in the issue for December, 1927, and was subsequently further described in WIRELESS WEEKLY for May 11 of last year. Owing to the simplicity of construction and the claims made for it, a large number of readers made it, and in numerous cases were kind enough to inform us of the results obtained.

Although since this set was designed such powerful short-wavers as the All Empire and the Air King have made their debut, the original set illustrated in these photographs still has a sacred place on the operating table of my experimental station, for the reason that it is so convenient for general work owing to the beautifully simple control. Needless to say, it cannot be expected to give the results of the Air King in volume, etc., but in passing I will mention that in the initial tests of the new station, PHI, in Holland, who were able to fill the operating room, via a cone speaker, with speech and music in no uncertain manner with the little Go-Getter.

Ask the average user what type of receiver he prefers, and the answer will be invariably "Schnell," "Reinartz," or "Three Circuit!" All are similar in principle, and to a certain degree in operation, but—and it is a big "but"—many vary from bad to mediocre to good in the results obtained. A carefully-designed and constructed short-wave receiver is like the proverbial little girl; when it is bad it is horrid.

First and foremost, let it be understood clearly that it is futile to expect startling results by building a receiver of poor com-

ponents. By this is meant, components must be of good solid construction and electrically correct. Results of some kind are obtainable with the cheapest of "junk" material, but the outcome is the odious comparison of a "flivver" and a "Rolls Royce." Con-

sider for a moment the essential qualities of the desired instrument.

- (1) Ease of control and fine tuning.
- (2) Selectivity and easy covering of all bands (amateur).
- (3) Stability and "punch."
- (4) A good sound engineering job.

Having digested these details, let us get on to the fundamentals. The theoretical and practical circuit with values as shown is, in the writer's opinion, yet unbeaten by the Superheterodyne, or any circuit using an R.F. stage. This, of course, from the point of view of the man in the street! It is just how we make use of this familiar circuit that is the crux of the whole question. Details requiring first consideration are naturally our old overworked friends, inductance and capacity. The type of coils to be used, method of mounting, and the type of grid circuit tuning condenser first require attention. Having used every known make or type of coil, from the embryo days of 1912, the writer overruled the familiar form "basket weave" (Lorenz), the scramble "after thought," the fine wire wound solenoid, and some commercial makes of mounted coil units.

Since this article was originally written, many coil units have made their appearance, which will serve the purpose admirably in this receiver, but it is proposed to describe the original home constructed coils for those who may desire to use them; of the commercial products, the Radiokes is recommended. For the construction of home-made coils the Airzone short-wave coil material was chosen, and cannot be excelled. The wire used, No. 16 D.C.C., is well spaced, and the former material, a Cellulose composition, is negligible in dielectric loss. The condenser chosen for tuning control would be hard to beat in every feature. This is the "Geophone" S.L.F. improved model "low-loss slow motion." For fine and accurate tuning, positive action, and absolute lack of "back-lash," it is unexcelled. The beautifully constructed reduction gearing is a friction device perfectly silent in action. This desirable quality is appreciated in the neighborhood of 10 to 26 metres. The condenser obtained having a

The Popular Go-Getter Short-wave Receiver

- 1 Bakelite Panel, 18 x 7 x 3-16in.
- 1 Bakelite Sub-panel, 18 x 8 x 3-16in.
- 3 A.W.A. UX Valve Sockets.
- 1 Radiokes Short Wave Coil Kit, or Alternative Airzone and material, as described.
- 2 Sub-panel Brackets.
- 1 Geophone S.L.F. .0003 slow-motion variable Condenser, or Alternative with suitable dial.
- 1 .00025 Pilot Variable Condenser.
- 1 Emmeo Velmo Vernier Dial.
- 1 30 Ohm Rheostat.
- 1 All American or A.W.A. 10 to 1 Ratio Transformer.
- 1 Ferranti A.F.3 Transformer, or A.W.A. Ideal.
- 1 Royally Variable Resistance 1500 to 100,000 Ohms.
- 1 Radiokes or Leveco's RF Choke.
- 1 Double Circuit Jack.
- 1 Single Circuit Jack.
- 1 .00025 Grid Condenser with clips.
- 1 10mfd. Grid Leak.
- 1 TCC 1mfd. Fixed Condenser
- 7 Terminals.
- 1 Plug and Socket.
- 16 feet Tinned Copper Wire, etc.

CIRCUIT PROVIDES FOR CAPACITY CONTROLLED REACTION

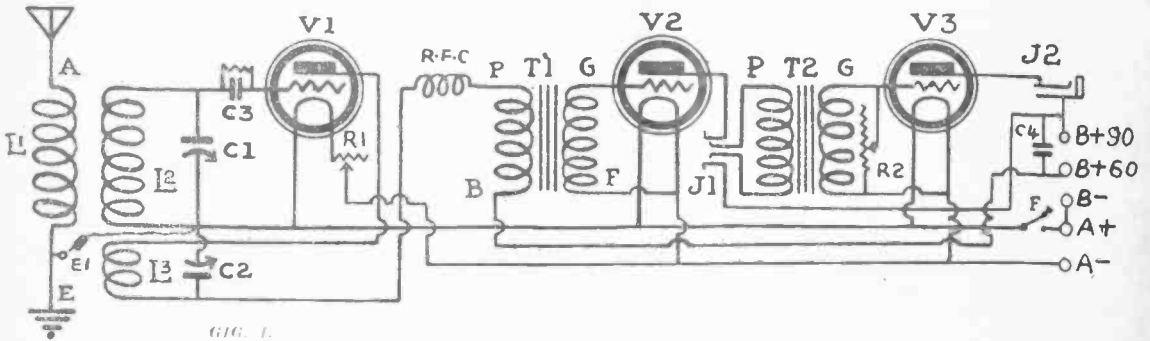


FIG. 1.

capacity of .0003 mfd. is not used as such, and required a little "doctoring" to enable it to utilise it to the best advantage. This "doctoring" consists of entirely dismantling the condenser—stripping down and re-assembling with five rotor and four stator plates, all double spaced. This latter point is extremely important, and for those not experienced in such work the writer recom-

idea germinated at the time the receiver was first considered. Since then there are many makes of excellent transformers on the market which will be admirable for use in first stage. Among these are the Ferranti AF4, the Philips, the AWA Ideal, or, in fact, any of the better known transformers.

Transformer No. 2 for the second audio

Two telephone jacks are required—a double circuit jack for the first, and a single circuit jack for the second. The radio frequency choke marked "R.F.C." is a Radiokes production, now well known for use in many circuits. The Radiokes choke is equally efficient on all wave bands, and, owing to its construction, is free from resonance with harmonics of the aerial earth system, thus avoiding "blind spots" in the receiver. Condenser C3 is an Electrad .00025 grid condenser used with a grid leak of 8 to 10 megohms; C4 is a 1 mfd. by-pass condenser, and is not actually necessary, but may be of advantage in minimising noise from an indifferent B battery. The Mullard valves used with the original Go-Getter receiver were emphasised as being the only ones suitable, but in the meantime many other types have been found efficient. The following combinations will be found suitable:—

	Detector.	First Audio.	Second Audio.	FM4 (Original)
Mullard	PM3	PM3	PM4	B406
Philips	A415	A415	A415	DEP410
Marconi	DEL410	DEL410	DEL410	UX11?
Radiotron	UX201A	UX201A	UX11?	

Some of these valves are inclined to be microphonic, and for this reason an AWA UX anti-vibration socket is used for the detector. The sockets for the amplifiers may be plain but good. As the receiver is intended to be used with 4-volt valves, a rheostat of 30 ohms resistance is used to control the detector only. The amplifiers are fed straight from the supply for the filaments. The battery switch is placed in the A positive lead as shown. To commence construction and assembly of the receiver, obtain two panels, measuring 18 x 7 x 18 x 8 in. respectively, together with two sub-panel mounting brackets. The panel measuring 18 in. x 8 in. becomes the base panel. When mounted, this will be 2 3/8 in. high from the base of the front panel. Looking at the panel from the front, the disposition of the controls is shown with measurements. Fig. 3 shows a plan view of the assembly, which is self-

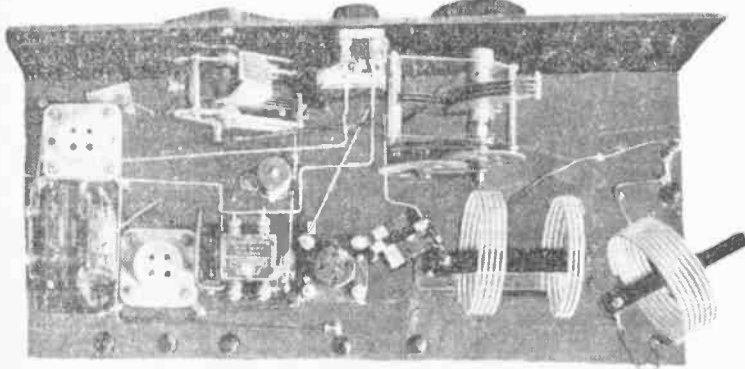


FIG. 3.

mends that the reader leaves the doing of this to his dealer.

This re-assembling calls for a fair amount of skill, as the condenser is a delicately balanced piece of work, and trouble would only result from re-assembling by inexperienced hands. The condenser is marked C1 in the theoretical circuit diagram. C2, the regeneration control or "throttle" condenser, may well be a Gecophone .00025 as purchased, but in the receiver described C2 is a .00025 S.I.F. condenser controlled by an Emmco Vernier De Luxe dial.

The tuning condenser itself may be an reliable smooth-running make if the reader does not like the Idea of treating Gecophone condensers like this, but a really good Vernier dial must be used if any other condenser is substituted. The Karas .00015 used with the Karas Micrometric Vernier dial will make an excellent tuning combination, or the AWA Logarithmic condenser of the same capacity and a dial such as the Ormonde.

The first inter-valve transformer is an "all American" of 10 to 1 ratio. This is found to be an ideal transformer for the first stage of amplification, and, contrary to expectations, does not distort to any noticeable degree whatever when the set is operating on telephony.

The idea of using a 10 to 1 ratio transformer in this first stage is simply to obtain a greater lift in amplification, and is an old

stage is a Ferranti AF3 or an AWA Ideal of 3 to 1 ratio.

Across the secondary of this transformer is "shunted" a smooth-running variable resistance. This is a Royalty Electrad, variable from 1500 to 100,000 ohms. resistance. This acts as a volume control for loud speaker reception. When wearing headphones, it functions as an excellent extraneous noise filter; on the last stage of amplification. For normal headphone work the first stage of amplification only is used but when it is desired to "boost" a weak signal, this filter resistance gives a better signal strength over "noise level" ratio. Again a useful feature from 10 to 25 metres!

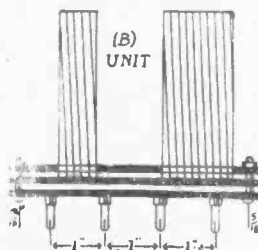
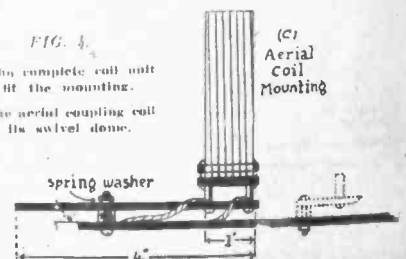


FIG. 4.
(b) The complete coil unit to fit the mounting.
(c) The aerial coupling coil on its swivel dome.



LAYOUT KEEPS ALL WIRING AS SHORT AS POSSIBLE

wherever feasible taken under the base panel.

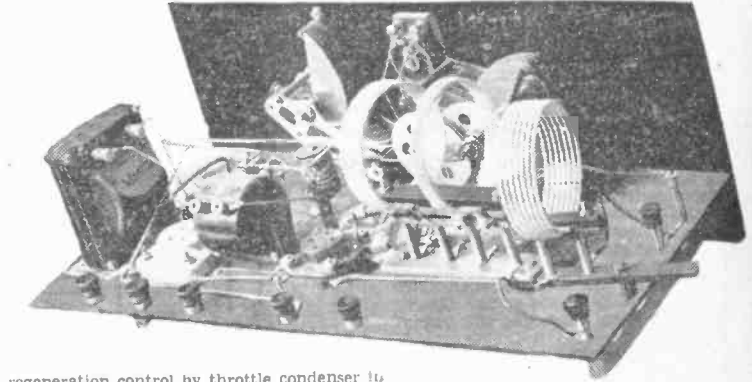
Wire the filament circuits first, not forgetting the filament switch in the A positive lead. Next grid and tickler circuits, first audio and second, finishing on the jacks. Seven terminals only are required, as shown. The details of wiring, lead for lead, are unnecessary, as the diagrams and illustrations show all that is required in this way. Should the reader be doubtful about any detail the author will be only too pleased to give any information required. And now a few words as to performance in justification of the instrument.

The regeneration control has extremely little detuning effect on the signal. The signal is practically constant in frequency when moving the regeneration control from zero to two-thirds full capacity. Tuning and holding a signal, whether telephony or telegraphy, is as simple on 15 metres as on 85 metres.

On the original tests of the receiver last year, no difficulty was experienced in putting 2XAD (the short-wave station of WGY, New York) on the loud speaker. Since the advent of PHI, Holland, this station is received almost like a local broadcast station at its best periods. Nowadays there are many international broadcast stations located in the wave-bands from 12 to 80 metres, and the constructor of this receiver will find a host of distant transmissions to gratify his lust for DX. In fact, whatever is on the air on the amateur wave-bands outside of "skip-distance" and radio "fogs," the receiver "goes out and gets it." Provided it is kept free from dust and sea air, a receiver of this calibre, using "Amplion" Carboncels for filament supply, and reliable "B" battery, can be installed and left for 8 to 10 months with the knowledge that it will always be ready, and worthy of its name.

A short-wave receiver is a very easy article to construct, and put into some sort of operation, but a really efficient short-wave receiver requires a little forethought and care.

Too many receivers are in use employing "floppy" coil systems, unsuitable valves, incorrect values, and a host of other defects. The solenoid type of coil used here is found to be more justifiable in every way than the "basket-weave" coil. Signals are spaced out with ease. The natural wave length of the coil cannot alter, as is the case with the usual "basket-weave," owing to collection of moisture on the dubious insulation between turns; and the appearance of the finished solenoid job is much more presentable. Many will be inclined to criticise the



The completed receiver.

regeneration control by throttle condenser in favor of resistance control.

Whilst resistance control has one point in its favor, that of absolute constancy of frequency in the grid circuit, the throttle system has the advantage of "building up" the signal to a greater degree at the point before oscillation commences.

In this article super technicalities are not indulged in. It is intended for the average short-wave enthusiast and devotee. Many refinements "De Luxe" in the design could be offered, but that would immediately place the proposition beyond the scope of the average pocket.

As it is the receiver will oscillate smoothly over the whole of the grid tuning condenser range, using one turn 2 1/2 inches in diameter, respectively, for grid and tickler "coils," with a separation of two inches between.

Practically no hand capacity is in evidence on this ultra-high frequency, so that the necessity for elaborate shielding of the receiver for work on the amateur bands is at once ruled out. Complete shielding would be of advantage in minimising power-leak interference from lighting mains and other sources, but this necessitates covering, in addition to a totally metal shrouded instrument. A final word. Almost any apology for an aerial will give good results on this receiver; even a piece of flex lying on the table or a loop; but an aerial well up in the air, and clear of buildings, will give a lot of help to that distant telephone station. For telegraphy reception, practically any form of aerial will suffice, as telegraphy signals are built up to a large degree by the sensitiveness of the receiver. With a poor

aerial system, carrier waves are easily received, but the percentage of modulation seems well below audibility. Over-amplifying a weak 'phone signal only results in a lot of noise "background."

The average transmitting man has available a good receiving aerial, but the broadcast listener may be one of those "weird and wonderful" affairs so often seen. So, again, the better the aerial the better the

result. Telephones for normal use are a matter for conjecture. The telephone must be of a good, sensitive, reliable make. The man with a deep pocket may use the very best, the "Browns" A type head-phone, for instance, or the "Baldwin"; if 4000 ohm 'phones are available the better are the results over 2000 ohm 'phones.

In any case, do not blame your finished receiver for poor performance if you are using a pair of head-phones which have been long due for relegation to the junk-box. In conclusion, it is hoped that the reader will find this, not "just another short-waver," but one of exceptional performance, and well worth the time and money spent.

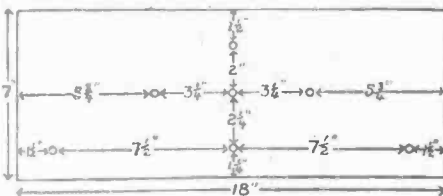
How Programmes are Built Up

(Continued from page 9.)

No mention of the routine of programme building would be complete without reference to its financial aspect, which, in fact, governs the whole. A continuous programme seven days a week, averaging over 13 hours a day from two stations, each day's programme from both stations being different, is necessarily a very costly business. From the programme builder's point of view money must always remain the chief limiting factor.

After the actual programmes are finally prepared, immense detail has still to be faced. Publicity, news, markets, and one hundred and one contingencies arising out of every-day happenings have to be made room for as they arise.

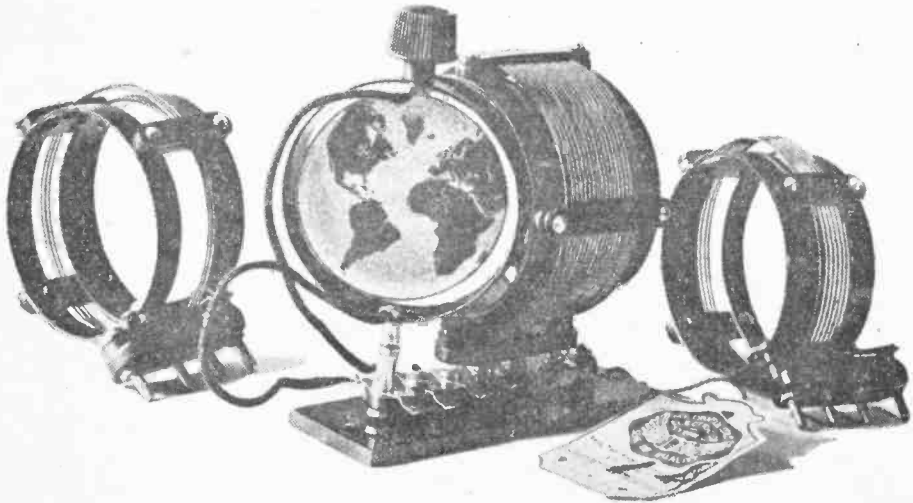
Above all must be remembered that while the new programmes are being mapped out, each current day's programme is in the course of performance.



THE GO-GETTER

is successful—only if

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Short Wave Coil Kit Is Used



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Price 55/- Per Kit

The above illustrated kit when used with a condenser of .00015 MF capacity will cover the specified wave-band.

Each coil is tested and calibrated—and guaranteed to perform as represented. If you construct your own coils you can't be certain of their characteristics. Radiokes Short Wave interchangeable inductors are very accurately space wound on a genuine Bakelite skeleton form, which shows the lowest possible losses for any type of coil.

Radiokes Short Wave inductor mountings are standardised so that they are interchangeable; and an accurate contact system on mounting base makes changing from one wave-band to another a simple operation.

An adjustable antenna coupling coil is mounted on base, and can be varied to make allowances for different antenna conditions and various conditions of detector oscillation.

Should the constructor desire to dive down to the 12-metre band, an additional Radiokes coil is obtainable to accommodate him, the cost of which is only 15/.

If the broadcast band is desired, another Radiokes coil is available to cover the band approximately from 245 to 540 metres, when used with the tuning condenser specified above. This coil also costs 15/, quite a reasonable sum when you consider that this converts your favorite short wave set into a sensitive and selective broadcast receiver, which is very simply tuned.

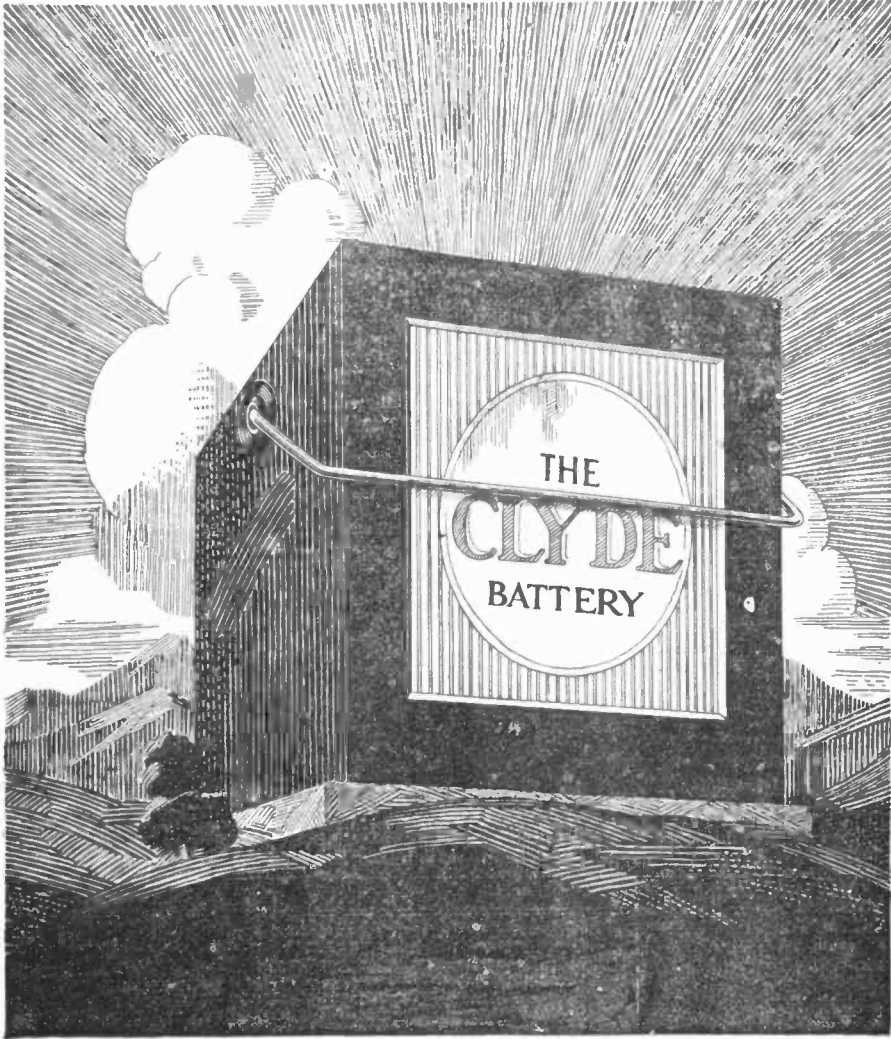
Altogether this kit is practically indispensable to the constructor of the "Go-Getter," that is, of course, if he is desirous of results, efficiency, and ease of operation.

RADIOKES R.F. PRODUCTS ARE OBTAINABLE FROM ALL HIGH-CLASS RADIO DEALERS, OR DIRECT FROM

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Obtainable at all radio dealers and garages through out the Commonwealth.

PROVING RADIO

No. 16 A two way telegraph set complete, which can be made up for a few pence, is described in this issue. We construct our own morse key, and sounder. The importance of the earth connection in telegraph sets, radio receivers, and transmitters, is also discussed.

THIS WEEK I have a lot to cram into a little space, so, without prefacing remarks, let us continue.

First of all, we shall make ourselves a morse key, and, if room can be found, we shall make a complete two-way telegraph set, which can be made to work for some considerable distance, providing a little care is taken. For the complete set you will require a morse key, a sounder, and a battery. We have already discussed batteries, and many readers have made them up with success. Further, we have been initiated into the mysteries of the electro-magnet (which will be made use of in our sounder). A buzzer may be used in place of the sounder if desired, but it would be well for the A.O.P.C

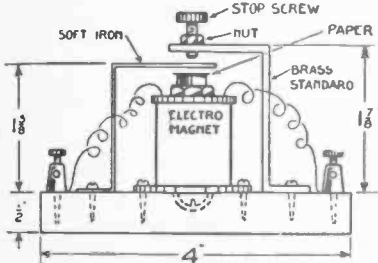


FIG. 2.

aspirant to make up the sounder, for experience' sake.

To make the key, get a block of wood 1/2 inch thick, 3 inches wide, and 4 inches long, for the base. Make the contact strip from a piece of heavy sheet brass, one-thirty-second of an inch thick, and 1/2-inch wide, by 3 3/8-inch long. Drill a one-eighth inch hole in each end of the strip, and bend it to the shape shown in Fig. 1.

Next, screw a knob (an old rheostat head, or variable contact, will do), which should be filed down until it is about an inch or 1 1/2 inches wide. Slip a few washers on to a wood screw, and mount this on the base-board, immediately below the knob. Mount two terminals, one each side of the end of the brass strip, and connect one end of the strip to one terminal, and the wood screw (which is supported by washers) to the other terminal. Take the connecting wires underneath the board.

To make the sounder, get a block of wood 1/2-inch thick, 3 inches wide, and 4 inches long for the base. Bore a 3/8-inch hole in the centre, so that the head of the screw from an electro magnet may set into it. Screw your electro-magnet (described in a previous series) down to the base. Glue a piece of thin cardboard over the end of the pole of the magnet, to keep the armature from making contact with the polar projection, otherwise it will stick (being attracted by the electro-magnet).

Now take a thin strip of iron 1/2-inch wide and 3 1/2 inches long, and bend the ends over so that the middle has a length of 1 1/2 inches, as shown in Fig. 2. Drill a hole in the short end, and screw this to the base, so that its free end is just over the pole of the magnet. This done, cut out a strip of thick brass 3-8-

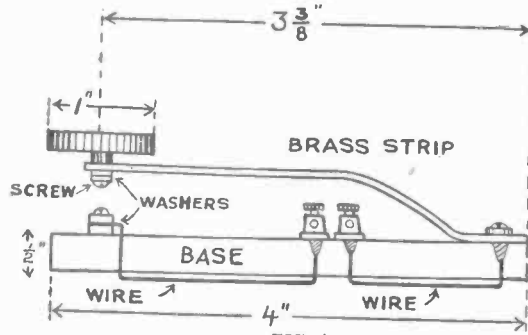


FIG. 1.

inch wide, and 3 inches long, and drill a 3-16 inch hole in each end, and bend it so that the middle part is 1 1/2-inch long; then screw it to the base, making sure that the free end is directly over the centre of the end of the magnet pole. Put a nut on a small machine screw, then screw this in the end of the standard as shown. This is called the stop-screw. Screw a terminal at each end of the base, and finally connect the terminal wires of the magnet to them. The manner in which the instruments are connected together is shown in Fig. 3.

This is how the apparatus works: When you press down the key, it closes the circuit, and the current then energises the electro-magnet; this draws the free end of the soft iron spring of the armature down, and on striking the "solar projection" a loud click is made. The instant you release the pressure on the key the armature will fly up and strike the stop screw, when another loud click, but of a different pitch, is made. It is the time interval between the two sounds that determines the length of time the key is held down, and hence, whether a dot or a dash has been made. It is unnecessary to have the key and the sounder close together, for they may be placed a quarter of a mile apart, and will work just the same. This type of sounder is used in all post-offices.

For a continuous note, such as that used in continuous wave in radio, a buzzer may be used. Later we shall make our own buzzer, using electro-magnets.

If using the sending set for any long distance, the battery may be connected in at either end of the line. Where any considerable distance is to be covered by the wires

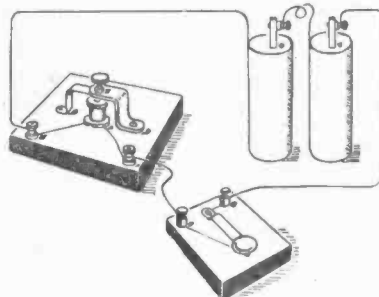


FIG. 3.

these wires (of fairly heavy gauge), must be insulated by either glass or porcelain insulators, and they must not touch trees, houses, or other objects, for it has already been explained that these objects are not perfect insulators, and a great deal of power would be lost. Also we have learnt that fine wire offers a greater resistance to a current than heavy wire, therefore, we will have to use heavier wire (say, 20 gauge), or will have to connect several cells in parallel, in order to increase the amperage, and thus overcome the resistance.

Nearly all regular telegraph lines use an "earth return" conductor, as this saves the cost of a second wire. You will remember that we have proved that the earth has con-

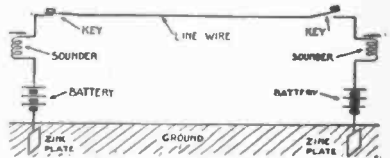


FIG. 4.

ductivity. Therefore, we set up the telegraph outfit indoors, and connect the terminal of the sounder with the line wire, and the other end of this with one of the terminals of the key; now connect the other terminal of the sounder with a short wire, and solder, or otherwise, fix a piece of pipe to the free end, and bury this a couple of feet down into some moist earth. You will then be able to telegraph, just as though two wires, and not one, were being used.

If both you and a friend have a telegraph set, you can rig up a two-way set, so that you can telegraph to each other. All you have to do is to connect up the instruments as shown in the wiring diagram, No. 4. When receiving, keep the key closed.

Now we have seen how the earth is a conductor. You will note the fact that I mentioned the earth should be moist. Perhaps you will remember that we recently performed an experiment, proving that earth had also resistance? Since we have commenced to make use of the earth as a conductor, it is time for us to see what can be done to make the resistance of the earth as small as possible. In radio receivers and transmitters, the earth connection is very important.

A considerable number of broadcast enthusiasts go to the trouble of erecting a costly aerial, with a view to obtaining the best possible results, but they totally neglect their earth connections. The earth is quite as important as the aerial, and this point cannot be emphasised too strongly. The efficiency of the earth depends upon the nature of the

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The Maxum "B" is designed to operate sets up to and including seven valves, and eliminates your "B" Battery. An invaluable knob control permits a variation of 20 volts for all tappings. Voltages can, however, be changed to suit different valves by altering the connections to the resistance strip inside the case.

PRICE £8/15/-

A Maxum "B" and an "A" Socket Power Supply Make Your Set an all Electric.

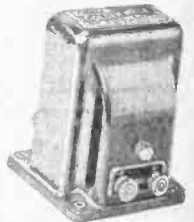
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soil in which the earth plate or pipe is buried, and its degree of moisture; upon the size of the plate or pipe used, and the way in which the connecting wires are attached; and upon the length and total area of the wire or wires connecting the receiver, transmitter, or experimental apparatus to the earth plate or pipe.

The moisture should be fairly damp. For this reason it is advisable to bury the plate near a drain-pipe, a garden tap, or any other place that is well served by water. If dry soil is used, several buckets of water should be poured over the spot at times to keep it moist. Keep the earth plate as large as possible, and solder all connections. When a plate is used in lieu of a pipe (zinc or galvanised iron is O.K.), solder several wires to one edge only. Use fairly heavy gauge wire (7-22 is excellent, and the strands of this wire may be used to advantage). The plate should be buried earthwise to a depth of three feet. An earth wire should be kept as short as possible always.

It is not necessary that the earth wire be insulated.

The symbol for the earth will be seen in any circuit in this issue. You will notice that the horizontal line represents the lead-in wire from the earth connection, whilst the parallel lines represent the parallel stratas of the earth, such as soil, sand, clay, rock, etc.

As we treat other symbols, you will see that each one is made to closely resemble the object which it represents.

Proving Radio Clubs

COFF'S HARBOR GROUP: "We held a meeting on the 28th instant, in the School of Arts Hall, at Coff's Harbor, and decided to form a 'Proving Radio Club.' There was not a large attendance (only four were present), but we are still confident that the club will be successful. Owing to the fact that another meeting was being held on the same night, in the same hall, we did not expect a very large attendance, though three more members are expected to be available at next meeting. Once we get a start off, with about eight or ten, we shall soon get the crowd to follow. The officers elected, pro tem, were: Mr. Debenham, president; John M. Burke, club secretary. The members decided to leave the election of a treasurer until the next meeting, which was arranged for next Friday night, when arrangements for a suitable club-room and meeting-rooms will be discussed.

"The members present were: Mr. Debenham, president; Mr. W. H. T. Riding, Mr. R. Morrow, and Mr. J. M. Burke (club secretary). We decided to write up a report, and have it placed in the local paper, together with an advertisement. The local newspaper proprietor inserted an excellent par for us in last week's issue of the paper. We should be pleased to hear if any action has yet been taken regarding badges."

REMARKS: This matter is still under discussion, and nothing has been definitely arranged yet. You will be advised immediately the badges are available. Club Certificates are at present on the printing press. Welcome to the members of your club. Intending members please write to the Secretary, John M. Burke, Lyster Street, Coff's Harbor.

CREMORNE GROUP: "Our second meeting was held at 117 Milson Road, Cremorne, on Wednesday, 27/3/29. The first experiments on static electricity were carried out with success, though a cat was not available! The electro-scope was not successful, though we tried tissue-paper, tinfoil, and silver-leaf. (Note: Advise executive committee, giving particulars of any deviations made, humidity, and other particulars.) "At 9.30 a demonstration was given with an electric pick-up, by Messrs. White, Allen, and Hughes. This was a great success, and we all spent quite an enjoyable evening." (Intending members write to S. R. D. Sherwood, 117 Milson Road, Cremorne.)

The Proving Radio Club are pleased to welcome three of 2BL's technical staff, who have kindly consented to join the club. They will assist in the experiments and lectures. Local secretaries desiring the services of the undermentioned members should write to them, care of 2BL:—Charles Youngman, Homebush; Thomas Innes, Marrickville; Eric Bessimer, Mosman.

KOGARAH GROUP: W. Roberts, 11 Prince's Highway, Kogarah, writes:—"I have not seen any reference in your good weekly regarding a 'Proving Radio Club' in the St George district, and I should like to see one formed here, as there must be many others like myself, who would welcome the chance to follow your experiments practically, with least expense. With this end in view I would be pleased to receive a call from any reader (or a letter from any person interested), so that arrangements may be made for the formation of a local group. My house is four doors from the tram stop."

REMARKS: Welcome. We shall be pleased to hear of your progress.

ORANGE GROUP: Mr. J. A. Allison "Brantwood," Nashdale, via Orange, N.S.W. writes: "In this week's issue of 'Wireless Weekly' I notice that members are required for a Country Club of the Proving Radio. As I am desirous of becoming a member of one of these clubs I would be glad if you would forward me, at your earliest convenience, full particulars."

The "Captain" to His "Comradios"

Coming Events

SATURDAY, April 13.—Scots College, annual cricket match. Past v. Present.

Wednesday, April 17.—Scots College O.B.U. annual dinner at The Carlton, 7 p.m.

Wednesday, June 26.—Scots College O.B.U. annual dance at The Ambassadors.

Dates of school events and Old School functions should be sent to "The Captain" a month ahead.

Put Cricket to Bed

A WORD to the wise cricket committee. The season is practically over, and you will save many shillings, and possibly pounds if you will have a little mercy on the materials which have served you so well during the summer. Put them to bed neatly and comfortably for their winter sleep!

Matting should be unrolled on a clean plot of grass, given a good beating (both sides), and rolled up very neatly and firmly. It is a good plan to use a 2in. x 2in. pole 7ft. long to roll it on. This keeps the matting from sagging when it is being moved or when it is put up on a rack. Never put it in contact with the ground. Put three or four rough wood blocks under it. But before putting it away at all, see that it is repaired now. There will be expensive delays if you wait until the beginning of next summer, when all the repair shops are so busy.

Matting Ends

NATURALLY matting wears through quicker at the ends where the batsmen stand. I have found that an improvement on the usual leather hem is a piece of stout "water-bag" canvas. You can use as much as two feet or three feet of it. Overlap the matting so that you have twelve or eighteen inches of canvas on each side. This is sewn solidly right through with four or six rows of heavy waxed thread. The eyelets for the pegs should not be metal, as they invariably come away, and a big tear results. Bind the small holes of the pegs in the same way as a tailor binds a buttonhole. The canvas makes a splendid firm hold for the batsman, and will last for several seasons of hard use. It is also lighter and cheaper than leather.

REMARKS: Would it not be more satisfactory for you if a local group were formed? Give your local paper a par regarding the formation of a group, and let us know how you get on. The organising secretary will send you full particulars shortly. Your letter is being passed on to him.

No other reports have been received from City and Suburban Groups, owing to the holidays, and consequent postponement of meetings.

GLADESVILLE GROUP (or ROZELLE GROUP): "I see in yesterday's 'Wireless Weekly' that you suggest a Rozelle Group be formed (in reply to J.C. of Rozelle). I second that suggestion, for there is no group out this way, and J.C. would soon have to enlarge his house to cope with the crowd that would be sure to join. By the way, what is the age limit? Are men only allowed to join? Or are boys given a chance too? I am a boy myself." This letter was received from A.T.O. Prince Edward Street, Gladesville.

REMARKS: Please forward your full name and address. We shall be pleased to welcome you as a member. Boys are given special tuition, not only in radio, but also in subjects indirectly concerned with radio, such as figures, etc. There is no age limit, the club is open to boys aged from nothing to several centuries!

Bats, Balls, Stumps, Pads

BATS should be immediately repaired and oiled, then placed standing up with the blade in an ordinary paper bat envelope to keep dust and grit from sticking to them during the winter. Never throw out an old bat because the blade is useless. Ask your bat-maker if the handle is good enough to have a new blade. If it is, you will have a far better "new" bat than any brand-new one! Sounds a bit Dutch, but a well-used bat handle is a prize. It has far more spring and comfort than one which has not been broken in.

Every old ball should be resewn where possible. They are most useful for practice both at the nets and at the fielding machine. New ones cost fierce sums nowadays.

Stumps only want you to see that they are not cracked or split, and that their "hats and shoes" are firmly fixed. Give the shoes a wipe with vaseline.

Pads should have buckles and torn straps seen to at once before putting away on a shelf neatly, but loosely, and laid flat. Stitch up any small rents in the wicketkeeper's gloves. That's about all, but you will save much time, much club money, and all the worry if you just do it now, while you know where everything is.

Letters

ALL notes to "The Captain" should be signed with your full name. Only initials or a pen-name are used when answering boys' and girls' questions over the air. This is a strict understanding. Address all letters to "The Captain," 2FC Sydney. Boys and girls of all ages from five to fifty-five are welcome to write (as my friend Jimmy Jackeroo, of Kookaburra Gully, puts it). Any old boy over fifty-five may please himself!

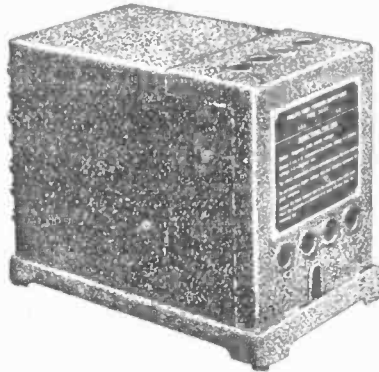
Greeting

SO, until next week, when we shall meet here on a page of WIRELESS WEEKLY, and, of course, over the air from 2FC next Sunday morning, take my greeting: "Good wishes to you all, comradios! Cheerio!"

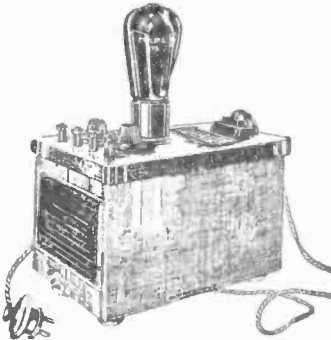
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Everything
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The Philips Eliminator does
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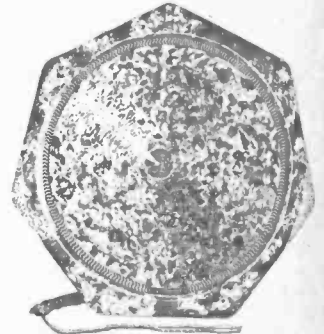
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Here is the most popular power unit
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Easy Terms
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PHILIPS BABY GRAND LOUD
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This is a particularly fine baby model
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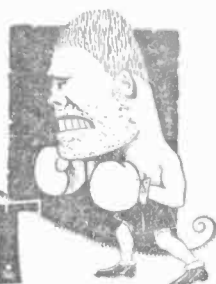
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Short-wave and Amateur Notes by
VK2NO

EASTER has come and gone, and with it one of the regular old-time "ham-fests." Yes, I enjoyed myself thoroughly, along with many more of the gang, and I think many of us caught some of the old-time spirit in some of the QSO's. With the arrival of the holidays I thought that, as Easter is a world-wide occasion for celebration, if one sat down at the key and pounded away a while, over there in Europe there would be sure to be some "hams" that would dodge their "too many parties and too many pals." and, like myself, slink into the shack.

My guess was correct, and on the Sunday I was so intrigued by the many signals that were flying around the dials that I sat on a DX hunt all through the afternoon, evening, and night, in company with OM VK2AW. There were Yanks, British, Belgians, Frenchmen, Finlanders, Peruvians, Chilians, Filipinos, Indians, and, in fact, the whole world, crammed at intervals into that little space on the dials that signifies the allocated frequency for the amateur 20-metre band.

I am not going to talk about 40 metres, for the reason, that I did not listen on it. When I have done so the burbling maze of QRM has speedily driven me back among the static free frequencies, where signals really travel! A horrible thought steals over me as I say that, because 20 metres is rapidly getting a taste of QRM also—and something will have to be done about it. I do not suppose that I am the only one who would like to jump with both feet on the fellow that sends Ta Te Ta Te Ta . . . doesn't give his call . . . and swings his tuning all over the place at the same time.

Worse crime still, what about the other type of pest who starts off with a good steady CQ, and then adjusts his transmitter WHILE HE IS CALLING CQ! I begin to feel like QST's OLD MAN when this starts, and look around for the cat to kick. Adjust the old transmitter, by all means, and don't take too long about it, but please don't give the man who takes a pride in real operating premature grey hairs.

Another thing is that the interminable CQ habit has not died yet, despite all the advice meted out by the Ham's Bible. If the man who calls CQ 45 times, and signs his call twice, imagines that the man at the other end is going to wait for his call (unless it is just to see who the sap is), then he is thoroughly mistaken. All that is needed is a short, snappy CQ three times . . . the break . . . and sign three times, and the necessary confidence in the transmitter, via which you have dared to launch your call on the air. Odds-millions, and by

my Doublet! we haven't got much frequency left, so let's make use of it properly!

Having given vent to my feelings anent the transgressor, let us up with the 20-metre curtain and see what has been doing. More and more of our own stations are slowly but surely sliding down to this band. After a taste of static and QRM on 40, and having heard others extolling the virtues of the other useful band, a coil is made for the receiver, and a little listening indulged in. The ears begin to prick, and the eyes to pop, when far off hams in remote corners of the earth are heard with good, hefty signals, and then there is a frantic rush to get the transmitter down on the job.

It is noteworthy that in our Australian 6th District one or two other stations besides VK6SA have made their appearance. VK6HE, in Geraldton, is often QSA4 here, with a good, steady DC note. The 5's are also well at it, and old-timer, VK5BW, was busy regaling himself with DX, and the inevitable "bug" key, over the holiday.

Without a doubt, the best 3rd District station is VK3CX. He puts over a beautiful note, perfectly steady, and stays put, no creeping. On the old 32-metre band 3BQ had a very strong signal, but on the 20-metre band I have never been able to hear him at anything more than R2 in the old scale. Max gets out, though, for I can often hear Yanks and South Americans going for him in numbers.

Location certainly plays a big part on this band. For instance, the strongest New South Wales station heard at VK2NO is always VK2LJ, and yet VK2RF, who is not a great distance from him, is very weak. The latter station is using the higher power of the two.

VK2EK puts out a very nice CC signal, but is always away in the dim distance on my receiver. At midnight on Sunday, March 31, in answer to a CQ call, my old friend, Sainio, of OH2NM, came back with gusto. It seems strange to hear prefix OH for Finland, as it was once so familiar in our old intermediate as representative of Honolulu. For an hour and a half a most interesting conversation was held with Finnish OH2NM during which he remarked that VK2NO had the old kick of A-2NO two years ago. Sainio is always an interesting contact for me, for the reason that he was one of my first DX stations on 200 metres in the days when G-6XG was the call under which I entered the ham world.

The calls the Indian stations are using seem, like the South Africans, to be very varied. For instance, AI5VX is in Colombo, VT2KT in Central India, and VU2KW in Karachi. These are the active stations in this part of the world, and may be heard intermittently.

Spanish EAR96 was working away with a few Australians and New Zealanders through the holiday, and was using PDC about R3 to 4 at this end. The strongest of the Englishmen was G5BY, in Croydon, South London, and I think he was well aware that he was getting through to this part of the globe well, for the reason that he was hitting the key at about 25 w.p.m. His report on sigs. from VK2AW was R6, but with a continual frequency change. This was traced eventually to the negative lead from the centre tap of the filament transformer coming into contact accidentally with the core.

Observations at this station show that the transmissions from VK2NO-VK2AW are heard far better in Europe than we hear the Europeans. It is a common occurrence to call England, and hear quite a number replying, but too weak to be of any use for a reliable QSO.

International BCL's will be pleased to hear that it is no use listening for 5SW in the evenings at the present time, as only a faint carrier can be heard, but in the mornings from 6 to 7.30, he is usually very strong, and the 2LO programme from London may be followed with ease.

The Belgians were also busy, and ON4FE at times came up to R5, but his rather rough RAC note made reading difficult. The 10 metre tests with the Old Country are over, and reports show that no English stations were heard in Australia. The only 10-metre signal heard at VK2NO during the Easter holiday was from K6EHA, in Honolulu, and he was a good R5. Listening in the afternoons at this frequency was ruined by the procession of automobiles and the occasional flight overhead of an aeroplane.

SHORT WAVE TRANSMISSION.

G. E. Company of America.

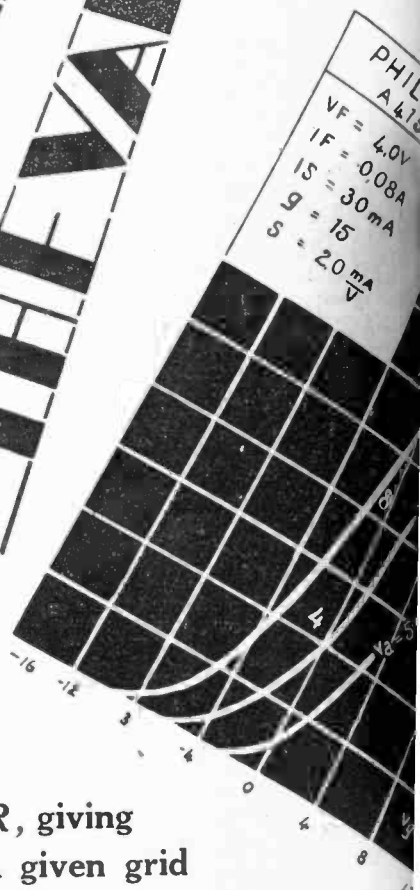
Call Sign.	Wave Length (approx.)	Day.	Time—G.C.T.
W2XAD	19.56 metres	Sunday	2030-0415
W2XAD	19.56 metres	Monday	2300-0500
W2XO	21.96 metres	Monday	1900-2100
W2YAF	31.48 metres	Monday	2300-0500
W2YAF	31.48 metres	Tuesday	2300-0500
W2XAD	19.56 metres	Wednesday	2300-0500
W2XO	21.96 metres	Thursday	1900-2100
W2YAF	31.48 metres	Thursday	2300-0500
W2XAD	19.56 metres	Friday	2300-0500
W2YAF	31.48 metres	Saturday	2300-0500

TELEVISION SCHEDULE.

W2XAD	19.56 metres	Tuesday	1830-1900
W2XAD	19.56 metres	Wednesday	1830-1900
W2XAD	19.56 metres	Friday	1830-1900
W2XAD	19.56 metres	Sunday	0415-0445
W2XAF	31.48 metres	Tuesday	0500-0530

Special features and events not occurring within the normal periods of transmission given above, such as speeches by internationally-known men, portions of important conventions, boxing matches, world series baseball games, etc., that are deemed of national and international interest, are usually transmitted through either station 2XAF or 2XAD, or both.

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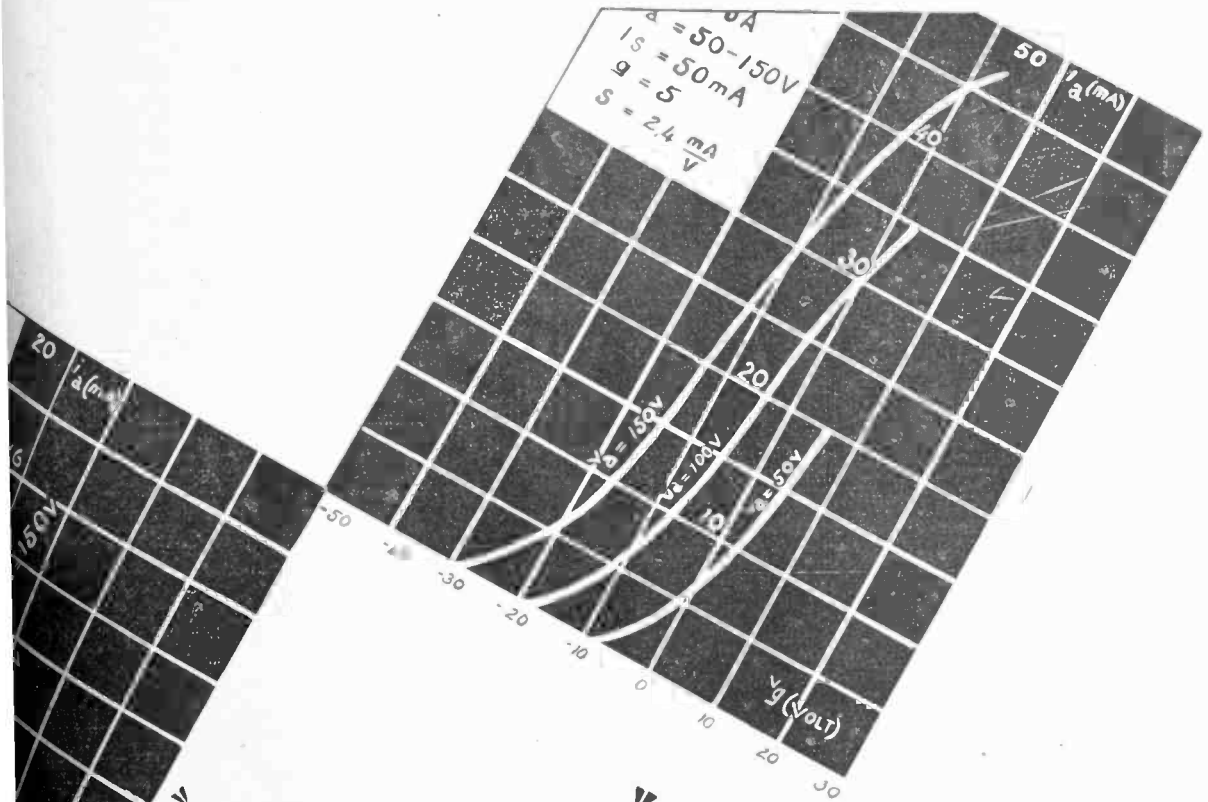
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A630	Res. Cap.-H.F.	.06	13/6
B605	Power	.1	13/6
C603	Super Power	.3	15/-

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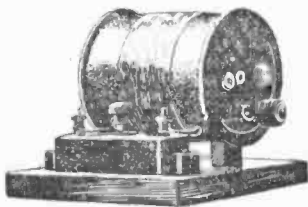
Type	Purpose	Fil.Amps.	Price
A409	General	.06	13/6
A415	Det.-1st Audio	.08	15/-
A442	Screen Grid H.F.	.06	30/-
A435	H.F.	.06	13/6
B409	High Gain Power	.15	15/-
B405	Super Power	.15	15/-
B403	Super Power	.15	15/-
B443	Penthode	.15	37/6



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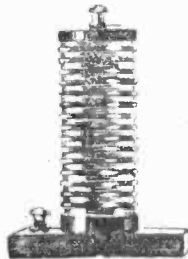
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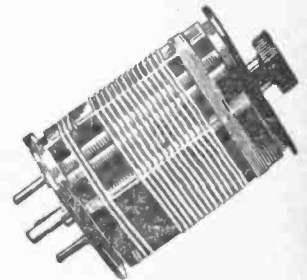
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MA 1964

Local Programmes, Friday, April 12

2FC

EARLY MORNING SESSION.

Announcer: A. S. Cochrane. 7.0: "Big Ben" and announcements. 7.2: Official weather forecast, rainfall, river reports, temperatures, astronomical memoranda. 7.7: "Sydney Morning Herald" summary. 7.12: Shipping intelligence, mail services. 7.15: Studio music. 7.25: Investment market, mining sharemarkets, metal quotations, wool sales, breadstuffs markets, inter-State markets, produce markets. 7.40: Studio music. 8.0: "Big Ben"; close.

MORNING SESSION.

Announcer: A. S. Cochrane. 10.0: "Big Ben" and announcements. 10.2: Pianoforte reproduction. 10.10: "Sydney Morning Herald" news service. 10.25: Studio music. 10.45: A talk on Home Cooking and Recipes, by Miss Ruth Furst. 11.0: "Big Ben." A.P.A. and Reuter's cable services. 11.5: Close.

MID-DAY SESSION.

Announcer: A. S. Cochrane.

12.0: "Big Ben" and announcements. 12.1: Stock Exchange, first call. 12.3: Official weather forecast, rainfall. 12.5: Studio music. 12.10: Summary of news, "Sydney Morning Herald." 12.15: Rugby wireless news. 12.18: A reading. 12.30: Studio music. 1.0: "Big Ben." Weather intelligence. 1.3: "Evening News" mid-day news service. Producers' Distributing Society's report. 1.20: Studio music. 1.28: Stock Exchange, second call. 1.30: Popular studio music. 2.0: "Big Ben"; close.

AFTERNOON SESSION.

Announcer: Laurence Halbert. Accompanist: Ewart Chapple. 2.30: Programme announcements. 2.32: The Booklovers' corner. 3.0: "Big Ben"; popular music. 3.15: A sketch by the students of the MacCunn School. 3.30: Valda Kersey, pianist: (a) "Sonny Boy" (Jolson). (b) "Somewhere, Someday" (Pollack). 3.37: Studio items. 3.45: Mrs. Scott will speak on "Our First Theatres" in connection with the forthcoming intermediate examinations. 4.0: "Big Ben." Valda Kersey, pianist: (a) "My Heart Stood Still" (Rodgers). (b) "Mother, I Still Have You" (Clarke). (c) "There's a Rainbow Round My Shoulder" (Rose). 4.7: Popular music. 4.25: A sketch by the students of the MacCunn School. 4.40: Studio items. 4.45: Stock Exchange, third call. 4.47: Popular music. 5.0: "Big Ben"; close.

EARLY EVENING SESSION.

Announcer: A. S. Cochrane. 5.40: The chimes of 2FC. 5.45: The children's session, conducted by the "Hello Man." Letters and stories. Music and entertainment. 6.0: The Farmyard Five from Kookaburra Gully. 6.30: Dalrely's market reports (wool, wheat, and stock). 6.40: Fruit and vegetable markets. 6.43: Stock Exchange information. 6.45: Weather and shipping news. 6.48: Rugby wireless news. 6.50: Late sporting news. 7.0: "Big Ben." Late news service. 7.10: A short recital of Dinner Music.

EVENING SESSION.

Announcer: Laurence Halbert. Accompanist: Ewart Chapple. 7.40: Popular music. 7.45: Programme announcements. 7.50: Studio items. 8.0: "Big Ben." From The Arcadia Theatre Chatswood: Nicholas Robins at the Wurlitzer organ. 8.20: From the studio: Ashfield Choral Society—"Ode to Music" (Nichol). 8.30: Dagmar Roberts, pianist— (a) "Prelude No. 8" (Chopin). (b) "Prelude No. 10" (Chopin). (c) "Valse Brillante in A Flat" (Chopin). 8.40: Suzanne Ennis, contralto— (a) "Break, Break, Break" (Darby). (b) "In the Marshes" (Reigo). (c) "Water Boy" (Robinson). 8.47: A sketch by Scott Alexander. 8.59: Weather report.

9.0: "Big Ben." Ashfield Choral Society— (a) "Welcome, Heroes of Renown" (Mendelssohn). (b) "Gypsy Chorus" (Balfe). 9.10: Vincent Aspey, violinist— (a) "Gypsy Dance" (Machez). (b) "The Lark" (Glinka-Auer). 9.17: Suzanne Ennis, contralto— (a) "Danny Boy" (Weatherby). (b) "All For You" (Martin). (c) "An Old Garden" (Temple). 9.24: Dagmar Roberts, pianist— (a) "Prelude" (Solomon). (b) "Fun" (Solomon). (c) "Cradle Song" (Reger). (d) "Rosemary" (Bridge). (e) "Country Gardens" (Grainger). 9.34: Ashfield Choral Society— (a) "In This Hour of Softened Splendour" (Pinsuti). (b) "Love Is Meant to Make Us Glad" (German). 9.46: Scott Alexander in a sketch. 9.58: From the Arcadia Theatre, Chatswood: Nicholas Robins at the Wurlitzer organ. 10.28: To-morrow's programme and late weather report. 10.30: National Anthem. Close.

Barnett. 5.0: From the Studio, Captain A. C. C. Stevens, "The Taj Mahl." 5.15: Popular music. 5.25: Producers' Distributing Society's poultry report. 5.28: Studio items. 5.37: Features of the evening's programme.

EARLY EVENING SESSION.

Announcer: Basil Kirke. 5.40: Children's Session, conducted by Uncle Bas; music and entertainment; letters and stories. 6.30: "Sun" news and late sporting. 6.40: A specially selected recital of dinner music records. 7.7: Australian Mercantile Land and Finance Co.'s report; weather report and forecast by courtesy of Government Meteorologist; Producers' Distributing Society's fruit and vegetable market report; grain and fodder report ("Sun"); dairy produce report ("Sun"). 7.25: Mr. Pim and Miss Pam in advertising talks and nonsense. 7.53: Ad. special. 7.55: Programme and other announcements.

EVENING SESSION.

Announcer: Basil Kirke. Accompanist: G. Vern Barnett. 8.0: G.P.O. chimes, 2BL Topical Chorus. 8.2: From the Haymarket Theatre, the Haymarket Theatre Orchestra, conducted by Stanley Porter. 8.20: From the Studio, Theodore Atkinson, baritone— (a) "The Sweepers," from "Fringes of the Fleet" (Elgar). (b) "Young Tom o' Devon" (Kennedy Russell). 8.27: Graham and Manning, entertainers. 8.37: Amy Firth, soprano. 8.44: Theodore Atkinson, baritone— (a) "Choose Me Your Valentine" (Clarke). (b) "In Summertime on Bredon" (Peel). 8.51: From the Haymarket Theatre, the Haymarket Theatre Orchestra, conducted by Stanley Porter. 9.15: From the Studio, Amy Firth, soprano. 9.22: Graham and Manning, entertainers. 9.32: Romano's Dance Orchestra, conducted by Bennie Abrahams. 9.42: From the Haymarket Theatre, the Haymarket Theatre Orchestra, conducted by Stanley Porter. 10.0: From the Theatre Royal, by courtesy of J. C. Williamson, Ltd.: 2nd act of "Hit the Deck." 11.3: From the Studio, late weather report; late "Sun" news service. 11.15: Romano's Dance Orchestra, conducted by Bennie Abrahams. 11.30: National Anthem; close down.

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2BL

MORNING SESSION.

Announcer: A. C. C. Stevens. 8 a.m.: G.P.O. Chimes, Metropolitan weather report. 8.1: State weather report. 8.2: Studio music. 8.15: G.P.O. chimes; news service from the "Daily Telegraph Pictorial." 8.30: G.P.O. chimes, news service continued. 8.40: Information, mails, shipping, arrivals, departures, and sailings. 8.45: Studio music. 9.15: Half an hour with silent friends. 9.45: Studio music. 10.0: G.P.O. chimes. Close down.

MIDDAY SESSION.

Announcer: A. C. C. Stevens. 11.0: G.P.O. chimes; 2BL Women's Sports' Association session, conducted by Miss Gwen Varley. 11.30: Advertising hints; talk on "Diet and Health," by Miss Dorothe de Cleghorne. 11.30: Advertising hints; talk on "Diet and Health," by Miss Dorothe de Cleghorne. 11.40: Women's Session, conducted by Mrs Cranfield. 12.0: G.P.O. chimes; special ocean forecast and weather report. 12.3: Studio music. 12.30: Shipping and mails. 12.35: Market reports. 12.48: "Sun" midday news service. 1.0: Studio music. 1.3: Talk to children and special entertainment for children in hospital. 2.0: G.P.O. clock and chimes; close down.

AFTERNOON SESSION.

Announcer: A. C. C. Stevens. Accompanist: Kathleen Roe. 3.45: G.P.O. chimes; popular music. 4.0: From Paling's Concert Hall, a recital by the students of G. Vern

2GB

10.0: Music. 10.10: Happiness talk by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Miss Helen J. Beegling. 11.30: Close down. 2.0: Music. 2.5: Women's radio service. By Mrs. Dorothy Jordan. 2.30: Music. 2.45: A talk. 3.0: Music. 3.15: Close down. 5.30: Children's session, by Uncle George. 7.0: Music. 8.0: Mr. Victor Earle, baritone. 8.7: Mr. Leonard Brewer, violinist. 8.15: Miss Gladys Verona, soprano. 8.22: Instrumental music. 8.30: Humorous interlude, by Mr. Jack Win and Mr. Heath Burdock. 8.35: Mr. Leon Novello, tenor. 8.45: Mr. Leonard Brewer, violinist. 8.50: Miss Ethel Muller, contralto. 9.0: Weather report. 9.3: Address. 9.15: Mr. Victor Earle, baritone. 9.35: Miss Gladys Verona, soprano. 9.45: Mr. Leonard Brewer, violinist. 9.50: Mr. Leon Novello, tenor. 10.0: Humorous interlude by Mr. Jack Win and Mr. Heath Burdock. 10.5: Miss Ethel Muller, contralto. 10.15: Dance music. 10.30: Close down.

2UW

MIDDAY SESSION.

12.30: Music. 1.0: G.P.O. clock and chimes; music. 2.30: Close down. 4.30: Musical programme.

EVENING SESSION.

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; music. 9.0: G.P.O. clock and chimes; comments on foreign affairs, by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down.

Interstate Programmes, Friday, April 12

3LO

EARLY MORNING SESSION.

7.15: Morning melodies; exercises to music; Stock reports; Stock Exchange information; market reports; general news; shipping and sporting information; time signal. 8.15: Close down.

MORNING SESSION.

Announcer: John Stuart. 11.0: To-day's Radio Recipe: Cauliflower Au Gratin. 11.5: Under the auspices of the Blue Triangle Sports' Association, Miss Bennett will speak on "Sports for Women." 11.25: "An Fall" will speak on "Fashions and Fabrics." 11.45: Under the auspices of the Health Department, Dr. Merrills will speak on "Potomaine and Food Poisoning."

MIDDAY SESSION.

Announcer: John Stuart. Accompanist: Agnes Fortune. 12.0: Melbourne Observatory time signal, express train information. 12.1: Prices received by the Australian Mines and Metals Association from the London Stock Exchange this day. British official wireless from Rugby: Reuter's and the Australian Press Association's cables; "Argus" news service. 12.15: Newmarket stock sales, special report by the Associated Stock and Station Agents, Bourke Street, Melbourne. 12.20 to 1.50: General programme.

AFTERNOON SESSION.

Announcer: John Stuart. Accompanist: Agnes Fortune. 2.15: General programme to 5.1: "Herald" news service; Stock Exchange information. 5.15: Close down.

EARLY EVENING SESSION.

8.0: Answers to letters and birthday greetings by "Billy Bunny." 8.25: Musical interlude. 8.30: "Billy Bunny."

EVENING SESSION.

Announcer: Frank Hatherley. 8.50: Madame Soward will speak on "French Without Tears." 7.5: Stock Exchange information. 7.15: Official report of the Newmarket stock sales by the Associated Stock and Station Agents, Bourke Street, Melbourne. Full report of the cow market, also sheep and cattle truck takings for the markets of next week. Rabbit prices. Weather synopsis. River reports. Market reports by the Victorian Producers' Co-operative Co., Ltd. Poultry, grain, hay, straw, juice, dairy produce, potatoes and onions. Market reports of fruit by the Victorian Fruitgrowers' Association. Citrus fruits. 7.30: News session. 7.43: Birthday greetings. 7.45: Out of the past. 7.46: Under the auspices of the Department of Agriculture, J. Brake, Senior Inspector of Agriculture, will speak on "Wheat Growing—Preparations for Seeding." 8.1: H. K. Love will speak on "Technicalities."

NIGHT SESSION.

Announcer: Frank Hatherley. Accompanist: Agnes Fortune.
 8.10: Collingwood Citizens' Band—March, "Anglo-Oriental."
 Part song, "Sweet and Low."
 March, "Normanton."
 8.20: Jack Stocks, "The Woman Water," has some further experience to relate.
 8.27: Marion Lightfoot will entertain with her steel guitar.
 8.33: Rosina Down, soprano—
 "Trees" (Rashah).
 "Love the Jester" (Montague Phillips).
 8.40: The Imperial Russian Trio (Arved Norit violin, Ivan Berzinsky 'cello, and Vassilli Ister piano)—
 "Sarabande" (Handel).
 "Rondo alla Turca" (Mozart).
 Arved Norit, violin.
 "Walther's Preislied" (Wagner).
 Ivan Berzinsky, 'cello—
 "Cavatille" (Lully).
 The Trio—
 "Hungarian Dance, No. 6" (Brahms).
 9.0: John Hobbs, baritone—
 "On the Road to Mandalay" (Oley Speaks).
 "Little Miss Gershwain-Way" (Sterndale Bennett).
 9.7: Collingwood Citizens' Band—
 "Gems from Schubert."
 9.17: Captain Donald Maclean—
 "Feats of the Mighty."
 9.37: Collingwood Citizens' Band—
 "A Darkie's Dreamland."
 9.42: Jack Stocks, "The Woman Water," in some more of his Painful Past.
 9.50: Marion Lightfoot, steel guitar—
 "Modern Melodies."
 10.0: "Argus" news service; British official wireless news from Rugby; meteorological information; announcements. Garden notes, supplied by Leslie H. Branning.
 10.10: Collingwood Citizens' Band—
 March, "Allendale."
 Trombone solo, "On With the Motley." (Soloist, A. Thorne).
 10.17: Rosina Down, soprano—
 "Magdalen at Michael's Gate" (Lehmann).
 "The Market" (Carew).
 10.24: Eric Welch will speak on to-morrow's Ep-
 som Turf Club races.
 10.34: John Hobbs, bass-baritone—
 "Limehouse" (Hyden).
 "When You're Away" (Sanderson).
 10.41: Collingwood Citizens' Band—
 Fox-trot, "Sally of My Dreams."
 10.47: The Radio Revelers—

"That's Her Now" (Ager).
 "Japansy" (Klenner).
 "Constantinople" (Carlton).
 "In the Woodshed She Said She Would" (Johnson).
 "Minnetonka" (Wallace).
 "Just Keep Singing a Song" (Sissell).
 "Roses of Yesterday" (Berlin).
 "Jo-Anne" (Ward).
 "Gipsy" (Ollbert).
 "Glad Rag Doll" (Ager).
 "All by Yourself in the Moonlight" (Wallace).
 11.30: God Save the King.

3AR

MORNING NEWS SESSION.

Announcer: Maurice Dudley. 10.0: G.P.O. Clock says "Ten." 10.1: Market reports, farm and station produce, fruit, fish, vegetables, etc. 10.2: Shipping agents. Ocean forecast. 10.30: Mail notices. Express train information. 10.35: News service. 10.59: Weather forecast.

MORNING MUSICAL SESSION.

11.0: Transmission from the Y.M.C.A. Prince's Bridge, Melbourne. Under the auspices of the Victorian Treeplanters' Association Convention. 1929 (held in conjunction with "Garden Week"). 12.20: British official wireless news, announcements. 12.30: Close down.

AFTERNOON SESSION.

3.0: General programme including The Strad Trio: Cecil Parker, violin; Myra Montague, piano. 4.30: Close down.

EVENING SESSION.

Announcer: Renn Millar. 6.0: General programme. 7.20: service, announcements.

NIGHT SESSION.

Announcer: Renn Millar.
 8.25: Did You Know That.
 8.30: Transmission from the Malvern Town Hall. Conductor, G. J. Mackay.
 10.30: From the studio. News service.

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4QG

EARLY MORNING SESSION.

Announcer: J. Tyson. 7.43: Time signals. 7.45: News service. 8.0: Electric records. 8.15: News service. 8.30: Close down.

MORNING SESSION.

Announcer: Rita McAuliffe. 11.0: General programme. 12.0: Close down.

MID-DAY SESSION.

Announcer: R. Wight. 1.0: Market reports and weather information. 1.15: Lunch-hour music. 2.0: Close down.

AFTERNOON SESSION.

Announcer: H. Humphreys. 3.0: A programme of records. 3.30: Mail train running times. 4.15: This afternoon's news. 4.30: Close down.

EARLY EVENING SESSION.

Announcers: R. Wight and H. Humphreys. 6.0: Mail train running times; mail information; shipping news. 6.5: Dinner music. 6.25: Commercial announcements. 6.30: Bedtime stories, conducted by "The Sandman." 7.0: News in brief. 7.5: Stock Exchange news. 7.6: Metal quotations. 7.7: Market reports. 7.25: Fenwick's stock report. 7.30: Weather information. 7.40: Announcements. 7.43: Standard time signals. 7.45: To-morrow's sporting fixtures reviewed.

NIGHT SESSION.

Announcer: A. V. James.
 8.0: From the studio, a programme arranged by Mr. Sydney May.

John Steele, tenor—
 "Maire My Girl" (Aitken).
 Lou Lambert, baritone—
 "Vagabond" (Coningsby Clarke).
 Jill Manners, soprano—
 "Ave Maria" (Mascagni).
 Vera Parker, contralto—
 "The Sweetest Flower that Blows" (Hawley).
 Double Quartette—
 "Drink to me Only with Thine Eyes" (Butterfly).
 Eric Hayne, violin—
 "Adoration" (Borowski).
 "Indian Snake Dance" (Cecil Burleigh).
 Pat McOnigly, soprano—
 "Elegie" (Massenet).
 Men's Voices—
 "The Song of the Pedlar" (Williams).
 Vera Parker, contralto—
 "My Treasure" (Prevalsa).
 W. L. Burch, bass—
 "Mountains of Mourne" (Collisson).
 John Steele, tenor—
 "Flowers of Forgetfulness" (Gadman).
 Double Quartette—
 "Song of the Vikings" (E. Paning).
 Jill Manners, soprano—
 "The Herald" (M. Shaw).
 Jack Land, tenor—
 "Anzels Guard Time" (Godard).
 9.0: Metropolitan weather forecast; week-end road information for motorists, officially supplied by the Royal Automobile Club of Queensland.

Double Quartette—
 "Dream of Home" (Arditt).
 Eric Hayne, violin—
 "Chanson Louis XIII." (Couperin-Kreisler).
 "Pavane" (Couperin-Kreisler).
 "Toy Soldier March" (Kreisler).
 Pat McOnigly, soprano—
 "Rackety Coo" (Frimail).
 Double Quartette—
 "May Day Song" (A. Thomas).
 Lou Lambert, baritone—
 "Fortune's Queen" (Oliver).
 John Steele, tenor—
 "Ave Maria" (Kahn).
 Quartette—
 "Londonderry Air" (Irish Melody).
 Vera Parker, contralto—
 "The Lost Chord" (Sullivan).
 Lou Lambert, baritone—
 "Little Mother o' Mine."
 Pat McOnigly, soprano.
 Men's Voices—
 "Land of My Fathers" (J. James).
 Jill Manners, soprano—
 "Cigarette" (Fraser Simson).
 Jack Land, tenor—
 "Farewell in the Desert" (Adams).
 W. L. Burch, bass—
 "Friend o' Mine" (Sanderson).
 Double Quartette—
 "We've No Monks" (Rachmannoff).
 10.0: "The Daily Mail" news; "The Courier" news; weather news; close down.

5CL

MORNING SESSION.

Announcer: J. L. Norris. 11.0: G.P.O. chimes. 11.15: Kitchen craft and menu talk. 11.45: Under the auspices of the St. John Ambulance Association, Mr. L. G. Cant will speak on "The Work of the Association." 12.0: Chimes. 12.1: Midday music. 12.15: General news service. British official wireless news. 12.40: More music. 12.52: S.A. Railway Information. S. C. Ward and Co.'s Stock Exchange information. Meteorological information. 1.0: G.P.O. chimes. 1.1: Lunch-hour recital. 1.59: Meteorological information. 2.0: G.P.O. chimes. Close down.

AFTERNOON SESSION.

3.0: Chimes; general programme, include Solomon Sisters; Mary Eason, soprano; Harry Hutchins, violinist; John D. Fraser, baritone; Pat McLeath, entertainer. 4.15: A short lecture, with illustrations, recordings by Horace Perkins, Mus.Bac., on "The Musical Instrument." S. C. Ward and Co.'s Stock Exchange information. 5.0: G.P.O. chimes. Close down.

EVENING SESSION.

Announcer: C. J. O'Connor. 6.0: G.P.O. chimes. 6.1: Birthday greetings, correspondence, songs and stories by "Miss Wireless." 6.30: Mr. Keith Minchin. 6.45: An interlude of dinner music. 7.0: G.P.O. chimes. 7.1: S. C. Ward and Co.'s Stock Exchange information. 7.6: General market reports. 7.15: 5CL's sporting service supplied by "Givius." 7.27: Musical interlude. 7.45: Miss Maude Ray.

NIGHT SESSION.

Announcer: C. J. O'Connor. Accompanist: Jean Finlay.
 8.0: Chimes.
 8.1: Symphony Orchestra (Conductor, Mr. Lionel Baird).
 Overture, "Morning, Noon, and Night" (Suppe).
 8.13: Agnes Kerr, contralto—
 "The Four Maries" (Scott).
 "Hall Caledonia" (Stroud).
 8.19: Vera Jura, violinist—
 "Spinning Song" (Carl Bohm).
 "Hungarian Dance" (Nachey).
 8.25: Symphony Orchestra—
 Selection, "The 3rd Pinafore" (Sullivan).
 8.37: John D. Fraser, baritone—

"An Evening Song" (Blumenthal).
 "I Heard You Singing" (Coates).
 8.43: Pat M'Lean.
 9.49: Symphony Orchestra—
 "Celebrated Largo, with Harp" (Handel).
 "Meditation," with harp (Gounod).
 9.0: Chimes.
 9.1: Meteorological information, including Semaphore Overseas grain report.
 9.3: Mr. C. T. Madigan, M.A., B.Sc., F.G.S., will give the second of his series of talks on "Life in the Antartica."
 9.18: Symphony Orchestra—
 Suite, "Dance of Sunfeast" (Waller).
 9.24: Agnes Kerr—
 "The Sundown Sea" (Steckel).
 "Rory Darlin'" (Temple).
 9.30: A comedy, entitled "The Pearls."
 Characters: Sir George Fullerton (40), Lloyd Taylor; Kitty Fullerton (his wife, 25), Bobs Trevor; Josephine (the maid), Miriam Ralph. Scene: Lady Fullerton's Morning Room in London. Lady Fullerton is arranging flowers and lamenting the fact that her husband has gone to the office forgetting that it is her birthday. Time: Morning.
 9.45: Symphony Orchestra—
 Tone Poem, "Valse Triste" (Sibelius).
 9.51: John D. Fraser—
 "The Last Song" (Rogers).
 "I Be Hopin' You Remember" (Clarke).
 9.57: Vera Jurs—
 "Nocturne in G. Flat" (Chopin).
 "Mazurka" (Wienlawski).
 10.3: Pat M'Lean.
 10.8: Symphony Orchestra—
 Grand March, "Entry of the Gladiators" (Faisk).
 10.15: General news service.
 Meteorological information.
 10.20: 5CL's sporting service, supplied by "Sporting News."
 10.30: Modern dance numbers by the "Radio Revelers."
 11.0: Close down.

6WF

12.30: Tune in. 12.35: Markets, news, etc. 1.0: Time signal. 1.1: Weather notes supplied by the Meteorological Bureau of West Australia. 1.3: Musical programme from the studio, including items by the Studio Trio, comprising Miss Audrey Dean, piano; Miss E. Waterman, cello; Miss V. Waterman, violin. 2.0: Close down. 3.30: Tune in. 3.35: Afternoon tea programme relayed from the Primrose Cafe de Luxe; vocal items from the studio. 4.30: Close down. 6.45: Tune in. 6.48: Bedtime stories by Uncle Duffy. 7.5: Light music by the Studio String Trio. 7.30: Commercial and general information. 7.45: Racing talk by the sporting editor of the "Truth" Newspaper Co., Ltd. 8.0: Time signal. 8.1: First weather bulletin. 8.3: Musical programme from the studio. 8.50: Late news items by courtesy of "The Daily News" Newspaper Co., Ltd.; station announcements; ships within range announcements; late weather bulletin. 8.57: Talk on "Gardening" by Mr. James Conarty. 9.15: Description of wrestling match by the sporting editor of the "Truth" Newspaper Co., Ltd., relayed from the Subiaco Oval. 10.30: Close down.
 10.4.5 Metre Transmission.—Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 6.45 p.m.

7ZL

MID-DAY SESSION.

Announcer: Jack Broadbent. 11.30: General programme to 1.30.

AFTERNOON SESSION.

Announcer: Jack Broadbent. 3.0: Chimes. 3.15: General programme. 4.30: Close down.

EARLY EVENING SESSION.

Announcer: Jack Broadbent. 6.15: Selection. 6.25: Birthday greetings, by "Uncle David" and "The Story Lady." 7.0: Answers to letters and birthday greetings, by "Uncle David." 7.10: News session.

EVENING SESSION.

Accompanist: Lella Read. Announcer: Jack Broadbent. 7.15: A. M. O'Leary will speak on "Review of Cricket Season." 7.30: A studio concert by the Discus Ensemble and 7ZL artists. Lella Read, piano solo. Selected. 7.35: Fred Heraud, baritone, "Song of the Tinker." "Speed the Plough" (Martin). 7.42: Harry Ooss-Custard, organ solo, "Fantasia," "The Storm," Parts 1 and 2 (Lemmons). 7.49: Jean Hibbard, soprano, "Thank God for a Garden" (Del Riego), "An Emblem" (Thompson). 7.6: Joyce Okines, elocutionist, "The Idle Shepherdess." 7.8: Doris Mannering, soprano, "The Lilac Tree" (Cartlan), "Land of the Long Ago" (Ray). 8.6: Guitlar duet, "Hawaiian Waltzes." 8.9: Fred Heraud, baritone, "Passing By" (Purcell), "Loving Smile of Sister Kind" (Faust). 8.16: Guitlar duet, "Hawaiian Melody." 8.19: Jean Hibbard, soprano, "Three Green Bonnets" (Herdolot). "You in a Gondola" (Clark). 8.26: Joyce Okines, elocutionist, "The First Call on the Butcher." 8.31: Doris Mannering, soprano, "The Charm of Spring" (Clarke), "I Know a Lovely Garden" (Herdolot). 8.38: Joyce Okines, elocutionist, "Bus Concert." 8.45: J. M. Counsel, a musical hour with the old masters, "The History and Development of Music." 9.45: News session. 10.0: G.P.O. clock chimes the hour. 10.1: Close down.

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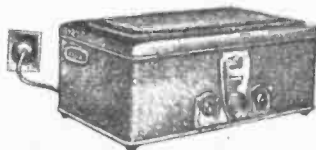
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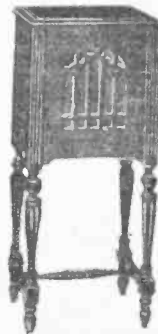
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FARMER'S

PITT, MARKET AND GEORGE STREETS

Local Programmes, Saturday, April 13

2FC

EARLY MORNING SESSION.

Announcer: A. S. Cochrane. 7.0: "Big Ben" and announcements. 7.2: Official weather forecasts, rainfall, river reports, temperatures, astronomical memoranda. 7.7: "Sydney Morning Herald" summary. 7.12: Shipping Intelligence, mail services. 7.15: Studio music. 7.25: Investment market, mining sharemarkets, metal quotations, wool sales, breadstuffs markets, inter-State markets, produce markets. 7.40: Studio music. 8.0: "Big Ben"; close.

MORNING SESSION.

Announcer: Eric Bessemer.

10.0: "Big Ben" and announcements. 10.2: Pianoforte reproduction. 10.10: "Sydney Morning Herald" news service. 10.25: Studio music. 10.30: Last minute sporting information by the 2FC racing commissioner. 10.40: Studio music. 10.45: A talk on "Gardening" by J. G. Lockley ("Redgum"). 11.0: "Big Ben." A.P.A. and Reuter's cable service. 11.5: Close down.

MIDDAY SESSION.

Announcers: Ewart Chapple, Laurence Halbert. 12.0: "Big Ben" and announcements. 12.1: Stock Exchange information. 12.3: Official weather forecast, rainfall. 12.5: Studio music. 12.10: Summary of news, "Sydney Morning Herald." 12.15: Rugby wireless news. 12.20: Studio music. 12.45: Popular music. 12.50: From Randwick: Description of City Tattersall's meeting, by the New South Wales Broadcasting Company's racing commissioner. Durlin intervals, the "Happy Trio" will play from the studio. 4.45: Complete racing resume. 5.0: "Big Ben"; close.

EARLY EVENING SESSION.

Announcer: A. S. Cochrane. 5.40: The chimes of 2FC. 5.45: The children's session, conducted by the "Hello Man." Letters and stories, music and entertainment. 6.30: Dalgely's market reports (wool, wheat, and stock). 6.40: Fruit and vegetable markets. 6.43: Stock Exchange information. 6.45: Weather and shipping news. 6.48: Rugby wireless news. 6.50: Late sporting news. 7.0: "Big Ben." late news service. 7.10: The 2FC Dinner Quartette, conducted by Horace Keats: (a) "Mauresque Caprice" (Boccalardi). (b) "Promotionen" (Strauss). (c) "It Happened in Nordland" (Herbert). (d) "Anitra's Dance" (Grieg). (e) "An Old Adobe" (Schertzingler). (f) "Spring Thoughts" (Salzer).

EVENING SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

7.40: Popular music.
7.45: Programme announcements.
7.48: Studio items.
8.0: From the Lewisham Hospital: Hospital concert party under the direction of Charles Lawrence.
9.45: From the studio: Weather report, Studio Dance Band, conducted by Cec. Morrison.
10.0: "Big Ben"; Alex Whitson, baritone.
10.7: Studio Dance Band, conducted by Cec. Morrison.
10.21: Alex Whitson, baritone.
10.30: Late weather.
10.32: Studio Dance Band, conducted by Cec. Morrison.
10.57: To-morrow's programme.
10.59: Studio Dance Band, conducted by Cec. Morrison.
11.30: National Anthem; close.

2BL

MORNING SESSION.

Announcer: Eric Bessemer. 8.0: G.P.O. chimes; metropolitan weather report. 8.1: State weather report. 8.2: Studio music. 8.15: G.P.O. chimes; news service from the "Daily Telegraph Pictorial." 8.30: G.P.O. chimes; news service continued. 8.40: Information, mails, shipping, arrivals, departures, and sailings. 8.45: Studio music. 10.0: G.P.O. chimes; close down.

MID-DAY SESSION.

Announcer: Eric Bessemer. 11.0: G.P.O. chimes; Women's Session, conducted

by Mrs. Cranfield; What's on at the Pictures and Theatres; stock recipes for cake, puddings, and dumplings. 11.30: Advertising hints. 11.40: Talk on "Gardening," by Mr. Cooper, Park Superintendent, City Council. 12.0: G.P.O. chimes; special ocean forecast and weather report. 12.3: Studio music. 12.30: "Sun" mid-day news service. 12.40: Studio music. 1.0: "Sun" news service. 1.10: Studio music. 1.30: "Sun" news service. 1.40: Studio music. 2.0: G.P.O. chimes; close down.

AFTERNOON SESSION.

Announcer: A. C. C. Stevens. Accompanist: Kathleen Roe. 3.45: G.P.O. chimes; popular music. 3.50: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.0: G.P.O. chimes. From the Studio, Thelma Lovett, soprano. (a) "When God Made the Roses" (Forster). (b) "The Dance on the Lawn" (Phillips). 4.7: Studio music. 4.10: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.20: From the Studio, Irene Jay, songs at the piano. 4.30: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.40: From the Studio, "Sun" news service. 4.45: Irene Jay, songs at the piano. 4.52: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 5.0: G.P.O. chimes; popular music. 5.20: Complete sporting and racing resume. 5.37: Features of the evening's programme.

EARLY EVENING SESSION.

Announcer: Basil Kurke. 5.40: Children's Session, conducted by Uncle Bas; music and entertainment; letters and stories. 6.30: "Sun" news and late sporting. 6.40: 2BL Dinner Quartette, (a) "A Spring Day" (Haines). (b) "Zazra" (Bowen). (c) "Three Dream Dances" (Taylor). (d) "Winds in the Trees" (Thomas). (e) "Vivace." Trio. Op. 72 (Godard). (f) "Waltz" (Carreno). 7.7: Complete sporting and racing resume. 7.30: Mr. Pim and Miss Pam in advertising talks, handy hints, and nonsense. 7.53: An Ad special. 7.55: Programme and other announcements.

EVENING SESSION.

Announcer: J. Knight Barnett.

Accompanist: G. Vern Barnett.

8.0: G.P.O. chimes; 2BL Topical Chorus.
8.2: "The Troubadors."
8.15: Harry Skinner, banjo solos—
(a) "Twin Star March" (Cullah)—arr Essex.
(b) "Donkey Laugh" (Morlay).
8.22: Dorothy Nail, comedy sketch—"The Dealer's Lament."
8.30: Popular programme.
9.30: Weather report.
9.31: "The Troubadors."
9.45: Harry Skinner, banjo solos—
(a) "Tune Tonic" (Grinshaw).
(b) "Air in C Major" (Turner).
9.52: Dorothy Nail, songs at the piano—
(a) "It must be very trying to be mad" (Talbot).
(b) "Nobody knows what I know" (Burchell).
10.0: Romano's Dance Orchestra, conducted by Bennie Abrahams.
10.15: From the Studio, late "Sun" news service.
10.30: Romano's Dance Orchestra, conducted by Bennie Abrahams.
10.57: From the Studio, to-morrow's programme.
10.59: Romano's Dance Orchestra, conducted by Bennie Abrahams.
11.30: National Anthem; close down.

2GB

5.30: Children's session, by Uncle George
7.0: Dance music. 8.0: Request evening. 9.0: Dance music. 10.30: Close down.

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The Kurrajong tree planted in Adelaide Government House Grounds, July, 1920, by the Prince of Wales, which will be mentioned by Mr. Cooper in his talk from 2BL this morning.

2UW

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: Musical programme. 10.30: Close down.

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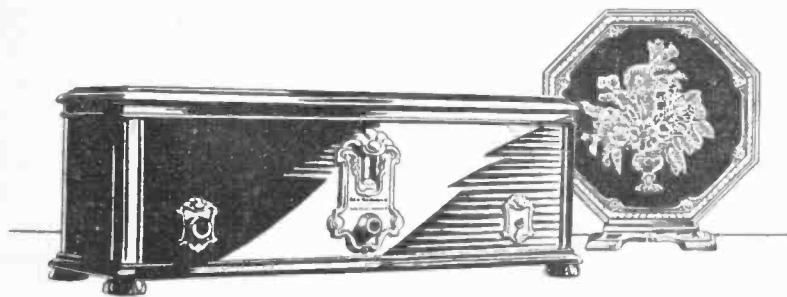
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Civic Centre,
Canberra.

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Interstate Programmes, Saturday, April 13

3LO

EARLY MORNING SESSION

7.15 to 8.15: See Friday.

MORNING SESSION

11.0 to 11.34: General programme.

MIDDAY SESSION

12.0: Melbourne Observatory time signal. Express train information. 12.1: Metal prices, etc. 12.30: General programme to 1.45.

AFTERNOON SESSION

Announcer: John Stuart. 2.13: Description of Two-year-old Handicap, 5 furlongs 20 yards, at Epson Turf Club races, by Eric Welch. 2.20: Description of final match of Pennant cricket competition by Rod McGregor. 2.43: Description of Epson Plate, 6 furlongs, Epson Turf Club races. 3.50: Description of final match of Pennant cricket competition. 3.13: Description of Epson Hurdle, one mile, Epson Turf Club races. 3.20: Description of final match of Pennant cricket competition. 3.43: Description of Brush Steeplechase, 2 miles 15 chains, Epson Turf Club races. 3.50: Description of final match of Pennant cricket competition. 4.30: Description of final match of Pennant cricket competition. 5.0: "Herald" news service. During the afternoon results of the Wodonga races will be broadcast as they come to hand. 5.20: Description of final match of Pennant cricket competition. 5.30: Close down.

EARLY EVENING SESSION

6.0: Stumps scores, final match of Pennant cricket competition. 6.3: Answers to letters and birthday greetings by "Little Miss Kookaburra". 6.30: Musical interlude. 6.35: Kookaburrites! Would you like a mystery story? All right, listen to this. Its name is even a mystery!

EVENING SESSION

7.5: Stock exchange information. 7.15: Market reports. Wholesale prices of fruit by the Wholesale Fruit Merchants' Association. Citrus fruits, 7.30: News service. 7.40: Birthday greetings. 7.43: Out of the past. 7.44: Dr. J. A. Leach will speak on "Fairy Warblers". 7.59: Programme announcements. 8.0: Tasmania information from the "Courier". Luncheon.

NIGHT SESSION

Announcer: Frank Hatfield. Accompanist: Agnes Fortune.
8.0 Official opening of the Wireless Exhibition.
8.30: The Station Orchestra—
Overture, "Wanderer's Goal" (Suppe).
8.35: Thos. B. George, bass-baritone—
"Prince Ivan's Song" (Alltisen).
"The Star" (Rogers).
8.45: Brunswick City Band—
March, "Kneller Hall" (Greenwood).
8.50: Olive Painter, mezzo-soprano—
"Anet's Quarrel" (Gard).
"Celin obligato, Tasma Tiersman."
"Kentucky Babe" (Geibel).
8.57: Song feature of the week.
9.0: E. Mason Wood, baritone—
"Drake Goes West" (Sanderson).
"The Port of St. Mary's" (Lohr).
9.7: The Imperial Russian Trio (Arved Norit violin, Ivan Berzinsky cello, Vassili Ister piano)—
"Serenade" (Gard).
"Mazurka Russe" (Glinka).
"Gerceuse" (Cuit).
9.30: Olive Painter, mezzo-soprano—
"I wonder if Love is a Dream" (Forster).
"The Old Scotch Songs."
9.37: The Station Orchestra—
"Elegie" (Tschakowsky).
9.44: A. Anderson, clarinet—
"Roberto tu che adorai" (Meyerbeer).
9.49: Thos. B. George, bass-baritone—
"Bran of Glensna" (Graham).
"Come to the Fair" (Easthope-Martini).
9.45: Eric Welch will describe to-night's events at the Stadium.
10.0: Brunswick City Band—
"Les Fleurs d'Australie" (Laski).
10.10: French Bros. banjoints—
Modern melodies.
10.17: The Station Orchestra—
"Waltz" (Tschakowsky).
"Twilight" (Cesek).
10.25: E. Mason Wood, baritone—
"The Golden Vanity" (Traditional).
"Molly Brandon" (Stanford).
10.32: Brunswick City Band—
March, "The Evertanlan" (Greenwood).
10.37: French Bros. banjoints—
"Lullaby" (Laski).
10.42: Late sporting.
10.46: The Radio Revellers will play a specially selected programme of latest and brightest dance music, including many special request items.
11.00: Close down.

3AR

MORNING SESSION

Announcer: Maurice Dudley.

10.0 to 10.59: See Friday.

MORNING MUSICAL SESSION

11.0: General programme, including The Imperial Russian Trio. 11.45: British official wireless news.

Rates of exchange as supplied by Messrs. Thos. Cook and son. Announcements. 12.0: Close down.

AFTERNOON SESSION

Announcer: Maurice Dudley. Accompanist: Reg. Brown. 3.0: General programme, including: Will Davis, bass: The Station Orchestra; Emily Davis, piano: Thom Foster, tenor: Jessie Irwin, soprano. 5.0: Close down.

EVENING SESSION

Announcer: Renn Millar. 6.0: Rotary Rhythms. 7.20: News service. Announcements. Result of Final Pennant Cricket Competition.

NIGHT SESSION

Announcer: Renn Millar. 7.3: All sporting results. 7.0: Transmission from Mechanics' Hall, Crofton.

Rendition of "The Messiah," being the 18th Concert by the Crofton Musical Society, augmented and assisted by the Metropolitan Orchestra.

Principals:

Soprano Dorothy Humphreys
Contralto Winnie Mayberry
Tenor Colin Thomson
Bass Ernest Sage
Conductors: Choral, H. C. Turner. Orchestral, E. Carey.

1. Overture.
2. Recit. (tenor). "Comfort Ye."
3. Air. "Every Valley Shall be Exalted."
4. Chorus. "And the Glory of the Lord."
5. Recit. (bass). "Thus Said the Lord."
6. Air. "But Who May Abide."
8. Recit. (contralto). "Behold a Virgin Shall Conceive."
9. Air and Chorus. "O Thou That Tellest."
10. Recit. (bass). "For Behold Darkness."
11. "The People That Walked."
12. Chorus. "For Unto Us a Child is Born."
13. Pastoral Symphony.
Recit. (soprano). "There Were Shepherds."
Recit. "And Lo the Angel Said."
Recit. "And the Angel Said."
16. Recit. "And Suddenly."
17. Chorus. "Glory to God."
18. Air (soprano). "Rejoice greatly."
19. Recit. (contralto). "Then Shall the Eyes."
20. Air. "He Shall Feed His Flock."
21. Air (soprano). "Come Unto Him."
22. Chorus. "Behold the Lamb of God."
23. Air (contralto). "He Was Despised."
24. Chorus. "All We Like Sheep."
27. Recit. (tenor). "All They That See Him."
28. Chorus. "He Trusted in God."
29. Recit. (tenor). "They Rebuke."
30. Air. "Behold and See."
31. Recit. "He Was Cut Off."
32. Air. "But Thou Didst Not Leave."
33. Chorus. "Lift Up Your Heads."
40. Air (bass). "Why Do the Nations."
44. Chorus. "Hallelujahs."
45. Air (soprano). "I Know that My Redeemer."
56. Chorus. "Worthy is the Lamb." Amen.
10.30: News service. Announcements.

4QG

EARLY MORNING SESSION

Announcer: J. Tyson. 7.15: Time signal. 7.45: News service. 8.0: Some electric records. 8.15: News service. 8.30: Close down.

AFTERNOON SESSION

3.0: A programme of records. 3.30: Mail train running times. 4.15: This afternoon's news. 4.30: Close down.

EARLY EVENING SESSION

8.15: Queensland bi-weekly news service for distant listeners. 8.30: Bedtime stories, conducted by "Uncle Ben." 9.15: To-day's race results in brief. 7.20: General sporting notes. 7.30: Sailing notes, by Mr. Fred Smith.

NIGHT SESSION

8.0: From the Savoy Theatre, overture by Savoy Orchestra.
8.10: Phyllis Verner, soprano—
"Christina's Lament" (Dvorak).
8.14: Harry Humphreys in a character sketch.
8.24: Mrs. Charles Willey, contralto—
"Out of the Darkness" (D'Hardiel).
8.30: Mrs. F. North, pianist—
"Berceuse" (Palmgren).
8.35: Doris M'Innes, soprano—
"Se Saran Rose" (A. Verdi).
"Will of the Wisp" (Spross).
8.44: Feo. Todd, elocutionist—
"Spotty" (Hennequin).
8.48: Phyllis Verner, soprano—
"Good Morning, Brother Sunshine" (Lehmann).
8.53: Mrs. F. North, pianist—
"Liebstraum" (Liszt).
8.58: Mrs. Charles Willey, contralto—
"Two Days."
9.1: Metropolitan weather forecast.
9.2: Feo. Todd, elocutionist—
"Life" (Guest).

9.7: Doris M'Innes, soprano—
"In the Garden of My Heart" (Ball).
9.10: From the Speedway, motor cycle races.
9.30: From Lennon's Ballroom, dance music.
10.0: From the studio, "The Sunday Mail" news "Queensland" bi-weekly news service for distant listeners; weather news; close down.

5CL

AFTERNOON SESSION

3.30: Epson race result. Brush Steeplechase. 3.31: Gawler race results. 3.40: Gawler race results. 3.50: Epson race result, Epson Handicap. 4.0: G.P.O. chimes and resume of previous race results. 4.30: Epson race result, Juniper's Flat Race. 4.31: Gawler race results. 4.40: Gawler race results. 4.55: Resume of the afternoon's sporting results. 5.0: G.P.O. chimes and close down.

EVENING SESSION

Announcer: C. J. O'Connor. 6.0: G.P.O. chimes. 6.1: Birthday greetings, correspondence, songs and stories by "The Wattle Lady." 7.0: Chimes. 7.1: S. C. Ward and Co.'s Stock Exchange information. 7.10: Rev. G. E. Hale, B.A., will give an interesting talk on "The Analysis of Dreams." 7.35: C. G. Riley will talk on "Items of Interest." 7.45: 5CL's sporting service, supplied by "Silvina."

NIGHT SESSION

Announcer: C. J. O'Connor. Accompanist: Jean Finlay.
8.0: G.P.O. chimes.
8.1: Holdens' Silver Band—
Conductor: Mr. O. Summerton.
"Song of Australia."
Overture, "Gems from the Overtures" (Hawkins).
8.8: Beryl Counter, mezzo-soprano—
"The Blue Flame" (Arthur Williamson).
"The Remembrance" (Arthur Williamson).
8.14: Hilda Reimann, violinist—
"Menuet" (Pederswyl).
"Le Cygne" (Saint-Saens).
8.20: John D. Fraser, baritone—
"Heart's Desire" (Clarke).
"You in a Gondola" (Clarke).
8.25: Holdens' Silver Band—
March, "The Flying Squad" (Ord. Humel).
Valse, "Destiny" (Baynes).
8.34: Pat M'Lean.
8.40: Charles Baggot, tenor—
"That Was Yesterday" (Clarke).
"Take Me With You When You Fly" (Clarke).
8.28: Holdens' Silver Band—
Selection, "Lightning Switch" (Alford).
9.0: G.P.O. chimes.
9.1: Meteorological information, including Semaphore Tides.
9.2: Overseas Grain Report.
9.3: A pianoforte recital, by Spruhan Kennedy—
"Traumesswilen" (Schumann).
"Nocturne in G Major" (Chopin).
"Ballet, Unhatched Chickens" (Moussorgsky).
"Romance in F Sharp" (Suchmann).
"Allegro" (Granados).
9.24: Beryl Counter—
"The Drarry Steppie" (Czechoslovak).
"Le Couer de ma Mlle" (Dalcroze).
9.30: Hilda Reimann—
"Adagio" from "Concerto" (Bruch).
9.36: John D. Fraser—
"The Dove" (Clarke).
"Yellow Slipper" (Clarke).
9.42: Holdens' Silver Band—
Song Number, "Just Like a Melody" (Donaldest).
Morceau, "Dreamland Bells" (Howells).
9.50: Pat M'Lean.
9.56: Charles Baggot—
"The Dawn" (Gilbert Lowe).
"The White Throat" (Mary Brake).
10.2: Holdens' Silver Band—
Song Number, "Sunshine" (Berlin).
Duet, "Panorama" (Greenwood).
Quickstep, "Voice of the Guns" (Alford).
10.15: General news service. Meteorological information.
10.30: Modern dance numbers by the Radio Revelers.
11.0: Close down.

6WF

12.0: Tune in. 12.5: Racing anticipations repeated for the benefit of our country listeners. 12.1: Musical programme from studio, including pianoforte solos by Miss Audrey Dean. 12.50: Markets news, etc. 1.0: Time signal. 1.1: Weather notes supplied by the Meteorological Bureau of West Australia. 1.2: Close down. 2.30: Tune in; sporting news, and other sporting results broadcast at intervals of 15 minutes during the afternoon. 3.30: Close down. 6.45: Tune in. 6.48: Bedtime stories by Uncle Dody.

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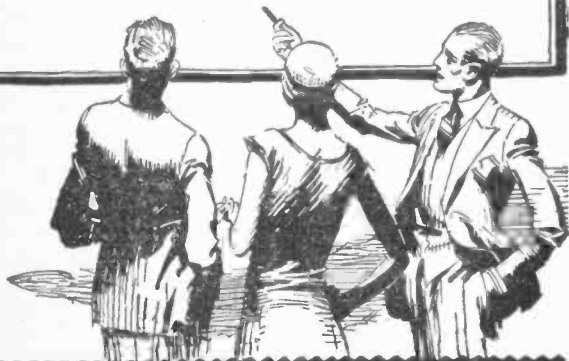
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7.12: Sporting results. 7.30: Commercial and general information. 7.45: Music. 8.0: Time signal. 8.1: First weather bulletin. 8.3: Vocal and instrumental artists from the studio; dance music relayed from the Temple Court Cabaret, Merv. Lyon and his Symphonic Orchestra. 9.50: Late news items by courtesy of "The Daily News" Newspaper Co., Ltd.; station announcements; ships within range announcements; late weather bulletin. 9.5: Programme continued from the Temple Court Cabaret and the studio. 10.30: Close down.

104.5 Metre Transmission.—Simultaneous broadcast on 104.5 metres of programme given on 1230 metres, commencing at 6.45 p.m.

7ZL

MID-DAY SESSION.

Announcer: Jack Broadbent. 11.30. General programme. 12.30: 3LO, Melbourne, commissioner last-minute selections for the Melbourne races; also Sydney races, by our special representative. 2.30: Running description of Two-year-old Hcp. 5f., Epsom, Victoria. 2.35: Close down.

AFTERNOON SESSION.

Announcer: Jack Broadbent. 3.0: Running description of Trial Plate, 6 furlongs, Epsom, Victoria. 3.5: Transmission from the T.C.A. Ground, cricket match, Sandy Bay v. Newtown, described by A. M. O'Leary. 3.30: Description of Trial Purse, 1 mile, Epsom, Victoria. 3.35: Sandy Bay v. Newtown. 4.0: Description of Brush Steeplechase, 2 miles 15 chains, Epsom, Victoria. 4.15: Cricket match, Sandy Bay v. Newtown. 4.30: Description of Epsom Handicap, 1¼ mile, Epsom, Victoria. 5.0: Running description of Jumpers' Flat, 1¼ mile, Epsom, Victoria. 5.5: Close down.

EARLY EVENING SESSION

Announcer: Jack Broadbent. 6.0: All sporting results to hand. 6.30: "Uncle David." 6.45: Answers to letters and birthday greetings. 7.15: News session.

EVENING SESSION.

Announcer: Jack Broadbent. 7.30: Roy Johnson will speak on "Manual Training." 7.45: J. M. Counsel, LL.B., will speak on "European Affairs." 8.0: Chimes. 8.8: A special studio programme. 10.0: News session.



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Local Programmes, Sun., April 14

2FC

MORNING SESSION.

Announcer: A. S. Cochrane. 10.0: "Big Ben" and announcements. 10.2: News service. 10.15: The Captain, "School Life." 10.30: The Comradios' bookshelf. 10.35: Studio music. 11.0: "Big Ben." From St. Andrew's Cathedral, Morning Service, conducted by the Very Rev. The Dean of Sydney. 12.15: Approx. Close down.

AFTERNOON SESSION.

Announcer: Eric Bessemer. 2.30: Programme announcements. 2.32: Children's session, conducted by the "Hello Man." 3.0: "Big Ben"; record recital. 3.15: "Brig-Gen. A. T. Anderson, C.M.G., will speak on "The Big Brother Movement." 3.30: From the Manly Band Rotunda, Manly Beach: The Manly Municipal Band, conducted by James Pheloung. 4.30: From the studio, musical items. 5.0: "Big Ben"; close down.

EVENING SESSION.

Announcer: Laurence Halbert. 6.0: "Big Ben"; programme announcements. 6.2: A talk by S. H. Bowden: "Vatican Palace." 6.20: From the Pitt Street Congregational Church: Organ Recital arranged by Lillian Frost. 7.0: Divine Service conducted by the Reverend T. E. Ruth. 8.30: Weather report. 8.31: From the Studio: Mabel Batchelor, soprano, with flute accompaniment by Victor M'Mahon. 8.38: Jules Van Der Klei, 'cellist. 8.45: Madame Evelyn Greig, Dulcitone solos. 8.52: Mabel Batchelor, soprano. 8.59: Victor M'Mahon, flautist. 9.6: Jules Van Der Klei, 'cellist. 9.14: Mabel Batchelor, soprano. 9.21: Madame Evelyn Greig, Dulcitone solos. 9.28: Muriel Barlow, contralto. 9.35: Victor M'Mahon, flautist. 9.42: Recital of selected records. 10.28: Late weather and to-morrow's programme. 10.30: National Anthem; close.

2BL

MORNING SESSION.

Announcer: Eric Bessemer. 11.0: G.P.O. chimes. From the Bourke Street Congregational Church, the Morning Service, conducted by Rev. Sydney Herbert Cox. Organ prelude. Call to Worship. Doxology, Prayer of Invocation. Hymn 446. "O Happy Band of Pilgrims." Responsive reading. 815. Psalm 55. Offertory. Organ interlude and Offertory Prayer. Solo. Hymn 455. "Lead, Kindly Light." Pastoral Prayer and Lord's Prayer (chanted). Anthem. "Sweet is the Sunlight." Notices. Anthem. "Seek Ye the Lord." soloist, J. G. Yuill. Scripture Lesson. Boys' and girls' story. Hymn 731. "Father, Lead Me Day by Day." Sermon. "Tares Among Wheat." Rev. Sydney Herbert Cox. Hymn 415. "Walk in the Light." Benediction. Organ postlude.

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12.15 (approx.): From the Studio, "Sun" news service.

12.30: Studio music.
2.0: G.P.O. chimes; close down.

AFTERNOON SESSION.

Announcer: Basil Kirke. 3.0: G.P.O. chimes. E. J. Davidson will speak on the "Toc H" movement. 3.10: Studio music. 3.30: From the Arcadia Theatre, Chatswood. Nicholas Robins at the Wurlitzer Organ. (a) Overture, "Tancred" (Rossini). (b) "Chant D'Amour" (Frommel). (c) "Fantasia of Operatic Airs" (arr.). (d) "Humoresque" (Dvorak), by request. (e) "Moments Musicales" (Schubert). 4.0: From the Studio, Studio music. 4.10: From the Arcadia Theatre, Chatswood. Nicholas Robins at the Wurlitzer Organ. (a) "Medley of Scotch Airs" (Arr. by N.R.). (b) "Adoration" (Telma). (c) "Polonaise in A Major" (Chopin). (d) "Simple Avenu" (Thorne, Op. 25). (e) "Nola" Novelty Number (Arnold). 4.40: From the Studio, Studio music. 4.55: Programme announcements. 5.0: G.P.O. chimes; close down.

EVENING SESSION.

Announcer: Basil Kirke. Accompanist: G. Vern Barnett. 6.0: G.P.O. chimes. The "Cheer-up Society," conducted by Uncle Frank. 7.0: From Petersham Baptist Church, Evening Service, conducted by Rev. G. A. Craik. Organ prelude. Hymn, "Jesus, the Very Thought of Thee." Prayer. Musical item. M.M.M. Male Choir. Lesson. Solo, C. Huggett. Hymn, "Tell Me the Old, Old Story." Offertory: Old Hymns on Piano, by Mr. F. Searl. Anthem. Choir. Prayer. Solo, G. Watson. Sermon, Rev. G. A. Craik. Hymn, "Beneath the Cross of Jesus." Benediction and Vesper. 8.30: From the Manly Band Rotunda, Manly Beach, the Manly Municipal Band, conducted by James Pheloung. 9.30: From the Studio. W. E. Lewis, baritone. 9.37: Dorrie Ward, soprano. 9.44: W. E. Lewis, baritone. 9.51: Dorrie Ward, soprano. 9.58: To-morrow's programme and announcements. 10.0: National Anthem; close down.

2GB

10.0: Music from St. Alban's Church, Redfern. 10.15: Morning service, from St. Alban's Church. 12.30: Close down. 3.0: Musical session. 5.30: Children's session, by Uncle George. 7.0: Address from Adyar Hall. 8.0: Concert from Adyar Hall. 8.15: Rosenkranz piano solos. 8.23: Miss Mary Neal, contralto. 8.30: Miss Annette Kerr, violiniste. 8.38: Mr. Sim Allan. 8.45: Miss Elsie Peerless, soprano. 8.52: Rosenkranz piano solos. 9.0: Miss Mary Neal, contralto. 9.7: Miss Annette Kerr, violiniste. 9.15: Mr. J. Sim Allan, baritone. 9.22: Miss Elsie Peerless, soprano. 9.29: Rosenkranz piano solos. 9.35: Close down.

2UW

10.30: Music. 1.0: Close down. 5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: Musical programme. 10.30: Close down.

Interstate Programmes, Sun., April 14

3LO

MORNING SESSION
 10.30: Bells from St. Paul's Cathedral. 10.45: Express train information; British official wireless news from Rugby; news from yesterday's papers.
 11.0: Morning service from Independent Church, Collins Street, Melbourne. 12.15: Close down.

AFTERNOON SESSION.
 2.0: Sonora recital of the world's most famous records. 3.0: Pleasant Sunday afternoon service transmitted from Wesley Church, Central Mission, Lansdale Street, Melbourne. 4.30: Close down. 5.45 Shipping information. 5.47: Answers to letters and birthday greetings. 6.25: "Brother Bill's" talk this week is called "The Menagerie". 6.45: Adult birthday greetings and programme announcements. 6.45: Bells from St. Paul's Cathedral, Melbourne.

EVENING SESSION.
 7.0: Evening service from Scots Church, Collins Street, Melbourne—Preacher, The Rev. W. Borland, M.A., D.D.; Psalm (Metrical Version) 43, verses 3-5, "O, Send Thy Light Forth and Thy Truth."

NIGHT SESSION.
 Accompanist, Mel Nelson.
 8.30: Southern Choral Society, accompanied by Brunswick City Band—
 "The Gloria," from "12th Mass" (Mozart).
 "Halleluyah Chorus," from "The Messiah" (Handel).
 9.40: Professor Bernard Henze, violin Professor Louis Hattenbach, cello, and Lindsay Biggins piano—
 "Trio In D Minor" (Mendelssohn).
 "Miniature Suite" (Kreisler).
 Allegretto Grazioso.
 Andante.
 Marche Miniature.
 9.20: "The Smith Girls"—
 "Now the Day is Over."
 "Saviour, Again to Thy Dear Name."
 9.47: Brunswick City Band—
 "Largo" (Handel).
 9.33: Southern Choral Society—
 "Tell Me the Old, Old Story."
 "Lead, Kindly Light."
 9.40: Brunswick City Band—
 March, "Kneller Hall" (Greenwood).
 9.45: "The Smith Girls"—
 "Crying Waters" (Hamblen).
 "Katie Laurie" (Cantor).
 10.0: God Save the King.

3AR

Announcer: Maurice Dudley. 11.0: Morning service from St. Paul's Cathedral, Melbourne. 12.15: British Official Wireless news. 12.30: Close down.

AFTERNOON SESSION.
 Announcer: Maurice Dudley. 3.0: Special Gramophone Recital, "Symphony No. 7, Op. 92" (Beethoven), by Felix Weingartner and the Royal Philharmonic Orchestra. Vocal selections from the Opera, "Merrie England" (Edward German). 4.30: Close down.

EVENING SESSION
 5.0: "Brer Rabbit." 5.30: Close down.

NIGHT SESSION
 7.0: Evening Service from the Unitarian Christian Church, Grey Street, West Eastern Hill, Melbourne. Minister, Rev. William Bottomley.
 8.30: The Strad Trio—Cecil Parkes, violin; May Broderick, piano; Frank Johnston, cello. Trio, "No. 1 in G major" (Haydn). "Andante." "Poco Adagio Cantabile." "Gipsy Rondo."
 8.43: Leonora Scott, Contralto—"Cara Selva" (Handel), "O, Sleep why didst thou leave me" (Handel).
 8.50: Cecil Parkes, Violin; Kingsley Parkes, violin; May Broderick, piano; Frank Johnston, cello—"Concerto in D minor" (Bach). "Vivace" (Arr. Cecil Parkes). "Largo ma non tanto." "Allegro."
 9.2: Ernest Wilson, Baritone—Selected.
 9.3: Cecil Parkes, Violin—"La Capricieuse" (Etard). "The Girl with the Flaxen Hair" (Debussy-Parkes). "Goblin Dance" (Bizet).
 9.19: Leonora Scott, Contralto—"Oh, had I Jubal's Lyre" (Handel). "To the Forest" (Tschickowsky).
 9.26: Betty Ross-Clarke in selections from "The Rivals" of Omar Khayyam.
 9.33: Ernest Wilson, Bass-Baritone. (Hummel).
 9.40: The Strad Trio—"Romance" (Hummel). "Westmoreland Minuet" (Shields). "Rondo" (Hummel).
 9.52: "Age" news service; announcements.

4QG

MORNING SESSION.
 11.0: The complete morning service will be relayed from All Saints' Church of England, Wickham Terrace. 12.15: Close down.

AFTERNOON SESSION.
 3.15: The concert by the Brisbane Citizens' Band will be relayed from the Brisbane Botanic Gardens. 4.30: Close down.

EARLY EVENING SESSION.
 6.30: From the studio, greetings to little listeners and replies to letters.

NIGHT SESSION.
 7.30: The complete evening service will be relayed from All Saints' Church of England, Wickham Terrace. At the conclusion of the evening service a concert by the Brisbane Municipal Concert Band will be relayed from Wickham Park. 9.30: Close down.

5CL

MORNING SESSION.
 Announcer: J. L. Norris. 10.45: Carillon of bells from Adelaide Town Hall. 11.1: Divine service, from Flinders Street Baptist Church. 12.15: British official wireless news. 12.30: Close down.

AFTERNOON SESSION.
 Announcer: J. L. Norris. 3.0: G.P.O. chimes. 3.1: A pleasant Sunday afternoon service, from Maughan Church, Franklin Street. 4.0: Close down.

EVENING SESSION.
 Announcer: J. L. Norris. 6.0: Chimes. 6.1: Birthday greetings, correspondence, songs and stories by "Miss Wireless." 6.30: "The Bird Lady" and "The Sunshine Songsters" will entertain the children. 7.0: Chimes. A religious service from Stow Memorial Church.

NIGHT SESSION.
 Announcer: J. L. Norris.
 Accompanist: Jean Flinty.
 8.20: Unley Orchestra—Conductor, Mr. Norman Sellick.
 "Yeoman of the Guard" (Sullivan).
 8.30: Eileen Starr of "The Girl Friend" Company—Selections from her repertoire.
 8.36: William and Florence Davey, xylophonists—
 "Mighty Lak a Rose" (Nevin).
 "Just a Memory" (Henderson).
 8.43: Arnold Matters, baritone—
 "Hear Me, Ye Winds and Waves" (Handel).
 "The Wanderer" (Schubert).
 8.50: Unley Orchestra—
 "Hydropaten Waltz" (Gungl).
 9.2: Eileen Starr of "The Girl Friend" Company—Selections from her repertoire.
 9.8: William and Florence Davey, xylophonists—
 "Melody in F" (Rubinstein).
 "The Rosary" (Nevin).
 9.14: Arnold Matters, baritone—
 "The Fuchsia Tree" (Roger Quilter).
 "The Great Awakening" (Phillips).
 9.21: Malcolm Gilman, trumpeter of the Unley Orchestra—
 "Neath Austral Skies" (P. Cade).
 "A Pair of Sparkling Eyes" (Sullivan).
 9.23: Unley Orchestra—
 "In a Chinese Temple Garden" (Ketyby).
 "Indian Patrol."
 9.40: Mr. P. H. Nicholls, in another of his interesting talks, "Selling Christianity."
 9.52: General news service.
 10.0: Close down.

6WF

10.25: Tune in. 10.30: Special half-hour for the enthusiastic listener. 11.0: Morning service relayed from the Wesley Church. 12.15: Close down. 3.30: Tune in. 3.35: Musical programme from the studio. 4.30: Close down. 7.0: Tune in. 7.5: Chimes from the Cathedral and selected numbers from the studio. 7.30: Evening service relayed from Trinity Church, Perth. 8.45: Band programme by the Perth City Band, conducted by Mr. Les. M. Price, relayed from the Government Gardens, Perth. 10.5: Close down.
 104.5 Metre Transmission.—Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 7 p.m.

7ZL

MORNING SESSION.
 Announcer: J. M. Counsel. 11.0: Transmission from Memorial Congregational Church, Brisbane Street. 12.30: Close down.

AFTERNOON SESSION.
 Announcer: J. M. Counsel. 3.30: A concert programme arranged by the Pleasant Sunday Afternoon Association. 4.30: Close down.

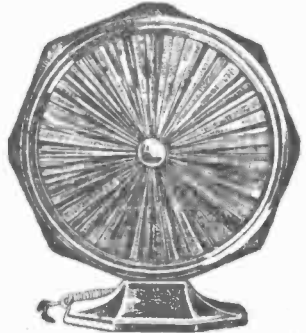
EARLY EVENING SESSION.
 Announcer: J. M. Counsel. 6.15: Chorus singing. 6.45: Bertha Southey Brammall.

EVENING SESSION.
 Announcer: J. M. Counsel. 7.0: Transmission from the Chalmers' Presbyterian Church, Bathurst Street. 8.25: A sacred and classical programme, by J. M. Counsel. 9.45: News session. 9.50: Close down.

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Local Programmes, Monday, April 15

2FC

EARLY MORNING SESSION.

Announcer: A. S. Cochrane. 7.0: "Big Ben" and announcements. 7.2: Official weather forecast, rainfall, river reports, temperatures, astronomical memoranda. 7.7: "Sydney Morning Herald" summary. 7.12: Shipping intelligence, mail services. 7.15: Studio music. 7.25: Investment market, mining share markets, metal quotations, wool sales, breadstuffs markets, inter-State markets, produce markets. 7.40: Studio music. 8.0: "Big Ben"; close.

MORNING SESSION.

Announcer: A. S. Cochrane. 10.0: "Big Ben" and announcements. 10.3: Pianoforte reproduction. 10.10: "Sydney Morning Herald" news service. 10.25: Studio music. 10.30: The 2FC racing commissioner, late sporting news. 10.45: A talk on "Home Cooking and Recipes," by Miss Ruth Furst. 11.0: "Big Ben"; A.P.A. and Reuter's cable services. 11.5: Close.

MID-DAY SESSION.

Announcer: A. S. Cochrane. 12.0: "Big Ben" and announcements. 12.1: Stock Exchange, first call. 12.3: Official weather forecast, rainfall. 12.5: Studio music. 12.10: Summary of news, "Sydney Morning Herald." 12.15: Rugby wireless news. 12.18: A reading. 12.30: Studio music. 1.0: "Big Ben"; weather intelligence. 1.3: "Evening News" mid-day news service. Producers' Distributing Society's report. 1.20: Studio music. 1.28: Stock Exchange, second call. 1.30: From the Aeolian Hall: Lunch-hour chamber music recital: "Schubert Trout Quintette." A. Podinovski, first violin; N. Beresniakoff, second violin; Robert Wood, viola; Jules Van Der Klei, cello; Louis Blitz, double bass; Alex Sverjensky, piano. 1.50: Popular studio music. 2.0: "Big Ben"; close.

AFTERNOON SESSION.

Announcer: Laurence Halbert. Accompanist: Ewart Chapple. 2.30: Programme announcements. 2.32: The Booklovers' Corner. 3.0: "Big Ben"; popular music. 3.20: A talk on the "Milk Week Campaign." 3.30: Mrs. A. P. Welling, pianist: "Chromatic Fantasia and Fugue" (Bach). 3.38: Mab Bowyer, contralto. 3.45: A reading. 4.0: "Big Ben"; Mrs. A. P. Welling, pianist, "Waltzes" (Brahms). 4.8: Mab Bowyer, contralto. 4.15: Studio music. 4.20: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.30: From the studio, popular items. 4.45: Stock Exchange, third call. 4.47: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 5.0: "Big Ben"; close.

EARLY EVENING SESSION.

Announcer: A. S. Cochrane. 5.40: The chimes of 2FC. 5.45: The children's session, conducted by the "Hello Man." Letters and stories. Music and entertainment. 6.30: Dalgety's market reports (wheat, wheat, and stock). 6.40: Fruit and vegetable markets. 6.43: Stock Exchange information. 6.45: Weather and shipping news. 6.48: Rugby wireless news. 6.50: Late sporting news. 7.0: "Big Ben"; late news service. 7.10: The 2FC Dinner Quartette, conducted by Horace Keats: (a) "Greek Festival Dance" (Hartmann). (b) "In a Hongkong Street" (Humphries). (c) "Gurnnut's Dance" (Railton). (d) "A Day in Venice" (Nevin). (e) "In the Garden of My Heart" (Ball). (f) Fox-trot.

EVENING SESSION.

Announcer: Laurence Halbert. Accompanist: Ewart Chapple. 7.40: Popular music. 7.45: Programme announcements. 7.48: Popular music. 8.0: "Big Ben." Studio Orchestra, conducted by Horace Keats. 8.20: John Warren and Muriel O'Malley, duets. 8.30: Brunton Gill and Dorothea Vautier, in a sketch: Balcony scene from "Romeo and Juliet" (Shakespeare). 8.42: R. A. Bartleman, baritone. 8.49: Studio Orchestra, conducted by Horace Keats. 8.59: Weather report. 9.0: "Big Ben." Lucille Bruntnell will speak on "The Genius of Henry Lawson." 9.15: Albert Cazabon, violinist; "Allegro,"

from Sonata for violin and piano in F Major, Op. 24 (Beethoven).

9.22: John Warren and Muriel O'Malley, duets.

9.32: Studio Orchestra, conducted by Horace Keats.

9.47: R. A. Bartleman, baritone.

9.54: Albert Cazabon, violinist—

(a) "Romance" (Svensden).

(b) "Humoresque" (Toraulin).

10.1: Brunton Gill and Dorothea Vautier, in a Sketch: "If I Were King" (McCarthy).

10.13: Studio Orchestra, conducted by Horace Keats.

10.28: To-morrow's programme and late weather report.

10.30: National Anthem; close.

2BL

MORNING SESSION.

Announcer: Eric Bessemer. 8.0: G.P.O. chimes; metropolitan weather report. 8.1: State weather report. 8.2: Studio music. 8.15: G.P.O. chimes; news from the "Daily Telegraph Pictorial." 8.30: G.P.O. chimes; news service continued. 8.40: Information, mails, shipping arrivals, departures, and sailings. 8.45: Studio music. 10.0: G.P.O. chimes; close down.

MID-DAY SESSION.

Announcer: Eric Bessemer. 11.0: G.P.O. chimes; 2BL Women's Sports' Association session, conducted by Miss Gwen Varley. 11.30: Advertising Hints; talk on "Diet and Health," by Miss Dorothea de Cleghorne. 11.40: Women's Session, conducted by Mrs. Cranfield. 12.0: G.P.O. chimes; special ocean forecast and weather report. 12.3: Studio music. 12.30: Shipping and mails. 12.35: Market reports. 12.48: "Sun" mid-day news service. 1.0: Studio music. 1.30: "Sun" news service. 1.40: Studio music. 2.0: G.P.O. chimes; close down. Note: Race results of the trots, by courtesy of the "Sun" Newspapers.

AFTERNOON SESSION.

Announcer: A. C. C. Stevens. Accompanist: Kathleen Roe. 3.45: G.P.O. chimes; popular music. 4.0: G.P.O. chimes; Nancy Wood, soprano. (a) "With the Swallow" (Aqua). (b) "Absent" (Metcalfe). 4.7: Captain Fred, baritone, "Some Aspects of Home Life." 4.22: Pat Crosby, contralto. (a) "Danny Boy" (Weatherly). (b) "Dawn" (Curran). 4.29: "Sun" news service. 4.34: Nancy Wood, soprano. (a) "Serenade" (Schubert). (b) "O' Western Wind" (Brahm). 4.41: Studio music. 4.53: Pat Crosby, contralto. (a) "The Second Minuet" (Beasley). (b) "My Window of Dreams" (Klenner). 5.0: G.P.O. chimes; "Sun" news service. 5.5: Pianoforte reproduction. 5.15: Popular music. 5.27: Resume of the trots. 5.37: Features of the evening's programme.

EARLY EVENING SESSION.

Announcer: Basil Kirke. 5.40: Children's Session, conducted by Uncle Bas; music and entertainment; letters and stories. 6.30: "Sun" news and late sporting. 6.40: 2BL Dinner Quartette, (a) "Serenade" (Heykins), (b) "Poupee Valsante" (Poidini), (c) "In a Persian Garden" (Lehmann), (d) "A Summer's Morn" (Haines), (e) "Spring Song" (Mendelssohn), (f) Fox-trot. 7.7: Australian Mercantile Land and Finance Co.'s report; weather report and forecast, by courtesy of Gov-

ernment Meteorologists; Producers' Distributing Society's fruit and vegetable market report; grain and fodder report ("Sun"); dairy produce report ("Sun"). 7.25: Mr. Pim and Miss Pam in advertising talks and nonsense. 7.53: An Ad. special. 7.55: Programme and other announcements.

EVENING SESSION.

Announcer: Basil Kirke. Accompanist: G. Vern Barnett. 8.0 G.P.O. chimes; 2BL Topical Chorus. 8.2: From the Victory Theatre, Kogarah, the Victory Theatre Orchestra, conducted by Fred Mitchell; Leslie Harvey at the "Christian" Organ. 8.20: From the Studio, excerpts from "The Gelska," by the Roseville Musical Society. 8.50: Alf Lawrence and Nell Crane, entertainers—

(a) "When You're Nearer Me" (Alf Lawrence). (b) "Three Ages of Woman" (Alf Lawrence). 9.0: G.P.O. chimes; weather report. 9.2: Romano's Dance Orchestra, conducted by Bennie Abrahams. 9.10: From the Studio, Charles Nicis, tenor. (a) "I Wonder" (Kalnin). (b) "Serenata, D'Arlequin" (Drigo). 9.17: Alf Lawrence and Nell Crane, entertainers—

"Song Similies" (Alf Lawrence). (Showing how popular melodies have been stolen from old-time tunes). 9.27: Romano's Dance Orchestra, conducted by Bennie Abrahams. 9.37: Marjorie Pritchard, popular vocalist. 9.44: From the Victory Theatre, Kogarah—The Victory Theatre Orchestra, conducted by Fred Mitchell; Leslie Harvey at the "Christian" Organ. 10.0: From the Studio, Charles Nicis, tenor.

(a) "Two Melodies Armenlames" (Servantsdiantz). (a) "O Paradiso" (Meyerbeer). 10.7: G. J. Hill, "The Idiosyncrasies of the Motor Car." 10.19: Late "Sun" news service. 10.29: Late weather report. 10.30: Marjorie Pritchard, popular vocalist. 10.37: Romano's Dance Orchestra, conducted by Bennie Abrahams. 10.57: From the Studio, to-morrow's programme. 10.59: Romano's Dance Orchestra, conducted by Bennie Abrahams. 11.30: National Anthem; close down.

2GB

10.0: Music. 10.10: Happiness talk, by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Miss Helen J. Beegling. 11.30: Close down. 2.0: Music. 2.5: Radio service, by Mrs. Dorothy Jordan. 2.30: Music. 2.45: Address. 3.0: Music. 3.15: Close down. 5.30: Children's session, by Uncle George. 7.0: Music from studio. 8.0: Miss Mary Plumb, contralto. 8.7: Mr. Phil Couchman, cornet. 8.15: Mr. Leon Cavallo, tenor. 8.22: Instrumental music. 8.30: A humorous interlude, by Mr. Jack Win and Mr. Heath Burdock. 8.35: Miss Gwladys Edwards, soprano. 8.45: Address by Professor E. Wood. 9.0: Weather report. 9.3: Miss Mary Plumb, 9.13: Mr. Phil Couchman, cornet. 9.23: A humorous interlude, by Mr. Jack Win and Mr. Heath Burdock. 9.30: Mr. Leon Cavallo, tenor. 9.40: Instrumental music. 9.50: Miss Gwladys Edwards, soprano. 10.0: Pence music. 10.30: Close down.

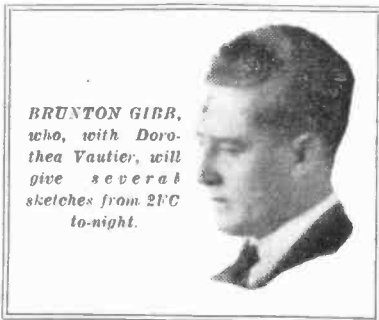
2UW

MIDDAY SESSION.

12.30: Music. 1.0: G.P.O. clock and chimes; music. 2.30: Close down. 4.30: Musical programme.

EVENING SESSION.

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; music. 7.45: Wireless talk—hints and advice, by Mr. E. Homfray. 8.0: Music. 9.0: G.P.O. clock and chimes; comments on foreign affairs, by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down.



BRUNTON GILL, who, with Dorothea Vautier, will give several sketches from 2FC to-night.

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Parts to build the New Stedipower "A" Battery Eliminator. 1500 m.f.d. Fixed Condensers. 25/-.
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Westinghouse 1 amp. Dry Rectifiers, 49/-.

De Jur Thermotrols. The New Fixed Rheostat. There's a Thermotrol for every make of valve. **3/6**
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Slow motion ratio. 55 to 1.
Complete with 4in. dial and auto-capacity earthing shield. **17/6**

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Build your own all-electric 3-valve set. Simple charts, 1/- Free with parts. We supply all components for this remarkable set.

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Lissen Speaker Units, British Built **13/9**
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English price, 18/-.

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Equals any 25/- job.

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FIXED or SEMI-CRYSTAL DETECTORS.
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Interstate Programmes, Monday, April 15

3LO

EARLY MORNING SESSION.

7.15 to 8.15: See Friday.

MORNING SESSION.

11.0: To-day's radio recipe—Lemon cheese. 11.1: Olga Parker will speak on "Stories to tell the Children"—"Pinochio." 11.25: J. Howlett Ross will speak on "Mary Queen of Scots and Chutlart." 11.32: Under the auspices of the Boy Scouts' Association, E. V. Neill will speak on "More About Scouting." 12.0: Melbourne Observatory time signal; express train information. 12.1: British official wireless news from Rugby; Reuters' and the Australian Press Association cables; "Argus" news service. 12.15: Newmarket stock sales; entries for the market for Tuesday, Wednesday, and Thursday, by the Associated Stock and Station Agents, Bourke Street, Melbourne. 12.20: Community singing, transmitted from the King's Theatre, Russell Street, Melbourne; conductor, O. J. Mackay. 12.40: Stock Exchange information. 12.43: Community singing resumed. 1.45: Meteorological information; weather forecasts for Victoria, New South Wales, South Australia, and Tasmania; ocean forecasts; river reports; rainfall. 1.50: Close down.

AFTERNOON SESSION.

Accompanist: Agnes Fortune. 2.15: General programme, including: The Strad Trio, Celia Genoni, M'Neill, Cecil Parkes, and Myra Montague, violin and piano; Moran Hillford, Frank Johnstone, cello; Ella Riddell, contralto; Captain Donald MacLean; The Station Orchestra; Jack Stocks; Marion Lightfoot; Celia Genoni, M'Neill. 4.50: Close down.

CHILDREN'S SESSION.

6.0: Answers to letters. 6.25: Musical interlude. 6.30: William C. Groves.

EVENING SESSION.

7.30: The Imperial Russian Trio—"Trio in D Minor" (Arensky), (a) Allegro Moderato, (b) (Scherzo), (c) Elegie, (d) Finale—Allegro Moderato. 8.0: Community singing, assisted by Ern Hall's Radio Revellers, with Hugh Huxham.

NIGHT SESSION.

Accompanist: Agnes Fortune.

8.30: The Station Orchestra—"Entr'acte music from Rossinunde" (Schubert).
 8.37: Celia Genoni, M'Neill, soprano—"Caro Nome" from "Bohème" (Verdi).
 "The Last Rose of Summer."
 8.47: The Heidelberg District Musical Society will commence their programme with—
 Two Old Madrigals, unaccompanied.
 (a) "Sing We and Chant It."
 (b) "In These Pleasant Groves" (Purcell 1676).
 8.54: The Station Orchestra—"Three Dances from Henry VIII" (German).
 9.1: Heidelberg District Musical Society—Songs of the English peasantry (arranged by Frederic Earp):
 (a) "A Blacksmith's Song" (Sussex).
 (b) "Widdelome Fair" (Devonshire).
 (c) "A Farm Laborer's Song" (Oxfordshire).
 9.10: Agnes Fortune, piano—"Shepherd Boy" (Orlegi).
 9.15: Heidelberg District Musical Society—Choral arrangement—"Come to the Fair" (Easthope Martin).
 9.19: The Station Orchestra—"Nell Gwynne Dances" (German).
 9.24: Heidelberg District Musical Society—Irish folk songs—
 (a) "Avenge and Bright Falls the Swift Sword of Erin."
 (b) "Follow Me Down to Carlow" (ladies' choir).
 (c) "Gramachree"—"The Song of the Battle Eve."
 9.33: Bertha Jorgensen, violin—"Londonderry Air."
 9.37: Heidelberg District Musical Society—Accompanied part songs—"Lullaby."
 "The Dance" (Edward Elgar).
 9.44: The Imperial Russian Trio (Arved Norf, violin; Ivan Berzinsky, cello; Vassili Hster, piano)—"Trio in D Minor" (Arensky).
 (a) Allegro Moderato.
 (b) Scherzo.
 (c) Elegie.
 (d) Finale—Allegro Moderato.
 One act play—"Think About It," produced by Dulcie Hall, Cast: Mr. Anybody, Campbell Copeland, Mrs. Anybody, Dulcie Hall; Miss Nobody in Particular, Leonie Levy.
 10.0: News service; meteorological information; British official wireless news from Rugby.
 10.10: Jack Stocks, the "Woman Hater" (by permission Tivoli Theatres, Ltd.)—Random Rhymes.
 Selection: "The Kiss Call" (Carvill).
 10.37: Jack Stocks, the "Woman Hater"—"More Random Rhymes."
 10.45: The Radio Revellers—"Honey" (Simons).
 "Alabama Stamp" (Creamer).
 "When the Right One Comes Along" (Gilbert).
 "All By Yourself in the Moonlight" (Wallis).
 "Glad Rag Doll" (Ager).
 "One Alone" (Romberg).
 "The Desert Song" (Romberg).
 "It Goes Like This" (Caesari).
 "Under the Stars of Havana" (Colman).
 "The Dance of the Blue Danube" (Fisher).
 11.30: God Save the King.

3AR

Announcer: Maurice Dudley.—10.0 to 10.59: See Friday.

MORNING MUSICAL SESSION.

11.0: Extracts from the Opera. 12.20: British official wireless news; announcements. 12.30: Close down.

AFTERNOON SESSION.

Announcer: Maurice Dudley.—3.0: His Master's Voice. 3.0: The Imperial Russian Trio. 3.55: The Imperial Russian Trio. 4.30: Close down.

EVENING SESSION.

Announcer: Frank Hatherley. 6.0: Orchestral. 7.30: News session. 7.43: Birthday greetings. 7.45: Out of the Past. 7.46 Under the auspices of the Department of Agriculture, J. T. Ramway, Potato Expert, will speak on "Potato Culture and Seed Selection." 8.0: A Maker of History.

NIGHT SESSION.

Announcer: Frank Hatherley.

Accompanist: Reg. Brown.

8.0: E. C. H. Taylor, "School Life and School Sport."
 8.15: Under the auspices of the League of Nations "The Freedom of the Seas."
 8.30: A. Firman, "Books of Yesterday, To-day, and To-morrow."
 8.40: The Radio Revellers—"Just Keep Singing a Song" (Sissell).
 "Roses of Yesterday" (Berlin).
 "Jo-Anne" (Ward).
 8.49: (By permission Tivoli Theatres, Ltd.)—"The Last Rose of Summer."
 8.52: The Radio Revellers—"Oopsy" (Gilbert).
 "Foney" (Simons).
 "Alabama Stamp" (Creamer).
 9.1: Ella Riddell, contralto—"Jessie's Dream" (Campbell).
 "Long, Long Ago" (Griever).
 9.4: The Radio Revellers—"When the Right One Comes Along" (Gilbert).
 "One Alone" (Romberg).
 "The Desert Song" (Romberg).
 9.13: Victor Harding, bass baritone—"Route March" (Stock).
 9.16: The Radio Revellers—"It Goes Like This" (Caesari).
 "Under the Stars of Havana" (Colman).
 "The Dance of the Blue Danube" (Fisher).
 9.25: The Scots' Comedian—"Here Awa."
 9.28: The Radio Revellers—"Rose Time" (Hall).
 "Forever More" (Burnett).
 "Nebraska" (Sissell).
 9.37: Ella Riddell, contralto—"My Ain Wee Hoose" (Munro).
 9.40: The Radio Revellers—"Little Irish Rose" (Zamenick).
 "Counting the Milestones" (Tilsley).
 "Daybreak" (Evans).
 9.49: Victor Harding, bass baritone—"What the Red-headed Boy's Said" (Harry).
 9.52: The Radio Revellers—"Glad Rag Doll" (Ager).
 "To Town Artillery" (Carillon).
 "Promise Me" (Van Couth).
 10.1: The Scots' Comedian—"The Man They Talk I'm Keened the Better."
 10.4: The Radio Revellers—"Ready for the River" (Moret).
 "My Stormy Weather Pal" (Plantadosi).
 "Dawning" (Silver).
 10.13: Ella Riddell, contralto—"Rohesay Bay" (Clay).
 10.16: The Radio Revellers—"Do You?" (Plantadosi).
 "Colombo" (Nichols).
 "Under the Burma Moon" (Davis).
 10.25: "Age" news service; announcements. God Save the King.

4QG

EARLY MORNING SESSION

Announcer: J. Tyson.—7.43: Time signals. 7.45: News service. 8.0: Records. 8.15: News service. 8.30: Close down.

MORNING SESSION.

Announcer: Rita McAuliffe.—11.0: Music; social news; lecturette; music; social news; Wurlitzer organ. 12.0 (noon): Close down.

MIDAY SESSION.

Announcer: R. Wight.—1.0 p.m.: Market reports and weather information. 1.20: Lunch-hour music. 2.0: Close down.

AFTERNOON SESSION

Announcer: H. Humphreys.—3.0: A programme reproduced records. 3.30: Mail train running times. 3.31: A recital by Mr. George Sampson, F.R.C.O. (City Organist). 4.15: This afternoon's news. 4.30: Close down.

EARLY EVENING SESSION.

Announcers: A. V. James and H. Humphreys.—6.0: Mail train running times; mail information; shipping news. 6.5: Wurlitzer organ. 6.25: Commercial announcements. 6.30: Bedtime stories conducted by "The Sandman" news in brief, Stock Exchange news, metal quotations, market reports, Fenwick's "Forecast" weather information, announcements, standard time signals; lecturette, "A Talk for Pig Breeders" by Mr. E. J. Shelton (senior instructor in Pig Raising).

NIGHT SESSION.

Announcer: H. Humphreys. **MUSIC EXAMINATION BOARD.** Arrangements have been made with the University of Queensland for the broadcasting of instruction matter in connection with the examination which are to be held this year under the auspices of the Queensland section of the Australian Music Examination Board.

On various nights authorities on the various grades will lecture from 4QO.

The scheme has been instituted with a view to affording country students an opportunity of being coached and instructed in preparation for the forthcoming examinations.

To-night Mr. Perry Brier will give a demonstration recital of the music for piano, Grade 3.

8.30: The Studio Orchestra (conductor, A. R. Featherstone).

Overture, "Finde Siecle" (Tohani).
 8.38: Annie Adams, soprano—"Dear Love, Remember Me" (Marshall).
 "I Heard You Go By" (Wood).
 8.43: Harry Collins and the Orchestra—Ten minutes fun and melody.
 8.53: Enid Stuart, violinist—"Valse Caprice" (Galeridge-Taylor).
 "Melodie" (Tschakowsky).
 9.0: Metropolitan weather forecast.
 9.1: The Studio Orchestra—"Serenade" (Toselli-Schmid).
 9.7: Harry Humphreys—"Readings from life of 'Jo,' the Crossing Sweeper (from 'Bleak House')." (a) Jo at the inquest. (b) Jo and Lady Deadlock. (c) Death of Jo.
 9.17: Fred Smith, ten minutes at the piano.
 9.27: Kenyon, entertainer, ten minutes fun.
 9.37: The Studio Orchestra—Novelty Two-step—"Click-l-y Clack" (Brahm).
 9.50: A short recital of Selected Gramophone Records.
 10.0: "The Daily Mail" news: "The Courier" news; weather news; close down.

5CL

MORNING SESSION.

Announcer: J. L. Norris. 11.0: Chimes. 11.1: Kitchen craft and menu talk. 11.45: Miss Laurie M'Leod, of Weber, Sherbrose, and Rice, will speak on "Physical Culture for Women." 12.0: Chimes. 12.1: Midday music. 12.15: General news service. 12.35: British official wireless news. 12.37: S.A. Railway information. S. C. Ward and Co.'s Stock Exchange information; meteorological information. 1.0: Chimes. 1.1: Lunch-hour recital. 1.55: Meteorological information. 2.0: G.P.O. chimes.

AFTERNOON SESSION.

Announcer: C. J. O'Connor. Accompanist: Jean Finlay. 3.0: Chimes. General programme, including—Ret Hot Pepper's Dance Band; Miss Dorothy Back, soprano; T. E. Williams, saxophonist; John D. Fraser, baritone; Edna Lawrence, contralto; Tom Dorling, banjoist; Tom O'Dea comedian. 4.55: S. C. Ward and Co.'s Stock Exchange information. 5.0: Close down.

EVENING SESSION.

Announcer: J. L. Norris. 6.0: G.P.O. chimes; birthday greetings; correspondence, songs and stories by "Auntie Jean." 6.30: An interlude of dinner music. 6.55: S. O. Ward and Co.'s Stock Exchange information. 7.1: General market reports. 7.19: Under the auspices of the South Australian Agricultural Department, Mr. A. H. Robin, B.V. Sc. (Government Veterinary Surgeon), will speak on "The Treatment of Common Stock Infections." 7.30: Entertainment by "The Twinklers" (Mr. F. J. Mills).

NIGHT SESSION.

Announcer: J. L. Norris. Accompanist: Jean Finlay. 8.0: G.P.O. chimes. 8.1: Studio Orchestra—"Overture, 'Calph of Bagdad'" (Boeldieu).
 Overture, "Calph of Bagdad" (Boeldieu).
 "Someday, Somewhere" (Pollock).
 8.11: Ruth Naylor, soprano—"White Rose" (Noel).
 "Sylvia" (Speaks).
 8.18: Geoff. O'Garra, cellist—"Londonderry Air" (Traditional).
 "Romance" (Davidoff).
 8.22: Holden's Male Voice Choir—"Gloria."
 "Calm as the Sea."
 8.29: Vern Rogers, trumpeter—"A Dream" (Bartlett).
 "Sincerity" (Cavalli).
 8.32: John D. Fraser, baritone—"The Little Hills."
 "The Spirit Flower" (Tipton).
 8.39: Studio Orchestra—"Country Dance" (German).
 "Two Outfars" (Horlick).
 8.51: Ruth Naylor, soprano—"There are Fairies at the Bottom of Our Garden" (Lohman).
 "The Lilac Tree" (Gartlan).
 8.57: Lizzette Foglia, violinist—Selected violin solo. 9.0: G.P.O. chimes. 9.1: Meteorological information, including Semaphores titles. 9.2: Overseas grain report. 9.3: Studio Orchestra—"Pastorale Dan" (German).
 "Just Like a Melody Out of the Sky" (Donaldson).
 9.10: A mystery play, entitled, "The Brass Door Knob." Characters: Mrs. Bradbury (the wife of a

7ZL

MID-DAY SESSION.

Announcer: Jack Broadbent. 11.30 to 1.30: General programme.

AFTERNOON SESSION

Announcer: Jack Broadbent. 3.0: Chimes; musical selections. 3.15: General orchestral programme. 4.15: An educational talk on "New Zealand's Apple Exports, 1929." 4.30: Close down.

EARLY EVENING SESSION

Announcer: Jack Broadbent. 6.15: Musical selections. 6.30: Basil Sproule, pianist. 7.0: Answers to letters and birthday greetings, by "Uncle David" and "The Storey Lady." 7.15: News session.

EVENING SESSION.

Announcer: Jack Broadbent. 7.30: A gas cookery talk, by "Regulo." 7.45: W. E. Fuller will speak on "Literary Lapses and Library Lists." 8.0: G.P.O. clock chimes the hour. 8.15: A dance programme by Reg Jones and his orchestra (interspersed with gramophone records); Reg Jones and his orchestra. "The Blackbirds are Bluebirds Now" (Friend). "High Upon a Hill Top" (Baer). "Mexican Serenade" (Tennessee). 8.24: The Gresham Singers, "After Many a Dusty Smile" (Elgar). 8.27: Reg Jones and his orchestra, "Out of the Dawn" (Donaldson). "Mother, I Still Have You" (Jolson). "When Love Comes Stealing" (Rapee). 8.36: Robert Radford, bass, "In a Cellar Cool." "Rocked in the Cradle of the Deep" (Knight). 8.43: Reg Jones and his orchestra, "My Angel" (Rapee). "Beloved" (Kahn). "The Kinkajou" (Tierney). 8.52: De Reske Singers, "Adoration" (Beethoven). "On Wings of Song" (Mendelssohn). 8.59: Reg Jones and his orchestra, "There's a Rainbow Round My Shoulder." "Sally of My Dreams" (Kennell). "For old time's sake" (De Sylva). 9.8: Goodrich Silverton Quartet, "Under the Clover Moon" (Healy). "Who's Blue Now" (Meyer). 9.15: Reg Jones and his orchestra, "Get out and get under the moon" (Tobias). "That's my weakness now" (Green). "Chiquita" (Wayne). 9.24: Ernest M'Kinley, tenor, "Waiata Maori" (A. Hill). "Song of the Loquast" (A. Hill). 9.31: Reg Jones and his orchestra, "Is it Gonna be Long?" (Cowan). "I'm Wingin' Home" (Tobias). "Rain" (Ford). 9.40: Jack Lumsdahn, baritone, "That's my Mammy" (Perse). "Good-night" (Wood). 10.0: G.P.O. clock chimes the hour; close down.

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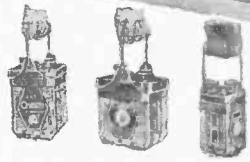
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Local Programmes, Tuesday, April 16

2FC

EARLY MORNING SESSION.

Announcer: A. S. Cochrane.

7.0: "Big Ben" and announcements. 7.2: Official weather forecast, rainfall, river report, temperatures; astronomical memoranda. 7.7: "Sydney Morning Herald" summary. 7.12: Shipping intelligence; mail services. 7.15: Studio music. 7.25: Investment market; mining sharemarkets; metal quotations; wool sales; breadstuffs markets; Inter-State markets; produce markets. 7.40: Studio music. 8.0: "Big Ben"; close down.

MORNING SESSION.

Announcer: A. S. Cochrane.

10.0: "Big Ben" and announcements. 10.2: Pianoforte reproduction. 10.10: "Sydney Morning Herald" news service. 10.25: Studio music. 10.30: Last minute sporting information by the 2FC Racing Commissioner. 10.40: Studio music. 10.50: Pianoforte reproduction. 11.0: "Big Ben"; A.P.A. and Reuter's cable services. 11.5: Close down.

MIDDAY SESSION.

Announcer: A. S. Cochrane.

Note: Race results from Menangle will be transmitted as received, by courtesy of "Sun" Newspapers, Ltd. 12.0: "Big Ben" and announcements. 12.2: Stock Exchange, first call. 12.3: Official weather forecast; rainfall. 12.5: Musical items. 12.10: Summary of news. "Sydney Morning Herald." 12.15: Rugby Wireless news. 12.18: A reading. 12.30: Studio music. 1.0: "Big Ben"; weather intelligence. 1.3: "Evening News" midday news service; Producers' Distributing Society's market report. 1.20: Studio music. 1.28: Stock Exchange, second call. 1.30: Studio music. 2.0: "Big Ben"; close.

AFTERNOON SESSION.

Announcer: Laurence Halbert.

Accompanist: Kathleen Roe.

2.30: Programme announcements. 2.32: The Booklover's Corner. 3.0: "Big Ben"; from Paling's Concert Hall—A Recital by the Students of Alexander Sverjensky—Pianist. "Sonata in G major" 1st movement; "Beethoven"; "Nocturne" (Paderewski); "Nocturne" (Grieg); "Eccosaies" (Beethoven-Bugoni); "Cuckoo" (Dagum); Dorothy Fountain—"Sonata E flat major." "Quasi una fantasia" (Beethoven); "Andante—Allegro molto vivace—Adagi—expressivo—Finale." Dorothy Durham—Songs, by a pupil of Madame Bennet-North—"Prelude" (Scott). "A Soft Day" (Stanford). "A Widow Bird Sat Mourning" (Lidgey). "Boy Johnny" (Cundell). Marjorie Ailomes. "Sonata in D Minor" 1st movement (Beethoven). "Ballade D Minor" (Brahms). "Masouke B Minor" (Chopin). Brenda Parkhill. 4.0: From the studio. "Big Ben"; a reading. 4.15: Popular music. 4.30: Pianoforte reproduction. 4.45: Stock Exchange, third call. 4.47: Studio items. 5.0: "Big Ben"; close.

EARLY EVENING SESSION.

Announcer: A. S. Cochrane.

5.40: 2FC chimes. 5.45: Children's session, conducted by the "Hello Man," assisted by Aunt Emily; letters and stories; music and entertainment. 6.30: Dalkey's market reports (wool, wheat and stock); 6.40: Fruit and vegetable markets. 6.43: Stock Exchange information. 6.45: Weather and shipping news. 6.48: Rugby Wireless news. 6.50: Late sporting news. 7.0: "Big Ben"; late news service. 7.10: The 2FC Dinner Quartette, conducted by Horace Keats—(a) "The Voice of Spring" (Strauss); (b) "Prelude in G Minor" (Rachmaninoff); (c) "Syncope" (Kreisler); (d) "Primrose" (Gershwin); (e) "Serenade Lyrique" (Elgar); (f) Fox-trot.

EVENING SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

7.40: Popular music.
7.45: Programme announcements.
7.48: Studio items.
8.0: The Marrickville Silver Band.
8.20: Ivy Green, soprano, winner in the recent Radio Eisteddfod conducted by the N.S.W. Broadcasting Company Limited.
8.27: Dagmar Roberts, pianist:
(a) "Devotion" (Schumann-Liszt).
(b) "Cradle-Song" (Schubert).
(c) Scherzo in E minor" (Mendelssohn).

8.27: Will Carter in Australian Bush

Sketches.

8.44: The Marrickville Silver Band.

9.0: "Big Ben"; weather report.

9.1: Virginia Bassetti, contralto.

9.8: Dagmar Roberts, pianist—

(a) "Romance" (Davis).

(b) "Ballade in A flat" (Chopin).

9.18: Ivy Green, soprano, winner in the

Radio Eisteddfod.

9.25: Marrickville Silver Band.

9.40: Will Carter in Cameos of the Australian

Bush

9.47: Virginia Bassetti, contralto.

9.54: From the Hotel Australia—Cec Morrison's

Dance Band

10.9: From the Studio—Nea Hallet in

popular items

10.16: From the Hotel Australia—Cec Morrison's

Dance Band.

10.30: From the Studio—Late weather.

10.32: From the Hotel Australia—Cec

Morrison's Dance Band.

10.57: From the Studio—To-morrow's programme.

10.59: From the Hotel Australia—Cec Morrison's

Dance Band.

11.30: National Anthem; close.

2BL

MORNING SESSION

Announcer: A. C. C. Stevens.

8.0: G.P.O. chimes; metropolitan weather report. 8.1: State weather report. 8.2: Studio music. 8.15: G.P.O. chimes; news service from the "Daily Telegraph Pictorial." 8.30: G.P.O. chimes; news service continued. 8.40: Information; mails; shipping, arrivals, departures, and sailings. 8.45: Studio music. 9.15: Half an hour with silent friends. 9.45: Studio music. 10.0: G.P.O. chimes. Close down.

MIDDAY SESSION.

Announcer: A. C. C. Stevens.

11.0: G.P.O. chimes; 2BL Women's Sports Association session, conducted by Miss Gwen Varley. 11.30: Advertising hints. 11.40: Women's session, conducted by Mrs. Cranfield—Sister Parry will speak on the work of St. John Ambulance Association. 12.0: G.P.O. chimes. Special ocean forecast and weather report. 12.3: Studio music. 12.30: Shipping and mails. 12.35: Market reports. 12.48: "Sun" midday news service. 1.0: Studio music. 1.30: Talk to children, and special entertainment for children in hospital. 2.0: G.P.O. chimes. Close down. Note—Race results from Menangle, by courtesy of the "Sun" newspapers.

AFTERNOON SESSION.

Announcer: A. C. C. Stevens.

Accompanist: Kathleen Roe.

3.45: G.P.O. chimes. Popular music. 3.50: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.0: From the Studio—Millie Hansen, soprano. 4.7: "Sun" news service. 4.12: A talk on the "Milk Week" campaign. 4.22: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.32: From the Studio—Millie Hansen soprano. 4.39: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.50: From the Studio—Pianoforte reproduction. 5.0: G.P.O. chimes; popular music. 5.15:

"Sun" news service. 5.27: Racing resume. 5.35: Producers' Distributing Society's poultry report. 5.37: Features of evening's programme.

EARLY EVENING SESSION.

Announcer: Basil Kirke.

5.40: Children's session, conducted by Uncle Bas; music and entertainment; letters and stories. 6.15: Mr. Norman speaks to the bigger boys. 6.30: "Sun" news and late sporting. 6.40: 2BL Dinner Quartette—(a) "On the Moonlit Terrace" (Cazabon), (b) "Moresco" (Sileus), (c) "Prelude in A Flat" (Chopin), (d) "Rustic Revels" (Fletcher), (e) "Fear of Mine" (Fletcher), (f) "Mystic Beauty" (Pinck), (g) Fox-trot. 7.7: Australian Mercantile Land and Finance Co's report; weather report and forecast, by courtesy of Government Meteorologist; Producers' Distributing Society's fruit and vegetable market report; grain and fodder report ("Sun"); dairy produce report ("Sun"). 7.25: Mr. Pim and Miss Pain in advertising talks and nonsense. 7.53: An Ad. special. 7.55: Programme and other announcements.

EVENING SESSION.

Announcer: Basil Kirke.

Accompanist: G. Vern Barnett.

8.0: G.P.O. chimes.

2BL Topical chorus.

Classic programme arranged by the Conservatorium String Quartet, under the direction of Gerald Walenn. Associate artist, Mr. Oliver King—

(a) "Summer Heat" (Alfred Hill).

(b) "South Wind.

(c) "The Linden Tree" (Schubert).

(d) "To Be Sung On the Water" (Schubert).

(e) "The Trout" (Schubert).

9.0: G.P.O. chimes; weather report.

9.1: C. N. Baevertz—"Great Writers I Have

Met"—Mark Twain.

9.16: The Radio Male Quartette.

9.28: Josef Kaartinen, saxophonist—

(a) "Valse Hilda" (Doerr).

(b) "Gloria" (Wiedoeff).

9.35: Sibley and Sayles—"The Two Sad

Sunbeams," present—

"Wireless Whispers" and "Rapid Rav-

ings."

9.43: The Radio Male Quartet.

9.53: Josef Kaartinen, saxophonist—

(a) "Serenade" (Driego).

(b) "Trumbology" (Trumbauer).

10.2: Sibley and Sayles, "The Two Sad

Sunbeams," present—

"A few more "Wireless Whispers" and

"Rapid Ravings."

10.9: The Radio Male Quartet.

10.17: Late "Sun" news service.

10.27: To-morrow's programme.

10.30: National Anthem. Close.

2GB

10.0: Music. 10.10: Happiness talk, by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Miss Helen J. Beegling. 11.30: Close down. 2.0: Music. 2.5: Women's radio service, by Mrs. Dorothy Jordan. 2.30: Music. 2.45: Talk. 3.0: Music. 5.30: Children's session, by Uncle George. 7.0: Music from studio. 7.30: Talk from the Radio Service Department, by Mrs. Stan Crittenden. 8.0: Mr. J. L. Walters, basso. 8.7: Mr. Reginald Duncan, violinist. 8.15: Miss Thelma Lansdowne, contralto. 8.22: Instrumental music. 8.30: A humorous interlude, by Mr. Jack Win and Mr. Heath Burdock. 8.35: Mr. William Green, tenor. 8.45: Miss Mildred Hill, pianiste. 8.55: Instrumental music. 9.0: Weather report. 9.3: Address by Dr. P. K. Roest. 9.15: Mr. J. L. Walters, basso. 9.25: Mr. Reg. Duncan, violinist. 9.35: A humorous interlude, by Mr. Jack Win and Mr. Heath Burdock. 9.40: Miss Thelma Lansdowne, contralto. 9.50: Miss Mildred Hill, pianiste. 10.0: Mr. William Green, tenor. 10.10: Dance music. 10.30: Close down.

2UW

EVENING SESSION.

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; music. 9.0: G.P.O. clock and chimes; comments on foreign affairs, by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down.



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RADIO BATTERIES
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Interstate Programmes, Tuesday, April 16

3LO

EARLY MORNING SESSION.

"Herald" Breakfast Hour. 7.15 to 8.15: See Friday.

MORNING SESSION.

11.0: To-day Radio Recipe: Steak a la Wilson. 11.1: Miss E. Noble will speak on "Gas Cookery." 11.25: Mrs. Dorothy Silk will speak on "Home-crafts." 11.45: Miss Dorcas Berry will speak on "An Australian Woman's Wanderings Through Europe."

MIDDAY SESSION.

12.0: Melbourne Observatory time signal. Express train information. 12.1: British official wireless news from Rugby, etc. 12.15: Newmarket stock sales, etc. 12.20: General programme, including Gwen Hart (soprano). 1.45: Close down.

AFTERNOON SESSION.

Accompanist: Agnes Fortune. 2.15: General programme, including The Radio Revellers, Sammy Shields, Ella Riddell (contralto). 2.49: The Radio Revellers. Marion Lightfoot, Mollie Warden (soprano), Sammy Shields, Ella Riddell (contralto), Mollie Warden (soprano). 4.45: News service. Stock Exchange information. 5.0: Close down.

CHILDREN'S HOUR.

6.0: Answers to letters and birthday greetings. "Bobbie Bluegum." 6.30: "Little Miss Kookakara" will tell the tiny ones all about the "Little Givens' Trip to Norway." 6.50: "Bobby Bluegum."

EVENING SESSION.

Accompanist: Agnes Fortune. 7.30: Stella Lamond, soubrette, will entertain with her ukelele.

7.37: John Hobbs, bass-baritone—"Hoelin" (Richards). "Don't Marry Monday" (Richards). 7.44: Stella Lamond, ukelele—"Modern Melodies."

7.51: John Hobbs, bass-baritone—"Chumleigh Fair" (Halliday). "Fishermen of England" (Phillips).

8.0: The Imperial Russian Trio (Arved Norit violin, Ivan Berzinsky cello, Vassili Ister piano). Fifteen minutes of popular classics.

8.15: Ernest Wilson, baritone. "She Alone Charmeth My Sadness" (Gounod). "Castilian Lament" (Del Riego).

8.22: Arved Norit, violin—"Serenade" (Drda).

8.28: Sammy Shields, the Scotch comedian—"Gins from Glasgow" (Phillips).

8.50: 59th Battalion Band—A feature rendering of the familiar "Colonel Boney" (Alford), played as for a ceremonial parade, with orders, followed by another favorite, "Old Comrades" (March) (Ticke).

8.40: Ella Riddell, contralto—"Land of Hope and Glory" (Elgar). "Where Corals Lie" (Elgar).

8.47: 59th Battalion Band—March, "The National Guard" (Lithgow). March, "Foden's Own" (Greenwood). Selected.

9.0: Special transmission.

10.37: Ernest Wilson, bass-baritone—"Tinker's Son" (Phillips). "Marching Along" (White).

10.45: The Radio Revellers—"Rosetime" (Hall). "Forever More" (Burnett).

"Me and the Man in the Moon" (Monaco). "Nebraska" (Sissell).

"When You Said Good-night" (Donaldson). "Little Irish Rose" (Zamecnik).

"Counting the Milestones" (Tilsley). "Daybreak" (Evans). Selected.

11.30: God Save the King.

3AR

Announcer: Maurice Dudley.—10.0 to 10.59: See Friday.

AFTERNOON SESSION.

Announcer: Maurice Dudley.—3.0: General programme; the Strad Trio. 3.42: Captain Donald MacLean; Cecil Parkes, violin. 4.30: Close down.

EVENING SESSION.

Announcer: Frank Hatherley.—6.0: Popular numbers. 7.20: News service; announcements. 7.43: Birthday greetings. 7.46: Under the auspices of the University Extension Board, Miss E. Derham, M.A., lecturer in English literature to the University Extension Board, will speak on "Three Modern Poets."

NIGHT SESSION.

Announcer: Frank Hatherley. Accompanist: Reg. Brown.

8.0: A. S. Kenyon will speak on—"Roman Cans." Part 2.

8.15: A. G. Kelson, "Postage Stamps." 8.30: The Imperial Russian Trio—Arved Norit (violin), Ivan Berzinsky (cello), and Vassili Ister (piano).

"Menuetto" (Schied-Moffat). "Berceuse" (Chopin). "I Hear You Calling Me" (English Song).

4QG

9.0: "The Rosary" English Song. Cielia Genoni-M'Neill, soprano—"Depuis le Jour" (Rabey). "Your Eyes" (John Pascoe Pawkner and Early Melbourne). 9.27: Lindsay Biggins—"Preludes 4, 6, 7, 9, and 17" (Chopin). "Poenaise in C Minor" (Chopin). "Fritations in a Chinese Garden" (Chasin). "Marianne" (Cai). Refrain, "Berceuse" (Palmgren). Selected, "Liebes Waltz" (Moskowski).

9.57: Cielia Genoni-M'Neill, soprano—"Quei Guardo il Cavagliero." "O, Cuba Habnara" (Sanchev). 10.4: Marion Lightfoot, banjo—"Yankee Land." "Dandy Fifth". 10.11: Jack Sticks, the Woman Hater—"Weary Willie Whimpers." 10.18: Marion Lightfoot, banjo—"Longwood Polka." "Peach Blossoms." 10.25: "Age" news service; announcements. "God Save the King."

EARLY MORNING SESSION

Announcer: J. Tyson.—7.43: Time signals. 7.45: News service. 8.0: Records. 8.15: News service. 8.30: Close down.

MORNING SESSION.

Announcer: Rita M'Auliffe.—11.0: Music; social news; talk on "Home Crafts" by Mrs. R. L. Reid. 12.0 (noon): Close down.

MIDDAY SESSION.

Announcer: R. Wight.—1.0 p.m.: Market reports and weather information. 1.20: Wuriltzer organ. 2.0: Close down.

AFTERNOON SESSION

3.0: The official opening of the third Queensland Shopping Week will be relayed from Allan and Stark's. 4.15: News; close down.

EARLY EVENING SESSION.

Announcers: R. Wight and H. Humphreys.—6.0: Mail train running times; mail information; shipping news. 6.5: A law talk, "Liability of Occupiers," by a barrister-at-law. 6.15: Records. 6.25: Commercial announcements. 6.30: Bedtime stories conducted by "Uncle Ben." 7.0: News in brief; Stock Exchange news, metal quotations, market reports. Fenwick's stock report, weather information, announcements, standard time signal. 7.45: Lecture, "On the Wallaby," by Mr. J. F. F. Reid (editor, "Queensland Agricultural Journal").

NIGHT SESSION.

Announcer: A. V. James. 8.0: A recital by Arthur Sharman (pianist) and Ivy Plane (soprano)—"The Market" (Carew). "Homing" (Del Riego). Arthur Sharman, pianist—"Humoreske" (Rachmaninoff). "Melody E Major" (Rachmaninoff). Ivy Plane, soprano, metal quotations, market reports. "Sixpence" (K. Spencer-Browne). "Waltz Song," from "Merrie England" (German). Arthur Sharman, pianist—"Prelude C Sharp Minor" (Rachmaninoff). Ivy Plane, soprano—"Wind in the Corn" (Clarket). "Morning" (Oley Speaks). Arthur Sharman, pianist—"Prelude B Flat Major" (Chopin). "To Spring" (Grieg). "STRIFE," Galsworthy's Greatest Play. John Anthony (chairman of the board) William Scantlebury (director) Oliver Wanklin (director) David Robert (leader of the men) James Green (for the men) Henry Thomas (for the men) Enid Underwood (Anthony's daughter)—Dulcie Bott Act 1.—In the Boardroom. Act 2.—Outside the works. Act 3.—In the boardroom.

8.30: "Strife." 8.35: Metropolitan weather forecast. 9.31: Rio Grande Serenaders—Selected Melodies. 9.35: S. P. Bacon, tenor—"Only the River Running By" (Hopkins). "I Know a Lovely Garden" (d'Hardelet). 9.41: Claude Walker—Ten minutes with Henry Lawson. 9.51: Rio Grande Serenaders—Selected Melodies. 9.55: Irene Blighstone, contralto—"Be, Love, I Bring Thee Flowers" (Lambert). "My Rosary for You" (Ball). 10.0: Rio Grande Serenaders—More Melody. 10.5: "The Daily Mail" news; "The Courier" news; weather news; "Queenslander" bi-weekly news service for distant listeners. 10.30: Close down.

5CL

MORNING SESSION.

Announcer: J. L. Norris. 11.0: Chimes. 11.1: Morning melodies. 11.45: Mary Ann Dres will speak about "Women's Whims." 12.15: General news service. 12.35: British official wireless news. 12.52: S.A. railway information. S. O. Ward and Co.'s Stock Exchange information; meteorological information. 1.0: Chimes. 1.1: Lunch-hour recital. 1.59: Meteorological information. 2.0: Close down.

AFTERNOON SESSION.

Announcer: J. L. Norris. Accompanist: Jean Finlay. 3.0: Chimes. 3.1: Rev. G. E. Hale, B.A., will speak on "Keeping a Staff Upper Lip." General programme, including: Station Quartette; Elen Starr; H. Boake-Smith, banjoist. 4.1: A pianoforte recital by Spruhan Kennedy. 4.55: S. C. Ward and Co.'s Stock Exchange information. 5.0: Close down.

EVENING SESSION.

Announcer: C. J. O'Connor. 6.0: G.P.O. chimes. 6.1: Birthday greetings, correspondence, songs and stories, by "The Watili Lady." 6.30: An interlude of dinner music. 7.0: Chimes. 7.1: Stock Exchange information. 7.6: General market reports. 7.10: 5CL's sporting service. 7.20: Miss Laurie McLeod, on "The Art of Dancing." 7.40: Dr. Herbert Basedon, in an interesting Australian talk.

NIGHT SESSION.

Announcer: C. J. O'Connor. 8.0: G.P.O. chimes. 8.1: Relay from the Hindmarsh Town Hall of the concert to be rendered by the Hindmarsh Municipal Band. Hindmarsh Municipal Band—"March, 'Old Comrades' (Ticke). Overture, 'Zampa' (Herold). H. Clayton, xylophonist of the Hindmarsh Municipal Band—"Ramona" (Wayne). Howard Bauerrochse, tenor—"Macushla" (M'Marrough). Gwen Collett, contralto—"My Heart Is Weary" (Thomas). Will Runge, humorist—Selected humor. Howard Bauerrochse, tenor, and George Cowley, baritone—"The Moon Hath Raised."

9.0: G.P.O. chimes. 9.1: Meteorological information, including Semaphore tides. 9.2: Overseas gain report. 9.3: John D. Fraser, baritone—"Nightfall at Sea" (Phillips). 9.7: Hindmarsh Municipal Band—Foxirot, "Chinese Moon" (Nausbaum). Selection, "The Spring Chicken" (Douglas). Characteristic intermesso, "The Village Forge" (Holloway). Gwen Collett, contralto—"A Song of Thanksgiving" (Alltson). George Cowley, baritone—"The Ballad Monger" (Martin). Will Runge, humorist—Humorous item. Howard Bauerrochse, tenor, and George Cowley, baritone—"The Two Beggars." Hindmarsh Municipal Band—"March, 'Territorials' Own" (Rimmer). 10.0: G.P.O. chimes. 10.1: A. Grenfell Price, M.A., will speak on "Pioneers of Australia—Captain Stuart." 10.15: General news service. Meteorological information. 10.30: Modern dance numbers, by the "Radio Revellers." 11.0: Close down.

6WF

12.30: Tune in. 12.35: Markets, news, etc. 1.0: Time signal. 1.1: Weather bulletin supplied by the Meteorological Bureau of West Australia. 1.2: Musical programme by the Studio Trio, vocal numbers. 2.0: Close down. 3.30: Tune in. 3.35: Musical programme from the studio; pianoforte solos by Miss Audrey Dean, station pianist; violin solos by Mr. Frank Romaine. 5.30: Close down. 6.45: Tune in. 6.48: Bedtime stories by Uncle Duffy. 7.5: Light music by the Perth Piano Trio, comprising Mr. A. Lynch, violin; Mr. H. Shirley, piano; Mr. R. Brearley, cello. 7.30: Commercial and general information. 7.45: Talk, "Books of the Month," by Mr. J. P. Bathgate. 8.0: Time signal. 8.1: First weather bulletin, supplied by the Meteorological Bureau of West Australia. 8.3: Items of SWPS Station Orchestra, conducted by Mr. W. Wilkins; Miss Audrey Dean, pianist. 8.50: Late news items by courtesy of "The Daily News" Newspaper Co., Ltd.; station announcements; ships within range announcement; late weather bulletin. 9.5: Orchestral programme continued from the studio. 10.30: Close down. 10.4.5 Metre Transmission.—Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 8.45 p.m.

naval architect, inventor of a new secret armoured car; Bessie Francis; Mr. Hawker (a spy in the pay of an enemy nation, posing as a hawker of plants); Jack Ham. Scene: The Bradbury's flat, on the top floor, No. 33, Hammerston Mansions, London N.W.

Time: Afternoon. Period: The present.
 9.35: Studio Orchestra—
 "Chinese Lantern Dance" (Blower).
 "Japanese Sunset" (Pepper).
 9.40: Holden's Male Voice Choir—
 "Lovely Night."
 "The Long Day Closes."
 9.51: Vern Rogers, trumpeter—
 "Tutti" (Wilfred Sanderson).
 "A String of Pearls" (Phillips).
 9.54: John D. Fraser, baritone—
 "Fickle Fortune" (Monckton).
 "Songs My Mother Taught Me" (Dwarka).
 10.0: G.P.O. chimes.
 10.1: Geoff. Goldsworthy, 'cellist—
 "Lullaby" (Scott).
 "Menuette, No. 2" (Popper).
 10.5: Studio Orchestra—
 "Slavonic Rhapsody" (Friedman).
 "Voice Parlienne" (Roberts).
 10.15: General news service. Meteorological information.
 10.30: Modern dance numbers, by the "Radio Revelers."
 11.0: Close down.

6WF

12.30: Tune in. 12.35: Markets, news, etc. 1.0: Time signal. 1.1: Weather bulletin supplied by the Meteorological Bureau of West Australia. 1.3: Panalope hour, relayed from Messrs. Musgrove's Ltd., Lyric House, Perth. 2.0: Close down. 3.30: Tune in. Afternoon tea programme relayed from the Carlton Cafe; vocal items from the studio. 4.30: Close down. 5.45: Tune in. 6.45: Bedtime stories for the Kiddies by Uncle Duffy. 7.5: Light music by the Perth Piano Trio. 7.30: Commercial and general information. 7.45: Talk by Lieutenant Colonel Le Souef, Director, Zoological Gardens, South Perth. 8.0: Time signal. 8.1: First weather bulletin. 8.3: Musical programme from the studio; relay from the Y.A.L. Ballroom of Ron Moyle's Orchestra. 8.50: Late news items by courtesy of "The Daily News" Newspaper Co., Ltd.; station announcements; shipping range announcements; late weather bulletin. 9.5: Programme continued from the Y.A.L. Ballroom and the studio. 10.30: Close down.
 104.5 Metre Transmission.—Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 8.45 p.m.

7ZL

MID-DAY SESSION.
 Announcer: Jack Broadbent. 11.30 to 1.30: General programme.

AFTERNOON SESSION.
 Announcer: Jack Broadbent. 3.0: Chimes. 3.4: Weather information. 3.15: General programme. 4.15: "Aunt Edna" will give a talk on "Men's wearing apparel." 4.30: Close down.

EARLY EVENING SESSION.
 Announcer: Jack Broadbent. 6.30: Little Sheila Carroll. 7.0: Answers to letters and birthday greetings by "Uncle David." 7.15: News session.

EVENING SESSION.
 Announcer: Jack Broadbent. 7.30: Under the auspices of the Tasmanian University, J. Field will speak on "Naval construction." 7.45: Geo. Collins-Tasmania's champion wrestler, will speak on "Physical Culture." 8.0: G.P.O. clock chimes the hour. 8.5: A concert programme by the Hobart Orpheus Club, part song, "The Jolly Beggar" (Candish); Cliffe Hughes, baritone, "The Three Bachelors" (K. Russell); Fred Kummer, tenor, selected; Doris M'Courbie, contralto, selected; Orpheus Club, part song, "Mosquitoes" (Bills). Mrs. H. Hurst, contralto, selected; W. Thompson, bass, "The Bandero"; Mrs. Cliffe Hughes, contralto, "The Garden of Your Heart" (Doré); Orpheus Club, part song, "Rose of My Heart" (Lohr); Basil Osborne, bass, selected; Cliffe Hughes, baritone, "Corporal John," "Bartholem" (Newton); Mrs. Adelaide Blythe, humorous recitation, selected; Orpheus Club, part song, "The Image of the Rose" (Leichardt); Doris M'Courbie, contralto, selected; Harry Foster, tenor, "O Night of Stars and Splendor"; Mrs. Cliffe Hughes, contralto, "Down Here" (Brahel); Instrumental duet (E. Creese, violin, Don Hodgman, 'cello); selected; Orpheus Club, part song, "Martyrs of the Arena"; H. C. Butson, tenor, "The Long Day Closes"; Orpheus Club, part song, "The Long Day Closes." 10.1: Close down.

Military Band

FEW musical items are more inspiring than a rousing march played by a good military band, especially when it is a tune that brings back thrilling memories. It would be difficult, to say how many thousands of Australians have been cheered through the mud of Flanders by the strains of "Colonel Bogey" being played by their regimental band, or, in the absence of the band, to the accompaniment of their own whistling. On April 16, the band of the 59th Battalion will give a rendering of "Colonel Bogey," played as a ceremonial parade with orders. The recital will conclude with the march "Old Comrades," equally popular and reminiscent of old army days.

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Or Dilecto Panel 13/4				1 Radiokes R.F. Choke	8	6	
1 Sub-panel, 18 x 8 x 3-16 in. Bakelite	9	0		1 Double Circuit Jack	2	3	
Or Dilecto Sub-panel 15/4				1 Single Circuit Jack	1	7	
3 A.W.A. UX Valve Sockets	9	0		1 .00025 Grid Condenser, with Clips	2	6	
1 Radiokes Short Wave Coil Kit	2	15	0	1 T.C.C. 1 Mf. Condenser	5	6	
2 Sub-panel Brackets	3	6		7 Terminals	1	9	
1 Cecophone .0003 Condenser	1	14	0	1 Plug and Socket	6	6	
1 .00025 Pilot Condenser				1 Doz. Lengths Bus Bar Wire	10	10	
1 30ohm Pilot Rheostat	3	6		1 Length Solder	3	3	
1 Emcco Velmo Vernier Dial	1	5	0	1 Doz. Assorted Metal Thread Screws	1	0	
1 10-1 All American Transformer	1	8	6	3 Lengths Spaghetti	1	3	
Or 1 A.W.A. Transformer 18/							
1 Ferranti AF3 Transformer	2	17	0				
Or 1 A.W.A. 3 1/2-1 Transformer 18/							

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10 Bakelite Strips, 4 x 1/2 in.	3	4		6 Special Plugs for Coils	2	0	
2 Bakelite Strips 2 x 1/2 in.	6	1		1 Length Airzone Coil	7	6	

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Local Programmes, Wednesday, April 17

2FC

EARLY MORNING SESSION.

Announcer: A. S. Cochrane.

7.0: "Big Ben" and announcements. 7.2: Official weather forecast, rainfall; river reports; temperatures; astronomical memoranda. 7.7: "Sydney Morning Herald" summary. 7.12: Shipping Intelligence; mails services. 7.15: studio music. 7.25: Investment market; mining sharemarket; metal quotations; wool sales; breadstuffs markets; Inter-Stats markets; produce markets. 7.40: Studio music. 8.0: "Big Ben"; close down.

MORNING SESSION.

Announcer: A. S. Cochrane.

10.0: "Big Ben" and announcements. 10.3: Pianoforte reproduction. 10.10: "Sydney Morning Herald" news service. 10.25: Studio music. 10.45: A talk on "Home Cooking and Recipes" by Miss Ruth Furst. 11.0: "Big Ben"; A.P.A. and Reuter's cable services. 11.5: Close down.

MIDDAY SESSION.

Announcer: A. S. Cochrane.

Note: Race results from Kensington will be transmitted as received, by courtesy of "Sun" Newspapers, Ltd. 12.0: "Big Ben" and announcements. 12.1: Stock Exchange, first call. 12.3: Official weather forecast, rainfall; 12.5: Studio music. 12.10: Summary of news. "Sydney Morning Herald." 12.15: Rugby Wireless news. 12.18: A reading. 12.30: Studio music. 1.0: "Big Ben"; weather intelligence; 1.3: "Evening News" midday news service; Producers' Distributing Society's report. 1.20: Studio music. 1.28: Stock Exchange, second call.

AFTERNOON SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapelle.

2.30: Programme announcements. 2.32: A short record recital. 3.0: "Big Ben"; from Paling's Concert Hall—A recital by the Students of Madame Emily Marks. 4.0: From the studio—"Big Ben"; a reading. 4.15: Popular music. 4.25: C. S. Yarwood, a talk on "Henry Lawson." 4.35: Studio items. 4.45: Stock Exchange, third call. 4.47: "Milk Week"; a talk in connection with the campaign. 5.0: "Big Ben"; close.

EARLY EVENING SESSION.

Announcer: A. S. Cochrane.

5.40: The children's session, conducted by the "Hello Man," assisted by Uncle Ted and "Sandy"; letters and stories; music and entertainment. 6.30: Dalgety's market reports (wool, wheat and stock). 6.40: Fruit and vegetable markets. 6.43: Stock Exchange information. 6.45: Weather and shipping news. 6.48: Rugby Wireless news. 6.50: Late sporting news. 7.0: "Big Ben"; late news conducted by Horace Keats—(a) "Mazurka Russe" (Glinka). (b) "Souvenir of the Ball" (Boccherini). (c) "Romance" (Wieniawski). (d) "Sally" (Keon). (e) "Moonbeams" (Delio). (f) Fox trot.

EVENING SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

7.40: Popular music. 7.45: Programme announcements. 7.48: Studio items. 8.0: From the Conservatorium of Music, Concert Programme arranged by the Royal Apollo Club; associate artists—Robert Harper, Gladstone Bell, Ethel Friend. 9.0: From the Studio—Weather report. 9.1: A tale by the Storyteller. 9.15: From the Conservatorium of Music, Concert Programme arranged by the Royal Apollo Club, second half. 10.15: From the Studio—Recital of Celebrity Records. 10.38: Late weather and to-morrow's programme. 10.30: National Anthem; close.

2BL

MORNING SESSION.

Announcer: A. C. C. Stevens.

8.0: G.P.O. chimes. Metropolitan weather

report. 8.1: State weather report. 8.2: Studio music. 8.15: G.P.O. chimes. News service from the "Daily Telegraph Pictorial." 8.30: G.P.O. chimes. News service continued. 8.40: Information, mails, shipping, arrivals, departures, and sailings. 8.45: Studio music. 9.15: Half an hour with silent friends. 9.45: Studio music. 10.0: G.P.O. chimes; close down.

MIDDAY SESSION.

Announcer: A. C. C. Stevens.

11.0: G.P.O. chimes. 2BL Women's Sports' Association session, conducted by Miss Gwen Varley. 11.30: Advertising hints. 11.40: Women's session, conducted by Mrs. Cranfield. 12.0: G.P.O. chimes. Special ocean forecast and weather report. 12.3: Studio music. 12.30: Shipping and mails. 12.35: Market reports. 12.43: "Sun" midday news service. 1.0: Studio music. 1.30: Talk to children and special entertainment for children in hospital. 2.0: G.P.O. chimes; close down. Note: Race results from Kensington will be broadcast by courtesy of the "Sun" Newspapers.

AFTERNOON SESSION.

Announcer: A. C. C. Stevens.

Accompanist: Kathleen Roe.

3.45: G.P.O. chimes. Popular music. 4.0: Marion McCall, soprano. 4.7: A talk by Basil Kirke. 4.27: Violet Hunt, contralto: (a) "Three Fishers" (Hullah). (b) "It is Not Because Your Heart is Mine" (Lohr). 4.29: "Sun" news. 4.34: Marion McCall, soprano. 4.41: Studio items. 4.52: Violet Hunt, contralto: (a) "Rest Thee, Sad Heart" (Del Rio). (b) "My Ship" (Del Rio). 5.0: G.P.O. chimes. Popular music. 5.15: Pianoforte reproduction. 5.27: Racing resume. 5.31: Sounding of the Last Post from the Cenotaph at Sunset. 5.34: From the studio, racing resume continued. 5.37: Features of the Evening's programme.

EARLY EVENING SESSION.

Announcer: Basil Kirke.

5.40: Children's session, conducted by Uncle Bas. Music and entertainment. Letters and stories. 6.30: "Sun" news and late sporting. 6.40: 2BL Dinner Quartette: (a) "Cheero" (Finck). (b) Valse, "Copellia" (Delibes). (c) "A Song Remembered" (Coates). (d) "Scenes From the South" (Nicode), (e) "Full Moon" (Woolmer), (f) "Blue Night" (Rollins). 7.7: Australian Mercantile, Land and Finance Co.'s report. Weather report and forecast by courtesy of Govt. Meteorologist. Producers' Distributing Society's fruit and vegetable market report. Grain and fodder report ("Sun"). Dairy produce report ("Sun"). 7.25: Mr. Pim and Miss Pam in advertising talks and nonsense. 7.53: An Ad. Special. 7.55: Programme and other announcements.

EVENING SESSION.

Announcer: Basil Kirke.

Accompanist: G. Vern Barnett.

8.0: G.P.O. chimes. 2BL Topical Chorus. 8.2: An hour with an old Sea Salt: A typical nautical programme arranged by W. E. Lewis, with the Sea Chanties of long ago and the rollicking story told by an old Seafarer. 9.0: G.P.O. chimes. Weather report. 9.1: Romano's Dance Orchestra, conducted by Bennie Abrahams. 9.10: From the Studio: Sketch by Charles Lawrence and Les Austin. 9.20: Sammy Cope, xylophone solos. 9.27: John Warren, tenor. 9.34: Claude Corbett will speak on general sporting. 9.49: Sammy Cope, xylophone solos. 9.56: A sketch by Charles Lawrence and Les Austin. 10.6: Anne Luciano, popular vocalist. 10.13: Romano's Dance Band, conducted by Bennie Abrahams. 10.23: From the Studio: Anne Luciano, popular vocalist. 10.30: Late weather report. 10.32: Romano's Dance Band, conducted by Bennie Abrahams.

10.57: From the Studio: To-morrow's programme.

10.58: Romano's Dance Band, conducted by Bennie Abrahams.

11.30: National Anthem. Close.

2GB

10.0: Music. 10.10: Happiness talk by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Miss Helen J. Beegling. 11.30: Close down. 2.0: Music. 2.5: Women's radio service, by Mrs. Dorothy Jordan. 2.30: Music. 2.45: Address. 3.0: Labor-saving demonstration, from Nock and Kirby, Ltd. 4.0: Close down. 5.30: Children's session by Uncle George. 7.0: Music from studio. 8.0: Miss Marjorie Allomes, contralto. 8.7: Miss Lella Waddell, violinist. 8.15: Mr. Clement Hosking, baritone. 8.22: Instrumental music. 8.32: Humorous interlude by Mr. Jack Win and Mr. Heath Burdock. 8.35: Miss Gladys Verona soprano. 8.45: Address. 9.0: Weather report. 9.3: Miss Marjorie Allomes, contralto. 9.13: Miss Lella Waddell violinist. 9.23: Humorous interlude by Mr. Jack Win and Mr. Heath Burdock. 9.28: Mr. Clement Hosking, baritone. 9.38: Instrumental music. 9.48: Miss Gladys Verona, soprano. 9.58: Miss Ada Brook, pianist. 10.8: Dance music. 10.30: Close down.

2UW

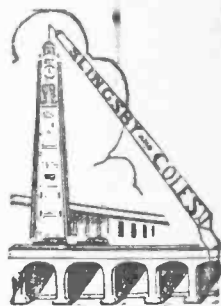
MIDDAY SESSION.

12.30: Music. 1.0: G.P.O. clock and chimes; music. 2.30: Close. 4.30: Musical programme.

EVENING SESSION.

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; music. 9.0: G.P.O. clock and chimes; comments on foreign affairs by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down.

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3LO

EARLY MORNING SESSION. 7.15 to 8.15: See Friday.

MORNING SESSION.

11.0: Sultana cake recipe. 11.5: Miss I. D. Beavan will speak on "Home-made Confectionery." 11.25: Mrs. M. Callaway Mahood will speak on "The Art of Decoration." 11.45: Mrs. Clarence Weber will speak on "Physical Culture for Women." 12.0: Melbourne Observatory time signal; express train information. 12.1: Metal prices, etc. 12.15: Newmarket stock sales, etc. 12.20: General programme, including Jack Stocks: The Radio Revellers; "Zui" Rudell, contralto. 1.5: Weather forecast for Victoria, etc. Stella Lamond. 2.0: Close down.

AFTERNOON SESSION.

2.15: A Studio concert, including—"The Station Orchestra; Ella Riddell, contralto; J. Alexander Browne, baritone; Captain Donald MacLean; Celia Geoni McNeil, soprano; The Imperial Russian Trio; Marlon Lightfoot; Rita Hilton; Celia Geoni McNeil, soprano. 4.47: Special weather forecast for the benefit of listeners in the Records disc. 5.0: News service. Stock Exchange information. 5.10: Close down.

THE CHILDREN'S HOUR.

6.0: Answers to letters and birthday greetings by "John, the Piper's Son." 6.30: Captain Donald MacLean—another exciting adventure story. 6.50: "John, the Piper's Son."

EVENING SESSION.

Accompanist: Agnes Fortune. 7.30: Johnston's Studio Boys, to 7.56. 8.0: The Station Orchestra. 8.10: Dawn Harding, mezzo-soprano. 8.26: Percy Code, trumpet.

NIGHT SESSION.

Accompanist: Agnes Fortune.

8.30: Johnston's Studio Boy—Overture, "The Bouquet." "Star Light Serenade." 8.37: Molly Mackay, Soprano—"One Morning Very Early" (Sanderson). Robin's Song (White). 9.44: The Station Orchestra—Selection, "Un Ballo in Maschera" (Verdi). 8.54: Colin Thomson, Tenor—"Impatience" (Schubert). "The Fisher Maiden" (Schubert). 9.1: The Station Quartet—"First Movement Quartet" (Schubert). 9.8: Bertha Jorgensen, Violin—"Slow Movement from Concerto" (Tschalkowsky). 9.15: Dawn Harding, Mezzo-Soprano—"None But Whom I Love" (Tschalkowsky). "When at Moru" (Schumann). 9.22: The Station Quartet—"Variations on a Theme of Mozart" (Beethoven). 9.29: Colin Thomson, Tenor—"Adehlde" (Beethoven). 9.36: The Station Quartet—"Sally in Our Alley" (Arr. Pochont). "Scottish Dances" (Arr. Pochont). 9.43: Molly Mackay, Soprano—"Mignon" (d'Harlot). "My Love She's But a Lassie Yet" (Old Scotch). 9.50: The Station Orchestra—Selection, "She's a Good Fellow" (Kern). 10.0: News service, British Official Wireless news from Rugby; announcements. 10.10: Stella Lamond, Soubrette with her Ukulele. 10.17: Johnston's Studio Boys—Selection, "Rose Marie." 10.27: Stella Lamond, Soubrette, with her Ukulele. 10.34: The Radio Revellers—"High Tension" (Post). "Ought to Hear Off! Lat! Beer!" "A Bungalow." "Radio and You" (Compsey). "Back in Your Own Backyard" (Johnson). "My Heart Stood Still" (Rodgers). "Give Your Baby Lots of Lovin'" (Wirtz). "When You Know Me" (Baden), selected. "God Save the King."

3AR

Maurice Dudley.—10.0 to 10.39: See Friday.

MORNING MUSICAL SESSION.

11.0: A Keteiby concert. 12.20: British official wireless news; announcements. 12.30: Close down.

AFTERNOON SESSION.

1.43: Description of Grangeburn Hurdle Race, two miles. Hamilton Cup meeting, by Mel. Morris. 1.58: Description of First Hurdle Race, two miles 62 yards. Wagga Gold Cup meeting, by Eric Welch. 2.18: Description of Maiden Plate five furlongs. Hamilton Cup meeting, by Mel. Morris. 2.33: Description of Maiden Plate, six furlongs. Wagga Gold Cup meeting, by Eric Welch. 2.53: Description of Ladies' Bracelet, seven furlongs. Hamilton Cup meeting, by Mel. Morris. 3.10: Description of Wagga Gold Cup, 1 1/4 miles. Wagga Gold Cup meeting, by Eric Welch. 3.38: Description of Hensleigh Handicap, six furlongs. Hamilton Cup meeting, by Mel. Morris. 3.45: Announcements. 3.48: Description of Chairman's Handicap, six furlongs. Wagga Gold Cup meeting, by Eric Welch. 4.23: Description of Wagga Stree Produce Stakes, five furlongs. Wagga Gold Cup meeting, by Eric Welch. 4.30: Results of Handicap Pony Race, five furlongs. Hamilton Cup meeting, by Mel. Morris. 4.58: Description of Highweight Handicap, seven furlongs. Wagga Gold Cup meeting, by Eric Welch. 5.5: Results of Murchall Handicap, seven furlongs. Hamilton Cup meeting, by Mel. Morris; announcements. 5.10: Close down.

EVENING SESSION.

Announcer: Frank Hatherley.—7.0: News service; announcements. 7.45: Wagga and Hamilton races. 7.45: Out of the Past. 7.45: Under the Auspices of the Department of Agriculture, R. Crowe, Exports Superintendent, will speak on "Marketing Methods."

NIGHT SESSION.

8.0: Transmission from Seymour Town Hall—Magnificent production of the Trial Scene and Extracts leading up to it from "The Merchant of Venice," by Mrs. R. A. Scott. Synopsis of play read by the Rev. W. E. Boydew.

Overture, March from "The Merchant of Venice."
Pianist
Violin
Violin

Miss E. Jones
Miss G. Halpin
Mr. V. Sabastucci
ETAIONETAION
ETAION ETAION
ETAION NM
Opening Scene: Street scene where the bond is made between Shylock and Antonio. Sixty-five people appear as pedestrians, gipsy-dollers, etc. strolling minstrels, peddlers, con-

Principal Characters:—
Gipsy Family: Mrs. A. Clark, Miss D. Wright, Miss Ivy Dunstan, and Geoff. Scott.
English Family: Mr. W. Boland, Mrs. A. Bolton, Miss M. Sluper, Edna Middlebrook, and Phyllis Morrison.
Venetian Ladies: Mrs. W. Adams, Miss K. Costa, Miss D. Boddy.
Moorish Gentlemen: Messrs. G. Diggle and Elugel.
Dame Telet: Miss M. Drew.
Venetian Dame: Mrs. F. T. Walsh.
Peddler: Mr. R. Darby.
Gondollers: Messrs. W. Caffrey, J. Oaten, and E. Lubbeck.

Vocal and instrumental items, making and breaking of the bond, accompanied by Misses E. Jones and G. Halpin, and Messrs. G. Cerbassi and V. Sabastucci.
Trio: Gipsy Laughin' and Her W. P. Dault, Mace, R. Hilton, and Her W. P. Dault.
Act III, Scene I. "Three Thousand Ducks: Well." Shylock, Bassanio, and Antonio.
Song: "I'll be Gipsy." Miss D. Boddy.
Song: "Romany Song." Master Geoff Scott.
Dance: "Spanish" (to harp and violin accompaniment). Miss Franklyn Hepworth.
Harp solo: Selected. Mr. G. Cerbassi.
Violin solo: Selected. Mr. V. Sabastucci.
Act. III, Scene II. How what news on the Rio? Salanio, Salarino, Shylock, and Tubal.

Song: "Gipsy Love Song." Miss D. Wright.
Act III, Scene III. "Cooler, Look at Him." Shylock, Salanio, Antonio, and Geoff.
Fall of curtain to mark lapse of 24 hours. Rise on the Trial Scene, in which the Councillors and Officers of the Shire appear as the Magnificoes of the Court.

Duke Mr. Morton Logan
Magnificoes—President J. Morrison; Councillors, J. Chittick, T. Tehan, G. R. Freeman, G. A. Stagg, H. Sidebottom, G. W. M'Alister, W. D. Chisholm, F. B. Haplin, A. J. Coyne, G. A. Scott, M. Leahy, and W. J. Sinclair.
Trainbearers—Francis Fox and Mary Denny
Antonio Mr. Reginald Hilton
Bassanio Mr. Paul Carey
Gratiano Mr. Colin Hall
Salarino Mr. Robert Ashton
Selerio Mr. Andrew Merce
Shylock Mr. Rupert Scott
Tubal Mr. Aubrey Grant
Goaler Mr. Francis Walsh
Portia Mrs. R. A. Scott
Harissa Miss Dorothea Boddy
Musical Interlude by Misses Erma Jones and Gladys Halpin.

Official opening of the Town Hall by the President of the Shire (the State Premier has been invited). Speeches by Parliamentarians and others. Interspersed with musical items from Rev. W. P. Dault, Messrs. E. H. Mace, G. Cerbassi, and V. Sabastucci.
National Anthem.
10.30: News service; announcements.

4QG

EARLY MORNING SESSION

Announcer: J. Tyson.—7.43: Time signals. 7.45: News service. 8.0: Records. 8.15: News service. 1.30: Close down.

MORNING SESSION.

Announcer: Rita M'Aliffe.—11.0: Musical; social news; talk on "Artistic Uses of Sealing Wax and Crepe Paper," by "Denise;" Wurlitzer organ. 12.0 noon: Close down.

MIDDAY SESSION.

Announcer: R. Wright.—1.0 p.m.: Market reports and weather information. 1.20: The Postal Institute Orchestra. 2.0: Close down.

AFTERNOON SESSION.

Announcer: H. Humphreys.—3.0: Records. 3.0: Mail train running times. 3.31: A recital by Mr. George Sampson, F.R.C.O. (City Organist). 4.0: Afternoon news. 4.30: Close down.

Wednesday, April 17

6WF

EARLY EVENING SESSION.

Announcers: R. Wight and H. Humphreys.—6.0: Mail train running times; mail information; shipping news. 6.5: Dinner music. 6.25: Commercial announcements. 6.30: Bedtime stories conducted by "Little Miss Brisbane." 7.0: News in brief; Stock Exchange news, metal quotations, market reports. Fenwick's stock report, weather information, announcements, standard time signals; lecturette, "A Dairy Subject," Mr. R. R. Keats (Queensland Agricultural High School and Colleger).

NIGHT SESSION.

Announcer: J. L. Norris.
Accompanist: Jean Finlay.
8.0: G.P.O. chimes.
8.1: Adelaide Orchestral Society—Conductor, Mr. Thomas Grigg—
Overture, "Like a Dream" (Ellenberg).
8.10: Ivy Jones, soprano—
"It Is Only a Tiny Garden" (Wood).
"Pale Moon" (Logan).
8.17: Ronnie Rambles round—Typical, topical talks.
8.23: Adelaide Orchestral Society: Conductor, Mr. Thomas Grigg—
Selection, "The Night Bird" (Strauss).
8.35: John D. Fraser, baritone—
"Youth" (Allison).
"I Pitch My Lonely Caravan" (Coates).
8.42: Cyril Reed and partner, Hawaiian Duo. In fascinating Hawaiian tunes.
8.48: Edna Lawrence, contralto—
Selected.
8.55: Adelaide Orchestral Society: Conductor, Mr. Thomas Grigg—
A string number—"Romance in A" (Laurance).
9.0: G.P.O. chimes.
9.1: Meteorological information, including Semaphore tides.
9.2: Overseas grain report.
9.3: Ivy Jones, soprano—
"Arise, O, Sun" (Del Riego).
"Captive Lark" (Ronald).
9.10: Cyril Reed and partner, Hawaiian Duo—
More modern melodies.
9.16: John D. Fraser, baritone—
"Fair Tales of Ireland" (Coates).
"Salaam" (Lang).
9.23: Adelaide Orchestral Society: Conductor, Mr. Thomas Grigg—
"Whispering of Spring" (Czibulka).
9.28: Edna Lawrence, contralto—
Selected.
9.35: Ronnie Rambles round—More typical, topical talks.
9.40: Adelaide Orchestral Society: Conductor, Mr. Thomas Grigg—
"Minuet" (Paderewski).
9.45: Mr. E. W. Holden, B.Sc., will speak on "Economics."
10.5: Adelaide Orchestral Society: Conductor, Mr. Thomas Grigg—
Selected orchestral selection.
10.15: General news service, Meteorological information.
10.30: Modern dance numbers, by "The Radio Revellers."
11.0: Close down.

NIGHT SESSION.

Announcer: H. Humphreys.
8.0: Alf. Featherstone and his Dance Orchestra—
Fox Trots: "By the Sapphire Sea" (Snyder).
"Egyptian Rose" (Snyder).
8.10: Jean Naylor, contralto—
"A Summer Night" (Thomas).
"Advice" (Barrie).
8.20: Alf. Featherstone and his Dance Orchestra—
Fox Trots: "Just Because You're You" (Turk).
"My Mammy Knows" (de Costa).
8.30: Stanley Tamblin, bass—
"The Blacksmith" (Slater).
"The Gallants of England" (Gatty).
8.35: Alf. Featherstone and his Dance Orchestra—
Jazz Waltz: "Chiquita" (Wayne).
8.40: Dibbe and Dab—
Ten minutes' melody and patter.
8.50: Alf. Featherstone and his Dance Orchestra—
One Steps: "Mos-kee-Toe" (Weidt).
"Us-Te-Zer" (Stutcher).
9.25: Doris M'Innes, soprano—
"Pale Moon" (Logan).
"Gondola" (Clarke).
9.35: Alf. Featherstone and his Dance Orchestra—
One-steps: "I Found the End of the Rainbow" (Straight).
"Somewhere in Erin" (Temple).
9.45: Harry Humphreys in a humorous sketch—
"Mum, Dad, and the Kid Visit the Zoo."
CAST:
Mum Harry Humphreys
Dad The Sandman
The Kid "Percy"
Attendants The Company
9.55: Alf. Featherstone and his Dance Orchestra—
Jazz Waltz, "Lolita" (Stoneham).
10.0: "The Daily Mail" news; "The Courier" news; weather news.
10.15: Dorothea Hives, elocutionist—
A group of Australian verse: "Moonrise" (Forrest).
"The Gippsland Girl" (Ogilvie).
"The Women of the West" (Evans).
10.20: Alf. Featherstone and his Dance Orchestra—
Forty minutes' dance music.
11.0: Close down.

12.30: Tune in. 12.35: Markets, news, etc. 1.0: Time signal. 1.1: Weather bulletin supplied by the Meteorological Bureau of West Australia. 1.3: "Talk, "Care of the Sick at Home," by Dr. Winifred Holloway, of London. 1.20: Music. 1.30: Close down. 3.30: Tune in. 3.35: Musical programme from the Primrose Cafe de Luxe: items by the Misses Marshall and Chapman; vocal numbers from the studio. 4.30: Close down. 6.45: Tune in. 6.48: Bedtime stories by Uncle Duffy. 7.5: Light music by the Perth Piano Trio. 7.30: Commercial and general information. 7.45: Talk on "Popular Science" by Mr. Hal M'Kall. 8.0: Time signal. 8.1: First weather bulletin; musical programme from the studio; relay from the Temple Court Cabaret of Merv. Lyon and his orchestra. 8.50: Late news items by courtesy of "The Daily News" Newspaper Co., Ltd.; station announcements; ships within range announcement; late weather bulletin. 9.5: Programme continued from the studio and Temple Court Cabaret. 10.30: Close down.

104.5 Metre Transmission—Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 6.45 p.m.

7ZL

MID-DAY SESSION.

Announcer: Jack Broadbent. 11.30 to 2.0: General programme.
AFTERNOON SESSION.
Announcer: Jack Broadbent. 3.0: Chimes. 3.4: Weather information. 4.30: Close down. During the afternoon results will be given of the Kyneton Races, run at Kyneton Racecourse, Melbourne, Victoria.

EARLY EVENING SESSION.

Announcer: J. M. Counsel. 6.30: Bertha Southey Bramhall will tell a Tasmanian fairy tale. 7.0: Answers to letters and birthday greetings. 7.15: Advice on fruit sales, from Melbourne; news service.

EVENING SESSION.

Announcer: J. M. Counsel. 7.30: Geo. Nation will speak on "Planting and Sowing." 7.45: Miss M. D. Wilson, instructress of dressmaking, will speak on "Dress cutting and designing." 8.0: G.P.O. clock chimes the hour.
8.6: Recital of instrumental and vocal items by our leading international artists, supplied by Findlay's Music Warehouse. 10.0: G.P.O. clock chimes the hour. 10.1: Close down.

5CL

MORNING SESSION.

Announcer: C. J. O'Connor. 11.0: Chimes. 11.1: Morning melodies. 11.45: Miss M. E. Chambers, Matron of the Mothers and Babies' Health Association, will speak on "Diet of Children Over One Year." 12.15: General news service. 12.35: British official wireless news. 12.40: Midday music. 12.52: S.A. Railway information, etc. 1.0: Chimes. 1.1: Lunch-hour recital. 1.20: Result of Grangeburn Hurdle Race, Hamilton Cup meeting. 1.33: Result of the First Hurdle Race, Wagga races. 1.53: Result of Maiden Plate, Hamilton Cup meeting. 1.59: Meteorological information. 2.0: Chimes. Close down.

AFTERNOON SESSION.

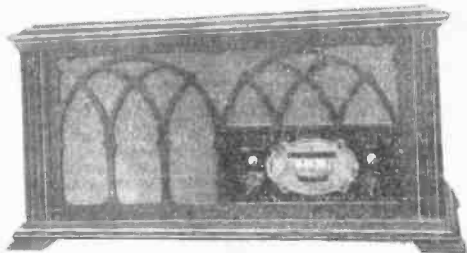
Announcer: C. J. O'Connor. Accompanist: Jean Finlay. 3.0: Chimes. 3.1: Resume of race results. General programme, including:—Boake-Smith's Quartette; Audrey Sanderson, soprano; William Davey, xylophonist; John D. Fraser, baritone; Ellen Elford, contralto; a one-act play, entitled, "Accidents Will Happen." Race results, 3.13, 3.26, and 4.1. 4.55: Stock Exchange information. 5.0: G.P.O. chimes; resume of race results. Close down.

EVENING SESSION.

Announcer: J. L. Norris. 6.0: Chimes. 6.1: Birthday greetings, correspondence, songs and stories, by "Miss Wireless." 6.20: A playlet for the children entitled, "The Middle of the Night." 6.40: An interlude of dinner music. 6.55: Resume of racing results. 7.0: Chimes. 7.1: Stock Exchange information. 7.6: General market reports, etc. 7.10: Rev. E. S. Kiek will give a talk on "Sir Thomas More." 7.25: An address to Boy Scouts. 7.40: 5CL Bluebird Girls' Club.

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Local Programmes, Thursday, April 18

2FC

EARLY MORNING SESSION

Announcer: A. S. Cochrane. 7.0: "Big Ben" and announcements. 7.2: Official weather forecast: rainfall; river reports; temperatures; astronomical memoranda. 7.7: "Sydney Morning Herald" summary. 7.12: Shipping intelligence; mails services. 7.15: Studio music. 7.25: Investment market: mining sharemarket; metal quotations; wool sales; breadstuffs markets; inter-State markets; produce markets. 7.40: Studio music. 8.0: "Big Ben"; close down.

MORNING SESSION.

Announcer: A. S. Cochrane. 10.0: "Big Ben" and announcements. 10.2: Pianoforte selections. 10.10: "Sydney Morning Herald" news service. 10.25: Studio music. 10.30: Last minute sporting information by the 2FC Racing Commissioner. 10.40: Studio music. 11.0: "Big Ben"; A.P.A. and Reuter's cable services. 11.5: Close down.

MIDDAY SESSION.

Announcer: A. S. Cochrane. 12.0: "Big Ben" and announcements. 12.1: Stock Exchange. first call. 12.3: Official weather forecast; rainfall. 12.5: Studio music. 12.10: Summary of news. "Sydney Morning Herald." 12.15: Rugby Wireless news. 12.18: A reading. 12.30: Studio music. 1.0: "Big Ben"; weather intelligence. 1.3: "Evening News" midday news service; Producers' Distributing Society's report. 1.20: Studio music. 1.28: Stock Exchange, second call. 1.30: Popular Studio music. 1.50: Last minute sporting information by the 2FC Racing Commissioner. 2.0: "Big Ben"; close.

AFTERNOON SESSION.

Announcer: Laurence Halbert. Accompanist: Ewart Chapple. 2.30: Programme announcements. 2.32: The Booklover's Corner. 3.0: "Big Ben"; popular music. 3.30: Enid D'Arcy, soprano—(a) "The Bitterness of Love" (Dunn). (b) "Boat Reverie" (Harrhy). 3.37: Studio items. 3.45: A reading. 4.0: "Big Ben"; Nancy Rouse, violinist. 4.7: Studio items. 4.17: Enid D'Arcy, soprano—(a) "Golden Dawn" (Lohr). (b) "Didn't You Know?" (Lehmann). 4.24: Popular music. 4.38: Nancy Rouse, violinist. 4.45: Studio items. 5.0: "Big Ben"; close.

EARLY EVENING SESSION.

Announcer: A. S. Cochrane. 5.40: The chimes of 2FC. 5.45: The Children's Session, conducted by the "Hello Man"; letters and stories: music and entertainment. 6.20: A "Safety First" talk. 6.30: Dalgety's market reports (wool, wheat and stock). 6.40: Fruit and vegetable markets. 6.43: Stock Exchange information. 6.45: Weather and shipping news. 6.48: Rugby Wireless news. 6.50: Late sporting news. 7.0: "Big Ben"; late news service. 7.10: The 2FC Dinner Quartette, conducted by Horace Keats—(a) "Petite Mazurka" (Sapellinkoff). (b) "A Spring Morn" (Guzaban). (c) "The Pirates of Penzance" (Sullivan). (d) "Meditation 'Thais'" (Masse-net). (e) Foxtrot.

EVENING SESSION.

Announcer: Laurence Halbert. Accompanist: Ewart Chapple. 7.40: Popular music. 7.45: Programme announcements. 7.48: Studio items. 8.0: From the Capitol Theatre—The Capitol Unit of Entertainment. 8.15: From the Studio—Miriam Pope soprano.

(a) "April is a lady" (Phillips).
(b) "Somewhere in This Summer Night" (Carew).
8.22: Lawrence Godfrey Smith, pianist—
(a) "Rosemary" (Bridge).
(b) "The Island Spell" (Ireland).
(c) "The Noel" (Gardiner).
(See Page 3.)
8.32: Our Interpretation Competition—Each artist in this unique competition will portray a certain nationality, as follows:
Brunton Gibb, coster.
Joe Cahill, Irishman.
H. W. Varua, Englishman.
Lawrence Macaulay, Scotsman.
Carl N. Pay, Italian.
Morconery Stuart, Frenchman.
Listeners will be asked for an expression of opinion regarding the most successful

performance by the respective artists, and the listener who most accurately forecasts the winning artist by popular vote will receive a prize of £2 2.
Address your replies to "Wireless Newspapers Limited," 51 Castlereagh Street, Sydney.

9.32: Weather report.
9.33: John Mitchell, tenor.
9.40: Lawrence Godfrey Smith, pianist—
(a) "Prelude" (Albery).
(b) "Two Preludes" (Besly).
(c) "Folk Song" (Scott).
9.52: A talk on Bridge by Graham Kent.
10.7: Miriam Pope, soprano.
(a) "Villa" (Lehar).
(b) "That's All" (Brahe).
10.39: From the Hotel Australia: Cec Morrison's Dance Band.
10.50: From the Studio—Late weather.
10.52: John Mitchell, tenor.
10.59: From the Hotel Australia: Cec Morrison's Dance Band.
10.57: From the Studio—To-morrow's programme.
10.59: From the Hotel Australia: Cec Morrison's Dance Band.
11.30: National Anthem; close.

2BL

MORNING SESSION.

Announcer: A. C. C. Stevens. 8.0: G.P.O. chimes. Metropolitan weather report. 8.1: State weather report. 8.2: Studio music. 8.15: G.P.O. chimes. News service from the "Daily Telegraph Pictorial." 8.30: G.P.O. chimes. News service continued. 8.40: Information, mails, shipping, arrivals, departures, and sailings. 8.45: Studio music. 9.15: Half an hour with silent friends. 9.45: Studio music. 10.0: G.P.O. chimes; close down.

MIDDAY SESSION.

Announcer: A. C. C. Stevens. 11.0: G.P.O. chimes. 2BL Women's Sports' Association session, conducted by Miss Gwen Varley. 11.30: Advertising hints. 11.40: Women's session, conducted by Mrs. Cranfield. 12.0: G.P.O. chimes. Special ocean forecast and weather report. 12.3: Studio music. 12.30: Shipping and mails. 12.35: Market reports. 12.45: "Sun" midday news service. 1.0: Studio music. 1.30: Talk to children and special entertainment for children in hospital. 2.0: G.P.O. chimes; close down.

AFTERNOON SESSION.

Announcer: A. C. C. Stevens. Accompanist: Kathleen Roe. 3.45: G.P.O. chimes. Popular music. 3.50: Romano's Cafe Dance Orchestra, conducted by Bennie Abrahams. 4.0: G.P.O. chimes. Alexander Sinclair, baritone: (a) "Hear Me. Ye Winds and Waves" (Handel). (b) "Go Not, Happy Day" (Bridge). 4.7: Studio items. 4.15: A talk on Milk Week Campaign. 4.25: Christopher Faulkner, cornet solos: (a) "A Perfect Day" (Bond). (b) "Alice, Where Art Thou?" (Archer). 4.32: Studio music. 4.42: Alexander Sinclair, baritone: (a) "The Ballad Monger" (Martin). (b) "Harlequin" (Sanderson). 4.50: Studio items. 5.0: G.P.O. chimes. Christopher Faulkner, cornet solos: (a) "The Exile's Lament" (Albert). (b) "Good-night, Farewell" (Keichen). 5.7: Pianoforte reproduction. 5.17: Popular music. 5.37: Features of the evening's programme.

EARLY EVENING SESSION.

Announcer: Basil Kirke. 5.40: Children session, conducted by Uncle Bas. Music and entertainment. Letters and stories. 6.30: "Sun" news and late sporting. 6.40: 2BL Dinner Quartette: (a) "In a Chinese Temple Garden" (Ketyby), (b) "Wine, Woman, and Song" (Strauss), (c) "Intermezzo" (Scott). (d) Ballet Music. "Faust" (Gounod). (e) "A Hillside Melody" (Phillips). 7.7: Australian Mercantile, Land, and Finance Co.'s report. Weather report and forecast by courtesy of Govt. Meteorologist. Producers' Distributing Society's fruit and vegetable market report. Grain and fodder report ("Sun"). Dairy produce report ("Sun"). Weekly traffic bulletin. 7.25: Mr. Plin and Miss Pam in advertising talks and nonsense. 7.53: An Ad. special. 7.55: Programme and other announcements.

EVENING SESSION.

Announcer: Basil Kirke. Accompanist: G. Vern Barnett. 8.0: G.P.O. chimes. 2BL Topical Chorus. 8.2: Studio production of "Romance," arranged by Lucille Bruntnell. 9.0: G.P.O. chimes. Weather report. 9.1: Athos Martelli, 'cellist. 9.22: Camille Aider, soprano. 9.15: Athos Martelli, 'cellist. 9.22: Camille Aider, soprano. 9.30: To-night's relay, the third of a series of inter-State relays when the dance music from 3LO will be re-broadcast for the benefit of studio listeners between 9.30 and 10.30. 10.30: National Anthem.

2GB

10.0: Music. 10.10: Happiness talk by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Miss Helen J. Beegling. 11.30: Close down. 2.0: Music. 2.5: Women's radio service, by Mrs. Dorothy Jordan. 2.50: Music. 3.15: Close down. 5.30: Children's session, by Uncle George. 7.0: Music. 7.30: Short talk by Mrs. Jordan. 8.0: Mr. Leslie Herford, baritone. 8.7: Instrumental music. 8.15: The Bohemian Girls. 8.22: Miss Ada Brook. 8.30: Mr. Jack Win and Miss Nora Windle, in a dramatic sketch. 8.45: Mr. Lisle Pearce and his orchestra. 9.0: Weather report. 9.3: Address. 9.15: Mr. Leslie Herford. 9.25: Mr. Lisle Pearce and his orchestra. 9.40: The Bohemian Girls. 9.50: Mr. Jack Win and Miss Nora Windle, in a humorous sketch. 10.0: Mr. Lisle Pearce and his orchestra. 10.30: Close down.

2UW

EVENING SESSION

5.30: Children's Hour, conducted by Uncle Jack. 5.30: Close down. 7.0: G.P.O. clock and chimes; music. 8.15: Gardening talk, by Mr. S. H. Hunt. 8.30: Music. 9.0: G.P.O. clock and chimes; comments on foreign affairs, by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down.

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Interstate Programmes, Thursday, April 18

3LO

EARLY MORNING SESSION.

7.15 to 8.15: See Friday last.

MORNING SESSION

11.0: To-day's Radio recipe: Rock Cakes. 11.5: Miss Bennett will speak on "Sports for Women." 11.25: Miss B. Macaulay will speak on "The Different Types of Human Beings." 11.45: Sister Purcell will speak on "Infant Welfare."

MID-DAY NEWS SESSION

12.0: Melbourne Observatory time signal, etc. 12.1: News services, Melbourne prices, etc. 12.15: Newmarket stock sales, etc. 12.20: Community Singing, old-time choruses, transmitted from the King's Theatre, Russell Street, Melbourne. Conductor: Frank Hatherley. 12.40: Stock Exchange information. 12.43: Community singing. 1.45: Weather forecast for Victoria, etc. 1.52: Close down.

AFTERNOON SESSION

Announcer: Renn Millar. Accompanist: Agnes Fortune. 2.15: General programme, including: Ella Riddell, Contralto; Guldford Bishop, Violin; Victor Harding, Bass-Bartitone.

THE EDUCATION HOUR

3.0: Dr. Loftus Hills will speak on "Topics of the Week." 3.15: Fritz Heit will speak on "Music for the Student." 3.30: Rev. Wm. Bottomly will continue his series of talks on "Sigurd the Volsung." by William Morris. 3.45: General programme including: Jack Stocks, Myrtle Robertson, Violin; Stella Lamont, Soubrette; The Station Orchestra. 5.0: News services, etc. 5.10: Acceptances and barrier positions for the Ascendale Park races on Saturday, April 20. 5.15: Close down.

CHILDREN'S HOUR

6.0: Answers to letters and birthday greetings by "Bobby Bluegum." 6.30: "Bobby Bluegum." 7.0: Market reports.

EVENING SESSION.

Announcer: Renn Millar. Accompanist: Agnes Fortune. 7.30: Lindsay Biggins, Piano. 7.40: J. Alexander Browne, Baritone. 7.43: Lindsay Biggins, Piano.

NIGHT SESSION

Announcer: John Stuart. Accompanist: Mabel Nelson. 8.0: Brunswick City Band (Conductor, Hugh Niven)—"Selection, "Edinboro Town" (Smith). 8.12: Sammy Shields, "The Scots Comedian" (by permission Tivoli Theatres, Ltd.)—"The Most Generous man in Edinboro." 8.20: Brunswick City Band—Fantasia, "The Maid of Orleans" (Laurent). 8.25: Sammy Shields, "The Scots' Comedian"—"More Scotch."

3AR

Announcer: Maurice Dudley. 10.0 to 10.59: See Friday last.

MORNING MUSICAL SESSION

11.0: Melodic Measures. 12.30: British Official Wireless news; announcements. 12.30: Close down.

AFTERNOON SESSION

1.43: Description of Kilora Hurdle Race, two miles, Hamilton Cup meeting, by Mel. Morris. 1.58: Description of Second Hurdle Race, 2m. 52yds., Wagga Gold Cup meeting, by Eric Welch. 2.18: Description of Handicap Trial Stakes, 6f., Hamilton Cup Meeting, by Mel. Morris. 2.33: Description of Autumn Handicap, 6f., Wagga Gold Cup Meeting, by Eric Welch. 2.53: Description of Novice Handicap, 5f., Hamilton Cup Meeting, by Mel. Morris.

AFTERNOON SESSION

Announcer: Maurice Dudley. 3.13: Description of Town Plate, 1m., Wagga Gold Cup Meeting, by Eric Welch. 3.38: Description of Hamilton Gold Cup, 1m. 3f., Hamilton Cup meeting, by Mel. Morris. 3.48: Description of Nursery Handicap, 5f., Wagga Gold Cup Meeting, by Eric Welch. 4.18: Description of Dindas Steeplechase, 2m. 55yds., Hamilton Cup Meeting, by Mel. Morris. 4.23: Description of Novice Handicap, 7f., Wagga Gold Cup Meeting, by Eric Welch. Results of Steeplechase, Hamilton Cup Meeting. 4.45: Evenson, transmitted from St. Paul's Cathedral. 5.3: Results of Welter Handicap, Wagga Gold Cup Meeting, and of the Flying Handicap, Hamilton Cup Meeting. 5.5: Close down.

EVENING SESSION.

Announcer: Frank Hatherley. 6.0: Paul Whitman's Orchestra. 6.20: Beautiful Ballads. 6.40: "The Moonlight Sonata" (Beethoven). 7.30: News session. 7.46: Stella Wilson now appearing in the "Vagabond King" at His Majesty's Theatre, will speak to you from her dressing room, by permission of J. C. Williamson, Ltd.

4QG

EARLY MORNING SESSION

Announcer: J. Tyson.—7.43: Time signals. 7.46: News service. 8.0: Records. 8.15: News service. 8.30: Close down.

MORNING SESSION.

Announcer: Rita McAuliffe.—11.0: Music: social news; lecturette: a gardening talk by "Tecoma." 12.0 (noon): Close down.

MIDDAY SESSION.

Announcer: R. Wight.—1.0 p.m.: Market reports

and weather information. 1.15: A lunch-hour address. 2.0: Close down.

AFTERNOON SESSION

Announcer: J. Tyson.—3.30: A programme of electrically reproduced records. 3.30: Mall train running times. 4.15: This afternoon's news. 4.30: Close down.

EARLY EVENING SESSION.

Announcers: H. Humphreys and A. V. James.—6.0: Mail train running times; mail information; shipping news. 6.5: From the Wintergarden Theatre, Wurilizer organ. 6.25: Commercial announcements. 6.30: Bedtime stories conducted by "The Sandman." 7.0: News in brief, Stock Exchange news, metal quotations, market reports, Fenwick's stock report, weather information, announcements, standard time signals. 7.45: Lecturette, A Talk on Books by Mr. J. Doyle (M'Leod's).

NIGHT SESSION.

Announcers: A. V. James and H. Humphreys.

WEDDING MUSIC.

The first portion of to-night's programme will be somewhat novel. It will comprise a recital of music suitable for wedding services; will be provided by the City Tabernacle Choir (conductor, Mr. Sydney May); and will be relayed from the City Tabernacle. 8.0: From the City Tabernacle—

Organ, "Elsa's Procession to the Cathedral" (Wagner).

Part Song, "Because" (d'Hardelot).

Organ, "Softly Awakes My Heart" (Saint-Saens).

Jack Atkinson, "A Song of Thanksgiving" (Allitson).

Organ, "Swing Song" (Barns).

Hymn, "The Voice that Breathed O'er Eden" (Hymns Ancient and Modern).

Organ, "Serenade" (Moszkowski).

Edgar Mansfield, "Love's Coronation" (Aylward).

Organ, "The Rosary" (Nevin).

Chorus, "The Bridal Chorus" (Lohengrin).

Organ, "Fanfare" (Ascher).

Ernest Harper, "Beloved, It Is Morn" (Aylward).

Organ, "Bridal Chorus" (Rose Malden—Cowen).

Organ, "Wedding March" (Mendelssohn).

9.0: Metropolitan weather forecast.

9.1: Movements of Travelling Dental Clinic.

STUDIO PROGRAMME.

9.5: Rio Grande Serenaders.—

In Selected Hawaiian Melodies.

9.10: Mary M'Neilsh, soprano—

"Se Saran Rose."

9.14: Arthur Struman, pianist—

"Valse Caprice" (Grodzki).

9.21: Rio Grande Serenaders, in selected numbers.

9.35: Mary M'Neilsh, soprano—

"Garmena."

9.40: A short impromptu programme by the Brisbane Citizens' Band (conductor, A. Kaeser).

10.0: The "Daily Mail" news; the "Courier" news; weather news; close down.

5CL

EVENING SESSION.

Announcer: C. J. O'Connor. 6.0: G.P.O. Chimes. 6.1: Birthday sings, correspondence, songs, and stories by "The Watlie Lady." 6.30: An Interlude of dinner music. 6.58: Stock Exchange information. 7.0: Chimes. 7.1: General market reports. 7.10: Dr. G. H. Wright, M.A., Litt.D. will speak on "What We Mean by Literature." 7.40: Mr. A. M. Whittenbury, Hints to Poultry Breeders.

NIGHT SESSION.

Accompanist: Jean Finlay.

Announcer: C. J. O'Connor.

8.0: G.P.O. Chimes.

8.1: Trio de Salon, Instrumentalists—

Selections from their repertoire.

8.7: Leonora Mira, soprano—

"The Leaves and the Wind" (Leon).

"My Dreams of You" (Unpublished).

8.13: Brenda Richards, elocutionist—

In a humorous number.

8.19: Trio de Salon, Instrumentalists.

Selections from their repertoire.

8.26: John E. Luter, tenor. 7.40: Mr. A. M. Whittenbury, "O, Dry those Tears" (De Riego).

"Obslination."

8.32: Trio de Salon, Instrumentalists—

Selections from their repertoire.

8.39: Leonora Mira, soprano—

"The Lilac Tree."

"Lady April."

8.45: Brenda Richards, elocutionist—

In another humorous number.

8.51: Trio de Salon, Instrumentalists.

Selections from their repertoire.

9.0: Chimes.

9.1: Meteorological information, including Semaphore tide.

9.2: Overseas grain report.

9.3: Modern Dance Night from 3LO, Melbourne.

The Radio Revellers—

"Colombo" (Nichols).

"Under the Burma Moon" (Davis).

9.10: Ciella Genoni-M'Neil, soprano.—

"Sweet Miss Mary" (W. H. Heildinger).

9.13: The Radio Revellers—

"Sonny Boy" (Brown).

"Sally of My Dreams" (Kernell).

"You're a Real Sweetheart" (Friend).

9.22: Stella Lamont, soubrette, and her Ukulele.

9.25: The Radio Revellers—

"Tokio" (Condor).

"Where the Cot, Cot, Ootson Grows" (Klein).

"Cinnamon Cake" (Bernard).

9.34: Jack Stocks, "The Woman Hater."

"They are the bone of his Existence."

9.37: The Radio Revellers—

"Paradise" (Zamecnik).

"Avalon Town" (Brown).

"Glad Rag Doll" (Ager).

9.46: Stella Lamont, soubrette, and her Ukulele.

9.49: The Radio Revellers—

"You are Wonderful" (Ash).

"Honeymoon Waltz" (Rensault).

"There Ought to be a Law against That" (Friend).

9.58: Jack Stocks, "The Woman Hater"—

"Some of his Very Own Experiences."

10.1: The Radio Revellers—

"Little Mother" (Rape).

"Oh, Ya, Ya" (Friend).

"Stars are the Windows of Heaven" (Mahj).

10.10: General news service.

Meteorological information, including Semaphore tide, etc. announcements.

10.25: The Radio Revellers—

"That's Her Now" (Ager).

"Japansy" (Kienner).

10.31: The Radio Revellers—

"Constantinople" (Carlton).

"In the Woodshed She Said she Would" (Johnson).

"Minnetonka" (Wallace).

"Just Keep Singing a Song" (Sissell).

"Roses of Yesterday" (Berlin).

"Jo-Anne" (Ward).

"Gypsy" (Gilbert).

"Honey" (Simons).

"Flower of Love" (Creamer).

11.0: Close down.

6WF

12.30: Tune in. 12.35: Markets, news, etc. 1.0: Time signal. 1.1: Weather bulletin supplied by the Meteorological Bureau of West Australia. 1.3: Panatrophe hour, relayed from Messrs. Musgrove, Ltd., Lyric House, Perth. 2.0: Close down. 3.30: Tune in. 3.35: Music relayed from the Carlton Cafe; vocal items from the studio. 4.30: Close down. 6.45: Tune in. 6.48: Bedtime stories for the Kiddies by Uncle Duddy. 7.0: Light music by the Perth Piano Trio. 7.30: Commercial and general information. 7.45: Talk by Mr. Fred Alexander, "Current Events in World Politics." 8.0: Time signal. 8.1: First weather bulletin. 8.3: Concert by the Perth City Band, conducted by Mr. Les. M. Price. 8.50: Late news items by courtesy of "The Daily News" Newspaper Co., Ltd.; station announcements; ships within range announcement; late weather bulletin. 9.3: Programme continued from the studio. 10.30: Close down.

10.45: Metre Transmission.—Simultaneous broadcast on 104.5 metres of programme given on 1250 metres commencing at 6.45 p.m.

7ZL

MID-DAY SESSION.

Announcer: Jack Broadbent. 11.30 to 1.30: General programme.

AFTERNOON SESSION.

Announcer: Jack Broadbent. 3.0: Chimes. 3.4: Weather information. 4.0: A representative of the Child Welfare Association will speak on "The Baby's Thumb." 4.30: Close down.

EARLY EVENING SESSION.

Announcer: Jack Broadbent. 6.25: "The Storey Lady" will tell a story to the wee folk. 7.0: Answers to letters and birthday greetings, by "Uncle David" and "The Storey Lady." 7.15: News session.

EVENING SESSION.

7.30: Under the auspices of the "Come to Tasmania" organization, Edwin J. Rogers, C.M.G., will speak on "Tasmania as a Tourist Resort." 7.45: A. J. Honey, secretary of State Employment Advisory Board, will speak on "Masters of Rural Interest." 8.0: G.P.O. clock chimes the hour. 8.15: Columbia broadcasts. 8.15: 7ZL's Old-time Dance Night, by Alla Polacca Orchestra and the Discus Ensemble; 7ZL Alla Polacca Orchestra, waltz, "Old Sweet Story" (Clifford); John Harrison, baritone, "Annie Laurie"; 7ZL Alla Polacca Orchestra, two-step, "Denham" (Conway); Cecil Sherwood, tenor, "Never did I behold so fair a Maiden"; 7ZL Alla Polacca Orchestra, schottische, "Honey Bee"; Noble, baritone, "Send for me" (Blbe); Denis Polacca Orchestra, waltz, "Dixie" (Roffe); Denis Polacca Orchestra, polka, "Masquerade" (Kessler); "Magers"; 7ZL Alla Polacca Orchestra, "Sweet Bessie" (Gilbert); 7ZL Alla Polacca Orchestra, soprano, "Mighty Lak a Rose" (Nevin); 7ZL Alla Polacca Orchestra, veta, "Masquerade" (Kessler); Denis Noble, baritone, "Send for me" (Blbe); Denis Polacca Orchestra, waltz, "The Honeymoon Waltz"; Denis Noble, baritone, "Muletter of Malaga" (Baron); 7ZL Alla Polacca Orchestra, varsoviana, "Varsoviana"; Flanagan Brothers, "Sweet Rosie O'Grady"; 7ZL Alla Polacca Orchestra, schottische, "The Sidewalks of New York" (Lawler); 7ZL Alla Polacca Orchestra, barn dance, "Freakin' King" (Lawler); 7ZL Alla Polacca Orchestra, waltz, "Merry Widow" (Lehar); 9.50: News session. 10.0: G.P.O. clock chimes the hour. 10.1: Close down.

The WIRELESS WEEKLY

RADIO INFORMATION

Under the direction of

Ray Allsop

and

Don B. Knock

Associate Technical Editors

Correspondence Answered

only through

these

Columns

(See Coupon Below)

Service

J. LIONS, Carlingsford Street, Epping, wishes to know if any reader can supply him with "Radio," dated August, 1927.

G. E. HANSFORD, 64 Gowrie Street, Newtown, asks for a copy of "Wireless Weekly," dated May 11, 1928, or "Radio" for December, 1927, containing the Go-Getter Circuit. (See this issue.)

L. MEIKLE, Francis street, Longueville, requests a copy of WIRELESS WEEKLY dated February 8, 1929, containing the Kug Crystal Receiver.

N.A.W. (Marriekville).—"I would be obliged if you would publish a circuit and details of a short wave receiver using one, two, or three valves, whichever you like, and using only one variable condenser of 250 mmf. capacity."

Answer: A short wave receiver using only one tuning control would not be very efficient. The 2005 mfd. condenser will be O.K. as a re-action control. Suggest you build the Go-Getter, which is described in this week's issue.

E.G.G. (Rockhampton).—"I intend building the All-Empire short wave set, but wish to use Airzone for the coils. Would you inform me per medium of WIRELESS WEEKLY Information Service of the different numbers of turns, etc., for the coils to cover all wave lengths?"

Answer: Look at the Go-Getter article, and follow the instructions given there. Sorry, but there is no room for complete construction details, etc., here. See article in this issue.

J. R. JONES, View Street, Wollongong, writes: "If you have a spare copy of WIRELESS WEEKLY containing the Marco Four, published recently, will you kindly forward to above address?"

Answer: Sorry we have no copies, but some reader may be able to oblige. There are no alterations in this receiver since it was first published. A Screen Grid Marco Four was published in these columns recently.

R. CARPENTER, Moleworth Street, Lismore.—"On my S.W. adaptor the wire on the choke became broken, and I took the screw out of the side, but failed to get set to operate when it was replaced."

Answer: Obviously an open circuit. Try shorting the choke right out of circuit.

Q. "I disconnected the choke, and set worked O.K. Can any harm be done to any part of the set using it like this?"

Answer: No harm done. Use a new choke.

J.R.K. (Ashfield).—"I have a six-volt 15-plate car battery. Would this be suitable as an 'A' battery?"

Answer: Yes. A trickle charger could be used. The Phillips, Balcite, Emmco, or the Westinghouse are the best trickle chargers.

Q. "Would a Phillips B and C eliminator be O.K. in place of other B and C batteries?"

Answer: Yes. "I am using No. 120 amperettes. Are these correct?"

Answer: Yes. "Would an Ampilon A.C.T. speaker be a good one for this set?"

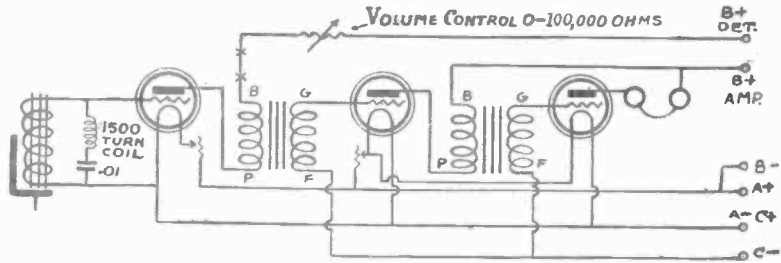
Answer: Yes. "If I use Six Sixty Valves will they be O.K.?"

Answer: Yes. "And will this be the correct order—SS810P, SS8073RC, SS810P?"

Answer: Yes. And it's just as well there's no more questions, because my vocabulary is well-nigh exhausted.

F.C.M. (Tasmania).—"I am writing to ask if you could let me know how to get two different values of grid bias from the one 'C' battery. I want a bias of 400 volts from the one 'C' battery, on the first audio, and nine volts on the last stage. If I use two 4 1/2 volt batteries in series that will give me the nine volts all right, but where do I tap off for the three volts? I was told to take it from the three-volt tapping on the first battery, but that does not seem right to me. How can one get a negative bias from a positive terminal?"

Answer: See the diagram published in these columns last week. It will be correct to make the tapping at the centre terminal on the first "C" battery for the three volts negative bias, providing the terminal will then give three volts negative with respect to the positive terminal. If the centre terminal used as one connection, and the RIGHT-HAND terminal used as another, then the centre terminal will be positive, and the P.D. will be 1 1/2 volts. Briefly, connect up this way: Have both batteries facing you, with the positive terminal of each to your left. The centre terminal of the first battery



W.W. (Croydon) and F.H. (Sydney) ask for a simple gramophone amplifier. This should suit their requirements admirably. The transformers should have a ratio of 3 1/2 to 1. The 1500-turn coil and .01 condensers constitute an input filter.

will be the three-volt tapping. The left-hand terminal will be positive, and the right-hand terminal negative. This negative terminal will connect to the positive terminal of the next battery. The centre terminal of the second battery will give 7 1/2 volts negative bias, and the last terminal nine volts negative.

C.J.C. (Enfield).—"I have been a constant reader of your valuable paper for the last two years, and would like to qualify for an A.O.P.C. Could you suggest any books that I could start that would help me to that end?"

Answer: The A.R.R.L. Handbook. James' Book on Valves.

E.H. (Coatamundra).—"Can a valve be re-seated after the filament has burnt out?"

Answer: A valve can quite easily be re-seated, but the filament cannot be replaced.

Q. "What steps should I take to enter the Wireless engineering trade or electrical engineering?"

Answer: As you are just 16 years of age, you should become apprenticed immediately. Make application to several large firms and electrical concerns, specifying your requirements, and mentioning the fact that you hold a scholar's intermediate certificate. In the meantime study the elementary electrical and radio laws, as outlined in "Proving General." These notes will be exceedingly useful to you, whether you take up electrical engineering or radio engineering. The laws of radio and electricity are the same. Pay particular attention in your studies to French measure, which is used universally in electrical measurements. If possible, join some night school, or a radio club, but not both. If you are willing to become apprenticed for, say, five years, you should do well. You will find it difficult to start on a wage unless you have been apprenticed. Once you have qualified you can demand a good wage, in spite of the fact that there are many electrical and radio engineers. If you are in doubt upon any electrical subject you are invited to write us about it.

W.W. (Croydon).—"I have often wondered to myself if you could supply me with a suitable amplifying unit through your valuable paper, for use with a gramophone pick-up, and I can assure you I would appreciate such a circuit."

Answer: Here is the simplest of circuits. Two transformers only are used. Suggest both transformers of 3 1/2-1 ratio.

General.—Many readers (including F.H., Sydney) are asking for the circuit of a simple gramophone amplifier. The circuit shown in these columns will be sure to meet with their approval.

F.H. (Sydney).—"Owing to the fact that Mr. Allsop has recently been undergoing a slight operation, he has been unable to proceed with his experiments in connection with amplifiers, and, consequently, the amplifier he referred to will be held over for a little while. It will, however, appear very shortly. In the meantime, you may be interested in the circuit shown in these columns."

(2) The De Luxe Four will suit your requirements, and will be more powerful than the Renown Three. The amplifier of the De Luxe Four can be used as a gramophone amplifier.

H.D. (Whitby).—"Built the Martin S.G. Five, also the Marneck, and had same trouble each time. There is no reaction; condenser makes no difference."

Answer: Looks as though you've a faulty component, or else you've erred in the same place each time. Since the trouble is in the reaction, this may be due to insufficient turns on the reaction, faulty choke coil, faulty detector valve, poor connections, etc. Make sure your R.F. choke is in the right place.

(2) "With C bias off, I get fairly decent results. i.e., with C bias on detector valve."

Answer: The detector valve is apparently unsuitable.

(3) "By taking earth wire off the set I can get sharper tuning."

Answer: This is only natural. I think the cause of your trouble is the R.F. choke.

(4) All the parts specified by you are quite O.K. W.R.G.B. (Burrawong).—"The whistle of which you complain when using more than 3 volts on your 4-volt valves may be due to any one or several of the following causes—Too much regeneration; faulty first audio transformer; reversed winding of one transformer; too high capacity reaction condenser; too many turns on reaction coil; faulty grid leak; too high voltage on detector valve."

R.D. (Wollongong).—"I have a six-valve super-heterodyne, which has been in use for nearly one month. I have been able to get all Australian 'A' and 'B' class stations except Perth, until a few days ago, when reception became very faint, though very clear. On switching on this morning, everything seemed to be all right for about ten seconds, when the set gradually died down, until nothing could be heard, and I found that by shutting off the set for about five minutes this could be repeated."

Answer: Accumulator needs re-charging. Perth is on a high wave-length, and cannot be heard unless different coils are used.

QUERY COUPON

If you are in difficulties about reception or set-construction, let us know, and we will endeavor to see you right. Make your questions brief to the point, and, where possible, show lay-out and wiring design. Under no circumstances will answers to queries be made by letter or by telephone. All answers will appear in the columns of this department in the order in which they are received.

Please answer the accompanying queries in your earliest convenience. I enclose this coupon in order to indicate that I am a bona-fide reader.

The Radio Information Service - WIRELESS WEEKLY LTD. Please answer the accompanying queries in your earliest convenience. I enclose this coupon in order to indicate that I am a bona-fide reader.

(2) Sorry, but we cannot reply by letter. Don't forget to send a coupon next time.

G.H.S. (West Marreeville).—"I am building the Marroch Five, and am desirous of winding my own coils. Will you please give specifications?"

Answer: We have had many such requests, and will give complete details through the paper very shortly. Please yourself in patience.

R.S. (Gordonvale).—"I offered you something for nothing, and you accepted. But you might send postage! Thanks for your kind remarks.

(2) "Our position in the far north handicaps us greatly. We are so far from the Australian stations. It takes a good five-valve to give reasonable results in the summer, but I think the All Empire, as a DX receiver, compensates us. Why do we have to buy a license to support Australian 'A' class stations? We also have to rely on WIRELESS WEEKLY to let us know of the latest radio products—no stores for us. I had a little trouble with reaction in my All Empire, but the cause, I found, was through paralleling grid and plate leads. After rectifying this I got much more satisfactory results."

Answer: Other readers who have built this set might take notice.

J.H.A. (Springdale).—"Re the Renown Special Would Emmco .0005 mfd. Stralytine condensers be suitable for this set?"

Answer: Yes.

(2) "Is it absolutely necessary to have a first-class audio transformer with a ratio of 5-1?"

Answer: To be perfectly frank, no. But if you wish for the maximum in good results, and if you wish to duplicate the results obtained with the original receiver—and if you wish to do away with likely trouble from faulty transformers—you will obtain a good one. You can always use cheap transformers in any set—they will work, but they won't give you the very best results. A few shillings extra makes it worth while.

(3) "Are Emmco metal case transformers suitable?"

Answer: Yes.

(4) "What length are the cardboard formers to be bought?"

Answer: Cardboard formers are sold in six-inch lengths. Cut off that not required AFTER the coil has been wound, allowing just enough to mount the coil.

(3) "Would this set be capable of Inter-State reception on the loud-speaker?"

Answer: In your locality, I should say "Yes." You are about 500 miles from Brisbane.

R. J. Vincent (Thorne Street, Pennant Hills) writes:—"If you have a copy available of the issue containing the article on building a triode charger, will you kindly forward one as soon as possible."

Answer: Sorry, but this copy is out of print. Perhaps some reader seeing this may be able to oblige you.

M. P. McKay (15 Evansdale Road, Hawthorne, E.2) writes:—"I should like to obtain a copy of WIRELESS WEEKLY in which appeared a short time ago"

the five-valve A.C. receiver, using Pilot components. If you cannot supply, kindly place a note in your P.I.S."

Answer: Having no copies left, we have "placed a note in our P.I.S." The receiver to which you refer is the Air Scout Five.

C.E.B. (Bellbird).—"I can get Sydney stations O.K. during daytime on my three-valve receiver, as described above, but at night time I can also hear Melbourne, Adelaide, Brisbane, Perth, and many and all other stations, but they are very muddy."

Answer: Using too much reaction. A stage of R.F. will be necessary if you expect to receive all these stations without mushiness, and at any volume, perhaps a change of grid-leak may help.

A.M.P. (Blisbane).—"Would you kindly let me have WIRELESS WEEKLY containing instructions to neutralise a five-valve Neutrodyne set?"

Answer: Regret we have no copies left. However, neutralising is pretty simple if you go carefully about it. Follow these instructions carefully. Tune in the receiver to a distant station, if possible, or if you cannot do this, tune in a local station to full volume. The station tuned in should be one near the centre of the dial, i.e. 3LO or 2BL. Now remove any fixed condenser that you have in the receiver, and re-tune. Next remove the first R.F. valve, i.e., the one at the extreme left, or if it is controlled by a rheostat of its own, i.e., a rheostat for each R.F. valve, the first rheostat may be turned right off. Now adjust the neutralising condenser until the station has entirely disappeared (or nearly so—possibly) disappears. Then re-tune the first R.F. valve, when the station should be heard at full volume. Now treat the second R.F. valve in the same manner. Adjustments should be made slowly and carefully, otherwise you will find that, though the set has been neutralised, say, for 3LO, it will not be neutralised for, say, 4GG.

K.T. (Babinda).—"In your article, January 11th, you describe an easily-made rectifier for A.C. mains, but you omitted to give specifications for the transformer. You simply say 'Use a Bell transformer to suit the current down'."

Answer: The construction of even a bell transformer is almost an impossibility without a winding machine, which latter few of us are fortunate enough to possess. A bell transformer costs only 8/6.

(2) "Re forming the rectifier. You refer to a terminal marked 'A.' Where is this situated on the transformer, and where is the like terminal situated on the rectifier? What is the like terminal for?"

Answer: Actually on an A.C. transformer there is no negative connection. One tapping, i.e., the 12-volt tapping (in this case is taken to the R.P. plate of the rectifier. The other tapping on the transformer, i.e., the one which, in conjunction with that connected to the lead plate, gives a step down A.C. voltage of 12, is connected to a terminal placed on a piece of elastic, or board, or anything else suitable, and this is connected to the negative terminal of the battery to be charged, or to the negative terminal of any instrument to be worked by D.C. The aluminium rod is connected to another terminal, and this is the positive connection. You must have a positive and a negative connection in D.C. As you suggest farther on in your letter, both terminals are dead ends, until you want to work with them.

(3) "Now re joint resistances. The first is: 'Find the joint resistance of 9, 3, 5, 6, 50, 7, and 4 ohms in series.' Your answer is 96 ohms. I can't get more than 84 ohms."

Answer: This was a misprint, which has been mentioned several times through these columns. In any case, you are wrong. The sum you refer to was 'Find the joint resistance of 9, 3, 5, 6, 2, 50, 7, and 4 ohms. The correct answer is 88 ohms. You merely left out the 2 ohms, thus bringing your answer down to 84.

(4): "The next one is 'Find the joint resistance of three wires in parallel offering respectively 2, 4, and 8 ohms.' Your answer is 1.142 ohms. Do you ignore what is left over after the third decimal? I got 1.142857, recurring. Is this answer correct? Please don't think I am trying to find fault, as I am really interested in 'Proving Radio'."

Answer: Your answer is quite correct, but unnecessary, as three places is quite enough. 1.142 will be quite sufficient for all purposes, unless you are asked to work the sum to the right off. Later you will find that you will be asked to work out a decimal sum to a certain number of places, say, four places, i.e., four figures after the decimal point, but if no instructions appear, three places is generally indicated.

A.S. (Waverley).—"I am desirous of building a three-valve receiver, and would be pleased to have your advice as to what to consider the most efficient circuit for this purpose. You might state when answering where the recommended circuit and details (layout, etc.) for building could be obtained."

Answer: The "Renown Three." WIRELESS WEEKLY, March 22, 1929.

CHIC I. (Bourke).—"Could you tell me if I have damaged my set by the following mistake? I connected two run-down 'A' 6-volt batteries to my five-valve set. The trouble was too great for me, so I disconnected one 'A' battery, and the set will not work now. 'A' and 'B' batteries are now in good order."

Answer: You connected the "A" batteries in series evidently. Since you are following Proving Radio you should have connected the two batteries in parallel (yet, you should know that connecting two batteries of equal voltage in series doubles the voltage. You could have connected the batteries in parallel without affecting the set. You have damaged the valves. Try removing the "B" batteries altogether, and leave the filaments of the valves burning at 6 volts for about three hours.

W.R.M. (Glen Innes).—"Last week I wrote you for information re the Countryman's one-valve set, as I couldn't get it to work properly, and, thanks to

the Query Column, I have learnt the cause of all the trouble from one of the answers you gave M.G. (Aclaidale), and now I have the set working O.K., and can pick up the following stations—2YA, 1YA (both of N.Z.), 2FC, 2BL, 2OB, 2UE, 3LO, 3AR, 4GG, 5CL. The "A" stations of Sydney, Melbourne, and Brisbane have had on the SPEAKER. Speech was quite audible three feet from the speaker, and music could be followed easily anywhere in a 12 x 12 room. 2YA was describing events at the Speedway, and the motor-bikes could be plainly heard passing the microphone."

Answer: Exceedingly good results for a one-valve set.

General.—Once again the good old Marco Four is out of print, and, in fact, it has been out of print for several weeks. Readers requiring copies may forward a par to this effect. See under.

Mr. B. Champion, c/o N. J. Rodgers, Farm 362, Griffith, N.S.W., wishes to know if any reader can supply him with a copy of the Marco Four article.

Answer: As you see above, we have no copies left. The last time this article was published was February 1, 1929.

V.L.B. (Daceyville).—"Since you improved 'WIRELESS WEEKLY' with 'Proving Radio,' I have got at least six old W.W. readers to start getting their paper again. Three of us have built the Improved Reinartz Three, and I am building mine now."

Answer: That's very nice to know.

(2) "Can you give me a simple short wave adaptor for the Renown Three?"

Answer: See queries columns, January 4, 1929.

(3) "Full directions for building an eliminator for the Renown Three?"

Answer: Go easy! Suggest the Economist Eliminator, or the Inexpensive "B" Eliminator, published in recent issues of "WIRELESS WEEKLY." Don't mind publishing circuits, but . . .

(4) "I have an 'Atlas' .0005 variable condenser (not S.L.P.) and wish to know how many plates I shall remove to make it of .0025, as I require it for a reaction condenser for the Renown Three."

Answer: Remove half of the rotor and half of the stator plates.

(5) "Would a .00035 condenser be better for reaction than a .00025 for the Renown Special? I am using a .00035 on my Reinartz."

Answer: This control is not critical. A .00035 or a .00025 condenser may be used.

(6) "Why do all your sets have big coils? Just have a look at a Trade Reinartz Three, where the coil is wound on a small Grodan former, using 28-gauge wire."

Answer: Grodan formers are quite O.K., but we always specify the best of material, or the material that was used in the original receiver. You will not go astray by using Grodan material, but there are now so many cheap coils on the market (especially Reinartz and three coil tuners) which are not very efficient. You may rest assured that WIRELESS WEEKLY will give you a receiver that will live up to its reputation—if the parts specified are used. The market is full of quack receivers, and parts and substitutions. Look at your own case. You desire to pull a cheap condenser to pieces and make it up into a .00025! In this case, there's nothing much to bother about, but in the majority of cases this will where trouble lies.

(7) "I don't envy your job. Have a job something like yours myself."

Answer: We are brothers in distress.

C.J.S. (Tent Hill).—"There's such a lot of 'biffer' about your letter that I must cut it down."

(1) "Could a stage of R.F. be added to the 1-valve circuit shown? My idea of it is shown in Fig. 1, but it won't work."

Answer: Circuit O.K., but coil specifications wrong. Forty-seven turns on a three-inch former is ample to tune from 200-500 metres. Sixty turns would allow you to tune higher, but would not allow you to get down much below 2BL.

(2) "Please give particulars in your columns if an P.F. stage could be added to advantage."

Answer: Aerial coil 20 turns, R.F. secondary coil wound on same former (3 inches diameter, spaced 1/4 in), 50 turns, R.F. plate coil 20 turns, spaced 1/4 in from detector secondary, which should be 20 turns. Don't like your method of reaction, which is losing favor. A special article will be published on "regeneration" this or next week. You will see the best methods of reaction from this.

(3) "With the earth connection, I cannot tune below 2BL's wave length."

Answer: Too many turns on secondary. Reduce to 50 turns. The earth only adds to the capacity of the coil.

(4) "Any comments or suggestions on the above?"

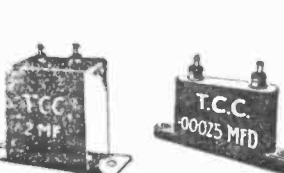
Answer: We don't do things by halves. Our comments and suggestions have been given in our replies.

A.E. F. Nelson, "Cher Nous," Eusee Street, Redd. F.C.T., wishes to know if any reader can supply him with "WIRELESS WEEKLY" containing the Browning Drake, also No. 3, Volume 13, dated January 17, 1929.

(2) "Whistling noise in your set probably caused by flat 'B' batteries. This would also explain why you would be unable to get other stations. A Browning Drake cannot be converted into a short wave receiver, except by using an adaptor, the making use of the audio stages of your R.D. Circuits of a S.W. adaptor recently appeared in these columns. If set only whistles on stations, and you cannot clear this whistle up, you are using too much regeneration, which may be caused through reaction condenser, too many turns on plate of detector valve, or too high voltage on plate of detector valve. Valves and parts are O.K."



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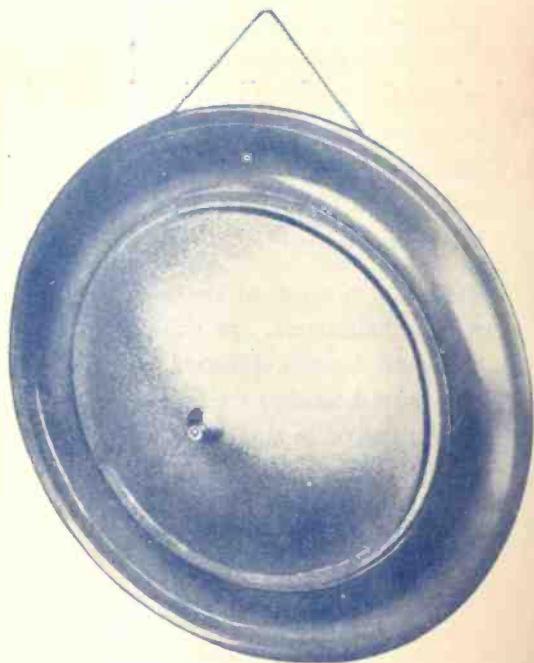
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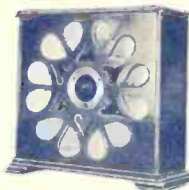
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