RADIO BULLETIN MAY, 1935







PLEASING EVERY PROSPECT

Philips Cover Every Possible Phase of Potential Demand

P HILIPS are determined that no retailer need go beyond the Radioplayer Series in order to meet any form or aspect of demand from any type of customer. Their aim has been to create a range which is at once universal yet specialised. In the Radioplayer series are receivers for city and country, short-wave, broadcast or dual wave, A.C., D.C., or universal, large homes or small flats, considerable incomes or limited purses.

The Radioplayer is designed to keep its retailer ahead of competition. Whilst its leadership hinges largely on the inimitable Super Series Valves and (in A.C. and Universal types) the world-famous Octode, every other feature has been conceived from the same point of view-the discounting of opposition. The Super Series Valves are, of course, so far ahead of the

stantly and easily removed from the Dial Escutcheon, and a second card, calibrated for the new wave-lengths accurately inserted. The new card will be sent to all owners of Radioplayers, together with full instructions, in ample time for the changeover. The important point is, however, that no service-call is involved, as the alteration calls for no structural work and is

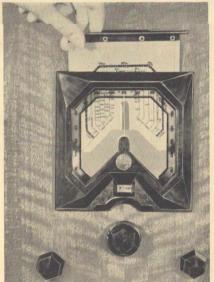
so simple that it could be carried out by a child of

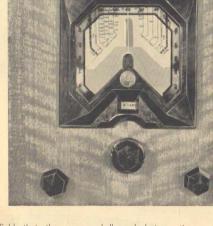
five. Selective Muting is another exclusive Philips development which has inspired unstinted praise even from the most critical experts. Selective Muting, it should be noted, is something far more than silent tuning between stations—it means complete silence between any desired stations. When tuning the Radioplayer with selective muting, all Stations except the one required can be rejected. The listener moves the dial straight to the Station he wants-and there is no blasting, crackling or static in between.

These features are mentioned merely as an indication of the care and thought which have been bestowed on every component and detail of design. It would be possible to analyse the en-

tire receiver in similar manner, but sufficient has been said to illustrate that the leadership of the Radioplayer is based, not upon platitudes and airy claims, but upon progress and technical developments.

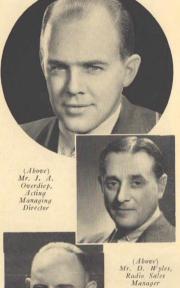
There is one other factor, however, which should be emphasised because of the paramount importance of cabinet work. It can be said without fear of contradiction that the new Radioplayer cabinets excite immediate admiration from all who are





field that they are unchallenged-but every other detail of the Radioplayer Series gives the dealer an advantage almost as great.

Consider, for instance, the new Micro-Index Dial. This dial is exclusive to Philips. It solves the problem of the official change in wave-lengths on September 1st without creating service difficulties for the retailer. By an ingenious arrangement, the card which carries all Station names can be in-



appreciative of true artistry. The timbers are specially selected, fully seasoned and completely free from the slightest tendency towards warping or crackling. The cabinet has a solidity of construction which prevents vibration as a result of high-powered speaker units. Strength is assured by the use of the finest casein and animal glues, spring and patent grip fasteners, machined glue blocks and screwed and morticed construction rails. Queensland Walnut has been selected as the ideal veneer. Particular attention has been paid to the finish of Radioplayer Cabinets. Each is carefully sanded and stained with a toning spray gum, then filled, rubbed down and sprayed with three coats of high grade lacquers over a period of five days. The surface is papered with fine waterproof sandpaper and finally pulled and polished to an exquisite finish.

(Lett)

Mr. G. Davidson,

Radio Sales Dept.

From a selling standpoint, it will be seen that the 1935 Philips Radioplayer Series has no equal on the Australian market. Every receiver creates its own response immediately it is demonstrated, and there can be no doubt that the dealer who features these sets can, literally and actually, count upon a record season.

Jestina FROM THE SKIES phases, despite tropi- When the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phases, despite tropi- when the 'plane arrived, not a mean the phase tropi- when the 'plane arrived, not a mean the phase tropi- when the 'plane arrived, not a mean the phase tropi- when the 'plane arrived, not a mean the phase tropi- when the 'plane arrived, not a mean the phase tropi- when the 'plane arrived, not a mean the phase tropi- when the 'plane arrived, not a mean tropi- when tropi- when

Throughout the ages man's dream has been the conquest of the skies. The dreams of the ancient Greeks were those of flying; of men with eagle's wings and speed of light.

The dreams of the Medici were of flying, but they remained—dreams. From those dreams have sprung the airways which we know to-day. Airways which form a network on the face of the earth and which are capable of both speed and safety.

Right through the ages the achievements of mankind which have been the most valuable are seldom the most spectacular.

The inventor of the electric lamp, the steam engine, and the radio valve, have been accorded the greatest ovation, whereas those who have developed the original prinequally great service to civilisation. Thus, in all the record-breaking feats of modern aviation, the latest achievement in which a half ton of radio valves have been transported it was scheduled to arrive at one

It is not a long space since Philips introduced the Octode to the Australian market. Immediate response by manufacturers followed the introduction of the new Super Series, and then from all sides came increased demands for the new wonder of radio—the Octode Valve.

BELOW: Unloading the

freight carried by K.L.M. from

the "Pelikaan" at Batavia.

Demand was unprecedented and immediate action was needed if there was to be no danger of shortage. A conference of the Philips Executives in Australia was called and it was decided to cable to Europe for supplies to be sent BY AIR MAIL.

Within three days of the sending of the cable the Octodes were on the fourteen thousand miles flight from ciple to the stage when it is commercially applicable have rendered commercial flight for distance, weight and speed, by far exceeding any other record ever made.

Before the freight had left Europe

Timor Sea and 30 Darwin to Brisbane.

Four great airways handled this freight—Imperial Airways, K.L.M., Qantas and New Eng-supporting them. land Airways—an example of wonderful co-operation and service.

Imperial Airways brought freight to Singapore whilst K.L.M., flying a different route, transported freight to Batavia. At these termini it was picked up by Captain Lester Brain in a giant four-engined Qantas 'plane, and brought, after a tropical crossing of the Timor Sea, to Darwin. Qantas then transhipped the freight to another 'plane which carried it through to Brisbane, encountering 30 m.p.h. headwinds shortly after leaving. In Brisbane they were once more transhipped. This time to the New England Airways three-engined monoplane
"City of Sydney" for the final lap of this momentous commercial flight.

cal weather over the ute behind schedule, hundreds of people from both the radio trade m.p.h. headwinds and public alike were waiting to when coming from greet it, the 'plane which brought Service from the Skies," and de-

monstrated the way in which Philips kept faith with the people who were

So great was the public interest in the flight that radio station 2SM, over ten days before the arrival of the 'plane, secured exclusive rights to broadcast the progress and reception of the 'plane. At regular intervals during the day, messages were put over the air, and on the day of the arrival both the welcome and official luncheon were broad-

As soon as the wheels touched the ground and the "props" ceased to whirl, unloading commenced. Cartons were rushed from the 'plane to trucks which quickly bore the valves Sydney-wards for Australian distri-



OCTODE VALVES

ABOVE : The Oantas R.M.A. Melbourne" loading freight at

Singapore which was transhipped to her from the Imperial

Airways' plane.

TRADE WELCOMES ARRIVAL OF

RECORD-BREAKING AIR FREIGHT

At Right: Unloading of the valve cartons from the 'plane on the arrival of the "City of Sydney" at Mascot Aerodrome, Sydney.

Below: The "City of Sydney" surrounded by the formation from the Aero Club of New South Wales, led by Mr. Robert









Above: Mr. J. A. Overdiep, Acting Managing Director of Philips Lamps, speaking into the microphone of Station 28M, at the welcome on the aerodrome.

Left: Some of the radio trade who were gathered at Mascot. Mr. George Davidson, newly appointed sales promotion officer of Philips, is seen in a kneeling position on the left.

Many well-known figures were present at the luncheon given in the Aero Club Grounds, Mascot.

Mr. J. A. Overdiep, in the capacity of Chairman, spoke first, stressing the importance of aviation in modern commercial life. Mr. Rudder, Jur., spoke in reply for Qantas; Col. Koopman, for K.L.M.; and Mr. Richardson, for New England Airways.

In conclusion, Mr. David Wyles replied for Philips, thanking those companies concerned for the co-operation and service which had helped to create such an outstanding record in commercial aviation.

Sydney Electrical and Radio Exhibition

NCE again huge crowds visited the annual Electrical & Radio Exhibition at the Town Hall, Sydney, held for a period of two weeks from Friday, 22nd March to Saturday 6th April.

Philips were again well to the fore with a modern display covering lamps, radio re-ceivers, valves, lighting equipment, transmitting apparatus, etc. The opportunity was taken to introduce samples of the new range of radioplayers and this pre-view excited considerable interest in the sets which are now on the market.

MICRO-INDEX DIAL FEATURE



PHILIPS STAND AT THE EXHIBITION

The installation by Philips of a Psychometer and Fashionometer in one of the lobbies of the hall proved to be an attraction of great interest. Thousands of people checked themselves on these machines to discover their "emotional tendencies" and their suitability for wearing colour.

The arrival of the record-breaking Octode valve air shipment coincided with the last days of the exhibition and the opportunity was taken to exhibit actual packages which arrived from across the world.

In order to demonstrate the outstanding advantages of the new micro-index tuning system a special display was created featuring an electric train which, intermittently stopped at various stations on its way round a circuit of rails, corresponded with the indicator on a giant model of the micro-index

A display of Philips Super-Series valves occupied one of the quarter sections into which the stand was subdivided and a revolving cylinder in the centre of the display served as a colourful and moving background for the exhibit.

X-ray and transmitting valves were exhibited for the interest of visitors and the method of packing for the latter was demonstrated by a special exhibit which revealed the sprung suspension utilised to ensure perfect delivery condition.

A huge 20,000 watt lamp featured in the lighting section of the stand became the subject of much discussion. This type of lamp is used mainly in lighthouses and has a current consumption of 200 amps.

THE WORLD'S LARGEST RADIO VALVE

With a power exceeding the total kilowattage of all trans-mitting stations in existence less than a dozen years ago, this new Philips water-cooled transmitting valve is a 250,000 watt creation with a length of nearly 5 feet. This giant of the other at full load, con-sumes no less than 420 amcumstances a power of 257 k.w. is obtained, which is suf-ficient electrical energy to light up a small town.

A flow of water of 120 litres per minute is necessary for cooling and on short waves excellent results are obtainable. The Philips Laboratories succeeded in obtaining 100 k.w. useful energy on a wavelength of 18 metres.



BARRETTER CONTROLLED

PHILIPS 200 mA AC/DC SERIES.

THE prejudice against AC/DC valves is definitely overcome by the introduction of the Super Series by Philips. Not only do the 200 m.A. range offer greater all-round efficiency, but several specific advantages are teatures which make the design of 1935 AC/DC receivers quite distinct from previous sets of this type.

The "barretter control" feature, is a case in point. Gone is the ordinary resistance which means complications in heat dissipation and strain on the valve filaments at point of switching on the current. Instead the barretter lamp ensures minimum heat and a constant control of the voltage which can never exceed the normal combined requirements of the filaments even when surges occur.

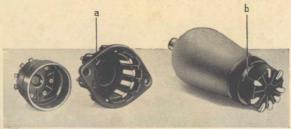
The employment of the barretter also permits the operation of a receiver over a wide range of voltages. A typical receiver functions on any voltages within the range of 195 volts to 265 volts A.C. or D.C. without circuit alteration.

The inclusion of an Octode frequency changer in the 200 m.A. AC/DC Series ensures outstanding performance and brings the AC/DC set in line with the four-volt valves in the Super Series. The CKI is a proto-type of the AKI (four volt

octode) and exhibits all the advantages of the former, including minimised background noise.

An outstanding feature of this new series is the special base which accommodates eight connections to the envelope of the valve without any interactionary complications. With the normal base it is not possible to efficiently accommodate more than seven pins but with this new arrangement perfect results are obtainable and the connection between valve and socket is of an ideal nature. The lugs on the base of the valve make strong contact with a series of springs, the arrangement of which are clearly discernible in the photographs.





PHILIPS SUPER SERIES-200mA. A.C./D.C.

TYPE	NAME	FILAMENT		NUMBER	PLATE		Neg.	SCREEN GRID		Imped-	Mutual	Ampl.	Load	Power	
		Volts	Current (Amps.)	PURPOSE	Volts	Current mA.	Grid Bias	Volts	Current mA.	(Ohms)	Cond. (mA/V.)	Course.	Res. (Ohms)	Output (m/Watts)	
СКІ	OCTODE	13	.2	Converter	250	0.8	1.5 (min.)	70	3.0	I.5 Meg.	Oscillat 50,000	or Grid	(No. 1)	Resistor,	
	SUPER CONTROL R.F. PENTHODE	13	.2	Class A Amplifier	250	4.5—0.01	2-20	100	1.5	I Meg.	2.2-0.005	2,200	_	-	
CBI	DUO-DIODE	13	.2	Detector and A.V.C. Maximum Diode Voltage 200V. — Maximum Diode Current 0.8mA.											
	DETECTOR AMPLIFIER TRIODE	13	.2	Class A Amplifier	200	4.6	3.7	-	-	18,000	3.0	50	-	-	
CFI	R.F. PENTHODE	13	.2	Class A Amplifier	250	3.0	2.0	100	1.0	1.3 Meg	2.2	3,000	-	-	
				Bias Detector	250	_	-	100	1	-	ohms.		Resistor, r, 10,000		
CL2	POWER AMPLIFIER PENTHODE	24	.2	Class A Amplifier	250	40	19	100	5	23,000	3.1	70	7,000	3,000	
CY2	DBLE. VACUUM RECT.	30	.2		Maximum A.C. Volts per plate 250 (R.M.S.) — D.C. Output Current 120mA.										
CI	BARRETTER	-	.2	Resistance Lamp	Regulating Range 80—200 Volts.										



The photo shows Mr. Edward Startz the famous PCJ announcer.

PCJ Again WORLD FAMOUS STATION

The world famous short wave station PCJ which operated on a wavelength of 19.71 metres (a frequency of 15,220 Kc/sec) and which on Sundays always relays the programme broadcast by the short wave station PHI, has commenced to transmit experimental programmes every Tuesday, from 7 p.m. till 10 p.m., and on Wednesday from 11 p.m. till 3 a.m. E.S.T.

THE SUPEROCTODYNE

A NEW STAR APPEARS

Originated in a French radio exposition the term Superoctodyne has now been adopted by Philips as a common expression for Octode-equipped superheterodynes. Such an important feature is the Octode in modern receiver design that it is well worthy of prominence as a selling feature.

The public demand new ideas in radio and the superoctodyne gives the dealer a wealth of sales talk which is backed by sound logic and technical improvement.

Get hold of this new term and use it for profits.