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OFFICIAL STATISTICS, COMMONWEALTH OF AUSTRALIA.

MANUFACTURING INDUSTRIES,

1940-41.

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NO. 12 WIRELESS APPARATUS

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BY

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PREFACE.

1. Industries included in the Series: The list of industries included in this series is the same as in previous years. Summaries of the various industries will appear as the information becomes available and not necessarily in any given order. The following have already been published: Nos. 1 to 7, and 9.
2. Classification of Factories: The classification of factories in Australia is based on the nature of the product. Where two or more distinct types of industrial activity are carried on in one establishment, factory proprietors are requested to furnish separate returns for each activity. In some instances, however, this is not practicable, and in such cases there is no alternative but to classify the factory according to its predominant activity. This difficulty is most acute in the Metal Trades industries (e.g. Engineering firms also producing Agricultural Implements Stoves and Ovens, and/or Brass and Copper products), but it is also to be found in factories concerned with the treatment or manufacture of Skins, Leather, Clothing, Wood products and some other articles. In consequence, and to an extent which will vary with individual industries the figures may include the subsidiary but extraneous activities of those establishments included in the industry, while they will exclude relevant activities which are subsidiary to the predominant activity of establishments classified to some other industry. This qualification is important in the case of Wireless Apparatus, the industry with which this summary is concerned.

Some of the items listed in Table 4 are also produced in establishments classified under the group "Electrical Machinery and Equipment". Details of these, however are not available for publication. Cabinets for domestic receiving sets are chiefly the product of the Cabinet and Furniture Industry; details of output however are not yet available.

3. Basis of the Statistics: The scope of the factory statistics is fully explained in Part I of the annual Production Bulletin.

Briefly, a "factory" is taken to be an industrial establishment in which four or more hands are employed or in which power other than hand is used.

All persons employed in the manufacturing activities of the factory are counted as factory employees. The figures relating to employment, therefore, exclude all those engaged in selling and distribution, such as salesman, travellers, collectors, carters engaged solely on outward delivery, and retailing storesmen. The figures do include, however, proprietors who work in their own factories and "out-workers".

The value of output is the wholesale selling value at the factory of goods made or processed during the year, including by-products. In addition it includes the value of other work done, such as repair work, assembling and making up for customers.

The value of production is the value of output minus the cost of raw materials, containers, power, fuel light, lubricants, water, tools replaced, and repairs to plant.

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CANBERRA, A.C.T.
21st January, 1943.

WIRELESS APPARATUS.

Early statistical details of the industry are not readily available as they were grouped with Electrical Machinery and Equipment, but the industry was given a separate entity in the new classification of 1930-31 and details from that year onwards are given below.

1. WIRELESS APPARATUS: AUSTRALIA, 1930-31 TO 1940-41.

Year	Number of Factories	Persons Employed (a)	Salaries and Wages Paid (b)	Power, Fuel and Light Used	Value of Other Materials Used	Value of Production	Value of Output
	No.	No.	£'000	£'000	£'000	£'000	£'000
1930-31	26	908	132	5	363	192	560
1931-32	35	1,677	201	8	637	379	1,024
1932-33	46	2,263	272	9	830	519	1,358
1933-34	57	2,625	296	11	958	620	1,589
1934-35	56	3,366	401	12	1,173	674	1,859
1935-36	67	3,943	493	18	1,398	827	2,243
1936-37	67	4,640	610	21	1,591	1,028	2,640
1937-38	73	5,519	792	24	1,949	1,274	3,247
1938-39	72	4,828	754	24	1,355	1,123	2,502
1939-40	73	4,869	785	26	1,547	1,262	2,835
1940-41	77	6,165	1,121	33	1,908	1,625	3,566

(a) Including Working Proprietors. (b) Exclusive of amounts drawn by Working Proprietors.

In the following table particulars of the Industry are given for each State during the year 1940-41.

2. WIRELESS APPARATUS: STATES, 1940-41.

Particulars	New South Wales	Vic-toria	Queens-land	South Aus-tralia	Western Aus-tralia	Tas-mania	AUSTRALIA
	No.	No.	No.	No.	No.	No.	No.
Number of Factories ..	46	17	4	8	2	-	77
Number Employed (a) -							
Males ..	3,259	725	77	80	9	-	4,150
Females ..	1,695	308	4	7	1	-	2,015
Total ..	4,954	1,033	81	87	10	-	6,165
	£	£	£	£	£	£	£
Value of -							
Salaries and Wages Paid(b)	922,740	175,325	(c)	10,855	(c)	-	1,121,252
Fuel used ..	27,234	5,636	(c)	319	(c)	-	33,473
Materials used ..	1,526,473	351,881	(c)	20,544	(c)	-	1,907,840
Production ..	1,303,723	285,305	(c)	19,191	(c)	-	1,624,967
Output ..	2,857,430	642,822	(c)	40,054	(c)	-	3,566,280
Land and Buildings ..	422,364	122,009	(c)	14,343	(c)	-	573,171
Plant and Machinery ..	268,833	61,422	(c)	2,549	(c)	-	335,735
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
H.P. of Engines Ordinarily in use ..	2,698	448	(c)	40	(c)	-	3,194

(a) Includes Working Proprietors. (b) Exclusive of amounts drawn by Working Proprietors. (c) Not available for publication. These figures are included in the total for Australia.

Particulars of the average salary and wage paid together with the average values per employee of output and production are shown in the following table for each of the year indicated:-

3. AVERAGE SALARIES AND WAGES PAID, OUTPUT ETC. PER EMPLOYEE: AUSTRALIA, 1936-37 TO 1940-41.

Year	Salaries and Wages per Employee (a)	Value of Output per Person Engaged (b)	Value of Production per Person Engaged(b)	Ratio per cent of Salaries and Wages to Value of Production
	£	£	£	£
1936-37	133	569	222	59.37
1937-38	145	568	231	62.15
1938-39	153	518	233	67.16
1939-40	163	582	259	62.26
1940-41	183	578	264	69.00

(a) Excludes Working Proprietors and amounts drawn by them. (b) Including Working Proprietors.

Particulars of the articles produced in Wireless Apparatus factories during 1939-40 and 1940-41 are shown in the following table. The quantities and values shown here are those furnished by the establishments included in this Summary only. The figures do not include similar articles produced in establishments not classified as "Wireless Apparatus Factories"

4. WIRELESS APPARATUS: ARTICLES PRODUCED, AUSTRALIA, 1939-40 AND 1940-41.

Particulars	Unit of Quantity	1939-40		1940-41	
		Quantity	Value	Quantity	Value
Domestic Receiving Sets -			£		£
Cabinets made (a) ..	No.	(c)	(c)	(c)	(c)
Chassis made ..	"	113,189	741,113	96,810	653,040
Complete Sets assembled ..	"	152,719	(b)	135,607	(b)
Wireless Valves for Receiving Sets ..	gross	(c)	(c)	(c)	(c)
Parts for Receiving Sets ..	-	(d)	510,171	(d)	565,283
Wireless Transmitting Apparatus ..	-	(d)	133,820	(d)	174,281
Other Wireless apparatus ..	-	(d)	76,105	(d)	309,848
Other Articles including value of other Work Done ..	-	(d)	1,373,419	(d)	1,863,828
Total Value of Output:		Value Only	2,834,628	Value Only	3,566,280

(a) Excluding Cabinets made in Furniture Factories. (b) Quantity only collected. (c) Not available for publication. (d) Value only collected.

Particulars of the number of broadcast listeners' licences issued in Australia since 1925 are given in the next table:-

5. BROADCAST LISTENERS' LICENCES IN FORCE: AUSTRALIA

As at 30th June	Number of Licences Issued	As at 30th June	Number of Licences Issued
	No.		No.
1925	63,401	1937	938,297
1933	468,390	1938	1,055,995
1934	597,949	1939	1,129,786
1935	720,514	1940	1,212,260
1936	823,610	1941	1,293,266

The number of persons employed shown in Tables 1, 2 and 7 has been adjusted to represent the average employment over the whole year in those cases where short time was worked. In the following table the factories have been classified according to the average number employed during the actual period worked.

6. FACTORIES: CLASSIFIED ACCORDING TO HANDS EMPLOYED, AUSTRALIA,
1930-31 to 1940-41.

Number of Persons Employed in each Factory	1930-31		1937-38		1938-39		1939-40		1940-41	
	Number of Fac-tories	Number Em-ployed	Number of Fac-tories	Number Em-ployed	Number of Fac-tories	Number Em-ployed	Number of Fac-tories	Number Em-ployed	Number of Fac-tories	Number Em-ployed
Under 4	5	8	8	13	10	17	12	21	16	34
4	-	-	5	20	5	20	6	24	3	12
5 to 10	5	29	9	64	8	54	8	48	14	101
11 to 20	7	95	12	165	12	170	11	148	8	125
21 to 50	3	136	15	490	17	566	17	604	13	412
51 to 100	3	215	10	742	5	371	4	288	8	503
Over 100	3	500	14	4,057	15	3,668	15	3,738	15	4,983
TOTAL:	26	983	73	5,551	72	4,866	73	4,871	77	6,170
Average Number Employed per Factory	38		76		68		67		80	

Further details of employment in the industrial group - Wireless Apparatus are furnished in the next three tables. In the first, the persons employed have been classified according to the nature of their employment.

7. PERSONS EMPLOYED CLASSIFIED ACCORDING TO GRADE OF OCCUPATION:
AUSTRALIA, 1930-31 TO 1940-41.

Grade of Occupation			1930-31	1937-38	1938-39	1939-40	1940-41
Working Proprietors	..	..	11	51	50	41	50
Managers and Overseers	..	..	54	218	227	255	296
Clerical Staff	..	..	61	401	422	360	461
Engine Drivers and Firemen	..	..	-	1	2	1	1
Workers, Skilled and Unskilled	..	..	778	4,822	4,106	4,201	5,346
Other (Carters and Messengers)	..	..	4	26	21	11	11
TOTAL:			908	5,519	4,828	4,869	6,165

The next table shows the actual number of persons employed (excluding Working Proprietors) on the pay-day nearest to the 15th of each month for the years 1939-40 and 1940-41.

8. PERSONS EMPLOYED ON PAY-DAY NEAREST TO THE 15TH OF EACH MONTH:
AUSTRALIA, 1939-40 AND 1940-41.
(Working Proprietors excluded)

Month		1939-40			1940-41		
		Males	Females	Total	Males	Females	Total
		No.	No.	No.	No.	No.	No.
July	..	3,505	1,123	4,628	3,664	1,651	5,335
August	..	3,307	1,090	4,397	3,792	1,685	5,477
September	..	3,245	1,061	4,306	3,877	1,737	5,614
October	..	3,467	1,142	4,609	3,854	1,756	5,610
November	..	3,445	1,177	4,622	3,853	1,791	5,644
December	..	3,465	1,257	4,722	3,979	1,880	5,859
January	..	3,439	1,286	4,725	3,998	1,880	5,878
February	..	3,427	1,298	4,725	4,123	2,104	6,227
March	..	3,423	1,360	4,783	4,258	2,203	6,461
April	..	3,515	1,420	4,935	4,362	2,377	6,739
May	..	3,670	1,442	5,112	4,548	2,515	7,063
June	..	3,765	1,543	5,308	4,627	2,727	7,354
Average:		3,473	1,266	4,739	4,080	2,025	6,105

A classification of the number of employees according to age on or about the 15th June, 1941 is shown in the next table:-

9. PERSONS EMPLOYED CLASSIFIED ACCORDING TO AGE, JUNE, 1941.

Sex	Under 16 years	16 and under 21 years	Adults	Total
	No.	No.	No.	No.
Males ..	290	1,800	2,537	4,627
For Cent of Total	6%	39%	55%	100%
Females ..	118	1,359	1,250	2,727
For Cent of Total	4%	50%	46%	100%
Persons ..	408	3,159	3,787	7,354
For Cent of Total	6%	43%	51%	100%

Statistics of the power equipment of the factories included in this group are given in the next table. The details given include the rated horse-power of engines ordinarily in use together with those in reserve or idle for the years 1939-40 and 1940-41.

10. POWER EMPLOYED TO DRIVE MACHINERY, AUSTRALIA

Class of Engine	Rated H.P. of Engines			
	Ordinarily In Use		In Reserve Or Idle	
	1939-40	1940-41	1939-40	1940-41
Internal Combustion - Petrol or Other Light Oils	14	14	-	4
Total Prime Movers	14	14	-	4
Motors driven by electricity- Purchased ..	3,073	3,180	19	49
Own Generation ..	-	-	-	-
Total Electricity ..	3,073	3,180	19	49
TOTAL POWER USED: (a)	3,087	3,194	19	53

(a) Without duplication.

Details of the quantities and values of the various items of power, fuel, and light used in Wireless Apparatus factories are shown in the following table:-

11. POWER, FUEL AND LIGHT, ETC. USED, AUSTRALIA, 1940-41.

Particulars	Unit of Quantity	Quantity	Value £
Coal - Black ..	ton	264	421
Coke ..	"	18	30
Wood ..	"	-	-
Fuel Oil ..	gallon	218,220	3,592
Electricity ..	-	(a)	20,348
Gas ..	-	(a)	6,026
Water used ..	-	(a)	1,613
Lubricating Oil ..	-	(a)	1,443
TOTAL ..		Value Only	33,473

(a) Value only available.

Particulars of the book values of premises occupied and plant used in Wireless Apparatus factories at the 30th June for each of the five years ended 1941 are shown in the next table. In addition, details of the values of additions and replacements made and depreciation allowed during the year 1940-41 are also shown. It should be noted that the amounts expended in Additions and Replacements refer to expenditure incurred by existing factories and do not include the cost of erecting and equipping new factories; these latter items, however, are included with the book values shown at 30th June. The amounts shown for Depreciation are those returned by factories. Changes in the number of factories operating and other factors affect comparison from year to year.

12. VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY: AUSTRALIA, 1940-41.

Particulars		Land and Buildings	Plant and Machinery
Additions and Replacements made during year (a)	..	20,276	86,258
Depreciation allowed during year (a)	..	2,122	62,869
Book Value (a) as at 30th June -			
1941	..	573,171	335,735
1940	..	598,092	352,103
1939	..	557,953	305,468
1938	..	549,254	315,325
1937	..	468,164	261,341

(a) See Note above.

The values of Imports of wireless valves and wireless apparatus are given in the following table.

13. IMPORTS OF WIRELESS VALVES AND APPARATUS: AUSTRALIA

Year	Wireless Valves		Wireless Apparatus
	Quantity	Value	
	No.	£A	£A
1936-37	1,388,098	338,628	96,498
1937-38	731,376	198,990	146,913
1938-39	495,670	174,939	137,164
1939-40	709,723	187,402	110,392
1940-41	225,083	103,396	121,363

During 1940-41, 4,528 Wireless Receivers wholly or partly assembled valued at £70,229 were exported together with Parts and Accessories valued at £156,016.

The following table shows the weekly minimum rates of wage and hours of labour in operation at 30th June, 1941, as prescribed by State Industrial Tribunals. Where no rate is shown it indicates that the particular occupation is not specifically provided for.

14. WIRELESS APPARATUS

(Minimum Weekly Rate of Wage and Hours of Labour as at 30th June, 1941)

Occupation	New South Wales (c)		Victoria (c)		Queensland (c)		South Australia (c)		Western Australia (c)		Tasmania (c)	
	Hrs	Weekly Wage	Hrs	Weekly Wage	Hrs	Weekly Wage	Hrs	Weekly Wage	Hrs	Weekly Wage	Hrs	Weekly Wage
Servicemen	..	..	..	..	..	..	..	..	..	..	..	..
Repairers	..	108/-	..	120/6	..	116/6	..	116/-	..	118/-	..	117/6
Women - wiring complete sets from diagram or model	..	101/-	..	100/-	..	96/-	..	96/-	..	118/-	..	97/-
Process workers	..	93/-	..	98/-	..	92/-	..	93/-	..	98/-	..	95/-
All Others	..	88/-	..	87/-	..	83/-	..	83/-	..	98/-	..	84/-
Females -												
Under 12 mths experience	..	57/6	..	57/-	..	54/6	..	52/6	..	..	..	53/-
Others	..	65/-	..	64/-	..	61/-	..	59/6	..	..	..	60/6
Juniors -										(a)		
Males -												
Under 16 years	..	21/-	..	21/-	..	20/-	..	20/6	..	..	..	20/6
16 "	..	28/3	..	29/3	..	27/9	..	28/3	..	..	..	28/3
17 "	..	40/-	..	39/6	..	37/6	..	38/6	..	..	..	39/-
18 "	..	50/-	..	49/6	..	47/-	..	48/6	..	..	..	49/-
19 "	..	63/6	..	63/-	..	60/-	..	61/6	..	..	..	62/-
20 "	..	76/-	..	75/-	..	71/6	..	73/-	..	..	..	74/-
Females -												
Under 16 years	..	21/-	..	21/-	..	20/-	..	20/6	..	..	..	20/6
16 "	..	25/3	..	25/3	..	23/9	..	24/3	..	..	..	24/9
17 "	..	32/-	..	31/6	..	30/-	..	30/6	..	..	..	31/-
18 "	..	38/3	..	37/9	..	35/9	..	36/9	..	..	..	37/3
19 "	..	44/6	..	44/-	..	42/-	..	43/-	..	..	..	42/6
20 "	..	51/-	..	50/6	..	48/-	..	49/6	..	..	..	50/-
(a) A sliding scale of wages based on commencing age and experience and a 44 hour week is provided by a Western Australian Arbitration Court Award for male junior workers. This scale ranges from 20 per cent. of the basic wage for adult males at 14 years of age to 85 per cent. of that wage at 20 years of age.												
Cabinet makers C.	..	..	..	117/-	..	..	..	114/-	..	..	..	108/-
S.	..	114/-	..	120/-	..	121/1	..	..	..	112/-	..	108/-
Frenchpolishers C.	..	..	..	117/-	..	..	..	114/-	..	..	..	108/-
S.	..	114/-	..	117/-	..	121/1	..	..	..	112/-	..	108/-
				and 120/-								

C. Denotes Commonwealth Court Award.

S. Denotes State Award.