

CHAPTER XXVIII.

DEFENCE.

§ 1. Department of Defence.

1. **Introduction.**—At the outbreak of the 1939–45 War, the Department of Defence comprised the three Fighting Services and a Central Secretariat. In November, 1939, separate Departments, each with its own Minister, were created for the control and administration of the Navy, Army and Air Force. The Defence Department as then reconstituted retained responsibility for over-all defence policy and for the conduct during the war of the business of the War Cabinet, set up in September, 1939, and the Advisory War Council, set up in October, 1940. These bodies ceased to function after the war.

2. **Functions and Organization.**—(i) *Functions.* Subject to the authority of Cabinet, the Minister and Department of Defence are responsible for:—

- (1) The formulation and general application of a unified defence policy relating to the Defence Forces and their requirements, including:—(a) co-operation in British Commonwealth and regional defence and the defence aspect of the Charter of the United Nations; (b) the supply aspect of defence policy, including the review of production programmes and capacity; (c) the scientific aspect of defence policy; and (d) the financial requirements of defence policy, and the allocation of funds made available.
- (2) The defence aspect of armistice and peace terms, control commissions, and forces of occupation.
- (3) Matters of policy or principle and important questions having a joint Service or inter-Departmental defence aspect.
- (4) The defence aspect of questions relating to the organization and machinery for:—(a) co-operation in British Commonwealth defence; (b) co-operation in regional security, including obligations under the United Nations Charter; (c) higher direction in war; and (d) higher direction of the Services.
- (5) The Commonwealth War Book, which is a summary of national plans for an emergency as developed in Departmental War Books.
- (6) The administration of inter-Service organizations, such as the joint intelligence machinery.
- (7) The defence aspect of:—the strength and organization of the forces, higher appointments in the Services, honours and awards.
- (8) Advice on the military aspect of civil defence.

(ii) *Organization, higher defence machinery, the control of the joint Service machinery and the Secretariat of the Council of Defence.* The joint Service and inter-Departmental advisory machinery of the Department, consists of various committees headed by the Defence Committee, the Chiefs of Staff Committee and the Joint War Production Committee.

The Defence Committee is a statutory body consisting of the Secretary, Department of Defence, who is Chairman, the Chiefs of Staff of the three Services, the Secretary, Prime Minister's Department, the Secretary, Department of External Affairs and the Secretary to the Treasury. Its function is to advise the Minister for Defence on:

- (a) The defence policy as a whole and also to co-ordinate military, strategic, economic, financial and external affairs aspects in framing defence programmes.
- (b) Matters of policy or principle and important questions having a joint Service or inter-Departmental defence aspect.
- (c) Such other matters having a defence aspect as are referred to the Committee by or on behalf of the Minister for Defence.

The main responsibility of the Chiefs of Staff Committee in peace is the preparation of strategic appreciations and military plans. The function of the Joint War Production Committee is, briefly, to examine the relation between strategic plans and their requirements to ensure that the war potential for them exists. The major committees subordinate to the Defence Committee and/or the Chiefs of Staff Committee comprise the Principal Administrative Officers Committee (Maintenance and *Matériel*), the Principal Administrative Officers Committee (Personnel), the Defence Research and Development Policy Committee, the Joint Planning Committee, the Joint Intelligence Committee and the Joint Administrative Planning Committee.

(iii) *Board of Business Administration.* In view of the heavy defence expenditure, the Government, in July, 1953, established the Board of Business Administration in the Department of Defence. The Board deals with joint Service matters of common interest to the three Services, or important subjects on which the collective advice of the Board is desired. The Board comprises businessmen who serve in a part-time honorary capacity and consists of an independent chairman and deputy chairman and the business advisers of the three Service Departments.

3. *Basis of Current Defence Policy.*—The main strategic factors affecting current defence policy may be summarized as follows:—

(i) *Likelihood of War.* Because of the nuclear deterrent, it is believed that global (or full scale) war is unlikely to occur as the result of deliberate planning, but could occur as the result of miscalculation. Limited war (or armed conflict short of global war) is always possible and could break out with little or no warning. Hostile powers will probably continue to seize every opportunity to attain their aims by cold war techniques, such as infiltration, subversion and armed insurrection.

(ii) *Area of Primary Strategic Interest.* South East Asia is of great strategic importance to Australia, whose primary effort will be directed to that area in cold, limited or global war.

(iii) *Reliance on Collective Defence.* The defence of South East Asia and Australia are to be sought through the concept of collective security. For this reason Australia is participating in regional arrangements such as SEATO, ANZUS and ANZAM. Such arrangements are entirely in accord with the United Nations Charter.

4. *The Defence Programme.*—(i) *Programme.* The level of national defences must be adequate to enable Australia to meet her regional and home defence responsibilities. The proportion of the national resources that can be allotted to defence is, however, affected by the concurrent demands of the programmes of national development, industrial expansion and migration, which add to our basic defence capacity. Current defence planning and preparations provide for the maintenance of an efficient Service organization including fighting forces, together with command, training and maintenance elements, capable of rapid expansion in time of war. The emphasis is no longer so much on numbers as on mobility, equipment and fire power. Equipment used by Australian forces will be standard or compatible as far as possible with that used by United States forces, with whom they are likely to be associated in war. The defence programme provides for the acceleration of the naval construction programme, designed to produce ships of the appropriate types, the building up of a regular army brigade group, highly trained, mobile, and equipped with the most modern weapons available, and the re-arming of certain squadrons of the R.A.A.F. with the latest fighter and transport aircraft. The first ground to air guided weapons unit will also be introduced into the R.A.A.F., and additional mobile control and reporting units will be established. The army brigade group will be additional to the infantry battalion in Malaya referred to below, and the Citizen Military Forces will be maintained at an adequate strength.

In the field of research and development, Australia is making its principal contribution through the Long Range Weapons Establishment which is a joint United Kingdom-Australian effort, for the testing of guided weapons. The executive authority for this project is the Department of Supply which is also responsible for design and inspection services and for the provision of the material requirements of the forces other than munitions.

The Department of Defence Production is responsible for the manufacture and supply of munitions and aircraft. The new filling factory at St. Mary's will be completed this year and the Small Arms Factory at Lithgow will shortly commence production of the new FN rifle for the Services.

The estimated cost of the defence programme for 1957-58 is £190 million.

(ii) *Financial.* Details of defence expenditure for 1955-56 and the allocation of the Defence Vote for 1956-57 are set out in the two tables which follow:—

ALLOCATION OF DEFENCE VOTE OF £190,000,000 FOR 1956-57.
(£'000.)

Service or Department.	Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.
Defence	828	27	35	890
Navy	28,828	8,490	1,747	39,065
Army	49,192	6,780	4,312	60,284
Air	39,664	10,322	3,764	53,750
Defence Production	3,497	2,336	14,058	19,891
Supply	11,391	1,225	2,516	15,132
Other Services	803	15	170	988
Total	134,203	29,195	(a) 26,602	190,000

(a) Includes in Services' Votes a total amount of £1,194,000 for advances to States under the Commonwealth-State Housing Agreement.

DEFENCE EXPENDITURE, 1955-56.
(£'000.)

Service or Department.	Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.
Defence	721	14	25	760
Navy	31,119	15,615	1,290	48,024
Army	48,980	9,000	3,466	61,446
Air	37,625	11,500	3,013	52,138
Defence Production	3,002	2,062	7,241	12,305
Supply	12,162	1,048	2,131	15,341
Other Services	646	6	50	702
Total	134,255	39,245	17,216	190,716

(iii) *Personnel Strengths.* The personnel strengths of the Services at 31st December, 1956 were:—

Category.	Navy.	Army.	Air Force.	Total.
Permanent Forces	(a) 12,238	22,409	14,570	49,217
Citizen Forces—				
Volunteers	6,094	14,599	1,760	22,453
National Service Personnel	5,074	(b) 69,024	(b) 656	(b) 74,754
Total Citizen Forces	11,168	83,623	2,416	97,207
Total Permanent and Citizen Forces	23,406	106,032	16,986	146,424

(a) Excludes 55 midshipmen not on pay. (b) Excludes 61,584 Army and 16,752 Air Force National Service personnel who have completed training and are on the reserve.

5. **Australian Forces Serving Overseas.** (i) *Malaya.* Australia participates with the United Kingdom and New Zealand in the Commonwealth Strategic Reserve in Malaya. In addition to its rôle as a strategic reserve, this force is being used in the campaign against the communist terrorists.

The Australian contribution comprises the following forces—

Navy—Two destroyers or frigates. An aircraft carrier also pays an annual visit, and additional ships would be provided in an emergency.

Army—An infantry battalion with supporting arms, and reinforcements in Australia.

Air Force—An airfield construction squadron, which is reconstructing the Butterworth airstrip, on completion of which it is planned to deploy two R.A.A.F. fighter squadrons, and a bomber squadron to replace the R.A.A.F. bomber squadron which has been engaged in operations against the terrorists in Malaya since 1950.

(ii) *Korea-Japan*. Forces from the three arms of the Australian Services were among the earliest to participate in United Nations action in Korea. An account of the Australian contribution is given in previous issues of the Official Year Book.

Australian forces in Korea were progressively reduced after the armistice in 1953. All air forces have been withdrawn and the final army forces, which comprised a signals unit of about 80 men at the beginning of 1957, will be withdrawn during the year. Australian ships will continue to serve in Korean waters during their regular tours of duty with the Far East Fleet.

The Commonwealth base in Japan was closed down and all Australian forces were withdrawn by the end of 1956.

6. **National Service Training.**—Under the National Service training scheme every male person, other than those mentioned below, ordinarily resident in Australia, who, on or after 1st November, 1950, attains the age of 18 years is required to register for National Service when called upon to do so by notice published in the Commonwealth *Gazette*. The first registration of male British subjects took place in May, 1951, and since then successive groups of eighteen-year-olds have been required to register, usually at six-month intervals. In May, 1954, the obligation to register was extended to New Australians.

Exemption from the liability to register is confined to certain diplomatic personnel and officials in the service of international bodies, members of the permanent forces and aboriginal natives of Australia. Exemption from the liability to undergo training may be granted to theological students, ministers of religion, members of religious orders, conscientious objectors and registrants suffering from certain prescribed physical or mental disabilities.

Registrants not exempted for service are liable to be called up for training provided they attain the requisite standard of medical fitness. Deferment may be granted for limited periods to students or apprentices so as to avoid undue interruption to their studies or trade training and to registrants who can establish before a court that their call-up would cause exceptional hardship to themselves, their parents or dependants. Early in 1955, provision was made to defer the call-up of registrants living outside approved C.M.F. training centres and to rural workers permanently engaged full-time on a rural holding in the production of food or raw materials.

Up to and including the intakes in January, 1957, training was carried out in all three Services and a total of 193,578 (6,967 Navy, 22,267 Air Force and 164,344 Army) had been called up for training.

Commencing with the second intake of 1957, which will take place in July, the total number to be trained each year is reduced from 34,000 to 12,000, all of whom will perform their training in the Army. There will be no further Navy or Air Force intakes. The total Army training liability is now 140 days consisting of an initial continuous training period of 77 days and 21 days part-time and camp training in each of the following three years. Trainees will remain on the Reserve of the Citizen Military Forces for five years from the date of call-up. The normal times for call-up will be in January, April and August of each year.

Provision is made to safeguard the rights of registrants called up for training, notably with regard to reinstatement in civilian employment. There is no statutory obligation on employers to make up any difference between the civil and service pay of employees who are undergoing training, but some employers, e.g., the Commonwealth Government and the Government of New South Wales, do so voluntarily.

In order to bring the numbers liable for service into line with the reduced intake figures, a new selection procedure has been introduced. This is in the form of a ballot conducted shortly after each new age group is called upon to register. Registrants included by ballot are regarded as available for call-up subject to the existing rules and procedures for exemption and deferment. Those excluded by ballot are granted deferment.

§ 2. Naval Defence.

1. **General.**—(i) *State Systems.* Information regarding naval defence systems prior to 1901 will be found in Official Year Book No. 2, p. 1084.

(ii) *Royal Australian Navy up to the end of 1939–45 War.* An outline of the development of Australian Naval policy was given in Official Year Book No. 3, p. 1060 and No. 12, p. 1012. Some account of the building of the Australian Navy, the proposed and modified cost thereof, the compact with the Imperial Government, etc., appears in Official Year Book No. 15, pp. 921–23. An account of the growth and activities of the Royal Australian Navy during the 1939–45 War is given in Official Year Book No. 36, pp. 1023–27.

2. **Naval Board.**—The Australian Navy is administered by a Board consisting of the Minister for the Navy with four Naval Members, and the Secretary, Department of the Navy; the seat of administration is at Melbourne.

3. **Strength of the Fleet.**—Ships in Commission: The Fleet consists of:—

Carrier Force: 1 Light Fleet Carrier, 3 Destroyers, 1 Daring Class Ship.

Escort Forces: 3 Frigates.

Surveying Duties: 1 Survey Ship and its tender.

Training Ships: 1 Frigate, 4 Ocean Minesweepers, 1 Light Fleet Carrier.

Auxiliary Vessels: 2 Boom Defence Vessels, 1 Ocean-going Tug, 1 Armament Store Carrier, 4 Search and Rescue Vessels.

In addition to the ships in Commission, a substantial reserve fleet is maintained in good condition against any future emergency.

4. **Personnel.**—The strength of the Royal Australian Navy has been pegged at 14,400, comprising 1,584 officers and 12,816 ratings.

5. **Womens' Royal Australian Naval Service.**—The strength of the W.R.A.N.S. remains pegged at 14 officers and 260 ratings. One Officers' Training Course was held from November, 1956 to February, 1957; all three cadets successfully passed the course. Ratings are serving at the following Establishments: H.M.A.S. *Cerberus*, where all training is also carried out, H.M.A.S. *Harman*, H.M.A.S. *Lonsdale* and H.M.A.S. *Melville* (Coonawarra W/T Station). The categories in which W.R.A.N.S. ratings are employed are: Telegraphists; Writers (General Duties), (Pay), and (Shorthand Typist); Stores Assistants (Stores) and (Victualling); Sick Berth Attendants; Cooks; Stewards and Regulating.

6. **Strength of Royal Australian Navy.**—The serving strength of the Royal Australian Naval Forces, both permanent and reserves, at 31st December, 1956, was 1,298 officers and 10,684 ratings including 60 native ratings of the Papua and New Guinea Division of the Royal Australian Navy. In addition, 11 officers and 196 ratings of the Women's Royal Australian Naval Service were serving and 104 cadet midshipmen were undergoing training, including 88 at the Naval College. Reserve strength comprised 1,494 officers and 9,357 ratings.

7. **Reserve and National Service Training.**—Reserve training was resumed as from 1st January, 1950, for members of the Royal Australian Naval Reserve. Training consists of 45 two-hour drill attendances at night or on Saturdays in naval training establishments in each of the capital cities, plus 13 days continuous training each year in H.M.A. ships or training establishments, including special schools. In addition, payment is made for further voluntary home training up to a maximum of 12 days. Selected members may undergo special courses up to a limit of six months during the whole of their service in the Reserve, whilst up to 12 months training or service may be performed in H.M.A. ships or establishments with similar qualifications. Engagements are for three years. Rates of pay have been aligned (with minor modifications) with those applicable to the Permanent Naval Forces. The training for members of the Royal Australian Naval Reserve (Sea-going) is normally 28 days every two years whilst members of the Royal Australian Naval Volunteer Reserve are under no training obligations.

Naval National Service personnel commenced training on 30th July, 1951. On completion of their 154 days initial training in naval establishments and H.M.A. ships, personnel have been attached to the Naval Reserve Training Establishment in their State until completion of their five-year liability for mobilization in war or emergency. After the intake in January, 1957, there have been no further intakes of National Service Trainees by the Navy.

Revised post-war conditions of service in the Royal Australian Fleet Reserve were introduced as from 13th December, 1950. This Reserve is comprised of two classes:— (a) former ratings who receive full benefits under the Defence Forces Benefits Act and are required to serve five years in the Royal Australian Fleet Reserve as a consideration for receipt of these benefits and (b) former ratings who have previously served in the Permanent Naval Forces of the Royal Australian Navy, Royal Navy, or a Dominion Navy subject to a minimum period of three years' service and an absence of not more than five years. No retainer is payable to members under (a) and no obligatory training is carried out but 14 days paid voluntary training can be undertaken. Members under (b) receive an annual retainer of £24 subject to completing annual training; if enrolled within 12 months of discharge from Permanent Naval Forces—7 days; if enrolled after a lapse of 12 months since discharge from Permanent Naval Forces—14 days; additional paid voluntary training up to 14 days may be carried out. Ratings receive pay applicable to Royal Australian Navy personnel whilst under training.

8. **Fleet Air Arm.**—The Fleet Air Arm of the Royal Australian Navy consists of five front line squadrons, one operational carrier, H.M.A.S. *Melbourne*, and one Naval Air Station, H.M.A.S. *Albatross* at Nowra, New South Wales. The aircraft carrier H.M.A.S. *Melbourne*, fitted with an angled deck and steam catapult, carries two squadrons of Gannet turbo-prop anti-submarine aircraft, and one squadron of jet Sea Venom all weather fighters and ground attack aircraft. The training ship, H.M.A.S. *Sydney*, is used periodically for deck landing training.

9. **Ship Construction and Repair.**—Provision is made for the maintenance in Australia of a nucleus ship construction and repair industry capable of rapid expansion in war. The present approved programme provides for the construction of three Daring Class Ships (one was completed in February, 1957), four anti-submarine frigates (under construction), one boom-working vessel (completed in 1956) and two inshore minesweepers (work not yet commenced); and the conversion of four "Q" class destroyers to fast anti-submarine frigates (three have been completed and work on one is in progress).

10. **The Relation of New Weapons.**—Careful consideration has been given to the implications of new weapons, and the decisions in regard to the Navy are based on the broad conclusions of great naval powers that these weapons should be introduced by the normal process of evolution, first into existing ships, and later perhaps into an entirely new form of fighting ship. The same authority supports the view that there will be no rapid development which will render vessels such as carriers, cruisers and destroyers obsolete in the near future.

11. **Naval College.**—Forty-two cadet midshipmen (including five from the Royal New Zealand Navy) entered the Naval College for training in the year commenced January, 1957. At that date, there were 104 cadet midshipmen undergoing training at the College.

12. **Training Establishments.**—Flinders Naval Depot, Victoria, remains the principal training establishment for ratings in the permanent forces, while several advanced training schools are established at Port Jackson, New South Wales. Air training is carried out at Nowra, New South Wales.

13. **The Australia Naval Station.**—Defined limits of the Australia Station are as follows:—

Eastern—

From 3° 30' North, 169° East, south to 1° South, thence east to 170° East, thence south along this meridian to 30° South, thence to 45° South, 160° East, thence south, along this meridian.

Northern—

From 3° 30' North, 169° East, west to 125° East, thence south to the Coast of Celebes, thence west along the Coast of Celebes to 120° East, thence south to 11° 30' South, thence west to 11° 30' South, 95° 15' East.

Western—

From 11° 30' South, 95° 15' East, south along this meridian to 30° South, thence west along this parallel to 80° East, thence south along this meridian.

14. **Foreign Service.**—The R.A.N. was represented in Japan by H.M.A.S. *Commonwealth* base establishment at Kure. This establishment closed down on 4th November, 1956. During the year ended June, 1956, H.M.A. Ships *Arunta*, *Warramunga*, *Tobruk* and *Anzac* served on the Far East Station as units of the Strategic Reserve. In addition, H.M.A. Ships *Queenborough*, *Quickmatch* and *Quadrant* were engaged in exercises on the Far East Station.

15. Papua and New Guinea Division of the Royal Australian Navy.—A Papua and New Guinea Division of the Royal Australian Navy, consisting of native ratings, was inaugurated in July, 1951 as a separate part of the Permanent Naval Forces for employment in Papua and New Guinea and waters adjacent thereto.

16. Ships of the Royal Australian Navy.—The following ships were in commission or in reserve in June, 1957:—

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1957.

Vessel.	Description.	Displacement.
In Commission—		Tons.
<i>Melbourne</i>	Aircraft Carrier Operational	15,680
<i>Sydney</i>	Aircraft Carrier Training	15,740
<i>Voyager</i>	Daring Class Ship	2,801
<i>Anzac</i>	Destroyer	2,436
<i>Tobruk</i>	"	2,436
<i>Warramunga</i>	"	2,012
<i>Quadrant</i>	Frigate	1,897
<i>Queenborough</i>	"	2,020
<i>Quickmatch</i>	"	1,705
<i>Swan</i> (Training Ship)	"	1,060
<i>Warrego</i> (Surveying Ship)	"	1,060
<i>Cootamundra</i>	Ocean Minesweeper	768
<i>Fremantle</i>	"	768
<i>Junee</i>	"	768
<i>Wagga</i>	"	768
<i>Lachlan</i> (Surveying Ship), on loan to the Royal New Zealand Navy	Frigate	1,477
In Reserve—		
<i>Hobart</i>	Cruiser	7,100
<i>Arunta</i>	Destroyer	2,012
<i>Barcoo</i> (Surveying Ship)	Frigate	1,477
<i>Barwon</i>	"	1,489
<i>Burdekin</i>	"	1,489
<i>Condamine</i>	"	1,537
<i>Culgoa</i>	"	1,537
<i>Diamantina</i>	"	1,489
<i>Gascoyne</i>	"	1,489
<i>Hawkesbury</i>	"	1,489
<i>Macquarie</i>	"	1,553
<i>Murchison</i>	"	1,537
<i>Shoalhaven</i>	"	1,537
<i>Ararat</i>	Ocean Minesweeper	768
<i>Bunbury</i>	"	768
<i>Bundaberg</i>	"	797
<i>Castlemaine</i>	"	863
<i>Colac</i>	"	768
<i>Cowra</i>	"	768
<i>Gympie</i>	"	789
<i>Kapunda</i>	"	768
<i>Mildura</i>	"	815

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1957—*continued.*

Vessel.	Description.	Displacement.
In Reserve— <i>continued.</i>		Tons.
<i>Rockhampton</i>	Ocean Minesweeper	768
<i>Strahan</i>	" "	768
Under Dockyard Control—		
<i>Quiberon</i>	Destroyer	1,760
<i>Vampire</i>	Daring Class Ship (Building)	2,789
<i>Vendetta</i>	" " "	2,789
Demilitarized—held for disposal—		
<i>Bataan</i>	Destroyer	2,071
<i>Quality</i>	"	1,760
<i>Benalla</i>	Ocean Minesweeper	844
<i>Dubbo</i>	" "	768
<i>Shepparton</i>	" "	782
<i>Platypus</i>	Depot Ship	3,455
Miscellaneous vessels in commission and in reserve—fifty-five		

§ 3. Military Defence.

1. *State Systems.*—A detailed historical account of the Australian defence forces prior to Federation will be found in Official Year Book No. 2, pp. 1075–1080. *See also* Official Year Book No. 12, p. 999.

The strength of the military forces of the States on 31st December, 1900 (the eve of Federation) was:—New South Wales, 9,338; Victoria, 6,335; Queensland, 4,028; South Australia, 2,932; Western Australia, 2,696; Tasmania, 2,024; total for Australia, 27,353. This total is exclusive of cadets, reservists and rifle club members.

2. *Commonwealth Systems.*—(i) *General.* Under the terms of the Constitution Act 1900, the Commonwealth took over control of defence matters in March, 1901. The growth of the Commonwealth Military Forces may be considered to have taken place in sixteen phases. For particulars of the phases which cover the period from the welding together of the military forces of the States into one homogeneous army in 1902 up to the decision to increase the training strength of the militia to 70,000 in the year before the 1939–45 War (phases 1–7), *see* Official Year Book No. 36 and earlier issues.

Phases 8–10, covering the period immediately prior to, and just following, the outbreak of the 1939–45 War, relate to the initial steps necessary to put the Australian Military Forces on a war-time basis, and to its organization into commands.

The eleventh phase, in January, 1942, was the division of Northern, Eastern and Southern Commands into separate commands and base headquarters to handle operational and administrative matters respectively, and the twelfth phase was the revision of the machinery for command administration of lines of communication areas. The thirteenth phase was the appointment of Lieutenant-General Sir Iven Mackay as G.O.C.-in-C. Home Forces commanding the forces in Northern, Eastern and Southern Commands. The fourteenth phase covered the period following the outbreak of war with Japan and the entry of United States of America Forces into the South-West Pacific Area, and related to the appointment of General Sir Thomas Blamey as Commander-in-Chief, Australian Military Forces, the cessation of the Military Board, and the replacement of the system of commands and bases by the field army and lines of communication areas. In March, 1943, First and Second Armies took over from Queensland, New South Wales and Victoria Lines of Communication Areas the command of all coast and static anti-aircraft artillery defences and training

establishments. On 16th June, 1944, Western Command was re-established and took over the combined responsibilities of Third Australian Corps and Western Australia Line of Communication Area.

The fifteenth phase was the re-introduction in March, 1946, of the Military Board and the organization of commands and military districts, and the sixteenth phase was the commencement of the National Service Training Scheme in August, 1951 (see § 1, para. 6 above and sub-para. (iv) (c) following).

For greater detail on phases 8-14, see Official Year Book No. 38 and earlier issues.

(ii) *Population of Military Age, 30th June, 1956.* The following particulars show the estimated numbers of males of military age in the population of Australia as at 30th June, 1956. The total number of cadet age, 14 and under 18, was 272,823; of citizen soldier age, 18 and under 26, 511,498; and 26 and under 35, 683,237; making a total of 1,194,735, 18 and under 35, which is considered the best period for military service. In addition to the above-mentioned, there were 1,442,190 males 35 and under 60, in Australia at 30th June, 1956.

(iii) *Allotment of Units.* Under the Command Organization (see above), units are raised on a territorial basis, each State supplying its proportion of the personnel required for the fighting services, the organization at 30th June, 1956, being as follows:—

COMMAND ORGANIZATION.

Army Headquarters.

Northern Command	Eastern Command	Southern Command	Central Command	Western Command	Tasmania Command	Northern Territory Command
All forma- tions and units in 1st Military District and New Guinea.	All forma- tions and units in 2nd Military District.	All forma- tions and units in 3rd Military District.	All forma- tions and units in 4th Military District.	All forma- tions and units in 5th Military District.	All forma- tions and units in 6th Military District.	All forma- tions and units in 7th Military District.

Commands conform generally to State boundaries as follows:—Northern Command, Queensland; Eastern Command, New South Wales; Southern Command, Victoria; Central Command, South Australia; Western Command, Western Australia; Tasmania Command and Northern Territory Command. New Guinea is the responsibility of Northern Command.

(iv) *Military Training Systems.* (a) *General.* Particulars of the military training systems in operation prior to the 1939-45 War, first on a compulsory basis and later voluntary, will be found in Official Year Book No. 38 and earlier issues.

The current plan (1956-57) for the Australian Regular Army is based on an average strength of 28,000 full time duty personnel (including 4,600 civilians) and a Citizen Military Force of 80,000 including National Servicemen.

(b) *The Australian Cadet Corps.* The Australian Cadet Corps is a voluntary organization comprised of School Cadet units and Regimental Cadet units. It serves as a training ground to provide, to some extent, the future officers and non-commissioned officers of the Australian Military Forces, and, as such, occupies an important position in the scheme of national defence. School Cadet units are raised at educational establishments in all States of the Commonwealth. The minimum age for enrolment is the year in which the applicant reaches the age of 14 years, and cadets, who in the large majority of schools receive a free issue of A.M.F. pattern uniform, may remain in the Cadet Corps until they cease to be pupils of the educational establishments concerned. A few units retain their own pattern school uniform and are not issued with A.M.F. pattern uniforms. Provision is made for the appointment of officers, warrant and non-commissioned officers on an authorized establishment scale from within school units. School cadet units are not affiliated with Citizen Military Force Units.

Regimental Cadet units have been raised in close affiliation with Citizen Military Force units, whose uniform they wear with the addition of the word "Cadets" directly under

the title of the parent unit. These units are manned by boys who either have left school or are students at schools where no School Cadet unit has been raised. Regimental Cadet units are now being disbanded.

The establishment of the whole Corps is 35,000 all ranks, and at 31st December, 1956, comprised 265 School Cadet units with a posted strength of 30,500 all ranks and 382 Regimental Cadets posted to Citizen Military Force units.

(c) *National Service Training Scheme.* Under the National Service Training Scheme (see § 1, para. 6 above) the Army is required to train 29,250 trainees per year, effected by three intakes each of 9,750 trainees in January, April and August each year. The first intake commenced training in August, 1951. As from the second intake of 1957, the annual intake has been reduced to 12,000.

(v) *Women's Services.* In November, 1950, approval was given for the enlistment of women into the Australian Regular Army, on a limited scale. Enlistment commenced immediately into the Australian Women's Army Corps. During June, 1951, the Australian Women's Army Corps was re-designated the Women's Royal Australian Army Corps (W.R.A.A.C.). Members are employed in establishments in direct substitution for male soldiers. The Women's Services in the Australian Regular Army now comprise two Corps only:—(a) Royal Australian Army Nursing Corps; (b) Women's Royal Australian Army Corps.

Women's Services have been incorporated in the Citizen Military Forces; it is proposed to raise sixteen companies of the Women's Royal Australian Army Corps and twelve companies of the Royal Australian Army Nursing Corps, a total of 3,900 all ranks, within the C.M.F.

At December, 1956, seven companies of the Women's Royal Australian Army Corps and nine companies of the Royal Australian Army Nursing Corps, a total of 2,250 all ranks, had been raised within the C.M.F.

(vi) *Korea.* On 2nd August, 1950, the Commonwealth Government announced its decision to raise and dispatch to Korea one infantry battalion as part of Australia's contribution of military assistance to the United Nations. 3rd Battalion, The Royal Australian Regiment, stationed in Japan, brought up to strength by special enlistments flown to Japan from Australia, became the Special Korean Force, and on 27th September, 1950, sailed from Japan for Korea where it joined 27th British Brigade. For its gallantry on 24th and 25th April, 1951, 3rd Battalion was awarded the United States Presidential Citation by the United States of America. On 4th October, 1951, the Commonwealth Government announced that a second infantry battalion would be sent to Korea to join 3rd Battalion. On 3rd March, 1952, 1st Battalion, The Royal Australian Regiment, which had been brought up to strength at Ingleburn, New South Wales, embarked for Japan where it was equipped before moving to Korea. 1st Battalion joined 3rd Battalion, under operational control of 28th British Brigade, 1st Commonwealth Division, on 1st June, 1952. 2nd Battalion, The Royal Australian Regiment, after training at Puckapunyal, Victoria, relieved 1st Battalion in Korea on 21st March, 1953, the latter battalion returning to Australia. 2nd Battalion was relieved by 1st Battalion and returned to Australia in April, 1954, while 3rd Battalion returned to Australia in November, 1954.

(vii) *Malaya.* On 1st April, 1955, the Commonwealth Government announced its decision to dispatch troops to Malaya as an Australian component of the British Commonwealth Far East Strategic Reserve. 2nd Battalion, The Royal Australian Regiment and 105th Field Battery; Royal Australian Artillery and other minor units embarked from Australia on 6th October, 1955 and disembarked at Penang on 20th October, 1955.

(viii) *The Staff College.* Until 1938, the training of staff officers was carried out in the various Military Districts throughout Australia, except in cases where officers were selected from time to time to attend courses abroad. In 1938, an Australian Command and Staff School, located in the original Officers' Mess at Victoria Barracks, Sydney, was established. Between 1939 and 1945, the training of staff officers was carried out under varying conditions by different schools in accordance with the changing needs of the war.

Early in 1946, the Staff School (Australia) was established at Seymour in Victoria and re-designated the Staff College in conformity with other Empire training establishments for training officers for command and staff appointments. The College was later moved to Queenscliffe, Victoria, where it is at present situated. The courses are of ten months' duration and are held from January to November each year. The normal intake is 30 students and, on successfully completing the course, an officer is awarded the symbol "psc".

The course is designed to train selected officers for war, and in so doing to fit them for Command or Grade II. staff appointments. Each course includes, among the students, Army representatives of the United Kingdom and other Dominions and countries. Included in the 1957 course are students from the United Kingdom, Canada, New Zealand, India, Pakistan, the United States of America, the Philippines and Burma. Vacancies on each course are reserved also for officers who may be nominated by the Royal Australian Navy, the Royal Australian Air Force and the Commonwealth Public Service.

In order to ensure common standards in tactical doctrine and staff and command training throughout the Empire, liaison is maintained with other Staff Colleges; and to this end, there is also a reciprocal exchange of instructors. To this extent, it may be said that the Staff College is imperial in character.

(ix) *The Royal Military College.* The Royal Military College was established in 1911 at Duntroon in the Australian Capital Territory for the purpose of providing trained officers for the Army. The conditions of entry are laid down in the Royal Military College Regulations and provide for admission by "normal", "service", and "special" entries. The length of the normal course is four years; "service" entry cadets attend for three years; and "special" entries for one year.

While at the College, cadets receive pay and allowance of 15s. per day in their first year, rising to 24s. 1d. per day in their fourth. Uniform maintenance allowance of 1s. 9d. per day is additional, and a further 6d. per day is paid to cadets on attaining the age of 18 years. The course of instruction is organized into military and civil departments and the instructional staff comprises officers of the Army and civilian professors. On graduation, cadets are appointed lieutenants in the Australian Regular Army. The College also trains New Zealand cadets for commissions in the New Zealand Permanent Forces under an agreement made with the Government of that Dominion.

(x) *The Officer Cadet School.* The Officer Cadet School was established in 1951 at Portsea, Victoria, for the purpose of speeding up the supply of junior regimental officers for the Australian Regular Army. Serving members of the Australian Regular Army, the Citizen Military Forces, National Servicemen, and civilians between the ages of 18 and 23 years, are eligible to apply for entrance. The course is of eleven months' duration, and on graduation, cadets are appointed second-lieutenants in the Australian Regular Army. They then normally proceed to further training at the Army School of the Arm or Service to which they have been allotted before being posted to regimental duties.

(xi) *The Women's Royal Australian Army Corps School.* The W.R.A.A.C. School was established in 1952 at Mildura, Victoria. It has two wings, one whose primary task is the training of officer cadets for the W.R.A.A.C., the other being for the training of non-commissioned officers at all levels and for other special courses. The officer cadets are selected from eligible applicants, who may be serving members between 21 and 32 years of age, or civilians between 21 and 30 years of age. The course is of six months' duration and, on graduation, cadets are appointed lieutenants in the Women's Royal Australian Army Corps.

(xii) *The Army Apprentices' School.* The Army Apprentices' School was opened in 1948 at Balcombe, Victoria, with the aim of training youths as skilled tradesmen for the Australian Regular Army, and to form a background for an Army career with prospects of promotion. The course is open to boys between the ages of 15 and 17 years and provides training in a number of highly skilled trades. A three-year course of intensive theoretical and practical work at the Apprentices' School is followed by one year in an appropriate Army workshop or technical unit. At the end of their third year, boys are given their Army trade test and also take the Victorian Apprenticeship Commission final grade public examinations, which ensures that they will be accepted as qualified tradesmen in civil life when they eventually leave the Army. In addition to trade training, the Apprentices' School provides general educational facilities up to the school leaving standard.

(xiii) *Army Schools.* Schools have been established for the major Arms and Services for the purpose of training officers and other ranks in the up-to-date techniques of their own Arm or Service, to qualify them for promotion requirements, and to produce trained instructors. In addition, a School of Tactics and Administration which has been established at Seymour, Victoria, provides qualifying and instructional courses in current tactical and administrative doctrine for members of all Arms and Services. Courses at Army Schools are conducted for members of both the Australian Regular Army and the Citizen Military Forces.

The following Schools have been established:—School of Tactics and Administration; Jungle Training Centre; Armoured School; School of Artillery; School of Military Engineering; School of Survey; School of Signals; School of Military Intelligence; School of Infantry; Royal Australian Army Medical Corps School of Army Health; Royal Australian Army Service Corps School; Royal Australian Army Ordnance Corps School; Royal Australian Electrical and Mechanical Engineers Training Centre; Transportation Training Centre; School of Music; Women's Royal Australian Army Corps School; Land/Air Warfare (Joint Services) School.

(xiv) *Rifle Clubs*. The Australian Rifle Club movement, which had its origin in 1888, is provided for in the Defence Act and comprises an Australian Council of State Rifle Associations (which functions in an advisory capacity to the Minister and in the promotion of intra-empire and interstate rifle competitions), State Rifle Associations, District Rifle Club Unions and Rifle Clubs. When placed in recess, the efficient strength of the rifle club movement was 1,018 clubs and 36,478 members. Approximately 20 per cent. of this number served overseas and a further 60 per cent. performed home service duties during the 1939–45 War. Rifle shooting activities were resumed in 1946 and the strength of the movement as at 31st December, 1956, was 1,033 clubs and 44,940 members.

(xv) *The Australian Battles Nomenclature Committee*. The Minister for the Army gave approval on 25th July, 1947, for the formation of the Australian Battles Nomenclature Committee to tabulate and classify the operations fought in the Pacific Zones in the 1939–45 War which involved the Australian Military Forces, to define their geographical and chronological limits and to advise the United Kingdom Battles Nomenclature Committee regarding operations in zones other than the Pacific Zone in which the Australian Military Forces participated. Sub-committees were later appointed to study the various campaigns in order to classify the operations into battles, actions and engagements. In 1956, the terms of reference of the Australian Battles Nomenclature Committee were extended to cover the operations in Korea 1950–53.

3. Strength of Australian Military Forces.—The effective strength of the Australian Military Forces at 31st December, 1956, was as follows:—Australian Regular Army, 19,184; Regular Army Special Reserve, 3,225; Citizen Military Force (including National Service Trainees), 83,623; Australian Cadet Corps, 29,152.

§ 4. Air Defence.

1. General.—A statement respecting the preliminary steps taken in connexion with the development of air defence will be found in Official Year Book No. 18, p. 610, and one on the expansion and development and zones and operations of the Royal Australian Air Force during the 1939–45 War appears in Official Year Book No. 36, p. 1027.

2. Operations in Korea and Malaya.—Reference to R.A.A.F. participation in operations in Korea is contained in Official Year Book No. 40, pp. 1112–13.

Australian assistance in the form of one transport squadron provided to the Malayan authorities is detailed in Official Year Book No. 40, p. 1113.

One bomber squadron was also provided for operations in Malaya. The Lincolns of No. 1 Squadron arrived in July, 1950, and were soon in action. Up till 1st February, 1957, No. 1 Squadron had dropped 31,211,850 lb. of bombs during operations against communist bandits. This bombing, which calls for extreme accuracy, was mainly on jungle hideouts frequented by the insurgents and was carried out in close co-operation with the ground forces.

3. Administration and Organization.—The Department of Air is responsible for policy for the organization and control of the Royal Australian Air Force. The Air Board is responsible, subject to approved policy, for the control and administration of the Royal Australian Air Force, and is constituted as follows:—Chief of the Air Staff, Air Member for Personnel, Air Member for Technical Services, Air Member for Supply and Equipment, Citizen Air Force Member and the Secretary, Department of Air.

Headquarters of the Royal Australian Air Force is located at Melbourne. An Oversea Headquarters is located at London and an Air Attaché at Washington.

The units of the Royal Australian Air Force are organized in three functional Commands throughout Australia and its Territories.

The Commands are:—

Home Command.—Home Command is responsible for the command of operational units and the conduct of their operations within Australia and its Territories.

Training Command.—Training Command is responsible for the command of training units, recruitment and individual training in the R.A.A.F.

Maintenance Command.—Maintenance Command is responsible for the command of supply and servicing units, and supply and servicing, including technical services, of the R.A.A.F. in Australia.

The organization of the Royal Australian Air Force includes the following types of formations and units:—

- (a) *Sub-formations*, comprising a headquarters unit to control the activities of a number of units at one location. Each formation has a base squadron which provides common services to all units at the location.
- (b) *Flying Squadrons*. These bomber, fighter, transport, target-towing and maritime reconnaissance squadrons undertake the operational and operational training flying commitments of the R.A.A.F.
- (c) *Aircraft Depots*. These units specialize in major overhauls, etc., of aircraft and equipment and relieve flying unit ground staff of these commitments.
- (d) *Stores Depots*. Stores and equipment ordered by the R.A.A.F. are delivered to these centrally located depots for distribution to units.
- (e) *Flying Training, Ground Training, Navigation, Radio and Air Armament Training Units*, which specialize in the aircrew and ground staff training required by the R.A.A.F.
- (f) *Airfield Construction Squadrons*. These units specialize in the construction of R.A.A.F. aerodromes and associated buildings and works services.
- (g) *Royal Australian Air Force College*. This unit is the training college for officer cadet entrants to the R.A.A.F.
- (h) *Telecommunications Units*. These units are responsible for the communications services of the R.A.A.F.
- (i) *R.A.A.F. Staff College*. This college trains specially selected R.A.A.F. officers for higher staff and command posts.

4. **Aircraft.**—Some of the aircraft which are at present being used in the Royal Australian Air Force are: bomber squadrons—Lincoln and Canberra; fighter squadrons—Mustang, Vampire, Meteor and Avon Sabre; transport squadrons—Dakota; maritime reconnaissance squadrons—Lincoln and Neptune; air observation post—Auster; training—Tiger Moth, Wirraway, Mustang, Dakota, Metropolitan, Lincoln, Winjeel, Vampire and Meteor.

5. **Establishment.**—The Royal Australian Air Force establishment, as proposed, comprises—(a) a Home Defence Organization, (b) Task Force elements and (c) a Training Organization, consisting in all of approximately 16,680 personnel.

6. **Strength of Royal Australian Air Force.**—At 1st February, 1957, the strength of the Royal Australian Air Force was as follows:—Permanent Air Force, 14,608; Active Citizen Air Force, 520; Active Reserve, 1,142 and General Reserve, 27,892. In addition 3,330 National Service Trainees were transferred to the Reserve each year up to 1957 after they had completed their 154 days training. After the intake in January, 1957, there have been no further intakes by the Air Force (see p. 1016).

7. **Women's Royal Australian Air Force.**—At 1st February, 1957, the Women's Royal Australian Air Force had an establishment of 841, with an enlisted strength of 724. There are 27 musterings, excluding members of the W.R.A.A.F. in training. The entry age is 18 to 34 years inclusive. Parental consent must also accompany applications for those between the ages of 18 and 21 years. A good education is necessary and applicants must be of British nationality, single, or a widow without dependants, and must be physically fit. Engagement period is four years with the option of re-enlistment for further periods of four years.

All W.R.A.A.F. trainees undergo a month's initial training course at Point Cook, Victoria. On graduating they are posted for duty to R.A.A.F. units anywhere in Australia. Wherever possible, the Air Force endeavours to post members of the W.R.A.A.F. to R.A.A.F. units within their home State. This rule applies for those who wish to serve in their home State, but members of the W.R.A.A.F. who wish to travel may indicate their preference and be posted to whichever State they desire.

§ 5. War Gratuities.

Reference is made in earlier issues of the Official Year Book to the payments made under the provisions of the War Gratuity Acts 1920 (*see* No. 15, p. 930) and the War Gratuity Act 1945–1947 (*see* No. 41, p. 999).

§ 6. Department of Defence Production.

1. **General.**—On 11th May, 1951, a Department of Defence Production and a Department of Supply were established by a decision of the Commonwealth Government. These Departments took over the functions previously undertaken by a joint Supply Department. The Department of Defence Production is responsible broadly for the production in government-operated factories and in industry under contract to the Government of munitions (including aircraft) required by the Services. It is also responsible for all those matters incidental to production, including planning production capacity to meet expected future Service requirements. References to previous operations of the various sections and establishments of the Department are given in Official Year Book No. 38, pp. 1200–9.

2. **Functions of the Department and Act Administered.**—The functions of the Department of Defence Production, as defined in the Administrative Arrangements approved by the Governor-General, are:—

- (i) Manufacture, acquisition, provision and supply of munitions for the defence forces, that is to say, armaments, aircraft, arms, ammunition, weapons, machine tools, war chemicals, radar and such other items as may be mutually agreed with the Department of Supply as falling within the definition of munitions, including the materials and plant necessary for the production of those things and all matters incidental thereto, including:—

The receipt from the Service Departments and other authorities or Departments of orders and forecasts of requirements of munitions; appropriate liaison with the Higher Defence Machinery, Service Departments and the Department of Supply to deal with Service munitions programmes; operation and management of factories, workshops and undertakings concerned in the production of munitions; arrangements and all action necessary to secure the manufacture, processing and delivery of munitions; investigations and development of Australian sources of munitions production, including the establishment of annexes or special capacity in industry for that purpose; acquisition by the Commonwealth and the establishment of factories and workshops for the purpose of producing munitions; provision and maintenance of stocks of materials and goods for the purpose of producing munitions.

- (ii) Employment and training of technicians, workmen and others for the purpose of producing munitions.
- (iii) Formation of Industry Advisory Committees to advise the Minister for Defence Production regarding:—

The allocation to industry of production programmes of munitions; the establishing of additional munitions production facilities, including annexes and undertakings; the obtaining of appropriate details of Australian industrial capacity required by the Department of Defence Production in allocating munitions production to industry; any other matters associated with munitions production as specified by the Minister.

- (iv) Provision and control of stores, magazine and similar undertakings required in connexion with production of munitions and for other purposes as required.
- (v) Arrangements for ascertaining costs and the control and limitation of profits in connexion with the production of munitions.
- (vi) Development of inventions originating in government factories in the interests of defence production.

The Act administered by the Department is the Supply and Development Act 1939–1948.

3. **Production.**—(i) *Munitions.* The Department is responsible for the production in Australia of the munitions (other than specialized Navy requirements) for the Armed Services. The production is undertaken in government-operated factories and industry. Broadly their roles are:—

- (a) Some processes are entirely undertaken by the government factories in peace and war because of special requirements.
- (b) Some classes of equipment and components are produced entirely by industry in peace and war.

- (c) Production techniques of advanced equipment and components of which industry may undertake mass production in war, are developed in the government factories in peace.
- (d) Limited requirements of standard equipment and components produced in peace by the government factories are in war produced on a mass production basis in industry.

The following factories are currently in operation:—Ammunition—Footscray, Victoria; Explosives and Filling—Albion and Maribyrnong, Victoria; Mulwala and St. Mary's, New South Wales; Ordnance—Maribyrnong, Bendigo, Echuca, Port Melbourne, all in Victoria; Small Arms—Lithgow, New South Wales; and certain annexes established in industry. Other government-owned factories and annexes are held on a care and maintenance basis against an emergency.

These factories are complementary to each other in the manufacture of a range of basic munitions. The Ammunition Factory makes the brass and non-ferrous components of gun ammunition, including melting and rolling and these components are then passed to the Explosives Factory for filling with explosives. In the case of small arms ammunition, however, the factory makes the complete round, receiving the propellant from the Explosives Factory. The Ordnance Factories principally make guns, and in addition make the steel shell bodies which are passed to the Explosives Factory to be filled with explosives and assembled with the brass and other components received from the Ammunition Factory. The Explosives Factories make the propellant and high explosives for the brass components made at the Ammunition Factory and the steel components made at the Ordnance Factory. The Explosives Factory also assembles the gun ammunition. The Small Arms Factory is equipped to make the rifles and other small arms for which the Ammunition Factory makes the ammunition.

Production of munitions is also a joint effort between the Government factories and private contractors in industry. In peace, industry produces many components for ammunition and other stores plus complete units such as electronic equipment and motor vehicles for the Services. In war, industry would provide the major capacity not only for mass production of these and many other new items, but also for the mass production of equipment and components using engineering techniques developed in peacetime in the Government factories.

(ii) *Aircraft.* (a) *General.* Matters relating to the production in Australia of military types of aircraft and aero engines and of other aircraft components required by the Royal Australian Air Force and the Royal Australian Navy are administered by the Department of Defence Production. Aircraft repair and overhaul activities carried out for those Services in civilian establishments, as distinct from Service workshops, are also the function of the Department, together with the responsibility of supplying aircraft and engine spare parts and airborne equipment generally.

(b) *Aircraft, Engine and Other Production.* The approved production programmes for the major aircraft manufacturing organizations in Australia comprised Canberra jet-engined bombers and Jindivik radio-controlled jet-propelled target aircraft at the Government Aircraft Factory, Melbourne; Avon Sabre jet-engined fighters, Winijeel basic trainers and Rolls-Royce Avon turbo-jet engines at Commonwealth Aircraft Corporation Pty. Ltd., Melbourne, and Vampire jet-trainers at De Havilland Aircraft Pty. Ltd., Sydney.

Associated concurrent production activities included the manufacture of parts of aero engines and of undercarriages at the Aircraft Engine Factory, Sydney, production of heavy forgings at the Heavy Forge Annexe, Sydney, and the manufacture of aircraft pressed metal parts at Chrysler Australia Ltd., Adelaide.

(c) *Repair and Overhaul.* During the year, the broad policy was continued by the R.A.A.F. of returning to the factories in which they were produced all Australian-made aircraft and aero engines requiring major overhaul and the incorporation of modifications. Repair and overhaul of R.A.A.F. aircraft of certain other types and of carrier-based aircraft operated by the R.A.N. were undertaken by civilian personnel in the aircraft factories or in the works of contractors specially equipped to handle this type of work.

Lincoln and Canberra bomber aircraft were repaired and extensively modified at the Government Aircraft Factory, together with Jindivik target aircraft. Avon Sabre fighter aircraft were repaired and modified and Rolls-Royce Nene and Avon turbo-jet engines were overhauled by Commonwealth Aircraft Corporation Pty. Ltd., Melbourne. Rolls-Royce Merlin and Pratt and Whitney Twin Row Wasp engines from the R.A.A.F., Rolls-Royce Griffon, Bristol Centaurus and Armstrong-Siddeley Double Mamba turbo-propeller engines from the R.A.N., and Rover Meteor engines from the Department of the Army for Centurian tanks were overhauled at the Aircraft Engine Factory, Sydney. Wright turbo-compound engines from R.A.A.F. Neptune aircraft were overhauled by Qantas Empire Airways Ltd., Sydney.

Carrier-based Sea Venom aircraft, Vampire fighters and trainers and Tiger Moth trainers together with Goblin turbo-jet engines from Vampire trainers and Gipsy Major

piston engines were repaired and overhauled at De Havilland Aircraft Pty. Ltd. Dakota transport and other miscellaneous aircraft were reconditioned and serviced at the Government workshops at Parafield, South Australia.

The repair and overhaul of carrier-based Fairey "Firefly", Hawker "Sea Fury" and Fairey "Gannet" aircraft were handled by the Fairey Aviation Company of Australasia Ltd. Sydney.

Sycamore helicopter aircraft built by the Bristol Aeroplane Company and Bristol freighter aircraft and Alvis Leonides and Bristol Hercules engines from those aircraft were repaired and overhauled by Bristol Aviation Services, also in Sydney.

Repair and overhaul work on propellers was undertaken at the Propellor Annexe, Sydney, managed for the Commonwealth by De Havilland Aircraft Pty. Ltd., Sydney.

The reconditioning and servicing of aircraft instruments, ancillary equipment and air-frame components were carried out by a large number of sundry contractors.

(d) *Avalon Test Field.* During the year, the aircraft flight test field at Avalon, near Geelong (Victoria), was further developed for the final assembly, fitting out and testing in flight of the Canberra bomber and Avon Sabre fighter aircraft built at the aircraft factories near Melbourne.

4. **Defence Production Planning.**—The Defence Production Planning Branch is the central planning authority of the Department and is the executive instrument of a Committee of the same name. The three Defence Services and the Departments of Defence, Defence Production, Supply and Trade are represented on the Committee and this enables a close liaison to be maintained with the Departments concerned directly and indirectly with defence in the formation of defence production planning policy.

Broadly, the functions of the Branch are:—(i) to plan for and undertake the development of additional production capacity to meet Service munition requirements for mobilization and war; (ii) to arrange production in industry of current munitions requirements for the Defence Services; (iii) to develop production techniques and, where necessary, capacity to produce such requirements.

These functions are performed by the following production and related sections which exist within the Branch:—(a) Ammunition; (b) Telecommunications; (c) Ordnance and Engineering Equipment (including optics, machine tools, mobile and electrical equipment and small craft); (d) Materials and Chemical Engineering; (e) Technical Services; (f) Planning.

In order to advise the Minister of the Department in the development of industrial mobilization plans to meet the requirements of war related to particular industries, the following Industry Advisory Committees have been created:—Ammunition; Electrical; Explosives and Chemicals; Materials; Radar and Telecommunications; Weapons and their equipment; and Military Vehicles.

5. **Finance and Accounts.**—The expenditure on munitions, munitions factories, aircraft production, etc., during 1954-55 and 1955-56 is shown in the following table:—

DEFENCE PRODUCTION: TOTAL EXPENDITURE.
(£'000.)

Particulars.	Expenditure.	
	1954-55.	1955-56.
Parliamentary Appropriations	(a) 5,280	(b) 12,334
Trust Fund Accounts—		
Government Factories and Establishments	14,564	16,781
Manufacture of Munitions	12,007	13,541
Munitions Materials	129	22
Defence Production Materials	570	349
Aircraft Production	15,944	18,417
Strategic Stores and Equipment	239
<i>Total Trust Fund Accounts</i>	<i>43,214</i>	<i>49,349</i>
Total Expenditure	48,494	61,683

(a) Includes contribution under Superannuation Act and Audit.
contribution under Superannuation Act.

(b) Includes Audit; excludes

§ 8. Department of Supply.

1. **General.**—Reference to the creation of the Department of Supply is contained in Official Year Book No. 39, p. 1257.

2. **Functions of the Department.**—The functions of the Department include (a) the manufacture, acquisition, provision and supply of services and goods other than "munitions" (that is to say foodstuffs, textiles, clothing, fibres, canvas goods, woodwork, hardware, boots, leatherware and other like supplies) required by Services and other authorities; (b) research and scientific development in relation to war *matériel*, including the operation of the Joint United Kingdom-Australia Long Range Weapons Project, and Australian research and development through the Weapons Research Establishment, the Aeronautical Research Laboratories, Defence Standards Laboratories and associated establishments; (c) design and associated technical development and inspection of war *matériel*; (d) planning for and procurement of strategic materials; (e) planning and establishment of manufacturing facilities for the production of goods other than munitions; (f) formation of industry advisory committees in respect of production and procurement matters; (g) arranging contracts for supply of goods and performance of services; (h) operation and management of Government Clothing Factories; (i) acquisition, maintenance and disposal of stocks; (j) sale or disposal of surplus or unserviceable Commonwealth property (except buildings or land); (k) provision of Commonwealth transport facilities; (l) security service for Supply and Defence Production Departments; (m) arrangements for ascertaining costs and control and limitation of profits on production contracts; (n) co-ordinating estimates, allocation and commitment of resources for Defence Supply needs (including munitions) and liaison with the National Security Resources Board; (o) provision and control of stores required for or in connexion with matters administered by the Department of Supply; general storage for other Departments as required.

3. **Acts Administered.**—Acts administered by the Minister for Supply are the Aluminium Industry Act 1944-1954, Atomic Energy Act 1953 and Supply and Development Act 1939-1948.

4. **Research and Development Branch.**—(i) *General.* The Research and Development Branch, which is under the control of the Chief Scientist, is responsible for research and scientific development in relation to war *matériel* including the operation of the joint United Kingdom-Australia Long Range Weapons Organization. The Chief Scientist is also the Chairman of the Board of Management for Research and Development, which is responsible for the efficient and economical conduct of research and development undertakings. The headquarters of the Branch is situated at 339 Swanston Street, Melbourne, and the following establishments are included in the Branch:—Weapons Research Establishment, Salisbury, South Australia; Defence Standards Laboratories, Maribyrnong, Victoria; Aeronautical Research Laboratories, Fishermen's Bend, Victoria.

(ii) *Weapons Research Establishment, Salisbury, South Australia.* This Establishment has two main sections, namely, the Trials and Instrumentation Wing and the Weapons Research and Development Wing.

The Trials and Instrumentation Wing is concerned with the Joint United Kingdom-Australia Long Range Weapons Project and is responsible for the testing of guided missiles developed in the United Kingdom. The Weapons Research and Development Wing is engaged chiefly on Australian-initiated research but also provides a supporting research service for the Joint Project.

The headquarters of Weapons Research Establishment consisting of the main laboratory, workshop and administrative services, is located at Salisbury.

Accommodation has been provided in the area for a number of United Kingdom firms which are developing guided weapons under contract to the British Ministry of Supply.

A modern airfield (Edinburgh Field) has been established adjacent to the Headquarters at Salisbury to meet the flying requirements of the establishment, the flying effort being provided by the R.A.A.F.

Testing ranges have been provided at Woomera, which is approximately 280 miles north-west of Salisbury and 9 miles north of Pimba, which is on the trans-continent railway line. A number of these testing ranges are now in operation. A modern township of 500 houses and extensive barracks accommodation has been built, complete with community store, hospital, school and all amenities usually found in an Australian country town.

(iii) *Aeronautical Research Laboratories.* The Aeronautical Research Laboratories at Fishermen's Bend have continued investigations in aerodynamics, structures, aircraft materials and general aeronautical engineering according to their approved programme with particular attention to defence problems. These laboratories also collaborate with the United Kingdom on aeronautical matters of mutual interest.

(iv) *Defence Standards Laboratories.* The Defence Standards Laboratories at Maribyrnong continue to give comprehensive service to industry, the armed services and to other Commonwealth and State Departments.

The broad function of these laboratories is the application of scientific knowledge and research to the problems arising in design, development, manufacture, inspection, storage, and use of war *matériel*. Research is also carried out in connexion with the development of new and improved materials, methods and equipment of known or potential interest.

5. *Design and Inspection Branch.*—(i) *General.* The prime functions of the Branch are to design and test equipment to meet the Army's special requirements, and to inspect stores equipment for adherence to standards before acceptance on behalf of the Army.

(ii) *Design.* Comparatively little of the Army's equipment is identical with commercial patterns. In many cases, these can be used as the basis, minor modifications being made to suit Service needs. In other cases, there is no commercial equivalent and a completely new equipment must be developed. Hence there is need for a design authority:—(a) to investigate, evaluate and recommend commercial types of equipment for adoption by the Army; (b) to devise modifications to bring commercial products, or oversea Service equipment, into line with Australian Army requirements; and (c) to design and develop completely new patterns of equipment for the Army.

The Design Establishment at Maribyrnong is equipped for these tasks. Its three design sections handle respectively armaments, vehicles, and general engineering and telecommunications. It has common facilities for dealing with defects, standards, rationalization and standardization, production drawings, specifications, publications, testing of components and complete electrical and mechanical units, and the construction of mock-ups and models. The establishment makes the maximum use of extra-mural facilities (universities, other government departments, and industrial firms) and itself undertakes equipment development only when this is clearly the best way of doing it.

A small amount of work is done for Services other than the Army, for non-service Departments and for industry.

(iii) *Inspection.* The Inspection Service is primarily intended for the inspection of supplies for the Army, but undertakes inspection on behalf of certain other Departments, and all proof of armament stores for the three Armed Services.

The Inspection Service is divided into four groups—Engineering, Ammunition and Small Arms, General Stores and Clothing, and Proof and Experimental. The headquarters of the service is predominantly technical. The size of elements in the States varies with the volume of production to be inspected.

The Proof and Experimental Group conducts a number of proof ranges, the chief of which are at Port Wakefield, South Australia, and Compton Vale, Victoria.

The General Stores and Clothing Group, in addition to its inspection function, is responsible for the design of general stores and clothing.

In addition, there is an Equipment Inspection Section which holds and issues a complete range of drawings and specifications for Army equipment, including United Kingdom and Australian Joint Service specifications. This Section provides the data on which production is based.

6. *Contract Board.*—(i) *General.* Under the Supply and Development Act 1939–1948, the Contract Board is the authority responsible for purchasing supplies and arranging services for the Military, Naval and Air Forces of the Commonwealth, as well as for the Departments of Supply and Defence Production. Under this Act and Regulations, it is charged also with the responsibility of arranging for the sale or disposal on behalf of Commonwealth Departments of all surplus or unserviceable war *matériel*, goods and services approved for disposal. In addition to its statutory responsibilities, the Board makes purchases and arranges disposals on behalf of numerous Commonwealth Government Departments and Authorities who have no public contracting organization of their own, e.g., Immigration, National Development and External Affairs (Colombo Plan supplies).

(ii) *The Board and its Administrative Organization.* The Contract Board meets in Melbourne, and comprises representatives of the Departments of Supply, Defence Production, Navy, Army and Air. The Board's administrative organization is the Directorate of Contracts. In each State other than Victoria, there is a District Contract Board with an administrative organization similar to the Directorate of Contracts. The table following shows, in respect of the Contract Board Organization, the purchases and realizations from disposals for the years 1954–55 and 1955–56.

CONTRACT BOARD ORGANIZATION : PURCHASES AND REALIZATIONS FROM DISPOSALS.

(£.)

State.	Purchases.		Realizations from Disposals.	
	1954-55.	1955-56.	1954-55.	1955-56.
Contract Board, Victoria	22,992,424	31,299,167	1,273,584	1,965,434
District Contract Board—				
New South Wales	6,824,197	5,950,805	1,324,574	1,113,615
Queensland	1,454,911	1,771,071	496,618	424,641
South Australia	909,723	1,136,241	355,185	321,958
Western Australia	485,597	592,163	143,134	114,195
Tasmania	162,494	113,172	23,463	32,641
Total	32,829,346	40,862,619	3,616,558	3,972,484

7. **Tinplate.**—Despite substantial losses of stoned fruits in Victoria as the result of floods, consumption of tinplate in 1956 was 126,865 tons or only 600 tons below the 1955 record.

Supplies were freely available from the United Kingdom and the United States of America, although some delays were caused by industrial disturbances.

Production of tinplate in Australia is expected to commence in 1957.

8. **Stores and Transport Branch.**—This Branch, administered by a Board of Management and working under the direction of a General Manager, functions as the central authority for meeting the storage and transport requirements of Commonwealth Departments and Authorities. It is the authority for the arrangement of furniture removals, at Departmental expense, in all States with the exception of the Australian Capital Territory and the Northern Territory. It has agents in Canberra and Darwin.

At 30th June, 1956, it had under its control, land, buildings, plant and machinery valued at over £5,707,805 and 2,315,000 square feet of storage space, of which 1,936,830 square feet was Government-owned and the balance held under tenancy.

9. **Finance Branch.**—The expenditure for Department of Supply activities during the years 1954-55 and 1955-56 are shown in the following table.

SUPPLY : TOTAL EXPENDITURE.

(£'000.)

Particulars.	Expenditure.	
	1954-55.	1955-56.
Parliamentary Appropriations	(a) 13,745	(a) 15,363
Trust Fund Accounts—		
Dorset Tin Dredge	34
Mica	444	72
Minerals Production	154	36
Government Factory (Clothing)	2,089	2,198
Stores and Transport	3,969	4,633
Strategic Stores and Equipment Reserve	Cr. 7	..
<i>Total Trust Fund Accounts</i>	<i>6,649</i>	<i>6,973</i>
Total Expenditure	20,394	22,336

(a) Includes amount appropriated for audit charges.

10. **Australian Aluminium Production Commission.**—Basic plans for the manufacture of aluminium ingot in Australia were approved by the Commonwealth Government in April, 1941, as a defence measure designed to make this country independent of oversea supplies. In April, 1944, an agreement was made between the Commonwealth and Tasmanian Governments for the establishment of the industry in Tasmania. The Australian Aluminium Production Commission, consisting of representatives of each of the two Governments, was constituted on 1st May, 1945. By legislation passed in 1952 and 1954, the original fund of £3,000,000 to finance the undertaking was increased to £10,500,000, of which the Commonwealth Government will contribute £9,000,000 and the Tasmanian Government £1,500,000. At the same time, the Commission was reconstituted to consist of five members of whom four represent the Commonwealth and one the State of Tasmania.

Workable deposits of bauxite (aluminium ore) have been proved in Tasmania, Victoria, New South Wales and the Northern Territory. The largest deposits are located in the Wessel Islands, Northern Territory, where nearly 10,000,000 tons of good grade ore have been proved, and also in the Inverell district of northern New South Wales, where reserves exceeding 8,000,000 tons have been brought under the Commission's control. In the Wessel deposits alone, there is a sufficient supply to maintain aluminium production in Australia for over 100 years, based on the present planned production of 13,000 tons of aluminium ingot annually.

The combined Bayer-Hall alumina and reduction plant erected at Bell Bay, northern Tasmania, is now in production of aluminium ingot and was expected to reach full production by the middle of 1957.