

CHAPTER XXVII.

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, and the Chiefs of Staff of the three Services. In general, its function is to advise on defence policy as a whole, and on matters of policy or principle and important questions having a joint Service or inter-Departmental defence aspect. 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 strategical 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 the business advisers of the three Service Departments.

3. *Basis of Current Defence Policy.*—The aim of Australian Defence Policy is to co-operate in repelling aggression.

The basis of Defence Policy has been transformed from preparedness by a critical date, to the capacity to maintain it at a level that can reasonably be sustained for a long haul having regard to the essential demands of other sectors of the national economy, including national development.

The size of the Defence effort having been determined by the amount of the Defence Vote, the relative strengths of the Navy, Army and Air Force are governed by the probable form and scale of attack. Strategically, this falls into two divisions :—

(i) Local defence of Australian territories and waters, which is the absolute responsibility of the Australian Government. This is the first priority for the Services.

(ii) Oversea defence based on global strategy to defend vital interests and to bring about the defeat of the enemy. Australia is committed as a member of the British Commonwealth, and in accordance with the provisions of the Anzus Treaty, the South-east Asia Collective Defence Treaty, and the Charter of the United Nations, to co-operate in collective security.

4. *The Defence Programme.*—(i) *Programme.* The Government's current Defence Programme has been directed to a re-balancing and stabilization of the defence effort at a peak figure of about £200 million having in view the strategic basis of policy and the related priorities. This has involved some adjustments both between and within the Armed Services to achieve the maximum security from the Vote, including adjustments to improve the balance between equipment and man-power to enable increased provision to be made for modern equipment.

In view of the probable nature and scale of attack, priority is being given by the Navy to surface anti-submarine vessels, and the responsibility for air protection at sea within the range of land-based aircraft has been assigned to the Air Force. Close operational co-operation will be maintained between the Navy and Air Force. The Fleet Air Arm is being retained at a reduced but nevertheless substantial strength in balanced relation to the other Services. There will be a weighting of the defence effort in favour of the Air Force.

Until the release of the Forces in Korea, and the Government is aware of what will be necessary in the light of developments in South-East Asia, no change is being made in the present organization and strength of the Permanent Army. Substantial provision has been made for the acquisition of modern equipment for the Army.

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 manufacture and supply of munitions and aircraft. Provision is being made for further progress with the Defence Production Capital Programme for the expansion of production capacity and the replacement and modernization of existing facilities to meet the material requirements of the Services.

(ii) *Financial.* Details of Defence Expenditure for 1953-54 and the allocation of the Defence Vote for 1954-55 are set out in the two tables which follow:—

ALLOCATION OF DEFENCE VOTE OF £200,000,000 FOR 1954-55.
(£'000.)

Service or Department.	Mainten- ance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisi- tions.	Miscel- laneous.	Total Expenditure.
Defence	670	15	30	..	715
Navy	31,987	14,528	1,650	..	48,165
Army	49,210	18,402	4,573	..	72,185
Air	36,197	17,529	3,680	..	57,406
Defence Production	2,744	2,271	1,464	..	6,479
Supply	10,778	1,507	2,662	13	14,960
Civil Defence .. .. .	..	..	..	90	90
Total	131,586	54,252	14,059	103	200,000

DEFENCE EXPENDITURE, 1953-54.
(£'000.)

Service or Department.	Mainten- ance.	Material Requirements, Machinery, Plant and Equipment.	Buildings, Works and Acquisi- tions.	Miscel- laneous.	Total Expenditure.
Defence	568	25	41	..	634
Navy	31,811	12,085	1,065	..	44,961
Army	53,169	7,860	3,312	..	64,341
Air	32,106	13,322	3,311	..	48,739
Defence Production	4,525	1,625	1,084	31	7,265
Supply	9,042	977	1,740	26	11,785
Defence Equipment and Supplies .. .. .	..	..	..	(a) 12,000	(a) 12,000
Total	131,221	35,894	10,553	12,057	189,725

(a) Paid to the Defence Equipment and Supplies Trust Account.

(iii) *Personnel Strengths.* The personnel strengths of the Services at 31st December, 1954 were:—

Category.	Navy.	Army.	Air Force.	Total.
Permanent Forces	(a) 13,396	23,389	14,838	51,623
Citizen Forces—				
Volunteers	5,044	15,296	2,334	22,674
National Service Personnel	3,368	66,765	587	70,720
Total Citizen Forces	8,412	82,061	2,921	93,394
Total Permanent and Citizen Forces	21,808	105,450	17,759	145,017

(a) Excludes midshipmen not on pay—157.

In addition to the above personnel, 21,409 Army and 12,555 Air Force National Service Personnel had completed their training at 31st December, 1954 and were on the General Reserve.

5. Australian Participation in Korea, Malaya and the Middle East.—(i) *Korea.*

(a) *Australian Contribution in Korea.*

Navy—A Royal Australian Naval Force of two ships since June, 1950, which has consisted from time to time of either two destroyers or a frigate and a destroyer. In addition, the Aircraft Carrier H.M.A.S. *Sydney* relieved H.M.S. *Glory* in October, 1951 for a period of three months, and for a further period of six months from November, 1953.

Army—At 30th September, 1954 the forces in Korea consisted of—

(i) 1st and 3rd Infantry Battalions, Royal Australian Regiment.

(ii) A proportion of a Brigade Headquarters and of the Headquarters of 1st Commonwealth Division.

(iii) An element of the British Commonwealth Communications Zone.

The periods of service in Korea of the respective Battalions have been as follows :—

3rd Battalion—September, 1950 to November, 1954.

1st Battalion—March, 1952 to March, 1953.

2nd Battalion—March, 1953 to March, 1954.

1st Battalion—relieved 2nd Battalion, March, 1954.

Air Force—No. 91 (Composite) Wing, formed of No. 77 (Fighter) Squadron (which has been in Korea since June, 1950), and No. 36 (Transport) Squadron, together with the necessary administrative and maintenance units for their support.

The total number of Australian personnel with service in the Japan-Korea area to 31st December, 1954 was 4,187.

(b) *Reduction of Commonwealth Forces in Korea.*

Reductions of the British Commonwealth Forces in Korea were decided in September, 1954 as part of a general plan for reduction of United Nations Forces serving in the theatre. The following Australian forces were withdrawn by the end of 1954—

Navy—one destroyer.

Army—3rd Battalion, and other elements;

Air Force—No. 77 (Fighter) Squadron.

The number of Australian personnel serving in the Japan-Korea area at 31st December, 1954 was 2,740.

(NOTE.—Early in 1955 No. 91 (Composite) Wing was disbanded and the majority of its administrative and maintenance units were withdrawn from the theatre together with No. 36 Transport Squadron. R.A.A.F. Transport Flight, Japan, was then formed comprising three transport aircraft and small administrative and maintenance elements.)

(c) *Command Arrangements.*

Overall operational control of the United Nations Forces in Korea is the responsibility of the United States Unified Command, which was established by the Security Council. The Commander-in-Chief, British Commonwealth Forces, Korea (an Australian Lieutenant-General), is responsible for the non-operational control and administration of the British Commonwealth Forces in Korea, the land forces of which comprise 1st Commonwealth Division, United Nations Forces.

(ii) *Malaya.* No. 1 (Bomber) Squadron and No. 38 (Transport) Squadron of the R.A.A.F. were engaged in anti-bandit operations in Malaya from June, 1950. The Transport Squadron was withdrawn at the end of 1952 but No. 1 (Bomber) Squadron is continuing operations in Malaya.

(iii) *Middle East.* No. 78 (Fighter) Wing which left Australia in June, 1952 for service as part of the peace-time Air Force garrison in the Middle East returned to Australia in January, 1955.

For further details see sections relating to the respective Services.

6. **National Service Training.**—(i) *Liability.* The National Service Act 1951-1953 requires every male ordinarily resident in Australia, other than certain officials in the service of international bodies, diplomatic personnel, men already serving in the Permanent Forces and aboriginal natives of Australia, who attains the age of 18 years or who has attained the age of 18 years since 1st November, 1950, to register when called upon to do so by notice published in the *Gazette*.

Every registrant is liable to be called up for service unless he is exempt on the grounds of being subject to prescribed physical or mental disabilities, a theological student, a minister of religion, a member of a religious order, or a person who has established a conscientious objection to all forms of military service. Persons who establish a conscientious objection to combatant service only are called up for non-combatant duties.

Provision is made for deferment of call-up for limited periods of students and apprentices and of individuals who can establish before a court that their call-up would result in exceptional hardship to themselves, their parents or dependants. In September, 1954 the Government announced that, for the time being, the training of those who do not live within reasonable distances of C.M.F. training centres and those engaged full-time as rural workers in the production of foods and raw materials would be deferred. The total number of National Servicemen to be trained will continue at the present figure of 33,750 annually.

(ii) *Conditions of Service.* Service under the National Service Scheme is with the Citizen Naval Forces, the Citizen Military Forces or the Citizen Air Force but no person is called up for service with the Citizen Naval Forces or the Citizen Air Force unless he has volunteered for service beyond the limits of Australia.

In the Navy and Air Force, National Servicemen are required to serve a total period of 154 days training which is performed in one continuous period except in the case of students who may complete their service in two periods of 77 days in successive years. In the case of the Army, the total period of training is 140 days, consisting of 98 days continuous training and 21 days training in camps or week-end bivouacs in each of the following two years. In all cases the Act requires a further term of service as reservists until five years from the date of call up. (*See also* sections dealing with the respective Services.)

(iii) *Strength.* To 31st December, 1954, 113,172 persons had been called up for training.

§ 2. Naval Defence.

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

2. **The Present System.**—(i) *General.* (a) *Royal Australian Navy up to 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.

(b) *Post-war Programme.* The following is a summary of the Naval Programme:—

(1) **Ships in Commission**—The Fleet consists of:—

Carrier Force : 2 Light Fleet Carriers, 4 Destroyers.

Escort Forces : 4 Frigates.

Surveying Duties : 2 Survey Ships and their tenders.

Training Ships : 1 Frigate, 5 Ocean Minesweepers.

Auxiliary Vessels : 3 Boom Defence Vessels, 1 Ocean-going Tug, 1 Armament Store Carrier, 3 Patrol Vessels, 2 General Purpose Vessels, 3 Search and Rescue Vessels.

- (2) In addition to the ships in Commission, a substantial reserve fleet will be maintained in good condition against any future emergency.
- (3) Personnel—The strength of the Royal Australian Navy has been pegged at 14,400, comprising 1,578 Officers and 12,822 ratings.
- (4) 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 will be attached to the Naval Reserve Training Establishment in their State until completion of their five-year liability for mobilization in war or emergency. The present annual intake of National Servicemen is 1,200.

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, viz.:—(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.

- (5) 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. *Sydney*, one training carrier, H.M.A.S. *Vengeance*, and one Naval Air Station, H.M.A.S. *Albatross* at Nowra, New South Wales. A new aircraft carrier H.M.A.S. *Melbourne*, which is fitted with the angled deck and the steam catapult will be commissioned in the United Kingdom in 1955. Also in 1955, some front line squadrons will re-equip with turbo-jet and turbo-prop aircraft.

- (6) *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 destroyers, four anti-submarine frigates, one boom-working vessel and two inshore minesweepers (work not yet commenced); the conversion of four "Q" class destroyers to fast anti-submarine frigates (one has been completed and work on three is in progress) and twelve minesweepers into comprehensive ocean minesweepers (ten have been completed); the modernization of two "Tribal" class destroyers (which have been completed); and the large refit of H.M.A.S. *Hobart*. In addition an aircraft carrier and a fleet tanker are being built in the United Kingdom for the Royal Australian Navy.

(c) *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.

(ii) *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.

(iii) *Naval College*. Seventy-one cadet midshipmen (including four from the Royal New Zealand Navy) entered the Naval College for training in the year commenced January, 1954. At 30th June, 1954 there were 182 cadet midshipmen undergoing training at the College.

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

(v) *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.

(vi) *Foreign Service*. The R.A.N. is represented in Japan by H.M.A.S. *Commonwealth* base establishment in Kure. During the year ended June, 1954 the following ships of the Royal Australian Navy served in Korean waters:—H.M.A. Ships, *Sydney*, *Murchison*, *Arunta*, *Tobruk* and *Culgoa*.

(vii) *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.

3. Ships of the Royal Australian Navy.—The following ships were in commission or in reserve in June, 1954 :—

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1954.

Vessel.	Description.	Displacement.
		Tons.
In Commission—		
<i>Sydney</i>	Aircraft Carrier	14,000
<i>Vengeance</i>	"	14,000
<i>Anzac</i>	Destroyer	2,325
<i>Tobruk</i>	"	2,436
<i>Arunta</i>	"	1,870
<i>Warramunga</i>	"	1,870
<i>Quadrant</i>	Frigate	1,760
<i>Shoalhaven</i>	"	1,544
<i>Murchison</i>	"	1,544
<i>Condamine</i>	"	1,420
<i>Hawkesbury</i>	"	1,420
<i>Barcoo</i> (Surveying Ship)	"	1,544
<i>Warrego</i> (Surveying Ship)	"	1,060
<i>Wagga</i>	Ocean Minesweeper	650
<i>Cootamundra</i>	"	650
<i>Junee</i>	"	650
<i>Fremantle</i>	"	650
<i>Gladstone</i>	"	650
<i>Lachlan</i> (Surveying Ship), on loan to the Royal New Zealand Navy	Frigate	1,420
In Reserve—		
<i>Bataan</i>	Destroyer	1,870
<i>Quailty</i>	"	1,760
<i>Barwon</i>	Frigate	1,420
<i>Burdekin</i>	"	1,420
<i>Culgoa</i>	"	1,420
<i>Diamantina</i>	"	1,420
<i>Gascoyne</i>	"	1,420
<i>Macquarie</i>	"	1,420
<i>Swan</i>	"	1,060
<i>Ararat</i>	Ocean Minesweeper	650
<i>Bunbury</i>	"	650
<i>Bowen</i>	"	650
<i>Bundaberg</i>	"	650
<i>Benalla</i>	"	650
<i>Castlemaine</i>	"	650
<i>Deloraine</i>	"	650
<i>Dubbo</i>	"	650
<i>Glennelg</i>	"	650
<i>Gympie</i>	"	650
<i>Horsham</i>	"	650
<i>Katoomba</i>	"	650
<i>Kapunda</i>	"	650
<i>Latrobe</i>	"	650
<i>Lithgow</i>	"	650
<i>Mildura</i>	"	650

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1954—*continued*.

Vessel.	Description.	Displacement.
In Reserve—<i>continued</i>.		Tons.
<i>Parkes</i>	Ocean Minesweeper	650
<i>Rockhampton</i>	"	650
<i>Strahan</i>	"	650
<i>Shepparton</i>	"	650
<i>Townsville</i>	"	650
<i>Platypus</i>	Depot Ship	3,455
Under Dockyard Control—		
<i>Hobart</i>	Cruiser	7,100
<i>Queenborough</i>	Destroyer	1,760
<i>Quiberon</i>	"	1,760
<i>Quickmatch</i>	"	1,760
<i>Colac</i>	Ocean Minesweeper	650
<i>Cowra</i>	"	650
Miscellaneous vessels in commission and reserve—sixty-one		

4. **Strength of Royal Australian Navy.**—The serving strength of the Royal Australian Naval Forces, both permanent and reserves, at 30th June, 1954 was 1,200 officers and 12,657 ratings including 60 native ratings of the Papua and New Guinea Division of the Royal Australian Navy. In addition, 12 officers and 244 ratings of the Women's Royal Australian Naval Service were serving and 194 cadet midshipmen were undergoing training, including 182 at the Naval College. Reserve strength comprised 1,240 officers and 5,474 ratings.

§ 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, 1953.* The following particulars show the numbers of males of military age in the population of Australia as at 30th June, 1953. The total number of cadet age, 14 and under 18, was 478,316; of citizen soldier age, 18 and under 26, 979,183; and 26 and under 35, 1,258,834; making a total of 2,716,333. 18 and under 35, which is considered the best period for military service. In addition to the above-mentioned there were 2,261,702 males 35 and under 60, in Australia at 30th June, 1954.

(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, 1954 being as follows:—

COMMAND ORGANIZATION.

Army Headquarters.						
Northern Command	Eastern Command	Southern Command	Central Command	Western Command	Tasmania Command	Northern Territory Command
All formations and units in 1st Military District and New Guinea.	All formations and units in 2nd Military District.	All formations and units in 3rd Military District.	All formations and units in 4th Military District.	All formations and units in 5th Military District.	All formations and units in 6th Military District.	All formations 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 present plan for the raising of the Australian Regular Army envisages a total of 26,000 soldiers and 5,000 civilians. The plan for the Citizen Military Force contemplates a strength of 72,000, including National Servicemen, by December, 1954.

(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 by April, 1954, comprised 265 School Cadet units with a posted strength of 29,875 all ranks and 1,236 Regimental Cadets posted to Citizen Military Force units.

(c) *National Service Training Scheme.* Under the National Service 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.

(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.

(vi) *Korea.* On 2nd August, 1950, the Commonwealth Government announced its decision to raise and despatch 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 27 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 28 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) *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 Queenscliff, 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 1953 course were students from the United Kingdom, Canada, New Zealand, India, Pakistan, the United States of America 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.

(viii) *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 14s. 1d. per day in their first year, rising to 22s. 9d. 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.

(ix) *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 six 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.

(x) *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.

(xi) *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.

(xii) *Army Schools.* Army 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 Army 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.

(xiii) *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, 1954 was 1,060 clubs and 43,035 members.

(xiv) *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.

3. *Strength of Australian Military Forces.*—The effective strength of the Australian Military Forces at 31st December, 1954 was as follows:—Australian Regular Army, 21,393; Regular Army Special Reserve, 3,021; Citizen Military Force (including National Service Trainees), 96,070; Australian Cadet Corps, 31,111.

§ 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, page 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 31st August, 1954 No. 1 Squadron had dropped about 20,000,000 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 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 Overseas Headquarters is located at London and an Air Attaché at Washington, United States of America.

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) **Area Headquarters.** There are three Area Headquarters (North Eastern, North Western and Western) responsible to Home Command for the command of units within their geographical areas.
- (b) **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.
- (c) **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.
- (d) **Aircraft Depots.** These units specialize in major overhauls, etc., of aircraft and equipment and relieve flying unit ground staff of these commitments.
- (e) **Stores Depots.** Stores and equipment ordered by the R.A.A.F. are delivered to these centrally located depots for distribution to units.
- (f) **Flying Training, Ground Training, Navigation, Radio and Air Armament Training Units,** which specialize in the aircrew and ground training required by the R.A.A.F.
- (g) **Airfield Construction Squadrons.** These units specialize in the construction of R.A.A.F. aerodromes and associated buildings and works services.
- (h) **Royal Australian Air Force College.** This unit is the training college for officer cadet entrants to the R.A.A.F.
- (i) **Telecommunications Units.** These units are responsible for the communications services of the R.A.A.F.
- (j) **R.A.A.F. Staff College.** This college trains specially selected R.A.A.F. officers for higher staff and command posts.

4. **National Service Training Scheme.**—Under the National Service Training Scheme, 3,330 personnel undergo training each year (*see also* § 1, para. 6 above).

5. **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 and Meteor ; transport squadrons—Dakota ; maritime reconnaissance squadrons—Lincoln and Neptune ; tactical reconnaissance—Mustang and Auster ; training—Tiger Moth, Wirraway, Mustang, Dakota, Lincoln, Beaufighter and Winjeel. Delivery to the R.A.A.F. of Avon Sabre aircraft commenced in September, 1954.

6. **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 16,450 personnel.

7. **Strength of Royal Australian Air Force.**—At 1st October, 1954 the strength of the Royal Australian Air Force was as follows :—Permanent Air Force, 14,882 ; Active Citizen Air Force, 745 ; Active Reserve, 1,569 and General Reserve, 19,724. In addition, 3,330 National Service Trainees undergo 154 days' training each year and are then transferred to the Reserve.

8. **Women's Royal Australian Air Force.**—At 1st October, 1954 the Women's Royal Australian Air Force had an establishment of 832, with an enlisted strength of 682. There are 27 musterings, excluding W.R.A.A.F.'s. 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. 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 trainee W.R.A.A.F.'s. 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 W.R.A.A.F.'s. to R.A.A.F. units within their home State. This rule applies for those who wish to serve in their home State, but for W.R.A.A.F.'s. desirous of travel, they may indicate their preference and be posted to whichever State they desire.

§ 5. War Gratuities.

1. **1914–18 War.**—Reference is made in earlier issues of the Official Year Book (*see* No. 15, p. 930) to the bonus payable in accordance with the War Gratuity Acts of 1920 as a war service gratuity to soldiers and sailors who served in the 1914–18 War. Owing to limitations of space this information cannot be repeated, but it may be noted that the gratuity was paid in Treasury Bonds, maturing not later than 31st May, 1924, and bearing interest at 5½ per cent. In necessitous cases payment was made in cash when desired by the person entitled. The first gratuities were made available about the beginning of June, 1920. The total amount paid to 30th June, 1953 was £27,515,036 and bonds amounting to £11,780 had not been redeemed at that date.

2. **1939–45 War.**—Briefly the War Gratuity Act 1945–1947 provided for payment to members of the Forces of war gratuity (a) at the rate of £3 15s. per month of overseas service, subject to a qualifying period of 90 days continuous or 180 days in the aggregate in twelve months, and of certain subsequent periods in Australia, and (b) at the rate of 15s. per month of Australian service after 6th December, 1941, subject to a qualifying period of six months' service, other than that for which payment at the overseas rate was made. Except for those coming within certain specified categories, members who performed overseas qualifying service were paid a minimum of twelve months' gratuity at the overseas rate, irrespective of whether the full period of twelve months had been completed or not.

In cases of death due to war service either overseas or in Australia, where members of the family were totally dependent on the deceased member, a minimum payment equivalent to three years' gratuity calculated at the oversea gratuity rate could be made. In respect of all other cases of death, overseas and in Australia, due to war service, gratuity at the rate accruing to the member at the date of notification of his death was continued for a further seven months.

The period of entitlement to gratuity terminated at the date of discharge or on 30th June, 1947, whichever was the earlier. The bulk of the payments were made on 3rd March, 1951, but in certain circumstances payments were made at earlier dates. Compound interest was allowed at the rate of 3.25 per cent. per annum on the yearly credit balances. For greater detail of the provisions of the Act *see* Official Year Book No. 36, pp. 1073-4 or the Official Report prepared by the Central War Gratuity Board. This report, entitled "Report on the Administration of the War Gratuity Act 1945-47", was tabled in Parliament in December, 1953.

A Registrar of War Gratunities controls the register in which are kept the accounts of all persons entitled to war gratuity. Provision was made for financing the Act by appropriation from Consolidated Revenue Fund and by borrowing. The War Gratuity Appropriation Act 1948 created a trust account for the payment of gratuities. Particulars of the operations of this fund during the years 1949-50 to 1953-54 were as follows :—

WAR (1939-45) GRATUITY TRUST FUND.
(£'000.)

Particulars.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Balance brought forward ..	30,051	36,751	5,934	4,545	4,351
Receipts	9,943	30,630	..	..	Dr. 4,000
Expenditure	3,243	61,447	1,389	194	87
Balance carried forward ..	36,751	5,934	4,545	4,351	264

§ 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 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 of munitions (including aircraft) required by the Services in government-operated factories and in industry under contract to the Government. It is also responsible for all those matters incidental to production, including the planning of 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 Acts 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, magazines 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 are developed in the Government factories in peace of which industry may undertake mass production in war.
- (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—Albion, Maribyrnong, Victoria ; Mulwala and St. Mary's (part), New South Wales ; Ordnance—Maribyrnong, Bendigo, Echuca, Port Melbourne Marine Engine Works, all located in Victoria, and Small Arms Factory, Lithgow, New South Wales. The operation of these factories are complementary to each other in the manufacture of a range of basic munitions. The factories do not compete with each other ; 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 and assembly. In the case of small arms ammunition, however, the factory makes the complete round, receiving the propellant from the Explosives Factory. The Ordnance Factories make principally 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 Factory makes 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 a joint effort between the Government factories and private contractors in industry. In peace, industry produces components for ammunition and other stores plus complete equipments such as electronics and motor vehicles for the Services. Industry would also provide the capacity in war for mass production of these items and other components using the techniques developed 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 Division of Aircraft Production of 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 Division, together with the responsibility of supplying aircraft and engine spare parts and airborne equipment generally.

(b) *Aircraft, Engine and Other Production.* At 1st July, 1954, the approved production programme 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, Avon Sabre jet-engined fighters, Winjeel basic trainers and Rolls Royce Avon turbo-jet engines at Commonwealth Aircraft Corporation Pty. Ltd., and Vampire jet-trainers at De Havilland Aircraft Pty. Ltd.

Associated concurrent activities included the production of maintenance parts of aero engines and of undercarriages and undercarriage parts at the Aircraft Engine Factory, the repair and overhaul of propellers at the Propeller Annexe, production of heavy forgings at the Heavy Forge Annexe and the manufacture of aircraft pressed metal parts at the Pressed Parts Annexe.

(c) *Design and Development Projects.* Concurrently with the production programmes, projects involving original design studies in aircraft and aero engine fields were advanced during the year at the Government Aircraft Factory and at the works of Commonwealth Aircraft Corporation Pty. Ltd.

At the former, the first stage of the design and development of radio-controlled target aircraft for use at the Rocket Range, Woomera, South Australia, covering both piloted and unmanned versions of the aircraft, had been completed at 1st July, 1954, and the quantity production of an improved version of the pilotless aircraft was in progress with modifications being incorporated progressively as flying experience with the aircraft increased.

The Commonwealth Aircraft Corporation advanced the Winjeel trainer from the prototype stage into production.

(d) *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 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 aircraft were repaired and extensively modified at the Government Aircraft Factory, together with repair of Jindivik aircraft. Wirraway aircraft and single row Wasp radial engines and Rolls Royce Nene turbo-jet engines were overhauled by Commonwealth Aircraft Corporation Pty. Ltd. in Melbourne, while Rolls Royce Merlin and twin row Wasp engines from the R.A.A.F. and Rolls Royce Griffon and Bristol Centaurus engines from the R.A.N. were overhauled at the Aircraft Engine Factory in Sydney. Wright turbo-compound engines from R.A.A.F. Neptune aircraft were overhauled by Qantas Empire Airways.

Vampire, Mosquito and Tiger Moth aircraft and Gipsy Major and Goblin engines were repaired and overhauled at De Havilland Aircraft Pty. Ltd., and Dakota transport and Wirraway aircraft at the Government workshops at Parafield, South Australia.

The repair and overhaul of carrier-based Fairey "Firefly" and Hawker "Sea Fury" aircraft operated by the R.A.N. were handled by the Fairey-Aviation Company of Australasia Ltd. in Sydney.

Sycamore helicopter aircraft of Bristol design and the Alvis "Lionides" engines with which they are equipped were repaired and overhauled by Bristol Aviation Services, also in Sydney. The same company also undertook the repair and overhaul of Bristol Freighter aircraft for the R.A.A.F., including the Bristol Hercules engines with which those aircraft are equipped.

(e) *Avalon Test Field.* During the year, the new aircraft flight test field constructed 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.**—A Defence Supply Planning Branch was established in July, 1950 within the (then) Department of Supply to co-ordinate the planning of expansion of production capacity in government-owned factories and in industry. When the Department of Defence Production was created, the Branch was transferred to that Department as the Defence Production Planning Branch.

Broadly, the functions of the Branch are :—(i) to arrange production in industry of current requirements for the Defence Services ; (ii) to plan the expansion of production capacity to meet such requirements for mobilization and war.

The following production and related sections exist within the Branch :—(a) Ammunition ; (b) Radar and Telecommunications ; (c) Materials ; (d) Chemicals and Chemical Engineering ; (e) Weapons and their Equipment including equipment involving optics ; (f) Engineer Stores including Mobile Equipment and Small Craft ; (g) Production Plant and Equipment ; (h) Instruments ; (i) Electrical. The production sections have a particular reference to the manufacture of defence stores and components by industry.

The Defence Production Planning Branch is the executive instrument of a Committee of the same name. The three Defence Services, the Departments of Defence, Defence Production, Supply and National Development are represented on the Committee. 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.

To advise the Department in the development of industrial mobilization plans to meet the requirements of war relating to particular industries, the following Industry Advisory Committees have been created :—Ammunition Industry, Electrical Industry, Explosives and Chemicals Industry, Materials Industry, Military Vehicles Industry, Machine Tools and Gauges Industry, Radar and Telecommunications Industry and Weapons and their Equipment.

The Department has undertaken a survey of industrial facilities to determine the ability of industry to meet the assessed war and mobilization requirements of the Armed Services.

5. Finance and Accounts.—The expenditure on munitions, munitions factories, aircraft production, etc., during 1952–53 and 1953–54 is shown in the following table:—

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

Particulars.	Expenditure.	
	1952–53.	1953–54.
Parliamentary Appropriations	(a) 9,186	7,307
Trust Fund Accounts—		
Government Factories and Establishments	14,928	13,422
Manufacture of Munitions	10,528	11,054
Munition Materials	31	34
Defence Production Materials	581	233
Aircraft	15,032	12,663
Strategic Stores and Equipment	2,001	..
Total Trust Fund Accounts	43,101	37,406
Total Expenditure	52,287	44,713

(a) Includes contribution under Superannuation Act and Audit.

§ 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, hardware, boots and other like supplies) required by Service and other authorities; (b) research and scientific development in relation to war *matériel*, including the operation of the Long Range Weapons and other defence science 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 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) acquisition, maintenance and disposal of stocks; (i) sale or disposal of surplus or unserviceable property (except buildings or land); (j) provision of Commonwealth transport facilities; (k) security service for Supply and Defence Production Departments; (l) arrangements for ascertaining costs and control and limitation of profits on production contracts; (m) co-ordinating estimates, allocation and commitment of resources for Defence Supply needs (including munitions) and liaison with the National Security Resources Board; (n) 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 and to the extent facilities are available.

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-Australian Long Range Weapons Organization. The headquarters of the Branch is situated at 339 Swanston-street, Melbourne, and the following establishments are included in the Branch :—Long Range Weapons Establishment, Salisbury, South Australia ; Chemical and Physical Research Laboratories, Salisbury, South Australia ; Defence Standards Laboratories, Maribyrnong, Melbourne ; Aeronautical Research Laboratories, Fishermen's Bend, Melbourne.

(ii) *Long Range Weapons Establishment, South Australia.* The Long Range Weapons Project is a joint United Kingdom-Australian one, the United Kingdom being responsible for the development of guided weapons and Australia providing the facilities necessary for the testing of such weapons. The Establishment is situated at Salisbury, South Australia, in premises established during the 1939-45 War for use as an explosives filling factory. In addition to the base establishment at Salisbury, there are two other centres, namely the Testing Ranges at Woomera and the R.A.A.F. Component at Mallala.

At Salisbury a staff of scientific, administrative and industrial personnel has been built up since the inception of the project. Many of the scientific personnel have been recruited from the United Kingdom and a number of Australian scientists have received training in United Kingdom Research Establishments under the Scientific Trainee Scheme.

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) adjacent to the Long Range Weapons Establishment at Salisbury was opened in 1954 by H.R.H. the Duke of Edinburgh. The aircraft and flying personnel required for the project have been made available 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-continental railway line.

A number of these testing ranges are now in operation and the tempo of trials is increasing. 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.

(v) *Chemical and Physical Research Laboratories, Salisbury, South Australia.* A section of Defence Standards Laboratories Staff engaged on explosives and physical research has been transferred to the Salisbury area, and this Group, together with the Electronics Research Laboratory and the Propulsion Research Laboratory form a new establishment designated the Chemical and Physical Research Laboratories. These laboratories are engaged on research in the field of propulsion, explosives and specific problems in the field of electronics.

5. **Design and Inspection Branch.**—The functions of this Branch fall into two clearly defined categories : (a) Design catered for by the Technical Design Establishment, and (b) Inspection catered for by a specialized Inspection Service.

(a) *Design.* The word "Design" is used here in the wider sense of a design authority. For example, armament production in Australia is based on British designs, but it is necessary to have in Australia a design authority to which the production agencies can refer problems arising out of differences in British and Australian manufacturing practices, techniques, skills, materials and tooling. A high percentage of Army stores is of a commercial or near-commercial pattern. Examples of these are trucks, earth-moving equipment, electrical and general engineering equipment, and general stores. In many of these items the amount of design may be small or may be carried out by their manufacturers, but selection of types, makes and models, and their variation if necessary, calls for the existence of a design authority with facilities for testing, reporting and making recommendations to guide selection. In each field different problems arise for the design authority. For example, radio development for the Army is carried out by the trade, but a design authority is required as an executive link between the users and the designers and manufacturers.

To meet its responsibilities as a design authority, a Design Establishment has been set up with the following elements :—

Four design sections to deal with design problems relating to the selection and the manufacture of armaments, vehicles, signal equipment, and general engineering plant and equipment.

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 ultimate objective of the design authority is to ensure proper selection of each of the many thousands of types of armaments, vehicles, telecommunications equipment, general engineering equipment, general stores, and clothing, etc., and that up-to-date specifications, drawings or sealed samples of each type are always available to the Army to support its demands and orders.

(b) *Inspection.* The Inspection Service whilst primarily intended for the inspection of supplies for the Army, also undertakes inspection on behalf of other Departments, and all proof of armament stores on behalf of the three Services.

The Inspection Service is divided into three main Groups, Engineering, Ammunition and Small Arms, and General Stores and Clothing. A Proof and Experimental Group and an Equipment Information Section are included. The latter holds and issues a complete range of Army drawings and specifications including United Kingdom and Australian Joint Service Specifications. It provides the data on which production is based.

6. **Contract Board**—(i) *General.* The Contract Board and its State Organization under the Supply and Development Act 1939–1948 and Regulations is the authority responsible for purchasing supplies or 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 also charged 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.

(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 1952–53 and 1953–54.

CONTRACT BOARD ORGANIZATION : PURCHASES AND REALIZATIONS FROM DISPOSALS.

(£.)

State.	Purchases.		Realizations from Disposals.	
	1952-53.	1953-54.	1952-53.	1953-54.
Contract Board, Victoria	29,283,062	30,032,564	908,122	1,327,420
District Contract Board—				
New South Wales	8,347,442	6,161,285	493,945	785,378
Queensland	2,183,589	1,177,587	187,066	336,660
South Australia	1,420,950	924,090	129,323	180,367
Western Australia	746,954	518,556	84,589	228,992
Tasmania	112,801	147,507	18,317	21,905
Total	42,094,798	38,961,589	1,821,362	2,880,722

7. **Tinplate.**—During the year 1954, tinplate was in free supply from the United Kingdom and the United States of America, which are the main sources of supply for Australia.

Tinplate usage in most branches of the industry increased considerably, and the consumption for 1954 was higher than for some years. The average consumption over the ten years ended 30th June, 1954 was 113,000 tons per annum.

8. **Stores and Transport Branch.**—This Branch functions as the central authority for the provision of storage and transport facilities necessary to meet the official requirements of Commonwealth Departments and authorities. It has branches in all States and agents in Canberra and Darwin.

At 30th June, 1954 it had under its control, land, buildings, plant and machinery valued at over £5,750,000 and 2,450,000 square feet of storage space, of which 1,900,000 square feet was Government-owned and the balance held under tenancy.

9. **Finance Branch.**—The expenditure for Department of Supply activities during the years 1952-53 and 1953-54 are shown in the following table.

SUPPLY : TOTAL EXPENDITURE.

(£'000.)

Particulars.	Expenditure.	
	1952-53.	1953-54.
Parliamentary Appropriations	(a) 11,519	(b) 11,846
Special Appropriation—Aluminium Industry .. ..	.. ..	2,451
Total Appropriations	11,519	14,297
Trust Fund Accounts—		
Aluminium Production	2,404	..
Minerals Production	130	155
Government Factory (Clothing)	1,706	2,275
Stores and Transport	4,924	4,467
Strategic Stores and Equipment Reserve	Cr. 644	2
Total Trust Fund Accounts	8,520	6,899
Total Expenditure	20,039	21,196

(a) Includes amount appropriated for audit, superannuation and debt charges.

(b) Includes amount appropriated for audit and superannuation 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.

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 being erected at Bell Bay, Northern Tasmania, is nearing completion, and is expected to be in production by July, 1955. The plant will be supplied with power from a new generating station at Trevallyn, near Launceston.