#### CHAPTER XXVIII.

#### DEFENCE.

#### § 1. Department of Defence.

- 1. Functions and Organization.—(i) Functions. Subject to the authority of Cabinet, the Minister and Department of Defence are responsible for the following functions.—
  - 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.
  - The defence aspect of armistice and peace terms, control commissions, and forces of occupation.
  - Matters of policy or principle and important questions having a joint Service or inter-departmental defence aspect.
  - 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.
  - The Commonwealth War Book, which is a summary of national plans for an emergency as developed in departmental war books.
  - The administration of inter-Service organizations, such as the joint intelligence machinery.
  - The defence aspect of:—the strength and organization of the forces, higher appointments in the Services, honours and awards.
  - Advice on the military aspect of civil defence.
- (ii) Organization, higher defence machinery and the control of the joint Service machinery. 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, the Defence Administration 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 Chairman of the Chiefs of Staff Committee, 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 the co-ordination of military, strategic, economic, financial and external affairs aspects of defence policy,
- (b) matters of policy or principle and important questions having a joint Service or an inter-departmental defence aspect, and
- (c) such other matters having a defence aspect as are referred to the Committee by or on behalf of the Minister for Defence.

The Chiefs of Staff Committee meets regularly for the discussion of technical matters on a joint service basis, and is responsible in peace for the preparation of strategic appreciations and military plans. The functions of the Defence Administration Committee, in addition to the regular review of the progress of the Defence Programme, include the co-ordination and integration of Service activities and the improvement of methods and organization. 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) Defence Business Board. The Defence Business Board furnishes advice on business matters of common interest to the three Services, or important subjects on which the collective advice of the Board is desired from the business aspect, with a view to promoting efficiency and economy in the execution of the Defence Programme. 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.
- 2. Basis of Current Defence Policy.—The main strategic factors affecting current defence policy may be summarized as follows.—
- (i) Because of the nuclear deterrent, the outbreak of limited or local wars is more likely than a global or full-scale war.
- (ii) In any likely war in the foreseeable future, Australia's interests will most likely be centred in South-East Asia, which is its first line of defence.
- (iii) The defence of South East Asia and Australia is to be sought through the concept of collective security. The greatest importance is attached, in Australia's defence policy and planning, to participation in the collective defence arrangements developed in its area of strategic interest—SEATO, ANZUS and British Commonwealth arrangements for defence co-operation. Such arrangements are entirely in accord with the United Nations Charter.
- 3. The Defence Programme.—(i) Programme. The level of national defences must be adequate to enable Australia to meet its regional and home defence responsibilities. The present three year defence programme which runs until June, 1962, is based on a comprehensive review of defence policy which was undertaken in 1959, It is designed to meet present strategic requirements and has, as its primary aim, the continual improvement of the ability of the Australian forces to act swiftly and effectively, in co-operation with allied forces, to meet limited or local war situations. Emphasis is placed in the programme on two major points: first, to have the forces, both regular and citizen, more readily available than they have been in the past; secondly, to provide them with modern equipment, in greater quantity and more varied types. Equipment used by the Australian forces will be standard or compatible, as far as possible, with that used by United States forces, with whom they are associated in defence arrangements.

Primary emphasis is placed in the Royal Australian Navy on anti-submarine capability and training, and provision exists for the acquisition of aircraft, vessels, and other equipment suitable for this purpose. Two new type anti-submarine frigates have already been delivered to the R.A.N. By agreement with the Royal Navy, modern submarines are maintained on the Australian station for effective anti-submarine training. For particulars of the operational fleet, see page 1096.

Important decisions relating to Army organization which will improve considerably the availability and operational effectiveness of the Australian Army, both regular and citizen forces, have been taken and are being implemented. The Army is now composed entirely of volunteers, and the combat elements are being based on the new pentropic division (see page 1097). The programme for modernizing army equipment is being put into effect, and further modern weapons, vehicles, aircraft, and marine craft are being obtained.

For the R.A.A.F., the Mirage III. aircraft with airframes and engines manufactured to a substantial extent in Australia has been selected as the future replacement of the present Avon Sabre fighter aircraft. Previous decisions taken to strengthen elements of the R.A.A.F. are being implemented.

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 (see p. 1101).

(ii) Financial. Details of defence expenditure for 1959-60 and the allocation of the Defence Vote for 1960-61 are set out in the two tables which follow:—

# DEFENCE EXPENDITURE, 1959-60. (£'000.)

Service or Department.		Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.		
Defence				1,168	42	21	1,231
Navy				32,647	8,430	1,216	42,293
Army				52,571	9,626	3,536	65,733
Air				44,335	13,471	4,043	61,849
Supply				13,726	2,663	4,411	20,800
Other Serv	rices	••	••	1,204	1	474	1,679
Tota	al	**	••	145,651	34,233	13,701	193,585

## DEFENCE VOTE, 1960-61. (£'000.)

Servic	e or Dep	partment.	Maintenance.	Capital Material Requirements, Machinery, Plant and Equipment.	Capital Buildings, Works and Acquisition of Sites.	Total Expenditure.	
Defence			 1,256	55	31	1,342	
Navy			 31,755	11,317	1,644	44,716	
Army			 50,926	11,344	3,369	65,639	
Air			 45,669	13,494	4,115	63,278	
Supply			 14,712	3,342	3,167	21,221	
Other Service	es	• •	 1,343	84	530	1,957	
Total			 145,661	39,636	12,856	198,153	

(iii) Personnel Strengths. The personnel strengths of the Services at 31st December, 1960, are shown in the following table:—

#### PERSONNEL STRENGTHS: SERVICES, DECEMBER, 1960.

Category.		1	Navy.	Army.	Air Force.	Total
Permanent Forces Citizen Forces (Volunteers)		(a) (b)	10,519 7,842	20,702 25,765	15,006 748	46,227 34,355
Total Forces	••		18,361	46,467	15,754	80,582

<sup>(</sup>a) Excludes 28 cadet midshipmen not on pay.

<sup>(</sup>b) Excludes 185 nominal reservists.

4. Australian Forces Serving in Malaya.—Australia has participated with the United Kingdom and New Zealand in the Commonwealth Strategic Reserve in Malaya since it was first established in 1955. At the request of the Government of the Federation of Malaya, the Strategic Reserve continues to be stationed in that country and to assist in border security operations against the communist terrorists.

#### § 2. Naval Defence.

- 1. Administration.—Under the provisions of the Constitution, the Minister of State for the Navy administers the Department of the Navy. Under the Naval Defence Act 1910-1952, the Royal Australian Navy is administered by the Naval Board. The Naval Board consists of the Minister as Chairman, four Naval Members, and the Secretary, Department of the Navy.
- 2. Historical.—Prior to 1901, naval defence systems were organized under the State Governments. Information regarding these systems is given in Official Year Book No. 2, page 1084. An outline of the development of Australian naval policy is given in Official Year Books No. 3, page 1060, and No. 12, page 1012. An account of the building of the Australian Navy, its cost, the compact with the Imperial Government, and other details appears in Official Year Book No. 15, pages 921-23. The growth and the activities of the Royal Australian Navy during the 1939-45 War are shown in Official Year Book No. 36, pages 1023-27.
- 3. Link with the Royal Navy.—Strong links with the Royal Navy are maintained by a constant exchange of officers for extended tours of duty, and by a full exchange of information and ideas. A liaison staff is maintained by the Royal Australian Navy in London, and by the Royal Navy in Australia. Advanced training and staff courses in the United Kingdom are provided by the Royal Navy for Royal Australian Navy officers.

A liaison staff is also maintained by the Royal Australian Navy in Washington and a comprehensive exchange of information is provided by this link. Staff courses in the United States are also attended by officers of the Royal Australian Navy.

- 4. Strength of the Fleet.—Ships in commission at June, 1961. were.—
  H.M.A. Fleet.
  - 1 Aircraft carrier.
  - 4 Destroyers.
  - 3 Fast anti-submarine frigates.
  - 5 Frigates.
  - 4 Auxiliary vessels.
- 5. Personnel.—The authorized establishment strength of the Royal Australian Navy has been pegged at 12,800 comprising 1,427 officers and 11,373 ratings. In December, 1960, the actual strength of the Naval Forces, permanent and reserves, serving full time, was 1,170 officers and 8,912 ratings, including 124 native ratings of the Papua and New Guinea Division of the Royal Australian Navy. 68 cadet midshipmen were undergoing training at the Naval College. 14 officers and 296 ratings were serving in the Women's Royal Australian Naval Service. Reserve strength comprised 1,095 officers and 6,812 ratings, serving part-time.
- 6. Women's Royal Australian Naval Service.—The established personnel strength of the W.R.A.N.S. is 16 officers and 370 ratings. They serve in the shore establishments in the following categories: Radio-operators, Regulating, Writers, Stores Assistants, Sick Berth Attendants, Motor Transport Drivers, Wrans (Radar Plot), Cooks and Stewards.

- 7. Reserve Training.—Members of the Royal Australian Naval Reserve carry out limited training at night or on Saturday afternoons, plus 13 days' annual continuous training; engagements are for three years and pay is approximately that of the Permanent Naval Forces. Special courses and service of longer duration are available to selected members. The Royal Australian Fleet Reserve consists of former ratings of the R.A.N., R.N., or a Dominion Navy whose obligation to perform training is determined by the length of their permanent naval service.
- 8. Fleet Air Arm.—The Fleet Air Arm of the Royal Australian Navy maintains two front line squadrons, embarked in the operational carrier, H.M.A.S. Melbourne. This ship is fitted with an angled deck, steam catapult and mirror deck-landing sights. Training and support squadrons for H.M.A.S. Melbourne's Sea Venom jet all-weather fighter and ground attack aircraft and Gannet turbo-prop anti-submarine aircraft are based at the Naval Air Station H.M.A.S. Albatross at Nowra, New South Wales.
- 9. Ship Construction and Repair.—Under the present ship construction programme, two anti-submarine frigates are completing at Australian dockyards and will commission in July, 1961. Two more have been launched and are fitting out.

In addition, six coastal minesweepers are being purchased in the United Kingdom and a survey vessel will be constructed at the State Dockyard, Newcastle.

- 10. Naval College.—The Royal Australian Naval College, transferred in 1930 from Jervis Bay, A.C.T., to Flinders Naval Depot, was re-established at Jervis Bay in January, 1958, and was commissioned as H.M.A.S. Creswell.
- 11. Training Establishments.—Flinders Naval Depot, at Crib Point, Westernport, Victoria, is the basic training establishment for ratings in the permanent forces, while several advanced training schools are established in Sydney, New South Wales. The Apprentice Training Establishment at Quaker's Hill, New South Wales, provides secondary education as well as training in trades in which the lads will be employed during their service in the Royal Australian Navy. Junior recruits training was introduced at Fremantle, Western Australia, during the latter half of 1960. A large proportion of instructional hours is devoted to school subjects, and the remaining instructional time is basic naval training and disciplinary training, so that on completion of training, ratings will be ready to undergo technical and specialist courses.
- 12. 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 along this meridian to 10° South, thence west to 78° East.
  - Western.-From 10° South, 78° East, south along this meridian.
- 13. Ship's Service Outside Australian Waters.—During the year ended June, 1961, H.M.A. Ships Melbourne, Vendetta, Vampire, Voyager, Quiberon, Quickmatch and Queenborough served on the Far East Station as units of the Commonwealth Strategic Reserve with headquarters at Singapore. H.M.A. Ships Diamantina, Swan and Gascoyne also made visits beyond the limits of the Australia Station.
- 14. 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 adjacent waters.

15. Ships of the Royal Australian Navy.—The following ships were in commission or in reserve in June, 1961:—

SHIPS OF THE ROYAL AUSTRALIAN NAVY, JUNE, 1961.

Ves	Description.	Displace ment.				
In Commission—						Tons.
Melbourne	• •	• •	• •	Aircraft Carrier	• • •	15,680
Anzac		• •		Destroyer		2,436
Vampire				,,		2,789
Vendetta				,,		2,789
Voyager				,,		2,80
Oueenborough				Frigate		2,020
Quiberon			• • • • • • • • • • • • • • • • • • • •	1		2,020
Quickmatch			• • • •	l "		2,020
Diamantina (Training			• • •	· · ·		1,489
Gascovne (Training)	,	• •	• •	. "	• • • • • • • • • • • • • • • • • • • •	1,489
Swan (Cadet Training)		• •		"		1,060
Barcoo (Survey)	•••	• • •		,,	• • •	1,47
Warrego (Survey)	••	• • •	• •	,,	•••	1,060
Kimbla (Trials)				Boom Defence Vessel		73:
• •	• •	• •	••	{	• •	
Bass (Survey)			• •	General Purpose Vess	el	250
Banks (Fishery Protect	ction)			23 27 28		250
Paluma (Survey)		••		Coastal Survey Vessel		240
In Reserve—						1
Sydney				Aircraft Carrier		15,740
				Doutenance		
Arunta	• •	• •	• •	Destroyer	• •	2,013
Tobruk	• •	• •	• •	*,		2,43
Warramunga	• •	• •	• •	*,	• •	2,01
Culgoa				Frigate		1,53
Quadrant		٠.		,,		2,02
Wagga (Training)				Ocean Minesweeper		76
	• •	• •	• •	· -	• •	1
Koala				Boom Working Vesse	١.,	76
Kangaroo		• •		,, ,,		76
Karangi				" " "		76
Kookaburra				,, ,, ,,	• •	53:
Sprightly			٠	Fleet Tug		570
Jnder Dockyard Contr	ol—					
Parramatta (a)				Frigate (completing)		
Yarra (a)				" "		
Derwent				,, (fitting out)		1
Stuart	••		• • •		• • •	1 ::
~,,,,,,	• •	••	• •	,, ,,	• •	

<sup>(</sup>a) Commissions July, 1961.

#### § 3. Military Defence.

1. State Systems.—A detailed historical account of the Australian defence forces prior to federation appears in Official Year Book No. 2, pages 1075-80. See also Official Year Book No. 12, page 999.

The strength of the military forces of the States at 31st December, 1900 (the eve of federation), exclusive of cadets, reservists, and rifle club members, 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.

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 a number of 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 re-establishment of the Military Board and the organization of Commands after World War II., see Official Year Book No. 46 and earlier issues.

The National Service Training Scheme was introduced in August, 1951. Full-time training under the scheme was suspended in November, 1959, and part-time training obligations with the Citizen Military Forces ended in June, 1960.

In 1960, a complete re-organization of the Australian Military Forces was undertaken. The re-organization involved the reshaping of the Army by—

- (a) the adoption of a pentropic divisional organization,
- (b) increasing the Regular Field Force,
- (c) reducing the command, training, and administrative structure, and
- (d) converting the Citizen Military Forces to a wholly volunteer force and eliminating national service training.
- (ii) Composition of the Australian Military Forces.
  - (a) The Australian Regular Army. Current planning provides for a Regular Army with a strength of 21,000.
  - (b) The Citizen Military Forces. Planned strength of the C.M.F. is 30,000 volunteers. Members are required to volunteer for service overseas in the event of war.
  - (c) Strength of the Australian Military Forces. The effective strength of the Australian Military Forces at 30th April, 1961, was—Australian Regular Army (including 597 Pacific Islanders and 581 Women's Services), 20,240; Citizen Military Forces, 26,786.
- (iii) Organization. Army Headquarters is responsible for the policy and control of the Australian Military Forces. The Military Board consists of the Minister for the Army, President, the Chief of the General Staff, five Military Members, and the Secretary, Department of the Army. After World War II., Command Headquarters were established to implement Army Headquarters policy and to command and administer those units placed under their authority. Command Headquarters are established in the mainland capital cities of Australia. The geographic extent of Commands is as follows:—
  - Northern Command.—The State of Queensland and a small part of northern New South Wales and the Territory of Papua and New Guinea.
  - Eastern Command.—The State of New South Wales, less those parts included in Northern, Southern, and Central Commands.
  - Southern Command.—The State of Victoria, the State of Tasmania, and part of southern New South Wales.
  - Central Command.—The State of South Australia, plus a portion of south-western New South Wales.
  - Western Command.-The State of Western Australia.
  - Northern Territory Command.—The Northern Territory.

The basic formation in the re-organized Army is the pentropic division, which is designed to have improved tactical capabilities with increased mobility and flexibility under conditions of tropical warfare. The pentropic division consists of five battle groups, each under the direct command of the divisional headquarters. Each battle group has, as its basic component, an infantry battalion of larger size and greatly increased fire-power compared with the infantry battalion which existed prior to the re-organization. In addition to the strengthened infantry battalion, each battle group includes supporting elements such as armour, artillery, engineers, signals, etc.

Two pentropic divisions have been raised. One division consists of two A.R.A. and three C.M.F. battle groups, and the other of five C.M.F. battle groups.

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(iv) Military Training Systems. (a) 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, Victoria, and redesignated 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. As from 1961, the course is to be of eighteen months' duration and will be held biennially. The normal intake is 50 students, and, on successfully completing the course, an officer is awarded the symbol "psc". The course is designed to train selected officers for Grade II. appointments in all branches of the staff in peace and war, and to prepare them to assume, after experience, command and higher staff appointments. Each course includes, among the students, Army representatives of the United Kingdom and other Dominions and countries.

Included in the 1961 course are students from the United Kingdom, Canada, New Zealand, India, Pakistan, Ceylon, United States of America, Thailand, Malaya, Indonesia 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 British Commonwealth, liaison is maintained with other Staff Colleges, and to this end there is also a reciprocal exchange of instructors between the United Kingdom and Australia. An instructor is now also provided by New Zealand.

- (b) 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" and "service" entries. The length of the "normal" course is four years; "service" entry cadets attend for three years. While at the College, Staff Cadets are wholly maintained, and, in addition, receive payment increasing with each year of the course. 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.
- (c) The Officer Caae. School. The Officer Cadet School was established in 1951 at Portsea, Victoria, for the purpose of speeding up the production 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. A special entry provides for candidates up to 25 years. The course is of 44 weeks' duration, and on graduation cadets are appointed second-lieutenants in the Australian Regular Army. Graduates normally proceed to further training at the Army School of the Arm and Service to which they have been allotted, before being posted to regimental duties.
- (d) The Women's Royal Australian Army Corps School. The W.R.A.A.C. School, established in 1952 at Mildura, Victoria, moved to Mosman, New South Wales, in 1958. It has three wings, one whose primary task is the training of officer cadets for the W.R.A.A.C., one for the training of non-commissioned officers at all levels and for other special courses, and one which is a basic training wing. 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.
- (e) 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's 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.

(f) Other 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. 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:-

Jungle Training Centre.
Armoured School.
School of Artillery.
School of Military Engineering.
Transportation Training Centre.
School of Military Survey.
School of Signals.
Infantry Centre.
Army Intelligence Centre.

Royal Australian Army Service Corps School. Royal Australian Army Medical Corps School of Army Health.

Royal Australian Army Ordnance Corps School. Royal Australian Electrical and Mechanical Engineers' Training Centre.

School of Music.

Air Support Unit (Army Component).

- (v) Women's Services. In July, 1950, approval was given for the enlistment of women into the Australian Regular Army on a limited scale. Enlistment into the Royal Australian Army Nursing Service commenced in November, 1950, and into the Australian Women's Army Corps early in 1951. In February, 1951, the Royal Australian Army Nursing Service became a Corps and was designated the Royal Australian Army Nursing Corps (R.A.A.N.C.). During June, 1951, the Australian Women's Army Corps was redesignated the Women's Royal Australian Army Corps (W.R.A.A.C.). 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 are incorporated in the Citizen Military Forces and one company of the Women's Royal Australian Army Corps is located in each Command excluding Northern Territory Command. Companies of the Royal Australian Nursing Corps are located in each Command excluding Northern Territory Command.

- (vi) Forces Overseas. At 30th April, 1961, 1,317 members of the Australian Military Forces were serving in Malaya and Singapore as part of the British Commonwealth Far East Strategic Reserve.
- (vii) History of the Australian Military Forces in War. Members of the Commonwealth Military Forces have taken part in the following campaigns:—the South African War, 1902; the First World War, 1914–1918; the Second World War, 1939–1945; Korea, 1950–1954; Malaya, 1955–1960.
- (viii) The Australian Cadet Corps. The Australian Cadet Corps is a voluntary organization. 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 a foremost position in the scheme of national defence. The Australian Cadet Corps, however, does not form part of the Australian Military Forces. School Cadet units are raised at educational establishments throughout the Commonwealth, except in the Northern Territory. 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, cadet under-officers, warrant and non-commissioned officers on an authorized establishment scale from within school units. School Cadet units may be, and in many cases are, affiliated with Citizen Military Force units.

The establishment of the Corps is 35,500 all ranks, and at 31st March, 1961, comprised 299 School Cadet units with a posted strength of 34,953, all ranks.

#### § 4. Air Defence.

- 1. General.—A statement regarding the preliminary steps taken in connexion with the development of air defence appears in Official Year Book No. 18, page 610, and one on the expansion and development and zones and operations of the Royal Australian Air Force during the 1939-45 War, in Official Year Book No. 36, page 1027.
- 2. 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 Technical Services, Air Member for Personnel, Air Member for Supply and Equipment, Citizen Air Force Member, and the Secretary, Department of Air.

Headquarters of the Royal Australian Air Force is in Canberra. A R.A.A.F. representative is located in London and Air Attachés at Paris and Washington.

The units of the Royal Australian Air Force are organized into the following two functional Commands throughout Australia and its Territories.

- Operational Command. Operational Command is responsible for the command of operational units and the conduct of their operations within Australia and its territories.
- Support Command. Support Command is responsible for the command of training units, supply and servicing units; recruitment and individual training in the R.A.A.F.; and supply and servicing, including technical servicing of the R.A.A.F., in Australia.

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

- Formations. These comprise 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.
- Flying Squadrons. These bomber, fighter, transport and maritime reconnaissance squadrons undertake the operational and, in conjunction with operational conversion units, the operational training flying commitments of the R.A.A.F.
- Operational Conversion Units. These units specialize in operational conversion training of aircrew for the bomber and fighter squadrons.
- Aircraft Depots. These units specialize in major overhauls, etc., of aircraft and equipment and relieve flying unit ground staff of these commitments.
- Stores Depots. Stores and equipment ordered by the R.A.A.F. are delivered to these centrally located depots for distribution to units.
- Flying Training, Ground Training, Navigation, Radio and Air Armament Training Units. These units specialize in the aircrew and ground staff training required by the R.A.A.F.
- Airfield Construction Squadrons. These units specialize in the construction of R.A.A.F. aerodromes and associated buildings and works services.
- Royal Australian Air Force Academy. This unit is the training college for officer cadet entrants to the R.A.A.F.
- Telecommunications Units. These units are responsible for the communications services of the R.A.A.F.
- R.A.A.F. Staff College. This college trains specially selected R.A.A.F. officers for higher staff and command posts.
- 3. Aircraft.—Some of the aircraft which are at present being used in the Royal Australian Air Force are; bomber squadrons—Canberra; fighter squadrons—Avon Sabre; transport squadrons—Dakota, Hercules and Metropolitan; maritime reconnaissance squadrons—Neptune; Army liaison squadron—Bell Helicopter and Cessna; training—Avon Sabre, Canberra, Dakota, Meteor, Vampire and Winjeel.

- 4. Establishment.—The Royal Australian Air Force establishment comprises an operational element and a support element consisting of 16,597 personnel. The support element includes headquarters and administrative staffs and the organization for training, supply and maintenance.
- 5. Strength of Royal Australian Air Force.—At 1st March, 1961, the strength of the Royal Australian Air Force was as follows:—Permanent Air Force, 14,680; Citizen Air Force, 613; and General Reserve, 14,427.
- 6. Women's Royal Australian Air Force.—At 1st March, 1961, the Women's Royal Australian Air Force had an establishment of 842 and an enlisted strength of 665 (not included in the R.A.A.F. strength in para. 5, above). Details of enlistment and service in the W.R.A.A.F. are given in Official Year Book No. 44, page 1058.
- 7. Operations in Korea and Malaya.—Reference to R.A.A.F. participation in operations in Korea and Malaya is contained in Official Year Book No. 39, pages 1251-2 and in subsequent issues.

#### § 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 Supply.

1. General.—Reference to the creation of the Department of Supply is contained in Official Year Book No. 39, page 1257. On 24th April, 1958, the Department of Defence Production was abolished and the functions previously undertaken by that Department were transferred to the Department of Supply. References to those functions and to the activities of the various branches and establishments of the former Department of Defence Production are contained in Official Year Book No. 44, pages 1059-61.

The Minister for Supply administers the Supply and Development Act 1939-1948, except insofar as it concerns the building, repair and maintenance of merchant ships and the building, extension, operation, repair and maintenance of shipyards, drydocking and repair facilities for merchant ships.

2. Functions of the Department.—The Department of Supply is responsible for the following functions.

Defence research and development, 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, the Defence Standards Laboratories and associated establishments.

Manufacture, acquisition, provision and supply of munitions (including aircraft) and miscellaneous goods and services required by the defence forces.

Arrangement of contracts for the supply of goods and the performance of services.

Operation and management of factories, workshops and undertakings concerned in the production of munitions (including aircraft), clothing, canvasware and other defence goods.

Acquisition, maintenance and disposal of strategic materials.

Planning and establishment of manufacturing facilities for the production of munitions and other defence goods.

Investigation and development of Australian sources of supply in connexion with defence.

Sale or disposal of surplus Commonwealth property other than land or buildings.

Provision of Commonwealth transport facilities outside the Australian Capital
Territory.

Provision and control of stores required for or in connexion with matters administered by the Department of Supply, and general storage for other Departments as required.

Provision of security services within the Department.

Arrangements for ascertaining costs and the control and limitation of profits in connexion with the production of munitions and other defence goods.

- 3. 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 at Maribyrnong, Victoria. Finsbury, South Australia, and Alexandria, New South Wales; Aeronautical Research Laboratories, Fishermen's Bend, Victoria.
- (ii) Weapons Research Establishment, Salisbury, South Australia. This Establishment has three main sections, namely, the Trials and Instrumentation Wing, the Weapons Research and Development Wing and the Engineering 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 Engineering Wing designs the technical features of new installations on the range and operates the engineering facilities of the Establishment.

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 established in South Australia at Woomera, which is approximately 280 miles north-west of Adelaide and 9 miles north of Pimba, a settlement on the Trans-continental railway line. Agreements have been signed by the Australian and United States Governments for a co-operative programme for the establishment and operation in Australia, for scientific purposes, of facilities for space vehicle tracking and communications.

A Space Research Station has been established at Island Lagoon, south of Woomera, for optical and telemetry tracking and recording of information from satellite and deep space probe vehicles. The station carries out this work with a Baker Nunn camera, Minitrack radio tracking equipment and an 85 ft. diameter dish radio telescope.

Tracking stations have been set up at Red Lake, north of Woomera, and at Muchea in Western Australia, in connexion with "Project Mercury", the "Man in Space" project of the United States National Aeronautics and Space Administration.

A modern township of 660 family houses and flats and 1,100 single quarters, together with modern amenities such as hospital, school, kindergartens, community store, swimming pool, and all sporting facilities, has been built at Woomera to accommodate the range and allied services personnel and their families.

(iii) Defence Standards Laboratories. The Defence Standards Laboratories at Maribyrnong, Victoria, Finsbury, South Australia, and Alexandria, New South Wales, 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.

- (iv) Aeronautical Research Laboratories. The broad function of the Aeronautical Research Laboratories is the application of scientific knowledge in the field of aeronautics to the operational and technical problems of the armed Services and industry, and to the development of new weapons and military equipment. More specifically, the Laboratories conduct investigations in aerodynamics, structures, materials, and power plants, with particular attention to aeronautical defence problems, especially those of missile design and operational effectiveness. These Laboratories also collaborate with the United Kingdom on aeronautical research matters of mutual interest.
- 4. Production.—(i) Munitions. The Department is responsible for the production in Australia of munitions (other than specialized Navy requirements) for the Australian Services. Production is carried out substantially in government factories but large orders are also placed with private industry.

The following government 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 and Port Melbourne, all in Victoria; Small Arms—Lithgow, New South Wales; Clothing—Victoria.

With the exception of the Clothing Factory, these factories are largely 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 filling factories for filling and assembly. However, the Factory makes the complete round for small arms ammunition, the propellent being supplied by the Explosives Factories. Electronic fuses are also being developed and produced with this factory as the co-ordinating establishment. The private radio industry is producing the electronic components required for these fuses.

The Ordnance Factories have produced armament and propulsion units for the Naval building programme of Daring class destroyers and frigates. Heavy forgings are produced at Maribyrnong and heavy plate fabrications are produced at both Maribyrnong and Bendigo. At Maribyrnong, production capacity exists for fire control equipment. Steel shell bodies are produced at Maribyrnong and passed to Explosives Filling Factories to be filled with explosives and assembled with other components produced at Ammunition Factories.

At Port Melbourne, production capacity exists for large marine diesel engines up to 20,000 b.h.p. At present, two 5,500 b.h.p. "Doxford" engines are in production for the Australian Shipbuilding Board and two 10,500 b.h.p. Sulzer engines are in production for the Broken Hill Proprietary Company Limited, the major components of which are forged or fabricated at Maribyrnong.

The Lithgow Factory is equipped to make the rifles and other small arms for which the Ammunition Factory produces the ammunition. The Factory is currently producing the F.N. 7.62 mm. automatic rifle for the Australian Army to replace the .303 Lee Enfield rifle. Orders for the new rifle have also been received from the New Zealand, Ghana and Malayan Governments. The stocks required for these rifles are produced from Australian-grown timber and fabricated by private industry.

The Clothing Factory makes uniforms and items involving canvas materials for the three services as well as for the Postmaster-General's Department.

(ii) Aircraft. (a) General. Production of military types of aircraft and aero engines and of other aircraft components required by the Royal Australian Air Force is also administered by the Department of Supply. Planning of capacity and the negotiation of contractual arrangements in connexion with aircraft modification, repair and overhaul, and for the supply of certain aircraft and engine spare parts and airborne equipment are also functions of the Department.

The following government factories are operated:—Aircraft Factory, Fishermen's Bend, and Test Field, Avalon, Victoria; and Airframe Repair Workshops, Parafield and Northfield, South Australia.

(b) Aircraft, Engine and Other Production. The approved production programmes for the major aircraft manufacturing organizations comprise the French Mirage supersonic fighter, the Jindivik radio-controlled jet-propelled target aircraft, and the Malkara guided missile at the Government Aircraft Factory, Melbourne; Avon-Sabre jet-engined fighters 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.

The Mirage project is being undertaken on the basis of the Government Aircraft Factory acting as the prime contractor, with the Commonwealth Aircraft Corporation manufacturing the engine, wing and fin.

Jindiviks are being produced for the Weapons Research Establishment at Woomera and for the United Kingdom Government and the Royal Swedish Air Board. The Malkara missile is being developed in accordance with British Army needs.

Production activities included the manufacture of engine parts at the De Havilland Aircraft Engine Factory, Sydney, of aircraft pressed metal parts at Chrysler Australia Ltd., Adelaide, and of turbine and compressor blades for jet engines at National Forge Pty. Ltd., Melbourne.

(c) Repair and Overhaul. During the year, the R.A.A.F. continued the broad policy of returning to the factories in which they were produced all Australian-made aircraft and aero engines requiring major overhaul or 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 for the purpose.

Canberra bomber and Jindivik target aircraft were repaired and modified at the Government Aircraft Factories.

Dakota transport and other miscellaneous aircraft were reconditioned and serviced at the Government workshops at Parafield, South Australia.

Vampire fighters and trainers and carrier-based Sea Venom aircraft were modified, repaired and overhauled at De Havilland Aircraft Pty. Ltd., Bankstown, New South Wales. Engines from Sea Venom, Vampire and Gannet aircraft, as well as from Centurion tanks were modified, repaired, and overhauled at the Engine Factory, Lidcombe. Propellers from the R.A.A.F. and the R.A.N. were also overhauled there.

Wright turbo-compound engines from Neptune aircraft and Allison T.56 engines from Hercules transports were overhauled at Qantas Empire Airways Ltd., Sydney, for the R.A.A.F.

The repair and overhaul of carrier-based Fairey "Gannet" aircraft for the R.A.N. and the erection of "Meteor" target aircraft for the Woomera Rocket Range were handled by the Fairey Aviation Company of Australasia Ltd., Sydney.

Sycamore helicopter aircraft, Bristol freighter aircraft, Alvis Leonides and Bristol Hercules engines were repaired and overhauled by Bristol Aviation Services, also in Sydney.

The reconditioning and servicing of aircraft instruments, electrical, electronic and other ancillary equipment and airframe components were carried out by various contractors.

- (d) Telecommunications. Developmental and production orders were placed with industry for new and improved types of Service telecommunications equipment.
- 5. 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 Naval, Military and Air Forces of the Commonwealth, as well as for the Department of Supply. It is also responsible for the sale or disposal of all surplus or unserviceable war matériel and other goods approved for disposal. In addition, the Board arranges purchases and disposals on behalf of other Commonwealth departments and authorities which have no public contract 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, 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 1958-59 and 1959-60.

### CONTRACT BOARD ORGANIZATION: PURCHASES AND REALIZATIONS FROM DISPOSALS.

(£.)

State.	State.		Purch	nases.	Realizations from Disposals.		
outs.			1958–59.	1959-60.	1958–59.	195960,	
Contract Board, Victoria			31,756,415	20,870,475	1,343,623	2,566,171	
New South Wales			4.906.385	4,632,332	1,432,395	1.518.981	
Queensland			868,149	1,095,748	458,951	564,946	
South Australia			1,242,548	2,301,840	382,450	644,545	
Western Australia			363,775	417,070	224,761	243,696	
Tasmania	• •	• •	91,339	89,025	35,673	64,399	
Total	• •		39,228,611	29,406,490	3,877,853	5,602,738	
			i				

- 6. Defence Supply Planning.—The central planning authority of the Department is the Planning Branch, the principal functions of which are:—
  - (i) to plan for and to assist in the development of additional production capacity to meet the Services' munitions requirements for mobilization and war;
  - (ii) to provide and administer stockpiles of relevant materials and reserve pools of plant and equipment considered essential for expansion of production in the event of war:
  - (iii) to prepare and advance co-ordinated production programmes against Service orders and to analyse and interpret achievement against these programmes for the information of the Department and the Services;
  - (iv) to provide advisory service in the field of instrumentation and inspection to Government factories and contractors engaged in the production of munitions requirements; and
  - (v) to carry out surveys of production capacity and to indicate steps necessary to augment capacity in the event of war.

A series of Industry Advisory Committees has been established to advise the Minister and the Department in the development of industrial mobilization plans to meet the Services matériel requirements for mobilization and war. The Committees are: Ammunition; Electrical; Explosives and Chemicals; Machine Tools and Gauges and Munitions Factory Equipment; Materials; Military Vehicles; Radar and Telecommunications; Weapons and their Equipment; Hard Fibres; Raw Cotton; and Rubber and Allied Materials.

Members of the Committees include industrialists of wide experience and the highest ability in their chosen fields.

7. 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 Storage Authority and the Central Transport Authority for all Commonwealth Departments. It is the authority for the arrangement of furniture removals at departmental expense in all States, but not in the Australian Capital Territory or the Northern Territory. It has agents in Canberra and Darwin. It also operates a Shipping and Customs Section and the England-Australia Bulk Air Freight Scheme for Commonwealth Departments.

On 30th June, 1960, the Branch had under its control land, buildings and works, vehicles, plant and equipment valued at £9,469,026 and 3,462,861 sq. ft. of storage space as well as storage facilities for large quantities of chemicals, bulk liquids and explosives.

8. Finance Branch.—The expenditure on Department of Supply activities during the year 1959-60 is shown in the following cable:—

# SUPPLY: TOTAL EXPENDITURE, 1959-60. (£'000.)

Particula		Expenditure			
Parliamentary Appropriations	20,800				
Trust Fund Accounts—				Γ	
Stores and Transport					5,462
Government Factories and Establish	ments	• •			15,828
Munitions Production					8,153
Defence Production Materials	••	••	••		171
Total Trust Fund Accounts	••	••	•••		29,614
Total Expenditure		••		., [	50,414