

CHAPTER 4

DEFENCE

DEPARTMENT OF DEFENCE

Central organisation for Defence

Recommendations for an integrated and functional organisation for the Department of Defence were accepted by the Government in December 1974 (*see* Year Book No. 60, 1974) and legislation to give effect to the re-organisation of the higher management of the Defence Force and the Department of Defence was passed by the Commonwealth Parliament in September 1975. The legislation, which came into effect on 9 February 1976, specifically recognises that responsibility for the general control and administration of the Defence Force rests with the Minister for Defence.

A new statutory appointment, the Chief of Defence Force Staff, was created to exercise command of the Defence Force through the three Service Chiefs of Staff (Navy, Army and Air) who are the professional heads and have responsibility for the management of their respective arms of the Defence Force. The Chief of Defence Force Staff is the principal military adviser to the Minister and together with the Secretary, Department of Defence advises the Minister on matters involving their joint responsibility.

The three Service Boards (Navy, Army and Air) have been dissolved and most of their power retained by the Minister or delegated by him to specific or appropriate military and civilian appointments under the Chief of Defence Force Staff and Secretary, Department of Defence respectively, within the unified Department. Under the reorganisation the three Service Chiefs of Staff, the Chief of Defence Force Staff and the Secretary, Department of Defence all have the right of access to the Minister.

The Secretary, Department of Defence has the powers and functions generally prescribed for such appointments in the Australian Public Service Act, but now qualified by the statutory authority of the Chief of Defence Force Staff and by Ministerial directives to the Secretary, enjoining responsiveness of the Public Service structure to the operational priorities of the Chiefs of Staff. The Secretary is responsible to the Minister for advice on general policy and on the management and utilisation of defence resources.

Role and functions of the Department of Defence

The role of the Department of Defence basically is the development of policy and advice to the Minister for Defence, and the co-ordination and execution of approved policy and the direction of the Defence Force.

The functions of the Department include strategic appreciations, national intelligence assessments and strategic intelligence reports; defence planning, systems analysis and formulating policy on force structure and force deployment; administrative policy and military advice for the Minister for Defence, organisation of collective military advice; planning and control of military operations; defence programming, resources allocation and expenditure control; scientific advice and formulation of defence research and development policy; policy relating to defence industry, facilities and procurement; rationalisation of Service activities and co-ordination of their policies; pay, allowances and conditions of service in the Defence Force and during retirement; establishments, postings and promotions; legislation concerning the Armed Services; public relations; Defence representatives overseas; defence electronic data processing; civil defence and administration of the Natural Disasters Organisation.

Higher defence machinery

Council of Defence

A Council of Defence has been established as provided for in the Defence Act. Its function is to consider and discuss matters referred to it by the Minister relating to the control and administration of the Defence Force and the respective Arms of the Defence Force. The Council is chaired by the Minister for Defence and membership includes the Minister assisting the Minister for Defence, the Chiefs of Staff and the Secretary of the Department of Defence.

The Committee structure

The Committee structure within the Department of Defence provides for reconciliation of the respective Services' operational requirements, professional management of the military career and sound management of resources and general policy. The committees accommodate the expertise of both military and civilian members and the material interests of the three Arms of the Defence Force. The following are the principal committees and their functions.

The *Defence Committee* advises the Minister for Defence on those general defence policies whose formulation calls for presentation of co-ordinated information and advice about the strategic, military, foreign affairs and economic aspects of defence.

The *Defence Force Development Committee* reviews the Five Year Defence Program and the annual Defence Estimates, as prepared by the staff, and conveys collective or individual comments to the Minister. The Committee exchanges views and reviews progress in the development of the Defence Program; provides the Minister and Defence Department staff with collective or individual opinion on the major weapon systems proposed in the Five Year Defence Program; and provides a forum for discussions of defence policy implications of military operations.

The *Chiefs of Staff Committee* is responsible to the Minister for Defence, through the Chief of Defence Force Staff for providing collective professional advice on military operations and on the military implications of defence policy and activities. It endorses military plans; provides collective advice concerning, and control and administration of, special forces of a multi-national nature, the responsibility for which is assigned to the Commonwealth Government, subject to such control conforming to the principles and procedures of the established machinery of Government and administration. It recommends the allocation of resources to designated commanders engaged in joint operations, and endorses the military aspects of policies concerning joint service units and installations.

The *Defence (Administration) Committee* reviews the Defence program and controls the Defence vote.

The *Defence Science Board* considers in the context of Defence objectives major issues concerning the policy for defence science including its relationship to other national interests.

The *Defence (Industrial) Committee* considers matters concerning the capacity of Australian industry to contribute to the defence requirements of the country; makes recommendations when appropriate for the retention of existing capacity or the development of new capacity in the light of Department of Defence assessments of requirements; provides guidelines to allow industry to prepare for meeting the requirements of the Defence Force during periods of threat or of war at varying levels of intensity and duration; gives financial and management advice to the Department of Defence and the Services on questions referred to it; advises on stockholding of strategic materials; considers questions relating to the Defence Cataloguing System, and equipment standardisation; oversees the Industrial Mobilisation Course; and reports annually to the Minister for Defence on its activities.

The *Defence (Conditions of Service) Committee* considers major issues concerning rates of pay and financial conditions of service of personnel of the Defence Force as a basis for recommendations to the Minister for Defence.

The *Joint Planning Committee* advises the Defence Committee and/or the Chief of Defence Force Staff and/or Chiefs of Staff Committee on operational aspects of defence planning; appreciations and plans for combined operations; and co-ordination of joint training.

Basis of current defence policy

The primary aim of Australian defence policy is to ensure the security of Australia and its Territories.

Defence policy is to maintain a substantial level of defence forces, to promote self reliance and to maintain relations in the defence field with allies and regional associates. Australia participates in the ANZUS alliance, and the Five Power arrangements.

In a period assessed as having low-threat probability, the basic concept for the force structure is a core force of sufficient skills and capabilities in existence, to allow timely expansion should there be unfavourable developments in the strategic situation.

Defence expenditure

DEFENCE EXPENDITURE BY DEPARTMENTS
(\$'000)

	Defence					Industry and Commerce (a)	Other(a)	Total
	Central(a)(b)	Navy	Army	Air	Total			
Actual expenditure—								
1970-71 . . .	88,822	247,924	421,037	302,657	1,060,440	58,446	13,756	1,132,642
1971-72 . . .	98,039	270,243	465,792	303,239	1,137,313	63,431	4,805	1,205,549
1972-73 . . .	110,278	293,094	445,061	352,185	1,200,618	69,952	3,304	1,273,874
1973-74 . . .	159,887	329,011	472,669	358,274	1,319,841	79,596	7,596	1,407,033
1974-75 . . .	311,883	404,410	550,299	409,357	1,675,949	109,492	5,207	1,790,648
1975-76 . . .	298,265	439,483	609,636	505,173	1,852,557	72,292	18,408	1,943,257
Estimated expenditure—								
1976-77 . . .	350,745	539,808	686,478	577,951	2,154,982	76,933	23,627	2,255,542

(a) Figures have been compiled on the basis of Departments as they are now organised (see page 109). (b) Includes Defence Forces Retirement and Death Benefits and Defence Science and Technology.

Equipment

An amount of \$102.3 million was spent on equipment of a capital nature in 1974-75. An amount of \$181.6 million is expected to be spent in 1975-76.

The major equipment items received by the Services in 1974-75 included 8 Sea King ASW helicopters, 1 slave dock for submarine refits, 10 light observation helicopters, 3 prototype fire support vehicles, 10 basic trainer aircraft (CT4) and 4 surveillance radars.

Major new equipment items planned for delivery in 1975-76 include 27 basic trainers (CT4), 1 Nomad aircraft, 18 light observation helicopters, 11 Turana pilotless target aircraft, 2 Sea King ASW helicopters, 1 surveillance radar and 4 medium girder bridges.

Defence Force manpower

<i>Strength at June</i>	<i>Permanent forces</i>	<i>Reserves(a)</i>	<i>Total</i>
NAVY			
1966	14,633	2,131	16,764
1967	15,764	2,365	18,129
1968	16,294	2,480	18,774
1969	16,758	2,661	19,419
1970	17,089	2,383	19,472
1971	16,997	2,303	19,300
1972	16,890	2,120	19,010
1973	17,215	1,935	19,150
1974	16,141	1,593	17,734
1975	16,094	1,302	17,396
1976 (estimated)	16,115	1,030	17,145
ARMY			
	<i>(b)</i>		
1966	32,702	33,526	66,228
1967	41,392	36,322	77,714
1968	42,840	37,523	80,363
1969	43,915	35,884	79,799
1970	44,513	33,316	77,829
1971	43,769	30,943	74,712
1972	41,273	28,009	69,282
1973	33,990	23,119	57,109
1974	30,235	20,000	50,235
1975	31,514	20,374	51,888
1976 (estimated)	31,500	21,150	52,650
AIR			
1966	19,358	1,035	20,393
1967	20,130	1,362	21,492
1968	21,564	1,304	22,868
1969	22,712	1,369	24,081
1970	22,642	1,509	24,151
1971	22,539	1,488	24,027
1972	22,720	1,399	24,119
1973	22,717	1,191	23,908
1974	21,119	748	21,867
1975	21,546	554	22,100
1976 (estimated)	21,300	490	21,790

(a) Refers to Reserves with training obligations. Figures exclude those members who are serving full time in the Permanent Defence Force. (b) Figures include National Servicemen in the period 1966-72 when there was compulsory military service for those selected.

Reserve Forces

The Reserve Forces of the Navy, Army and Air Force are available to supplement the Permanent Defence Force.

Each Reserve Force consists of several reserve elements with different call out provisions and training obligations. The most important elements involve a training obligation and are as follows.

Emergency Reserves (Naval Emergency Reserve Forces, Regular Army Emergency Reserve, Air Force Emergency Reserve) which may be called out by the Governor-General for continuous full-time service as the need arises.

Citizen Forces (Royal Australian Naval Reserve, Active Citizen Military Forces, Active Citizen Air Force) which may be called out by proclamation for continuous full-time service in a time of defence emergency or war.

Defence science and technology

The activities of the new Defence Science and Technology Organisation (D.S.T.O.) which were previously conducted in agencies administered by the Service Departments and the former Department of Manufacturing Industry are now conducted within the Department of Defence. From 1 July 1974, by agreement between the Minister for Defence and the Minister for Manufacturing Industry, the Department of Defence exercised management and technical control of Research and Development (R & D) agencies of the former Department of Manufacturing Industry. On 1 July 1975 these agencies came fully under policy, administrative and technical control of the Chief Defence Scientist.

The functions of the D.S.T.O. are: defence science policy; scientific advice on all defence matters; analysis of weapons systems and equipment; relationship of Australian R & D to international programs; conduct of R & D; trials and evaluation of proposed and existing equipment.

The D.S.T.O. consists of the following three main functional areas of responsibility: Military Studies and Operational Analysis Division; Policy and Program Planning Division; Australian Defence Scientific Service.

Military Studies and Operational Analysis Division

The Division formulates the program of analytical studies for tactical, operational and force structure problems throughout the D.S.T.O.

Policy and Program Planning Division

This Division defines principal objectives of the D.S.T.O. and advises on scientific and technical aspects of Defence policy including arrangements for international co-operation in scientific and technical activities.

Australian Defence Scientific Service

The Service prepares, co-ordinates and reviews the D.S.T.O. program. It provides overall management of the scientific and financial resources of the Defence laboratories and trials units. Proposals to the Chief Defence Scientist for the choice, development and use of weapons and equipment by the Australian Defence Force are initiated and assessed. Under co-operative arrangements with governments outside Australia, it provides the scientific, technological and administrative effort required for the development and operation of facilities specified in the arrangements and, by agreement, plans, conducts and analyses these operations.

Within the Australian Defence Scientific Service, the *Services Laboratories and Trials Division* is responsible for the planning and execution of trials of service equipment. It maintains a source of engineering design, development and modification for Defence Force equipment and a source of technical advice associated with the planning, engineering and evaluation of new equipment and with the management of in-service equipment. Advice is provided to the Defence Force and the Department on the general engineering and trials standards appropriate to Service equipment.

Major establishments and laboratories operating under the control of the Services Laboratories and Trials Division include:

The *Engineering Development Establishment* in Victoria which provides for the Defence Force and the Department a source of development engineering; equipment design and related advice.

The *Royal Australian Navy Research Laboratory* in New South Wales which undertakes research into underwater acoustics, oceanography, mine warfare and mine countermeasures.

The *Armed Forces Food Science Establishment* in Tasmania which is responsible for the preparation of special food specifications with particular emphasis on calorific content and storage life.

The *Royal Australian Navy Trials and Assessing Unit* in New South Wales which conducts ship and equipment tests and trials, investigations, inspections and evaluations and carries out assessments of weapon practices as required.

The *Tropical Trials Establishment* in Queensland which provides trials facilities and technical and administrative support for user, engineering and evaluation trials of stores and explosive material in a tropical environment.

The *Joint Tropical Research Unit* in Queensland, which is jointly sponsored by the United Kingdom and Australia, participates in a program of work involving the study of the behaviour and degradation of materials in tropical environments.

Other important establishments or laboratories under the control of the Australian Defence Scientific Service include:

The *Weapons Research Establishment* in South Australia which conducts research and development in areas of significance to Defence, including work on Australian-initiated defence projects.

It constructs, operates and develops the Woomera Range including the instrumentation and engineering facilities necessary to the Joint British/Australian Guided Weapons program. Weapons Research Establishment has four wings, namely the Applied Physics Wing, the Engineering Wing, the Weapons Research and Development Wing, and the Trials Wing.

The *Materials Research Laboratories* in Victoria, South Australia and New South Wales which provide R & D support to all branches of the Defence Force by establishing and maintaining scientific and technical expertise in particular fields relevant to the supply and operation of defence material including materials aspects of armaments and defence equipment, explosives and ammunition, instrumentation and standards of measurement and protection of personnel and equipment. It applies this expertise to the solution of Service and supply problems ranging from scientific investigation of current difficulties to development of new equipment. Scientific developments in the fields of physics, chemistry and metallurgy are studied which are judged to have potential defence application in the future.

The *Aeronautical Research Laboratories* (A.R.L.) in Victoria which undertake research and development in areas of significance to defence and on specific defence projects particularly in the field of aeronautics. It acts as consultant and makes investigations for the Defence Force, Government departments and authorities and industries engaged on defence work. Civil work may be undertaken where the special equipment or expertise at A.R.L. is required.

Defence representation overseas

Defence Attache representation is maintained in Afghanistan, Britain, Burma, Canada, France, India, Indonesia, Iran, Japan, Korea, Malaysia, Nepal, New Zealand, Pakistan, Papua New Guinea, the Philippines, Singapore, Thailand and the United States of America.

Defence co-operation with South-East Asian and South Pacific countries

In support of Australia's Defence policy, the Government conducts defence co-operation activities with countries in the region—particularly South-East Asian and South Pacific countries. These activities include joint projects, training in Australia, loan of personnel and combined military exercises.

In 1975-76, which was the first year Australian activities in Papua New Guinea were separately identified in the Australian Defence appropriation, assistance to P.N.G. was valued at \$29.8 million. This included the loan of Australian servicemen to P.N.G., training for P.N.G. servicemen in Australia, survey and engineering projects in P.N.G. and the provision of certain items of equipment.

Expenditure on the Defence Co-operation Program with Indonesia to June 1976 amounted to \$19.7 million. Major current projects include the survey and mapping of Irian Jaya, a field communications project, assistance with Sabre aircraft previously transferred to Indonesia by Australia, research and development projects, and a maritime patrol project.

Annual expenditure on Defence co-operation with Malaysia and Singapore is now running at approximately \$4 million and \$0.8 million respectively. Major continuing projects in Malaysia include an Armed Forces manufacturing workshop, a parachute and diving school, and electronic target ranges. Assistance to Singapore is mainly in the area of personnel training particularly qualified flying instructors.

Training assistance is provided to Thailand and the Philippines. Assistance to South Pacific countries is mainly in the form of training in Australia. Limited numbers of personnel are provided on loan.

Training in Service training establishments in Australia is an important part of defence co-operation activities. Over 600 overseas personnel are trained in Australia each year by the three Services.

THE DEFENCE FORCE

Defence Force activities overseas

The main areas in which Australian Defence Force elements have been deployed overseas during the year are Malaysia/Singapore and Papua New Guinea. Units have also visited Indonesia, New Zealand, Hawaii, Britain and Canada for exercises and training.

In support of the Five Power arrangements Australian Defence Force elements in the Malaysia/Singapore area include:

Navy—One destroyer or destroyer escort present in the area at all times, and one submarine present for part of the year; and shore support units.

Army—An Australian Army infantry company is maintained at Butterworth on a basis of three month detachments from Australia in a training role.

Air Force—Two squadrons of Mirage fighter aircraft are maintained at Butterworth in Malaysia, with a detachment at Tengah in Singapore.

In Papua New Guinea, elements of all three arms of the Defence Force play a major role in the development of the Papua New Guinea Defence Force.

The Commonwealth Government maintains an on-going program of defence co-operation with other neighbouring countries and provides transport support for United Nations activities in selected Asian areas.

Royal Australian Navy

The R.A.N. maintains and exercises a modern, well equipped and highly trained maritime force. The structure of this force is based primarily on the provision, at sea, of a balanced naval task group, consisting of surface warships, naval aviation, and the R.A.N.'s submarine force.

Development of the Royal Australian Navy

Information relating to naval defence systems prior to 1901 appears in Year Book No. 2 page 1094. Further information relating to the development of Australian naval policy appears in Year Books No. 3 and 12, pages 1060 and 1012 respectively; an account relating to the building of the Australian Navy, its cost, the compact with the Imperial Government, and other details, appears in Year Book No. 15, pages 921–3; and the growth and the activities of the R.A.N. during the 1939–45 war are described in Year Book No. 36, pages 1023–7.

Higher organisation

Under the Defence Act the Chief of Naval Staff has command of the R.A.N., subject to the overall command of the Defence Force by the Chief of Defence Force Staff. Principal staff officers to the Chief of Naval Staff are the Deputy Chief of the Naval Staff, and the Chiefs of Personnel, Technical Services, and Materiel. Other senior officers of the R.A.N. include the Flag Officer Commanding the Australian Fleet and the Flag Officer Commanding East Australia area.

Ships of the Royal Australian Navy

The Fleet, February 1976: *Melbourne*—aircraft carrier; *Supply*—oiler; *Stalwart*—destroyer tender; *Perth*, *Hobart*, *Brisbane*—guided missile destroyers; *Vendetta*, *Vampire*—destroyers; *Yarra*, *Parramatta*, *Stuart*, *Derwent*, *Swan*, *Torrens*—destroyer escorts; *Duchess*—training ship (destroyer); *Curlew*, *Snipe*—coastal minehunters; *Ibis*—coastal minesweeper; *Moresby*, *Flinders*—Surveying ships; *Diamantina*, *Kimbla*—oceanographic research ships; *Oxely*, *Otway*, *Onslow*, *Ovens*—submarines; *Attack*, *Acute*, *Advance*, *Adroit*, *Ardent*, *Assail*, *Aware*, *Barbette*, *Barricade*, *Bayonet*, *Bombard*, *Buccaneer*—patrol boats; *Banks*, *Bass*—general purpose vessels; *Brunei*, *Labuan*, *Tarakan*, *Wewak*, *Betano*, *Balikpapan*—heavy landing craft.

In operational reserve, February 1976: *Hawk*, *Gull*, *Teal*—minesweepers.

Fleet Air Arm

The Fleet Air Arm maintains three front line squadrons for embarkation in the operational carrier H.M.A.S. *Melbourne*. These squadrons currently consist of Skyhawk A4G fighter ground-attack aircraft, Tracker S2E anti-submarine aircraft and Sea King Mk 50 anti-submarine helicopters. Three training and support squadrons are based at the R.A.N. Air Station, Nowra, New South Wales. Other aircraft operated by the Navy are the Bell 206B helicopter in the survey ship HMAS *Moresby*, Iroquois UH1B and Wessex 31B helicopters (utility tasks and search and rescue), HS-748, Macchi trainer and Jindivik pilotless target aircraft.

Ship construction and repairs

There are two naval dockyards, one at Garden Island, New South Wales, and one at Williamstown, Victoria. The Dockyard at Cockatoo Island, which is operated by Vickers Cockatoo Dockyard Pty Ltd by agreement with the Commonwealth Government, carries out considerable naval repair work and has the capability to construct warships.

Current construction projects include two Oberon Class submarines in the United Kingdom, two guided missile frigates in the United States of America and an oceanographic vessel being built at Williamstown. Modernisation of three River Class destroyer escorts, *Parramatta*, *Stuart* and *Derwent* and the half-life refit of a fourth, *Yarra*, are currently being planned.

Extensive improvements to the weapon control systems of the guided missile destroyers *Hobart*, *Perth* and *Brisbane* are being progressed at Garden Island Dockyard.

Personnel

At 29 February 1976, the actual strength borne for full-time duty was 16,172 comprising 2,123 officers and 14,049 sailors, male and female. These figures include 64 officers, 19 sailors of the Citizen Naval Force, 2 officers of the Royal Australian Naval Emergency Reserve, 2 officers and 4 sailors on loan to the Indonesian Navy and 31 officers and 57 sailors serving with the Papua New Guinea Defence Force.

Women's Services

The present Women's Royal Australian Naval Service was reconstituted in January 1951. The numbers serving in shore establishments in February 1976 were 29 W.R.A.N.S. officers and 785 W.R.A.N.S. The Royal Australian Naval Nursing Service was inaugurated in November 1964, and its strength in February was 23 officers.

Naval Reserves

The Australian Naval Reserves consist of the R.A.N. Emergency Reserve, R.A.N. Emergency List, Royal Australian Fleet Reserve, Royal Australian Naval Reserve (R.A.N.R.), and Womens Royal Australian Naval Reserve. The authorised establishment of the combined Reserve force is 12,000. At 29 February 1976 there were 1,395 officers and 3,965 sailors in the Naval Reserves of which 300 officers and 775 sailors had training obligations. These figures exclude 66 officers and 19 sailors carrying out full-time service with the R.A.N.

The R.A.N.R. is the training reserve of the Naval Reserves. Members carry out weekly training and thirteen days continuous training annually; sailors engage for periods of three years. Other reserves do not normally carry out part-time training, but members may volunteer for periods of annual training, and for periods of full-time service with the R.A.N.

Training and entry

On entry, General List officers are trained at the Royal Australian Naval College H.M.A.S. *Creswell* at Jervis Bay, New South Wales. The College was established to provide trained officers for the R.A.N. Junior entry to the College is at the age of fifteen to seventeen years and senior entry at a maximum age of twenty years. In February 1976 there were 172 cadet midshipmen under training. On completion of initial training, officers go to the Fleet for sea training, followed by advanced training either ashore in Australia, at universities or technical colleges, or at Royal Navy training establishments in the United Kingdom.

H.M.A.S. *Cerberus* at Westernport, Victoria, is the main training establishment for adult sailors in the permanent naval forces, while several advanced training schools are established in New South Wales. The period of initial engagement for sailors varies from six years for tradesmen to nine or twelve years, and on completion sailors may re-engage for shorter periods up to the age of fifty-five.

H.M.A.S. *Nirimba* at Quakers Hill, New South Wales, is the naval school for apprentices. It provides secondary education, as well as technical training in trades, to boys aged fifteen to seventeen and a half years. The school was established in 1956 to meet the R.A.N.'s increased demand for highly skilled tradesmen. In January 1976 there were 477 naval apprentices under training.

H.M.A.S. *Leeuwin* at Fremantle, Western Australia, is the junior recruit training establishment. Entrants must be aged between fifteen and a half and sixteen and a half years. Training lasts one year and instruction is mainly academic, the remaining time being devoted to basic naval and disciplinary training. On completion of the course sailors are posted to technical and specialist courses before proceeding to sea. In January 1976 there were 728 junior recruits undergoing training.

On completion of initial training sailors join the Fleet for sea training before returning to the various training schools at H.M.A.S. *Cerberus*, H.M.A.S. *Penguin* and H.M.A.S. *Watson* at Sydney and R.A.N. Air Station at Nowra, New South Wales. Sailors who are selected for the submarine service receive initial submarine training in the United Kingdom and a number of technical courses for certain sailors are conducted in the United States of America.

To meet increasing requirements for officers, direct entries are accepted into the R.A.N. Short service commissions of seven years are granted on completion of training as seamen, supply or aircrew officers, to suitable applicants who have completed their secondary schooling and who are over seventeen years of age and under twenty-four years of age. Other direct entries may be approved outside these age limits from persons with appropriate qualifications and experience.

Opportunities exist for university undergraduates studying medicine, dentistry and engineering to enter the R.A.N., and on successful completion of their studies to commence short or full-time service in the Navy. Fully qualified doctors, dentists, engineers, instructors and legal officers may also enter the R.A.N. directly if they are of the appropriate age.

Australian Army

The Australian Army maintains a potential ability and readiness to conduct operations on land for the defence of Australia, and, in co-operation with the other arms of the Australian Defence Force shares a responsibility to deter aggression, and to ensure the nation's security and to preserve its national interests.

Development of the Australian Army

A detailed account of the Australian Defence Force prior to Federation appears in Year Book No. 2, pages 1075–81. See also Year Book No. 12, page 999. For particulars of the phases which cover the period from Federation up to the re-establishment of the Military Board and the organisation of Commands after the 1939–45 War—see Year Book No. 46 and earlier issues.

Higher organisation

Command of the Army is the responsibility of the Chief of the General Staff, subject to the overall Command of the Defence Force by the Chief of Defence Force Staff and he has for his principal staff officers, the Deputy Chief of the General Staff, the Chief of Operations, the Chief of Personnel, the Chief of Materiel, the Chief of the Army Reserve and the Inspector General of the Army Reserve.

The Army is organised into three functional Commands as follows:

Field Force Command which commands all field force units of the Australian Army, both Regular and Citizen Military Forces.

Logistics Command which commands all logistic elements of the Army.

Training Command which is responsible for all individual training and commands all Army training and schools with the exception of the Royal Military College, Duntroon.

Military Districts as listed below provide administrative support for the three functional Commands:

1st Military District—the State of Queensland.

2nd Military District—the State of New South Wales, less those parts included in 3rd and 4th Military District.

3rd Military District—the State of Victoria and part of Southern New South Wales.

4th Military District—the State of South Australia, plus a portion of south-western New South Wales.

5th Military District—the State of Western Australia.

6th Military District—the State of Tasmania.

7th Military District—the Northern Territory.

The Military District headquarters also handle those matters in which both Commonwealth and State Governments are involved.

Personnel strength

The effective strength at 25 February 1976 was: Australian Regular Army, 31,551 (including 30,029 males and 1,522 females (Women's Services)); Citizen Military Forces, 19,752.

Women's Services

In July 1950 approval was given for the enlistment of women into the Australian Regular Army on a limited scale. Enlistment commenced into the Royal Australian Army Nursing Service 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 and Citizen Military Forces now comprise these two corps.

Training

Staff College. Until 1938, the training of staff officers was carried out in the various Military Districts. In some cases officers were selected 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 British Commonwealth training establishments for training officers for command and staff appointments. The College was later moved to Queenscliff, Victoria, where it is presently situated. The course is held annually and is of twelve months duration. The normal intake is eighty students. The course is designed to train selected officers for appointments in all branches of the staff in peace and war and to prepare them to assume, after experience, command and higher staff appointments.

Students from Canada, Fiji, India, Indonesia, Malaysia, New Zealand, Pakistan, Papua New Guinea, the Philippines, Thailand, United Kingdom and United States of America are included in the course. Vacancies on each course are reserved also for officers who may be nominated by the R.A.N., the R.A.A.F. and the Australian Public Service.

In order to ensure common standards in tactical doctrine, and staff and command training, liaison is maintained with other Australian and overseas Staff Colleges, and to this end there is also a reciprocal exchange of instructors between the United Kingdom, the United States of America, and Australia. An instructor is also provided by New Zealand.

Royal Military College. The Royal Military College was established in 1911 at Duntroon in the Australian Capital Territory to provide trained officers for the Army. The conditions of entry are laid down in the Royal Military College Regulations. The course is four years of military and academic studies. The first three years are primarily academic and the fourth year military. Following affiliation with the University of New South Wales a faculty of Military Studies was introduced in 1968. Cadets who meet the requirements for admission to the Faculty may take a course leading to the award of a degree in Military Studies by the University of New South Wales in one of the following: Arts, Applied Science or Engineering. 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. Since 1967 one Singaporean and three Thai cadets have graduated and presently (1976) one Malaysian, three Singaporean and three Thai cadets are attending the College.

Officer Cadet School. The Officer Cadet School was established in 1951 at Portsea, Victoria, to increase the rate at which junior regimental officers could be produced for the Australian Army. Serving members of the Regular Army, the Citizen Military Forces and civilians between the ages of eighteen and a half and twenty-two and a half are eligible for entrance. A special entry, provides for candidates up to twenty-four and a half years. The course lasts for forty-four weeks, 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 or Service to which they have been allotted before being posted to regimental duties. The Officer Cadet School also trains officers on occasions for Kenya, Malaysia, New Zealand, Thailand, the Philippines, Singapore, Fiji, Brunei, and the Papua New Guinea Defence Force

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 nineteen and a half and thirty-two years of age, or civilians between nineteen and a half and thirty years of age. The course is of twenty-two weeks duration and on graduation cadets are appointed lieutenants in the Women's Royal Australian Army Corps.

Army Apprentices School. The Army Apprentices School was opened in 1948 at Balcombe, Victoria, to train youths as skilled tradesmen for the Regular Army and to provide them with a background for an Army career with prospects of promotion for the graduates. The course is open to youths between the ages of fifteen and seventeen and provides training in a number of highly skilled trades. Most apprentices attend two years of intensive theoretical and practical work at the Apprentices School followed by two years on-the-job training in an appropriate Army workshop or technical unit under the supervision of an Apprentice Master. Radio tradesmen train for three years at the Apprentice School before undertaking one year on-the-job training. All apprentices take the Victorian Apprenticeship Commission final grade public examination, which ensures that they will be accepted as qualified tradesmen in civilian life when they leave the Army. In addition to the trade and military training, the Apprentices School provides the facility for apprentices to attain an educational standard of Victorian Technical Leaving.

Other Schools. Army schools have been established for the major arms and services to train officers and other ranks in the up-to-date techniques of their own arm or service, to qualify them for promotion and to produce trained instructors. Courses at Army schools are conducted for members of both the Regular Army and Citizen Military Forces. The following Army schools have been established: Land Warfare Centre, Armoured Centre, School of Artillery, School of Military Engineering, Transportation Centre, School of Military Survey, School of Signals, Infantry Centre, Army Aviation Centre, Army Intelligence Centre, Royal Australian Corps of Transport Centre, Royal Australian Army Medical Corps, School of Army Health, Royal Australian Army Ordnance Corps, Royal Australian Electrical and Mechanical Engineers Training Centre, Royal Australian Army Provost School, School of Music, Air Support Unit (Army Component), and Air Movement Training and Development Unit (Army Component).

Royal Australian Air Force

The function of the Royal Australian Air Force is the conduct of operations in the air for the defence of Australia and Australian interests.

Development of the Royal Australian Air Force

For a short note about the development of the Royal Australian Air Force, see Year Book No. 58, page 91.

Higher organisation

The Chief of the Air Staff (C.A.S.) has command of the Royal Australian Air Force subject to the overall command of the Defence Force by the Chief of Defence Force Staff. The C.A.S. is assisted in his decisions by an advisory committee the membership of which comprises the Chief of the Air Staff (Chairman), Deputy Chief of Air Staff, Chief of Air Force Personnel, Chief of Air Force Materiel, Chief of Air Force Technical Services, Director General Supply—Air Force, and other senior officers or specialists as may be directed by the C.A.S. The Committee has no statutory authority nor executive function and the C.A.S. is not obliged to accept its recommendation.

The Chief of Air Staff administers and controls R.A.A.F. units in Australia through two commands: Operational Command and Support Command. Operational units based at Butterworth, Malaysia, work within the broad directives issued by the C.A.S. They contribute toward the development of the Malaysian and Singapore defence capability and provide forces for the Integrated Air Defence System.

Operational Command is responsible to the C.A.S. for the command of operational units and the conduct of their operations within Australia. Support Command is responsible to the C.A.S. for training of personnel, and the supply and maintenance of service equipment.

Structural organisation

The R.A.A.F. has five operational elements, the units of which, actively and directly participate in air operations. These elements are the Strike/Reconnaissance Force, Tactical Fighter Force, Air Transport Force, Tactical Air Support Force and the Maritime Force. The role of the strike/reconnaissance force is primarily counter air operations. The tactical fighter force is responsible for air superiority, air defence and air interdiction operations, and also provides close air support to sea and land forces. The air transport force is used for routine logistic and domestic transport, and in addition has a tactical transport role. Tactical transport and close air support aircraft normally operate within a tactical air support force which is usually controlled by a joint (Air Force/Army) headquarters. Maritime forces are primarily employed in ocean surveillance, anti-submarine warfare and search and rescue. Major maritime operations are controlled by a joint (Air Force/Navy) headquarters.

The support component consists of those units and personnel which support units of the operational component. The elements are Maintenance Supply, Air Training, Ground Training, Administrative and the Citizen Air Force.

Aircraft

The R.A.A.F.'s strike/reconnaissance force is currently equipped with F111C and Canberra aircraft. The air defence and ground attack squadrons are equipped with the Mirage 111-0. Transport aircraft currently in use are Hercules C130A and C130E, Caribou, Dakota, Mystere 20, HS748, and BAC1-11. Three squadrons operate Iroquois and Chinook helicopters and the two maritime squadrons operate Neptune SP2H and Orion P3-B aircraft. Aircraft used for basic training are the CT4 Airtrainer, Macchi and HS748.

Personnel (including Reserve and Women's Services)

At 29 February 1976 the Permanent Air Force establishment was 22,796 and the Citizen Air Force 600; the actual strength was Permanent Air Force 21,368 and Citizen Air Force 452, while the strength of the General Reserve was 6,212. The Permanent Air Force figures include the Women's Royal Australian Air Force which has an establishment of 931 and actual strength of 1,014, the R.A.A.F. Nursing Service which is established for 99 and actually has 86, and 6 female doctors, dentists and education officers.

Training, entry

Staff College. The R.A.A.F. Staff College, located at Fairbairn, A.C.T., provides staff training and higher Service education to selected officers normally of the rank of Squadron Leader. The course, which is of a nominal year's duration is designed to broaden the students' professional background and to prepare them for command and staff appointments of greater responsibility. A two year correspondence course covering communication skills, military studies, international affairs and management is a compulsory prerequisite for entry to this course.

R.A.A.F. Academy. R.A.A.F. College was formed at Point Cook, Victoria in 1947 to provide a tertiary level professional education for future permanent officers. In 1961 the College was reconstituted as R.A.A.F. Academy to become an affiliated college of the University of Melbourne. Cadets are selected principally for the General Duties Branch and undertake a four year course at the Academy, leading to a Bachelor of Science degree after three years and the award of a Graduate Diploma in Military Aviation on completion of the fourth year. Some cadets selected for the Engineer Branch complete first year at R.A.A.F. Academy and then proceed to the University of Sydney to complete the remaining three years of the Bachelor of Aeronautical Engineering Course.

Diploma Cadet Squadron. The Diploma Cadet scheme provides training for cadets selected to undertake diploma studies in aeronautical, mechanical, electrical and communication engineering at the Royal Melbourne Institute of Technology and other Institutes of Technology in the Melbourne area. Cadets selected for Equipment Branch duties were originally located with the engineering cadets in Melbourne and undertook their studies at the Royal Melbourne Institute of Technology. This function has now been transferred to No. 7 Stores Depot at Toowoomba, Queensland where the cadets now undertake the three year course leading to the Bachelor of Business Studies degree at the Darling Downs Institute of Advanced Education.

Undergraduate Scheme. Students undertaking courses in medicine, dentistry, engineering (all branches) and science as undergraduates at any Australian University may be sponsored in advanced years under the Undergraduate Scheme. On completion, the students are commissioned in the specialist branches of the R.A.A.F.

Officer Training. With the exception of those officers commissioned from R.A.A.F. Academy or the flying training schools, all officers entering directly (with or without a tertiary qualification), commissioned airmen and airwomen, engineering and equipment cadets and undergraduate students undergo the Officers' Initial Training Course at the Officers' Training School, Point Cook, Victoria.

Basic Aircrew Training. R.A.A.F. pilot, navigator and air electronic officer trainees are selected primarily direct from civilian life although some places are filled by serving officers (including graduates of R.A.A.F. Academy) and airmen. Direct entry and serving airmen trainees are commissioned on graduation, having completed their officer training concurrently with their flying training.

The initial phase of basic pilot training for R.A.A.F., R.A.N. and Army trainees is conducted by No. 1 Flying Training School at R.A.A.F. Base Point Cook, Victoria. The final phase for R.A.A.F. and R.A.N. students is conducted by No. 2 Flying Training School at R.A.A.F. Base Pearce, Western Australia whilst Army students complete their training with the Army at Oakey, Queensland.

Basic navigator, air electronic officer and R.A.N. observer training is conducted by the R.A.A.F. School of Air Navigation at R.A.A.F. Base East Sale, Victoria. The School of Air Navigation also conducts post-graduate advanced navigation training for R.A.A.F. and R.A.N. pilots, navigators and observers.

Central Flying School conducts basic flying instructor training for the R.A.A.F., R.A.N. and Army at R.A.A.F. Base East Sale. In addition it conducts basic air traffic control training for all three armed services and, in conjunction with No. 1 Flying Training School, basic pilot training for the Papua New Guinea Defence Force.

Basic loadmaster, flight engineer and crewman training for transport, maritime and helicopter aircraft is conducted by training flights within the appropriate operational squadron. Students for this training are selected from volunteer serving airmen.

Aircrew Operational Conversion Training. With the exception of Mirage pilot conversion training which is conducted by No. 2 Operational Conversion Unit at R.A.A.F. Base Williamstown, New South Wales, all other aircrew undergo conversion training to operational aircraft types with a training flight within the appropriate operational squadron.

Ground Training. Training for non-aircrew personnel is generally provided in two stages: Basic and Advanced. Basic training, which includes apprentice training, brings the airman to a level of proficiency in his particular trade such that he can be recognised and employed as a qualified tradesman on an operating unit. Advanced training covers higher level training courses including supervision and management techniques, and specialist courses on particular aircraft or telecommunications systems.

Major Training Schools. The major ground training schools in the R.A.A.F. are the School of Radio at Laverton, Victoria, and the School of Technical Training at Wagga, New South Wales. The School of Radio averages a trainee population of about 400 while the School of Technical Training has over 800 members under training at any time. Apprentice training for radio tradesmen

is provided at Laverton, while apprentice training for other engineering trades is provided at Wagga. In addition, both schools provide training for adult-entry airmen and airwomen. Although training for airwomen is generally confined to the non-technical areas, many courses are now common to both airmen and airwomen.

Civil Recognition. Because the training of R.A.A.F. apprentices is conducted in more than one State, the R.A.A.F. has elected to obtain civil recognition of apprentice-trained tradesmen on a national basis through the provision of the Tradesmen's Rights Regulation Act, rather than be directly associated with the State apprenticeship authority. Recognition of adult-trained tradesmen is similarly obtained under the Tradesmen's Rights Regulation Act.

Civil Schooling Scheme. To meet the needs of the R.A.A.F. in a variety of disciplines in which it is uneconomical for the Service to set up its own training schemes, serving officers and airmen are sponsored at universities and advanced colleges/institutes to undertake full or part time tertiary level study mainly in the fields of engineering, science, economics, business administration, management, accountancy and education. Members studying under this scheme are located on and administered from bases throughout the country.

DEFENCE PRODUCTION

The functions previously performed by the former Department of Supply (*see* Year Book No. 60, page 105) were during 1974 and 1975 re-distributed between the Departments of Defence (research and development functions, defence production in industry, guided weapons and electronic support facility), Administrative Services (Stores and Transport, and purchasing functions), and a new Department of Manufacturing Industry which absorbed also the functions of the Department of Secondary Industry. In December 1975 the Department of Manufacturing Industry was re-named the Department of Industry and Commerce, absorbing *inter alia* the Shipbuilding Division of the Department of Transport.

Defence production functions of Department of Industry and Commerce

The defence production functions of the Department of Industry and Commerce are carried out under the *Supply and Development Act* 1939 and include the following:

Planning, establishment, operation and management of facilities producing aircraft, guided missiles, small arms, ammunition, explosives, marine engines, clothing and other defence goods. Acquisition, maintenance, and disposal of strategic materials, investigation and development of Australian sources of supply of defence materiel in conjunction with Department of Defence.

For the performance of the above functions the Department has two production divisions: Munitions Supply; and Aircraft, Guided Weapons and Electronics Supply; supported by Production Planning Branch, Marketing Branch and elements of Central Office and Regional technical and administrative staffs.

Munitions supply

The Munitions Supply Division is responsible for the production of munitions required by the Defence Force. Production is carried out in Government factories, which may place orders with private industry for components and materials. The factories currently in operation and their main products or services are as follows:

Ammunition Factory, Footscray, Victoria (fuses, primers, cartridge cases and small arms ammunition); Clothing Factory, Victoria (uniforms and clothing); Engine Works, Victoria (building and servicing of marine diesel engines); Albion Explosives Factory, Deer Park, Victoria (high explosives, propellants, chemicals); Explosives Factory, Maribyrnong, Victoria (propellants, explosives, chemicals, ammunition, rocket motors, paints, cements, and allied products); Mulwala Explosives Factory, New South Wales (propellants and chemicals); Munitions Filling Factory, St Marys, New South Wales (ammunition and explosive munitions); Ordnance Factory, Bendigo, Victoria (heavy guns, mountings, large gears); Ordnance Factory, Maribyrnong, Victoria (guns, projectiles, heavy forgings, rocket motor components); and Small Arms Factory, Lithgow, New South Wales (rifles, machine guns, mortar shells, calibre shells and fuse components).

Aircraft, guided weapons and electronics supply

Aircraft. Production both in Government factories and in industry of aircraft and aero-engines and of other aircraft components is the responsibility of this Division. Planning of capacity and negotiation (in conjunction with the government purchasing authority) of contractual arrangements concerning aircraft modification, repair and overhaul, and for the supply of spare parts and airborne equipment for the Services, are also functions of the Division.

The following factories are operated by the Division: Government Aircraft Factory at Fishermen's Bend, Victoria together with its Final Assembly Workshops and Test Airfield at Avalon, Victoria and the Aircraft Engineering Workshop at Pooraka, South Australia.

The Government Aircraft Factories (G.A.F.) have designed and developed a twin turbo-propeller utility aircraft known as Nomad. Production of 70 aircraft was approved by the Government. Sales have been made to Commonwealth Government Departments (including Defence (Army)) and overseas countries. G.A.F. also designed and is producing the Jindivik radio-controlled target aircraft which has been supplied to Britain, Sweden and America as well as to the Department of Defence. Turana, a small jet-engine powered, pilotless target aircraft in production for the Royal Australian Navy is of G.A.F. design and is produced in the Factories.

The Commonwealth Aircraft Corporation Ltd (C.A.C.) Fishermen's Bend, Victoria, was the prime contractor for the Australian production for the R.A.A.F. and R.A.N. of the Italian Macchi jet trainer and for the production of the British Viper engine that powers this aircraft. The C.A.C. is the major Australian contractor for the Bell light observation helicopter which is being produced for the Australian Army. Hawker de Havilland Australia Pty Ltd at Bankstown and Lidcombe New South Wales was the major sub-contractor for the Macchi. Macchi trainer production for the R.A.A.F. and R.A.N. was completed in 1972.

Guided Weapons. The production of the Ikara anti-submarine system is continuing at the Government Aircraft Factory at Fishermen's Bend. Excluding the torpedo, production of the system, covering broadly the torpedo carrying flight vehicle and its motor, launcher and magazine handling equipment and guidance and tactical control equipment is a combined effort by departmental establishments and industry, directed and co-ordinated by the Department. Ikara has been fitted to 9 R.A.N. ships and variants have also been purchased by the British and Brazilian Navies.

Planning and marketing

The Production Planning Branch is responsible for co-ordination, in conjunction with the production divisions, of the provision of defence production capability in the Government factories and aircraft industry to meet the Defence Force requirements. Within defence policy guidelines the Branch provides and administers reserve stocks of materials and reserve pools of plant, equipment and other requirements needed for rapid expansion in the event of war.

The Marketing Branch undertakes sales of Departmental products and services; administers Department of Industry and Commerce and Department of Defence patents and licensing arrangements; co-ordinates and monitors Australian Industry Participation programs arising from major Government purchases from overseas; co-ordinates with Department of Defence the development of co-operation between Australia and New Zealand in the defence supply field.

Finance

The total expenditure on Defence-orientated Department of Industry and Commerce activities in 1974-75 was \$250,750,000. This was made up of \$74,648,000 from Parliamentary Appropriations, \$170,093,000 from Trust Fund Accounts and \$6,009,000 from revenue.

Personnel

At 31 December 1975, 9,311 personnel were employed on specifically defence orientated functions (excluding general financial and administrative management support) as follows: administration 767; aircraft production 2,481; munitions production 5,189; miscellaneous production 846; cadets and trainees 20; overseas staff 8.

PURCHASING

The Office of the Purchasing Commission, a Division of the Department of Administrative Services, arranges for the purchase within Australia of supplies and services for the Australian Navy, Army and Air Force and for Department of Industry and Commerce factories and establishments. Purchase of supplies from overseas sources is arranged and progressed by the Department of Defence. Upon request, the Office also arranges contracts on behalf of other Commonwealth Government departments and authorities. The Office also arranges disposal—by means of public tender, auction or otherwise—of stores no longer required for Commonwealth Government purposes.

Purchases by the Office of the Purchasing Commission in 1974-75 totalled \$185 million. Total realisation from disposals in 1974-75 was \$17 million.