

CHAPTER 4

DEFENCE

Department of Defence

Central Organisation for Defence

Until November 1973 there existed a Defence Group of departments (*see* Year Book No. 59, 1973) consisting of the Departments of Navy, Army, Air and Supply which, together with the Armed Services, were co-ordinated by the Department of Defence. On 30 November 1973, the Government merged the three Service Departments together with the Department of Defence.

On 4 December 1973, the Minister for Defence made a statement announcing the Government's acceptance of a report recommending an integrated and functional organisation for the new Department of Defence. At the time of writing, a major reorganisation of the Department is proceeding. Legislation is being introduced to abolish the Navy Board, Military Board and Air Board. The Defence Forces, which retain their identity, are each headed by a Chief of Staff, responsible to the Minister for Defence through a Chief of Defence Force Staff (and subject to defence policies and manpower and financial resources) for the operational control and command, fighting efficiency and training of his Service.

The Chief of Defence Force Staff is to be a statutory officer in the Department of Defence, responsible directly to the Minister for the command of the Navy, Army and Air Force. This officer replaces and absorbs the previous functions and appointments of the Chairman, Chiefs of Staff Committee. The Chief of Defence Force Staff is to be provided with a Military Planning and Operations Staff.

The reorganisation contemplates greater control of military matters by the Chief of Defence Force Staff and, under the Minister for Defence, greater departmental control of supply, determination of the size and equipment of the Defence Force, policy on training and education, determination of establishments and conditions of service and management of scientific services.

Functions of the Department of Defence

The functions of the Department of Defence will include all aspects of defence policy, co-ordination of the defence tasks of the Department of Supply, and direction of execution of defence policy by the Armed Services: the Royal Australian Navy, the Australian Army, and the Royal Australian Air Force. More specifically, 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 Armed Services and during retirement; establishments, postings and promotions; legislation concerning the Armed Services; public relations; Defence and Service advisers abroad; defence electronic data processing; civil defence.

Higher defence machinery

Because of the essentially joint nature of most military operations, and because important decisions on defence matters can best be reached by consultation between all interested parties, defence administration is traditionally carried out at the highest levels through a series of committees comprising members of the Services, Defence and other departments. The following are to be the principal committees of the Department, and their functions.

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

The *Defence Program Committee* will review the Five Year Defence Program and the annual Defence estimates as prepared by the staff, and convey collective or individual comments to the Minister. The Committee will exchange views and review progress in the development of the Defence Program; provide to the Minister and Defence Department staff collective or individual opinion on the major weapons systems proposed in the Five Year Defence Program; and provide a forum for discussion of defence policy implications of military operations.

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

The *Defence Management Committee* will provide a forum for discussion of matters of general interest.

The *Plans and Operations Executive* will deal with military planning, operational and training matters which concern the Chief of Defence Force Staff or Chiefs of Staff Committee.

The *Defence Force Structure Committee* will provide advice to the Defence Program Committee and participate in decision making on the development of the force structure, Five Year Defence Program and major equipment proposals, and keep these matters under review.

The *Defence Operational Requirements Group* will endorse guidelines on capabilities for development of staff targets, endorse staff targets prepared by Services; and consider service Staff requirements, approving them for definition and development.

The *Program and Estimates Committee* will review the annual draft Defence Program and Estimates and make recommendations to the Defence Program Committee.

The *Defence (Conditions of Service) Committee* considers and makes recommendations to the Minister for Defence and, in the case of major proposals, to the Treasurer, concerning rates of pay and financial conditions of service of personnel of the Defence Force.

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 *Dockyard Policy Committee* will review the financial management, work programming, personnel management and industrial relations and facilities, and equipment planning aspects of the Dockyards' activities.

The *Defence Research, Development, Trials and Evaluation Review Committee* is to consider and recommend policy guidelines for the Research, Development, Trials and Evaluation Program; draw attention to developments which may affect defence policy; and recommend new projects of a continuing nature estimated to cost more than \$1 million per annum or, over their expected life span, more than \$2.5 million.

It is expected that the *Defence (Industrial) Committee* and a *Defence Business Board* will continue (see Year Book No. 59, page 86) but the form and composition of these bodies has not yet been decided.

Basis of current defence policy

The primary aim of Australian defence policy is to ensure the security of Australia and her 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, the Five Power arrangements and SEATO. In a period assessed as having low-threat probability, the basic concept for the force structure is a core force in being of sufficient skills and capabilities to allow timely expansion should there be unfavourable developments in the strategic situation.

Personnel strengths

The selective national service scheme, which was in its eighth year of operation, was abolished with effect from 5 December 1972. Those serving under the scheme were given the opportunity of selecting immediate discharge, completing their term of full-time duty or transferring to the permanent force. Those persons eligible for national service selection who had opted to join the C.M.F. were given a similar opportunity in regard to their C.M.F. obligation.

PERSONNEL STRENGTHS OF DEFENCE FORCES

NAVY

<i>Strength at June—</i>	<i>Permanent Forces</i>	<i>Citizen Forces</i>	<i>Emergency Reserves</i>	<i>Total</i>
1964	12,569	5,202	..	17,771
1965	13,503	3,762	443	17,708
1966	14,714	3,797	686	19,197
1967	15,893	3,931	793	20,617
1968	16,454	4,047	904	21,405
1969	16,943	3,971	1,114	22,028
1970	17,304	4,462	897	22,663
1971	17,232	5,093	918	23,243
1972	17,134	5,378	921	23,433
1973	17,484	5,168	932	23,584
Estimated strength at June 1974	16,350	5,400	800	22,500

ARMY

<i>Strength at June—</i>	<i>Permanent Forces</i>		<i>Citizen Forces</i>	<i>Emergency Reserves</i>	<i>Total</i>
	<i>Australian Regular Army</i>	<i>Pacific Islands Regiment</i>			
1964	22,681	812	27,505	..	50,998
1965	25,314	1,415	28,146	288	55,163
1966	32,702	1,732	32,046	662	67,142
1967	41,464	2,246	34,670	889	79,269
1968	42,944	2,406	35,762	1,031	82,143
1969	44,051	2,474	34,256	981	81,762
1970	44,533	2,434	31,397	822	79,186
1971	43,769	2,593	29,364	657	76,383
1972	41,290	2,769	26,578	594	71,231
1973	33,990	3,013	22,592	527	60,122
Estimated strength at June 1974	30,100	2,900	19,500	450	52,950

AIR FORCE

<i>Strength at June—</i>	<i>Permanent Forces</i>	<i>Citizen Forces</i>	<i>Emergency Reserves</i>	<i>Total</i>
1964	16,564	926	..	17,490
1965	17,720	724	26	18,470
1966	19,358	865	170	20,393
1967	20,130	1,059	303	21,492
1968	21,564	907	397	22,868
1969	22,712	902	467	24,081
1970	22,642	841	668	24,151
1971	22,539	788	700	24,027
1972	22,720	778	621	24,119
1973	22,717	681	510	23,908
Estimated strength at June 1974	21,250	400	320	21,970

Equipment

An amount of \$152.0 million was spent on equipment of a capital nature in 1972-73; this included \$58.0 million under credit arrangements with the Government of the United States of America. An amount of \$112.1 million was expected to be spent in 1973-74.

The major equipment items received in 1972-73 by the Services included 1 hydrographic ship (H.M.A.S. *Flinders*), 4 heavy landing craft, 1 HS748 support and training aircraft, 5 light observation helicopters, 6 F111C and 3 Macchi aircraft.

Major new equipment items planned for delivery in 1973-74 include 3 heavy landing craft, 18 F111C aircraft, 6 Mirage IIID aircraft, 12 medium lift helicopters, 5 utility helicopters, 4 Nomad aircraft, 13 light observation helicopters, 1 HS748 aircraft, 12 Turana pilotless target aircraft.

Research and development

The laboratories of the Department of Supply together with the Services' own technical establishments, have continued to work on projects and investigations in support of Service needs. An extension to the arrangements for the conduct of the Woomera Range and its associated technical facilities has been jointly made with the United Kingdom, and collaborative programs in space tracking and other selected areas are being undertaken in association with the United States of America.

Defence expenditure

EXPENDITURE BY DEFENCE DEPARTMENTS AND SERVICES (\$'000)

	<i>Defence</i> (a)	<i>Navy</i>	<i>Army</i>	<i>Air</i>	<i>Supply</i>	<i>Other</i>	<i>Total</i>
Actual expenditure—							
1968-69	19,077	232,327	410,621	382,559	90,482	29,631	1,164,697
1969-70	23,440	241,140	409,386	301,162	94,091	33,841	1,103,060
1970-71	22,080	247,924	421,037	302,657	106,011	37,864	1,137,573
1971-72	25,789	270,243	465,792	303,239	112,262	39,750	1,217,075
1972-73—							
Total	32,766	293,094	445,061	352,185	123,520	38,648	1,285,274
Less—United States Credits	4,138	4,853	48,605	384	..	57,980
Payments from appropriations	32,766	288,956	440,208	303,580	123,136	38,648	1,227,294
Estimated expenditure—							
1973-74	69,337	319,933	460,239	352,284	129,457	14,260	1,345,510

(a) Includes defence aid for Malaysia, Singapore and South Vietnam.

Logistic arrangement with the Government of the United States of America

The logistic arrangement referred to in Year Book No. 57, 1971 and earlier issues of the Year Book continues to apply. No new credits are being arranged.

Citizen and Reserve Forces

Citizen and Reserve Forces may be called out by proclamation for continuous full-time service in a 'time of defence emergency'. The particular circumstances giving rise to the proclamation of a time of defence emergency could be varied, but would occur in a situation where the Regular Forces needed the full-time support of the Citizen and Reserve Forces in hostilities short of general war.

The three Services also have volunteer Emergency Reserves which may be called out for continuous full-time service when they are needed. These reserves provide a ready means of supplementing and reinforcing operational units.

Australian forces serving overseas

As at 31 December 1973 the Australian element of the ANZUK Force in Malaysia and Singapore included:

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—One battalion of RAR; one field battery; elements of headquarters, signals and logistics units integrated with United Kingdom and New Zealand elements. However, the Government decided that the battalion and battery would not be replaced when their tour of duty was completed about the end of 1973, and these ground combat elements are being progressively withdrawn, leaving only a small residual Army element in Singapore.

Air Force—Two squadrons of Mirage fighter aircraft supporting elements based at Butterworth in Malaysia.

Defence co-operation with South-East Asian countries

In support of Australia's policy, the Government is pursuing major programs of defence co-operation with Indonesia, Malaysia and Singapore.

Current defence aid to Malaysia and Singapore, to which amounts of \$16 million and \$4 million respectively have been pledged for the period 1971–74, represents a continuation of programs first commenced in 1964. To date over \$52 million has been spent on these programs, comprising technical assistance projects and a wide range of equipment for the Malaysian and Singapore armed forces. As well, other projects in defence co-operation have been undertaken, most notably the provision of 16 refurbished Sabre jet fighters to the Royal Malaysian Air Force.

In 1972 a three year defence co-operation program of \$20 million with Indonesia was begun. The main projects undertaken so far have been the survey and mapping of Sumatra and provision of patrol boats and technical assistance to improve Indonesian maritime surveillance capacity. In addition 16 ex-R.A.A.F. Sabre aircraft have been given to Indonesia.

Both under the above defence aid and co-operation programs and in the context of defence assistance to countries of the region generally, Australia accepts large numbers of overseas trainees in Service training establishments. During 1973 the total was about 600 spread over all three Services.

Naval Defence

Prior to 1901, naval defence systems were organised under the State Governments. Information regarding these systems is given in Year Book No. 2, page 1094. An outline of the development of Australian naval policy is given in Year Books No. 3, page 1060, and No. 12, page 1012. An account appears in Year Book No. 15, pages 921–3, of the building of the Australian Navy, its costs, the compact with the Imperial Government, and other details. The growth and the activities of the Royal Australian Navy during the 1939–45 War are shown in Year Book No. 36, pages 1023–7.

Under the provisions of the Commonwealth of Australia Constitution Act the Minister of State for Defence administers the Department of Defence (Navy Office). Under the *Naval Defence Act* 1910–1973 the Royal Australian Navy is administered by the Naval Board. The Naval Board consists of the Minister for Defence (President), five Naval Members, and the Special Deputy, Department of Defence (Navy Office).

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 of America are also attended by officers of the Royal Australian Navy.

Ships of the Royal Australian Navy

The Fleet, December 1973: Melbourne—aircraft carrier; *Supply*—oiler; *Stalwart*—destroyer tender; *Perth, Hobart, Brisbane*—guided missile destroyers; *Vendetta, Vampire, Duchess, Anzac*—destroyers; *Yarra, Parramatta, Stuart, Derwent, Swan, Torrens*—destroyer escorts; *Teal*—coastal minesweeper; *Curlaw, Snipe*—coastal minehunters; *Moresby, Flinders*—surveying ships; *Diamantina, Kimbla*—oceanographic research ships; *Oxley, Otway, Onslow, Ovens*—submarines; *Attack, Aitape, Acute, Adroit, Advance, Archer, Ardent, Arrow, Assail, Aware, Barrette, Barricade, Bayonet, Bombard, Buccaneer, Ladava, Lae, Madang, Samarai*—patrol boats; *Banks, Bass*—auxiliaries; *Brunei, Labuan, Tarakan, Wewak, Salamaua, Buna, Betano*—heavy landing craft.

In operational reserve, December 1973: Hawk, Gull, Ibis—minesweepers.

During 1973 the ships *Melbourne, Brisbane, Perth, Vampire, Derwent, Supply, Stuart, Stalwart, Teal, Curlaw, Snipe, Swan*, made overseas visits. The submarines *Onslow and Ovens* also made overseas visits.

Fleet Air Arm

The Fleet Air Arm of the Royal Australian Navy maintains three front line squadrons for embarkation in the operational carrier H.M.A.S. *Melbourne*. These squadrons currently consist of Skyhawk A4-G fighter/ground attack aircraft, Tracker S2-E anti-submarine aircraft, and Wessex Mk31B anti-submarine helicopters. Four training and support squadrons are based at the Naval Air Station, at Nowra, New South Wales. Other aircraft operated by the Navy are the Scout helicopter in *Moresby*, Iroquois helicopter (training and search and rescue), Dakota, Macchi trainer.

Ship Construction and Repairs

There are two naval dockyards, one at Garden Island, New South Wales, and one at Williamstown, Victoria. Also the dockyard at Cockatoo Island, which is operated by the Vickers Cockatoo Dockyard Pty Ltd, by agreement with the Australian Government, carries out considerable naval work. All three dockyards carry out ship re-fitting for the Navy.

During 1973, the construction of H.M.A.S. *Flinders*, a small hydrographic ship, was completed. Also, the extended refits of two Daring Class Destroyers, *Vendetta* and *Duchess* were completed. Present and scheduled construction includes two Oberon Class submarines (in the United Kingdom), one oceanographic ship and extended refits for four River Class Destroyer Escorts, *Yarra*, *Parramatta*, *Derwent* and *Stuart*.

Personnel, training, entry, women's services, reserves

Personnel. The estimated strength of the Royal Australian Navy in terms of personnel borne for full-time duty for 1973-74 is 16,115. At 31 December 1973 the actual strength of personnel borne for full-time duty was 2,241 officers and 14,550 sailors, which included 152 officers and sailors of the Citizen Naval Forces, 6 officers and sailors of the Royal Australian Navy Emergency Reserve. These figures exclude the Navy component of the Papua New Guinea Defence Force which comprised 11 officers and 252 sailors at 31 December 1973.

Training. On entry, General List officers are trained at the Royal Australian Naval College, H.M.A.S. *Creswell* at Jervis Bay. 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 November 1973 there were 114 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 December 1973 there were 472 naval artificer 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 December 1973 there were 698 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.

Direct entry officers. To meet increasing requirements for officers, direct entries are accepted into the Royal Australian Navy. 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.

Women's Services. The present Women's Royal Australian Naval Service was inaugurated in January 1951. The numbers serving in shore establishments in December 1973 were 36 officers and 707 W.R.A.N.S. The Royal Australian Navy Nursing Service was reconstituted in November 1964, and its strength in December 1973 was 23 officers.

Emergency Reserve. In November 1964 approval was given to form the Royal Australian Naval Emergency Reserve to provide a readily available source of trained manpower which may be called on for continuous full-time service. The authorised establishment of this force is 2,000 officers and

sailors. At 30 December 1973 the strength of the reserve available for mobilisation was 67 officers and 823 sailors, which excluded 2 officers and 4 sailors serving full-time. Members are required to complete thirteen days training annually and are paid an annual bounty.

Citizen Naval Forces. The Citizen Naval Forces consist of the R.A.N. Emergency List, Royal Australian Fleet Reserve, Royal Australian Naval Reserve and Women's Royal Australian Naval Service Reserve. The authorised establishment of the combined forces is 10,000. At 30 December 1973 there were 1,136 officers and 4,313 sailors in the Citizen Naval Forces. These figures excluded 98 officers and 54 sailors serving full-time. The R.A.N.R. is the training reserve of the Citizen Naval Forces. 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.

Military Defence

A detailed account of the Australian defence forces prior to federation appears in Year Book No. 2, pages 1075–81. See also Year Book No. 12, page 999.

Commonwealth Systems

Under the terms of the Commonwealth of Australia Constitution Act 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 homogenous Army in 1902 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.

National Service Training was introduced in 1951 and suspended in 1959–60. It was re-introduced in June 1965 and suspended in December 1972.

Organisation

The Department of Defence (Army Office) is responsible for the policy and control of the Australian Army. The Military Board consists of the Minister for Defence (President), the Chief of the General Staff, the Vice Chief of the General Staff, the Chief of Operations, the Chief of Personnel, the Chief of Matériel, the Citizen Military Forces Member, and the Special Deputy to the Permanent Head, Department of Defence (Army Office). After the 1939–45 War, Command Headquarters, on a geographic basis, were established to implement Military Board policy and to command and administer those units placed under their command.

On 1 November 1973, the geographic Commands were abolished and the Army was reorganised on a functional basis. The new Commands established are:

Field Force Command
Logistic Command, and
Training Command

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

Logistic Command commands all logistic elements of the Army.

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

To provide administration support for the three functional Commands there are military district organisations. These are:

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 Districts.

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 Australian and State Governments are involved.

Personnel, training, Women's Services, cadets

Personnel. The effective strength at 26 December 1973 was: Australian Regular Army, 31,775 (including 30,513 males and 1,262 females (Women's Services)); Citizen Military Forces, 20,487.

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 Commonwealth training establishments for training officers for command and staff appointments. The College was later moved to Queenscliff, Victoria, where it is at present situated. The course is held annually and is of twelve months duration. The normal intake is seventy 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, India, Indonesia, Malaysia, New Zealand, Pakistan, 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 Royal Australian Navy, the Royal Australian Air Force, and the Australian Public Service.

In order to ensure common standards in tactical doctrine, and staff and command training throughout the Commonwealth of Nations, liaison is maintained with other 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 for the purpose of providing 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. Cadets not admitted to the Faculty take a diploma course appropriate to their educational background. 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. In 1967 one Thai cadet commenced training at the College; another Thai cadet commenced in 1970, a third in 1972 and a fourth in 1973.

Officer Cadet 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 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 and 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, 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-seven weeks duration and on graduation cadets are appointed lieutenants in the Royal Australian Army Nursing Corps or the Womens Royal Australian Army Corps.

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 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 which is followed by two years on-the-job training in an appropriate Army workshop or technical unit under the supervision of an Apprentice Master. The exceptions to this are the Radio Tradesmen who train for three years at the Apprentices School before one year on-the-job training. Before leaving the Apprentices School 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 eventually leave the Army. In addition to 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 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 and to produce trained instructors. Courses at Army schools are conducted for members of both the Regular and the Citizen Military Forces. The following Army schools have been established: Jungle Training 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 Transport Corps Centre, Royal Australian Army Medical Corps School of Army Health, Royal Australian Army Ordnance Corps Centre, 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).

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 Womens 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 Womens Army Corps was redesignated the Womens Royal Australian Army Corps (W.R.A.A.C.). The Womens Services in the Australian Regular Army now comprise these two Corps. Womens Services are incorporated in the Citizen Military Forces, and one company of the Womens Royal Australian Army Corps is located in each Military District excluding the Northern Territory. Companies of the Royal Australian Nursing Corps are also located in each Military District excluding the Northern Territory Military District.

Australian Cadet Corps. The Australian Cadet Corps is a voluntary organisation. 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, does not, however, form part of the Australian Military Forces. School Cadet units are raised at educational establishments throughout Australia except in the Northern Territory. The minimum age for enrolment is the year in which the applicant reaches the age of fourteen years, and cadets, who in most 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 of cadets, cadet under-officers, warrant and non-commissioned officers from within school units according to an authorised establishment scale. School Cadet units may be, and in many cases are, affiliated with Citizen Military Force units. The establishment of the Corps is 46,000 all ranks, and at 30 June 1973 comprised 327 School Cadet units with a posted strength of 37,622 all ranks.

Air Defence

There are two elements in air defence: static air defence and counter air operations by strike aircraft.

Static air defence is provided by manned interceptor fighter aircraft, at times augmented by surface-to-air missile systems and gun defences, all operating under the direction of a control organisation. Such static systems are limited in their defensive coverage by the radius of action of the fighter aircraft and/or the effective operating range of the controlling radar.

Complementary to the static air defence system and capable of much wider ranging activities are the counter air strike forces. The aim of these forces is to destroy the enemy's offensive air capabilities at their source.

Higher organisation

The Air Board is responsible to the Minister for Defence for the control, organisation, and administration of the Royal Australian Air Force and is constituted as follows: Chief of the Air Staff, Air Member for Personnel, Air Member for Supply and Equipment, Air Member for Technical Services, and Special Deputy (Air Office) Department of Defence.

The Air Board administers and controls R.A.A.F. units in Australia and its Territories through two commands, Operational Command and Support Command. The guiding principles of the command organisation within Australia are to decentralise day-to-day operating activities as far as possible and to streamline the force and make it as efficient as possible. Operational units overseas, working within the broad directives issued by the Air Board, comprise the R.A.A.F. components of the ANZUK Force located at Butterworth in Malaysia and in the Republic of Singapore.

The members of the Air Board and their staffs are located at the Department of Defence (Air Office) in Canberra. An R.A.A.F. representative is located in London, and air attaches are located in Djakarta, Saigon, Paris, and Washington. Operational Command is responsible for the command of operational units and the conduct of their operations within Australia and its territories. Support Command is responsible for the recruitment and training of personnel, and the supply and maintenance of service equipment.

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 93.

Organisation of units

Bases. Each command is established with the units necessary to carry out its allotted function. There is no fixed rule regarding the number and types of units within each command, as this depends upon the nature of its present and future responsibilities. Where possible, units having similar functions or requiring similar facilities are located together, and the geographical locations are known as bases.

Formations—comprising a headquarters unit to control the activities of a number of units at one location; each formation has a base squadron which provides common services to all units at the location.

Flying squadrons—strike reconnaissance, air defence, ground attack, medium and short range transport, helicopter, and maritime reconnaissance squadrons which undertake the operational flying and in conjunction with operational conversion units, the operational flying training commitments of the R.A.A.F.

Operational conversion units—specialising in operational conversion training of aircrew for the air defence and ground attack squadrons.

Aircraft depots—specialising in major overhaul, etc., of aircraft and equipment.

Stores depots—centrally located depots to which stores and equipment ordered by the R.A.A.F. are delivered for distribution to units.

Airfield construction squadron—specialising in airfield construction tasks in support of the R.A.A.F. operational component within Australia and the Territories.

Telecommunications units—responsible for the communications services of the R.A.A.F.

R.A.A.F. hospitals—hospitals in Australia and at Butterworth providing medical services for the R.A.A.F.

Flying and ground schools and units—schools and units specialising in the aircrew and ground staff training required by the R.A.A.F.

R.A.A.F. Diploma Cadet Squadron and R.A.A.F. Academy—training units, to diploma and university degree level respectively for officer cadet entrants to the R.A.A.F.

R.A.A.F. Staff College—trains specially selected R.A.A.F. officers for higher staff and command posts.

Aircraft

The R.A.A.F.'s strike reconnaissance force is currently equipped with Canberra and F111C aircraft. The air defence and ground attack squadrons are equipped with the Mirage III-O. Transport aircraft currently in use are Hercules C130A and E, 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 Winjeel, Macchi and HS748.

Personnel, Reserve, Women's Services

At 30 December 1973, the authorised Permanent Air Force establishment was 23,171 and the Citizen Air Force 600; the enlisted strength was Permanent Air Force 21,520 and Citizen Air Force 421, while the strength of the General Reserve was 7,657. The Permanent Air Force figures include the Women's Royal Australian Air Force, which has an establishment of 979 and strength of 807 and the R.A.A.F. Nursing Service with an establishment of 113 and strength of 82.

Department of Supply

For information relating to the creation of the Department of Supply and its development up to 1959 see Year Book No. 51, page 1204, and earlier issues. On 18 December 1959 the Department assumed responsibility for the operation and management of space tracking stations in Australia on behalf of the United States of America's National Aeronautics and Space Administration (NASA). On 29 March 1962 Australia became a foundation member of the European Launcher Development Organisation (ELDO), and the Department accepted responsibility for the test firing of the launching rocket for that Organisation's experimental satellite, using the facilities of the Woomera Rocket Range. The last of these ten test firings at Woomera was on 12 June 1970.

On 1 May 1968 the Department took over the Administration of the Antarctic Division from the then Department of External Affairs. In December 1972, this responsibility was transferred to the Department of Science.

Functions of Department

The functions of the Department of Supply include the following:

Defence research and development, including the operation of the Joint United Kingdom-Australia Weapons Research Project, and Australian research and development.

Planning, establishment, operation and management of facilities producing aircraft, guided missiles, small arms, ammunition, explosives, marine engines, clothing, telecommunications equipment and other defence goods.

Printing for the Defence group of departments.

Arrangement of contracts for purchasing of supplies and services required by the Armed Forces and certain other Government organisations.

Acquisition, maintenance, and disposal of strategic materials.

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

Disposal of surplus or obsolescent Australian Government goods on behalf of all departments.

Provision of Australian Government transport facilities outside the Australian Capital Territory and the Northern Territory.

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

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

Operation and management of space tracking stations and certain other facilities on behalf of the Government of the United States of America.

The Minister for Supply administers the *Supply and Development Act 1939-1966*, except insofar as it concerns the building (see also Chapter 12, Transport and Communications), repair, and maintenance of merchant ships and the building, extension, alteration, repair, and maintenance of shipyards, drydocking and repair facilities for merchant ships.

For the performance of the above functions the Department is organised into five Divisions, namely:

Research and Development; Munitions Supply; Aircraft, Guided Weapons and Electronics Supply; Planning and Procurement; and Finance and Management Services.

Research and Development

The Research and Development Division is responsible for scientific research and development in relation to war material; the operation of the Joint United Kingdom-Australia Weapons Research Project; and support of space research programs for the United States of America's National Aeronautics and Space Administration (NASA). The headquarters is situated in Canberra, and the following establishments are included in the Division: (a) Weapons Research Establishment,

Salisbury, South Australia; (b) Defence Standards Laboratories, Maribyrnong, Victoria; Woodville North, South Australia; Alexandria, New South Wales; Joint Tropical Research Unit (J.T.R.U.) at Innisfail, North Queensland in conjunction with the United Kingdom Ministry of Defence; (c) Aeronautical Research Laboratories, Fishermen's Bend, Victoria; and (d) Central Studies Establishment, Canberra, Australian Capital Territory.

Weapons Research Establishment. The Establishment has three scientific wings, namely Trials Wing, Applied Physics Wing and Weapons Research and Development Wing. The Trials Wing is concerned with the operation, development and instrumentation of the Woomera Range, and the planning, execution, and assessment of trials to meet the requirements of projects approved under the United Kingdom-Australia Joint Project arrangements. The arrangements have been extended for two years from 1 July 1974. The Applied Physics Wing conducts scientific research of significance to the Defence requirements of Australia in the broad fields of systems analysis, electronics, optics, radio propagation, radar, lasers, infra-red, visual surveillance. The Weapons Research and Development Wing is engaged similarly in aeroballistics, weapon systems, rocket propulsion and marine physics for the Defence group of departments.

In addition, an Engineering Wing provides engineering design, development and maintenance facilities, and certain technical services for the scientific wings (including the Joint Project Trials Wing). Engineering support is also provided for other Research and Development Division Laboratories. The Engineering Wing also undertakes tasks for other Supply organisations and the Australian Defence Services.

Defence Standards Laboratories. This Establishment (at Maribyrnong, Victoria) provides a scientific service to the Defence Services, Department of Supply factories and other authorities engaged in support to Defence, generally within the fields of chemistry, physics, metallurgy, engineering, explosives and ammunition, and to a limited extent, in the fields of biochemistry and physiology. It also undertakes scientific research appropriate to its responsibilities and of significance to the defence requirements of Australia. It is the principal Standards Laboratories of the Defence group of Departments and provides calibration facilities for the higher grades of standards. The Australian National Standards Commission has appointed D.S.L. as a verifying authority under the Weights and Measures (National Standards) Act.

Branches are located at Woodville North, South Australia and Alexandria, New South Wales.

The Joint Tropical Research Unit (J.T.R.U.) at Innisfail provides facilities for studying the behaviour and degradation of a wide range of materials and stores in hot-wet and hot-dry tropical environments.

Aeronautical Research Laboratories. The work of this establishment is broadly related to the aeronautical aspects of materials science, mechanical engineering, aircraft structures, aerodynamics and system studies. It undertakes research and development on specific defence projects, provides advice and conducts investigations for the Services, Government departments and industries engaged in defence work. Scientific research related to these responsibilities and of significance to the defence requirements of Australia is also undertaken.

Central Studies Establishment. This establishment assists the Defence group of departments in the application of operational research and systems analysis techniques to the study of military problems.

United States of America's project. Agreements have been signed by the Governments of Australia and the United States of America to co-operate in the establishment and operation in Australia of space vehicle tracking stations. The agencies for the Australian and the American Governments are the Department of Supply and the National Aeronautics and Space Administration (NASA) respectively.

As part of the world-wide network supporting NASA's space program the stations are designed to track spacecraft in their orbits around the earth or on their journey into space, to receive telemetered data from the spacecraft and to issue radio commands controlling the spacecraft's manoeuvres. The Department of Supply is responsible for managing, staffing and operating the stations on behalf of NASA. The stations which are now in operation are at Carnarvon in Western Australia (this station will close by the end of 1974 following a review by the United States of its space tracking requirements) and at Orroral Valley, Honeysuckle Creek and Tidbinbilla in the Australian Capital Territory.

An extensive communications system links the tracking stations with the control centres in the United States of America. At all stations the responsibility is vested in a station director who is a senior officer of the Department of Supply.

Under the Australian Government's policy of using the resources of private industry wherever possible, contracts for operation and maintenance services at the stations have been let as follows: Amalgamated Wireless (A'asia) Ltd (Carnarvon, Orroral Valley and Tidbinbilla), and Standard Telephones and Cables Pty Ltd (Honeysuckle Creek). NASA expenditure on operations in Australia for the period July 1972 to June 1973 was \$12.76 million.

The balloon-launching station at Mildura, Victoria, which the Department manages, will continue in operation until at least May 1975, although the agreement under which the United States Atomic Energy Commission used it terminated on 9 May 1974. There has been sufficient expression of interest from the Australian scientific community in using the station to suggest that it should be maintained for at least an interim period, during which its future can be further assessed. The station's prime purpose before 9 May was to monitor the level of radioactivity in the upper atmosphere using high-altitude balloons. Research experiments were flown on behalf of United States and Australian universities and research institutions.

Munitions Supply

The Department of Supply is responsible for the production of munitions required by the Armed Services. Production is carried out in Government factories, and a wide range of orders is also placed with private industry. 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); Defence Printing Establishment, Victoria (special defence printing requirements); 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, chemicals); Munitions Filling Factory, St Marys, New South Wales (filled ammunition and explosive munitions); Ordnance Factory, Bendigo, Victoria (heavy guns, mountings, large turbine gears); Ordnance Factory, Maribyrnong, Victoria (guns, projectiles, fire control equipment, rocket motor components); and Small Arms Factory, Lithgow, New South Wales (rifles, machine guns, mortar shells, small calibre shells and fuse components).

Aircraft, guided weapons and electronics supply

Aircraft. Production both in Government factories and in industry of military types of aircraft and aero-engines and of other aircraft components required by the Services is administered by the Department of Supply through this Division. Planning of capacity and the negotiation 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: The Government Aircraft Factory at Fishermen's Bend 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 have designed and developed a twin turbo-propellor utility aircraft known as Nomad. The first prototype flew in July 1971, and in May 1972 the first production phase of the aircraft was authorised. The first production run will include aircraft for the Australian Army and for sale to other users. GAF also designed and is producing the Jindivik radio-controlled target aircraft which has been or is being supplied to Britain, Sweden and America as well as to the Weapons Research Establishment and the R.A.N. The Turana target aircraft in production for the Royal Australian Navy is of GAF design. GAF produces the missile of the Australian-designed Ikara anti-submarine weapon system which is in production for the Royal Navy, the Royal Australian Navy and the Brazilian Navy.

Apart from the Government Aircraft Factory, the Commonwealth Aircraft Corporation Pty Ltd is the only major aircraft manufacturer in Victoria. The Corporation 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 CAC 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 R.A.A.F. and R.A.N. was completed in 1972.

Guided weapons. The production of the Ikara anti-submarine missile is continuing at the Government Aircraft Factory at Fishermen's Bend. Production of the complete Ikara system, covering

broadly the missile, motor, propellants, guidance equipment, launcher, and magazine handling 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. Other overseas sales are being actively pursued. Turana, a development from the Ikara concept which can use the same shipboard launchers, is a small jet engine-powered, pilotless target aircraft being produced by the Government Aircraft Factory for the R.A.N. At St Marys, New South Wales, a Guided Weapons and Electronics Support Facility has been established to repair and maintain guided missiles for the Armed Services. The facility also provides support to the Services in calibration, aerial testing and modelling, in the provision of environmental test facilities, and in the maintenance and calibration of avionics equipment.

Naval Systems. A special group handles the co-ordination within the Department of the procurement and industrial development aspects of major R.A.N. equipment purchases. The R.A.N.'s new destroyer project, submarine and ship sonar systems, are current activities of this group.

Electronics. The Department is responsible for the technical aspects of supply of telecommunications and electronics equipment for the Defence Group. Production is also arranged for other Australian Government authorities and foreign aid programs. There has been recently a growing involvement in the negotiation for Australian industry participation in Defence purchases overseas. Projects handled by the Department include multi-channel UHF radio relay equipment and a range of military radio pack-sets for the Army, a computer-based message switching system for the Navy and major fixed telecommunications installations for the Air Force. Technology development in electronics is separately sustained from a production development appropriation within the Department of Supply vote.

Barra. The development of this long-range underwater submarine-detection system is being co-ordinated by the Department in several Australian electronic and aircraft companies. The project is one of the largest defence development projects undertaken in Australia. The United Kingdom, as its contribution to the joint program, is developing the airborne data processing equipment. The R.A.N. and R.A.A.F. are considering the fitting of the system to their aircraft. There is potential for sale to friendly countries.

Planning and procurement

Contract Board. The Board, constituted under the Supply and Development Regulation arranges for the purchase of supplies and services for the Australian Naval, Military and Air Forces and for Department of Supply factories and establishments. Upon request, the Board also arranges contracts on behalf of other Australian Government departments and authorities. It also arranges disposal—by means of public tender, auction or otherwise—of stores no longer required for Australian Government purposes. The Board comprises representatives of the three Services and of the Department of Supply. In each State there is a District Contract Board similarly constituted, which is authorised to exercise the functions of the Contract Board within certain financial limits.

Purchases by the Contract Board and District Contract Boards in all States in 1972-73 totalled \$188 million. Total realisation from disposals in 1972-73 was \$13 million.

Planning. The Production Planning Branch:

- studies manufacturing capacity available for the Services' requirements in peace and war;
- plans for and assists in the development of additional production capacity and plans the organisation of industrial resources for defence production in war;
- 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;
- receives and allocates to the appropriate departmental divisions all orders and procurement demands placed on the Department;
- monitors all aspects of progress in satisfying them and keeps client departments informed of progress;
- provides advisory services in the field of materials supply and utilisation to Government factories and contractors engaged in the production of munitions requirements;
- administers the national stockpile of strategic materials.
- arranges and administers the Department's interface with industry.

Stores and transport. The Stores and Transport Branch functions as the central storage and transport authority for most Australian Government departments. It provides car transport and goods transport by road in all States but not for the Australian Capital Territory or Northern Territory. It is the authority for the arrangement of furniture removals at departmental expense in all States,

but not in the Northern Territory. It has agents in Darwin. It also operates a shipping and customs section and the England–Australia bulk air freight scheme for Australian Government departments.

On 30 June 1973 the branch had under its control land, building and works, vehicles, plant and equipment, valued at \$27,609,000; 4,992 motor vehicles and 29.3 hectares of storage space as well as storage facilities for large quantities of chemicals, bulk liquids and explosives.

Sales and Aid. The Sales and Aid Branch promotes sales of Departmental products; administers arrangements for the supply of material provided as Defence Aid by the Australian Government; acts as project manager for some Defence aid projects; provides technical advice and procurement services on Civil Aid Programs; administers Departmental patents and licensing arrangements; co-ordinates and monitors Australian industry participation programs for Australian defence purchases from overseas; administers and co-ordinates the development of co-operation between Australia and New Zealand in the defence supply field.

Finance and Management Services

Finance. The total expenditure on Department of Supply activities in 1972–73 was \$265,557,000. This was made up of \$123,137,000 from Parliamentary Appropriations and \$142,420,000 from Trust Fund Accounts which included \$27,957,000 for Stores and Transport, \$95,291,000 for Government Munitions and Aircraft Factories, \$18,132,000 for projects for other governments and \$1,040,000 for cafeterias.

Management Services. The Technical Services Branch of the Department provides an operating, advisory and consultative service to the Department for industrial engineering, office methods, management operations research, archives and registry practice, instrumentation, electrical and communications engineering services, materials handling, defence standardisation, stores cataloguing, library services and safety.

The Automatic Data Processing Branch provides services to the Department by: assisting in the specification of data-processing systems; designing and implementing computer based systems; co-ordinating computer equipment requirements; and providing ADP training programs.

Personnel. At 31 December 1973 the Department employed 19,779 personnel as follows: administration 2,442; cadets and trainees 229; laboratories 5,961; aircraft production 2,099; munitions production 5,684; miscellaneous production 877; Stores and Transport Branch 2,460; and overseas staff 27.

