

CHAPTER 1

FORMATION OF THE ROYAL AUSTRALIAN AIR FORCE

THE Royal Australian Air Force had its origin in three linked events—the founding of the Central Flying School in 1912; the forming of the Aviation Instructional Staff which, as part of the Permanent Military Forces, opened the school under canvas in February 1914, and the sending overseas in the 1914-18 war of an Australian Flying Corps—a “half-flight” that went to Mesopotamia and eventually four squadrons that fought in the Middle East and France in 1916-18.¹ From the Australian Flying Corps’ strength of 460 officers and 2,234 other ranks, some, all young, versatile and experienced in combat, were to help build an independent Australian air force; others were to play an important part in developing Australian civil aviation; and others were to remain in England to serve in the Royal Air Force that Britain had established in 1918.²

But while the Australian squadrons were still in action in France and Palestine, far-sighted leaders in Australia were picturing the day, predicted in 1917 by the great South African leader, General Smuts, “when aerial operations, with their devastation of enemy lands and destruction of industrial and populous centres on a vast scale, may become the principal operations of war”. One of these leaders, a wise Australian commander, had already proposed as a war measure “of pressing importance” the establishment of a military air force proportionate to the army Australia was then maintaining. He was Major-General Legge,³ Chief of the General Staff. In a memorandum dated 29th April 1918, he sought immediate authority to raise for the defence of Australia a citizen force of 300 officers and 3,000 other ranks, and “to immediately commence the construction of 200 aeroplanes and 12 balloons”. “A sufficient air service,” General Legge wrote, “. . . can go far towards breaking the strength of an attack, or increasing the value of an inferior defending force *if it can master the air service of the enemy.*”⁴ “A thousand aeroplanes,” he said, “would cost less than one battle cruiser. . . . From our knowledge of the present war and from my own experience, I have to report that the minimum requirements of the Air Service are as set out and their creation should not be delayed a day when we realise that they may be needed tomorrow.”

¹ In November 1918 the AFC comprised No. 1 Sqn (commanded by Maj S. W. Addison) in Palestine and Syria, and three squadrons in France: No. 2 (Maj A. Murray Jones), No. 3 (Maj W. H. Anderson) and No. 4 (Maj W. A. McCloughry). Its organisation in England included a wing headquarters, an aircraft repair section and four training squadrons.

² The Royal Flying Corps, with 2,073 officers and men in 1914, together with the Royal Naval Air Service, grew into the Royal Air Force with 383 squadrons manned by 291,175 officers and other ranks at end of the first World War.

³ Lt-Gen J. G. Legge, CB, CMG. (1st AIF: GOC 1 Div 1915, 2 Div 1915-16.) CGS 1914-20; Comdt Royal Military College, Duntroon, 1920-22. Regular soldier; of Sydney; b. London, 15 Aug 1863. Died 18 Sep 1947.

⁴ The italics are Legge's.

As a minimum basis for the air service establishment in Australia, Legge listed: eight divisional, two army, and five reserve squadrons; schools, a factory, repair shops, aircraft parks and depots; a balloon wing and headquarters. For these he needed 654 officers and 7,209 other ranks. A majority were to be Citizen Air Force men; the permanent strength was not to exceed 20 officers and 500 other ranks. Aircraft for the squadrons (18 for each) were to total 270; for the aircraft parks and depots 135. Legge added that "even if the whole Australian Imperial Force were returning to Australia at once with all their equipment, the personnel and equipment asked for would still have to be provided . . . policy should be settled and a general and substantial authority given . . . to create, or justify the creation by the Government, of certain local industries". These industries were to include wire and steel-tube drawing, linen weaving and the manufacture of aero-engines and magnetos. "Expenditure should be fairly chargeable to 'War'," a comment against which the Minister for Defence, Senator Pearce,⁵ wrote, "I approve—GFP." On the official file there are two annotations. One is in the handwriting of the Commonwealth Treasurer and acting Prime Minister, Mr Watt,⁶ and is initialed by him. (The Prime Minister, Mr Hughes,⁷ was overseas attending an Imperial Conference.) It reads: "Cabinet is of opinion that . . . steps should be taken to arrange for the construction of engines and raw material . . . the necessary measures to encourage local manufactures should at once be taken." On 1st May 1918, Senator Pearce initialed a second note reading, "C.G.S.—Please bring up your immediate proposals with estimates of cost." To this last direction Legge complied with detailed lists of expenditure for his plan, based on a capital cost of "under £1,000,000" and an annual cost of £465,000.

On 24th June 1918, another and equally emphatic plea for an adequate air service came to the Defence Council, this time from the Naval Board, which strongly supported a program drafted by Wing Commander Maguire,⁸ Royal Naval Air Service, Air Service Adviser to the Board. Maguire proposed the establishment of an airship station at Sydney, one at Melbourne and one at Fremantle, each to have two non-rigid airships; three kite balloon stations, one for each of the three naval ports; a seaplane school with 12 machines; an aeroplane school with 20 machines; and two seaplane stations (each with 12 flying-boats). For this program 2,000 officers and men were sought. The Admiralty was to be asked to lend a seaplane carrier, complete with machines, spares and complement

⁵ Rt Hon Sir George Pearce, KCMG. Senator 1901-38. Minister for Defence, 1908-9, 1910-13, 1914-21, 1932-34. Of Perth, WA, and Melbourne; b. Mt Barker, SA, 14 Jan 1870. Died 24 Jun 1952.

⁶ Rt Hon W. A. Watt. Premier of Victoria 1912-14, MHR 1914-29; Treasurer and A/Prime Minister 1918-20. Of Toorak, Vic; b. Kyneton, Vic, 23 Nov 1871. Died 13 Sep 1946.

⁷ Rt Hon W. M. Hughes, CH. MHR 1901-52. Prime Minister 1915-23; Attorney-General 1939-40; Min for Navy 1940-41. B. Wales, 25 Sept 1864. Died 28 Oct 1952.

⁸ Cdr O. H. K. Maguire, DSO; RN. Comd HMS *Bustard* 1914-16; RNAS 1916; Comd Houten Bay Air Station 1917; Air Adviser to Naval Board 1918-19. B. Monkstown, Ireland, 19 Sep 1885. Died 8 April 1924. (Served with and held rank of W Cdr in RAF.)

of pilots. (Later Maguire reported that the Admiralty had stated that such a vessel could not be spared.)

Maguire seems to have had no illusions about Australia's ally, Japan, then still engaged against Germany. In support of his program, he wrote, "I understand that Japan has no service aviation of any magnitude, but there is no doubt that she is making preparations to have a very large . . . air service in the near future." The Naval Board asked that £500,000 be allotted for the next financial year for the construction of stations, the purchase of aircraft and for pay. Like Legge, Maguire contended that Australia should be self-supporting in the manufacture of aircraft. "Due to its long distance from possible sources of supply," he wrote, "the conditions for importing machines in time of war, in sufficient quantities to be of use, would be of enormous difficulty."

Two days later both the military and naval programs were referred by the Defence Council to a committee consisting of the First Naval Member, Rear-Admiral Sir William Creswell;⁹ the Director of Naval War Staff, Captain Thring;¹ Maguire; Legge; Major Harrison;² the officer commanding the Central Flying School at Point Cook;³ and Mr George Swinburne, chairman of the Defence Department's Board of Business Administration. On 13th July this committee reported to Cabinet that the two plans should be presented so that the Government would be able to judge their cost. Accompanying this report was a statement by Thring on the navy's strategical requirements and a progressive and highly-ambitious program drafted by Maguire for the R.A.N. air service; this covered a six-seven years' period. Thring, emphasising the value of early information of the approach of an enemy, advocated seaplane stations in the island groups to the north of Australia as far advanced in the direction of the approach of an enemy as possible. There was further emphasis on this in Maguire's program, which provided for seaplane stations, one each at Bynoe Harbour to the west of Darwin, in Arnhem Land, on the mainland of New Guinea and at Rabaul, and five other stations on the Solomons-Santa Cruz-Fiji line.

On 13th August, Cabinet authorised a minute which read:

Aviation Programme
£3,000,000 approved to 30/6/21; Council of Defence
to arrange allocation and details.

A sign of increasing awareness of the value of flying training was the disbanding, in September, of the Aviation Instructional Staff established as part of the Permanent Military Forces in 1913, and the formation in its place of No. 1 Home Training Squadron, A.F.C., A.I.F.

⁹ Vice-Admiral Sir William Creswell, KCMG, KBE; RAN. First Naval Member, Aust Naval Board, 1911-19. Of Silvan, Vic; b. Gibraltar, 20 Jul 1852. Died 20 Apr 1933.

¹ Capt W. H. C. S. Thring, CBE; RAN. Director of War Staff 1915-18. Of Wiltshire, Eng; b. Bradford-on-Avon, Wilts, 30 May 1873. Died 17 Jan 1949.

² Gp Capt E. Harrison. (Served in AN & MEF and 1st AIF.) Director of Aeronautical Inspection RAAF 1928-45. Of Melbourne; b. Castlemaine, Vic, 10 Aug 1886. Died 5 Sep 1945.

³ Central Flying School, Point Cook, Australia's first military air unit, gave its first flying course in 1914.

To consider how the £3,000,000 vote should be allocated and how the navy and army projects should be modified, a sub-committee was appointed. Its members were: Rear-Admiral Creswell, absent from the first meetings through illness and represented by the Second Naval Member, Commodore Cochrane,⁴ Legge, Maguire, Major L. Y. K. Murray, R.A.F. (Central Flying School), and Swinburne who was chairman. From the outset there was sharp division of opinion between Legge, the professional soldier and senior commander, and Maguire, a naval man with flying predilections. In retrospect the readiness of Cabinet to spend £3,000,000 in three years on air services when, only three years earlier (in November 1915) a cable had been sent to the British Government stating that it was "impracticable to organise complete squadron either in Australia or in conjunction with other Dominions",⁵ is significant. Faced with the task of planning for both capital and annual expenditure within the £3,000,000 limit, the sub-committee spent hours in earnest and often keen debate. The official minutes of its meetings, the first of which was held on 2nd October, give an account not only of the strong clash of opinions, each expert in its own way, but of the fundamental issues that had to be decided before the R.A.A.F. was born. Legge, for his part, said he could not and would not attempt to modify his plan. Cochrane, for the navy, contended that with only £1,500,000 they could but initiate a program. Maguire, advocating an ambitious naval program, saw a unified service providing for both the navy and the army as the only immediate and economical way out. Legge, acutely conscious of the air force his army would urgently need if war continued, feared that the navy would steal the plums from the Treasurer's pudding and saw his plan in grave danger of drastic reduction.

Formation of an independent Australian air force had no immediate appeal for Legge though he admitted that that might well be the eventual course. He made it clear that his immediate objective was an air service "for land work" with not fewer than 400 planes, 600 officers and 7,000 other ranks. He pointed out that, despite its gallant pilots and commanders, the Australian Flying Corps had had practically no experience before the war in administration and command and that, for some time at least, they must be directed by those who knew what was meant by expenditure under a responsible Government. Later he wrote, "We want our show to be run by Australians and not to be importing officers all the time. The British, of course, have senior officers to spare. We have not got flying officers . . . sufficiently experienced in administration and organisation to run the service by themselves. . . . In England the extravagance and waste of the Air Service is simply appalling . . . and the reason is that the bulk of the flying officers, who are good officers, fine fliers and fighters, are not experienced in administration and organisation."

⁴ Cmdre H. L. Cochrane, RN. Second Naval Member, Aust Naval Board, 1917-20. B. 16 Oct 1871. Died 29 Mar 1950.

⁵ F. M. Cutlack, *The Australian Flying Corps* (1923), (*Official History of Australia in the War of 1914-18*, Vol VIII), p. 423.

At the time when Legge was offering this criticism, Major-General F. H. Sykes, the R.A.F.'s second Chief of Air Staff, was advocating an ambitious plan for the formation of an Imperial Air Force to cost £21,000,000 a year. As Saunders has written,⁶ it was on this figure that Sykes' plan was wrecked. While it would be both unfair and misleading to infer that Legge's criticism was either meant to be or could fairly be applied to the British Chief of Air Staff (Saunders justly remarks that in the light of what happened in 1939 it is possible to maintain that Sykes was right), the contrast between the two pictures has perspective value.

But this dream of an Empire Air Force to which Australia would have been asked to contribute its share of 37 cadre squadrons (to be drawn from Australia, Canada, South Africa and New Zealand), if it was communicated to Australia at all, did not intrude on the discussions of the sub-committee. On the contrary there appears to have been a strong move in Government planning towards self-sufficiency. At this stage the Federal Cabinet was considering very seriously the construction of 200 aeroplanes in Australia.

Swinburne, as chairman of the sub-committee, wrote a memorandum in which he recommended: (1) that Legge's proposals should be examined by the Military Board and then submitted to a conference, which would include the First Naval Member, to determine how far the two Services could cooperate in such a plan; (2) that a Naval Aviation Service should begin with the establishment of two stations for naval defence and training, but that the full naval plan be deferred until the appointment of the new Naval Board; (3) that the whole air service should have one administrative authority; and (4) that the question of the local manufacture of aircraft should be referred to an Aircraft Construction Committee. The Military Board, in turn, recommended that Legge's plan be given a trial (if proved inefficient, then the more expensive plan, employing many more permanent members, would have to be considered). Legge's plan required the purchase from overseas of 200 aircraft within five years, in addition to 200 aircraft which the Australian Flying Corps was expected to bring back to Australia. Maintenance of a strength of 400 aircraft was considered more important than the manufacture of aircraft in Australia. Provision was also made for the admittance of Citizen Force trainees into the Australian Flying Corps on a voluntary basis for twelve months.

For a report on possible coordination with the naval plan, the army plan was referred to yet another sub-committee the members of which were Maguire, Murray and Major Sheldon⁷ (Australian Flying Corps), all of them flying men. This sub-committee was forthright. It reported that two separate air establishments under two separate authorities would be "impracticable, undesirable and could in no way be recommended". Instead, inauguration of a separate air force under its own Minister and

⁶ H. St G. Saunders, *Per Ardua* (1944), pp. 284-5.

⁷ Maj W. Sheldon. Comd 4 Sqn AFC 1916-17, 2 Sqn 1918. Regular soldier; of Caulfield, Vic; b. Singapore, 20 Aug 1889.

staff was advocated. Any militia plan was unlikely to give the most efficient results. Officer pilots should be entered for five years' service and three years in reserve. Technical officers should be seconded from the navy and the army. The 200 aircraft to be brought to Australia by the Australian Flying Corps should be used and no more purchased until replacements were needed, the replacements to be new types. The proposed strength of the unified air force was 370 officers and 2,467 other ranks.

On 20th January 1919, Swinburne, as chairman of the initial sub-committee, reported that it recommended formation of an Australian Air Corps for both the army and the navy under one administration and with central control. Introduction of a complete plan should be deferred until after the results of the Peace Conference were known. Legge remained the dissenter, contending that unified control of naval and military aviation was unsuitable to Australia; that the plan for combined action gave an undue share of the money allocated to the navy, and that, while for half the vote a force of fifteen squadrons could be created for the land forces—part regular, part militia—the combined proposal would mean a much smaller number of aircraft and only four squadrons organised.

The first decisive step in the formation of an Australian air force was taken in January 1919 when the Defence Council recommended the establishment of a temporary organisation for a joint air service for both the army and the navy. Yet another committee—the Air Service Committee—was formed, but this time it was given administrative powers, under the Ministers for Defence and the Navy, authorised to spend £500,000 for buildings and plant, and instructed to consider the local manufacture of aircraft. Initially its membership was confined to Swinburne (again the chairman), Legge and Maguire.

Business before the first meeting of the Air Service Committee on 31st January included examination of a proposal to acquire 200 aircraft from Britain. The official minutes record, pointedly, that no decision was made pending determination of policy and "how far available money would go". But the problem was tackled promptly, and early in the committee's sessions reference is found to a familiar figure, General Birdwood, who, at A.I.F. Headquarters in London, included in the wide scope of his responsibilities the role of adviser on air service matters to the Commonwealth. Birdwood had cabled on 29th January recommending the formation of four squadrons equipped respectively with Sopwith Snipe single-seater fighters, Bristol two-seater fighters, DH-9A day bombers and Vickers Vimy long-distance and night bombers. In response, the committee recommended the purchase of 15 of each of these types as a charge to A.I.F. votes. These aircraft would be in addition to 20 Avro's and 12 Sopwith Pups which had already been ordered for training. Birdwood proposed that the four squadrons of the A.F.C., on their return

to Australia, should provide cadre training establishments and hold half service equipment, the remainder being for training only.

Government approval was given to the committee's recommendation that two air force stations be established, one probably on Corio Bay and the other near Sydney; these were to be in addition to the Central Flying School at Point Cook. Legge and Maguire agreed that, without additional outlay, the two new stations would be able to provide for the training of civilians. At the committee's fourth meeting on 24th February Major Goble,⁸ R.A.F., whose services had been lent to the Commonwealth by the British Air Council, was nominated by Maguire as executive officer to the committee and the nomination was subsequently approved. Maguire, at this meeting, also suggested that the committee should recommend to the Government that legislation should be introduced for the creation of a new force similar to the R.A.F., but the committee decided that "for the present at any rate" the powers conferred by the *Defence Act* were sufficient.

On 1st April, the Governor-General (Sir Ronald Munro-Ferguson) wrote to the Secretary of State for the Colonies (Lord Milner) inviting the cooperation of the Air Ministry in "certain steps considered necessary to the initiation of an air force in Australia". "My Ministers desire," he wrote, "that first preference be given to members of the Australian forces and that every effort be made to secure them. In the event, however, of suitable Australians not being available, the Commonwealth Government would be glad if such personnel could be loaned from the R.A.F. for a period of two years." Posts to be filled were those of a Director of Air Services, a Director of Equipment, and two station commanders (lieut-colonels). Ten officers and a limited number of machines for a seaplane squadron and such officers and men as were necessary for airship and kite balloon units were also sought. Equipment asked for also included six flying-boats, three airships and three kite balloons. On the day this letter was written, Senator Pearce, in London, sent a cable to the acting Prime Minister (Mr Watt) asking that the Government ensure that applications were invited from members of the A.F.C., members of the A.I.F. who had joined the R.A.F., and any other Australian aviators available.

At this stage regulations under the *War Precautions Act* to bring the air force into being were being prepared from drafts made by Legge and Maguire. Maguire strongly advocated that the air administration should have complete control and that neither the Military Board nor the Naval Board should have any jurisdiction. On 5th April Swinburne told Legge that when the regulations had been promulgated the committee would be prepared to take over from him, as Chief of the General Staff, all organisation associated with flying. The plan drafted by the committee was for

⁸AVM S. J. Goble, CBE, DSO, DSC. (RNAS 1915-18; comd 5 Sqn RAF 1917-18.) Acting Chief of Air Staff RAAF 1923-24, 1933, and 1939-40. Aust Air Liaison Offr to EATS, Canada, 1940-45. Regular air force offr; of Melbourne; b. Croydon, Vic, 21 Aug 1891. Died 24 Jul 1948.

an air force to be administered by an Air Board under the Ministers for Defence and the Navy. In the first two years its strength was not to exceed 1,400 officers and other ranks.

Meanwhile, Maguire, who had done so much of the planning, had embarked for England. The Air Service Committee, loath to lose his services, arranged for his appointment as Australian liaison officer in London. But, as Maguire prepared to step out of the Australian scene another important figure was stepping in. At a meeting of the Air Service Committee on 16th May, the chairman read a cable message from Senator Pearce in London proposing that Lieut-Colonel Williams,⁹ a regular soldier who had commanded No. 1 Squadron A.F.C. with distinction, should be retained in London to assist Maguire. The proposal was adopted.

On 4th June the Governor-General received a cabled message from the Secretary of State for the Colonies which said: "Please inform your Ministers that announcement will be made in the House of Commons today that H.M. Government have approved of a proposal of Air Council that a gift of aeroplanes not exceeding 100 in number should be made to any Dominion requiring machines; object of H.M. Government being to assist Dominions wishing to establish air forces and therefore developing defence of Empire by air." The offer was gratefully accepted.

At a meeting two days later the Air Service Committee dealt with the first definite plan for the development of commercial aviation in Australia. It came from a group of businessmen who had registered a company to be known as Aerial Transport Limited, which planned to operate passenger, freight and mail services within the Commonwealth, and offered to make its aeroplanes available for use by the Government's pilots; to train up to 50 Government pilots a year without charge, the pupils' salaries to be paid by the Government; and to place the whole of its organisation at the Government's disposal in the event of war. It also proposed that all employees of the company should be enrolled as members of the A.F.C. Reserve. Legge recommended, and the committee approved, that the company should be informed that the Government welcomed its proposals and that, as far as possible, its services would be used.

About this time the attention of the committee was swung sharply back to the question of whether Australian or "imported" officers should command the new air force. On 12th June the Secretary for the Colonies informed the Australian Government that the Air Council could submit names for a Director of Air Services (a brigadier-general at a salary of £1,500 a year) and a Director of Equipment (a colonel at £1,200 a year). But Mr Hughes intervened with an urgent cable message to Watt in which he said "I earnestly hope that you will not appoint any but Australians to these or any other positions. In my opinion such a

⁹ Air Marshal Sir Richard Williams, KBE, CB, DSO. (1914-18: Comd 1 Sqn AFC 1917-18, 40 Wing RAF 1918.) Chief of the Air Staff 1921-38; Air Officer i/c Administration, Coastal Cd RAF 1939; Air Member for Organisation and Equipment RAAF 1940-41; AOC Overseas HQ RAAF 1941-42; RAAF Representative, Joint Chiefs of Staff, Washington, 1942-46; Dir-Gen Civil Aviation 1946-55. Regular air force offr; of Adelaide and Melbourne; b. Moonta, SA, 3 Aug 1890.

policy would be not only quite wrong, but exceedingly foolish." To this Watt wrote a peremptory minute—"I concur. Inform Defence Department and ask immediate attention."

The acting Defence Minister (Senator E. J. Russell) had meanwhile appointed a special committee to review the Defence estimates. This committee, with the concurrence of Goble and Lieut-Colonel E. D. M. Robertson, R.A.F., Air Service Adviser to Admiral Lord Jellicoe, who was then investigating Australia's defences, recommended that the formation of airship and kite balloon sections should be deferred "pending further developments". This stay in proceedings with lighter-than-aircraft was accompanied by a more active investigation of the question of providing Australia with aeroplanes. The Cabinet's view of this project was expressed when, on 26th July, Watt cabled to Pearce in London, "Proposed Arsenal would produce 50 aeroplanes per annum, but not ready for two to three years." In the House of Representatives on 31st July, the Minister for Works and Railways (Mr Littleton Groom), answering a question, explained that an application had been received from a British firm (the Aeroplane Manufacturing Company, London) seeking an invitation to open an aircraft factory at its own expense, even without any guarantee of orders. "The Government decided," Groom told the House, "that it was unable at present to invite any one firm to start a factory in the Commonwealth as a number of firms were considering the matter and as local companies were being formed to undertake aerial transport. The Government would, however, be only too glad to offer any facilities to companies who determined to manufacture aeroplanes in the Commonwealth."¹

There were members on both sides of the House ready to champion the development of air services, with heavy emphasis on defence. A factor which stimulated this advocacy was the idea that an air force offered opportunity for economies in both men and money that did not occur in the other two fighting Services. As early as December 1918, Dr W. R. N. Maloney, a staunch socialist, had declared from the Opposition benches: "The defence of Australia must be entrusted to the aeroplane and the submarine. A super battle cruiser or a super battleship costs, with its equipment, about £4,000,000 and carries many valuable lives. For that sum we could get 10,000 aeroplanes; and if we standardise our aeroplanes, with a factory in each of the six States, they would cost only about £250 each. When an aeroplane is destroyed it means the loss of two lives only; but it may sink a leviathan man-of-war costing £4,000,000 and carrying many men."² Dr Maloney's figures were inaccurate, and his anticipation of a single aircraft destroying a "leviathan man-of-war" was an over-simplification of an extremely hazardous operation, but his general contention expressed the same argument which Legge had emphasised eight months earlier.

¹ *Commonwealth Debates*, Vol 88, p. 11131.

² *Commonwealth Debates*, Vol 87, p. 9481.

Such arguments brought no consolation to the planners behind the scenes as Swinburne showed when, in August, he drafted a cable message which was sent to Pearce in London: "Although strongly urged by the committee the Government has not yet authorised expenditure for the initial scheme for Corio Bay and Sydney. Works have not yet commenced and could not be completed before next year. The Government is anxious to obtain sanction of full Cabinet before launching so large an annual expenditure; also awaiting Jellicoe's report." And the next scene was a depressing one: the full Cabinet withheld its sanction and the Treasurer's guillotine descended. On 16th September Swinburne reported to his little committee, now comprising himself, Legge and Goble, that the Cabinet had suspended the whole air service plan and that that year's estimates were to be confined to a limited provision for the Central Flying School only. It must have been with a sense of acute frustration that the committee drafted one of its last messages to London. In this Maguire and his colleagues were informed that the flying school would be reduced to "practically a store section", and that the committee was recommending that all members of the A.F.C. should be returned forthwith. "The gift aeroplanes," the message concluded, with a note of despondency, "can be shipped when convenient to Air Ministry and stored here." The last meeting of the Air Service Committee, held on 8th October 1919, noted that Lieut-Colonel Williams would embark for the return voyage on 14th October.

Planning was to be resumed though the Air Service Committee had ceased to exist. The planners had some support from parliamentary advocates who sought to outweigh Treasury caution and it was significant that the Treasurer himself, Mr Watt, when introducing the Supply Bill on 23rd October, offered evidence in defence of air service expenditure. "We have read in the press," he said, "that the Japanese will appropriate £25,000,000 for a four-years aviation plan."³ The truth was that in Australia, as in Britain, where Lord Trenchard,⁴ one of the great figures in the history of Service aviation, was planning to remould the R.A.F. within limits set by rigorous economy, the people were too concerned with post-war rehabilitation to react favourably to heavy defence expenditure—a reaction shared by the Cabinet. But Pearce was too much of a realist to evade the problem. Obviously the first answer must come from both the army and the navy and so the Commonwealth's first, and temporary, Air Board of four officers, two from each Service, came into being—Captain Nunn,⁵ with Goble, who had served in the Royal Naval Air Service, representing the navy, while the military members were

³ *Commonwealth Debates*, Vol 90, p. 13899.

⁴ Marshal of RAF Viscount Trenchard, GCB, GCVO, DSO. GOC RFC in Field 1915-17; Chief of Air Staff 1918-29; Commissioner Metropolitan Police 1931-35. Of London; b. 3 Feb 1873. Died 10 Feb 1956.

⁵ Vice-Adm W. Nunn, CB, CSI, CMG, DSO; RN. Comd HMS's *Aurora* and *Curlew* in Harwich Force 1917-19, HMS *Ramillies* 1924-25. Of London; b. Ripon, Yorks, Eng, 10 Dec 1874. Died 7 Apr 1956.

Brigadier-General Blamey,⁶ whose record placed him in high demand as an adviser, and Williams, who brought with him up-to-date information about Air Ministry planning in addition to years of air combat experience.

On 31st January 1920 the new board held its first meeting. It had been appointed specifically to prepare an air policy for Australia. Its report, completed on 7th February only eight days after the first meeting, was both frank and precise. It contained an early note that the board's estimates were necessarily based on figures prepared by previous authorities without verification, which, anyway, could be little more than a guide because it was not possible to foresee accurately the effect on cost of the rapid change and development inevitable in an air corps. With this qualification, the report presented a six-years program with "a valuable air force at the end of two years", which would be "able to take the field should necessity arise". The estimates were for these first two years only—first year, £1,790,110; second year, £2,338,155. This was brave planning, yet there was the inevitable qualifying statement: "The Board does not recommend any reductions from the figures submitted . . . but, in accordance with the request of the Minister that, in view of the financial situation, it may be impossible to meet the full requirements, Air Board has considered means by which these can be reduced with the least prejudice to the defence of Australia."

For the naval portion of the six-years plan the recommendations of Jellicoe were adopted—one squadron each of fighting and torpedo-carrying aeroplanes, each with a strength of 18 aircraft; one squadron each of ships' aeroplanes (or seaplanes) and of flying-boats for training, each with a strength of 12 aircraft, and eleven and a half flying-boat service squadrons. Aircraft required for this part of the program, including 50 per cent spare aircraft, totalled 297. Military requirements were: 8 single-seater fighter and 6 reconnaissance squadrons of 24 aircraft each; 6 bombing squadrons (4 light of 18 aircraft each and 2 heavy of 10 aircraft each); one training squadron of 18 aircraft. Provision of spare aircraft again amounted to 50 per cent, which would be "the minimum needed until aircraft were being produced in Australia", making a total of 669 aircraft. The grand total of aircraft for the entire program, with spares, was 966 in 36½ squadrons. If finances demanded it, reduction on the naval side was to be 6 squadrons. On the military side the reduction was to be on the basis of 18 instead of 24 aircraft for each fighter and reconnaissance squadron, and, if civil aviation could use bomber-type aircraft, the 4 light bomber squadrons could be dispensed with.

Reviewing the probable direction and object of an attack on Australia, the board made an appreciation that had point 20 years later. "Trade with Japan has greatly increased during the war," the report said, "but the restrictions on Asiatics in Australia have not decreased. Japan is insisting

⁶ Field Marshal Sir Thomas Blamey, GBE, KCB, CMG, DSO. (1st AIF: GSO1 1 Div 1916-17; Brig-Gen GS, Aust Corps, 1918.) GOC 6 Div 1939-40, I Corps 1940, AIF in ME 1940-41; Dep C-in-C ME 1941-42; GOC-in-C AMF 1942-46. Of Melbourne; b. Wagga Wagga, NSW, 24 Jan 1884. Died 27 May 1951.

on the terms of the Mandates which give the administration of the German Pacific possessions to Australia being framed so as to prevent the restrictions on Asiatics now operating in Australia being applied in the islands. There is no need to elaborate on the attitude of either Australia or Japan on the White Australia question. Japan might consider that, if opportunity offered, and particularly if the attention of the British was occupied in other parts, she could obtain her wishes without too great a commitment other than that of her naval forces. A reasonable plan of action to such an end might be to insert her fleet between the centre of the Empire and the main Australian centres, by occupying a line, Singapore, Fremantle, Albany, as a first step."

Contemplating enemy action on the east, the board observed that Sydney and Melbourne were the vital centres, submission of which would be necessary before a foreign power could impose its will on the people; action possible at that time by "two northern powers only—America and Japan". Before Australia could be defended adequately it required an air service so distributed as to be capable of watching and furnishing timely information of the approach of any large convoys from the north, by either the eastern or western routes, and of destroying any air forces which might precede or accompany them.

The board found the problem of the administrative control of an air force—a touchy question for a conference of senior officers of the army and the navy—to be insoluble. The report stated that, because the Australian Air Corps would have no independent function, it was vital that the naval and military forces should be represented strongly on the controlling body to ensure coordination. Obviously a body of this kind could not control the internal organisation and administration of the corps; administration and discipline of any corps could best be achieved by a commanding officer. An objection to this was that it would be essential for such a commander to have direct access to the Minister in charge of the corps and it would be "trusting to personalities too much" to ensure that such an officer did not tend to eliminate the naval and military controlling body. "In fact," the report said, "it might be forecasted with certainty that, should a strong personality obtain the command, this result would be inevitable." So, on the actual question of an appointment, the representatives of the two Services could not agree. The naval members insisted that a naval flying officer should be the first appointed (later the appointment could alternate between the navy and the army), or, failing that, a naval and a military officer of equal rank should be appointed to exercise joint control. The army view opposed priority for the navy and regarded dual control as likely to divide the corps when the aim should be unity from the beginning. The board said that, until this question was decided, it was not possible to determine details of organisation.

On the manning of the corps the board agreed that the greater proportion of men could well be enlisted in a citizen force. One training and

two fighting squadrons, four flying-boat squadrons, and one of ships' aeroplanes or seaplanes, should be manned entirely by regulars and should form an instructional cadre from which the regulars for all the remaining squadrons should be provided. Provision of all equipment for the air force would be the function of the Australian Arsenal which, when organised, would undertake aircraft production.

With this report before him, Pearce held his hand while legislation to be placed before Parliament was considered. In Parliament itself, Dr Maloney, ever inquiring, questioned Major-General Sir Granville Ryrie, Assistant Minister for Defence, and learned that the contract price for a DH-9A (light day bomber) was approximately £3,300 delivered in Australia, while the twin-engined Vickers-Vimy heavy bomber would cost about £10,000;⁷ figures which were in very sharp contrast with Maloney's earlier estimates and a reminder that even an air force would be expensive.

On 9th September 1920 the House of Representatives listened to a notable exposition of the Government's defence policy by the Prime Minister. This contained an emphatic and in some ways prophetic picture of what air power might do. He asked: "What are the main factors in a determination of the scale of defence by sea, land and air, which it is necessary for Australia to maintain in the immediate future?" He answered with four headings—the international situation; the League of Nations as it imposed obligations on and as it offered protection to Australia; Australia's partnership in the British Empire; and Australia's policy and ideals, "especially the White Australia policy". He then posed the problems inherent in the defence of a 12,000-miles coastline and in the obligations and responsibilities imposed on Australia by her control of the Pacific Mandated Territories, the protection of which "by land and air", he said, "would be a very serious problem".

It may be confidently expected that aviation and those scientific methods of warfare which developed so rapidly during the war, and which, particularly during the latter portion of the conflict, were resorted to so freely, may develop still further. No doubt that development will completely revolutionise warfare and let us hope that it will make warfare impossible. That, I think, is the earnest prayer of every civilised man. If some scientist were to find a means for the general destruction of mankind, I venture to say that that would abolish war. . . . It is on the sea that our destiny lies and it is on the sea that we must uphold our freedom. The air, that new element which man has now conquered, is but the sea in another form and it is on the sea and in the air that we shall have to look for our defence. . . . We believe that in the air we may hope to create a force which will be of incomparable service in defending us against an enemy. The Government therefore, are placing on the Estimates a sufficient sum for the building up of an efficient air force. . . . It is proposed to afford such inducements as will encourage manufacturers to make engines and aeroplanes in this country and the Government will not hesitate to give a very substantial bonus for that purpose.

In closing his speech Hughes declared, "I am—if honorable members care to say so—a fanatic in my belief in aviation."⁸

⁷ *Commonwealth Debates*, Vol 93, p. 4379.

⁸ *Commonwealth Debates*, Vol 93, pp. 4386-93.

A week later Sir Joseph Cook, then Treasurer, introducing the 1920-21 Budget, said "The experiences of war have shown that the air force must now be regarded as a vital necessity to both arms of defence." He was explaining the vote of £500,000 for the air services with an additional £100,000 for civil aviation.⁹

Next day in the Senate, Pearce, as Minister for Defence, in asking for this vote, outlined the Government's plan for the development of the air force. The funds required had been largely reduced by the gift by Britain of 128 aeroplanes with equipment of all kinds, he said. A considerable number of men had already been trained and it was hoped that measures relating to civil aviation would ensure a reserve of both airmen and machines. A combined naval and military air corps would be organised under a board composed of flying, equipment and finance officers. It was unnecessary, at that juncture, to create a separate department and wasteful to separate the naval and military sides of the Service. The corps would, for convenience, be placed under the control of the Minister for Defence. A bill would be submitted for the constitution, administration and discipline of the air corps. The Minister would be assisted by an air council which would include officers of the navy, army and Air Board, with a Controller of Civil Aviation as an additional member.¹

So much for the plan. Warning of its cost came from Mr Marks,² who often espoused the cause of aviation and particularly the air force, when, on 7th October, he told the House of Representatives that he had sought "from all flying men of any importance who had come back from the front", their estimates of Australia's air force needs. "I am afraid to mention the cost of what they propose," he said. "They consider that over £2,000,000 will be required to provide an effective air force for Australia."³ The first Air Board's six-years plan, then in the custody of the Minister, was, of course, still secret.

The passage of the Air Navigation Bill, introduced in the Senate by Pearce on 4th November 1920, while it related specifically to civil aviation, was regarded as a stepping-stone to air force economy. "If we can encourage civil aviation it will doubtless relieve the Commonwealth of a large expenditure upon military aviation," the Minister said in his second reading speech.⁴

The next formal step in the development of the air force was the definition, by Statutory Rules,⁵ of the constitution of the Air Council—the Minister for Defence, a naval member, a military member, two mem-

⁹ *Commonwealth Debates*, Vol 93, p. 4674.

¹ *Commonwealth Debates*, Vol 93, p. 4717.

² W. M. Marks. (RNVR 1915-19.) MHR 1919-31. Solicitor; of Sydney; b. Jamberoo, NSW, 6 Jun 1875. Died 31 Mar 1951.

³ *Commonwealth Debates*, Vol 93, p. 5432.

⁴ *Commonwealth Debates*, Vol 94, p. 6233. Assent to this measure, which gave the Commonwealth power to control air navigation previously controlled only by the police laws of the various States, was reported on 6 April 1921.

⁵ Statutory Rules 1920, Nos. 222/3.

bers of Air Board (one nominated by the Naval Member and one by the Military Member) and the Controller of Civil Aviation; and of the Air Board—First Air Member, Director of Intelligence and Organisation; Second Air Member, Director of Personnel and Training; Third Air Member, Director of Equipment; and a Finance Member.

The Air Council was constituted to advise the Minister on air force provisions necessary for the defence of Australia, on the general direction of air policy in its naval and military aspects, and on the coordination of civil aviation. All proposals entailing an expenditure of more than £100 were to be referred to the council by the Air Board. On 16th December the Civil Aviation Branch of the Department of Defence came into being with Lieut-Colonel Brinsmead⁶ as its first Controller.

The new Air Board was constituted on 9th November 1920 with Williams as First Air Member, Goble as Second Air Member, Captain McBain⁷ as Director of Equipment and Mr Joyce⁸ as Finance Member; Mr Coleman⁹ was secretary. At its first meeting on 22nd December 1920, the board had before it a long memorandum on the formation of the Australian Air Force, compiled by Williams. A most comprehensive document, it set out general principles and a very detailed program. "The task is the greater," Williams explained, "because Australia has not previously attempted to do anything in this direction further than the actual preliminary flying training of a limited number of pilots. . . . There is no peacetime experience in organisation, administration and training of a service such as a modern air force in any part of the Empire on which to rely, for such a service on a peace basis was never attempted until the formation of the permanent R.A.F. after the recent war."

The program submitted provided for an air force headquarters, a liaison office in London, and two wing headquarters; these to control two fighter squadrons for air defence; one squadron each of float-seaplanes, flying-boats and torpedo carriers for naval cooperation; and for military cooperation, two corps reconnaissance squadrons, one flying training school, a recruit depot and non-technical training centre and a stores depot. All squadrons would be manned as regular units except the corps reconnaissance squadrons which would be Citizen Force units. The principles laid down by the R.A.F. would be adopted with only such modifications as were dictated by local conditions. The forming of Citizen Force units was regarded as an experiment and their cost and value would be compared with those of the permanent units after a period of trial. A considerable number of men who had served with the A.F.C. or R.A.F.

⁶ Lt-Col H. C. Brinsmead, OBE, MC. (24 Bn; Staff Offr for Aviation AIF 1918-19.) Controller of Civil Aviation 1920-33. Of Melbourne; b. Hampstead, England, 17 Mar 1887. Died 11 Mar 1934.

W Cdr P. A. McBain, MBE. (1st AIF: Lt AFC.) B. 22 Apr 1891. Died 7 May 1937.

⁸ A. C. Joyce, CBE. Commonwealth Auditor-General 1946-51. Of Melbourne and Canberra; b. Melbourne, 22 May 1886.

⁹ P. E. Coleman, OBE. (1st AIF: 1 Div HQ 1914-15; Capt AIF HQ 1916-18.) Secretary Air Board and Air Council 1921-39; Asst Secretary Dept of Air 1940-45; Asst Secretary Dept of Defence 1945-50. Of Elsternwick, Vic; b. Malvern, Vic, 8 Dec 1892. Died 13 Apr 1950.

would be willing to enrol in the Air Force Reserve, formation of which should be undertaken at the earliest possible opportunity. In time it might even be possible to have reserve units organised in civil aerial transport companies. All officers engaged in staff administrative duties must be qualified flying officers, but, owing to the limited administrative experience of most Australian flying officers, it might be necessary to obtain some officers with administrative experience for whom flying training would have to be provided later. The aim should be to have only graduates of the Staff College appointed to the Air Staff and higher appointments in other branches. This report was passed to the first meeting of the Air Council on the 23rd December 1920 and was approved generally.¹ The use of the machinery of the departments of the Navy and Defence in the administration of the air force was also approved by the council. With one eye on civil aviation, the air force offered courses for former A.F.C. and R.A.F. pilots who intended to engage in commercial aviation, and in 1920 nine airmen took advantage of the offer.

On 15th February 1921, the Air Board, at the instance of Williams, sent to the Air Council a recommendation that the Australian Air Force be formed as from 31st March. It was the approval of this recommendation by the Air Council and the Minister for Defence that brought the Royal Australian Air Force formally into existence on that date, though it was not until July of the same year that the prefix "Royal" appeared in the Air Board agenda.

The new air force came into being with an initial strength of 151, of whom 21 were officers.² Its equipment, in addition to the gift aeroplanes from Britain,³ consisted of 20 standard trainers (Avro 504-K) and 10 scouting planes (Sopwith Pups bought during the war) and 6 Fairey seaplanes bought in 1921, to which 6 Avro 504-K's, built in Australia, were later added. Headquarters of the force were in Melbourne, a liaison office was maintained in London, and No. 1 Flying Training School and No. 1 Aircraft Depot at Point Cook.

There was a school of opinion which strongly advocated military participation in civil aviation, arguing that the union of the two would provide not only good training for Service flyers but economic benefits from essential aerial services. Pearce himself supported a proposal Brinsmead had made soon after he became Controller: that the air force

¹ The council comprised: the Minister for Defence, Senator Pearce; Rear-Adm Sir Allan Everett (represented by Capt C. T. Hardy); Maj-Gen Sir Brudenell White; W Cdrs R. Williams and S. J. Goble and Brig-Gen T. A. Blamey.

² They were: General List—Wing Commanders R. Williams (Director of Intelligence and Organisation), S. J. Goble (Director of Personnel and Training); Squadron Leader W. H. Anderson; Flight Lieutenants (Honorary Squadron Leaders) R. S. Brown, A. M. Jones, E. Harrison and H. J. Berryman; Flight Lieutenants A. P. Lawrence (Medical), L. J. Wackett, A. T. Cole, H. F. De La Rue, and H. N. Wrigley; Flying Officers (Honorary Flight Lieutenants) F. H. McNamara, VC, A. H. Cobby, F. W. F. Lukis, J. K. Fryer-Smith; Flying Officer (Observer) W. S. J. Walne.

Quartermaster's List—Squadron Leader P. A. McBain (Director of Equipment); Flying Officers H. Johnston, C. J. Harman and J. H. Rogers.

³ 128 machines (DH-9, DH-9a and SE-5a types), which with spares etc. were valued at approximately £1,000,000. The 28 in excess of the offer of 100, mentioned earlier, represented replacements of 28 given during the war by citizens and organisations in Australia.

should establish an experimental mail service between Geraldton and Derby in north-western Australia. Faced by opposition from Williams and other Service leaders, who insisted that the establishment in men, aeroplanes, ground transport and spare parts would have to be very much larger than he contemplated, Pearce on 19th March 1921 expressed his personal regret that "the potential value of such a service in the national economic sphere failed to elicit any response from the Service members of (Air) Council". But when the Air Board supported Williams, the Minister recommended that the proposal should be deferred until more efficient machines were available. In the meantime the air force undertook a survey of the route between Geraldton and Derby; it was carried out by Flight Lieutenant Cole.⁴ Eventually Cabinet declared a preference for an airmail service operated by a private company on a subsidy basis. At this time a number of former A.F.C. pilots, in whom the urge to fly was dying hard, were travelling round the country making a spectacular if somewhat precarious living from commercial "joy flying". From these flyers Australian aviation drew not only the nucleus for its first civil aircrews, but, as men like Norman Brearley⁵ and Hudson Fysh⁶ demonstrated, some very able executive officers.

This link with civil flying had a political aspect. When Pearce introduced an Air Defence Bill in the Senate on 8th April, he said he hoped commercial aviation would develop and so provide a large number of aeroplanes readily available for war, and a training ground for aviators whose services would be available in the Citizen Forces.

This Bill provided for a permanent establishment to be known as the Naval Air Force, which would be "practically complete for war purposes", and a military air force which would be only partly regular and, in the main, would consist of members of the Citizen Forces. Both the military and naval colleges were to provide officers for the air force, thus avoiding the expense of a separate air force college. The Government thought that sufficient men who had served in the flying corps would apply and thus provide adequate staff for the new force.

The following establishment was proposed for the first year: in Victoria a headquarters, one aircraft depot, one flying training school, one recruit and non-technical depot, two aeroplane squadrons (one to be composed of Citizen Force men) and one flying-boat squadron; in New South Wales two aeroplane squadrons (one of Citizen Force men) and one seaplane squadron for use on ships of the Royal Australian Navy. For this program £500,000 was to be provided. Twelve seaplanes and nine

⁴AVM A. T. Cole, CBE, DSO, MC, DFC. (1st AIF: Nos 1 and 2 Sqns AFC.) Comd Central and Southern Areas 1939-41, 235 Wing RAF 1941-42; Forward Air Controller Dieppe Raid 1942; AOC RAF Northern Ireland 1942-43; Comd North-Western Area 1943-44; RAAF Liaison Offr SEAC 1945. Regular air force offr; of Malvern, Vic; b. Glen Iris, Vic, 19 June 1895.

⁵Gp Capt N. Brearley, DSO, MC, AFC. (1914-18: King's Liverpool Regt, RFC and RAF.) Comd RAAF training units 1941-44. Founder and managing director, WA Airways Ltd. Of Perth, WA; b. Geelong, Vic, 22 Dec 1890.

⁶Sir Hudson Fysh, KBE, DFC. (1st AIF: 3 LH Regt and 1 Sqn AFC.) Managing Director Qantas Empire Airways 1923-47, Chairman since 1947. Of Sydney; b. Launceston, Tas, 7 Jan 1895.

flying-boats would be ordered from Britain and for the rest of the strength in aircraft, the gift machines from Britain would be used. There were to be 150 officers and 1,000 other ranks for the Permanent Air Force and 36 officers and 300 other ranks for the Citizen Air Force. In later years new units would be formed chiefly from Citizen Force trainees.

Senator H. E. Pratten protested against the incorporation in the Air Defence Bill of the British *Air Force Act* which, in turn, incorporated the British *Army Act*. Pratten summed up saying, "If we swallow at one gulp the British *Army Act* of 190 sections there is also a provision by which, automatically, any amendment of the British *Army Act* will apply to Australia without coming before Parliament." He opposed the idea "that the air force in Australia should bear to the air forces of the Empire the relationship which Australia's navy bears to the navy of the Empire". If there was one arm of defence that must be independently built up it was the air force and no precedent made by the military or naval forces must necessarily govern it. Pearce submitted an amendment which removed the application of the *Air Force Act* in peace, but Pratten pressed for its complete removal, saying "it would be better for us to have nothing to do with the Imperial *Air Force Act*". His protest was unsuccessful and the Bill was read a third time and passed to the House of Representatives where it was read a first time on 18th May. Parliament was prorogued soon afterwards and the bill lapsed along with the rest of the Government's unfinished legislation.

Despite lack of statutory authority and the appearance of lowering economic clouds, the infant air force began taking its first steps. Early in July an order was placed with the Australian Aircraft and Engineering Company, of Sydney,⁷ for the manufacture of six Avro (504-K) aircraft to cost £7,100. In the same month the Air Board recommended and the Air Council approved, "subject to funds being made available", the purchase of land at Laverton as a site for No. 1 Aircraft Depot, No. 1 Wing Headquarters and Nos. 1 and 2 Squadrons (a corps reconnaissance and a single-seater fighter squadron respectively), and the purchase of a site at Richmond, New South Wales (where some years before the State Government had established a flying school), for No. 2 Wing Headquarters and Nos. 3 and 4 (aeroplane) Squadrons.

Also in July, the Air Council laid down as policy for the development of the air force, engagement of only such officers and other ranks (except for naval units) as were necessary for the cadres of war units and the training and instruction of Citizen Force recruits. The program for 1921-22

⁷ The story of the Australian Aircraft and Engineering Company, floated in May 1920 by a syndicate which had acquired representation of A. V. Roe and Company in Australia, was an illustration of good intentions with a sad finale. The order for six Avro machines was placed to encourage local manufacture though they were not required at the time. One-third of the contract price was advanced immediately; extensions of the delivery date were allowed, and the company finally produced the aircraft which satisfied all tests. The engines were provided from air force stocks. Next, the company, having failed to obtain further Avro orders, undertook to design a commercial aeroplane, one of which was ordered for the Controller of Civil Aviation (at a cost of £5,900 without the engine), but the company went into liquidation soon after receiving the contract, arrangements having been made to complete the aircraft on order.

provided for a minimum permanent establishment—"to be attained gradually"—of 108 officers and 791 other ranks.⁸

On 25th July 1921 Air Board Order No. 1 was promulgated. This document contained no flights of high air force policy, just a sobering instruction—premises known as the Guiding Star Hotel, Braybrook, were out of bounds to the Permanent Air Force while on duty!

Within the next few weeks approval of Air Council was obtained for the purchase of a site on the shores of Corio Bay⁹ for No. 6 Squadron (flying-boats) and for the construction of 12 landing grounds between Perth and Derby for a civil air service.

In November, while the Washington Disarmament Conference was in its opening session, the Air Council approved the recommendation of the Air Board that a R.A.A.F. Reserve should be formed, but this was little more than token consent, for the council insisted that there could be no grant for uniforms or allowances, and that annual training could not be given! Williams, who made the proposal, estimated that there were about 500 trained pilots in Australia. The R.A.A.F.'s current permanent strength was 50 officers and 258 other ranks. Lack of funds made it improbable, he said, that additional men could be enlisted in that financial year.

In December a grant from air force funds was made to the Melbourne University for the construction and equipment at the university of an aerodynamic laboratory, including a wind tunnel. The Government approved an amount of £1,500 for this—just half the amount recommended by Air Board. The restraining hand of the Federal Treasurer became more evident as 1922 advanced. In June an officer resigned from the Permanent Air Force and the then Director of Personnel and Training (Squadron Leader Anderson¹) felt obliged to oppose payment of compensation for early retirement from the Service. His explanation was significant: "If compensation were offered there are probably several officers and other ranks whose services could ill be spared, who would avail themselves of the opportunity to resign now, owing to the greatly reduced prospects of promotion etc., brought about by the reduction of the establishments previously approved." The Air Board agreed. Compensation was not paid. Similarly when, in October, the rates of pay for the Citizen Air Force,² which was to have at least 25 days' training a year, were reviewed, the Air Board had before it a letter from the Defence Department saying that before these rates were adopted "a serious endeavour

⁸ Air Board Agendum No. 98, 13 July 1921.

⁹ The purchase was made to permit development of flying-boat, seaplane and torpedo operations in cooperation with the navy, but a change in policy caused this to lapse and the site was leased for grazing.—Report on Point Cook by Public Works Committee, *Parliamentary Papers* (General) 1922, Vol II, pp. 2387-2407.

¹ AVM W. H. Anderson, CBE, DFC. (1914-18: AN&MEF and 1 and 3 Sqns AFC.) Air Member for Personnel, RAAF, 1940-42, 1944; Comdt RAAF Staff Sch 1943, 1945. Regular air force offr; of Melbourne; b. Kew, Vic, 30 Dec 1891.

² Sqn Ldr ("general list"), £1 14s a day; F-Lt, £1 9s; F-O, £1 3s; P-O 18s; Sgt-Mjr, class 1, 16s; AC1 with specialist's pay, 8s.

should be made to secure the personnel at rates of pay which will approximate to those of the Naval and Military Citizen Forces". It is noteworthy that Air Board decided that trainees could not be allotted to the Citizen Air Force, therefore all members must be volunteers.

Another economy measure of the period was the reduction of the Air Board to three members. Later in the year it was agreed that Williams should go to England to attend the Staff College, Camberley, for the 1923 course and then remain in England for attachment to the staff at Air Ministry "for such other instructional duties as may be arranged by him", returning to Australia via America to study aviation there. Goble (who had been at a staff course in England) was appointed acting Chief of the Air Staff in his absence. Ministerial approval for the establishment of No. 1 Squadron—three flights comprising 39 officers and 155 other ranks—was given in November.

In May 1923, the Air Board considered the compilation of a War Book, listing steps to be taken on the outbreak of a war, and asked the Naval and Military Boards whether their requirements had changed since they were enumerated in February 1920. The Naval Board replied that for War Book purposes five flights were needed (this, in very marked contrast to the original assessment of $12\frac{1}{2}$ squadrons, was the result of extreme economies). The Military Board assessed its needs at $20\frac{1}{3}$ squadrons which was one-third of a squadron more than the original claim. On this basis a seven-years plan was drafted; the Air Board drafted a further plan which, by the end of the fifth year, would provide two flights for the navy and five squadrons for army and air force requirements, plus the necessary administrative organisation.

Parliamentary debate on expenditure led to a detailed examination of air force expenditure by the Commonwealth Parliamentary Joint Committee of Public Accounts which produced its report on 3rd July 1923. This committee of 10 members examined 20 witnesses. It was told that in the reorganisation of the Air Board in October 1922 more had been lost than gained—in money the annual saving was £25! Further, until such legislation as the Air Defence Bill became law, only graduates of the Royal Military College, Duntroon, could hold permanent commissions, a fact which was causing discontent and resulting in officers leaving the Service when opportunity occurred. The committee learned too that the greater portion of the gift equipment from Britain had been stored in wheat sheds at Spotswood, near Melbourne, because no other storage was available, and that it was deteriorating there while waiting for proper accommodation to be provided at Laverton.

After examining air force expenditure the committee thought that the money provided had been, on the whole, wisely spent, but the air force could not by any means be regarded as sufficient for the needs of the country. Pressing for early legislative action, the report said that despite keenness and earnestness and despite provision for effective coordination of the military, naval and civil branches, air force administration was

hampered by the absence of powers which alone could give it independence as a force and make it effective. Labour members of the committee submitted a minority report recommending elimination of the private contractor and operation of all aerial services by the Government; naval and military services could be used in a Government mail-carrying plan with advantage to the Government and to the pilots.

On 29th June, four days before the committee's report was published, the legislative action it was so anxious should be taken was resumed with the re-introduction, this time in the House of Representatives, of the Air Defence Bill. The Minister in charge of the bill on this occasion was Mr Bowden,³ who had succeeded Senator Pearce as Minister for Defence. Bowden opened his second reading speech with quotations from current newspaper reports stating that the R.A.F. had been increased by 34 squadrons and went on to picture unrest among Australian officers. Some of these officers were leaving to take commissions in the R.A.F.; in fact Britain's Air Minister (Sir Samuel Hoare) was quoted as saying how welcome Australian applications for R.A.F. commissions would be.

Mr M. Charlton, the Leader of the Opposition, said that aviation would probably reduce the cost of defence by making it unnecessary for Australia to have a large navy. He revived the argument that military aviation could operate air mail services. Though opposed to the Bill as drafted the Labour party was not against adequate preparation for the defence of Australia.

Mr Marks had some specific statements to make about Japan, which he had recently visited. As the guest of the Japanese Fleet, he said, he had seen its air force at work. At Yokosuka he saw the *Hosho*, the aircraft carrier, one of five Japan would possess, and the 40,000-ton battle cruiser *Akagi*⁴ which could carry 50 fighting and bombing planes brought from below decks by electric hoists.

If Japan should be considered the potential enemy of Australia, as certain sections of our Press would have us believe (he declared), then there is nothing to prevent her . . . from sending the *Akagi* or the *Hosho*, or both, accompanied by her battle-flagship *Nagato*, to Australia, and if she does, who is going to stop her from hauling down our flag? These aeroplanes could fly over Sydney Heads from 100 miles away and Australia would be taken. Japan proposes to spend, between 1923 and 1927, £5,000,000 on her naval air services, and how is she going to spend that money? . . . in three ways—first in the arming of old and new ships with aircraft; second, in increasing the number of her aviators; and third, in study and research in aeronautics and aeroplane making. . . . The Naval Air Force of Japan has been organised by the Master of Sempill, the great British airman, and a number of aviators who distinguished themselves during the war. I find that there is no foundation whatever for the opinion expressed . . . that the Japanese have no "air" or "engine" sense. The Japanese are not inferior to Australians or British—they can fly all right. Their only fault, up to the present, is that

³Hon E. K. Bowden. MHR 1906-10, 1919-29; Min for Defence 1923-25. Solicitor; of Granville, NSW; b. Parramatta, NSW, 1872. Died 14 Feb 1931.

⁴As a result of the Washington Treaty, the *Akagi* was converted into an aircraft carrier of 36,000 tons.

they take too many risks. . . . Apart from this the Japanese will become equal to the British or ourselves in the air. . . . A great aeroplane factory has been started for turning out complete aeroplanes. This factory, up to the present, has not fully functioned, but I understand that several fine planes have been constructed.⁵

This was a period when air force advocates stood against stern opposition. In America Brigadier-General William Mitchell and other senior officers were making dramatic claims that bombers could sink the most heavily armed ships and Mitchell was asserting that air power (aided perhaps by submarines) could interdict to any enemy ships all approaches to American shores and hence, in itself, constitute a sufficient protection against invasion.⁶ It was rather in this tradition that Mr Green⁷ (Labour) quoted in Parliament the dramatic contentions of Rear-Admiral W. F. Fullam, who had commanded the American Fleet in the Pacific during the 1914-18 War. These conjured the passing of sea power and envisaged a puny power, without a navy, challenging the strongest battlefleet. "With intelligent energy" it would make its coast impregnable against a hundred dreadnoughts, holding a maritime enemy 100 miles from its shores, and "chaining aggression, expressed in ships, to the beach".

Then came the battle over the incorporation of the *Air Force Act* which the Bill proposed, as it had when Pearce had presented it. But this time the sound and the fury were much more vehement. Mr Scullin⁸ expressed the feeling of the Opposition when he said there was "something decidedly wrong in the principle that a Commonwealth Act of Parliament should be automatically changed by legislation enacted in another part of the world". "Our *Defence Act*, when framed, was not uniform with the British *Army Act*," he declared, "but was there anything lacking in the methods employed by the A.I.F. because of the absence of that uniformity? The Bill has been drafted with the idea that our air force shall be sent abroad to fight. It is a Bill for the air defence of Australia. . . . The Government are asking us to surrender our political independence as well as the independence of Australia."

The debate disclosed reasons for Labour's advocacy of the air force in preference to the other Services. As contemplated the air force was substantially a Citizen Air Force built up round a nucleus of professional airmen and, as the Air Board had determined that all members of the Citizen Air Force must be volunteers, it was easy to jump the conscription hurdle. In the conception or misconception that an air force was essentially a home defence force operating along the coast, to which quite a number of politicians seemed to subscribe, there seemed an answer to the equally touchy problem of overseas service.

⁵ *Commonwealth Debates*, Vol 103, pp. 1158-9.

⁶ William Mitchell, *Winged Defence* (1925).

⁷ Hon A. E. Green, MLA, WA, 1911-21. MHR 1922-40; Min for Defence 1929-31; PMG and Min for Works 1931. Of Kalgoorlie, WA; b. Avoca, Vic, 21 Dec 1869. Died 2 Oct 1940.

⁸ Rt Hon J. H. Scullin. MHR 1910-13, 1922-49. Prime Minister and Min for Industry 1929-32; Treasurer 1930-31. Of Richmond and Ballarat, Vic; b. Trawalla, Vic, 18 Sept 1876. Died 28 Jan 1953.

The basic objection to the Bill lay in its adoption of the *Air Force Act's* definition of "active service" and this objection was not confined to those on the Opposition benches. Mr F. Anstey put the Labour party's case thus: "We say that the air force shall not be available for the military occupation of any country. We do not favour spending the revenue of Australia to train men for the defence of the country, only to find that in a time of national crisis they have been dispersed to the four corners of the world."⁹ To this Mr Latham¹ replied that to suggest that all laws relating to the air force were to cease beyond the three-mile limit round the Australian coast was to reach very nearly the limit of the ridiculous. What the Bill sought to do was exactly what had been and was then the law of the Commonwealth in relation to the army and the navy.

This did not satisfy the Bill's opponents. The Government, by now acutely conscious of its unpopularity for this reason, finally withdrew the measure and made a new approach to the question of air force legislation. On 24th August an Air Force Bill, intended as a temporary measure, was brought down in the House of Representatives. Immediately the Opposition Leader (Charlton) challenged it on the grounds that the Imperial *Air Force Act* still applied. The Defence Minister (Bowden) thereupon undertook to insert a provision that the British *Army Act* (and therefore the Imperial *Air Force Act*) would not apply to the Australian Air Force. Sir Granville Ryrie supported the Minister's undertaking: "A majority in this House and, I believe, a majority of the people outside, are against the incorporation of the *Army Act* in our legislation," he said. Though Labour members voted on party lines against the amended clause—because it did not go far enough—the Bill was passed. In the Senate, Pearce, then Minister for Home and Territories, introduced the Bill which passed all stages with little debate. Pearce told the Senate that the whole contentious question of the Imperial Act would be examined by a committee to decide future policy for the various defence branches and their relation to the forces of the Empire. A stormy legislative passage was over. The Act received Royal assent on 1st September 1923. At last the R.A.A.F. had some statutory foundation.

Early in 1923 applications had been sought from navy and army officers wishing to be seconded to the R.A.A.F. for the first complete course of flying instruction, and subsequent attachment, at No. 1 Flying Training School. Two naval officers, Lieutenants Hewitt² and Wackett,³ R.A.N.;

⁹ *Commonwealth Debates*, Vol 104, p. 1366.

¹ Rt Hon Sir John Latham, GCMG. (Lt-Cdr RANR 1917-20.) MHR 1922-34; Att-Gen 1925-29, 1931-34; Min for Industry 1928-29, 1932-34; for External Affairs 1932-34; Chief Justice, High Court of Aust 1935-52; Aust Minister to Japan 1940-41. Of Malvern, Vic; b. Ascot Vale, Vic, 25 Aug 1877.

² AVM J. E. Hewitt, CBE. Director Personal Services RAAF 1940-41; Asst Chief of Air Staff 1941-42; Director Allied Air Intelligence SWPA 1942-43, 1944; AOC 9 Gp 1943; Air Member for Personnel 1945-48. Regular air force offr; of Toorak, Vic; b. Tylden, Vic, 13 Apr 1901.

³ AVM E. C. Wackett, CB, CBE. Director of Technical Services RAAF 1936-42; Air Member for Engineering and Maintenance 1942-48, for Technical Services 1948-59. Regular air force offr; of Melbourne; b. Townsville, Qld, 13 Aug 1901.

five army officers, including Lieutenants Bladin,⁴ Wilson⁵ and Ewart,⁶ of the Staff Corps, and five civil cadets, one of whom was L. J. Brain,⁷ began training.

The scope of flying training, limited as it then was to the course at No. 1 Flying Training School and such operational flying as could be provided by the R.A.A.F.'s still infant units, using obsolescent aircraft, was widened when the 1923 Imperial Conference opened the way for entry by Australians to short-service commissions in the R.A.F., for the attachment of R.A.A.F. officers to the R.A.F., and for the specialised training of R.A.A.F. officers at R.A.F. schools. This was encouraging news for ambitious R.A.A.F. officers, though there was a sobering thought in the news that, in a drastic reduction of defence expenditure for 1923-24, Britain's air force vote was being cut from £13,000,000 to £9,000,000.

Mr Bruce,⁸ who had become Prime Minister in February 1923, gave the wider picture of Empire air forces development when on 27th March 1924 he made his report to Parliament on the Imperial Conference. He said that one of the "guiding principles" laid down at the conference was the desirability of the development of the Empire's air forces by the adoption, as far as was practicable, of a common system of organisation and training and the use of uniform manuals, patterns of arms, equipment and stores (excepting the type of aircraft) in each part of the Empire. The conference had noted also the necessity for the maintenance by Great Britain of a Home Defence Air Force of sufficient strength to give adequate protection against air attack by the strongest air force within striking distance of her shores. But the Prime Minister left no one in doubt about his conviction, "reached after the most exhaustive enquiries", that there was not the slightest foundation for the opinion that the day of the capital ship had passed and that aeroplanes and submarines were a sufficient defence. He heavily emphasised his Government's view that the navy was Australia's primary arm of defence.⁹

An interlude at this stage, with an important bearing on R.A.A.F. prestige, was the first flight round the Australian continent, made by

⁴ AVM F. M. Bladin, CB, CBE, Director of Operations and Intelligence 1940-41; AOC Southern Area 1941-42, North-Western Area 1942-43; SASO 38 Gp RAF 1943-44; Deputy Chief of the Air Staff 1945; Chief of Staff BCOF, Japan, 1946-47. Regular air force offr; of Kew, Vic; b. Korumburra, Vic, 26 Aug 1898.

⁵ Air Cmdre D. E. L. Wilson, Comd RAAF Stn Richmond 1939-40, HQ Central Area 1940, 2 Training Gp 1941-42; AOC North-Western Area 1942; comd 1 Training Gp 1942-43, RAF Stns Wyton and Linton-on-Ouse 1943. Regular air force offr; of Sydney; b. Berowra, NSW, 1 Dec 1898. Died 2 Aug 1950.

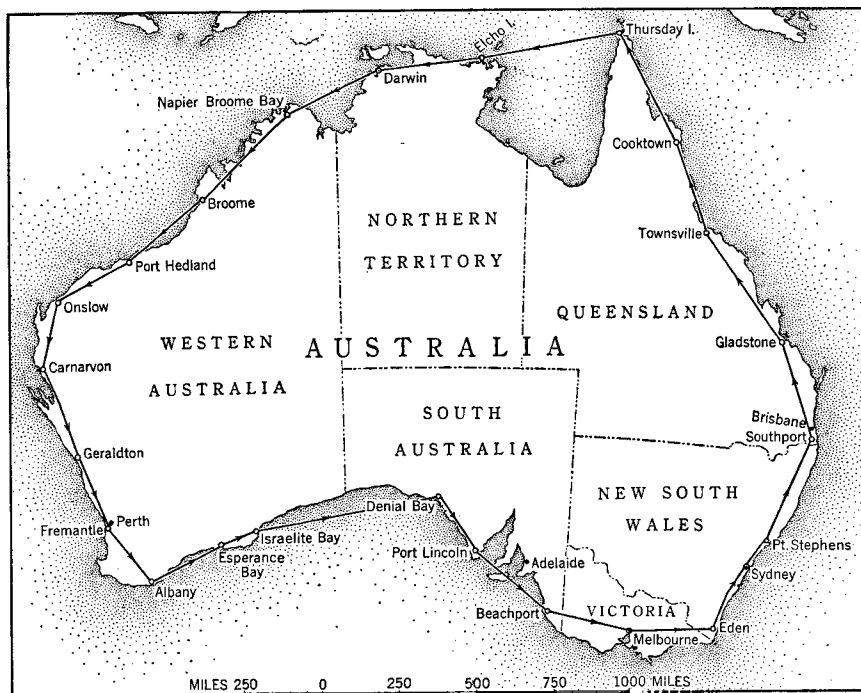
⁶ Air Cmdre U. E. Ewart, SASO Southern Area 1940-41; comd 5 FTS 1941; Asst Chief of Staff (Administration) Allied Air HQ 1942; Asst Comdt RAAF Staff School 1943-44; comd Pacific Echelon RAAF GHQ SWPA 1944-45; AOC RAAF Overseas HQ 1946-48; Founder and Comdt RAAF Staff College 1949-52. Regular air force offr; of Melbourne; b. Edgbaston, Eng, 19 Apr 1900.

⁷ W Cdr L. J. Brain, AFC, 1370. Qantas Merchant Air Service and Trans Pacific Air Ferry Service 1939-45. Airlines pilot and Operations Manager, Qantas, 1924-46; General Manager TAA 1946-55; Managing Director De Havilland Aircraft Co. since 1955. Of Sydney; b. Forbes, NSW, 27 Feb 1903.

⁸ Rt Hon Viscount Bruce, CH, MC. (Lt Worcester Regt 1915; Capt Royal Fusiliers 1916-17.) MHR 1918-29, 1931-33; Prime Minister of Aust 1923-29; High Commissioner for Aust in London 1933-45. B. Melbourne, 15 Apr 1883.

⁹ *Commonwealth Debates*, Vol 106, p. 44 *et seq.*

Wing Commander Goble and Flight Lieutenant McIntyre,¹ in a Fairey seaplane. The objects of the flight were to make a reconnaissance of the east coast sea-going defence route to Thursday Island, to test the suitability of the Fairey seaplane for cooperation in a survey of the Great Barrier Reef, and to ascertain the suitability of that type of aircraft for mail carrying. The flight, which began on 6th April 1924, ended on 9th May, an elapsed time of 34 days in which there had been 20 days of



First round Australia flight

flying. The distance covered was 7,186 nautical miles. The Prime Minister later announced in Parliament that in recognition of the feat of these officers—"one of the most wonderful accomplishments in the history of aviation"—the Government would make a gift of £500 to Goble and £250 to McIntyre.

The air force estimates for 1924-25 had been set at £392,394, which included provision of an army cooperation squadron at Richmond, New South Wales, and a seaplane flight at Rushcutter's Bay in Sydney Harbour. What the Air Board described as "only minimum peace reserves" were allowed for.

¹ F-Lt I. E. McIntyre, CBE, AFC. (Flight Sub-Lt RNAS 1917-18.) Regular air force officer; of Tankerton, Kent, Eng; b. Herne Bay, Kent, Eng, 6 Oct 1899. Killed in aircraft accident 12 Mar 1928.

In Parliament, on 1st August, Mr Forde² (Labour) moved the reduction of an appropriation of £7,129 for air service works "as an instruction to the Government that all aeroplanes should be built in Australia".³ He said that "a very enterprising firm", Pratt Brothers,⁴ had spent a huge sum of money on up-to-date plant and were prepared to recondition existing air force machinery, to build new military and civil types of aircraft and construct small, light aeroplanes to stimulate public interest in flying.

The Minister for Defence (Mr Bowden) said that in addition to the establishment of an aircraft depot at Laverton, Victoria, which was proceeding, a naval cooperation seaplane squadron was planned for Sydney and the Richmond aerodrome had been purchased from the New South Wales Government.⁵ In five years' time there would be four additional air force units, including a flying-boat squadron. A flying-boat designed by an Australian, Squadron Leader Wackett,⁶ was being tested.

In September Goble reported that it would be possible to establish by the end of the fifth year only: No. 1 Aircraft Depot at Laverton, No. 1 Flying Training School, Point Cook, a mixed squadron at Laverton, one army cooperation squadron, one single-seater fighter and one light bombing squadron at Richmond. A force of this size was quite inadequate and at the end of the fifth year would still be equipped with 1916-17 types of aircraft. With such an annual appropriation it would be impossible to provide new types.

In December Ministerial approval was given for an increase by four cadets in the intake of the Royal Military College, Duntroon, so that four graduates from each course from 1928 on, could be commissioned in the R.A.A.F. In the meantime the Military Board agreed to make one graduate available in 1925, one in 1926 and four in 1927. These would be additional to the seconded officers (four a year selected from the college graduates) who had been commissioned in the army and, normally, had completed twelve months' attachment abroad. A proportion of these officers transferred as Permanent Air Force officers and the remainder returned to the army after three years' secondment.

An analysis of the *Air Force List* of 1925⁷ to determine the principle sources from which the R.A.A.F. was drawing its officers, shows that of a total of 75 Permanent Air Force officers (excluding two in the medical branch) 17 were former members of the Australian Flying Corps, 14 were former R.A.F. or R.N.A.S. members with war service, 12 were

² Rt Hon F. M. Forde, MLA Qld 1917-22; MHR 1922-46. Min for Trade and Customs 1931-32; Deputy Prime Minister and Min for Army 1941-45; Prime Minister July 1945; High Commissioner for Australia in Canada 1946-53. MLA Qld 1955-57. B. Mitchell, Qld, 18 Jul 1890.

³ *Commonwealth Debates*, Vol 108, p. 2795.

⁴ The Aircraft Manufacturing and Supply Co of Australia, Geelong, Victoria.

⁵ *Commonwealth Debates*, Vol 108, pp. 2968-9.

⁶ W Cdr Sir Lawrence Wackett, DFC, AFC, 1333. (1st AIF: Nos. 1 and 3 Sqns AFC.) Comd RAAF Experimental Stn 1924-30. Manager, later Managing Director, C'wealth Aircraft Corporation. Aeronautical engineer; of Melbourne; b. Townsville, Qld, 2 Jan 1896.

⁷ See Appendix 2.

seconded from the Australian Army, three were on loan from the R.A.N., six were engineering graduates from the universities, or holders of technical college engineering diplomas. The remainder represented a variety of callings, including clerks, farmers, accountants, public servants and business men.

When, on 10th June 1925, the Governor-General opened Federal Parliament, he said that his advisers had noted with pleasure the decision of the British Government to proceed with the construction of the Singapore Base. He also announced the Australian Government's decision to build a seaplane carrier at Cockatoo Island Dockyard, adding that provision had been made for "the aeroplanes and necessary amphibians to equip the seaplane carrier".⁸ A week later, Sir Elliot Johnson, speaking on a motion of censure on the Government moved by Charlton as Leader of the Opposition for its plan to build two cruisers, strongly urged the construction of a "much larger type" of seaplane carrier. He quoted reports that Japan's latest carrier, the *Akagi*, had a displacement of 36,000 tons, a speed of 28 knots, ten 8-inch guns, sixteen 4.7-inch guns and was designed to carry 50 aircraft. Britain's largest carrier was 4,200 tons smaller and four knots slower than the *Akagi*.⁹

Air force enthusiasts must have received with satisfaction a pronouncement by Major-General Sir Neville Howse,¹ who had succeeded to the Defence portfolio, and who, speaking on the Defence Equipment Bill on 24th June 1926, declared: "Every strategist now lays it down that the air service should be increased five-fold beyond what was considered necessary in 1924, and that no forward action by an army or a navy should begin without very careful reconnaissance." With this in mind, he added, the work of building a seaplane carrier had been undertaken. It had been estimated that a carrier with modern aircraft added from 400 to 500 miles to the range of any naval force.²

Existing air force organisation at this stage was: Headquarters at Melbourne; Liaison Office, London; No. 1 Flying Training School, Point Cook; No. 1 Aircraft Depot, Laverton; No. 1 (Composite) Squadron, Laverton; No. 3 (Composite) Squadron and No. 101 (Fleet Cooperation) Flight, at Richmond; and an Experimental Section,³ at Randwick, New South Wales.

Ambitious plans for the development of air communications between Britain and Australia were outlined by the Prime Minister when he re-

⁸ *Commonwealth Debates*, Vol 110, p. 6.

⁹ *Commonwealth Debates*, Vol 110, p. 186.

¹ Maj-Gen Hon Sir Neville Howse, VC, KCB, KCMG. (1st AIF: ADMS 1 Div 1915; DMS AIF 1916-19.) DGMS AMF 1921-24. MHR 1925-30; Min for Defence 1925-27, Health 1925-27, 1928-29, Home and Territories 1928, Repatriation 1928-29, Medical practitioner; of Orange, NSW; b. Stogursey, Somerset, Eng, 26 Oct 1863. Died 19 Sep 1930.

² *Commonwealth Debates*, Vol 113, pp. 3525-7.

³ Experimental Section RAAF was established 14th January 1924 on land and buildings acquired from the RAN. Commanded by Sqn Ldr L. J. Wackett, the section had undertaken construction of flying-boats (designed by Wackett), research and experiments on Australian aircraft materials, modifications to equipment, reconditioning and repair of aircraft, the making of small quantities of urgently needed spares and the technical training of newly-enlisted men.

turned early in 1927 from another Imperial Conference. Britain was opening up a regular air service between Cairo and Karachi, Mr Bruce said, and he had indicated to the conference that Australia would be prepared to cooperate in experimental flights between Australia and Singapore by trying to establish heavier-than-air communication with that country as part of an eventual route between Britain and Australia. Australia had, in fact, done far more than any other part of the Empire in the development of commercial and passenger-carrying air services. The route from Cairo to Karachi and the service by defence planes between Cairo and Iraq, over approximately 800 miles, were regarded as great achievements, but he had been happy to tell the conference that for some years Australia had maintained a commercial and passenger-carrying service over a route 1,400 miles long. The conference had recognised that in the air a new arm of defence had developed and that to the British Empire with its widely scattered territories and its commerce traversing the trade routes of the whole world, air routes and bases would probably be as important in the future as fleets and naval bases had been and still were.

By June 1927 Ministerial approval had been given for the purchase of two Supermarine "Southampton" flying-boats to permit the R.A.A.F. to cooperate with the R.A.F. which planned to send four "Southamptons" to Singapore and thence to Australia on a special service mission.

A statement by the Chief of the Air Staff, Williams, published on 19th July 1927, which declared "our machines are quite good for training, but not adequate for defence", may well have been a gentle reminder of a somewhat grim report, two months earlier by the Chief of the General Staff, Lieut-General Sir Harry Chauvel, in which he stated that circumstances might well arise that might prevent the naval forces of the Empire being available for the defence of Australia and that it was incumbent on Australia to provide effectively for her own local security—an accepted principal of Imperial defence. Under such conditions, Chauvel observed, the principal instruments of local security for Australia must necessarily be the army and the air force. The statement by Williams prompted a question by Charlton in Parliament, and brought the reply from the Prime Minister that the supply of gift equipment was becoming exhausted and a "commencement" was being made with re-equipping the R.A.A.F.'s service units and portion of the Flying Training School with more modern aircraft.

A review of air force training and development in 1927 showed that 13 pilots had been trained for the Permanent Force and 9 for the Citizen Force while, at the end of the year, 22 were under training for the Permanent Force. Seven pilots had been trained for short-service commissions in the R.A.F. and a further 6 were being trained for that purpose. No. 101 Flight had cooperated with H.M.A.S. *Moresby* in surveying the Great Barrier Reef. The Experimental Section had been at work producing the "Widgeon" flying-boat. Orders for the latest type of army cooperation aircraft and for light day bombers had been placed in Britain and the

purchase of new trainers was under review. Two commercial companies—West Australian Airways and Queensland and Northern Territories Aerial Services Limited (Qantas)—had established small flying schools, one at Perth and two in Queensland (Brisbane and Longreach). A bonus of £40 was paid to the companies for each pilot trained. Two other commercial companies had begun operations in New Guinea. Six civil air routes aggregating 3,500 miles were operated by commercial companies in Australia and their aircraft had flown a total of about 500,000 miles in the year. The Australian Aero Club, operating at Sydney and Melbourne, was receiving £20 for each pupil trained. By the end of September 60 pupils (including three women) had gained private pilot's licences.

Australia's status in aviation rose appreciably early in 1928 when Herbert Hinkler⁴ made his 16-days flight from England to Australia. The Prime Minister supplemented a eulogy of the man who had made this "great and historic flight" with a gift of £2,000 on behalf of the Commonwealth. The day after Hinkler's landing in Australia the R.A.N's new and first seaplane carrier, *Albatross*, was launched at Cockatoo Island Dockyard.

In March the Air Board considered a report on Wackett's "Widgeon" which said that there was no great demand for this type of aircraft in Britain and only one British manufacturer was working on such an aircraft. Probably it would be necessary to have drawings prepared and tenders invited locally to obtain some idea of its price.

If the air force was not making very spectacular progress in those days, at least it was attracting the attention of potential recruits. For course "A" in 1928 which was to provide for the training of 35 pupils (8 vacancies being restricted to airmen candidates) 250 applications were received. But the physical and educational standards demanded were high and only 44 passed the preliminary selection tests. Medical tests reduced this number to 26 and of these only 8 passed as fit for flying duties, 3 being accepted as cadets and 5 for training as airmen pilots.

On 9th June Kingsford-Smith⁵ and Ulm⁶ landed at Brisbane, completing the first flight across the Pacific Ocean—6,928 miles in 83 hours, 38 minutes flying time—and adding another achievement to Australia's mounting record in world aviation. Kingsford-Smith followed this on 11th

⁴ Sqn Ldr H. J. L. Hinkler, AFC, DSM. (1914-18: 28 Sqn RAF.) Of Bundaberg, Qld; b. Bundaberg, 8 Dec 1890. Killed in aircraft accident in Italy, 7 Jan 1933.

⁵ Air Cmdr Sir Charles Kingsford-Smith, MC, AFC. (1st AIF: Signal Service and 23 Sqn RFC.) Joint founder of Aust National Airways Ltd 1928; of Neutral Bay, NSW; b. Hamilton, Qld, 9 Feb 1897. Lost at sea, while flying from Rangoon to Singapore, 8 Nov 1935.

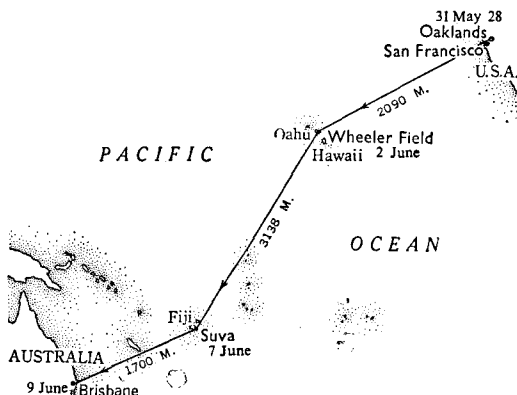
⁶ F-Lt C. T. P. Ulm, AFC. (1st AIF: *Nom de guerre* Charles Jackson, 1 Bn 1914-16. Wounded, returned Australia and re-enlisted 45 Bn 1916-18.) Joint founder and director of Australian National Airways Ltd 1928; of Lavender Bay, Sydney; b. South Melbourne, 18 Oct 1897.

In June 1927, Ulm, with Kingsford-Smith made a record-breaking flight (7,539 miles) round Australia in 10 days 5½ hours. He was organiser and co-commander for the trans-Pacific flight of the *Southern Cross* in June 1928, for the non-stop flight from Melbourne to Perth in August, and for the to-and-from flights between Australia-New Zealand in September of the same year. In June 1933 he flew an Avro X (*Faith in Australia*) on another record-breaking flight (6 days, 17 hours, 56 minutes) from England to Australia. In April 1934, he flew the first official airmails both to New Zealand and New Guinea. Ulm was lost at sea, on 4th December 1934, several hours after taking off from Oakland, California, on a flight to Australia.

September with another memorable trans-ocean flight, the first air crossing from Australia to New Zealand—Sydney to Christchurch, by way of Wellington, 1,630 miles in 14 hours, 25 minutes.

As the year advanced the British squadron of "Southampton" flying-boats came, showed the flag in the Pacific, and went its way again after providing a highlight in R.A.F.-R.A.A.F. operational coordination which gave valuable experience. But the R.A.A.F.'s squadrons were still flying aeroplanes that had been "modern" when the last shots were being fired in the First World War a decade before. These were the out-

dated gift aircraft from Britain, and it must have been with incredulity that the pilots and trainees learned that, for the rearming of Nos. 1 and 3 Squadrons, an order had been approved for 32 Westland "Wapiti" aircraft—aircraft that had just come into use in the R.A.F.



First trans-Pacific flight