SALMOND TO ELLINGTON

CLEARLY apparent to the Government at this stage were the material shortcomings of the R.A.A.F. and the inevitability of heavy financial commitment before these were overcome. The Government decided that an outside opinion was needed and, on 2nd July 1928, Air Marshal Salmond\(^1\) of the Royal Air Force arrived in Melbourne at the Government's invitation to examine and report on the organisation, administration, training and general policy of the Australian force.

Salmond was given three terms of reference: to examine and report on the equipment and training policy and make recommendations on them; to examine and report on the organisation, administration and general policy of development; to advise on the employment of the R.A.A.F. in the defence of the Commonwealth. The first two terms were covered in Part I of his report which became a public document and the third formed the basis for Part II of the report which remained a secret document for reasons of national security.

The report, dated 20th September 1928, began in sympathetic vein by observing that the defects found in the force were due largely to the immense difficulties inseparable from the task of building up an air force in its initial stages and without properly established organisation and bases. No. 1 Squadron and No. 3 Squadron, each with approximately one-third regular and two-thirds Citizen Force men, were the only operational units designed to undertake war operations in cooperation with the army or the navy, should the need arise. For this the R.A.A.F. was totally unfit because of the obsolete service machines in use, the entire absence of any reserve equipment, and the low standard of training in the two squadrons.

Salmond emphasised that full value from costly and perishable equipment could not be obtained by units, chiefly Citizen Force, which received only 25 days\(^2\) training a year. The mixed composition of Nos. 1 and 3 Squadrons (each had one army cooperation, one bomber, and one fighter flight) led to maintenance and training difficulties. The reason for their mixed composition was a desire to gain skill in as many air force tasks as possible, and retain the capacity to form a complete squadron round each flight later. Salmond did not find in the squadrons the stability to justify this policy and recommended one service type of aircraft and one operational role for each squadron. The standard throughout the force was low. Officers were very well trained at No. 1 Flying Training

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\(^1\) Marshal of RAF Sir John Salmond, GCB, CMG, CVO, DSO. Comd RFC and RAF in Field 1918-19; Chief of Air Staff 1920-33; Director of Armament Production and Dir-Gen Flying Control and Air Sea Rescue 1939-45. Of London; b. 17 Jul 1881.

\(^2\) This was the prescribed period for training in the defence forces, under the compulsory training plan then in operation.
School, but were denied further practice and training because of the insufficiency and inadequacy of aircraft. He examined closely the existing system of commissioning by which Permanent Force officers in the general duties (flying) branch held either permanent or short-service commissions in the R.A.A.F. or were seconded from the navy or army for three years while holding a permanent commission in their parent Service.\(^3\)

Since the formation of the force, he wrote, when a certain number of Staff Corps and war service officers were granted permanent or short-service commissions, a majority of the officers awarded permanent commissions had been regular officers of the navy and army who had transferred to the R.A.A.F. after secondment, certain suitable short-service commission officers, and certain cadets from the Royal Military College who volunteered or nominated for service in the R.A.A.F. after graduation. Transfer after secondment, Salmond found, nullified the advantages of the very principle of secondment, and the same weakness applied to the commissioning of Duntroon cadets if more than a few were given permanent commissions. He proposed, therefore, establishment of a R.A.A.F. Wing at Duntroon with a three-year instead of a four-year course. The number of cadets required annually was six; this number, supplemented annually by a small entry from the universities to fill technical posts, and the promotion of a proportion of the officers with short-service commissions, would provide all the regular officers needed. About half of the junior officers should hold only short-service commissions to ensure three things: a steady flow of young, fully trained officers to the Reserve, a reasonable prospect of promotion and a career for the regular, and the absence of any need for a large number of "unemployed list" officers. The obligation on candidates for commissions in the Citizen Air Force to undergo four months' continuous training at No. 1 Flying Training School largely limited the field of selection to university students. Citizen Force officers, he proposed, should in future be trained in the squadron most convenient to their university—Melbourne University trainees at No. 1 Squadron, Laverton, and Sydney University trainees at No. 3 Squadron, Richmond. If, as seemed possible, the number of university candidates fell short of requirements, other volunteers could be selected for training in the same districts. If the candidates for commissions were not restricted to compulsory trainees it should be possible to gain some advantage from the flying activities of the aero clubs.

Salmond found that in the previous two years 10 officers (all flying instructors) and 136 airmen had voluntarily left the Service, attracted by offers of civilian employment. Improved conditions, including an annual gratuity supplementary to deferred pay and payable on retirement, longer leave periods, higher pay (which already was being considered by the Air Board), and the increase of accident benefits for the Citizen Air Force to the Permanent Force level, all seemed advisable.

\(^3\)The period for short-service commissions was four years on the active list and four years on the Reserve while Citizen Force officers served for eight years, four of which might be on the Reserve.
1928 NEW UNITS PROPOSED

Salmond recommended the establishment and complete equipment within nine years of the following new regular units: one flight of single-seater fighters at Point Cook, and another at Richmond; one flight of coastal reconnaissance flying-boats at Point Cook and another at Lake Macquarie, New South Wales, using the “almost continuous series of lakes and protected waters close to the eastern seaboard for a distance of 2,000 miles from Melbourne to Townsville”; one bomber reconnaissance squadron at Richmond and one at Laverton, which might use torpedo-carrying aircraft once these had been stabilised; a R.A.A.F. cadet wing at the Royal Military College, Duntroon; an army cooperation squadron with a training flight for the Duntroon cadets, at Canberra; a stores depot at Richmond and a recruit training section at Laverton. In addition, he recommended the formation of a Citizen Force bombing squadron at Perth and construction of three flying-boat slipways, one each at Albany (Western Australia), Brisbane and Darwin.

The Experimental Section at Randwick, near Sydney, Salmond found to be without justification, unless the Government was prepared to set up an experimental factory where new types of aircraft might be produced and the successful ones put out to contract. Unless such a policy,
at considerable and recurring cost, was adopted, he recommended that the section’s function as a factory cease and that the reconditioning work be done elsewhere. Skilled work of a very high order and ably directed had been done. Two “Widgeon” amphibians and one training aircraft of experimental type (the “Warrigal”) had been produced in addition to a large number of propellers and fittings and some aeroplanes and engines had been reconditioned. If the object of the building of these machines was to prove that it was possible to build aircraft entirely or almost entirely from Australian materials, that object had been attained.

Development of air routes—“a considerable measure of defence against hostile seaborne raid attack”—was also recommended by Salmond, who said that maintenance of the closest possible cooperation between the air force and civil aviation was imperative.

The first step in putting Salmond’s recommendations into effect was the granting in January 1929 of Ministerial approval for an order for six Bristol Bulldog single-seater fighters for a fighter flight at Point Cook. Early in February 1929, in the course of his speech at the opening of a new Parliament, the Governor-General said that in the framing of financial proposals for the coming year, Salmond’s recommendations would receive consideration.

The Government’s task in translating the Salmond plan into fact had to be considered against a background of grim economic pressure, and much hopeful talk of the possible outcome of the signing of the Kellogg Pact. Allowing for these influences, Parliament’s reception of the plan was favourable, though there was an interesting critical sidelight when Mr Theodore complained that the closing of the Experimental Section would be a “tragic blunder”. He said gross hardships were being imposed on those engaged in the production of aviation requirements. Had it not been for the section no adequate test could have been made in Australia of the Harkness light aero-engine then being produced in Sydney. If no other way for the founding of the aircraft industry in Australia was possible, then its establishment by Government enterprise would be justified. There was nothing occult or mysterious about the building of an aeroplane, no long tradition behind the industry, and Australia was able to compete on equal terms with any other country.

The Prime Minister, Mr Bruce, said that the Government had hoped that on completion of the current five-year defence program (in the fiscal year 1928-29) the three-year plan recommended by Salmond would begin, but the finances of the country would not permit further expansion and the Government had to be content with maintaining what it had. The Government’s view was that the sea was Australia’s first line of defence.

To Theodore’s criticism, Bruce replied that Australia had not yet reached the stage at which it could manufacture the aircraft it needed.

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it had not even reached the stage at which it could produce an engine for a motor-car. All the great nations were spending millions of pounds in developing aviation and Australia could not hope to keep abreast, let alone ahead of these developments.6

But Bruce's responsibilities, as Prime Minister, for the program in hand were soon to end. Three weeks after this speech Parliament was dissolved, and on 20th November the Scullin Government was occupying the Ministerial benches and the House was listening intently while the Governor-General, opening the new Parliament, announced the suspension of compulsory military training, and, in keeping with Labour's consistent advocacy of a strong air force, gave the R.A.A.F. specific attention. "The question of maintaining a separate organisation for the air force, having been brought under the notice of my Ministers," he said, "the Defence Committee was instructed to investigate and report to the Council of Defence. No decision was arrived at by the council, the matter being postponed pending a comprehensive review of the position of the air force. My Ministers have, however, asked for a report on the possibility of coordinating the work of the air force with that of civil aviation."7

Behind this somewhat oblique statement on "the question of maintaining a separate organisation for the air force", was a very drastic proposal that the navy and the army should have separate air arms. Major-General Sir William Glasgow,8 who had just relinquished the Defence portfolio, took the opportunity offered by the Address in Reply to challenge this. Arguing in favour of one coordinated force with a three-fold purpose— independent operations, army cooperation and naval cooperation—he said that the navy as it then was would require only about 15 aircraft. He hoped that the Government did not intend to cut the already diminutive air force into "separate, distinct entities" for the two other Services. He added emphatically that the air force and civil aviation were "absolutely different and distinct".9 Mr Latham, as Leader of the Opposition, asked, with some display of incredulity, what officers of the Defence Department had brought the matter to the notice of Ministers.1 Mr Scullin assured him that the suggestion had come from officers in both the army and the navy with the officers of the air force dissenting.

That those in command of the R.A.A.F. were genuinely afraid that the Government might yield to pressure from the other Services and split the air force was indicated by Mr White2 who, a week later, told the

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6 Commonwealth Debates, Vol 121, p. 298.
1 Commonwealth Debates, Vol 122, p. 96.

(When war broke out in 1939 White was a lieut-colonel on the Unattached List of the Australian Military Forces, in which he had commanded a battalion from 1926 to 1931.)
House of Representatives that if the force was split it would be set back
a decade in development. To abolish the Air Board and divide the air
force between the army and navy would duplicate training staffs, material
and men. The new Defence Minister, Mr Green, said later that it was
not the Government’s policy to amalgamate the air force with the army
and the navy. If it had any predilection at all, it was in favour of keeping
the air force separate. But he kept the contentious issue bubbling by
adding: “However, if we can preserve efficiency and at the same time
save money by amalgamation, the proposal will be considered. Already a
committee has been set up . . . for the purpose of amalgamating the
financial control of the different branches.”

In June 1930, however, Green, in a review of Defence Department
retrenchments, gave an assurance that air force units and establishments
would be maintained. Since no difficulty had been experienced in keeping
the two Citizen Force units at full strength under the voluntary system,
no reduction in air force activities had taken place.

Australian aviation gained impetus from the achievement of Kingsford-
Smith on 24th June, in making the first east-west crossing of the Atlantic
by air (in 31½ hours). The Australian Prime Minister cabled Kingsford-
Smith announcing his promotion to the honorary rank of wing commander
in the R.A.A.F. in recognition of his achievement.

The keenness with which expenditure was being cut was illustrated in
July when the Air Board recommended that only one officer (Squadron
Leader Lukis) instead of two should be nominated for the 1931 R.A.F.
Staff College course. This was adopted despite the fact that the cost of
such courses was met from a fund in London established by credits
from the Air Ministry on payments for the training in Australia of short-
service commission officers for the R.A.F. At this stage the R.A.A.F. had
104 officers, 782 other ranks and 26 first-line aircraft. When, in July,
Mr Scullin himself took over the Treasury portfolio following the resigna-
tion of Mr Theodore, he announced that the R.A.A.F. had been reduced
by 3 officers and 34 airmen, but as the force had been working below
establishment no dismissals were entailed.

In August the British airship R-100 flew from Britain to Canada and
back. Two months later (5th October) the protagonists of the lighter-than-
air craft were deeply shaken in their convictions by the news of the loss
of the British airship R-101 on a flight to India in which the dead included

10 Australia and Britain had an agreement (made at the 1923 Imperial Conference), by which
10 cadets were selected annually, trained as pilots in Australia, and on graduation were sent
to Britain to hold short-service commissions in the RAF for four years. The Commonwealth
received £1,500 for each pilot so trained.
11 Commonwealth Debates, Vol 125, p. 3894. In the preceding 12 months the RAAF had accepted
33 cadets to fill vacancies and provide for the normal wastage in the flying training courses
for short-service commissions in the RAF and RAAF. Of these five had been discharged as
not temperamentally suited to flying.
the British Secretary of State for Air, Lord Thomson.\(^8\) Also in October Kingsford-Smith again achieved a notable success when, leaving England on 9th October, he landed at Darwin after a flight of 9 days, 21 hours and 40 minutes. Again the Government conferred higher honorary rank on him, this time that of air commodore.

By March 1931 we find Mr Chifley,\(^9\) a new Minister for Defence, telling a questioner in Parliament of Australia’s experiments in the construction of Service aircraft—a picture of trial, error and some accomplishment which, because of prohibitive costs at a time when the Treasury was disturbingly empty, could make no greater contribution than Salmond had predicted.\(^1\) In this period, too, experimental flights were made which laid the foundations for a memorable and lasting international air service partnership. These were made between England and Australia by Imperial Airways Limited, at the instance of the British Government and without cost to Australia. Qantas Limited provided the Brisbane-Darwin connecting link.

Again the political wheel turned. February 1932 saw the opening of the 13th Parliament with the newly-formed United Australia Party led by Mr Lyons\(^2\) in office. This time the Governor-General’s speech made no reference to defence beyond the hopeful and highly significant statement, “My Ministers consider that the Disarmament Conference is one of the most vitally important international conferences that has yet been held. A real reduction and limitation of armaments would make a great contribution to the peace and welfare of humanity. The problems of disarmament have a fundamentally important bearing on the well-being and progress of our Commonwealth.”\(^3\) So much for the hopes. But, as the historian Toynbee had noted (only a few months earlier) the Japanese people “racked by the remorseless turning of the economic screw . . . had followed the lead of the Japanese Army in reverting from the policy of commercial expansion to the policy of military conquest”.\(^4\) One month after the Governor-General had spoken, Japanese forces were attacking the Chinese at Shanghai, a fact which, apart from its denial of hope of world disarmament, prompted an emphatic reiteration in the Australian Parliament of Labour’s opposition to oversea service.

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\(^8\) Sqn Ldr W. Palstra RAAF was among those killed.


\(^1\) “Widgeon I”, an experimental amphibious aircraft designed by Wackett on the recommendation of the Controller of Civil Aviation (Brinsmead) for civil use but later used by the air force for training seaplane pilots, was struck off charge when no longer serviceable. “Widgeon II”, a development of “Widgeon I”, was also produced for civil use and had completed 130 hours of flying, including a flight round Australia, when in tests at Point Cook it met with an accident involving loss of life. “Warrigal I” was an experimental landplane, designed to reduce the cost of air force training, but a lighter and cheaper aircraft had been developed in Britain and was adopted for training in the RAAF. “Warrigal I” was damaged in a landing and was not rebuilt.


\(^3\) Commonwealth Debates, Vol 133, p. 6.

\(^4\) A. J. Toynbee, Survey of International Affairs 1931, Pt IV, Sec 1 (1922), p. 403.
The ghost of lost autonomy, which had haunted the R.A.A.F. for nearly three years, was laid in September by Pearce, back in office as Minister for Defence, who said the question of merging the Naval, Military and Air Boards had been investigated, but it “was not considered desirable to take the action suggested”.5

An outcrop of rumours and reports of “mysterious strangers spying out the land” in the coastal areas of the Northern Territory occurred early in 1933. Mr H. G. Nelson, Parliamentary representative for the Northern Territory, referred to these reports in the House and sought an assurance from the Government that a patrol boat or seaplane would be dispatched to the area to investigate them and that the Darwin garrison would be strengthened. He was told that the reports were not confirmed and that the circumstances did not warrant dispatch of a patrol boat or seaplane. The question of a suitable garrison at Darwin was being considered. Darwin, at this time, was coming into notice as Australia’s northern doorway. In March, Imperial Airways and Qantas were associated in tendering for the air mail contract for the proposed Brisbane-Singapore route. Soon afterwards, an Imperial Airways four-engined aircraft visited Australia on a goodwill and survey mission. In July the London-Karachi service of Imperial Airways was extended to Calcutta and in December to Singapore.

January 1934 was an important month for civil aviation development with a defence significance. It marked the formation of Qantas Empire Airways, an organisation in which Imperial Airways became directly associated with the pioneering Australian company and accepted a substantial shareholding. In April the new company secured a five-year contract, in open tender, for the Brisbane-Singapore air mail service.

In July 1934 the Government’s decision to purchase a cruiser from Britain for £2,250,000 prompted Latham to anticipate the old “aircraft before warships” argument by saying that reliable expert opinion claimed that warships were a necessary protection against raids and attacks on commerce. One of the fundamental dangers of relying wholly upon aircraft and shore defences was that their action was affected, often vitally, by the weather; ships were not subject to the same disadvantage. But, despite the mounting naval program, Pearce was able to announce in August provision for 18 Hawker Demon aircraft, the latest type advised by the British Air Ministry and senior R.A.A.F. officers, and 24 Seagull

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5 In the light of subsequent associations it is of interest to note that in the United States the struggle for air force autonomy was seen to have failed as a result of the ineffectiveness of the Air Corps Act of 1926 and the refusal of Congress to accept any one of 29 bills introduced between 1926 and 1935 to achieve reorganisation. Thus many leading officers in the Service concluded that the fight for independence was hopeless and decided to strive for a more limited objective—the formation of what was termed a GHQ Air Force in which offensive aviation might be concentrated under one command, thus achieving for that force a more or less independent mission. The GHQ Air Force did not, in fact, gain permanent status until 1st March 1935 and then only after protracted and, from the viewpoint of autonomy-minded airmen, extremely discouraging official investigations. The US Air Force did not achieve complete autonomy until 1947, although great war-time progress was made towards this goal. (For a detailed examination of this subject see W. F. Craven and J. L. Cate (Editors). Early Plans and Operations, January 1939 to August 1942 (1945), Ch II of Vol I in the official series The Army Air Forces in World War II; and M. S. Watson, Chief of Staff: Prewar Plans and Preparations (1950), Ch IX, in the official series United States Army in World War II.)
Mark V (later Walrus) seaplanes, made to R.A.A.F. specifications. Under the contract of purchase Australia would receive copies of all the plans of the latter machines. In addition provision was made for carrying out the remainder of the first portion of the Salmond plan: technical equipment (including aircraft engines), motor transport, ammunition and stores—£162,400; buildings, works and sites—£88,600. From this provision two general purpose squadrons, a wing headquarters, with stores depot, aircraft repair section and engine repair section would be formed at Richmond, New South Wales; one general purpose squadron at Laverton; a coastal reconnaissance flight at Point Cook and a Citizen Air Force squadron at Perth. With the arrival of the new aircraft it would be possible to recommission H.M.A.S. Albatross and equip her with modern aircraft in place of her obsolete Seagulls. In addition the cruisers of the R.A.N. Squadron and the Albatross were being fitted with aircraft catapults.

The increasing speed and range of aircraft was demonstrated in 1934 by the Melbourne Centenary Air Race, in which a prize of £10,000 was won by C. W. A. Scott and T. Campbell Black who flew a de Havilland “Comet” from Maldenham to Melbourne in 2 days, 22 hours, 54 minutes, 18 seconds! One commentator of the day said of the race: “Not the least of the services that Sir MacPherson Robertson gave to Australia in promoting the Centenary Air Race (he also provided the £10,000 prize), was to bring home to us that southern Australia is within two days’ range of Europe for a cargo-carrying machine. If Melbourne is within two days of Europe northern Queensland is within ten hours of the Japanese islands and the southern capitals are within non-stop range. . . .”

Another civil aviation event of importance was the next stage in the development of the England-Australia air service—the dispatch by the Duke of Gloucester on 10th December of the first scheduled Qantas airliner on the Brisbane-Singapore section of the England-Australia route. The Singapore-London section was operated by Imperial Airways.

In March 1935 observers noted the announcement of the official constitution of the German Air Force and, only a few days later, Hitler’s significant addendum to this—a statement in Berlin that Germany had already reached air parity with Britain! Promptly, in May, proposals were laid before the British Parliament for the increase in the strength of Britain’s first-line aircraft to 1,500 by 1937. This was not such a huge program as it may have seemed at the time to air-conscious critics in Australia, for the British first-line aircraft strength even then was 1,020: Home Defence 580, Fleet Air Arm 175, India 96, Egypt and the Sudan 60, Iraq 51, Aden 12, Palestine 12, Malta 6, and Singapore 28. But the effect of the British proposal for increased air strength had its Australian reflection in personal correspondence which took place in October and

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In Air Ministry parlance “first-line” denoted aircraft available to operational units ready for immediate flight but not including reserves. The RAAF adopted the same definition.
earlier, between the British Chief of the Air Staff (Air Chief Marshal Sir Edward Ellington) and Air Commodore Williams. Ellington wrote asking whether additional Australian pilots and other ranks could be obtained for the R.A.F. Williams replied that, apart from any question of Government policy, the low rates of R.A.F. pay would not attract Australian tradesmen, and that, though large numbers of young men would probably offer for training for short-service commissions in the R.A.F., few would be willing to pay their own fares on the chance of qualifying as pilots. The practical course, Williams wrote, seemed to be to adhere to the existing agreement and continue the training of pilots in Australia for the R.A.F. The Air Board, reviewing this correspondence, was quick to note the advantages in this last proposal. It would allow for the maintenance of a much larger R.A.A.F. training establishment, keep the Service more up to date technically through the more rapid use of aircraft, and establish a larger credit in London (payments by Air Ministry for Australian training) with which new aircraft could be bought.

Ellington replied that the Air Ministry would request officially that the number of pilots trained in Australia for the R.A.F. should be increased from 15 to from 20 to 25 a year, but that for 1936 the R.A.F. would be prepared to take up to 50 pilots. By this time the Air Board had become increasingly conscious of a need of its own—a need for more technical officers. It recommended to the Minister that one officer should be sent to each R.A.F. armament, signals and engineering course and one to every second photography and navigation course.

About this time the first really effective action was taken to develop the Australian aircraft industry when, at the instance of Mr Essington Lewis, then managing director of the Broken Hill Proprietary Company Limited, the Government convened a conference at which plans were made for the formation of a syndicate that was soon to initiate establishment of factories to make aircraft and engines.

Such progress was made in 1934-35 with the first part of the Salmond plan that the Minister for Defence (Mr Archdale Parkhill) was able to announce in November that in January 1936 the first section of No. 2 Aircraft Depot at Richmond would be formed; in April the two new squadrons (one at Richmond and one at Laverton) would be established and, in addition, No. 101 Fleet Cooperation Flight would become a full squadron in that month. This development would entail an increase in the permanent strength of the force of 563.
Towards the year's end the issue of national defence had reached such important dimensions that Parkhill made an official statement which set out the Government's policy in detail and analysed the program for each of the Services. In this he explained that the average annual defence expenditure during the five-year program which ended in 1928-29 was £6,700,000, but at the depth of the depression this fell to £3,200,000. The Government's first aim had been to restore the forces and provision was made in 1933-34 for an additional expenditure of £1,500,000. Under the three-year program, adopted in 1934-35, provision was made for an additional expenditure of £8,000,000 mainly for development and the average annual expenditure in this period would be £6,500,000. The program's objective for the air force was practically to complete Part I of the Salmond plan, providing: in Victoria—Headquarters, No. 1 Flying Training School, No. 1 Aircraft Depot, No. 21 (Citizen Air Force) Squadron for cooperation with fixed defences, fighter-bomber squadron, and bomber-reconnaissance squadron; in New South Wales—No. 2 Aircraft Depot, No. 22 (Citizen Air Force) Squadron for cooperation with fixed defences, army cooperation squadron, bomber-reconnaissance squadron and fleet cooperation squadron; in Western Australia—No. 25 (Citizen Air Force) Squadron for cooperation with fixed defences. The Salmond Report had been amended in the light of additional demands. The decision to concentrate on three of the seven divisions of the army had led to a consequent decision to form three army cooperation squadrons instead of one as Salmond had proposed. One of these was provided for in the three-year program and two would follow later. Cooperation with fixed defences had not been specially considered by Salmond, but a recent review of the plan for rearming the coast defences entailed air cooperation. Men for four of the five squadrons for this purpose would be from the Citizen Air Force. Two of these squadrons already existed in cadre form, one was provided for in the three-year program and two would be formed later.

For coast reconnaissance Salmond had recommended four units, each of four flying-boats, but these were insufficient. Further, the modern multi-engined landplane, capable of flying with one engine out of action, was considered suitable for seaward reconnaissance as well as for other operations. It was less expensive than the flying-boat and had a higher performance. It was proposed therefore that this aircraft should be substituted, though one flying-boat unit would be maintained in the light of possible requirements in Papua or other areas where land operations were not practicable. This alteration would, without additional cost, permit units of twelve aircraft instead of four flying-boats. Two of these coastal squadrons would be included in the three-year program and three (one with flying-boats) formed later. One fighter-bomber unit was provided in the program and two would be formed later.

With details of the program for the three Services before them, keen air force enthusiasts were quick to compare the respective allocations of
money. The total estimates for each Service for the second year (the
best developmental picture the statement provided) gave this comparison:
navy £2,961,204; army £2,515,060; air force £1,138,212. Earlier Mr
Curtin had expressed in Parliament the view of such critics when he
remarked that he regarded the proposed increase in the navy vote as of
less service and less economy than that for the air force.

Curtin was expressing Labour's policy when he challenged the Govern-
ment's emphasis on naval development. But the key to the question
whether priority for air force development could be justified lay in another
and unanswered question—what the offensive power of the aircraft then
in service really was. This could not be answered because there was no
adequate evidence from experience in war. And the Government had no
intention of reversing a policy that had been maintained by all previous
Australian Governments except one—the Scullin Labour Government.

Another issue which deeply concerned those charged with air force
development—the old battle over the adoption of the Imperial Air Force
Act—reappeared about this time. As it had been from the beginning,
opposition was by no means solely on party lines in Parliament. The
trouble lay in the fact that, whereas the army and the navy were adminis-
tered in terms of Imperial legislation, the air force was still prescribed
for largely by Commonwealth regulations. The Senate Standing Commit-
tee on Regulations and Ordinances, in a report issued on 30th October
1935, referred to the lack of an adequate Act. The existing Act consisted
of only three sections, applying a portion only of the Defence Act and
Regulations. The committee held that the problem was not confined to
administrative detail, but amounted to substantive legislation which should
be the subject of parliamentary enactment, and, regarding the problem as
more pressing as the air force increased in importance, saw no reason
why a distinction should be made between the air force and the naval
and military forces. On 4th December Ministerial approval was given
for the drafting, once more, of an Air Defence Bill which would apply
the Imperial Air Force Act. The draft Bill prepared in 1924 was revised
but this "did not meet requirements" and another draft was prepared
which, while not departing in principle from the original, resembled more
closely the Naval Defence Act. But its expediency was still in doubt
and it was shelved along with the others.

By March 1936, on the eve of the third year of the three-year defence
development plan, about £1,700,000 worth of aircraft had been ordered
from Britain for the R.A.A.F., but the R.A.F. expansion program was
absorbing the production of the British aircraft industry to such an extent
that Parkhill admitted that it was unlikely that any further aircraft would
be available from Britain "for a considerable time".

However, the long range answer to the lack of combat aircraft was
becoming clearer. In February 1936 the syndicate formed under the

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8 Rt Hon J. Curtin. MHR 1928-31, 1934-45; Prime Minister and Min for Defence 1941-45. Of
Cottesloe, WA; b. Creswick, Vic, 8 Jan 1885. Died 5 Jul 1945.
leadership of Essington Lewis had sent a mission of three qualified men to Britain, Europe and the United States, to investigate aircraft production. Five months later the report of this mission was before the Air Board. Convinced that the local production of aircraft for both Service and civil needs was “thoroughly practical” the mission recommended the erection of factories to produce, as an initial program, at least 40 general purpose aircraft, and as a supplementary and simultaneous program, 10 training aircraft. Parkhill, reporting on these recommendations in September, said that it was “absolutely essential” that the Commonwealth should build its own aircraft and that it was expected that the new company would be able to begin production within 12 months. In the same month Mr Casey, the Federal Treasurer, introduced a budget with a heavy emphasis on defence, against a background of deepening international concern caused by the seizure of Ethiopia by Mussolini’s forces and by Hitler’s rising power. He spoke of the Government’s grave responsibilities for national security and observed that the great strides in the development of air communications were an important reminder to Australia that, in spite of its geographical remoteness, it could not ignore happenings elsewhere. Casey then introduced the highest defence vote since the 1914-18 War—£8,809,107. The share of the air force in this vote was much as Parkhill had announced for the program in December 1935. The first-line strength in aircraft would be increased in the first year of the new program to 96, and by the time the plan was completed in 1937 the strength of 114 aircraft contemplated by Salmond would be increased to 194. Thus the leeway lost in the economic depression would be made up. The strength of the regular force would be increased that year to 2,263, an increase of 1,373 since the beginning of the program, while the strength of the Citizen Air Force would be increased by 119. There were then 96 cadets in training.

On 17th October 1936 the Commonwealth Aircraft Corporation was incorporated, with an authorised capital of £1,000,000, the shareholders being the original companies—Broken Hill Proprietary Company Limited, the Broken Hill Associated Smelters Proprietary Limited and General Motors-Holden’s Limited—joined by Imperial Chemical Industries of Australia and New Zealand Limited, and the Orient Steam Navigation Company Limited.

While Australia was pressing forward with its vigorous though comparatively modest aircraft production program, the aircraft industry in Britain was taking steps that were to have profound consequences four years later—the eight-gun fighter had been evolved. In March 1936 the pro-

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4 W Cdr L. J. Wackett, Sqn Ldrs H. C. Harrison and A. W. Murphy.
5 The type recommended as most suitable for Australian production was an all metal, low-wing monoplane of stressed-skin wing design with variable pitch propeller, hydraulically operated retractable-undercarriage landing gear, and a 600 hp radial engine.
duction drawings for the Hawker Hurricane were begun. In June the Air Ministry ordered 600 of these aircraft and production began in the same month. (The first production Hurricane flew on 12th October 1937.) It was in 1936, too, that another famous British fighter aircraft, the Spitfire, came into world notice by achieving a speed of 340 miles an hour at 17,500 feet, with a fixed-pitch propeller.

When the Estimates came before Parliament in November Curtin described the Singapore Base as "useless for the defence of Australia" if the British fleet was engaged elsewhere. In the same debate, following references to reports that the Russian Air Force had carried out experimental parachute troop operations, Mr Drakeford remarked that he should "regard as absurd the suggestion that troops could be moved to Western Australia by air in sufficient numbers to defend that State if it were attacked". When Parkhill asked him in what way the Northern Territory could be defended, Drakeford replied that it was conceivable that such territory would have to be relinquished until Australian forces were so organised as to enable them to retake it. From statements made by members on both sides of the House he had been led to believe that out-of-the-way parts of the Australian continent could not be defended in any circumstances; "even Defence experts must acknowledge that", he added.

R.A.A.F. development was placing an increasingly heavy strain on its training resources, and the decision of a year earlier to train 50 pilots for short-service commissions in the R.A.F. in the financial year 1936-37 was becoming an embarrassment. Twenty-five pilots were listed to embark for England in January 1937 and a further 25 in July 1937, but the Air Board sought relief from its commitment of 25 a year in subsequent years. The maximum intake of No. 1 Flying Training School was 96 a year, and while the board recognised the demands created by the expansion of the R.A.F. it fixed 8 each half year as the maximum number of pilots it could now train for that Service.

Overshadowing all other aspects of air defence in 1937 was the influence of the Imperial Conference of that year which caused a sharp rise in Australia's defence expenditure. In August, when the Prime Minister (Mr Lyons) reported on the conference, he gave proof that the air force had gained much ground in the calculation of the relative importance of the three Services. Lyons explained that the Imperial Conference had approved the general lines of R.A.A.F. development and that the stage had been reached at which it had become a question of money, plus the sound and economical development of an extensive ground organisation and of recruiting, training and the manufacture of aircraft. There had been general endorsement in London of the decision to establish an aircraft industry in Australia and this was one of the factors in the Government's defence plan. Air defence was supplementary to Empire sea power as the first line of Australia's defence against invasion. If a British fleet was to

be based at Singapore as a safeguard to Australia, Australia must be prepared to cooperate and provide the squadron necessary in her own waters. It was an “unavoidable geographical fact” that the first line of defence for the Commonwealth was naval.

Curtin, always quick to accept the challenge when Singapore was mentioned, quoted a newspaper report of a statement by Winston Churchill in which he declared that Singapore was as far away from Japan as Portsmouth was from New York and could not be regarded in any way as a menace to Japan. Curtin then posed the question: “How can Singapore be so far away from the Yellow Sea as not to be able to hurt it and be a thousand miles farther away from Sydney and yet be able to protect it?” If increased expenditure was to be provided for defence, more should be spent on aerial services than the amount contemplated by the Government. He then returned once more to the old argument based on a comparison of aeroplane and battleship production costs and their relative values in war. He said that he understood that on 31st June 1937, Japan’s shore-based bombing and fighting machines totalled 1,500. In addition its invasion power in aircraft from carriers was 300 and Japanese navy-air expansion plans provided for new carriers with a total capacity of 600 aircraft. Australia would need approximately as many aircraft to resist effectively an enemy’s attempt to land on her shores. He quoted from a speech by Mr Hughes on 20th October 1936 in which he had said, “Aerial defence is the only defence within our capabilities.” For a capital outlay of £15,000,000, Curtin claimed, Australia could have 50 squadrons or 600 aircraft. On current costs 50 squadrons could be maintained and “replaced” for £5,000,000 a year. Such aircraft would be more valuable than the warships that could be provided for the same money.

The back-cloth against which Curtin spoke on all matters of Commonwealth defence was the policy of the Australian Labour Party. This, while it advocated “adequate home defence against possible foreign aggression”, sought a prohibition on the raising of forces for service outside the Commonwealth or “participation in or promise of participation in any overseas war except by decision of the people”. To achieve an adequate defence

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9 *Sydney Morning Herald*, 1 June 1937.

1 In 1936 the British Prime Minister, Mr Baldwin, appointed a sub-committee of the Imperial Defence Committee to examine the question of the vulnerability of capital ships to air attack. Members of the sub-committee were: Sir Thomas Inskip (chairman), Viscount Halifax, Mr Malcolm MacDonald MP and Mr Walter Runciman MP with Lord Chatfield (First Sea Lord and Chief of the Naval Staff) and Air Chief Marshal Sir Edward Ellington (Chief of the Air Staff) as expert advisers. The sub-committee concluded that the evidence did not justify arguments that air power had doomed the battleship. On the question of relative costs the Admiralty and the Air Ministry had collaborated in an investigation and had given the agreed figure of 43 twin-engined bombers as the nearest approximation possible to the equivalent in cost of one capital ship, taking into account overhead, maintenance, replacement, and similar charges. "The fact is," the report stated, "that the relative costs of battleships and aeroplanes have not, in themselves, any bearing on the matter. If capital ships are essential to our security, we must have them. . . . The advocates of the extreme air view would wish this country to build up no capital ships (other Powers continuing to build them). If their theories turn out well-founded we have wasted money; if ill-founded, we would, in putting them to the test, have lost the Empire."—*Command Paper No. 5301*, 1936.

plan commensurate with Australia’s ability to maintain it, the party had adopted an eight-point program the first point in which was “aerial defence and the further development of commercial aviation capable of conversion for defence purposes”, and the second, “establishment of airports and depots at strategical points on the coast and inland”. The naval and land forces (which, with the aerial forces, were to be maintained “at an efficient standard”) received their first mention in Point 6.

The Commonwealth Aircraft Corporation had now decided that the aircraft with specifications most closely resembling those recently recommended by the oversea mission was the NA-33, made by the North American Aircraft Corporation, California. This had a Pratt and Whitney single-row Wasp radial engine. The chief reason for the corporation’s preference for this aircraft was that both the airframe and the engine were comparatively simple and presented no great construction problem —and therefore were suitable for the industry to cut its teeth on. Acceptance of an American design drew one or two mild protests in Parliament about keeping aircraft construction “within the Empire”, but the project was approved, and planning began for production of the NA-33 which, with modifications specified by the R.A.A.F., was to become known as the Wirraway.

Another current development was the growth of the Meteorological Branch of the Department of the Interior under what was known as the “aviation plan”. Permanent positions in the branch were increased from 92 to 151. Special training in forecasting and research was provided for men who were to be posted to aerodromes throughout the Commonwealth and provision was made for the complete re-equipment of the radio station at Laverton which Parkhill admitted was obsolescent.

As 1937 was closing Mr Thorby, who had succeeded Parkhill as Minister for Defence, found his responsibilities increasingly heavy. In December the Japanese sank the American gunboat Panay by air bombing in the Yangtze River. Awareness of international tension was becoming more and more noticeable—though it was still considered “diplomatic” to refrain from naming Japan directly; as when Sir Henry Gullett declared, “I shall not name a particular country”, and went on to refer to Singapore and Hong Kong as two great naval bases lying “across the track of any aggression which can menace this country”. Such aggression, he said, was not unlikely, but these bases had a very considerable and increasing air force. He advocated naval and air force cooperation with the British forces in the Far East and pictured the R.A.A.F. as “an air

\[8\] An aboriginal word meaning “challenge”.


1937-38

BIG EXPANSION PLANNED

force which could move freely over the intervening islands in the event of danger. As 1938 opened the pressure on the defence program became still greater. In March Mr Lyons announced a revised three-years plan with an expenditure of £43,000,000—more than double the sum spent in the previous three years. Of this the navy would receive £15,000,000, the air force £12,500,000 and the army £11,500,000. For the first time the air force was given priority over another Service in the direct allocation of money. The new program was related to what Lyons described as a "wider pattern of Empire defence, with Empire sea power and the Singapore Base as its fundamental basis". For the air force the plan would provide (in three years) 9 additional squadrons, another flying training school, an equipment depot, 2 armament training camps, 2 group headquarters, 4 station headquarters and the extension of existing establishments. Thus the number of squadrons would be raised to 17 with a first-line strength of 198 aircraft. The strength of the regular air force in February was 199 officers and 2,020 airmen, which was 61 officers and 230 airmen short of the full establishment. To complete the 17-squadron program the strength would need to be increased by 240 officers and 2,250 airmen to a total of 500 officers and 4,500 airmen. In this total approximately 490 would be pilots.

The Commonwealth Aircraft Corporation, which was given an accelerated program with a substantial increase in the number of aircraft on order, began to lay in stocks of essential materials. Darwin was now receiving more definite recognition as a site for an air base and in May the Air Board reviewed a works program for the site to cost £282,000.

Meanwhile the Air Board was once more wrestling with the old problem of trying to apply the Imperial Air Force Act. All other air forces of the British Commonwealth used the one legal code which was laid down by this Act on the basis of experience gained in administering the R.A.F. Most recently (in 1937) the New Zealand Parliament had adopted it for the R.N.Z.A.F. and had applied, in addition, Britain's Rules of Procedure, King's Regulations and Air Council Instructions. This, it was claimed, greatly simplified all administrative problems when the air force came into formal contact with the navy and the army, which used similar Imperial manuals, and with air forces of the Empire other than the R.A.A.F. But there was no immediate solution and at this stage the attention of the Air Board was diverted into a much deeper and wider channel which concerned the whole fabric of the force.

The prospect of war was becoming graver. Germany had annexed Austria, making the Anschluss a grim fact, and her quarrel with Czecho-

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9 At this time the RAAF was flying Hawker Demon fighter-bombers (first deliveries 1935), Avro Anson bombers (first deliveries early 1937), and Seagull amphibians (first deliveries 1935-36). Training types were Westland Wapitis, Bristol Bulldogs and Supermarine Southamptons (first received as service types about 1928; in use as trainers for from two to three years), De Havilland Moths (first received 1928; individual aircraft replaced periodically), and Avro Trainers (first received 1935-36).
Slovakia was reaching boiling-point. In the face of such news the Australian Government had decided that the air force, in common with the army and the navy, should be developed into a strong independent fighting Service, fitted for war. It was apparent that the Salmond plan, revised though it had been in 1936, was now an inadequate basis for the future. For some time service flying casualties had been arousing hot criticism in Press and Parliament, a situation which led to mis-statements that were unfair both to the public and to the Service. The immediate answer, the Cabinet decided, lay in obtaining an independent critical report from the best expert available. After an exchange of opinion with the Air Ministry, London, the Government invited Marshal of the Royal Air Force Sir Edward Ellington to make such a report. Ellington, having relinquished the post of Chief of Staff of the Royal Air Force in August 1937 to Air Chief Marshal Sir Cyril Newall, was now Inspector General of the R.A.F. The first announcement the Air Board received of the invitation to Ellington appeared in the Press, a fact which, very naturally, put the board sharply on the defensive.

Soon after he reached Australia, Press interviewers quoted Ellington as making two sweeping comments on Australian defence. One was that Australia's first line of defence lay in England—Japan could never attack Australia without overcoming British power; an opinion to which he was quoted as adding that local defence, though necessary, was of secondary importance. The second reported comment was that Australia was safe from attack by air except by seaborne aircraft which would not be effective “under present conditions”.

It was mid-June when Ellington began his investigation and one month later, on the eve of his departure for New Zealand, he submitted his report to Lyons. It was a document written dispassionately, clearly and formally. The introductory passage suggested that the aim of the R.A.A.F. should be defined as “the defeat, in cooperation with the navy and army, of any power which is threatening the independence of the country”. He found some aspects of the proposed expansion, notably the question of reserves, as taking too narrow a view of the requirements of the R.A.A.F. in war. He advocated the exchange of senior officers between the R.A.A.F. and the R.A.F. All service squadrons were below strength both in officers and other ranks, and deficient in flight commanders and non-commissioned officers. Cadets and other recruits were of the right type and the maintenance of aircraft was efficient.

But for all directly concerned the crucial part of the report was that relating to service flying accidents. “The rate of the R.A.A.F. is definitely worse than that in the United Kingdom,” Ellington wrote, but he added that in a small air force fluctuations must be expected. Records for the previous three years had been examined and these showed that of 12

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*Argus* (Melbourne), 16th and 30th June 1938.
accidents, three appeared due to disobedience or bad flying discipline and possibly a fourth was due to the same cause. This was a high proportion and pointed to a need for the strict enforcement of regulations. Examination of reports on a series of Hawker Demon accidents showed no evidence either of faulty maintenance or of defects inherent in the design of the aircraft.

Next in importance to the need for improvement in flying discipline, Ellington placed improvement in training after the flying training school course had been completed. The initial training of pilots at Point Cook and of other ranks at Laverton was thorough, but there was room for improvement after the training had been completed at Point Cook, notably in the service squadrons and especially in armament training. Flying training should be extended to include instruction comparable with that of advanced training squadrons in the R.A.F. and an air navigation course of at least 10 weeks should be provided. Flying clubs or civil transport companies should undertake the training of pilots both for the Reserve and as a preliminary to the flying training school course for those intending to enter the regular service. Further, these clubs or companies should provide annual training for Reserve pilots, though instructors might be difficult to obtain at that time. It was essential that the Air Board should have power to supervise such training and the necessary staff should be added to R.A.A.F. Headquarters for that purpose. It should be Government policy in normal times that all pilots of subsidised airline companies should first have passed through the R.A.A.F. Civil and R.A.A.F. pilots might be exchanged for brief periods—more cooperation between civil aviation and the R.A.A.F. was desirable.¹

At the Commonwealth Aircraft Corporation’s factory at Fishermen’s Bend, Melbourne, Ellington inspected the Wirraway. “I understand,” he wrote in his report, “that it is intended to use it in replacement of the Demon as a fighter-bomber. I consider that the Wirraway should be regarded as a temporary expedient . . . it can only be regarded as an advanced training aircraft.” He suggested that the choice of a new type should be delayed until a suitable aircraft had been tested in Britain.

In Ellington’s opinion the existing meteorological stations were inadequate both for the air force and for civil aviation. High priority, he said, should be given to the proposed establishment of 14 additional stations at places including Rabaul, Salamaua, and Norfolk and Lord Howe Islands.

At the end of June, while Ellington was still engaged in his investigations and before he had made known his poor opinion of the Wirraway, Mr Thorby announced that 40 of these aircraft had been ordered on

¹The most important civil aviation development in 1938 occurred on 1st July when the Commonwealth Parliament passed the Empire Air Service (England to Australia) Bill to ratify an agreement between the British and Australian Governments and Qantas Empire Airways Ltd: the Australian Government was to pay Qantas an annual subsidy (not exceeding £50,000) for the carriage of mails. The first through westbound flying-boat service left Sydney on 5 July and the first eastbound service reached Sydney on 6 July. By August 1938 three services a week were operating.
definite contract at a "very satisfactory" price in relation to that for imported machines of similar type. Between 60 and 70 additional aircraft would be ordered later. Arrangements had been made to provide all the types of aircraft required and, after the first delivery, these would be 100 per cent Australian.

In the same month the Air Board was authorised to retain the eight Australian-trained pilots who would be ready for R.A.F. short-service commissions by January 1939 on the ground that the entire output of No. 1 Flying Training School was needed for Australian expansion. But authority was also given to increase the number of Australians to be sent to Britain for training there for R.A.F. short-service commissions from the promised 25 to 40 a year.

The threat implied by the Munich crisis quickened defence preparations still further. On 26th August the Council of Defence met and after a survey of the whole situation ordered all regular forces to their war stations. The strategical redistribution of the R.A.A.F. was planned; provision was made for taking over civil aircraft for war purposes, and workshop production was accelerated to bring the serviceability of all aircraft to its maximum.

On 31st August Lyons released the Ellington report to the Press. The immediate outcome of this was that Lyons was quoted as being "satisfied" and as saying that the Government had adopted the report which had confirmed the general lines of the Government's air defence policy; the Air Board was hot with indignation, and the Press, for the most part, highly critical of the Air Board and of the Chief of the Air Staff in particular. Among the more restrained newspaper comments was an editorial in The Sydney Morning Herald of 1st September which said of Ellington's proposal that senior R.A.A.F. and R.A.F. officers should be exchanged: "if this opportunity were accepted in its full spirit there would be an opportunity both for reconstruction of the Air Board and the advantage to the whole Service of guidance for a term by a senior British air officer with valuable up-to-date experience—an advantage which the Australian Fleet and Army already appreciate."

Partial mobilisation of the air force in Britain in September was a grim pointer to what might lie ahead. In the Australian Parliament there were questions about the post of Chief of the Air Staff. Mr Curtin questioned the Government's expenditure on aircraft. The Ellington report, he said, comprised at least a severe questioning of the aircraft the R.A.A.F. now had. The report, he added, carried, as it were, screaming across every page, "I mean much more than I say." Parliament should have better evidence that the colossal burden which defence was imposing was not greater than it should be.

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Footnote:
The Council of Defence had been constituted by Statutory Rule No. 37 of 1935 for the higher direction of defence policy. It was superseded on the outbreak of war by the War Cabinet and Chiefs of Staff Committee.
The Air Board in 1928. Left to right—Rear row: Mr P. E. Coleman (Secretary) and Mr A. C. Joyce (Finance Member). Front row: Gp Capt S. J. Goble (Director of Personnel and Training), Air Cmde R. Williams (Director of Intelligence and Organisation) and W Cdr R. A. McBain (Director of Equipment).

W Cdr S. J. Goble and F-Lt I. E. McIntyre (RNAS) after completing the first flight round the Australian continent on 4th July 1924. The flight in a Fairey seaplane covered 7,186 nautical miles and was accomplished in 20 days of actual flying. At the time it was an outstanding feat in aviation.
A formation of Southampton flying-boats of No. 101 Flight, 31st January 1930. At this time the aircraft of No. 101 Flight were operating with H.M.A.S. Albatross.

From background to foreground, Hawker Demon, Avro Anson and Bristol Bulldog aircraft of No. 1 Flying Training School at Laverton, Victoria, on 12th May 1937.
The signing of the Munich Agreement on 29th September had eased the tension generally. In November Mr Street succeeded Mr Thorby as Minister for Defence and Thorby became the first Minister for Civil Aviation. As a step towards overcoming the grave lack of aircraft the Government had placed an order for 50 Lockheed Hudsons for early delivery from the United States, but a proposal (originating in the New South Wales Parliament) that the Lockheed Aircraft Corporation should be invited to establish a factory in Australia was rejected. The Commonwealth Aircraft Corporation was then employing between 600 and 700 men.

Late in November the debate on the 1938-39 Budget in the House of Representatives produced a speech on defence by Mr Fairbairn, who pictured the possible fall of Singapore and a situation in which Britain would not be able to come to Australia's aid for some considerable time. He then declared that the part of the R.A.A.F. in war would not be as great as many imagined. Some people thought that because R.A.F. bombers had recently flown from Egypt to Darwin in little more than a day, Australia could be bombed from a base in Japan. That idea was nonsense, "even Brisbane could not be effectively bombed by an enemy operating from a base in New Guinea". As an independent force the R.A.A.F.'s main duty would be to intercept such aircraft as could be dispatched from enemy raiding cruisers which could only be small in number and striking power. "It should be quite easy for us to provide adequate air defences to meet that contingency," he added.

This speech by Fairbairn was notable because, made from the Government benches, it ended with very sharp criticism of the Government which opened up the whole question of the Ellington report as it reflected on Williams as Chief of the Air Staff. He (Fairbairn) felt that the greatest benefit from such a visit would come not from any report Ellington might make, but in the fact that members of the force would have opportunities to discuss with him at length their particular problems. But he had reason to suspect that Ellington had no conferences with the R.A.A.F. and had never discussed its problems with any senior member of the force. Apparently, too, he had been given no opportunity to be helpful in any way except by reporting to the Prime Minister and, Fairbairn declared, "one realises how well fitted the Prime Minister and the ex-Minister for Defence are to take action on a report from a great air expert". Almost as soon as Ellington had left, a report was handed out to the public and, on the strength of it, the Press had come out with very severe criticisms of the Chief of the Air Staff and the Air Board. What seemed monstrously unfair was that the report was made public without any opportunity being given to the Air Board to defend itself publicly. "In my opinion," Fairbairn said.

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bairn declared, “this is one of the most staggering of the many signs of ineptitude in regard to national leadership at the present time. Moreover, I have reason to suspect that some inner report must have been given to the Press over and above that given for publication because I have read Sir Edward Ellington’s report over and over again and I cannot see in it anything on which to base the criticism made by several newspapers of the Chief of our Air Staff.”

In December Street announced that expenditure on the air force was to be increased from £12,512,000 to £16,444,000. The main new items of expenditure were: the local manufacture of aircraft; reserves of equipment, tools and fuel; reserve training; formation of a Citizen Force cadre squadron at Townsville; and the establishment at Port Moresby of a base for mobile naval and air forces. The R.A.A.F’s first-line strength would be raised from 17 squadrons with 198 aircraft, to 18 with 212. The principle underlying the proposed strategic distribution of the air force in peace was that forces sufficient to undertake air defence, reconnaissance and striking operations, should be maintained in each vital area of the Commonwealth. In addition a reserve was to be maintained in a central area from which reinforcements could be dispatched along organised air routes to other areas or threatened points. The Prime Minister had made personal representations to the British Prime Minister for the earliest possible delivery of twin-engined, general reconnaissance aircraft and as a result the British Government was lending Australia, on a charter basis, a number of Avro Anson aircraft as an interim measure. These would be in addition to the 50 Lockheed Hudson aircraft the Government had ordered earlier from the United States.

Street said that the expanded program included the full equipment of the first-line strength of 212 aircraft with the necessary reserves. Orders for the locally-made Wirraway had also been increased. Airfields would be constructed at coastal points such as Nowra and Moruya Heads in New South Wales, Bairnsdale and Mallacoota in Victoria and either Busselton or Harvey in Western Australia. Flying-boats would be stationed at the new Port Moresby base.

By mid-January 1939 Fairbairn’s attack on the Lyons Government over the Ellington report had produced two answers. The first was a Press statement which Lyons issued on 16th January and the second was the printing of the Ellington report with comments by the Air Board and the Civil Aviation Board and with what a prefatory paragraph described as “the decisions and observations of the Commonwealth Government”. The Press statement announced that “the conflict of opinion between Sir Edward Ellington and the Air Board” had required a most exhaustive examination of the matters dealt with. In view of the national concern of the Australian people in any criticism of the efficiency of the Australian defence forces, it was important that there should be a plain and

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straightforward summary expressing the kernel of the Government’s conclusions; one which could be readily understood by all. It then set out seven points made by Ellington in praise of the R.A.A.F. and continued:

Sir Edward Ellington then proceeded to criticisms in regard to flying accidents, discipline and training. While appreciating that there have been difficulties inherent in expansion and delivery of equipment, the Government considers, from the information before it, that the Air Board cannot be absolved from blame for these conditions and that the main responsibility rests on the Chief of the Air Staff. The Government considers that the air force is organically sound, but that the criticism points to more short-comings in the directive faculty. The Government, however, feels that considerable credit is due to Air Vice-Marshal Williams for his past work in building up the R.A.A.F. and that a defect of the air force organisation has been the absence of a senior command to which the Chief of the Air Staff could rotate, as in the case of the Military Board. The varied experience which is essential for occupants of the post of Chief of the Air Staff must therefore be sought overseas.

By arrangement with the Air Ministry Air Vice-Marshal Williams is being sent abroad for two years, during which period he will be attached in the first instance to the Chief of the Air Staff, R.A.F. Later, the Air Ministry proposes that he should assume the appointment of officer in charge of administration of the Coastal Command and subsequently executive command of an operational group. Air Commodore Goble, the present Air Member for Personnel, will become Acting Chief of the Air Staff with the temporary rank of Air Vice-Marshal. Air Commodore J. C. Russell of the R.A.F. has been selected to proceed to Australia on exchange with Air Vice-Marshal Williams for duty as Air Member for Personnel in the R.A.A.F. . . . These changes will also give effect to the exchange of senior officers as recommended by Sir Edward Ellington. Air Commodore Goble recently returned from two years’ duty in Britain.

In the departmental observations of each phase of the Ellington report there was a warmth of expression that was in marked contrast to Ellington’s own dispassionate phrasing. To his first suggestion, that in defining the aim of the force too narrow a view of the war requirements of the Service had been taken, the Air Board replied that the aim itself was decided by Government policy and quoted from the agenda of the Council of Defence, which defined this aim as “acting in close cooperation with the navy and the army to defend Australia and its territories against raids on territory or on trade”. To change this would call for a complete review on the basis of a much wider field of operations and wider range of activities as well as reconsideration of reserves. For the Government it was insisted that a limited role for the air force had not been envisaged and, from a statement by Lyons on 24th August 1937, were quoted the words “and as a striking force in whatever role it may be required to perform”. Clashes between the Air Board and the Government were revealed at intervals through the comments on the report suggesting that, with the passing of time, the report had become a vehicle more for the

8 This Press statement was reproduced as an addendum to the printed copy of the Ellington report.
9 Agendum No. 2, 1938.
conflict of opinion between the Government and the board than between
the board and Ellington. Concerning flying accidents the Government
declared that “since Sir Edward Ellington’s visit there have been accidents,
particularly in the service squadrons, which had indicated the persistence
of underlying causes”.

The Government’s observations on this point also disclosed that Parlia-
mentary and Press criticism had had much to do with the decision to
invite Ellington to make the report. “As the purpose of Sir Edward
Ellington’s visit was to report on the R.A.F., particularly in view of
the alarm expressed in Parliament and Press on the accident rate,” the
comment added, “great weight must be attached to his conclusions.” With
some warmth the board contested Ellington’s statement that the rate of
accidents in the R.A.A.F. was definitely worse than in the R.A.F. Such
comparison was unfair it claimed. General experience, supported by statis-
tics, showed that in normal conditions, and even allowing for the fluctua-
tions to which Ellington had referred, accidents must be expected to
increase in number with an increase in flying hours—but not in proportion
to the hours flown. The R.A.F’s flying hours were, proportionately,
something like 30 times those of the R.A.A.F., much of it done in multi-
engined aircraft of long endurance commanded by experienced pilots with
second pilots or automatic pilots to assist them. In public addresses in
Australia Ellington had said that in the R.A.F. most accidents to pilots
occurred in their first and second year after graduation. Eighty-three per
cent of R.A.A.F. pilots were in this category. The board protested “most
strongly” against Ellington’s method of relating discipline to accident
figures and thus comparing the R.A.A.F. with the R.A.F. R.A.A.F.
discipline was equal to that of the R.A.F.

The Air Board warmly defended the Wirraway as the best aircraft avail-
able in its class. The board could not believe that Ellington intended that
the Demon should be used in operations while the Wirraway was regarded
as a trainer only. His words “temporary expedient” were misleading;
every type could be so regarded until a better aircraft was available—and
a better aircraft of its class than the Wirraway was not even in sight. In
this way, with considerable bitterness, the details of the Ellington report
were argued.

As though in defiance of Ellington’s criticism the first Wirraway became
airborne for test flying on 27th March 1939, its performance\(^1\) earning
the praise of the Minister for Defence. In March also an air mission,
sent to Australia at the suggestion of the British Government, recom-
mended that Beaufort bombers should be built in Australia for both the
R.A.F. and R.A.A.F. It was proposed that space available in State Govern-
ment railway workshops should be used for the manufacture of certain
components and that others be made by sub-contractors in private industry.

\(^1\) Performance: Top speed at critical altitude (8,600 ft) 220 mph; maximum rate of climb 1,950
feet a minute. Original armament: two fixed .303-in machine-guns firing through the propeller;
one rear gun mounted on hydraulic hoist; normal bomb-load 500 lb.
The assembly of the aircraft complete with engines and the manufacture of accessories and fittings should be undertaken in two main workshops, one in Sydney and the other in Melbourne. These recommendations were approved by both the British and Australian Governments.

In June the Council of Defence called for reviews by the Chiefs of Staff with “medium” and “invasion” scales of attack as their basis; this to supplement the earlier policy of basing Australia’s defence on the probability of “minor”-scale attacks on territory or trade. The Chief of the Air Staff recommended expansion of the air force to meet “medium”-scale attacks, a plan which anticipated sustained attacks on shipping by enemy vessels and heavy raids on territory by combined operations. A program for a force of 32 squadrons with a first-line strength of 360 aircraft with the necessary ancillary units was recommended. This force was to be composed of 14 general reconnaissance (bomber or torpedo-bomber), 3 general reconnaissance (flying-boat), 9 general purpose, 2 fighter, 1 fleet cooperation and 3 army cooperation squadrons. But the Government decided that the “minor”-scale basis should be retained and the proposal, to become known subsequently as the “Z Scheme”, was deferred.

Acceptance of the Beaufort as the most suitable type of aircraft for general reconnaissance and as a bomber had a political as well as a Service aspect. Civil aircraft were now operating at speeds approaching 240 miles an hour and the Government was being subjected to criticism in which this fact was being used for comparison with the performance of Service aircraft. On this issue as well as for specifically Service reasons, the Beaufort with a maximum speed of 270 miles an hour appeared to be the best answer.2

With the accession of Mr Menzies8 to the Prime Ministership in April, soon after the death of Mr Lyons, Mr Fairbairn was appointed Minister for Civil Aviation, Minister assisting the Minister for Defence and Vice-President of the Executive Council.

On 10th July the R.A.A.F. took delivery of its first Wirraway and in the same month Street announced that the Service, with a regular force strength of 3,104 and a Citizen Force of 552, was inviting applications for cadetships for flying training courses of three terms each of 15 weeks, the intake for which was 50 cadets a term. Expenditure on a new flying

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8 At this stage the various types of aircraft selected for the different air force roles, the periods for which they were to be regarded as standard and the time at which preparations for production (or purchase) of new types to replace them were to begin (given in parentheses) were: general reconnaissance—Beaufort with Taurus engine, for seven years (at the end of four or five years); general purpose and intermediate training—Wirraway with single-row Wasp engine, for five years (at the end of three years); fighters—an approved RAF twin-engined aircraft (the Beaufighter) with 1300 hp engines, to be imported and standard for seven years (at the end of five years); flying-boats—Sunderlands, to be imported, with Pegasus 22 engines, for seven years (at the end of five years); fleet cooperation—Seagull V, to be imported, with Pegasus 2M2 engines for three years (at the end of two years); primary trainer—CAC low-wing monoplane if prototype tests satisfactory with Gipsy II engines, for eight years (at the end of six years).

training school at Forest Hill, near Wagga, New South Wales, received the Minister's approval in August.

On 25th August, after a meeting of the Defence Committee, the Prime Minister formally announced the existence of a state of emergency. Next day the Administrator of the Northern Territory was informed that seven Ansons of No. 12 Squadron would leave for Darwin as soon as the weather permitted and that these would be followed by a flight of four Wirraways about 1st September, or, if the situation demanded, four Demons would be sent earlier in place of the Wirraways.

The disposition of the R.A.A.F. squadrons on 28th August was:

**Laverton, Victoria**
- No. 1 (Bomber) Squadron
- No. 2 (General Reconnaissance) Squadron
- No. 21 (General Purpose) Squadron
- One flight of No. 12 (General Purpose) Squadron

**Richmond, New South Wales**
- No. 3 (Army Cooperation) Squadron
- No. 6 (General Reconnaissance) Squadron
- No. 9 (Fleet Cooperation) Squadron, less three aircraft in cruisers
- No. 22 (General Purpose) Squadron
Point Cook, Victoria
No. 10 (General Reconnaissance) Squadron, with temporary aircraft pending the arrival of Sunderland flying-boats ordered from Britain

Pearce, Western Australia
No. 14 (General Reconnaissance) Squadron
No. 25 (General Purpose) Squadron

Darwin, Northern Territory
No. 12 Squadron (two flights only)

Brisbane, Queensland
No. 23 (General Purpose) Squadron, one flight only

At this date the R.A.A.F. possessed 82 Ansons, 54 Demons, 7 Wirraways and 21 Seagulls. There were also 82 trainers.

At 5.30 a.m. on 1st September Germany invaded Poland and the next day the "precautionary stage" for all Commonwealth Defence Forces was adopted, the whole of the active Permanent and Citizen Forces and portion of the Reserve being called up. On 3rd September Britain declared war on Germany. Australia and New Zealand immediately followed Britain's lead and the Commonwealth's "full war stage" went into operation. For the air force this meant complete mobilisation with all squadrons at war stations and on short call for combat operations.