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New Zealand’s Military Aircraft Purchases

1957 - 1981

From the Canberra to the Boeing 727

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in History at Massey University

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2002
Contents

Acknowledgments i
Abbreviations ii

Introduction 1

1. The Canberra and the Light Bomber Role 5
2. The DC6 and the Transport Role 18
3. The Marlin and the Maritime Debate 30
4. The Maritime and Transport Roles and the C130 49
5. The Orion and the Maritime Role 69
6. Helicopters 83
7. The Combat Role and the Skyhawk 101
8. The Training Role and the Airtourer, Airtrainer and Strikemaster 118
9. The Medium Range Transport Role and the Andover 132
10. The Friendship and the Cessna 421C 147
11. The VIP and Transport Roles and the Boeing 727 155

Conclusion 169
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### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AJHR</td>
<td>Appendices to the Journals of the House of Representatives</td>
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<tr>
<td>ASW</td>
<td>Anti-submarine warfare</td>
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<td>CAS</td>
<td>Chief of Air Staff</td>
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<tr>
<td>CDC</td>
<td>Cabinet Defence Committee</td>
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<td>CDS</td>
<td>Chief of Defence Staff</td>
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<td>CGS</td>
<td>Chief of General Staff</td>
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<tr>
<td>CNS</td>
<td>Chief of Naval Staff</td>
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<tr>
<td>FEAF</td>
<td>Far East Air Force</td>
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<tr>
<td>MRT</td>
<td>Medium-Range Transport</td>
</tr>
<tr>
<td>NZPD</td>
<td>New Zealand Parliamentary Debates</td>
</tr>
<tr>
<td>RAF</td>
<td>Royal Air Force (Britain)</td>
</tr>
<tr>
<td>RAAF</td>
<td>Royal Australian Air Force</td>
</tr>
<tr>
<td>RNZAF</td>
<td>Royal New Zealand Air Force</td>
</tr>
<tr>
<td>SRT</td>
<td>Short-Range Transport</td>
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<tr>
<td>VTOL</td>
<td>Vertical Take-Off/Landing</td>
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Note: The term 'combat aircraft' was used in the 1960s to describe aircraft whose primary function was the delivery of offensive weapons. The expression is used in preference to the term 'strike' to differentiate between the combat role in general and the long-range strike/bomber role in particular.
Introduction

This thesis will examine the factors that influenced New Zealand’s military aircraft purchasing decisions between 1957 and 1981. This larger question gives rise to two lines of enquiry. Firstly, why did the New Zealand Government choose to equip particular roles? Secondly, why were the various aircraft types then chosen to fulfill these roles? This period encompasses the purchase of the Canberra, which was a significant episode in the history of the RNZAF’s combat wing. It also includes the crucial re-equipment programme of the 1960s. The period ends with the purchase of the 727s, which was part of the adaptation to new defence commitments.

While a number of authors have commented on individual purchasing decisions, some have considered broader issues involved in military aircraft purchases. Foremost amongst these was David Filer, whose work dealt with the RNZAF during the period from 1946 to 1972. He stated that the most significant development in the RNZAF during the 1946-72 period was the selection the United States as a source of new aircraft. This was in contrast to the early post-war period when New Zealand had chosen to purchase from Britain. He suggested that the change towards American purchases was part of the Air Force’s response to the general defence trend in the period away from ties with the United Kingdom and towards ties with the United States and Australia. However, he acknowledged American dominance in military aircraft production and their willingness to provide credit facilities. Filer concluded that the RNZAF was altered more by this move from defence ties with Britain towards ties with the United States and Australia than by the switch from commitments in the Middle East to South-East Asia.

Filer emphasises the importance of budgetary constraints, claiming that finance has often been the overriding factor in procurement decisions and has led to many deferrals of
equipment purchases. This concern has meant that although the RNZAF has acknowledged the benefits of common equipment, Australian-produced planes have cost too much in comparison to their competitors and have not been chosen. To reduce expenditure and financial risk, two factors have dominated in the type of military aircraft New Zealand has chosen: they have been relatively cheap and they have had a proven service record.

Rolfe identified a desire to standardise equipment with Australian, noting that “For at least 40 years, there have been tentative moves to co-operate with Australia in defence supply... Little was achieved.” Rolfe, like Filer, mentions the Services’ preference for proven types, and points out that New Zealand acquisition projects often involve the purchase of second-hand equipment which becomes available at short notice.

Three main sources were used to answer the questions posed and to test the arguments advanced by previous authors. Firstly, there were files from the National Archives, including Cabinet, Treasury and RNZAF documents. Some material relating to the replacement of the Canberra was obtained from HQNZDF. The Alexander Turnbull Library provided files relating to the sale of New Zealand-built aircraft. Secondly, the reports of the Service boards, Ministry of Defence and Ministry of External Affairs were researched. Lastly, Newspapers, particularly the Christchurch Press, and Hansard were consulted.

This thesis agrees with Filer that the choice of roles for the RNZAF was affected by financial limitations. These concerns were particularly important in determining the RNZAF’s specific combat role. However, while the Government was keen to restrict defence spending, it was willing to purchase the best aircraft available to fulfill the roles it had chosen for the RNZAF. Trade concerns and the desire to standardise with allies, particularly Australia were evident, but not over-riding. This thesis will argue against the
view that the of purchase American-built aircraft was part of a move away from defence ties with the United Kingdom. New Zealand still had close defence links with Great Britain in the 1960s, which was the most important period in terms of aircraft purchases. However, the decline of the British aviation industry meant that suitable British-built alternatives were not available for consideration. On the other hand, the United States was producing the best aircraft in the West. The result was that the United Kingdom joined New Zealand, Australia and numerous other countries in purchasing American aircraft. Australia’s aircraft were not only expensive, but did not meet New Zealand requirements or match the performance of contending types.

The most significant change in the RNZAF was not the shift to the United States as a source of aircraft; it was the switch in emphasis from the combat roles it favoured to providing support for the Army. While in the 1960s the Government was not willing to equip the RNZAF to participate in its preferred combat roles, it did purchase aircraft suitable to support the Army in South East Asia. This was significant, because as Filer pointed out, the prestige of combat aircraft was important to the RNZAF’s identity, morale and ability to attract recruits. The emphasis on the RNZAF’s support functions continued after the end of forward defence. In fact the requirement for air transport grew as New Zealand’s defence commitments shifted closer to home.
Notes


2. ibid.

3. ibid., p.112.

4. ibid., p.111.

5. ibid., p.110.

6. ibid., p.111.


8. ibid., p.137.

9. ibid., p.141.
Chapter One

The Canberra and the Light Bomber Role.

The Canberra bomber was New Zealand's last major military aircraft acquisition of the 1950s. It was also the last British-made aircraft purchased before the RNZAF began to buy from the United States. A number of commentators have sought to explain the decision to purchase the Canberras. They have generally seen it as the result of a deliberate change of roles in the 1950s. Wright noted that in 1947 planning for the RNZAF included a long-range bombing capability, but he claimed that the selection of the Canberra bomber to replace the Vampire fighter/bomber was influenced by Britain's 1957 Defence White Paper. That review had ruled out new fighters for the RAF, and Australia and New Zealand followed this general lead. The RNZAF's combat role changed from day fighter/ground attack to light bomber/interdiction and the Canberras were obtained accordingly.

Ewing and Macpherson mentioned that by 1948 planning for the post-war RNZAF provided for two bomber/reconnaissance squadrons and one fighter squadron. The RNZAF was finally able to purchase bomber aircraft when spending cuts elsewhere in the service made funding available.

Lockstone stated that the Canberra was obtained to meet the RNZAF's requirement for a tactical bombing and interdiction capability. He noted that while Australia was also producing the Canberra, British-made aircraft were favoured for their lower cost. The decision was also influenced by the fact that No 75 Squadron in Malaya was equipped with Canberras hired from the RAF.

Filer suggested some rather different motives for the purchase. He maintained that the delay in ordering a replacement for the Vampire was caused in part by the switch from Middle Eastern to South East Asian commitments. This led the Government to re-evaluate
the RNZAF’s requirements before selecting a new aircraft. Filer believed that the RNZAF had chosen the Canberra to replace the Vampire and then adapted the combat role to suit. He claimed that the RNZAF favoured strike aircraft for reasons of prestige, even though the bomber role would be less important in South East Asia than close air support. The Canberra was also preferred as it was a proven and relatively cheap aircraft that was in service with New Zealand’s allies. However, the Government’s wish to restrict expenditure delayed a decision to order aircraft until 1957.

This chapter will argue the RNZAF had actually planned to operate Canberras alongside its Vampires in the early 1950s. Financial constraints delayed the purchase to such an extent that the Canberra’s introduction to service coincided with the obsolescence of the RNZAF’s fighters. By that time the Air Force had recommended a change from the day fighter/ground attack role to a light bomber force. It will also argue that the choice of the Canberra was not affected by the shift to commitments in South East Asia as the Canberra was favoured before that move took place. However, it concurs that there is some evidence to suggest that the change in the RNZAF’s combat role was influenced by changes in British policy in regard to fighters.

In 1948 the Government approved a plan providing for two regular RNZAF bomber squadrons and one fighter/bomber squadron. In December 1950 the Cabinet Defence Committee endorsed another plan for the RNZAF that had been prepared in consultation with the British Chief of Air Staff, Lord Tedder. The intention was to field both Vampire fighters and Canberra bombers for service in the Middle East. Some aircraft, including Vampires, had already been ordered, but no decision had been made on the Canberra.

Lord Tedder had recommended that the Air Force preserve its knowledge of bombing methods by buying Canberras, even though this would increase its number of types in service. The Canberra was favoured because it was ‘by far the best of its type in the
world and would be taken into service in the Royal Air Force in 1951. The Prime Minister, Sidney Holland, expressed concern at the variety of roles included in the plan, and stated that "It appeared that effort might be unduly dispersed at this time with a resultant loss of overall efficiency." He invited the CAS to consider whether it would be better to limit the range of RNZAF activities. While some changes were made to the plan, the recommendation to purchase Canberras remained.

In June 1951 the Chief of Air Staff informed the Defence Council that the Mosquito fighter/bombers operated by the RNZAF were obsolete and could not be deployed operationally. Maintaining these aircraft was costly and replacement was necessary. Therefore the RNZAF wished to re-equip with Canberras in 1952. The CAS pointed out that the Canberra would be the standard medium bomber in RAF service. Heavy demand for the aircraft meant that a delay of up to two years was expected, making it necessary to place an order as soon as possible. The CAS said that Australia was also preparing to manufacture Canberras and recommended that consideration be given to supporting the Australian aircraft industry, despite the fact that Australian Canberras were expected to cost more than those of British origin.

The Secretary to the Treasury acknowledged that new aircraft would be more capable and more economical to operate, and recommended placing orders as soon as possible. However, Cabinet did not approve the purchase: it was anticipated that the cost of the new bombers would drop as mass production got underway, while demand meant that none would be available before 1954. The RAF suggested that additional fighter/bombers would suffice as an interim measure. It would seem that the early enthusiasm for the Canberra was dampened by financial considerations.

In February 1954, the Minister of Defence, T. L. Macdonald, said "It cannot be denied that a more modern fighter aircraft must eventually replace the Vampire if New Zealand is
to maintain itself in a reasonable state of preparedness. In August he explained that the evaluation of aircraft to re-equip No. 75 Squadron would have to consider the plans of other Commonwealth air forces with which New Zealand might have to integrate. However, progress on making such a decision seems to have stalled for almost two years.

In February 1956 the CAS pointed out that the RNZAF did not have an aircraft capable of combating surface raiders, and recommended re-equipping one of the transport squadrons with light bombers for this purpose. He explained that a medium-range transport squadron could be formed with civilian aircraft if war broke out, and argued that allies should provide long-range transports. This demonstrated the RNZAF’s willingness to forgo other roles to acquire strike aircraft and particularly the prestigious Canberra. It also suggests that the role of the Canberra was not settled. On the other hand, perhaps the RNZAF believed that an argument based on maritime security and trade protection would be more likely to persuade Cabinet than plans for raids on distant enemy targets.

In May 1956 Cabinet considered a proposal to convert No 41 Squadron from transport aircraft to Canberra bombers. This recommendation was one of a number of urgent equipment requirements put forward by the three Services. The plan also provided for the purchase of new fighter aircraft to re-equip No 75 Squadron. No contending types were named, but planned expenditure was based on the cost of the Hawker Hunter. The Air Force was also considering re-equipping No 14 Squadron with Canberras, although this was not included in the proposal before Cabinet. Even after the switch to an emphasis on South East Asia in 1955, the RNZAF was clearly hoping to obtain both fighters and bombers to replace the existing day fighter/ground attack aircraft. In December 1956 it was reported that Air Commodore Eveleigh, the Assistant Chief of the Air Staff, had referred to the possibility of New Zealand receiving Canberras as an ‘open secret’. He pointed out that ‘how many, when, and even where’ were still to be decided by the Cabinet Defence
Committee. Eveleigh also said that Canberras would ‘put some more kick into SEATO, a thing we will have to do if we want to keep war away from New Zealand’. The CNS was said to support the acquisition of Canberras. 23

During the 1957 Review of Defence it was proposed that the fighter/ground attack role be switched to light bomber/interdiction. 24 It was argued that the new role would provide a more balanced Commonwealth force in South East Asia and give the RNZAF greater flexibility. The proposed change was seen as conforming with the allied strategy in South East Asia, where plans called for air strikes on the Chinese mainland followed by interdiction missions against the Chinese army. 25 The Far Eastern Air Force (FEAF) was re-equipping half of its day fighter/ground attack squadrons with Canberras to undertake such raids. The remaining units were to operate night fighters to protect the bomber bases, and the Chiefs of Staff claimed that New Zealand had to choose between these two roles. The Canberra was preferred because it could perform high-altitude bombing and low-level support, and it had a long range. 26 The Canberra could also mount strikes from bases in Australia should allied forward defensive efforts fail.

The RAF was withdrawing its Venoms from the region, and these were the same aircraft that the RNZAF was operating in Malaya. A squadron of eight Canberras would cost approximately the same as a squadron of sixteen Venoms. Moreover, the RAF was willing to provide Canberras for use in Malaya for little more than the cost of hiring the Venoms. 27

Wright argued that the change in the combat role was influenced by Britain’s 1957 defence white paper, which had signaled the demise of the manned fighter. 28 Indeed, that year the British Minister of Defence told the New Zealand Cabinet that fighters were not considered a high priority because it was impossible to defend cities from nuclear attack. 29 Therefore reducing the number of fighter aircraft would not greatly affect security. However, fighters were being maintained to protect bomber bases until more effective
surface to air missiles became available. The RNZAF had previously considered aircraft like the Hunter to replace the Vampire/Venom in the day fighter/ground attack role. However, the RAF was now re-equipping its day fighter/ground attack aircraft in the Far East with interdictors and night/all-weather fighters. New Zealand faced no air threat, so night/all-weather fighters were not required on national grounds. These fighters also lacked the versatility of the Canberra, which offered the RNZAF a much more flexible combat force.

Filer argued that the RNZAF preferred the Canberra for reasons of prestige, despite the fact that fighters would be more useful in South East Asia. However, fighters were considered less important in allied plans for operations in South East Asia at that time. Fighters operating in the close support role might have been adequate in counter-insurgency efforts, but defence planners were focused on the potential for larger conflicts. The Chiefs of Staff rated limited war with China a distinct possibility in 1957, and New Zealand’s allies believed that nuclear strikes and interdiction missions would be essential to slow the advance of the enormous Chinese army. Thus the Canberras were intended to assist operations on the ground even though they were to fly interdiction missions rather than close support. The RNZAF’s emphasis on a light bomber/interdictor was also consistent with SEATO strategy.

The decision not to acquire new fighters also fitted with the Government’s unwillingness to expand the RNZAF’s combat force. The Air Force had planned to equip two squadrons with Canberras and one with day fighter/ground attack aircraft. However, Cabinet did not approve the proposal to convert No 41 Squadron, leaving the RNZAF with only two combat squadrons. At the same time, the day fighter/ground attack role seemed to have vanished from the FEAF, so it made sense to press ahead with plans to equip with Canberras only. If Cabinet objected to the re-equipment of No 41 Squadron because of the
cost involved, it is likely that financial constraints influenced the decision not to acquire new fighters.

The RNZAF thus wanted to hire Canberras to equip No 14 and purchase Canberras for No 75 Squadron. 

Fourteen aircraft would be required for service in New Zealand, and they were expected to remain in front-line use until 1965. With the arrival of the Canberra, the Vampires would be used for training. The RNZAF believed that re-equipment in other roles could be deferred to accommodate this purchase, a further indication of the high priority that the Air Force accorded combat aircraft.

The 1957 Defence Review, tabled in June, announced the change in the combat role and stated that the Vampires and Venoms would eventually be replaced with Canberras. A Cabinet Minister, Tom Shand, told the House that ‘The Canberra bomber is undoubtedly the best close support aircraft in existence today, and especially valuable because it can fly from New Zealand to the theatre of operations, something which is not possible with fighter type aircraft.’ Philip Holloway, a Labour MP, supported the change in the combat role, saying that ‘it seems commonsense to use a striking force rather than an interceptor force’.

The Cabinet Defence Committee had noted that the recommendation to order Canberras was a matter of urgency. In June Cabinet discussed the proposed purchase and agreed that Britain should be approached to secure the best financial terms. In July the Minister of Defence sought Cabinet approval for the purchase of fourteen Canberras to equip No 75 Squadron. The Canberra was recommended because it could operate in both the bomber/interdictor and close support roles. It possessed high performance, long range, ease of maintenance and acceptable runway requirements. The aircraft was operated by a number of air forces and was expected to have a considerable service life. It was rated as the most cost-effective option to re-equip the RNZAF, and gave New Zealand the means to deploy nuclear weapons.
The Air Board had selected the B(I) 8 Canberra produced in Britain, rather than the B 20 manufactured in Australia. The Australian aircraft did not meet the operational requirements of the RNZAF, and cost approximately twice as much as the more advanced B(I) 8. Furthermore, the short production run in Australia would necessitate a costly arrangement for life-of-type spares and attrition aircraft. Although the RNZAF had previously been willing to consider paying a higher price to support Australia's defence industry, it is doubtful that they ever envisaged paying twice as much. The British variant was to remain in production for some time, which would allow costs to be spread. The choice would also allow the RNZAF to benefit from an integrated provisioning scheme in place with the RAF that provided further economies and a proven source of supply.

Treasury did not contest the choice of the Canberra or the need for re-equipment. They did suggest that if crews were trained by the RAF fewer training aircraft would be required in New Zealand. The RNZAF, no doubt anxious to secure an order as soon as possible, agreed to reduce the number requested to eleven.

In July, the Minister of Defence recommended to Cabinet the purchase of eleven Canberras. The British Air Ministry had stated that delivery could commence in September 1958 provided that an order was placed that month. The Minister noted that delay could lead to greater operating costs for the Venoms once the RAF had re-equipped. Postponement could also result in a higher purchase price.

Doubts about the acquisition of Canberras were expressed privately by members of the External Affairs Department. In March 1956, Frank Corner questioned how the Canberras would fit into the concept of a single, unified defence force. He told Alister McIntosh that 'I slightly mistrust the U.K. pushing us into Canberras but know almost nothing about it.' McIntosh wrote that he was 'very doubtful about the Canberras but cannot clarify my doubts or produce worthwhile objections to experts.'
These doubts are significant, especially in the case of McIntosh as he frequently attended meetings of the Cabinet Defence Committee. Some of their concerns related to the correct balance of forces. Corner in particular favoured a more unified defence force and suggested that the RNZAF should focus on supporting the Army. Conversely, the bomber/interdictor role would allow the Air Force a greater degree of independence from the other Services. There were also questions about the likelihood of the kind of war in Asia that would require such air strikes.

It is also clear from this correspondence that there was strong resistance within the Government to spending on the military. McIntosh told Foss Shanahan that the Deputy Prime Minister, Keith Holyoake ‘doesn’t like defence, and he has been even more determined than the Prime Minister to ensure that the Defence Fund is used up for other purposes, as, in fact, it has been largely used up’. He also stated that ‘Relations between the P.M. and Mr Macdonald have been very bad for some time, and, on this defence issue, we could do nothing with him at all. As I told you last week, the decision on Canberras was only brought about as a result of a question asked by Mathison, [an Opposition MP] obviously drafted by the press.’

Mathison’s question had been prompted by comments attributed to the Australian Minister of Supply and Defence Production, Howard Beale. He had visited New Zealand for discussions on defence production and procurement and was subsequently interviewed by the *Melbourne Herald*. Beale was quoted as saying that ‘It is expected that an arrangement will be made for the Australian aircraft industry to service and modify the Canberra jet bombers which the New Zealand Government has purchased from the United Kingdom Government.’ This was before Cabinet had approved the purchase. The Australian correspondent reported that Beale had not visited Wellington with the intention
of selling Australian-manufactured Sabre fighters as he already knew that New Zealand had decided to purchase Canberras on special terms from the United Kingdom.

Mathison asked the Prime Minister to confirm that the RNZAF would be re-equipped with Canberras. On 9 August, the Minister of Defence answered that ‘in the New Zealand White Paper it was stated that the RNZAF would be re-equipped with Canberra aircraft. Those for the squadron in New Zealand are being purchased in the United Kingdom. The terms are not yet finalised.’ He also explained that the squadron in Malaya would operate hired Canberras. It would seem that the embarrassing question from Mathison forced the Government to make a decision. On 14 August 1957 Cabinet approved the purchase of 11 Canberras.

The RNZAF’s desire to obtain the Canberra preceded any questions over the replacement of the Vampire. While the purchase of bombers marked a change in the combat role of the Air Force, this occurred because of the decision not to acquire new fighters which was in turn due to a belief that the age of the manned fighter was drawing to a close. Nor does it seem that the wish to purchase Canberras was affected by the change in commitments from the Middle East to South East Asia. The willingness to forgo other roles for the sake of the Canberra demonstrated the importance of strike aircraft to Air Force planners. Filer argued that the RNZAF wanted the Canberra for reasons of prestige, and to some extent that is true. Combat aircraft were considered essential to the RNZAF’s identity as a fighting Service. Modern aircraft were also necessary to maintain morale and attract recruits. The prestige of the Canberra was important for these reasons, but it would be unfair to say that the Air Force wanted Canberras solely for reasons of prestige. RNZAF planners, like their SEATO allies, believed that Canberras would be required to fight a limited war in South East Asia.
The Canberra purchase also highlighted the increasing importance of financial considerations, over and above military concerns. These restrictions delayed for several years a purchase that the RNZAF considered urgent. The Government was reluctant to approve the purchase of Canberras even after an undertaking to do so had been published in the 1957 White Paper. This was despite the absence of any serious challenge to the proposal from Treasury. The desire to limit defence spending that was beginning to emerge would have more serious repercussions in the years that followed.
Notes

2 ibid., p.142.
4 ibid., p.165.
7 ibid., p.84.
8 'The Size and Shape of New Zealand's Armed Forces', National Archives, 'Part 1-Defence-1955-57', AAFD, 811, 224/8/2, box 149g.
9 'Revision of the R.N.Z.A.F. Plan', CAB 228/1/1 dated 20 December 1950, National Archives, 'Part 1-General 1950-57' (Air Force), AAFD, 811, 228/1/1, box 74j.
10 Minutes of Cabinet Defence Committee meeting held on 15 June 1950, DC (50) 1, National Archives, 'Discussions with Sir Hugh Saunders - 1950', AAFD, 811, 228/1/2, box 74k.
11 Extract from DC (50) M 1, 23 June 1950, National Archives, 'Part 1-General 1950-57' (Air Force), AAFD, 811, 228/1/1, box 74j.
12 Extract from Minutes of first meeting of the Defence Council, dated 28 February 1951, National Archives, 'Part 1-General 1950-57' (Air Force), AAFD, 811, 228/1/1, box 74j.
13 'RNZAF Plan', DC (51) 9, dated 31 May 1951, National Archives, 'Part 1-General 1950-57' (Air Force), AAFD, 811, 228/1/1, box 74j.
14 Extract from Minutes of the 6th meeting of Defence Council 1 June 1951: Item 3, RNZAF plan DC (51) 9, National Archives, 'Part 1-General 1950-57' (Air Force), AAFD, 811, 228/1/1, box 74j.
15 RNZAF Plan', DC (51) 9, 31 May 1951.
16 'Notification to United Kingdom of Aircraft Requirements for Royal New Zealand Air force', dated 2 October 1952, National Archives, 'Aircraft - General - 1950 - 1957', AAFD, 811, 228/3/1, box 106j.
19 Cabinet Defence Committee minutes, D (56) M1 for meeting held 2 February 1956, National Archives, 'Part 1-Defence-1955-57', AAFD, 811, 224/8/2, box 149g.
21 'Notes for discussion at Cabinet sub-committee meeting', D (56) M 6, 9 April 1956, National Archives, 'Part 1-Defence-1955-57', AAFD, 811, 224/8/2, box 149g.
22 The Marlborough Express, 8 December 1956, (clipping) National Archives, 'Post-war policy RNZAF 6448-763', Air 1, 1/1/35.
23 ibid.
24 'Cabinet Defence Committee minutes, D (57) M6 for meeting held 18 April 1957, National Archives, 'Part 1-Defence-1955-57', AAFD, 811, 224/8/2, box 149g.
26 'Cabinet Defence Committee minutes, D (57) M6 for meeting held 18 April 1957.
27 ibid.
28 Wright, p.142.
29 Minutes of Cabinet Meeting held 3 September 1957, CM (57) 35, National Archives, 'Part 1-Defence-1955-57', AAFD, 811, 224/8/2, box 149g.
30 Filer, p.83.
32 ibid.
34 NZPD, 311(1957), p.32.
35 NZPD, 312(1957), p.1131.
36 'Cabinet Defence Committee minutes, D (57) M3 for meeting held 11 April 1957, National Archives, ‘Part 1-Defence-1955-57’, AAFD, 811, 224/8/2, box 149g.


41 Alister McIntosh to Frank Corner, May 1957, Unofficial Channels, p.228.

42 Alister McIntosh to Foss Shanahan, 12 August 1957, Unofficial Channels, p.231.

43 ibid.

44 The Press, 8 August 1957, p.11.

45 NZPD, 312(1957), p.1579.


47 Filer, p.84.
Chapter Two

The DC6 and the Transport Role

In April 1961 the Government purchased three DC6 passenger aircraft from TEAL for the RNZAF. Wright and Harrison both stated that the DC6s were obtained to supplement the Hastings fleet. Duxbury, Ewing and Macpherson claimed that these aircraft were obtained as interim replacements for the Hastings prior to delivery of the Hercules. However, they note that the Hastings were retained in service alongside the DC6s. Filer explained that although there was support in New Zealand for the purchase of Hercules transports, TEAL began to press the Government to buy its DC6s as transports in 1960. This was opposed by the Minister of Defence as the aircraft were second-hand and required strengthening and modification for military use. However, the subsequent National Government purchased the DC6s, with the Minister of Defence announcing that they would carry the RNZAF through the two to three year wait for more modern transports. Filer saw this as an example of ‘immediate financial considerations overcoming the long-term requirements of the RNZAF’. No commentator has claimed that the purchase of American-built DC6s marked a deliberate shift towards coordinating equipment with the United States. However, Stephen Hoadley remarked that the DC6 was one of a number of purchases in the early 1960s that ‘reminded New Zealand of United States supply potential in an otherwise quiet and Commonwealth-oriented foreign policy period’.

This chapter agrees that the DC6s were obtained to supplement the Hastings rather than replace them. It concurs that financial restrictions were important, and that the DC6 purchase allowed the Government to increase the RNZAF’s air transport capacity while minimising expenditure. This chapter will also show how the suggestion that the Air Force could make use of the DC6s brought to a head the debate over the transport role. This
debate concerned both the extent to which the RNZAF would be required to transport the Army, and the priority of the transport role.

The DC6s had entered service with TEAL in 1954, having previously flown with British Commonwealth Pacific Airlines. By 1958 TEAL was anxious to replace them. The airline argued that by the end of 1960 they would be obsolete and unable to cope with increased passenger numbers. When Cabinet agreed to the purchase of Lockheed Electras in 1958, TEAL turned to the disposal of the DC6s.

It appears that the suggestion that these aircraft could be sold to the RNZAF was made by Sir Leonard Isitt, the Chairman of TEAL and a former CAS. Retaining the aircraft in New Zealand rather than selling them overseas would allow TEAL to continue carrying out some of the necessary maintenance. This promised a greater volume of work for the company and would lower their unit costs. Isitt argued that the DC6s were economical long-range aircraft with excellent performance. They were fully modified, in good condition and could transport service personnel and 'all but the heaviest of military stores.' Rather surprisingly, it seemed that although the DC6 was considered obsolete as a civilian airliner, it still had a bright future in military service.

TEAL pressed for a quick decision because they would have to make provisions for space in workshops and spares storage if the aircraft were to be retained. They would also have to keep the specialised tools and equipment required to service the aircraft and continue to train tradesmen. TEAL informed the Air Secretary that the DC6s were likely to realise a better figure than originally thought, provided they were offered for sale at an early date.

The RNZAF's long-range transport squadron was equipped with three Handley Page Hastings. Four had been delivered in the early 1950s but one had subsequently been destroyed. During the 1957 Review of Defence, the CAS, Air Vice Marshal Kay, had
informed the CDC that the RNZAF was planning to replace the Hastings in 1961/62 because of wastage. In 1959 Air Commodore Hunter wrote that "The Hastings are still giving us good service but they will not last indefinitely and as you know are "Orphan Annies", particularly in respect of the Hercules 737 engines. We are having to take life-of-type provisioning for these aircraft. If we should have the misfortune to write another one off we could be very embarrassed in respect of our long range transport role."\(^{11}\)

The suggestion that the DC6 could serve in the transport role gave rise to two key questions. Firstly, the Chiefs of Staff had to decide what roles the RNZAF's future transport aircraft would be required to fulfill. Secondly, the Air Force would have to evaluate the suitability of the DC6 to carry out those roles.\(^{12}\)

The RNZAF set about evaluating the DC6 and examining the implications of the proposed purchase. It was agreed that it was a proven aircraft that would pose few problems. In fact, as one Group Captain wrote, "it could be quite the easiest purchase we have ever arranged for re-equipping the RNZAF."\(^{13}\) This was because TEAL was operating from Whenuapai, and the purchase would mean simply moving the aircraft from one hangar to another.

One of the main drawbacks was the fact that the DC6 was American-built while most of the RNZAF's other aircraft were British. British and American parts were incompatible and had to be kept separate, which required more storage space.\(^{14}\) The RNZAF was also concerned about the cost of the purchase. TEAL had maintained that the DC6 would hold its value well and estimated that by 1960 their aircraft would be worth $400,000 each.\(^{15}\) The RNZAF concluded that $500,000 was a more reasonable sum.\(^{16}\)

The suitability of the DC6 for the transport role was the main concern. As it was a passenger aircraft, the doors were too small and the floor too weak to handle large, heavy loads.\(^{17}\) This was significant to the RNZAF, because it meant that the DC6 could not carry
engines. The Air Force also told TEAL that the Army wanted an aircraft that could carry troops, light weapons and jeeps.\textsuperscript{18} It was possible to correct these deficiencies, but it was not considered economical to do so given the short service life envisaged.\textsuperscript{19}

In May 1959, the Air Secretary said the Air Board viewed Isitt's proposal with 'considerable sympathy', and stated that if the intention was to replace the Hastings in their present role the three DC6s on offer would suffice.\textsuperscript{20} However, 'if the Government should decide that the concept of a "force in being" involves having in our control the aircraft which could move the Army with its equipment to the theatre in time of war, then we would have to recommend the purchase of the Lockheed 130B.\textsuperscript{21} The RNZAF had taken an interest in the C130, and in 1959 Lockheed submitted a proposal to supply three of these aircraft as military transports. While the DC6 was a civilian passenger plane, the C130 was a purpose-built military transport.

The evolution of the RNZAF's transport role was brought on by changes to New Zealand's defence commitments. In 1949 New Zealand had undertaken to provide an augmented infantry division for service in the Middle East in the event of a global conflict.\textsuperscript{22} In 1955 this commitment was transferred to South East Asia. This force was to be dispatched a few months after the commencement of hostilities. However, by the late 1950s there was growing recognition of the importance of maintaining mobile forces capable of responding quickly in the event of conflict. Indeed, the 1957 Review of Defence stated that 'The value of a New Zealand contribution would in fact be directly related to the speed with which it could be made available.'\textsuperscript{23} The quickest way to move soldiers was by air, but the RNZAF was reluctant to assist the Army in becoming more mobile. Alister McIntosh remarked during the 1957 Defence Review that 'Air steadfastly refuse to make any provision whatever for transport for Army.'\textsuperscript{24} The following year the Labour Government stated that while the commitment to provide a division for service in a global
conflict would remain, a brigade group was to be available at immediate notice for service in limited conflicts. The emphasis on mobility meant that the provision of air transport for the Army was now essential.

The requirement for adequate air transport was made clear to the Government. In 1959 the Chiefs of Staff told the Minister of Defence that subversion, insurgency and limited war were the greatest threats to the SEATO region. The military response required consisted of land forces that could be moved rapidly by sea and air, with support from naval and tactical air forces. The RNZAF depended on air transport, while the RNZN would also require support. These aircraft would have to come from New Zealand’s own resources, making it necessary to replace the Hastings.

The apparent agreement on the need for air transport was complicated by a disagreement over the relative priority of the role. During this time the RNZAF was working to replace the Sunderlands in the maritime role, and the Navy supported such a move as these aircraft were to operate alongside their frigates. The main obstacle was the cost, particularly when there was pressure to re-equip in the transport role at the same time. The RNZAF wanted to secure a new maritime aircraft before transport re-equipment took place, while the Army maintained that their transport needs were more pressing.

In July 1960 the CGS included the provision of a more capable air transport force in a list of recommendations to the Government. The CAS, arguing for maritime re-equipment, pointed out that purchasing maritime aircraft and C130B transports would cost $15 million. He explained that the C130s had been included to meet an Army requirement for the movement of 1914 troops and 300 tons of freight in 21 days. However, ‘if this Army requirement no longer exists, or, if it should be reduced to small numbers of personnel, the Services peace and war needs for transport airlift can be met by a very modest expenditure, viz, by the introduction of DC6’s ex-TEAL, suitably modified, which
are now lying for disposal and available all up at under £M0.5.28 This would allow the Government to re-equip the two roles for around £6 million, and would certainly ease concerns over the cost of maritime aircraft. Filer said that the DC6 purchase was a case where ‘immediate financial considerations overcame the longer-term requirements of the RNZAF’.29 However, the CAS preferred to limit spending on the transport role to provide funds for maritime re-equipment.

While the RNZAF was expressing a growing interest in the DC6s, the Minister of Defence remained opposed. In September 1960 the CAS announced that the RNZAF might proceed with the purchase.30 The Minister, however, said that the answer was still no. He explained that the RNZAF needed either troop transports or ASW aircraft, and that if the DC6s were bought ‘it will be the same old story of strengthening and modification.’31 He preferred to wait twelve months and buy a new aircraft, describing TEAL’s proposal as an attempt ‘to push old planes off on to us’.32 Connolly added that New Zealand had been buying second-hand equipment and it was time ‘we gave our chaps a break and bought something built for the job’.33

Connolly was also questioned in the House over the future of the transport role. National’s Tom Shand stated that ‘The Air Force would have a clear cut role of providing transport between New Zealand and the centre of operations in the event of an emergency, so there would be heavy capital expenditure involved in building up transport squadrons.’34 The Minister replied that although he would like to see new aircraft provided, the Hastings would have to continue flying for ‘many more years before they could be regarded as economic from the point of view of the purchase price’.35 He also pointed out that the Hastings fleet had only accumulated a relatively low number of flying hours. By early 1961, however, the Services were planning for replacement to commence in 1961/62.
million had been allocated to purchase transports, which was the estimated cost of four C130s.

The 1961 Review of Defence highlighted the shortage of air transport available to move forces rapidly. The Hastings could carry out the movement of RNZAF reinforcements but not those of the Army. The Chiefs considered that four transport aircraft could probably deliver the first reinforcements to South East Asia in seven to ten days. SEATO plans called for these forces to be in place within three days. The deployment of a second battalion group would be well beyond the RNZAF’s means. Nor was there any guarantee that civilian aircraft would be available to assist unless there was a complete mobilisation. These aircraft would not be suitable for military purposes without extensive modification, which made it preferable to obtain purpose-built types. It was also unlikely that allies would be able to provide transport aircraft should a conflict arise as they would be stretched to shift their own forces. The Committee was told that it was important to have transport aircraft under New Zealand command for the sake of morale in the event of a military reverse.

At the same time, the RNZAF was beginning to display signs of unease at the direction that the Review was taking. ‘It was suggested that care needed to be exercised in basing defence plans on the commitment of New Zealand land forces in South East Asia. In the event of conflict there it was likely that the Air Force would be called upon to deal with the spear-head of the enemy attack.’ The RNZAF was concerned that emphasis on support for the Army would come at the expense of participation in its preferred roles. The Air Force’s own plans for capital expenditure would have to compete with proposals to purchase transport aircraft.

The priority accorded to the Army was endorsed by Lord Mountbatten, the Chief of the United Kingdom Defence Staff. In March 1961 he told Cabinet that New Zealand’s
priority must be the maintenance of the battalion committed to the Commonwealth Strategic Reserve. He also said that it was 'essential at least to keep alive the Navy and Air Force. Soldiers needed transport and the Royal Air Force was moving more and more into the role of transport.'

In April 1961 the National Minister of Defence, Dean Eyre, proposed that the RNZAF should purchase the three DC6s on condition that two C130s would be ordered immediately for delivery in two years. Two more C130s would be ordered later. The DC6s would cost £300,000, which was half the price that TEAL had previously expected. The C130s were valued around £5 million, with the price expected to rise after September of that year. The Hastings could continue operating until the arrival of the Hercules, provided wing-spar modification was carried out. The CDC was told that the DC6s were good aircraft which 'could be utilised with advantage for cold war requirements.' While the Hastings modification was undertaken the DC6s would provide flights to Singapore, the United Kingdom and Fiji.

New Zealand's lack of air transport was emphasized to the CDC. It was explained that although with New Zealand's current capacity it might be quicker to move additional troops and equipment by sea, airlift would provide a progressive increase in troop strength. The CDC agreed in principle to the purchase of the DC6s, but decided that a decision on the C130 should be deferred. There was concern at the expenditure of overseas funds involved, especially when the Services had other spending planned. The Committee wanted more details from both the Services and the Minister of Finance before approving such a large purchase.

The Minister then submitted a proposal to Cabinet to re-equip the RNZAF's long-range transport force. The paper explained that the initial air transport requirement in the event of war was for 2505 personnel and 378 tons of freight to be flown to Singapore within 21
days. This included elements from the three Services. The balance of the Army brigade group, 4070 troops and 18,505 tons of freight, would travel by sea. Following the initial deployment there would be a requirement for flights to support forces in Singapore and Fiji. Such demands were well beyond the Hastings fleet, which, with the aid of an Electra from TEAL, could carry only 25% of the personnel and 21% of the freight specified.

The Minister explained that the C130 had been selected to replace the Hastings. However, the RNZAF would be faced with a severe shortfall between the placement of an order for C130s and the commencement of operational service. The problem would worsen when the Hastings force was reduced to two available aircraft during the spar-modification programme. Therefore it was proposed to implement both long-term and short-term re-equipment projects, with the purchase of four C130s as the ultimate goal. However, the DC6 presented an opportunity to provide a much needed boost in capacity within acceptable financial limits.

The DC6 did not possess the rough-field capability required for military operations, and this lack of tactical flexibility meant that it was not considered economical to modify them for freight operations. The Hastings would remain in service alongside the DC6 to carry out military tasks and deliver freight. Thus the DC6 was to complement, not replace the Hastings. Three Hastings, three DC6s and one Electra would be able to move 63% of the personnel and 21% of the freight allocation. The Hastings would then be replaced by the first two C130s while the DC6s would continue flying until the second pair arrived.

On 17 April 1961 Cabinet approved the purchase of TEAL’s three DC6s at a cost not exceeding $300,000. The RNZAF purchased the aircraft from TEAL and not from the United States, which makes their country of origin coincidental rather than especially significant. Permission was also granted for the spar modification to extend the life of the Hastings fleet. However, Cabinet deferred a decision on the purchase of C130B aircraft.
The DC6 was well proven and relatively cheap, but it was a less than ideal aircraft. However, there was a genuine need to bolster the long-range transport force at the time the decision was made. This was because changes in defence policy had created a major shortfall in capability. The DC6 was not the answer to the larger problem of air transport, but it helped to fill a gap that would have existed even if the C130s had been ordered at the same time. It is also likely that the Government felt more comfortable deferring the purchase of new transports because it had made this concession towards improving capability. The RNZAF’s willingness to accept DC6s as replacements for the Hastings in order to improve their chances of obtaining ASW aircraft was significant. This demonstrated the difference of opinion that existed between the Army and Air Force concerning the relative importance of the transport role, a difference that was going to be evident for the subsequent four decades.
Notes

2 Duxbury Et. Al., p.37.
3 Filer, p.96.
4 ibid.
7 Air Secretary to Minister in Charge of Civil Aviation, dated 13 May 1959, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
8 Leonard Isitt to Minister in Charge of Civil Aviation, dated 2 April 1959, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
9 ibid.
10 General Manager of TEAL to Air Secretary, dated 4 September 1958, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
11 Air Commodore Hunter to Air Commodore Gill, dated 13 January 1959, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
12 Air Secretary to CAS, Minute No 246/1958, dated 9 September 1958, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
13 DES to AMS, Minute No 111, dated 12 June 1959, National Archives, 'Air New Zealand re-equipment Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
14 D.AIR.ENG to D.T.S., Minute No 2444/58, dated 19 September 1958, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
15 Air Commodore Hunter to Air Commodore Gill, dated 13 January 1959, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
16 NZSM WASHINGTON to RNZAF HQ WN, 178/23:26 Jan 59, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
17 D.AIR.ENG to D.T.S., Minute No 2444/58, dated 19 September 1958.
18 General Manager of TEAL to CAS, 7 May 1959, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
19 D.AIR.ENG. to A.M. S. Minute No 2428/59, dated 22 June 1959, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
20 Air Secretary to Minister in Charge of Civil Aviation, dated 13 May 1959, National Archives, 'Air New Zealand re-equipment: Disposal of DC6s to RNZAF 1958-59', Air, 1/1/152.
21 ibid.
24 Alister McIntosh to Frank Corner, May 1957, Unofficial Channels, p.228.
25 'Royal New Zealand Navy Ability to Meet International Defence Commitments', COS (59) 1, 26 January 1959, National Archives, 'Defence of the Pacific -1959-60', AAFD, 811, Acc w3738, 244/8/3 box 1322.
26 See Chapter Three
27 'Re-Equipment of the Services', D (60) 7, dated 4 August 1960, National Archives, 'Defence of the Pacific -1959-60', AAFD, 811, Acc w3738, 244/8/3 box 1322.
28 ibid.
29 Filer, p.96.
30 The Press, 19 September 1960, p.12.
31 ibid.
32 ibid.
33 ibid.
34 NZPD, (324) 1960, p.2232.
35 ibid., p.2233.
36 Cabinet Defence Committee, minutes of meeting held 21 February 1961, National Archives, 'Part 1-defence-defence committee meetings - 1961-70', AAFD, 811, Acc w3738, 222/2/2, box 1315.

Cabinet Defence Committee, Minutes of meeting held 21 February 1961.

Notes of a meeting of Cabinet held on 1 March 1961, National Archives, 'Defence of the Pacific - General - General - 1958-60', AAFD, 811, Acc w3738, 224/1/1, box 1321.

Ibid.

Cabinet Defence Committee, Minutes of meeting held 6 April 1961, National archives, 'Part 1 - Defence - Defence Committee Meetings - 1961-70', AAFD, 811, Acc w3738, 222/2/2, box 1315.

Ibid.

Chapter Three

The Marlin and the Maritime Debate

The re-equipment of the air transport force that began with the purchase of the DC6s was completed before the acquisition of replacement maritime aircraft. However, the RNZAF began to press for maritime re-equipment in the late 1950s and it was their top priority after the purchase of the Canberras. The Air Force recommended two replacement types before the eventual decision to purchase the Orion, and the first of these was the Martin Marlin flying boat. Previous authors have said little about this first attempt at re-equipment. Filer noted that the RNZAF began to look for a replacement maritime aircraft in 1957, and that their preference was for flying boats, which were being produced in the United States but not Britain. Examination continued throughout the Labour administration but in 1959 the Minister of Defence said that re-equipment would not occur for another three years. Filer mentioned that Connolly favoured maritime aircraft over frigates due to financial concerns. Four replacement types were identified: the Marlin and Orion from the United States; the Canadian Argus and the British Shackleton. Filer did not mention that the RNZAF’s preference for flying boats resulted in a recommendation to Cabinet to purchase the Marlin. This chapter will show how that recommendation led to clash over the priority of maritime aircraft. This debate brought the RNZAF’s long-standing views on the maritime role into conflict with perceptions of the evolving strategic environment and illustrated the growing influence of financial considerations.

The importance of the maritime role to the Air Force was apparent from the early post-war years. In 1948 the CAS stated that ‘The primary role for which the R.N.Z.A.F. should be trained and equipped is the defence of trade in the strategic area of responsibility accepted by New Zealand.’ He explained that this would require Coastal Command
training and co-operation with the Navy. To fulfill this role the RNZAF would require two squadrons of medium or long-range aircraft and one flying boat unit.

This early RNZAF plan contained three elements of recurring importance in the development of the maritime role. Firstly, the CAS acknowledged the need to cooperate with the Navy. Secondly, the Air Force was planning to operate both land-based aircraft and flying boats. The most striking feature of the plan, however, is the priority that was given to the maritime role.

In 1951 the CAS declared that the most serious threat to New Zealand came from attacks on shipping, and that it would require the combined efforts of the Navy and Air Force to counter this danger. He explained that flying boats were preferred for the maritime role because they did not require runways that were vulnerable to enemy attack. The RNZAF was therefore investigating replacements for the Catalinas that had been in service since the war. The RAF had not ordered any new flying boats, but the Americans were developing such an aircraft. However, the anticipated cost of $2 million per machine meant that obtaining a whole squadron was beyond New Zealand’s means. The RNZAF was therefore considering the acquisition of reconditioned Martin Mariner flying boats.

The CAS also recommended scrapping plans to field a land-based maritime squadron of British-built Shackletons.

It is significant that even in 1951 the RNZAF was willing to look to the United States as a source of aircraft when it appeared that the British would not be able to meet New Zealand’s needs. The preference for flying boats took priority over the policy of buying from the United Kingdom. The RNZAF was also taking an operational lead from the Americans, who were planning to retain flying boats, rather than the British, who were not.

The CAS was directed to identify a replacement for the Catalina, and he recommended re-conditioned Sunderland flying boats from Britain. Macdonald, the Minister of Defence,
told Cabinet that ‘The A.N.Z.A.M. commitment of the R.N.Z.A.F. makes the flying boat essential as it is eminently suitable for reconnaissance over outlying islands and can land on open stretches of water for closer observation when required.’ This also made the flying boat useful for rescue work. The selection of the Sunderland, another wartime type, to replace the Catalina allowed the RNZAF to re-equip for a reasonable price. Sixteen aircraft were estimated to cost a little over $1 million.

The Sunderland was expected to have a useful life of eight to ten years, and the first aircraft was handed over to the RNZAF in 1953. However, by 1956 the RNZAF was looking to replace them. Approval in principle was sought to begin re-equipping one squadron of Sunderlands with more modern flying boats or land-based aircraft. The Air Force wanted to purchase two aircraft to commence the re-equipment of No. 5 Squadron, at a cost of $2.585 million, in 1959/60. This demonstrated the massive expenditure that would be involved in acquiring new maritime aircraft. The RNZAF also wanted Canberras, a replacement for the Vampire, jet trainers and helicopters. Thus there was significant competition within the Air Force share of defence spending, additional to the rivalries between the equipment projects of the three Services. The Air Staff would have to present a strong case to secure a new maritime aircraft, demonstrating both the maritime threat and the role of the RNZAF in countering it.

In 1956 the CDC was involved in a review of defence policy, and Macdonald invited the Chiefs to comment on the principles underlying New Zealand’s defence policy. The first requirement was the defence of New Zealand and her sea communications, identified as a task for the Navy and Air Force. It was at this time that the CAS suggested converting one of the transport squadrons to Canberra bombers for combating surface raiders. The Chief of Naval Staff explained that the other main threats were mines and long-range submarines.
The latter were judged the greatest danger, and the CNS stressed the need for RNZAF cooperation in detecting and defeating submarines.

Filer mentioned that there was a degree of rivalry between the Navy and RNZAF over the best way to counter submarines. The debate over the relative effectiveness of ships and aircraft was no doubt aggravated by the competition for defence spending, as replacement frigates and maritime aircraft were very expensive. He also noted that some officers from the two Services appreciated the need for a joint effort in maritime operations. While the RNZN and RNZAF may have competed for funds to purchase ASW equipment, they were required to cooperate in the effort to secure priority for the anti-submarine role. It is clear that at this time there was agreement at the highest level over the need for a joint maritime effort.

The reviews of defence policy that occurred in 1957 and 1958 demonstrate two important features of the debate over maritime replacement. On the one hand, RNZAF thinking on the importance of the maritime role, and the best way to fulfill it, had remained largely unchanged since the end of the war. On the other hand, contemporary strategic assessments were calling into question the need for anti-submarine warfare aircraft.

In January 1957 the CDC considered a paper by the Chiefs of Staff that articulated the principles on which New Zealand’s defence policy was based. In general discussion it was stated that ‘Enemy submarines would almost certainly pose a threat to New Zealand sea communications and possibly in some measure to the home territory.’ The Americans were developing a method for combating submarines with flying boats, which meant that it would be worth retaining such aircraft to provide trained aircrews and technicians. The flying boat squadrons could also patrol the South Pacific, an area where New Zealand had a number of responsibilities.
The need for maritime aircraft was not so apparent in the paper before the CDC. The Chiefs had written that ‘In the unlikely event of global war the threat to the New Zealand area would be from submarines and possibly armed commerce raiders.' Yet they had also stated that a deliberate global war was most unlikely for the next five to ten years. A limited war was a more realistic threat, but less of a danger to New Zealand. The paper claimed that if China was involved her Russian-type submarines might pose a small threat to New Zealand, but it was unlikely that they would roam far from the battle zones in Asia. In fact, the Services believed that a Chinese-Vietminh alliance would not be able to mount a large maritime threat even in South East Asia.

The Chiefs’ assessment pointed out that low-level conflicts up to a limited war, possibly involving China, were the most likely challenge New Zealand would face. These low intensity conflicts presented little or no maritime threat as neither insurgents nor Chinese communists possessed significant naval capabilities, especially submarines. Russian involvement was considered highly unlikely. Besides, the Soviets would undoubtedly have higher priority targets assigned to their submarines than would be found in New Zealand waters.

Despite the questions raised by the Chiefs’ assessment, the RNZAF continued to stress the importance of flying boats. In April 1957 the CDC was reminded that the British CAS had advised that the maritime role be retained. Furthermore, ‘although the United Kingdom had dropped flying boats there appeared to be every advantage in New Zealand retaining these aircraft until 1962/63 or thereabouts, when consideration could be given to re-equipping the maritime squadron, possibly with American flying boats’.

The Air Force followed American developments in this field, and in July 1957 the CAS sought permission to visit the United States. The Minister of Defence told Cabinet that a flying boat which might be suitable as replacement for the Sunderlands was now being
developed in the United States. Macdonald also stated that it was most important for the Air Board to have an appreciation of modern anti-submarine warfare weapons and techniques.

The CAS, Air Vice-Marshal Kay, subsequently visited aircraft manufacturers in Britain and the United States. There had been reports that the RNZAF was considering the Martin Seamaster to replace the Sunderlands, but Kay stated that 'the RNZAF was no more considering Seamasters than it would consider B52s or turbo-prop Britannias for the maritime role'. He pointed out that New Zealand would have to choose between flying boats and land based aircraft. 'If we decided on land planes, it would mean that we would have to move from the flying-boat base at Lauthala Bay (Suva) to Nandi Air Base... It would, of course, also mean the building of expensive land bases on other Pacific islands'. However, the Air Board still favoured flying boats.

Kay also raised the issue of standardisation. Filer wrote that 'In September 1957 the Chief of Air Staff, Air-Vice-Marshall Kay, stated that there would be great advantages to New Zealand in standardizing Air Force equipment and procedures with the United States'. However, Kay went on to say that 'it would be logical for the United States and New Zealand - in operational work in the Pacific territories - to standardise... The maritime and anti-submarine role was one which especially lent itself to standardisation in certain equipment and procedures'. One reason for this was the close proximity of the two countries' island territories. The RNZAF wished to acquire replacement flying boats and these were only available in the United States. The preference for flying boats influenced the choice of aircraft more than the desire to operate American aircraft. Therefore, Kay's view that the RNZAF should standardise maritime aircraft with the United States is of less significance that it would have been had alternative British aircraft been available. Kay was advocating standardisation in a particular role in the Pacific, and it is premature to see
this as a sign of a move away from ties with the United Kingdom. After all, Cabinet had only recently approved the purchase of British-built Canberras for service in South East Asia.

The 1957 Review of Defence confirmed the retention of the maritime role. It concluded that ‘In the event of war in the Pacific area, the Allied anti-submarine forces would be extended to the utmost to counter the threat from the still growing Russian and Chinese long-range submarine fleets.’ During the preparation of this review, the Chiefs acknowledged that the threat from submarines was small, but they argued that in a few years the threat to shipping (and to land-based targets) will increase with the introduction of nuclear powered submarines and submarine-launched guided missiles. It is therefore essential that a maritime element be retained in the RNZAF and it is proposed that the existing aircraft be maintained as long as possible and then be replaced with suitable flying boats.

The arguments in favour of the RNZAF’s maritime role were based largely on the threat to New Zealand, which was acknowledged to be slight. In September 1957, the British Minister of Defence informed the CDC that the Russian fleet of 400 to 500 submarines ‘would present in global war a threat against which the allies could not insure themselves by direct means’. He considered that maintaining sea communications during war would require the use of nuclear weapons. However, he argued that submarines could be confronted in a limited war, such as might arise in South East Asia. This would be necessary to protect convoys, landings and other operations. Maritime aircraft formed part of New Zealand’s commitment to the Commonwealth Strategic Reserve in South East Asia, and they would be more likely to see action there than in New Zealand waters.

The 1958 Review warned that submarines would pose a threat to sea communications and, in a global war, a potential threat to the population from submarine-launched
missiles. The Review stated the need for maritime re-equipment and mentioned that anti-
submarine missile aircraft would be examined as other Commonwealth navies were using
these types alongside anti-submarine frigates. Yet at the same time, the Government was
deferring orders for two more frigates for twelve months.

In July 1959 the Minister of Defence announced that it would be three years before the
Government ordered a new maritime aircraft. He explained that another five years of
service could be wrung out of the Sunderlands, but more importantly, 'we haven’t got the
money. We’ve got a lot of defence equipment to pay for now.' Connolly said that the
original order for four ‘Whitby’ frigates would eventually be filled, but declared that he was
more in favour of aircraft than ships. He explained by saying ‘Take the Martin - the only
flying-boat defence aircraft being made now... That costs over £1 million. But you can buy
four of those for the cost of one frigate’.

The delay of three years before new aircraft would be ordered was in line with earlier
Service plans to re-equip in 1962/63. However, in February 1960 Connolly recommended
to Cabinet the purchase of seven American Martin Marlin P5M2 flying boats to replace the
Sunderlands. The Air Board selected the Marlin because it was fitted with the latest ASW
equipment and would ‘enable the RNZAF to contribute effectively to the defence of New
Zealand, from the only threat that exists’. The selection of the Marlin also avoided the
need for large works expenditure as existing RNZAF facilities could be brought up to the
required standard with only minor spending. The paper noted that any other maritime
aircraft would have involved greater expense, presumably in the provision of runways and
hangars for a land-based alternative.

The fact that the Marlin was an American aircraft was also in its favour. The Minister
explained the desire to achieve compatibility with allied anti-submarine forces, and that the
Marlin would be the standard maritime aircraft of the United States Navy in the Pacific.
The Americans planned on fielding 180 of these aircraft, and New Zealand would be able to benefit from their experience and share any developments in operational technique. Long term finance was also available to spread the cost of the aircraft.

The RNZAF wanted six aircraft for No. 5 Squadron and one for an Operational Conversion Unit at a total cost of £9,480,000. They were willing to forgo the purchase of an attrition aircraft to lower the initial outlay. The Minister wanted to place an order immediately so that New Zealand’s aircraft could be built as part of an American production run. This explains why the recommendation was made only months after the Minister had announced a three year wait. However, Treasury did not support the recommendation, and Cabinet deferred its consideration. In the meantime, the Chiefs of Staff were directed to report on the priorities for re-equipping the three Services.

The attempt to replace the Sunderland came at a time when the country was slowly emerging from an economic crisis. In June 1958 the Minister of Finance, A. H. Nordmeyer, had announced that a "series of heavy deficits has reduced our exchange reserves to the lowest level on record since before the end of the war." Export income grew during the year ended March 1960, but it was "still insufficient to justify any substantial increase in imports and to build our overseas reserves to an adequate level." Indeed, the Minister cautioned that "when export income rises we should build up our external reserves - however tempting it may be to spend all the increased earnings." This explains why there was so much opposition to purchase of expensive military aircraft at that time.

AVM Calder, the CAS, challenged Treasury’s opposition to the purchase. He asserted to the Minister of Defence that the Treasury memorandum, particularly where it touches on costs, on policy of the defence of the New Zealand area vis a vis contribution to South East Asia, and on priorities in Services re-equipment programme appears to have presented in a
way calculated to deflect Cabinet from the real issue which is - whether New Zealand is to continue to have an effective Naval/Air maritime defence.\textsuperscript{34}

Treasury had apparently attacked the proposal on all fronts.\textsuperscript{35} The RNZAF maintained that maritime aircraft were necessary for the defence of New Zealand, while Treasury countered by saying that government policy was to achieve security by contributing forces in South East Asia. The issues of cost and the priority of aircraft to replace the Sunderland were related. The small threat posed by hostile submarines meant that ASW re-equipment was not urgent. Treasury therefore argued that neither the cost, nor the priority of this project was justified. Treasury apparently suggested that the Sunderlands had life left in them, which is what the Minister had declared publicly the previous year.

The CAS maintained that the fundamental question was whether the RNZAF needed maritime aircraft. The submission to Cabinet in favour of the Marlin had remarkably little to say about the maritime role, especially considering the level of expenditure sought. The recommendation stated that ‘The importance of maritime defence to New Zealand was again recognised in the 1958 Review of Defence which stated a continuing requirement for maritime aircraft to be operated in this role and the need for a maritime re-equipment programme.’\textsuperscript{36}

The CAS now addressed the need for maritime aircraft. Firstly, he explained that New Zealand was only able to fight overseas if the country itself was secure.\textsuperscript{37} Furthermore, shipping and troop convoys would face a greater risk from submarines than in the past. The Navy could not tackle maritime defence on its own and required Air Force cooperation. The CAS asserted that ‘We must look to our own moat. Then discuss priorities by all means.’\textsuperscript{38} This line of argument challenged two of Treasury’s claims. It held that home defence was a prerequisite for involvement overseas and that maritime aircraft involved in this task demanded the highest priority, above anything destined to operate overseas.
CAS also declared that 'If the influence of Treasury views prevails, our allies must question our sincerity, and value, especially the United States to whom we would look first for help.'39 He stated that 'even with two new frigates, or more, our capacity without new aircraft is non-existent as far as our own security is concerned, and we become and are seen to be incompetent trustees of an area on our protection of which not only we, but our allies and neighbours rely.'40

As the CAS continued to press for a decision in 1960, he expanded his basic argument. He was particularly concerned that maritime re-equipment would be prejudiced by spending on the Army.41 The CAS maintained that because a large portion of the Army would require mobilisation and training before undertaking operations, purchasing to equip the full brigade establishment was not entitled to the priority accorded to forces in being. He was concerned that maritime re-equipment might be prejudiced by 'equipping ground forces the operational deployment of which would be authorised only in most drastic circumstances and which, if deployed in limited numbers, will assuredly be in conditions calling for the greatest measure of escort by maritime forces.'42

The CAS reiterated that the Sunderlands were obsolete in the maritime role and that keeping them in service would become increasingly expensive. He also raised the issue of morale, saying 'It is extremely difficult to maintain a degree of enthusiasm when the aircrews know how ineffective the Sunderland is as an anti-submarine weapons system, and in what light it is regarded by our friends and allies.'43 He confirmed that the Marlin was the most economic and efficient choice, but highlighted the problems that stemmed from delaying an order. Not only had the cost continued to rise, but it appeared too late for a New Zealand order to be added to the American purchase. This would lead to delays and New Zealand would have to make financial arrangements with the manufacturer rather than the government. The CAS was concerned that this might preclude the provision of long-
term finance under the US Mutual Security Military Sales Scheme. He emphasized the importance of re-equipment in the maritime role, and added that 'It is equally important that the illusion does not persist that an efficient anti-submarine force exists in the RNZAF.'

The CAS seems to have maintained the support of his colleagues as the priority of maritime aircraft was confirmed in May 1960 when the Chiefs presented a plan to re-equip the services. The first item on the RNZAF programme was the provision of seven Marlins in 1960/61. This was ahead of the replacement of the Hastings, which was scheduled for 1961/62. The Chiefs claimed that the programme was necessary to fulfill the Government's defence policy, and that if the required funding was not available then another review of defence would be essential. This was because 'the 1958 White Paper was drawn up on the basis of the Government's existing and forward obligations and not on the basis of a ceiling on expenditure'. It was clear that the Services were entering a new era in which they would have to become much more conscious of financial considerations and the influence of Treasury.

In July 1960 the CAS presented the Minister of Defence with a report that explained both the selection of the Marlin and the tasks that it would undertake. This was a more detailed document than the proposal that had been submitted to Cabinet. The Marlin had been selected because it was the only suitable flying boat available, and the RNZAF wished to continue with this type of aircraft. It was also technically superior to the land-based alternatives - most notably the British Shackleton. The Marlin was identified as the aircraft that best suited the RNZAF's requirements, and this makes it difficult to explain the proposal solely in terms of a plan to purchase from the United States.

The CAS mentioned that the United States Navy might offer to release a number of Marlins to replace the Sunderlands if the New Zealand Government decided against the purchase of new machines. These aircraft were surplus and would be much cheaper. They
would be reconditioned and equipped to the same standard as the new Marlins, and would have a service life of 10 to 12 years.

Calder stated that forces could only deploy overseas if New Zealand was secure, and that the country could no longer rely on its isolation to provide protection. The report warned that 'if we are de-nuded of maritime defences any power with a small submarine potential and some modern weapons could neutralise us'. He acknowledged that the submarine threat from China and Russia was slight, but cautioned that it could increase rapidly. Indonesia was also identified as a threat to lines of communication with South East Asia. The CAS argued that 'Quick changes on the political front can bring unthought military threats and a few submarines flying the flag of a small power, even though still manned by "on loan" foreign nationals, could immobilise us'. He feared that enemies could be encouraged to undertake such an operation if New Zealand lacked the means to oppose it.

Continuity in the maritime role was important, and Calder advised that if a break occurred 'it would, by virtue of the rapid progress being made, take years to put right and in the process leave New Zealand quite inadequately prepared against its greatest, and at present only, direct attack.' This argument would be raised frequently in defence of the Air Force's roles. The complexity of the systems involved and the demanding nature of operational flying meant that capabilities such as anti-submarine warfare could not be resurrected overnight. The potential for sudden political change meant that threats might arise faster than the RNZAF could adapt to meet them. The CAS argued that it was necessary to maintain the role even though the immediate threat was minimal.

The possession of suitable aircraft would also allow New Zealand to contribute to collective defence efforts in SEATO, ANZAM, ANZUS and under the Radford/Collins Agreement. The CAS told the Minister that if New Zealand contributed to the defence of
others, then those allies could be expected to return the favour. Their assistance was necessary because New Zealand lacked the means to defend itself against the potential maritime threat.

The effort to establish the priority of maritime re-equipment challenged the emerging direction of defence policy. The only direct threat foreseen by New Zealand's defence planners was that posed by hostile naval forces, in particular submarines. To counter such an attack would require a military response. By contrast, the CAS claimed that 'the most likely threat to stability in the South East Asian area is one of subversion or insurgency which may or may not call for military action'. This was at a time when limited military operations in South East Asia were the basis for New Zealand's defence planning. The CAS then went further, and warned that 'New Zealand's security may be imperilled by too great an emphasis being placed on the current narrow, and perhaps transitory, threat of insurgency in the South East Asian Area'. His contention was that although the threat posed by insurgency was small and possibly fleeting, New Zealand's dependence on shipping would remain unchanged. That being the case, the maritime role deserved a corresponding degree of priority.

The Chief of General Staff responded to the report by declaring that 'I do not dispute the roles and duties of the frigates and maritime aircraft as outlined in the Naval and Air papers except to say that in the main, they refer to war in general and not to the particularized threats which we face.' Indeed, it was the contemporary threats that were the basis for the CGS's argument. This was in contrast to the CAS, who had stressed the need to anticipate future challenges. The emphasis on limited war in Asia suited the Army better than it did the Air Force, and the more immediate need for adequate land forces favoured their plans for re-equipment. The RNZAF was concerned that it might lose some of its capabilities if they were deemed to be of lesser importance.
The necessity for home defence was the basis of the RNZAF's argument for maritime re-equipment. The CGS, however, asserted that the threat to New Zealand was of 'insignificant proportions even in the unlikely event of war with the Soviet Union'. At the other end of the scale he argued that 'Even if we were to put all our resources into the local defence of New Zealand I doubt if we could guarantee its defence in global war'. He maintained that security at home was largely due to the strength of the allied forces that lay between New Zealand and any potential adversaries. The belief that deployed forces brought security at home was contrary to the CAS's view that only a secure New Zealand would permit overseas deployment. The CGS supported the emphasis placed on operations in South East Asia, and he agreed with the view expressed by the Australian Minister of Defence that it was necessary to establish procurement priorities. Accordingly, he recommended that the Government consider the provision of equipment for a Brigade Group and an amphibious landing capability for the Navy. The RNZAF would need long-range air transports and light aircraft and helicopters to cooperate with ground forces. The CGS stressed the support functions of the RNZAF and the Navy, rather than their preferred operational roles. He was also suggesting priorities for the re-equipment of the other services which were contrary to those advanced by their respective Chiefs.

In regard to the maritime role, the CGS said 'I am of the opinion that some maritime reconnaissance of the area by ships and aircraft is required but the whole question should be subjected to a detailed examination to determine the most efficient and economical means of achieving this'. A thorough examination may well have considered the possibility of assigning the RNZAF a surveillance role rather than an ASW function. Such a reduced mission would not require sophisticated aircraft like the Marlin.

While there were disagreements between the Services over the anti-submarine role, there seemed to be support from the Minister of Defence for maritime re-equipment. In
September 1960 he was questioned over the replacement of the Sunderlands, and replied: "The subject has been under consideration for some time and it was hoped to obtain some priority that would enable new aircraft for the Air Force to be provided as early as possible."

Indeed, priority was the key issue. The Army did not object on principle to the purchase of maritime aircraft, but believed that there were more pressing matters to be dealt with. The Services were unable to agree on priorities, so it was impossible to plan a re-equipment programme. This meant that the Government could not commit to a purchase as large as that of the Marlin for fear of further heavy demands for spending.

The underlying cause of the debate over the maritime role was a heightened desire to limit defence spending. The escalating cost of sophisticated types like the Marlin meant that purchasing proposals met with greater scrutiny. Thus the desire to purchase a replacement for the Sunderland precipitated a debate over the need for, and priority of, the RNZAF’s maritime role. Such a debate had not arisen at the time that the Sunderlands were ordered, despite the fact that the submarine threat then was arguably smaller than in 1960. The low cost of these aircraft meant that their purchase was of less significance than the proposals that would follow. At the same time, developing economic problems meant the Services were being forced away from planning based on perceived equipment needs towards programmes shaped by financial restrictions. The limit on defence spending then led to increasing competition between the Services. The RNZAF and Navy agreed on the requirement for the maritime role, but they had little choice. The Navy could hardly argue against the need for new aircraft at the same time they were pressing for ASW frigates, and vice versa. The Air Force thus began to query the scale and priority of the Army’s purchasing plan. Finally, RNZAF thinking on the maritime role had changed little since 1945, but assessments were tending to minimise the submarine threat, especially in the more likely scenario of a limited war. The Air Force continued to base its main argument on the
danger posed to New Zealand by submarines, when perceptions of that threat had greatly eroded. The later difficulties that the RNZAF would encounter in re-equipment were foreshadowed in the failed Marlin proposal.
Notes

1 Filer, p.93.
3 'Extract from Minutes of 6th meeting of Defence Council, 7 June 1951', National Archives, 'Part 1 - General - 1950 -57 (Air Force)', AAFD, 811, 228/1/1, box 74j.
5 Harrison, Lockstone and Anderson explain that there was a 78% cost overrun on the project by 1954. P.243.
6 'Cabinet Defence Committee, Minutes of Meeting held 10 April 1956', National Archives, 'Part 1 - Defence - 1955 - 57', AAFD, 811, 224/8/2, box 149g.
7 Harrison, Lockstone and Anderson explain that there was a 78% cost overrun on the project by 1954. P.243.
8 'Cabinet Defence Committee, Minutes of Meeting held 2 February 1956', National Archives, 'Part 1 - Defence - 1955 - 57', AAFD, 811, 224/8/2, box 149g.
9 Harrison, Lockstone and Anderson explain that there was a 78% cost overrun on the project by 1954. P.243.
10 ibid.
11 ibid.
12 ibid.
13 Appendix B to Annex to COS (56) 42, National Archives, 'Part 1 - Defence - 1955 - 57', AAFD, 811, 224/8/2, box 149g.
14 Appendix B to Annex to COS (56) 42.
22 ibid.
23 Purchase of Martin Marlin Maritime Aircraft for the RNZAF', CP (60) 120, dated 26 February 1960, National Archives, 'Air Force - General - 1958 - 60', AAFD, 811, Acc w3738, 228/3/1, box 1328.
24 Minutes of Cabinet Meeting held 29 February 1960, CM (60) 9 dated 3 March 1960, National Archives, AAFD, 807, (60) 9, box 154c.
27 ibid., p.3.
29 I have been unable to locate Treasury's report on the Marlin proposal and have adduced its arguments from the CAS's response.
36 'Purchase of Martin Martin Maritime Aircraft for the RNZAF', CP (60) 120, dated 26 February 1960, National Archives, 'Air Force - General - 1958 - 60', AAFD, 811, Acc w3738, 228/3/1, box 1328.


38 ibid.

39 ibid.

40 ibid.


43 ibid.

44 ibid.

45 Annex A to 'Re-Equipment of the Services', Cabinet Defence Committee paper, D (60) 2, dated 4 May 1960, National Archives, 'Defence of Pacific 1959 - 60', AAFD, 811, Acc w3738, 244/8/3, box 1322.

46 'Re-equipment of the Services', Chairman, chiefs of staff committee to Minister of Defence, dated 13 April 1960, 'Re-Equipment of the Services', Cabinet Defence Committee paper, D (60) 2, dated 4 May 1960, National Archives, 'Defence of Pacific 1959 - 60', AAFD, 811, Acc w3738, 244/8/3, box 1322.


49 ibid.

50 ibid.


52 ibid.


54 ibid.

55 ibid.

56 CGS to Minister of Defence, dated 22 July 1960.

Chapter Four

*The Maritime and Transport Roles and the C130 Hercules*

The purchase of three C130 transports in 1963 was the RNZAF's first major acquisition of the 1960s. Filer said that the CAS, Air Vice-Marshal Morrison, was keen to reduce the number of types in RNZAF service.¹ Morrison thought that the Hercules could replace the DC6s, the Hastings and the Bristol Freighters in the transport role. He also believed that the C130 could be modified to replace the Sunderland, and Cabinet approved a plan to purchase three transport aircraft and five maritime variants. Filer also viewed the selection of the C130 as a possible sign of a deliberate move away from Britain and towards the United States.² Another commentator also stressed that Morrison was 'particularly in favour of the Lockheed C130...Nothing else was in the same league, and initially Morrison envisaged they would also fulfill the maritime patrol role'.³

This chapter will argue that maritime re-equipment remained the RNZAF's highest priority after the failure of the Marlin proposal. It explains how the C130 came to be chosen to replace the Sunderlands as well as the transport aircraft. It will also show how the focus on South East Asia complicated the RNZAF's attempts to secure a maritime replacement. Finally, it will demonstrate the importance of inter-service relations and economic conditions in re-equipment.

The National Party proposed an enquiry into New Zealand's defence needs during the 1960 election campaign.⁴ The need for a review was then reinforced by the economic difficulties that the National administration encountered. In 1961 the Minister of Finance identified two areas of concern of particular relevance to the re-equipment of the Services: a large deficit on overseas exchange transactions and ever increasing government
expenditure. A lack of overseas funds was particularly significant as defence equipment had to be imported.

The need to restrain expenditure meant that proposed equipment purchases were subjected to thorough examination. Those projects deemed necessary then had to be phased to fit within financial limits. This posed the question of how to prioritise equipment projects. The RNZAF argued that the Sunderlands' obsolescence made their replacement its first priority, but changes in government policy had created a pressing need for military air transport. Then there was the issue of priority across the three Services. The Air Force and the Navy were making large demands, but the Army was assuming greater significance in defence planning and required new equipment suited to its South East Asian commitments.

The review process set out to establish the forces required to implement government policy. This involved an appraisal of the contemporary strategic situation and a forecast for the following five years. The accompanying threat assessment lent little weight to the RNZAF's desire to replace the Sunderland. A paper prepared by the Chiefs claimed that some maritime defence 'measures' might be required in a limited war with China. Even in the unlikely event of a global war 'the only likely threat would be an occasional submarine'. However, the Chiefs insisted that the possibility of a larger conflict could not be ignored, and recommended equipping as best as possible to meet the threat. They asserted that force levels should not be based solely on the immediate future, nor confined to the requirements of operations in South East Asia; the defence of the wider area of strategic interest remained important.

The Chiefs also acknowledged the fiscal restraint, saying that 'in relation to other demands on the national economy, it may not be possible at present to provide, or even to plan for, all of the elements of the forces for which a military need can be shown. This may
be so even if equipment purchases are spread over a considerable number of years. Consequently they proposed staggering the necessary purchases over ten years, and formulated both minimum and maximum force levels. The latter described the forces that would be required to meet all possible contingencies. The RNZAF's maximum level provided for one maritime squadron and anticipated the purchase of seven maritime aircraft worth $5.7 million in 1965/66. It also included four transport aircraft to replace the Hastings at a cost of $5 million from 1961/62. The minimum force level suggested for the Air Force did not include maritime aircraft at all, and the Chiefs warned that this would mean 'The virtual elimination of our contribution to maritime defence in the Pacific area'.

The CDC agreed on three levels of priority for re-equipment. The first concerned regular ground forces and transport aircraft for use in 'brush-fire' war in South East Asia, or in a United Nations operation. The second priority went to territorial forces, naval vessels and interdictor aircraft for a larger limited war. The third priority was maritime aircraft and additional anti-submarine vessels to defend New Zealand in a global war. Hence the Committee's priorities differed from those of the Air Force. The transport role, especially in support of the Army, was one which the RNZAF had been willing to forgo. The priority given to such aircraft would favour replacement of the Hastings and would delay maritime re-equipment. The Air Force wanted to replace the Sunderlands first, but the maritime role had received the lowest priority.

Despite the relegation of maritime aircraft within defence planning, the Services argued for the retention of the role and eventual re-equipment. Shortly after the CDC meeting, the Chiefs of Staff discussed the maritime role. They agreed that maritime reconnaissance in the Pacific was a continuing need and that the Sunderland was an acceptable aircraft for this role. They also said that the Sunderland should be replaced as soon as practicable, and concluded that the new aircraft would probably be land based. However, the Chiefs
recommended reducing both the scale of maritime reconnaissance and the establishment at Lauthala Bay, due to the obsolescence of the Sunderland and the small maritime threat.

The reduction of the Lauthala base also anticipated the introduction of land-based aircraft.

The RNZAF dissented from these recommendations, but was defeated by the other two Services.

A similar opinion had already been expressed in the CDC: ‘On one view too much of the available resources was now being devoted (in view of the threat estimate) to maritime reconnaissance. The need for reconnaissance and “showing the flag” should be recognised but could be met at a lesser cost than at present.’ 12 This did not bode well for the RNZAF.

The Minister of Defence, Dean Eyre, asked Cabinet to confirm the continuation of the maritime squadron’s role and deployment ‘with a view to replacing the Sunderland flying boat by a modern maritime aircraft as soon as practicable’. 13 He argued that the question of maritime defence could not be resolved solely by reference to the situation in South East Asia, as the Government needed to consider both global and local issues. Eyre also maintained that the speed and range of aircraft made them a vital element of an effective maritime force. However, he pointed out that Treasury favoured closing down the Lauthala Bay base and opposed the replacement of the Sunderlands. 14

Cabinet subsequently reduced the maritime squadron from thirteen aircraft to six, divided equally between Hobsonville and Lauthala Bay. 15 They also deferred a decision on the purchase of C130 transports until the following year. The Chiefs of Staff were directed to revise their plans accordingly, ‘bearing in mind the need for maximum economy in Government expenditure including expenditure of overseas funds’. 16

While the RNZAF pressed for maritime re-equipment, the larger debate over priorities continued in the Defence Review. The CGS maintained that the first priority should be forces for a ‘brush fire’ war, where New Zealand’s main contribution would come from the
Army, with only limited Naval and Air involvement. His intention was to expand the Army so that a brigade could be deployed overseas, with trained reinforcements at home. The Army preferred to increase its regular force, but this was too difficult and expensive. The plan was to raise a territorial force to provide the additional manpower, which would be cheaper than regular forces, but would still cost $12 million over the next ten years. By comparison, the RNZAF had previously planned to spend $9 million re-equipping the two light bomber squadrons and $5.7 million on new maritime aircraft. Thus the money that the Army wanted would go a long way towards purchasing aircraft for the RNZAF's preferred roles.

The CAS argued that the cost of National Service would be considerable and that 'It could prejudice the readiness of existing forces. The important thing in the cold war was to have available the right regular forces'. The CNS agreed and 'doubted whether a large land force would ever be used'. However, the Military Adviser, Major-General Sir Stephen Weir, supported the need for land forces for the type of war foreseen in South East Asia. During discussion it was pointed out that 'The Naval threat in the South East Asian area was not large and SEATO had never been embarrassed by a shortage of naval power. There was an air threat to meet...this again had not been a serious concern to SEATO because of the mobility of the air forces of the SEATO powers.' SEATO, however, did lack sufficient land forces, and there would be a significant requirement for air transport within the theatre.

The issue of maritime re-equipment was also raised, and attention was focused solely on land-based aircraft. It was pointed out that 'the question of forces to meet other threats in South East Asia and the South Pacific, e.g. a submarine threat, depended on the estimate of the likelihood of such a threat.' The Military Adviser had already stressed the importance of threat assessment in military planning, and the slight danger posed by submarines did
little to help the Navy or the Air Force in their attempts to re-equip. It was also claimed that defending New Zealand and the South Pacific required security in South East Asia, another argument previously raised by the Army.

The Services continued to vie for the limited funds available by advancing arguments that supported their individual plans. Thus the Air Force stressed regular forces and the danger of larger conflicts. The Army maintained that the threat of a larger war, and hence enemy submarines, was slight. The small threat to New Zealand, and the greater possibility of limited war in South East Asia favoured the Army’s plans. However, the lack of agreement amongst the Chiefs was a barrier to re-equipment as it prevented formulation of an accepted plan. Such a plan was necessary to phase acquisitions, and to convince the Government that the equipment was necessary. Those opposed to a particular purchase would exploit any division between the Chiefs of Staff.

The CGS had suggested that New Zealand adopt the same strategic outlook as Australia. The Australian Minister for Defence, A.G. Townley, held talks with Cabinet in June 1961. He explained that ‘The submarine threat was the critical issue in view of the development of the Russian and Chinese potential and this was the number one Australian naval priority’.

The second priority was maritime reconnaissance, which was conducted by Neptune aircraft. The Minister also emphasized the importance of bombers for offensive action. He stated that Australia intended to use civilian, not military aircraft as troop transports. The priority given to the anti-submarine role, the importance of bombers and the plans to move soldiers with civilian aircraft were clearly closer to RNZAF thinking than that of the New Zealand Army. Townley had also declared that ‘The air contingent would be Australia’s most important contribution in the event of hostilities in South East Asia.’

Yet the need to limit expenditure remained the greatest concern. The foreword to the 1961 Review of Defence Policy explained that ‘An important factor in the review has been
the need to limit governmental expenditure in the present economic situation... defence plans calling for a steeply ascending scale of expenditure in the next few years cannot prudently be accepted. Nevertheless, the Review maintained the need for the continuation of those roles that had received lower priorities. For example, it stated that 'The Government places high priority on the provision of transport aircraft to ensure that forces can be moved quickly to and within any likely theatre of operations.' Accordingly, transport aircraft suitable to support the Army were in the first level of priority. It went on to explain that the DC6s had been purchased as an interim measure and would have to be replaced in due course. At the same time, the Review announced the Government's intention to maintain the RNZAF's maritime capability, particularly in the anti-submarine role, to guard against the possibility of a greater submarine threat in the future. It stated that the DC6s 'still have some years of useful life', while reminding readers that the Sunderland had first entered service in 1936. The Government thus declared its intention to retain both roles and acknowledged the obsolescence of the maritime aircraft. Nevertheless, re-equipping the Army had been deemed the higher priority. This made the findings of the 1961 Review ill suited to the RNZAF's plans.

The drive to re-equip the maritime squadron involved not only defending the role but identifying an aircraft to replace the Sunderland. The RNZAF and the Government both believed that flying boats were ideal for Pacific operations. The Air Force had already demonstrated this by recommending the Marlin. The Minister of Defence expressed similar feelings in Parliament:

Unfortunately no military flying boats suitable to replace the Sunderlands were being made. The last production line has ceased at the end of last year. The Labour Government had had an opportunity to buy those planes but he could appreciate its hesitancy considering that they cost at least £750,000 each. Many
would like to see modern flying boats replace the Sunderlands in the Pacific area, which seemed to be the one area in the world where the flying boat, in peace or war, was ideal.  

He did not favour land-based aircraft as they would render Lauthala Bay base redundant, and there was little chance that New Zealand would recover any of its investment there.

The lack of suitable flying boats was cited by Dean Eyre in 1962 as a reason for the delays in replacing the Sunderlands. The following year he stated that the Air force had looked ‘all over the world’ for a replacement flying boat, but there was none that possessed sufficient range. He explained that New Zealand’s requirements were unique, and that its major allies were operating land based aircraft. They had abandoned flying boats, so manufacturers had stopped building them, forcing New Zealand to switch to land-based aircraft.

However, there was another good reason for making such a change. While the Sunderlands required a forward base closer to their patrol areas, more modern aircraft could operate from New Zealand. Leaving Lauthala and operating the Sunderlands from Hobsonville would save approximately £200,000 annually, and Treasury had recommended closing the base for that reason. This also favoured the choice of a land-based aircraft rather than a flying boat. The CDC discussed the issue in May 1961 and was informed that following the disposal of the Sunderlands, land-based aircraft would operate from Auckland with Nandi as a forward base. It was suggested that Lauthala could be run down immediately after a decision was taken on land-based aircraft to replace the Sunderland. The Air Force was apparently trying to use the desire to close Lauthala to strengthen their argument for new aircraft.

The switch to land-based types brought the prospect of operating a common aircraft in the transport and maritime roles. There were operational advantages to such a scheme, but
the prospect of further economies had an even greater attraction. In 1962 Air Vice-Marshal Morrison became the CAS and outlined his plans for future re-equipment of the RNZAF. These included the acquisition of fighter-bombers and new maritime and transport aircraft. He suggested that the C130 could be adapted to perform both roles.

In 1962 Dean Eyre visited Australia to discuss defence matters. He reported that ‘The Australian view had been expressed in one quarter that, whilst New Zealand was welcome to join any party it must bring along its share of the liquor. Further it may have to abide being told just what to bring. Eyre explained that although the Australians did not presume to advise on the future development of the RNZAF, they did suggest priorities for re-equipment. These included maritime reconnaissance, which the Australians believed was important to both countries. However, long-range transport was absent from the list. The Australians argued that ‘Long range air transport is no longer a reason for maintaining a military air force - especially if it is available via a national capability.’ Eyre remarked that he was ‘intrigued to note that the Australians do not use their 12 C.130 aeroplanes for long distance transport of troops.’ The Australians also warned that a dual-purpose aircraft could not perform both roles at the same time, even though circumstances might demand it. Perhaps they were concerned that the RNZAF’s proposed maritime C130s would be diverted to the transport role in wartime and would not be available for anti-submarine duties.

The RNZAF had been interested in the C130 Hercules for several years, and in 1959 Lockheed had proposed to supply three as transports. In 1961 the RNZAF recommended replacing the Hastings with this aircraft, and the Minister of Defence had concurred. The Hercules could carry more than the Hastings yet could operate from airfields otherwise only suitable for the much smaller Dakotas. The C130 was in service with the United States, Australia and a growing number of other air forces. Filer noted that there were British
aircraft available, such as the Armstrong Whitworth Argosy, and that the selection of the Hercules may have been part of a move towards the United States. However, he admitted that Britain itself acquired C130s because of their technical merits. It would appear that the RNZAF's selection of this aircraft was based more on its superior performance than its country of manufacture. Furthermore, the RAF had previously endorsed the choice of the C130. In July 1962 the Air Officer Commanding-in-Chief RAF Transport Command, Air Chief Marshal Sir Edmund Hudleston, when asked about the suitability of the Hercules for the RNZAF, said 'My colleagues agree with me that the C130 is a first-class aircraft'. The 1963 submission also stated that the C130E was a proven aircraft, something that Fisher had identified as an important consideration.

The Minister of Defence consequently recommended re-equipping the maritime and transport squadrons with C130s. Five aircraft would replace the eight Sunderlands still in operation, allowing the closure of Lauthala Bay in favour of facilities at Whenuapai. The Air Force believed that fitting the Hercules with ASW equipment would produce a 'first class maritime aeroplane', although the feasibility of this required further investigation as it had not yet been attempted. Another three C130s would replace the DC6s and Hastings transports.

Purchasing a new aircraft would eliminate the costs associated with maintaining obsolete types, while the use of common spares and equipment would also bring savings. Any such reduction in costs might help the Air Force to secure maritime re-equipment. Furthermore, tying maritime replacement to the transport purchase might have eased opposition to a separate maritime aircraft. However, the project still involved a large capital cost of $13,500,000. The Minister of Defence argued that this would be offset by the long service life of the C130E - estimated to be a minimum of 15 years - and the lower recurring expenses. These savings were estimated at $920,000 a year, of which $500,000
were overseas funds. The purchase would be covered by the Mutual Security Military Sales Scheme, whereby the United States Air Force would receive an initial payment of 10% with the remainder spread over seven years. The availability of finance has been suggested as a reason for choosing American aircraft, but Eyre denied that this had been a factor in the selection of the C130.40

The fact that the C130 was an American aircraft was not emphasised by the CAS in either the submission to Cabinet or in committee discussion. The CAS explained that the C130 had been chosen because it was the most versatile transport aircraft, in large scale production and ‘in use by many air forces.’41

The submission detailed the other aircraft considered by the RNZAF in their attempts to identify a replacement for the Sunderland. Both the Canadair Argus and the Lockheed Orion were ruled out because their high wheel load would have restricted them to only three, non-military, bases in the New Zealand area. Furthermore, they were no cheaper than the maritime C130. The performance of the Marlin and the Grumman Albatross was only a marginal improvement over the Sunderland, and the Marlin was also out of production. The Breguet Atlantic was not expected to enter service for several years, while the Shackleton and the Lockheed Neptune were out of production. These aircraft also lacked the maritime C130’s potential for air transport and to be self-supporting on deployed operations. Humanitarian missions and showing the flag were important aspects of New Zealand’s maritime operations, so the Government wanted an aircraft that could operate from the greatest number of islands. This required an aircraft like the C130 which could cope with short, rough fields.

The RNZAF considered aircraft made in France, Canada, the United States and the United Kingdom. Although compatibility with allied air arms was one of the RNZAF’s requirements, American aircraft were not obviously favoured ahead of the rest. There were
valid reasons for rejecting the other contenders and excellent reasons for choosing the C130. Furthermore, the Hercules was identified as the only aircraft to meet the needs of the RNZAF and permit standardisation in the maritime and transport roles.

While the C130 was clearly the RNZAF’s first choice to replace the Hastings and DC6, which was the first priority in terms of the 1961 Review, the current proposal stressed the importance of maritime re-equipment. The submission stated that ‘This re-equipment is related primarily to replacing the oldest aircraft, Sunderlands, and at the same time achieving economy by standardizing transport and maritime aircraft types’. Yet the previous year the Minister of Defence had told Parliament that both the DC6 and the Hastings had many years of service left, and that ‘essentially nothing was the matter with the present planes except that other nations had more modern ones’.

Treasury supported the purchase of three C130s for the transport role, but opposed acquisition of the ASW variant, due to its high cost and the low priority given to the maritime role in the 1961 White Paper. The Minister of Defence argued against Treasury, claiming that ‘This opinion is contrary to the Government’s 1961 Review of Defence which clearly requires that maritime effectiveness must be maintained’. The Sunderlands were obsolete, and the RNZAF estimated that it would only be able to maintain their ASW equipment for another two years. While the Minister acknowledged the priority of the transport role, he claimed that the Far East Air Force and the RNZAF had sufficient aircraft to meet this need. Therefore ASW re-equipment should not be deferred for the sake of an improved airlift capability.

The proposal to purchase C130s reiterated the need for maritime aircraft:

The threat is of a growing Pacific Sino/Soviet submarine force in being, forecast to rise to 140 submarines by 1967 without allowing for Chicom increases - the assessment that Communism will seek to extend its influence in cold war by all
possible means, including clandestine submarine operations - and the growing
Indonesian Naval capability including 12 ex Russian submarines.45

The submission was passed to the CDC for further discussion. Here the CAS was
supported by the CNS, who held that effective maritime defence required RNZAF
cooperation.46 Anti-submarine warfare was also one of the Navy's principal roles, so the
CNS had an interest in the purchase. The CGS, by contrast, had reservations about the
proposed expenditure on maritime aircraft. His concern was that the cost would be too
great, and he stated that 'If, however, the result of giving priority to the re-equipment on the
maritime side was that this would be the only re-equipment for some years, the Army would
certainly be unhappy at this result.'47 The Army's main concern was adequate air transport
between New Zealand and Singapore, but the CGS was also anticipating the need to replace
the Bristol Freighters and introduce helicopters for Army use. The question of equipping
TEAL to support the Army was raised again, but it was pointed out that these aircraft would
be unavailable in lesser emergencies. Furthermore, there were certain military tasks that
the airline could not carry out.

Treasury was also concerned by the level of expenditure involved and was keen to
conserve overseas funds. They were expecting a further request for four more C130s, and
reminded the CDC that TEAL was also planning re-equipment. Accordingly, Treasury
'considered that a decision of this magnitude should not be taken without an examination of
the priorities for the re-equipping of the three Services'.48 Once again, Treasury's response
was to defer the proposal to allow for a wider review. This was less than two years after
the 1961 Review, and demonstrates how quickly financial considerations can render defence
policy obsolete. It is also proof of the importance of an agreed plan. If such a programme
was prepared, then further reviews could be shown to be unnecessary. On the other hand, a
competing Service might welcome a review as a chance to undermine a rival proposal.
The C130 submission went to Cabinet, along with estimates for defence spending for the next five years.\textsuperscript{49} Cabinet deferred a decision, and sought further information on New Zealand’s maritime commitments and the savings arising from re-equipment.\textsuperscript{50} This information was furnished in a more detailed proposal that based New Zealand’s maritime obligations on the Radford/Collins Agreement of 1951. This was an operational arrangement between New Zealand, Australia, the United Kingdom and the United States in the event of war against a common enemy. It divided the Pacific into areas of responsibility allocated to each participant. Within that area, the country responsible would provide protection for shipping and lines of communication. This included defence against submarine threats. External Affairs believed that ‘the Radford/Collins provision clearly imports a responsibility for N.Z. and the other signatories to provide naval and air forces to meet the obligations referred to’.\textsuperscript{51} Despite the fact that the agreement had been concluded by the armed forces rather than Government, the legal department of External Affairs argued that ‘the Agreement can be considered as embodying a series of firm and explicit undertakings which the various Governments would be bound to honour’.\textsuperscript{52}

The submission to Cabinet also raised the issue of RNZAF morale. The Minister of Defence was concerned that elderly aircraft, and a corresponding lack of effectiveness, would damage the RNZAF’s recruiting. In addition, ‘The efficiency and morale of the Air Force cannot be maintained without early and strong Government support. Words will be of no use unless accompanied by a programme of re-equipment with modern aircraft.’\textsuperscript{53} Consequently maritime replacement should proceed alongside the immediate equipment needs of the other Services.

Treasury had pointed to the CGS’s misgivings in their opposition to the purchase of maritime C130s. They supported approval in principle for the purchase of three transport variants, but believed that plans for maritime re-equipment required further scrutiny,
suggesting that the new Ministry of Defence and the Officials Committee should examine the matter. Treasury also doubted the CAS's claims that the proposed re-equipment would result in recurrent savings of $920,000. The Minister argued that the Officials Committee was intended to assist in the formulation of defence policy, and that the proposed purchase was not a policy matter. He claimed that

The present RNZAF proposal is concerned only with the replacement of obsolete aircraft by a reduced number of modern machines in order to continue to meet the maritime task which has always been, and will remain, a primary defence commitment. The 1961 Review of Defence made this clear, vide paras 23, 56 and 59. It does not therefore require review within a re-assessment of policy.  

This had been the RNZAF's position throughout the years it had been attempting to replace the Sunderland.

While the purchase of new maritime and transport aircraft was receiving renewed attention, the Chiefs of Staff expressed their concern at the general state of the forces. In January 1963 they warned the Minister of Defence that 'no one service is now capable of carrying out to the full the tasks envisaged in current Government defence policy'. The RNZAF, for example, could field only a single Canberra squadron and a medium range transport squadron of limited capability. The Chiefs blamed the Government's failure to provide adequate funding. They also pointed to the lack of a clearly defined Government programme for future equipment purchases. Yet the disagreements amongst the Chiefs of Staff were at least partly to blame for this situation. The Government could not be expected to formulate a coherent plan if its principal military advisers were at odds. The Chiefs therefore decided on the 'minimum and immediate requirements' for each service as the foundation for such a programme. The Navy sought a third frigate. The Army wanted
to complete the re-equipment of the Brigade Group, and provide equipment for logistic units. The RNZAF wanted C130s for the maritime and transport roles. The Chiefs estimated that an annual increase of £4.4 million in defence spending for a period of five years would allow the necessary steps to be taken. They continued to claim that the purchase of the Hercules would save up to £.9M a year, mostly in overseas funds. The Chiefs stressed the need to contribute effectively to collective defence efforts and warned that

It is accepted today that the United States expects its allies to adopt a policy of ‘self-help and mutual aid’: US support for New Zealand in time of crisis will be inevitably affected by the size of the effort that New Zealand now makes available on her own behalf, and on behalf of the Alliance. 56

The attempt to re-equip the two roles with one purchase stalled, and in June 1963 the Minister of Defence moved to break the deadlock. There was general agreement on the need to purchase C130 aircraft for the transport role, and Treasury had supported such a move. The Air Board was also planning to withdraw the DC6s from service in 1964. 57 The Minister therefore suggested that such a purchase was a logical first step in the re-equipment programme. However, this did not mean abandoning the maritime C130. The Minister proposed that the evaluation team sent to investigate the transport purchase should also evaluate the maritime scheme - an idea that Treasury supported.

The Minister hoped to obtain approval quickly so that the aircraft would be available when the battalion in Singapore was scheduled for rotation in 1965. This time Cabinet did decide promptly and favourably. On 17 June 1963 approval was given for the purchase of three C130E transports and associated items at an estimated cost of £4.981M. 58 Cabinet also agreed in principle to the purchase of the maritime C130s as part of the five-year plan. 59 The Prime Minister announced these decisions at the annual meeting of the
Dominion Council of the RSA. He said that 'The Government recognised the need to maintain adequate forces as an earnest of our intention to play our proper part in the collective defence arrangements which we depend upon for security.' 60

The Government’s pledge to maintain adequate forces required a increase in defence spending to correct the current deficiencies. Reese stated that in the early 1960s 'Australian and New Zealand expenditure was the minimum that their governments judged compatible with the retention of the goodwill of major allies and was widely acknowledged in the press and universities as being less than it should be.' 61 In June 1962, Dean Eyre, the Minister of Defence, wrote to the Deputy Prime Minister drawing attention to troubled state of defence funding. He stated that 'the annual defence vote is only providing properly for the perpetuation of Services - not their existence.' 62 More to the point, re-equipment had reached 'that critical point where the future purposeful existence of the Services is involved'. As far as the RNZAF was concerned, their obsolete aircraft had to be replaced before the Service could make an adequate contribution to collective efforts. The rising cost of aircraft and other military equipment mean that defence spending had to increase before rebuilding could commence.

The approval of the five-year plan was made possible by the improvement in the economy. In July 1963 the Minister of Finance spoke of an economy ‘completely recovered from the overstrain of 1960-61, past the convalescent period of the last year, and now full of vigour and life’. 63 Record export receipts had brought a marked improvement in the balance of payments, which meant that overseas funds were available for defence purchases. Defence expenditure of £28.1 million in 1962/63 increased to £30.8 million and was expected to exceed £34 million in 1965/66.

The order for C130 transports and the proposal to obtain maritime C130s illustrate several important features of defence procurement. The transport purchase was the least
controversial because government policy had created a need for it, and the 1961 Review gave it top priority. Treasury supported the purchase because of this clear requirement. The Army also backed the proposal as their own plans depended on air transport. If anything, the Air Force was reluctant to proceed with transport re-equipment for fear that it would prejudice their plans to replace the Sunderland. By contrast, maritime aircraft were considered a low priority by both the Army and Treasury and their high cost caused considerable debate. The Services had been forced into competition for the limited funds by the Government’s desire to restrict expenditure, and the shift in defence policy towards South East Asia favoured the Army’s plans. A feasible re-equipment programme, agreed upon by the three Services, and improved economic circumstances cleared the way for Cabinet approval, justified in part by the apparent obligation under the Radford/Collins Agreement to provide maritime aircraft and to contribute to collective defence.
Notes

1 Filer, p.97.
2 ibid., p.95.
3 Wright, p.149.
7 ibid.
8 ibid.
9 Appendix C to Annex to COS (61) 1, National Archives, 'Defence of Pacific 1960 - 1965', AAFD, 811, Acc w3738, 244/8/3, box 1322.
12 Cabinet Defence Committee, minutes of meeting held 10 May 1961, D (61) M.6, National Archives, 'Defence of Pacific - General - 1961 - 1966', AAFD, 811, Acc w3738, 228/3/1, box 1328.
15 ibid.
17 ibid.
18 ibid.
19 ibid.
20 Cabinet Defence Committee, Minutes of meeting held 12 June 1961.
21 ibid., (Unnamed speaker)
22 'Discussions with the Hon. Athol G. Townley, Australian Minister for Defence', D (61) 8, National Archives, 'Defence of Pacific - 1960 - 1965', AAFD, 811, Acc w3738, 244/8/3, box 1322.
23 ibid.
31 Cabinet Defence Committee, minutes of meeting held 10 May 1961, D (61) M.6, National Archives, 'Defence of Pacific - General - 1961 - 1966', AAFD, 811, Acc w3738, 224/1/1, box 1321.
34 ibid.
37 Filer, p.95.
43 NZPD, 331 (1962), p.1535.
44 'Purchase of Maritime and Transport Aircraft for the RNZAF', D (63) 1.
45 ibid.
46 Cabinet Defence Committee, D (61) M.1, Minutes of meeting held 23 January 1963, National Archives, 'Defence - Defence Committee - Meetings - 1961 - 1970', AAFD, 811, Acc w3738, 222/2/2, box 1315.
47 ibid.
48 Cabinet Defence Committee, D (61) M.1, Minutes of meeting held 23 January 1963.
51 ibid.
52 ibid.
53 'Purchase of Maritime and Transport Aircraft for the RNZAF', CP (63) 124, dated 22 February 1963.
54 ibid.
56 'Survey of the Present Effectiveness and Immediate Equipment Requirements of the Three Armed Services of New Zealand', Cabinet Defence Committee, D (63) 3, dated 18 February 1963.
60 The Press, 19 June 1963, p.16.
61 Reese, p.278.
62 Letter from Dean Eyre to Jack Marshall, 7 June 1962, Alexander Turnbull Library, MS-Papers-1409/333-3.
Chapter Five

The Orion and the Maritime Role

Approval in principle for the purchase of maritime C130s cleared the way for the replacement of the Sunderlands. However, it soon became apparent that it would not be feasible for the service to develop such an aircraft. Filer argued that RNZAF plans to develop a maritime C130 were abandoned because of the high cost and possible delays. The RNZAF then recommended the purchase of five Lockheed Orions. The Orion was built in the United States and was already in service with their Navy. Filer also stated that it was of major importance ‘that the Orion could be purchased for less than £9 million’. Harrison, Lockstone and Anderson wrote that the RNZAF had investigated fitting maritime modules to C130s when they were not being used as transports. When this idea was dropped the Orion was recommended. Duxbury, Ewing and Macpherson claimed that the Orion was chosen ‘as it was a fully developed and efficient ASW system whose advantages outweighed those of the maritime C130 being studied’.

This chapter concurs that the RNZAF turned to the Orion after ruling out the maritime C130. However, it argues that the approval by Cabinet of the investigation into the maritime Hercules had the effect of confirming the continuation of the maritime role. The Orion was then chosen because it was the best maritime aircraft available, and the only one that met New Zealand’s requirements. The prior agreement over the need for new aircraft, and the outstanding qualities of the Orion meant that this final stage in the effort to replace the Sunderlands was marked by less serious debate than in the preceding years.

In 1963 an RNZAF team travelled to the United States to finalise the transport purchase and to investigate the maritime C130. Their evaluation led to concerns over the cost and performance of the latter proposal. Officials concluded that it would not be practical to
develop a maritime C130 for New Zealand. The CAS then proposed re-equipping with five Lockheed P3B Orions at a cost of approximately £10.5 million.

The maritime C130 existed only on paper when Cabinet granted approval in principle to the project. The RNZAF News had reported that approval in principle 'paves the way for the next step in the RNZAF’s re-equipment programme - the sending to the United States of a fact finding team to further evaluate and report on the suitability of the Hercules as an effective maritime anti-submarine aircraft'. Cabinet had effectively approved the acquisition of the aircraft before its suitability had been established. The Press reported that 'The principal reason for the rejection of the maritime version is that the basic Hercules machine has not yet been adapted for anti-submarine work anywhere in the world'. The RNZAF would face very high development costs to convert the aircraft to the maritime role. The costs associated with this development work would then be carried by only five aircraft, adding substantially to their price. On the other hand, the development costs of the Orion would be spread over a much larger fleet. However, the RNZAF had estimated that it could acquire five maritime C130s for £7,600,000, which was less than the cost of the Orions. Remarkably, the Air Force had claimed that it could develop a new maritime aircraft for less than the cost of buying an existing type. Secondly, it was anticipated that the ASW systems fitted to the C130 would be rendered obsolete by rapid advances in this field. New equipment manufactured in the United States would be designed for the Orion, so the RNZAF would have to bear the cost of modifying equipment to fit the C130 every time it wished to upgrade. Performance concerns should have come as no surprise either. The Air Force had chosen the C130 for the maritime role because it was the best transport available. Lockheed, who also manufactured the Hercules, had favoured the Electra for the maritime role. The RNZAF’s plan to operate a common type in two different roles would mean compromising performance for the sake of economy.
The reasons for rejecting the maritime C130 should have been obvious even before the proposal first went to Cabinet. Two days after *The Press* reported that the C130 was unsuitable for the maritime role, it published Labour’s defence policy for the 1963 election. This included an undertaking to ‘expedite efforts to find a replacement for New Zealand’s flying boats’. Holyoake replied that Labour’s defence policy was ‘nearly a reiteration of measures already adopted or established by the National Government’. The maritime role, which had received the lowest priority in the 1961 Review and had been contested fiercely since, now had plenty of support.

The Cabinet would not endorse the maritime role without first identifying an affordable replacement, and the Secretary of Defence, J.K. Hunn, believed that ‘Cabinet was no doubt influenced by what then seemed the special advantages of an all-C130 force’. However, once the continuation of the role had been announced, the Government had to accept the purchase of a suitable type like the Orion or be seen to back down from stated policy. The strange proposal for a maritime C130 may thus have played a part in ensuring the continuation of the ASW role.

The Orion had been specifically developed as an anti-submarine warfare aircraft for the United States Navy. It possessed high speed and long range, and could locate and destroy conventional and nuclear submarines. This aircraft could also carry fifty troops and 4000 lbs. of equipment. The Orion had recently entered operational service with the United States Navy in the Pacific, and was compatible with other NATO and SEATO forces. It was thus a common allied type and a proven aircraft. It was expected to have a service life of at least fifteen years, and was built to accommodate future advances in role equipment. In addition, the Orion was well suited to search and rescue. The Air Force concluded that the Orion was ‘an excellent aircraft with which to replace the obsolete Sunderland flying boats’.
The Orion had previously been ruled out partly because of its runway requirements, which would have limited its operation to a few airfields in New Zealand and the Pacific. The Orion had a maximum All Up Weight (AUW) of 127,500lbs, but could operate from Whenuapai at an AUW of 110,000 lbs. without upgrading the runways and taxiways. At this AUW the Orion had a range of 3,059 NM. Alternatively, it could loiter for 4 hours 38 minutes at a radius of 1000 NM, with sufficient weapons for two anti-submarine strikes. Similar weight restrictions would enable the Orion to operate from more airfields in the Pacific.

The Secretary of Defence supported the proposal to acquire five Orions, noting that the Chiefs of Staff had recently reaffirmed the need for maritime re-equipment. The Chiefs had stated that ‘While the threat from these [maritime] forces to New Zealand itself has been assessed as slight, New Zealand’s overall defence rests on the collective security arrangements entered into with allies under ANZUS, ANZAM and SEATO, all of which involve, inter alia, maritime commitments’. This represented a shift in emphasis in the justification for re-equipment. At the time of the Marlin proposal, the CAS had stressed the importance of defending New Zealand from submarine attack. The Chiefs now highlighted the contribution that maritime aircraft would make to allied efforts, which was consistent with the Government’s emphasis on collective security. The Chiefs then reminded Cabinet that the Sunderlands could neither fulfil New Zealand’s maritime obligations, nor contribute effectively to home defence.

The Secretary of Defence agreed that the threat to New Zealand was not the only reason for procuring new maritime aircraft, though it could grow ‘if Indonesian bellicosity continues and her military capabilities keep expanding’. Hunn argued that allies might call upon New Zealand to contribute to maritime efforts in the Pacific and the Indian Ocean. SEATO, ANZAM and ANZUS imposed an obligation to ‘be ready to help as best we can’.
Therefore, Cabinet had to consider not just New Zealand’s maritime needs, but whether aircraft like the Orion would be useful in collective efforts.

Hunn acknowledged that the provision of transport aircraft was most pressing, but pointed out that the purchase of three C130s would help to address the existing shortfall. The RNZAF had decided that the second priority was the replacement of the Sunderlands. The Government had agreed in principle to purchase maritime aircraft. However, their approval had been granted on the basis of a common transport and maritime type. The RNZAF was now proposing to operate the Orion alongside the Hercules. This may explain why the Secretary felt obliged to reiterate the need for maritime aircraft.

The Secretary then turned to the question of aircraft types. Now that the prospect of a common type had disappeared, aircraft could be evaluated largely on their ability to undertake the maritime role. Hunn declared that ‘the Orion is far and away the best aircraft’. He also pointed out that it could perform other useful roles, both military and humanitarian. The Chiefs of Staff agreed that the Orion was the most suitable replacement, in fact the only suitable new aircraft available. The Breguet Atlantic had entered production, but none of New Zealand’s allies were expected to operate this aircraft in the Pacific or in South East Asia. Hunn commented that ‘the aircraft has not been proven in operational use and should be dismissed on these grounds alone’. The Minister was also informed that there were no British aircraft available. The absence of suitable aircraft from the United Kingdom makes it difficult to determine the extent to which the Orion purchase was influenced by a deliberate move towards the United States.

The Orion satisfied the major requirements of the RNZAF: it was the best aircraft available; it was expected to have a long service life; and it was a proven aircraft in service with one of New Zealand’s most important allies. The Orion’s weakness was its runway requirements. While it could still be operated from Whenuapai at a lesser AUW, the
Secretary argued that the runways at that base should be improved anyway. If necessary the Orion could operate from Ohakea or Mangere, carrying fuel sufficient for a range of 5,000 miles.

The most significant alternative was the purchase of second-hand Martin Marlins. This flying boat was expected to remain in service with the United States Navy until 1970. There had been uncertainty as to the availability of second-hand Marlins, but a visiting Department of Defence team had confirmed that as many as ten could be provided. These aircraft were approximately ten years old and were fitted with ASW equipment similar to that carried by the Orion. The Marlins were estimated to cost around $900,000 each, compared with $1,295,000 per Orion.

The Ambassador in Washington, George Laking, had already discovered that Marlins would be available when he met the Defence Department team before it left for New Zealand. Just prior to this meeting, the Head of the New Zealand Services Joint Mission in Washington had advised Wellington that Marlins were not available. Laking believed that the Defence Department wanted New Zealand to commit more money to defence and that they wanted New Zealand to buy Orions. He wrote that ‘this I am sure explains their embarrassment that someone in Navy should let slip that a number of Martins were available for purchase.’ He went further:

It seems to me from this distance that the purchase of amphibious (?) aircraft to replace the Sunderland would make a lot of sense. We would spend less and could continue our role in South Pacific, operating out of Lauthala Bay. It is probably only Morrison’s plans for the expansion of the RNZAF which stand in the way of such a development. From any other point of view it should have considerable appeal.
Hunn explained that while Marlins were cheaper than Orions, the RNZAF would need to buy more than twice as many. The high operating costs of the Marlins would then consume any money saved on the initial purchase after eight years of service. To this was added the cost of maintaining Lauthala Bay. The Secretary of Defence warned that while flying boats were useful in peace time, there was a shortage of suitable bases from which to operate them in the event of conflict in South East Asia or the Pacific. Hunn maintained that on balance the Orion was the best aircraft for the RNZAF’s needs.

The Officials’ Committee on Defence had discussed the purchase of Orions in February 1964. This committee included the Secretaries of External Affairs, Treasury and Defence, the Chiefs of Staff and the Chief of Defence Staff. The proposal before the Committee recommended the purchase of five Orions, along with associated spares and equipment, to replace the Sunderlands at an estimated cost of £10.5 million. This was almost £2 million more than the estimated cost of maritime C130s. The intention was to negotiate a price and terms of payment that would limit expenditure to the £13.5 million that had been approved for the purchase of transport and maritime aircraft. To help achieve this, the RNZAF would be directed to plan for only the minimum provision of spares.

There was initially unanimous support, but the Secretary to the Treasury soon adopted a more cautionary position. The Minister of Defence later explained that the Secretary was ‘not taking specific objection to the present proposals about the Orion as such’. Rather, he was apprehensive about the effect that the purchase of Orions might have on the larger programme of defence spending. Hunn believed that Treasury wanted to see other defence proposals likely to emerge in the near future before Cabinet confirmed the availability of funding for transport and maritime aircraft. He stressed that current planning was based on the £13.5 million that had previously been approved for transport and maritime re-equipment. He also acknowledged that Treasury’s concern over the effect that new projects
might have on the five-year plan was justified. However, he reminded the Minister of Defence that it would be the responsibility of the Ministry to adjust the re-equipment programme to fit financial limits. Hunn also believed that Treasury was worrying about projects that were still a long off.

Treasury’s concerns demonstrate the way in which individual re-equipment projects were inseparable from the larger programme of defence spending. One purchase could not be approved without due consideration of other demands. The problem with the current proposal was that Cabinet had only provided £13.5 million to re-equip both roles. The C130s had been approved at a cost of £4.981 million, while the Orions were estimated to cost £10.5 million.

The Secretary of Defence suggested several ways to reduce the cost of purchasing Orions. A logistics support agreement with the United States would allow the RNZAF to reduce the level of spares bought with the aircraft. There was also the prospect of negotiating lower prices for the Orions and C130s. However, it was considered unlikely that any second-hand Orions would be available from the United States Navy. The obvious way to lower the cost of the project was to purchase fewer Orions. The Secretary suggested obtaining more aircraft later as production was expected to continue for several years. However, the CAS claimed that five aircraft were necessary if all of the Sunderlands were retired. The Minister of Defence explained to Cabinet that the Sunderlands were not only obsolete but expensive to operate. He also warned that ‘Until the Air Force can “shorten sail” by closing the flying boat base at Lauthala Bay it will be hard put to find the manpower to support the early introduction of helicopters as present defence plans envisage.’

Cabinet subsequently approved in principle the choice of the Orion to replace the Sunderland on 23 March 1964. Cabinet also consented to a planning figure of five
aircraft, but wished to know if it was possible to complete such a purchase within the $13.5 million approved the previous year.

An RNZAF team then travelled to the United States to obtain further information. They reported that the estimated total cost of the C130s and Orions was $13.49 million. The three transports would cost $4.81 million, while the price of the Orions had dropped from $10.5 million to $8.68 million. The United States Navy prepared a Letter of Offer for the sale of the Orions at this price that was valid until 1 September 1964.

The RNZAF identified a number of ways to bring the combined cost of the two projects within the financial limit. The level of support equipment and spares required to operate the Hercules had been reduced. Some equipment could be obtained more cheaply in New Zealand and Australia. The apparent level of commonality between the Orion and the C130 offered further economies. In particular, the Air Force expected that the Orion would be refitted with an engine that was nearly identical to that on the Hercules. The RNZAF had also revised its policy on holdings of spares. Previously it had bought enough spares and equipment to support operations at war rates from the commencement of re-equipment. However, more sophisticated aircraft like the Orion necessitated a longer period of training for air and ground crews before full utilisation. The RNZAF estimated that it would take two and a half years before the Orions could operate at planned rates. During that time the fleet would not require the maximum level of spares and support equipment. The proposed Co-operative Logistics Support Arrangement with the United States would also lessen the level of spares held in New Zealand. The remainder would stay in the United States and be available on demand. It was anticipated that this agreement could save $171,000 across the two aircraft purchases. The RNZAF also believed that they could operate the Orion at a lower cost than that estimated by United States Navy.
Despite the efforts to minimise the cost of the Orions, Treasury remained concerned at the level of defence spending. They pointed out that £35.7 million had been provided for defence in 1964/65. A pay adjustment had added £75 million, while the purchase of five Orions would increase the total to £37.13 million. This was sharp rise from the £29.1 million spent the previous year. Treasury warned that there would be further demands for defence spending. Cabinet had only approved £300,000 for work on the runways at Whenuapai, but the estimated cost was now three times that. Nor had any funding been set aside for rebuilding Calliope wharf, which was expected to cost over £1 million. Treasury also expected the Navy to seek approval for a fourth frigate in 1966/67.

Cabinet had ruled that decisions on individual purchases within the five-year plan would have to take into account contemporary financial concerns. In this case, a fall in wool prices resulted in a desire to conserve overseas funds. The plan to purchase Orions instead of a common aircraft for the transport and maritime roles meant that the savings expected from re-equipment had dropped to £460,000 - approximately half the earlier estimate.

Treasury concluded that 'to purchase five Orion aircraft at this juncture will place an undue strain on the present difficult budgetary position.' It would be preferable to stagger the acquisition of Orions, with an initial purchase of three aircraft. A decision as to whether to order two more would be deferred for two years. Treasury proposed that the initial order should also be delayed for a year to prevent major expenditure on the Orions falling due at the same time as large payments were made on the C130s.

Defence officials were adamant that five Orions were necessary and that all should be bought at once. The Chief of Defence Staff and the Secretary of Defence assured the Prime Minister that his advisers agreed on this point. They cited the example of shipping escort to show that three aircraft would be insufficient. This role required enough aircraft to provide continuous air cover, with another available as a "Hunter Killer". Eight Sunderlands could
provide cover out to 600 miles with one aircraft ready for the “Hunter Killer” role. Three Orions could provide similar continuous cover, but no “Hunter Killer”. In this case three Orions would be less effective than eight Sunderlands, despite the fact that the Orions were more capable aircraft. The CDS and the Secretary agreed that six Sunderlands would have to be retained if only three Orions were bought. This mixed force would be more expensive but less effective to operate than five Orions.

Treasury neither argued against the need for maritime re-equipment nor contested the choice of the Orion. They did not even object in principle to a force of five Orions. Their concern was the effect that the scale and timing of the proposed Orion purchase would have on the level of defence expenditure. The Air Force believed that five Orions were not only necessary but would be cheaper than a mixed maritime force. Perhaps the RNZAF was also concerned that delaying the acquisition of Orions would push back the whole re-equipment programme. By 1964 it was looking ahead to replace the Canberras, along with a number of other projects. The Air Force must have been anxious to avoid a clash between requests for large amounts of funding.

Treasury’s view prevailed for a time, and on 10 August 1964 Cabinet decided that only three aircraft would be ordered initially.\(^{34}\) Cabinet also agreed to reconsider the purchase of two more aircraft within two years. However, a fortnight later Cabinet cancelled this ruling and agreed to purchase five Orions.\(^{35}\) Perhaps the Prime Minister was swayed by the arguments put to him by the CAS shortly after the first Cabinet meeting. Morrison concluded by saying ‘Finally, and with respect, the arguments and factors around this project point so compellingly to the only proper decision being to order five Orions now and I take confidence in addressing this letter to you’.\(^{36}\) The CAS also included an appendix that listed statements made by the Government to the effect that five aircraft would be
The possibility of some political reaction to an apparent half measure may have brought the Prime Minister around.

The disagreement over the number of Orions to be purchased demonstrates the absence of any serious debate over the need to acquire at least some Orions. If aircraft purchases can be considered to involve two principal issues, the first - that of the need for re-equipment - had been resolved by the time the Orion was recommended to Cabinet.

The need for maritime re-equipment had been accepted by the Government when the dual role C130 purchase had been approved by Cabinet, and support for the purchase within the defence establishment remained undiminished. The second question - that of the type of aircraft - was quite straightforward as the Orion appeared to be the only one that met all New Zealand's requirements. The RNZAF was able to keep the cost within the prescribed limits, so there was little reason for the Government to reject the proposal. However, this satisfactory resolution for the RNZAF only came after several years of intense debate over the need for, and priority of, maritime aircraft.
Notes

1 Filer, p.98.
2 ibid., p. 98.
4 Duxbury, Ewing and Macpherson, p.45. Bentley and Wright also noted that the maritime C130 was abandoned in favour of the Orion. Bentley, p.152., and Wright, p.150.
13 ibid.
15 ibid.
17 ibid.
18 ibid.
19 George Laking to Alister McIntosh, 28 February 1964, Unofficial Channels, p.312.
20 ibid.
21 ibid.
24 The RNZAF was planning to acquire new combat aircraft, jet trainers and a replacement for the Bristol Freighter. Then there was the demand for helicopters, particularly to support the Army. There was, therefore, a considerable and expensive list of aircraft awaiting further consideration - not to mention the other services' projects.
26 ‘Proposed Purchase of Orion Aircraft for RNZAF’, CP (64) 214, dated 20 March 1964.
29 Both Wright and Filer mention that the RNZAF hoped to benefit from this instance of commonality.
30 The arrangement would mean that 18 months worth of spares would be held in New Zealand rather than the usual 30 months.
32 'Purchase of Orion Aircraft', Secretary to the Treasury to Minister of Finance, dated 5 June 1964, National Archives, 'Air Force - General - 1961 - 1967', AAFD, 811, Acc w3738, 228/3/1, box 1328.
33 CDS and Secretary of Defence to Prime Minister, dated 13 August 1964, National Archives, 'Air Force - General - 1961 - 1967', AAFD, 811, Acc w3738, 228/3/1, box 1328.
34 'Orion Aircraft', CM (64) 31, dated 12 August 1964, National Archives, 'Air Force - General - 1961 - 1967', AAFD, 811, Acc w3738, 228/3/1, box 1328.
Chapter Six

Helicopters

Previous writers said little on the purchase of New Zealand’s military helicopters. Wright stated that ‘The RNZAF received its first helicopters as a result of Morrison’s reformation’.¹ Filer noted that the RNZAF, unlike the Navy and Army, had little use for helicopters.² He also stated that there was ‘some inter-service rivalry into which the Air Force was drawn over the types of helicopters to be obtained and the way they were to be organized and administered’.³ More significant is Filer’s assertion that ‘British helicopters were available, but American helicopters were purchased, a development which reflected the moves in New Zealand defence policy away from Britain and towards the United States’.⁴

This chapter will explain why the Wasp, Bell 47G Sioux and UH-1D Iroquois were chosen for New Zealand despite the Government’s expressed preference for a single type, or at least helicopters from a single manufacturer. In the process it will reveal the influence that the other services, particularly the Army, were able to exert on this particular aircraft purchase in what continued to be an inter-service competition for resources. It will also present the helicopter project as evidence of the surprising strength, rather than the weakness, of New Zealand’s defence ties with Britain in the mid-1960s.

The RNZAF had planned to purchase two Westland Whirlwind type helicopters in the late 1950s for maritime and search and rescue work.⁵ However, helicopters were not accorded a high priority and this purchase did not proceed. The Government’s position was expressed in July 1960 to a representative of the Bell Helicopter Corporation. The Minister of Defence acknowledged the benefits of helicopters, but explained that ‘the cost of operating and maintaining a fleet of helicopters sufficient for Government needs, does not
justify their employment at present .... there are more essential items on which available funds must be spent’.  

The purchase of helicopters was deferred in the 1961 defence programme. During that year’s Defence Review the Army gave helicopters a much higher priority than the Air Force’s favoured interdictors. In 1963, when re-equipment in the maritime and transport roles dominated debate, the Army stressed the need for helicopters. The Army and Air Force remained divided over this issue. In January, at a meeting of the CDC, the high cost of helicopters gave rise to the suggestion (unattributed) that ‘endeavors should be made to arrange for Britain to provide the Army’s requirements for helicopters in forward areas’. In reply it was stated that ‘The Government would be deluding itself if it relied on someone else to provide this type of transport’. 

Some insight into the acquisition of helicopters is provided by a report written by D.W. Baird, a retired RNZAF Group Captain. Baird was a representative attempting to sell French Alouette helicopters to the services, and in 1962 he submitted proposals to the Army. In 1963 the Army informed Baird that they required a Light Observation Helicopter, able to carry three people, and a larger helicopter able to carry about ten. Baird noted that this requirement emerged after the Director of Artillery had been to the United States, and appeared based on American practice and helicopter types. In December 1963 the Director explained to Baird that although the Army would prefer to operate two different types, ‘the Alouette 11 could meet some 90% of their overall requirement’. 

Baird noted that ‘it was clear that the RNZAF had itself no operational need for helicopters, other than as search and rescue aircraft’. He also identified an aspect of RNZAF thinking that was crucial in shaping their choice of helicopter: It was gathered that the view of the Air Staff, Technical and Supply staffs of the RNZAF strongly favoured the operation of one general purpose helicopter for
the needs of the services if this was at all possible, this view being based on the need of the RNZAF to operate the minimum number of types of aircraft, to reduce the logistical support problem.14

This was in direct contrast to the Army's wish to have two types. Baird also suspected that while a common helicopter should be able to fit aboard the frigates, the Army's requirement would have greater influence than the Navy's in determining which helicopter to buy.

In April 1964 Air Vice-Marshal Morrison recommended the purchase of six Alouette III and six Bell 47G Sioux helicopters.15 The Minister of Defence had directed that a single type of helicopter should be selected if practicable, but the RNZAF believed that it would be more economical to operate the much cheaper Sioux alongside the Alouette. The American Sioux had been selected as a Light Observation Helicopter (LOH) in support of the New Zealand Brigade. The Hiller 12E-SL had also been evaluated and was found to have similar performance. However, the Sioux was cheaper and had been chosen by both the British and Australian armies. The CAS explained that in peace-time these helicopters would be used for training in New Zealand; in war they would be shipped to the theatre to support the Army.

The CAS anticipated that the RNZAF would operate Short Range Transport (SRT) helicopters in South East Asia. Such aircraft would be part of an ANZUK transport force. The type chosen would be determined after discussions with the RAF and RAAF. However, he believed that it would take three years for the RNZAF to acquire sufficient experience to employ helicopters operationally. Until that time the Bristol Freighters would continue in the transport role.

The Navy also required helicopters from the ‘Leander’ class frigates. The feasibility of employing the Alouette in this role was examined, but there were doubts that it 'would be
acceptable in the 'British Naval environment where the standard aircraft is the British Wasp'.

Morrison claimed that the immediate need was to establish a helicopter training unit in New Zealand to support the three Services. While he maintained that it was unnecessary to equip this unit with the kind of helicopters that would be used operationally, he suggested that the Alouette could be suitable for the SRT role. The RNZAF sought a helicopter that could cover both basic and operational training, and assist in search and rescue, maritime and SRT duties.

The RNZAF evaluated three types for the training role: the American Bell UH-1 Iroquois; the British Wasp/Scout; and the French Alouette. The CAS advised that 'only the Alouette provided the compromise we required to enable us to cover economically within New Zealand the variety of tasks required in a training and development unit in peace and war.' Morrison argued that although the Wasp and Iroquois possessed superior performance in certain areas, they would not be as suitable as the Alouette for basic training. The Iroquois was also too large to fit on a frigate, while 'the dubious service history of the Wasp makes it unacceptable.' He claimed that the Alouette had been operated from 'Leander's and could fulfill ASW training and operational roles. The RNZAF also believed that the Alouette had significant potential as an operational SRT helicopter. The CAS thought that the Alouette might contribute to the ANZUK transport force, where the RAF would handle the heavy lift requirement.

The Alouette was expected to be only half as expensive to buy and operate as the Iroquois. The CAS stated that 'A training unit, equipped with 6 Alouette III helicopters...will provide the best and most economic basis from which to develop an operational VTOL capability for the three N.Z. Armed Services'. The five-year defence
programme included £1 million for light aviation, sufficient to meet the cost of this proposal and the purchase of six light fixed wing aircraft to support the Army.

The CAS intended to use the initial purchase of helicopters to establish a training unit in New Zealand. Therefore, the fact that the Alouette lacked the performance of the Iroquois was not as important as its potential as a trainer. The greater flexibility of the Alouette meant that there remained a possibility of employing this helicopter in both naval and military roles.

The Army had formulated its own helicopter requirements based on experience in Malaya and the policies of Britain, Australia and the United States. The CGS supported the Sioux, but opposed the Alouette. Now that the choice of the Wasp for the Navy appeared inevitable, he argued that 'The selection of aircraft for the RNZAF and Army should, we believe, be based primarily on the operational needs of the Army, which are accepted by the Chiefs of Staff and which have given rise to the present discussion.' The Army acknowledged that the Alouette would be suitable for the training role envisaged by the RNZAF, but argued that it would not improve the capability of the Army. The CGS explained that 'If adopted for an operational role, it would represent a “half-way” solution only, would give rise to immediate compatibility problems, and would call for special purchase and logistic arrangements'.

The CGS therefore recommended the purchase of a smaller number of Iroquois from the United States. The Army estimated the cost of Alouette at £102,695 each, against £170,000 for the Iroquois. However, the Iroquois would lift twice as much as the Alouette and could carry more troops. The Iroquois was in service with the Australian and US armies, and the Army considered compatibility with allies to be a compelling factor. The CGS reminded his colleagues of the Minister’s direction that if more than one type of helicopter was
purchased, they should come from the same manufacturer. Both types recommended by the Army were built by Bell.

The CGS suggested that basic training of Army and Air Force helicopter pilots could be carried out on the Sioux. Army pilots would then continue training on this aircraft while RNZAF pilots graduated to the Iroquois. The Sioux was used as a basic trainer by the Americans and the Australian Army, and the British Army was planning to do the same. US Army pilots then progressed to the Iroquois. The CGS therefore recommended that the Government purchase three more Sioux for training.\(^{24}\)

The Army’s suggestion was sensible: pilots in allied armies received their training on the Sioux and Iroquois, and there was no reason why New Zealand pilots could not do the same. If the Alouette was unsuitable for the utility role in support of the Army, its purchase as a dedicated trainer was unnecessary. The CGS recommended that the five year programme should include six Sioux helicopters and six Helio Courier fixed wing aircraft for the Army. Another three Sioux helicopters would provide basic training for all pilots, while three Iroquois would cover the advanced training for the RNZAF.

Morrison's's recommendation was to equip a training unit with a general purpose helicopter. The CGS, by contrast, based his proposal on battlefield utility. Here the greater performance and compatibility of the Iroquois made it better suited to the needs of the Army than the Alouette. In responding to the CAS's recommendations, the CGS had written that ‘It is alleged that the Services do not always state the full implication of a new equipment policy. Army believe that in this case, Government should be given a full picture of the light aviation requirement, covering not only the present 5 year programme but also ... the continuation requirements in the subsequent period’.\(^{25}\) The Army based its recommendation on a narrowly focused, but longer term view. The RNZAF, by contrast,
had only attempted to address immediate needs but had considered the requirements of all the Services.

The Navy also had a pressing need for helicopters. A ‘Leander’ could detect a submarine at a range of 20,000 yards, but its anti-submarine mortar had an effective range of only around 1,000 yards. Modern submarines could fire their torpedoes from 9,000 yards. To regain the advantage, the Navy required a means to deliver an active homing torpedo at a range of 20,000 yards. This could be done with a Missle Carrier System or a remote control helicopter, but the Chiefs of Staff decided to use a manned helicopter.

The new ‘Leander’ was particularly dependent on its helicopter as an essential part of the ship’s weapons system. The Navy’s older frigates had two anti-submarine mortars, but the ‘Waikato’ had only one. The other had been removed to make way for the expected helicopter. The Secretary of Defence explained that ‘without the helicopter embarked the ship [Waikato] would be without its main armament’. Remarkably, the importance of Naval helicopters was not made clear to Treasury until 1965, by which time it was a matter of some urgency.

The CNS alleged that the CAS’s paper ‘is weighted in favour of the ALOUETTE III, and does scant justice to the WASP’. The CAS had claimed that the Alouette had been operated off ‘Leander’ frigates, but the CNS pointed out that this was misleading. The Alouette had landed and taken off from a ‘Leander’, but ‘This does not constitute “operating” from the frigate and it can, in fact, land on and take off from the LEANDER class only under extremely limited conditions of weather and ship-movement’. The Alouette had no blind-flying or all weather capability, nor did it have the necessary flight auto-stabilisation system. Thus it would require a number of modifications before it was capable of operating in the maritime role.
The CNS explained that the Wasp, although essentially the same as the Scout, had been developed later and had not suffered the same problems. The Wasp was expected to cost approximately 1% more than the Alouette, but it was more capable in the maritime role. In addition, the expense of modifying the Alouette to suit the Navy would increase the cost. The CNS acknowledged that the engine overhaul life of the Wasp's engine was 300-400 hours, but it was expected to rise to 800-900 hours within two years. The Alouette's engine had an overhaul life of 750 hours.

The Navy also placed great importance on compatibility with the Royal Navy. This was so that 'ships of the RNZN may operate RN helicopters, and RNZN helicopters may make use of RN ships and RN facilities, spare parts and stores'.

The Minister of Defence had directed that a single helicopter type should be chosen if practicable, but the different needs of the three services made this impossible. The RNZAF wanted a helicopter that would perform well as a trainer, with the flexibility to cover the battlefield and maritime roles. It was keen to avoid a multiplicity of types, and was the most enthusiastic supporter of a multi-purpose helicopter. However, the single helicopter solution, although suiting the Air Force, would have deprived the other services of specialist operational capabilities. The Army and the Navy were more interested in their own particular roles, and they chose helicopters accordingly. Compatibility with allies was also a greater concern to the other services than it had been to the RNZAF, which did not appear troubled by the prospect of operating a French helicopter.

The three Services were now recommending four different types, manufactured in three different countries. In May 1964 the CDS wrote that 'To date consideration of the various makes of helicopters which might be suitable for use by the Services has been handicapped by conflicting statements of performance and cost. Possibly there has also been a tendency to place undue emphasis on certain advantages. This situation could also arise when the
question of STOL aircraft is examined'. The CDS wanted the services to assemble agreed data on the performance and cost of contending helicopter and STOL aircraft types. Such information was to be provided for the following helicopter types: Bell 47G, Hiller 12E; Scout/Wasp; Alouette II and III; Bell UH-1D; and the Wessex 2. The CDS then directed that joint studies were to examine all the major questions concerning helicopters and STOL aircraft. The CDS thus set about enforcing a degree of cooperation in the face of growing disagreement. He also drew attention to the Minister's direction that a single type of helicopter should be purchased if possible.

The CDS also wanted a list of helicopters that Britain, the United States, Australia and Malaysia would be operating in South East Asia for the next five to seven years. He was considering compatibility with all of the major allies, rather than favouring any particular country. The direction to look only five to seven years ahead meant that compatibility could be evaluated against the contemporary situation. A longer forecast may have favoured American helicopters, as Britain’s presence would decline. However, New Zealand did not expect the British to leave South East Asia immediately.

These studies were aimed at producing firm recommendations for a light aviation programme to cover the next seven years. This was to include aircraft that could be purchased before 1967/68 with the £1 million available in the five year programme. The CDS suggested that these studies should be the first task of the recently established Joint Warfare Committee (JWC).

In August 1964 the JWC presented their evaluation of the Sioux, the Hiller, the Scout, Wasp and Alouette III. It concluded that the Wasp should be preferred to the Alouette III in the ASW role. The adoption of the Alouette would have necessitated expensive modifications to both the aircraft themselves and the ‘Leander’ frigates, which were designed to accommodate the Wasp. The Alouette was not capable of carrying two
torpedoes with sufficient fuel to provide the necessary endurance. The Wasp would provide compatibility with the Royal Navy, and would allow the utilization of maintenance facilities in Singapore.

The lingering desire to operate a single type meant that the Wasp was also considered for the Army and RNZAF helicopter roles.\(^{34}\) The Services concluded that it would be uneconomic to use this type on land. The Army was not satisfied with the Wasp’s lifting capability, while the RNZAF did not believe that it would be satisfactory in the training role.

The JWC also confirmed that the Sioux was the best choice for the LOH role. The Hiller met the specified requirements, but the Bell helicopter was preferred because of its cost, compatibility with allies, performance, maintenance requirements and service record. In addition, the Sioux was judged to be a better basic trainer. The JWC stated that ‘the source of production should be further investigated with a view to compatibility with the United Kingdom Army aircraft’.\(^{35}\) The committee recommended that six helicopters be purchased. Training could continue in New Zealand using requisitioned civilian helicopters if these helicopters accompanied the Brigade overseas.

The committee had also examined the Army’s requirement for a general purpose helicopter for close support on the battlefield. The JWC defined this role as ‘principally the rapid movement of men and supplies over relatively short distances where suitable landing sites are available’.\(^{36}\) The JWC evaluated the Alouette and the Westland Scout, which the British Army employed in this particular role. These two aircraft possessed similar performance, and the JWC believed that there would be little difference in capital costs. However, the Scout would be more expensive to operate. The Alouette could carry six passengers while the Scout could only manage four.\(^{37}\) The Alouette was also considered to be more suitable for flying training than the British helicopter. The Alouette was a well tried design.
The JWC explained that the British allocated four Scout helicopters to a Brigade Group flight for close support purposes. The committee believed that four Alouette III helicopters assigned to the New Zealand Brigade Group would meet the requirement equally well. Two more Alouettes would provide operational training.

This proposal calls into question the importance of compatibility with allied forces. The Bell 47G was preferred partly because it was in service with the British Army, yet the JWC explained that ‘in the Army role this factor does not carry as much weight as in the ASW role as 1st and 2nd line spares must be carried by the parent unit and all other servicing is done at base where adequate stocks will be held’.38

The committee considered that ‘within the finance available for provision of helicopters in the New Zealand Services, the best option is for 6 LOH (Bell 47G) and six Alouette III’. The JWC estimated that the total project cost was £851,921. It also explained that a study of SRT helicopters would be necessary when the time came to replace the Bristol Freighter.

The Alouette was considered more suitable than the Scout in the utility role. However, the Services then decided that neither of these helicopters would meet the needs of the New Zealand Brigade.39 The British Brigade had the support of larger helicopters that were able to carry the loads that the Scout could not manage. New Zealand would not have such aircraft, and thus would require a higher level of performance from the utility helicopters.

Following a meeting of the Chiefs of Staff on 6 August 1964, the JWC prepared a new paper comparing the Alouette, the UH-1B and the UH-1D.40 The larger, more powerful American helicopters possessed superior performance in a number of areas. The report noted that both Iroquois models could lift more than the Alouette. The Alouette had seating for six passengers, the UH-1B could carry eight and the UH-1D could manage twelve.
The JWC report noted that ‘Whilst in the RNZAF view the logistical problems associated with the introduction of a French aircraft are fundamentally no different to those of American or British origin, Army’s view is that logistical problems would exist within the ANZUK division’. The Army preferred an American helicopter as this would enable parts to be obtained through a new logistics arrangement.

The UH-1B was considered to be a proven aircraft, and it was in service with the United States and Australia. The JWC explained that earlier evaluations had assumed that the UH-1B would be significantly more expensive to operate than the Alouette III. However, the committee now believed that the difference in costs between the two types would be considerably less. The same was true of the comparison between capital expenditure. Perhaps the more accurate figures quoted by the joint committee demonstrate the merits of a combined evaluation versus a single service scheme.

The RNZAF still believed that the Alouette would be the better helicopter for pure pilot training, but conceded that both the UH-1B and D could be used. The Air Force did not consider these types to be ideal for training, and they would be less economical than the Alouette in this role. However, this seems to have been a concern that the Army did not share. Their focus was the operational performance of the helicopters under consideration.

The $1 million that had been allocated for light aviation left $545,811 for the purchase of utility helicopters. That was enough to buy either six Alouettes, five UH-1Bs or four UH-1Ds. The services had previously assumed that the choice would be between six Alouettes or three UH-1D helicopters. The JWC considered that six Alouettes would provide the most economic force, as well as the greatest flexibility. However, the Alouettes could not lift as much as either of the Iroquois options. The JWC believed that five UH-1B helicopters would provide more flexibility than the smaller force of UH-1Ds.
The UH-1D was more capable than the earlier UH-1B, but was more expensive to operate. Although the RNZAF did not believe that there would be any problems associated with the UH-1D, it lacked the proven service record of the earlier model. Nor had it been used extensively as a trainer. UH-1D cost $14,000 more than the B model, which meant that the available budget was insufficient to purchase the five aircraft that the services required. A force this size was necessary to cover both training and search and rescue. Accordingly, the JWC ruled that the UH-1B would best meet the requirement for a utility and training helicopter.

The British Whirlwind 10, which was in service with the RAF, was also evaluated for the utility role. The earlier models had been piston engined, but the Whirlwind 10 was powered by a gas turbine. The Whirlwind was an old design with little scope for development. Indeed the services believed that it would soon be obsolete. It was more expensive than the UH-1B, but could not match the carrying capability of the Iroquois.

In October 1964 the Secretary of Defence submitted his recommendations to the Minister. He explained that the £1 million provided for light aviation in support of the Army had been divided between helicopters and fixed wing aircraft: £850,000 for helicopters and £150,000 for light aircraft. Hunn proposed the purchase of five UH-1B Iroquois and six Bell 47G helicopters at a combined project cost of £838,000. He also sought approval for the selection of the Wasp for the Navy.

The Secretary advised that 'For Army support in South East Asia it will be essential in the future to have SRT helicopters capable of deploying supplies of heavy equipment and troops from the main airhead to units in the field.' Hunn believed that SRT helicopters would replace the Bristol Freighters, and he named the British Westland Wessex as a candidate. He also drew attention to the helicopter's unique abilities in the search and rescue role.
The submission to Cabinet explained that the RNZAF would be responsible for the operation of helicopters and light fixed wing aircraft, and would provide training and maintenance. Army officers would be trained to fly the Sioux and the light aircraft and would operate under the command of the Brigade Commander when appropriate. The utility helicopters could also be placed under his command but would normally remain under RNZAF control.

Cabinet approval was delayed by concerns over defence expenditure. The decision to purchase the Orions and C130s with cash instead of by loan meant that defence spending already exceeded the levels specified in the five-year plan. The Secretary to the Treasury acknowledged that ‘Helicopters are now accepted as necessary for support of an Army in the field’. However, the operating costs involved would force an increase in expenditure, and would erode any savings that might result from the Orion purchase. Treasury expected further demands for spending to cover the cost of light fixed wing aircraft, which could not now be obtained within the $1 million budget. In addition, the five-year plan did not include any provision for naval helicopters. This was at a time when economic difficulties had led Cabinet to direct that government expenditure for 1965/66 should be kept within present levels. The Government was advised that if it intended to follow the five-year plan, then the purchase of helicopters should not be approved. Treasury declared that ‘The stage has been reached where a re-assessment should be made of future Defence spending and a review of priorities made in relation to defence needs and the very high overseas content’.

The Acting Minister of Defence, P.B. Allen, informed Cabinet that ‘With regard to the Helicopter proposal the necessary priority has already been given to the acquisition of these aircraft .... None of the possible projects listed by the Services for the future will outrank helicopters in order of priority’. In April 1965 Treasury advised that work on a new defence programme had ‘confirmed that purchase of helicopters ranks first in order of
priority among equipment to be purchased’. The high priority, and the prospect of spreading the cost over two years, led Treasury to recommend Cabinet approve in principle the purchase of six Bell 47G and five UH-1B helicopters.

On 3 May 1965 Cabinet approved in principle the purchase of two Wasps, and confirmed the purchase of six Sioux helicopters and five Iroquois helicopters ‘or an equivalent later model’. The Army and the Air Force had reached agreement on the type of helicopter to purchase, but they disagreed over the particular model. The Army preferred the UH-1D because it could carry twelve soldiers, while the UH-1B could only accommodate seven. The RNZAF argued that the UH-1B, fitted with an improved rotor system, would offer better performance. However, the Services were eager to receive helicopters as soon as possible, and agreed that whichever model was available first would be acceptable. The Chiefs wanted to have at least one helicopter in November 1965.

The Minister of Defence then visited Washington and was told by Secretary McNamara that either model could be supplied. The US Army supported the selection of the UH-1D, and it was ‘evident that they would prefer to supply the UH-1D’. They also advised the RNZAF that the improved rotor system for the UH-1B would impose a significant weight penalty, and a system to provide logistical support for the rotor system could not be guaranteed for at least a year. Therefore the RNZAF would not now disagree with the selection of the UH1D if this were the general opinion of the Chiefs of Staff.

The debate over the model of Iroquois to be purchased demonstrates further the considerable influence that the Army had on the selection of helicopters. Not only did they succeed in securing the Iroquois rather than the Alouette, but they were able to obtain the exact model that they preferred. Accordingly, UH-1D helicopters were ordered in 1965.

The original plan to obtain a single type of helicopter, which was favoured by the Government and the RNZAF, gave way to the purchase of three different types.
occurred because the needs of the Army and Navy, not the Air Force, determined the helicopters chosen. The Navy wanted the Wasp, because it was compatible with the ‘Leander’ frigates and in service with the Royal Navy. The Wasp was unacceptable to the Army, which preferred the more capable UH-1. The RNZAF’s recommendation of the Alouette, although consistent with the direction to purchase a single type, was over-ruled by the other Services. The RNZAF was not concerned about operating a French machine, and they were willing to sacrifice some performance for flexibility. The Army and the Navy took the opposite view, and considered compatibility with allies to be a major factor. Two of the three types, the Wasp and the Sioux, were favoured because they were in British service. Indeed the Sioux is a good example of the difference between buying an American aircraft and a deliberate move away from Britain. The Army had more freedom of choice than the Navy, but they were not opposed to the purchase of a British helicopter per se. The US helicopters that were available were more modern than their British counterparts, and possessed higher performance. The fact that the Iroquois was in service with Australia was probably more significant than its American origins. It is also important to remember that the Army, like the Navy, was committed to fight alongside British units and to serve under British command. Therefore, there was no reason to reject British aircraft for the sake of standardisation with someone else. Besides, if the services were moving away from Britain and towards the US, and if American helicopters were available, why bother to evaluate British and French aircraft in the first place? And if the RNZAF had ordered C130s and Orions as part of a shift to the US, why was their next recommendation a French helicopter?
Notes

1 Wright, p.152.
3 ibid.
4 ibid., p.102.
9 See Chapter 4.
11 ibid.
13 ibid.
14 ibid.
16 ibid.
17 ibid.
18 The problem was related to fuel computer systems failure.
20 ibid.
22 ibid.
23 ibid.
24 He also suggested that pilots could be trained by civilians.
26 ‘Purchase of Naval Anti-Submarine Warfare Helicopters’, Secretary of Defence to Minister of Defence, attached to ‘Purchase of Naval Anti-Submarine Warfare Helicopters’ Secretary to the Treasury to Minister of Finance, April 1965, National Archives, ‘Helicopters’, T, 1, 42/255/72/1, box 38.
27 ‘Purchase of Naval Anti-Submarine Warfare Helicopters’, Secretary to the Treasury to Minister of Finance, April 1965, National Archives, ‘Helicopters’, T, 1, 42/255/72/1, box 38.
29 ibid.
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35 'Light Aviation in the New Zealand Services - Phase 1 - Helicopters', Annex to JWC (64) 2, dated 3 August 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
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37 'Comparison of General Purpose Helicopters: Comments, Performance, Specification and Costs, Appendix 'C' to 'Purchase of Helicopters for the Armed Forces', Secretary of Defence to Minister of Defence, dated 7 October 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
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40 'Comparison of Helicopter Types to Provide the New Zealand Army Brigade Support In the Field and Training Within New Zealand', Annex to JWC (64) 3, dated 10 August 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
41 ibid.
42 'Comparison of General Purpose Helicopters: Comments, Performance, Specification and Costs'.
43 'Comparison of Helicopter Types to Provide the New Zealand Army Brigade Support In the Field and Training Within New Zealand'.
44 'Comparison of General Purpose Helicopters: Comments, Performance, Specification and Costs'.
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47 'Purchase of Helicopters for the Armed Forces', Secretary of Defence to Minister of Defence, dated 7 October 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
48 ibid.
49 'Purchase of Helicopters for the Armed Forces', Memorandum for Cabinet, dated 11 November 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
50 'Purchase of Helicopters for the Armed Forces', Secretary to the Treasury to Minister of Finance, dated 3 November 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
51 'Defence Re-equipment Programme: Purchase of Helicopters for the Armed Forces', Secretary to the Treasury to Minister of Finance, November 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
52 'Defence Re-equipment Programme', Memorandum for Cabinet, dated 26 November 1964, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
53 'Purchase of Helicopters for the Armed Forces', Secretary to the Treasury to Minister of Finance, April 1965, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
54 'Purchase of Naval Anti-Submarine Warfare Helicopters', CM 65/15/4, National Archives, 'Helicopters', T, 1, 42/255/72/1, box 38.
56 ibid.
57 ibid.
Chapter Seven

The Combat Role and the Skyhawk

While most authors have said little about the reasons for the selection of the A4, Filer stressed the importance of financial considerations, stating that ‘the main reason for obtaining the Skyhawk was that it was the most suitable aircraft available within the price limit set by the Government.’ He also claimed that the RNZAF failed to realize that their stubbornness in recommending the F4 could have led to the Government not to purchase any replacements at all. Besides looking at financial considerations, Filer took into account the wider issues involved in the purchase of combat aircraft. He stated that ‘The debate over the Canberra replacements basically concerned the question of their role.’ Filer explained this debate with reference to the switch to South East Asian commitments, where ground attack would be the most useful role. He also saw the purchase of the A4, and the other major purchases of the era, as ‘part of the Air Force’s response to the general defence trend in the period away from ties with the UK and towards ties with the US and Australia.’ He also said that ‘The greatest factor in the Skyhawk’s favour was that it was cheaper... than the Phantom or Mirage.

This chapter will argue that attempts to secure combat re-equipment certainly took place against a backdrop of economic difficulties, particularly where the balance of payments was concerned. This meant that financial considerations generated, and then dominated, the debate over combat aircraft. This debate concerned not only the role and type of aircraft to be purchased, but also the very need for combat aircraft. The chapter will also consider the purchase in terms of compatibility with New Zealand’s allies.

The 1961 Review of Defence had accorded the highest priority to air transport, but in 1965 the CAS argued that ‘There is implicit agreement at all levels that New Zealand’s primary objective in defence must be to play its part effectively in deterring open war.’
Indeed, No. 14 Squadron had deployed to Singapore in 1964 as part of the allied effort to deter Indonesian aggression. The Review had assumed that New Zealand's allies would have sufficient combat aircraft available, but would be deficient in air transport. The CAS now claimed that Britain did not have enough combat aircraft in the region. The United States was stronger, but it was believed that they would expect their allies to make an effective contribution. Australia was playing its part by ordering F111s.

While the CAS was stressing the importance of the combat role, he was also conscious of the need for new aircraft. As early as 1961 the Australian Minister of Defence had said that the Canberra was obsolete against anti-aircraft missiles. The RNZAF reported that the United States had lost seven B57s (American Canberras) in South Vietnam during 1965. These losses had occurred in an area where there were no enemy fighters and no anti-aircraft weapons larger than the 50-calibre machine gun. Improving air defences, including MiG-21 fighters, meant that the RNZAF's Canberras would face even greater dangers if they went into action in South East Asia. The vulnerability of the Canberra, and the small size of the available force, led the CAS to estimate that the squadron could be lost in two months of war. The Air Force was also concerned that peace-time attrition would reduce the force further still, while remaining aircraft would require a disproportionate amount of maintenance.

Rolfe mentioned the role of service identity in purchasing decisions. The importance of combat aircraft to the RNZAF was obvious when the CAS declared that 'Without fighting equipment we are not a fighting service; we cannot attract and hold the calibre of men we need, and we cannot maintain the level of morale necessary to be an effective force'. The CDC acknowledged that combat aircraft 'were probably essential for the maintenance of a separate service'. In 1967 the Minister of Defence warned that 'it is doubtful if the RNZAF can be sustained as an effective force in other roles if its combat core is removed'.
He went on to explain that if the RNZAF was to continue as a separate service, then the combat role would have to receive the highest priority.

There was support for, and opposition to, the purchase of replacement combat aircraft on both sides of Parliament. In 1962 Labour’s Mick Moohan pointed out that Australia was planning to replace its Canberras with Vigilantes and he argued that it would make sense for New Zealand to do the same. He stated that ‘the most modern aircraft should be provided’. Labour’s defence policy at the 1963 election included the retention of the Canberra squadron. Then in 1966 Arthur Faulkner, another Labour MP, said that it would be better to buy more expensive combat aircraft as ‘New Zealand did not want to repeat a previous experience of having aircraft which were inferior in speed and operational capacity’. At the same time, National’s John Harrison said that there was no great difference of opinion between the two parties in regard to the requirements of the Air Force and Navy. On the other hand, Cabinet members Robert Muldoon and Tom Shand were opposed to the purchase of combat aircraft.

While there was some agreement on the importance of combat aircraft to the RNZAF’s identity, that did not necessarily translate into support for the Air Force’s preferred combat role. The light bomber/interdictor role had been debated at the time of the 1961 Review of Defence. The CAS had wanted strike aircraft to be given first priority. Those opposed to this suggestion argued that interdictor aircraft would only be useful in a large war, not in the limited conflicts that dominated defence planning at this time. The Army believed that helicopters should be given a higher priority. This was in contrast to the Australian Minister of Defence, who stated that ‘It was essential also to look at the bomber which could go out and hit the enemy’. Even then Australia was considering replacements for its own Canberras. However, the Review placed strike aircraft on the second level of priorities and halved New Zealand’s combat force by returning No. 75 Squadron’s Canberras to the RAF.
The CAS's first recommendation to replace the Canberra was the F111, and he put forward this proposal in an extraordinary fashion. Morrison was featured on the front page of the Press, explaining that in comparison to the F5 and the F4 the F111 was 'easily at the top with the flexibility of varage geometry and its ability to operate as a fighter or a bomber'. Morrison claimed that the F111 was the only aircraft capable of replacing both the Vampires and the Canberras then in RNZAF service. The F111 was the most capable aircraft under development and it offered performance that was far superior to the RNZAF's obsolete types. The F111 was expected to be in service with the United States, Australia and Britain. In terms of capability, flexibility and compatibility the F111 was a natural choice for the RNZAF. However, the F111 was neither a proven aircraft nor cheap - the CAS estimated that it would cost £1.5 million per aircraft, and he wanted two squadrons.

Morrison explained that 'we have to satisfy the Chief of Defence Staff, the Defence Council and the Government, but opinion in the Air Force is hardening'. Perhaps Morrison had anticipated the difficulties that would arise in attempting to secure combat replacement and was attempting to gather public support for strike aircraft. In February McIntosh had informed Laking that 'We are at present engaged in a review of defence and the Prime Minister is very alarmed lest this report should appear as a White Paper as the Government have promised and result in further pressure on the Government from the military and the press to do more in the defence field.' Morrison may have been aware of the Prime Minister's sensitivity to the press, and might have tried to exploit it.

The RNZAF had already fought a difficult battle to re-equip the anti-submarine role over the objections of the Army and the Treasury. The high cost of combat replacement was bound to provoke another debate, and this time the CAS chose to strike first.

Morrison was admonished by both his military and civilian superiors. The Minister of Defence explained that the Chiefs of Staff would have to decide what the RNZAF's combat role would be before any decision could be made on the type of aircraft to purchase.
went on to say that the new joint defence organisation was to obtain ‘unanimity in the three services on the kind of equipment which is best for all three - not equipment that is desirable for one particular service’.

Clearly Morrison’s proposal was at the very least premature, if not pre-emptive.

The 1965 Review of Defence, conducted by the Defence Council and the Ministry of Defence, duly concluded that the RNZAF should continue to operate combat aircraft. The Defence Council was then required to determine the specific combat role. The role chosen would then determine the cost of replacement aircraft. However, the Cabinet Defence Committee had already estimated the cost of replacement at £12 million, and it was this limit that determined the role.

Treasury suggested selecting the F4 rather than the F111 to replace the Canberra. However, while Treasury recommended that the planning figure of £12 million should stand, this

[did] not answer the fundamental question as to why we must get involved in Combat aircraft. In discussing various possible roles for combat aircraft such statements as ‘Indeed the overall allied air superiority during the period is such that there seems little point in New Zealand considering contributing to allied capability in this field’ appear.

The request for new combat aircraft was ill timed from the Government’s perspective. In October, when the CDC was considering a defence programme through to 1970, Treasury warned that ‘It seems clear that in the foreseeable future any increase in overseas expenditure will aggravate the present serious balance of payments difficulties.’ In December the Secretary of External Affairs wrote that ‘The Government are in a thorough financial mess, somewhat of their own making....Hence the deplorable attitude towards defence’.
The Defence Council considered three potential combat roles: counter-air/interdiction, close air support and air defence. New Zealand faced no air threat, so the Council concluded that the purchase of dedicated fighter aircraft was not justified. Counter-air/interdiction was considered a useful role and was favoured by the RNZAF. However, the Council believed that this role would require ‘highly sophisticated and costly aircraft such as the F111, the acquisition of a squadron of which is beyond New Zealand’s financial resources’. The interconnected nature of the questions of role and cost is demonstrated by this decision. The Defence Council could not recommend a role which the Government could not afford to equip. Jack Hunn, the Secretary of Defence, later wrote that ‘I could not be persuaded later on that the American F-111 fighter-bomber should be selected to replace the aged Canberras; so this RNZAF proposal was never formally submitted.

The Defence Council favoured the close air support role. However, the cost of such aircraft was probably as important as their usefulness in determining this role. Indeed the Air Staff Requirement (ASR) that resulted from the Defence Council’s decision stated that financial and other considerations had led to the selection of the close air support role. Close air support did not require the same level of sophistication, and therefore expense, as the interdictor role. The ASR stated that the requirement for a long-range interdictor aircraft would remain, though its future would depend on government policy.

The CAS wanted air defence and counter-air/interdiction to be secondary roles. The Defence Council would not go that far, but decided that replacement aircraft would also have some air defence and counter-air/interdiction capability. Air defence and interdiction were more demanding missions than the primary role, and these specifications ruled out the use of a specialized counter-insurgency aircraft. In 1966 Morrison explained that the requirement for a replacement aircraft to possess some interdiction capability ‘meant simply that it had to have the power to penetrate to the heart of an enemy and deliver a lethal “punch”. This was the type of mission that the F111 was designed to carry out and it was
far removed from the intention to provide close air support in ‘likely future emergencies’. This suggests that the RNZAF wanted to obtain the most capable aircraft that they could get, regardless of the precise role set by the Government.

The draft white paper circulated in 1966 announced the new combat role and advised that the Government would soon be placing an order for replacement aircraft.42 Treasury’s view was that ‘The purchase of combat aircraft appears to be one of the least essential items at this time in terms of our treaty commitments’.43 This low priority was in contrast to the high cost involved, and Treasury cautioned that the actual figure could exceed the £12 million estimate. Treasury believed that the Government would have to use Export/Import Bank credit from the United States to spread the cost of the purchase, and that this would worsen the balance of payments situation. The 1966 Economic Review had drawn attention to a deterioration in the balance, describing it as ‘the most serious problem facing the country at the present time’.44 Treasury recommended that any decision on combat aircraft should be delayed until 1967/68 at the earliest.45

When the Review of Defence Policy was published in 1966 it announced that new combat aircraft would be ordered in time to be operational in 1970.46 It also confirmed that the primary role of the new aircraft would be close air support, and that suitable aircraft would have some air defence and counter air/interdiction capability. When opposition to the purchase of combat aircraft stiffened, the Minister of Defence reminded his colleagues of the undertaking to replace the Canberras by 1970 and warned that ‘a retraction from this concept, or a suggestion of a further general review of defence policy, would draw widespread public criticism’.47 Morrison had employed a similar argument when pressing the Prime Minister to order five Orions.

Once the first-rate F111 was ruled out, the RNZAF shifted attention to less expensive aircraft. In fact, the RNZAF had planned to replace the Canberras with aircraft of the F4 type prior to the F111 proposal.48 The chief remaining contenders were the F4, the Mirage
III and later the Mirage V, and the F5. The Mirage III and the more expensive F4 represented the second tier of combat aircraft in terms of cost. The F5 was much cheaper still, and at least one rung further down. In fact, the F5 had been chosen for the American Military Assistance Program because its low cost and lack of sophisticated equipment made it a suitable aircraft for developing air forces.

The F4 and the Mirage were in the same order of costs, but the RNZAF preferred the F4 because of its superior performance. The F4 was in service in large numbers with the United States Air Force, Navy and Marines. During the Vietnam war it was used extensively in the close air support role, but it was such a capable aircraft that it possessed great flexibility. This meant that the F4 could be employed in a variety of ways, including the interdictor role that the RNZAF preferred.

In December 1966 the Minister of Defence recommended to Cabinet the purchase of 16 F4E aircraft. The F4 had been chosen from a shortlist that included the F5, the Mirage III and Mirage V. The superiority of the F4 was apparent in the summary provided by the Minister:

Of the four short list aircraft, the F4 best meets all possible requirements of operational performance. In addition it has the advantage in respect of compatibility/mutual logistic support and it has the longest potential operational value including the wider roles. Although the F4 is the most expensive aircraft of the four, it has the highest performance, and a force of F4s would represent the best value from the cost effectiveness and flexibility viewpoints.

Morrison accepted that the performance of the F4 was greater than that required by the role at that time, but he claimed that this would enable the aircraft to serve for at least ten years. The superior performance of the F4 came at a heavy cost: the sixteen aircraft proposed by the Minister of Defence were expected to cost £19 million, which was nearly
60% more than the planning estimate. This figure was also substantial when compared to the total defence expenditure in 1962/63 of £28.1 million. A revised proposal was then put forward recommending an initial purchase of eleven F4E aircraft. The acquisition would then be completed by a follow-on purchase in the 1970s.

The very high costs involved in the purchase of F4s led Treasury to make a thorough examination of this proposal. Treasury argued that New Zealand had made no commitment to provide combat aircraft and was not obliged to do so. It was also suggested that money might be better spent on other kinds of aircraft, or on equipment for the Army. Treasury pointed out that the Army considered equipment for its Field Force to be of a higher priority than ground support aircraft. This was significant, given that close air support would be provided for the Army's benefit. Modern aircraft would have much higher operating costs than the Canberras. New jet trainers would also be required, adding further to the cost of combat re-equipment. Treasury urged the Government to 'avoid further overseas expenditure unless absolutely essential. This applies particularly in this case as aircraft give no economic return and increase the use of overseas funds'.

Treasury believed that the F5 would be a suitable replacement for the Canberra. They pointed out that the F5 was in service with thirteen countries and had achieved a good record in Vietnam. The F5 also had supporters within the Government, including, at an early stage, the Minister of Defence. In December 1965 The Press reported that Dean Eyre 'left little doubt... that the favoured plane would be the Northdrop F5'. He believed that the F5 would be suitable aircraft to meet New Zealand's needs. Robert Muldoon, the Under-Secretary of Finance, who did not want to purchase new combat aircraft, believed that the F5 would be suitable for New Zealand. The F5 was favoured because it offered adequate performance at a much lower cost than the F4. Indeed Morrison had estimated that the F5 would be only half the price of an F4.
In March 1967 the CDC decided to defer a decision on the ordering of replacement aircraft for six months. The Government was forced to restrict defence spending by a sharp fall in the price of wool and the accompanying balance of payments difficulties. In June 1967 the Minister of Finance wrote that 'The economic difficulties which confront us today are the most serious New Zealand has had to face at any time since before the Second World War.' This was hardly an opportune time to request large expenditure to equip a contentious role. The financial statement advised that 'consideration will be given to the question of combat aircraft for the RNZAF.' The CDC had decided to postpone the order, but this published statement was a much more ambivalent undertaking.

The cost of combat aircraft was generating considerable opposition to the continuance of the role. By 1967 the CDS believed that 'it is clear that separate reassurance is called for in respect of the combat role, essentially because of the economic difficulties that have arisen since this Government policy was evolved.' The CDC investigated the possibility of obtaining combat aircraft through barter trade. It also considered whether or not allies might make aircraft available if New Zealand supplied the crews. Nothing came of these proposals, but they suggest that the opposition to the purchase of combat aircraft was a matter of financial concern rather than principle.

To ease the burden of defence spending, the Government entered into a Military Sales Agreement with the United States Export/Import Bank in February 1967. Filer suggested that the availability of American credit may have helped turn New Zealand towards the United States as a source of military aircraft. However, New Zealand had chosen to pay cash for the Hercules and Orion, and had selected American helicopters before this agreement was entered into. In fact, it appears that the Government arranged a line of American credit because it was going to purchase combat aircraft from the United States. In October 1966 External Affairs had advised their representative in Paris that 'current negotiations with the Americans for a substantial long-term credit for defence purchases
have been based in large measure on a presumption that New Zealand will be placing an
order with them for combat aircraft. This was a reasonable assumption, given that the
two main options, the F4 and F5, were manufactured in the United States.

In 1967 the Chiefs of Staff again proposed the purchase of sixteen F4 aircraft in two
batches. The initial purchase of eleven aircraft was expected to cost $25 million. Then
in October the Cabinet Defence Committee asked the Minister to make recommendations
within a limit of $15-$20 million. The recent devaluation of the New Zealand dollar
meant that $20 million was insufficient to purchase an adequate number of F4s, F5s or
Mirage Vs. Sixteen F4s would cost $44 million dollars, while it would cost $32 million to
purchase Mirages. Even a force of F5s would cost $25 million.

The following year the Chiefs of Staff ruled that the F4 was too expensive and would be
dropped from consideration. The Mirage was the most capable aircraft after the F4 but
there were a number of concerns about its suitability for New Zealand service. However,
the cost of buying and operating Mirages was the decisive factor. At $30 million the
Mirage was cheaper than the F4 but a good deal over the proposed $20 million dollar
budget. Financial pressure ruled out aircraft of the F4 class and forced the RNZAF to lower
its sights once again. The Air Force did not believe that the F5 was a suitable aircraft, and
chose the American A4 to replace the Canberra.

The A4 had been considered previously, but it could not compete with the capabilities of
the F4. However, it was a proven aircraft that had earned a good reputation in service in
Vietnam. It was in service in large numbers with the United States Navy and Marines and
had been purchased for the Australian Navy.

Treasury remained opposed to combat re-equipment and continued to argue that New
Zealand was not obliged to provide such aircraft. They also drew attention to the fact that
Cabinet had not confirmed the combat role since the 1966 White Paper, and argued that any
purchase should be delayed until a new review of defence had been completed. However,
Treasury acknowledged that if the availability of Export/Import Bank credit was the only consideration, then the A4 would represent the best value for money. Their advice to the Government was to delay any decision until after five nation defence talks in June 1968. If this gathering confirmed the need for combat aircraft, then Treasury would support the purchase of Skyhawks.

Financial pressure had forced the RNZAF to settle on an aircraft that even Treasury could accept. Cabinet approved the purchase of Skyhawks on 10 June 1968. The timing of the decision was no doubt influenced by the expiration of the Export/Import Bank credit, but it should also be noted that New Zealand’s balance of payments position had improved in 1968.

The purchase of combat aircraft demonstrates how confused the issue of compatibility can become. Filer said that ‘Britain was not producing modern combat aircraft suitable for New Zealand’s requirements, a fact which accelerated the Air Force’s shift away from links with Britain and the RAF’. The F111 was an American aircraft, but with the demise of the TSR 2 there were no British aircraft of this kind available. In fact Britain had decided to obtain F111s itself when the TSR 2 programme was cancelled. The F4 was also an American aircraft, but it too featured in British plans. When the British Chief of Air Staff visited New Zealand in 1966 he explained that the RAF would be deploying F4s worldwide. He went on to state that there would be ‘obvious advantages in commonality of equipment’ if New Zealand bought the F4. In 1967 David Thomson, the New Zealand Minister of Defence, explained to the Cabinet Defence Committee that amongst the advantages offered by the F4 was the fact that it was operated by both Britain and the United States:

It will be in front line use with the United States Air Force, United States Navy and United States Marine Corps in the operational theatre, and, in modified
forms, with the Royal Air Force and Royal Navy, and it has the great advantage of compatibility and mutual logistics support with our United States ally.\textsuperscript{74}

The Minister of Defence went so far as to attribute the demise of New Zealand plans to purchase F4s at least in part to Britain's decision to withdraw from South-East Asia.\textsuperscript{75} This meant that New Zealand would not be able to receive support for F4s deployed to Australia, Singapore or Malaysia. In truth this was not important to the decision taken, because the Government could not afford to buy F4s and would not have done so if Britain had remained in the region. It is significant that the Government did not expect to receive support from the United States in the area where New Zealand was most heavily committed. However, the RNZAF seemed to place more emphasis on compatibility with the United States during this time than it had done previously. In 1966 Morrison had argued that New Zealand would become more dependent on the United States for logistical support, and that this made standardisation of equipment necessary.\textsuperscript{76} It may be that the RNZAF emphasised the importance of compatibility to strengthen their argument in favour of the F4. David Thomson advised Cabinet that if the A4F was 'deployed forward with Allied Air Forces, however, we should have to make some provision to support ourselves'.\textsuperscript{77}

Treasury and the Minister of Finance preferred the F5, despite the fact that it was not in service with either Britain or the United States. The question of compatibility may not have carried much weight with the Government, for whom the cost involved was of prime importance. Ultimately, the lack of contending British aircraft types, and the willingness of the RAF to acquire American aircraft, makes it difficult to determine the extent to which the Skyhawk purchase was part of a move away from Britain and towards the United States.

Compatibility with Australia also presented problems. The Australians had ordered the F111, and would therefore share a common strike aircraft with the United States. The RNZAF could not standardise in this role because of the cost. Then in choosing to recommend the F4, the RNZAF selected an American aircraft that the Australians did not
operate. Morrison explained that 'The Australians, with close land-masses, wanted an interceptor-fighter, and in the Mirage that is what they got...But in our isolated position we require a plane with “long legs” - a plane which can fulfil several roles effectively, and which particularly has longer range. The Mirage does not have this'. In this case New Zealand could not standardise with Australia because of differing requirements. If the Government had chosen to purchase Mirages, then the RNZAF would not achieve compatibility with the United States, which did not operate this aircraft.

The RNZAF had found itself in a similar situation to that which had occurred between 1958 and 1961. The Government would not order combat aircraft in the years 1965 - 1967, regardless of the efforts of the CAS, because of the poor state of the country’s balance of payments. The Government was reluctant to spend money on defence, and was no doubt wary after the heavy expenditure that had followed the implementation of the 1963 plan. The RNZAF, however, viewed combat aircraft as the most important part of the re-equipment programme. Indeed combat aircraft were considered vital for the Air Force’s efficiency, identity and survival as a separate service. The role had been chosen to minimise the cost, but the actual requirements of the role had little to do with the selection of aircraft. The RNZAF wanted the most capable aircraft that it could get, regardless of the role specified by the Government. The Air Force had favoured the F4 back when it was planning to continue operating interdictors; it still favoured the F4 when close support had been identified as the new combat role. Yet the high cost of combat aircraft called into question the need for any combat replacement at all in such difficult times. This questioning exerted considerable pressure on the RNZAF and forced them to lower their aim twice: firstly, from the F111 to the F4; and secondly, from the F4 to the A4. The cost of the aircraft was the crucial factor in securing re-equipment. Arguments based on compatibility and performance could not convince the Government to order an aircraft they considered to be too expensive. Regardless of how important these considerations were to
the Air Force, they could not persuade the people whose opinions really mattered. It is
difficult to assess just how important compatibility with the United States was to the
RNZAF. It seems unlikely that the RNZAF would have chosen an American aircraft of
lesser performance over a superior British aircraft just for the sake of compatibility. The
move to a limited war scenario is arguably the more important factor, as the low threat faced
by New Zealand meant that the Government could not justify great expenditure on combat
aircraft in times of economic difficulty. This meant that cost was the most important
consideration in the selection of the A4.
Notes

1 This chapter is drawn largely from a research exercise I completed on the A4 purchase.
3 Ibid., p.87.
4 Ibid., p.110. Wright states that the choice reflected the expected role of the RNZAF as an alliance partner.
5 Filer, p.106.
6 Effectiveness of RNZAF Strike Wing', Minute No.15/1965, dated 27 Jan 1965, Air 051/1/12.
8 Effectiveness of RNZAF Strike Wing', Minute No.15/1965, dated 27 Jan 1965.
10 'Timing of Combat Aircraft Re-equipment', CAS to CDS and Minister of Defence, dated 3 March 1966, Air 051/1/12.
11 'Effectiveness of RNZAF Strike Wing', Minute No.15/1965.
12 'Timing of Combat Aircraft Re-equipment', CAS to CDS and Minister of Defence, dated 3 March 1966, Air 051/1/12.
13 Rolfe, p.130.
14 'Timing of Combat Aircraft Re-equipment', CAS to CDS and Minister of Defence, dated 3 March 1966, Air 051/1/12.
15 Minutes of Cabinet Defence Committee 6 October 1965' dated 7 October 1965, National Archives, 'Defence Committee meetings 1961-70', AAFD 811, w3738, 222/2/2.
16 RNZAF Combat Role', D (67) 8 dated 15 August 1967, National Archives, 'Defence Committee papers', AAFD 811, w3738, 222/2/3.
24 Ibid.
26 The Press, 1 July 1965, p.3.
27 The new organisation included a Defence Council to coordinate the activities of the three services. Its members included the three Chiefs of Staff, hence the need for unanimity.
28 The Press, 1 July 1965, p.3.
29 'Defence Programme 1965-70' - Cabinet Defence Committee, D(65) 1, 13 August 1965, National Archives, 'Defence of the Pacific - General', AAFD 811, w3738/1321, 224/1/1.
32 Ibid.
34 McIntosh to Corner, dated 22 December 1965, Unofficial Channels, p.338.
38 'Cabinet Defence Committee - Defence Programme 1965-70', D (65) 3, 4 October 1965.
39 'RNZAF Air Staff Requirement No 12/Air for a Tactical Combat Aircraft.', Dec 1965, Air 051/1/12.
51 'Combat Aircraft Study', CAS to CDS, dated 11 March 1966, Air 051/1/12.
52Draft of 'Combat Aircraft Re-equipment', CAS to Prime Minister, 1966, Air 051/1/12.
57 ibid.
58 'Combat Aircraft Study', CAS to CDS, dated 11 March 1966, Air 051/1/12.
62 'RNZAF Combat Role', Chief of Defence Staff, 27 June 1967, DEF 41/12 vol 3.
63 Cabinet Defence Committee minutes 5 December, dated 7 December 1967, National Archives, 'Defence Committee meetings 1961-1970', AAFD 811, w3738, 222/2/2.
64 ibid.
67 Filer, p.110.
69 'RNZAF Combat Role, And Canberra Aircraft Replacement', Chiefs of Staff Committee, COS (67) 81, dated 1 August 1967, DEF 41/12 Vol 3.
71 'Combat Aircraft for the RNZAF', extract from the minutes of chiefs of staff Committee meeting of 15 March 1968, COS/M (68) 6, DEF 41/12 Vol. 4.
73 The Press, 26 March 1966.
75 Cabinet Defence Committee minutes dated 21 March 1968, National Archives, Defence Committee Meetings 1961-1970, AAFD, 811, Acc w3738, 222/2/2.
76 'Draft of 'Combat Aircraft Re-equipment', CAS to Prime Minister, 1966, Air 051/1/12.
Chapter Eight
The Training Role and the Airtourer, Strikemaster and Airtrainer

Following the major re-equipment programme of the 1960s, attention turned to the acquisition of modern training aircraft. Filer mentioned that in 1965 a joint RAAF-RNZAF team investigated various jet trainers. Australia chose to produce the Macchi trainer and hoped that they would be purchased by New Zealand, 'particularly in view of the establishment of the Australia/New Zealand Joint Defence Production Sharing Agreement in September 1969'. However, New Zealand obtained instead 10 British-built Strikemasters to replace the Vampires, Harvards and Devons. Filer noted that the Australians were disappointed, but 'on both technical and financial grounds the Strikemaster was a better plane than the Macchi'. He also saw in the Strikemaster purchase further evidence of the financial limits on New Zealand defence acquisitions. The RNZAF wanted to buy 24 Strikemasters, or at least 18. However, they were only able to purchase 10. Other commentators relate the purchase of Strikemasters simply to the need for a new jet trainer. Bentley and Conly said of the Airtrainer purchase that 'There was no controversy about the choice. The Air Force was already committed to the purchase of the Strikemasters and needed a basic trainer, particularly one with an instrument capability, that would take pilots halfway through their training'.

This chapter will explain why Airtourers, Strikemasters and Airtrainers were purchased for the RNZAF. It will consider the commercial reasons behind the selection of Airtourers and Airtrainers for the RNZAF, and will argue that the Government was persuaded that these purchases would assist the company's efforts to sell aircraft to foreign air forces. It will highlight the importance of the trade considerations surrounding the purchase of the Strikemaster. Regarding the Airtrainer purchase, it will argue that the RNZAF had
intended to adopt ‘all through’ jet training on Strikemasters, so that pilots would complete almost all of their training on jet aircraft. However, financial constraints meant that it was unable to purchase enough Strikemasters to achieve this. The RNZAF then developed a revised programme utilizing the piston-engined Airtrainer.

Aero Engine Services Limited (AESL) of Hamilton acquired the rights to manufacture the Victa Airtourer light aircraft in 1967. The Airtourer Division lost money, and in 1969 the Board of Directors sought assistance from the Government, complaining that the Air Force had failed to order any Airtourers, and ‘is allegedly to evaluate competitive overseas aircraft’. They sought an order for Airtourers from the RNZAF, and asserted that a New Zealand purchase would enhance the aircraft’s reputation and improve the prospects for sales to foreign air forces.

The Department of Industries and Commerce and the Ministry of Transport agreed that attempts to sell the Airtourer overseas would benefit from an RNZAF order. In September 1969 the Minister of Defence, David Thomson, told Cabinet that there was the possibility of selling 24 Airtourers to the RAAF, and that if this occurred ‘it would greatly enhance the value of the Australian New Zealand Joint Defence Production Arrangement’. The RNZAF intended to obtain a few light aircraft when jet trainers were introduced into service in 1971/72 - 1972/73 and the Harvards retired. However, there was no provision for light aircraft in the 1969/70 estimates.

The Minister explained that there were some training tasks for which the size and complexity of the Harvard were a disadvantage. The RNZAF believed that a light aircraft could perform these roles more efficiently. A number of types were evaluated, and the Air Force concluded that a modified Airtourer 150 would be suitable. Thomson sought approval for the purchase of four aircraft and spares at a cost of $80,000. Three Harvards would then be withdrawn from service, which would result in estimated savings of $12,000
p.a. Treasury, the Secretary of Transport and the Secretary of Industries and Commerce supported the proposal.

Cabinet deferred a decision on the purchase of Airtourers\textsuperscript{10}, apparently unconvinced that it would lead to increased overseas sales in the light of mistaken reports that the company was already producing at full capacity.\textsuperscript{11} Having corrected this misapprehension, the Minister of Transport, J.B. Gordon, told Cabinet that if the sale of four Airtourers to the RNZAF went ahead, then AESL ‘can be virtually certain of receiving an initial order for 20 Air Tourers from the Royal Australian Air Force within the next month or so with a probable further order for another 20 at a later date’.\textsuperscript{12} AESL had only sold 41 Airtourers since April 1967, so the sale of 40 aircraft to the RAAF would have been a major boost for the company. Cabinet therefore approved the purchase of four Airtourer 150 aircraft on 15 September 1969.\textsuperscript{13}

In 1956 the RNZAF had planned to acquire Provost type jet trainers, with the first expenditure programmed for 1958/59.\textsuperscript{14} However, in 1970 pilot training was still carried out in Harvards that had trained pilots for the Second World War, and Devons that had been in use for 19 years.\textsuperscript{15} Obsolete Vampires were used for operational training and strike conversion. These elderly aircraft lacked the performance and sophistication required to prepare pilots to operate modern types. Furthermore, their service lives were coming to an end. The Minister of Defence warned that ‘There are already grave technical support problems for the Devons; the Vampires cannot be kept in the air beyond 1972 without risk of technical collapse and heavy and unjustifiable expenditure.’\textsuperscript{16} If the Devons and Vampires were retired, the Harvards and Airtourers would be the only trainers available after 1972. Pilot training could not be maintained with those aircraft alone, so the RNZAF needed a new jet trainer in service by late 1972. The Minister advised that the prospect of training pilots overseas had been considered. However, training with the USAF was too
expensive, while it was unlikely that the RAAF would be able to accommodate RNZAF trainees as they were experiencing problems with their training programme. The Minister also believed that it would be cheaper to train pilots in New Zealand than in Australia. In May 1970 Cabinet approved a five-year defence programme which included the purchase of jet trainers.

There were two principal contenders for the RNZAF order. The Macchi MB326H was an Italian design built under licence in Australia, while the BAC 167 Strikemaster was a British aircraft. The Macchi had been the leading contender because it was in service with the RAAF. In March 1965 the Minister of Defence, Dean Eyre, had announced that the RAAF and RNZAF would conduct a joint evaluation of jet trainers. He stated that since 1957 government policy had sought closer defence co-ordination with Australia, meaning that 'the two countries should work towards compatibility and, where possible standardization of defence equipment'. Eyre considered the joint evaluation 'a practical step towards an “ANZAC” approach to flying training'. He added that there would be no commitment to purchase aircraft. Morrison expressed similar views the following year, when he predicted that RAAF and RNZAF pilots would train together at Wigram before the end of 1966. He said that the Australians ‘have approved the Macchi trainer, and have set up a Macchi jet trainer production line. I believe we shall come to accept this aircraft’. In 1968 the Minister of Defence told Cabinet that following the introduction of Skyhawks, Canberras and Vampires would be used for training until they were ‘replaced by a force of jet trainers, probably Australian Macchis’.

The case for the Macchi seemed to strengthen in 1969 when the Australian and New Zealand Ministers of Defence signed a memorandum of understanding on co-operation in defence supply. The objectives of the agreement included standardisation of equipment, maximum self sufficiency in production and maintenance, and maximum reciprocity in
Purchasing Macchis would be a step towards standardisation and self-sufficiency, but it would only worsen the substantial trade imbalance between the two countries. Thus there was a significant tension at the heart of the agreement. Maximum reciprocity would have little value for New Zealand as long as the country was unable to produce expensive military equipment. The cost of one large acquisition, such as jet trainers, might never be recovered. This imbalance was demonstrated in October 1969 when there was some suggestion that Australia would buy Airtourers if New Zealand bought Macchis. The Secretary of Industries and Commerce argued that ‘To talk in terms of some form of deal Airtourer ($0.5m) / Macchi ($6m) is the classic case of the sprat and the mackerel with the mackerel going to Australia’.

Australian experience with the Macchi also gave concern over its suitability. There was no guarantee that its fatigue life would enable it to serve for a reasonable period of time - an important economic consideration. There had also been a significant increase in the price of the Macchi, and it could not be used for weapons training without expensive modifications. The fly away cost of the Macchi was $496,800 against $518,400 for the Strikemaster. However, the need for modifications meant that the total cost of a Macchi purchase would be $9.335 million, compared with $9 million for Strikemasters. The operating costs of the Macchi had also proven to be higher than anticipated. On the other hand, the Strikemaster was considered to offer ‘distinct advantages and economies in relation to the other contender on technical and logistic grounds’.

Thomson told Cabinet that ‘The conclusion is plain; the BAC Strikemaster is the preferred aircraft for the next 15 years’. Once again the RNZAF had chosen an aircraft primarily on its technical merits, rather than its potential for commonality with allies. The price difference between the Strikemaster and the Macchi was not great, and the RNZAF might have argued that it was a
reasonable premium to pay if standardisation with the RAAF was a major concern. However, the RNZAF instead simply chose what it believed was the better aircraft.

The timing of the jet trainer purchase meant that trade considerations assumed great significance. In November 1970, the Deputy Prime Minister, John Marshall, was to travel to London to argue for preferential access to British markets following that country’s entry into the EEC. The Secretary of Foreign Affairs, George Laking, commented that

Cabinet will doubtless wish to take into account the desirability of drawing maximum advantage in our trade negotiations from its decision on this question. Since technical considerations point towards the purchase of the Strikemaster we are not faced with the difficult decision whether to over-ride those considerations in order to favour a British manufactured aircraft at this time.\textsuperscript{27} Laking hoped that a decision would be taken in time for Marshall to make use of it during the pending negotiations. The British Government was keen to see an order placed for Strikemasters, and the Minister of Defence was aware that Marshall would be approached on the subject while in London.\textsuperscript{28} Clearly the British had seen the opportunity that the vital trade negotiations presented to their aircraft salesmen.

While the decision to purchase Strikemasters was beneficial to relations with Britain, it was certain to displease the Australians. Thomson informed Cabinet that the Australian Minister of Defence would be in Wellington for talks on defence supply while Marshall was at work in London. He acknowledged that ‘If this order for aircraft goes against Australia it does hit at the aim of the arrangement’.\textsuperscript{29} However, he reminded Cabinet that the agreement on defence supply was intended to ensure maximum reciprocity in purchasing, and that New Zealand’s defence purchases from Australia since the agreement amounted to $3 million against a mere $40,000 worth of orders received. At the Ministerial meeting Thomson stated that ‘Not unnaturally New Zealand’s attention focused on ways and means
of reducing the imbalance in trade which exists in terms of the Arrangement’. New Zealand would not be able to achieve this aim if it bought Macchis.

While New Zealand’s relationship with Australia was a crucial aspect of defence planning, the trading links with Britain were far more important at this time from the Government’s perspective. The concern for the relationship with the United Kingdom was apparent even in the relatively minor purchase of jet trainers, and is evidence of the broad view that the Government took in purchasing matters. The fact that Laking would even admit the possibility of over-riding technical merit in favour of trade benefits suggests that the RNZAF would have faced considerable opposition if it had recommended the Macchi.

While there was general acceptance of the requirement for new jet trainers, the number of aircraft to be purchased was a matter of controversy. The RNZAF recommended commencing ‘all through’ jet training. The RAF had adopted this system in the late 1950s, and in 1956 the retiring CAS said that the RNZAF ‘along with all progressive air forces, is examining whether it should turn over to all-jet training’. The intention to introduce this syllabus was evident in equipment plans prepared during the 1960s. An estimate of capital expenditure prepared in 1961 included 20 aircraft to replace the Harvards and Vampires at a cost of £1.3 million. In 1969 the defence programme submitted to Cabinet included ‘20 trainers to enable disposal of Vampires, Harvards and Devons and to meet training standards required for the RNZAF operational fleet’. By 1970 the RNZAF planned to undertake 14% of wings course training in light piston-engined aircraft and 86% on jets. Eighteen Strikemasters were required to institute this pattern. Three Harvards would be retained, along with some Devons for navigation and air electronics training. All of the Vampires and the remaining Devons and Harvards would be sold, a total of 56 aircraft.

The approved defence programme included $7.8 million for the acquisition of jet
trainers, which was sufficient to buy 10 Strikemasters. The purchase of 18 aircraft required a further $2.5 million within the five-year programme, either from additional government expenditure or from savings elsewhere within the plan. However, ‘In view of the known financial constraints...the Defence Council (with the reservation from the Chief of Air Staff) has not felt able, because of the resultant penalties on other activities, to support a recommendation for the purchase of the necessary additional 8 aircraft involved’. The other Chiefs were not willing to sacrifice their own funding for the sake of the RNZAF. The Defence Council recommended that the original purchase be restricted to 10 aircraft, but ‘recognized that serious issues would be raised if the final number of aircraft was restricted to that figure because it in no way matched the RNZAF’s professional assessment of the requirement for “all through” jet training of pilots’. Treasury did not support additional funding, because of the need to limit Government expenditure. The purchase of only 10 jet trainers meant that the Harvards and Devons had to be retained for pilot training, with the Strikemasters replacing the Vampires in the strike conversion role only.

On 21 December 1970 Cabinet confirmed that the initial purchase would be restricted to ten aircraft. There was an option to order eight more Strikemasters within six months, but the Defence Council did not seek Cabinet approval for the purchase of the additional aircraft within the time limit.

In 1973 a study was undertaken to determine the most cost-effective method of training pilots for the RNZAF. One way to reduce the cost involved was to increase the proportion of training on light aircraft, and the CAS concluded that 38% of the wings course could be conducted on the Airtrainer. The move away from all-through jet training may also have been influenced by Australian experience with this scheme. The RAAF had introduced all-through jet training in 1969, but it reverted to basic training on the piston-engined Winjeel.
after just two pilots course.\textsuperscript{43} The Winjeel was then replaced by the Airtrainer. The RNZAF planned to make even greater use of the Airtrainer than the RAAF.

In February 1974 the Labour Minister of Defence, A.J. Faulkner, informed Cabinet that the RNZAF was still conducting flying training to wings standard on the Harvards, which had been in service for 32 years, and Devons that had served for 25 years.\textsuperscript{44} He stated that 'apart from the problems of maintenance and supply of spares, this combination falls well short of the requirements for the training of pilots'.\textsuperscript{45} Cabinet was advised that BAC planned to close the Strikemaster production line following the completion of six aircraft under construction. These aircraft would be available to the first customer to place an order. The Government had to make a decision quickly if it was to complete the re­equipment of the RNZAF with a single type of jet trainer.

The RNZAF had chosen the Airtrainer to serve alongside the Strikemaster. This aircraft had been developed by AESL, but following the restructuring of New Zealand's aviation industry a new company, Aerospace Industries, took over production. The company, whose shareholders included Air New Zealand and NAC, had already sold Airtrainers to the RAAF and the Royal Thai Air Force. The operating costs of the piston-engined Airtrainer were much lower than those of the Strikemaster, but the Minister of Defence warned that 'Any reduction in the jet training element, or any reduction in the total flying content would result in a lessening in pilot quality'.\textsuperscript{46}

The RNZAF, supported by Treasury, sought 13 Airtrainers and a total of 15 Strikemasters to conduct both flying training and strike conversion. This would allow the disposal of 27 Harvards, 5 Devons and 4 Airtourers.\textsuperscript{47} Cabinet deferred a decision pending further information, including the possibility of purchasing Indian-made aircraft rather than Strikemasters.\textsuperscript{48} The Prime Minister, Norman Kirk, had visited Hindustan Aeronautics during a visit to India little more than a month before the Cabinet meeting.\textsuperscript{49} Faulkner told
Cabinet that the Indian aircraft was little more than a version of the BAC Jet Provost, which had previously been rejected in favour of the Strikemaster. The Indian aircraft was considered to be under-powered, especially when required to carry weapons. It was also rated as an uneconomic trainer. On 18 February Cabinet approved the purchase of six Strikemasters and 13 Airtrainers.

In May 1975 the Minister of Defence, W.A. Fraser, suggested a further modification to the proposals. He pointed out that ‘While a high proportion of the pilot training syllabus must be undertaken with a jet trainer, it is also desirable for a number of reasons, including economy, that as much ab-initio training a possible be completed on a light fixed wing trainer’. The RNZAF had considered that the Airtrainer could be used for a maximum of 38% of the wings course. The Airtrainer version available at the time had a maximum all up weight (MAUW) of 2400lbs and instrumentation that was suitable only for training in visual meteorological conditions. However, the manufacturers had investigated increasing the MAUW to 2650lbs and modifying the Airtrainer so that it could be used for full instrument flying training.

Fraser claimed that ‘The development of the Airtrainer into a much more versatile type of aircraft would undoubtedly improve its longer term sales potential in a highly competitive world market’. He also believed that the work would benefit industry in general. The Department of Trade and Industry, the Department of Scientific and Industrial Research and the Ministry of Transport had all ‘endorsed the desirability from a national point of view of improving the versatility of the CT4’.

The Minister stated that it would be possible to conduct 130 hours of training, including full instrument training, on the modified Airtrainer. That meant that training on light aircraft would make up 56% of the wings course, rather than the 14% proposed in 1970. Pilots would now spend more time on piston-engined trainers than they would in jets - a
considerable retreat from the concept of ‘all through’ jet training. The modified Airtrainers would cost $1,686,875, which was $928,875 more than the original price. However, the Minister stated that the additional capital spending would be recouped within two years due to lower operating expenses. Fraser claimed that the reduction in load on the Strikemaster was welcome, because the high serviceability rate planned when the purchase was made has not been achieved. Lower utilisation would also prolong the life of the Strikemasters. On 12 May 1975 Cabinet approved the purchase of 13 modified Airtrainers. 57

The purchase of Airtourers in 1969 was an attempt to consolidate New Zealand’s fledgling aviation industry. The purchase of new jet trainers was inevitable, given the age of the RNZAF’s training fleet and the introduction of modern operational types. The Strikemaster was chosen for its technical merits, but its British origins assumed great significance because of the EEC sensitive trade negotiations. However, while the RNZAF was successful in securing a new jet trainer, it was unable to obtain enough aircraft to institute ‘all through’ jet training. The reduced number of Strikemasters that the RNZAF received meant that the purchase of a new light trainer was necessary, and the Airtrainer was chosen. It met the RNZAF’s requirements, and was a New Zealand-built aircraft. The desire to reduce the cost of flying training, coupled with the opportunity to boost the sales of the Airtrainer meant that a modified version was purchased. This further reduced the jet flying within the wings course to less than half the total time. The Air Force had sought to obtain sufficient jet aircraft to institute a planned programme of training, but its training syllabus was ultimately determined by the aircraft that could be purchased and operated within financial limits.
Notes

1 Filer, p. 108.
2 ibid.
3 ibid.
4 Wright, p. 160, and Duxbury, Ewing and Macpherson, p. 25.
5 Bentley and Conly, p. 163.
6 'Aero Engine Services Ltd - Request For Government Assistance', Secretary to Minister of Overseas Trade, dated 11 August 1969, Alexander Turnbull Library, MS-Papers-1403-115/1.
8 ibid.
9 These included flight grading of pilot candidates, fixed wing training for Army pilots, University Officer Cadet familiarization flying, and Air Training Corps flying scholarships.
11 There had been reports that the company was already building an aircraft every eight days and was planning to increase production. The Minister of Transport, J. B. Gordon, reported that although a television programme had suggested that AESL was producing an aircraft every eight days, this was not the case. The company was capable of achieving that rate, but was not working at full capacity. ‘RNZAF Re-equipment: Light Fixed Wing Training Aircraft', CP (69) 876, dated 11 September 1969. National Archives, 'Armed Forces - Equipment and Ammunition - Air Force - Aircraft - 1967 - 1976', AAFD, 811, Acc w3738, 233/4/4/1, box 1319.
16 ibid.
18 ibid.
19 ibid.
21 ibid.
24 'Sale of New Zealand Manufactured Airtourer 150 Aircraft to R.A.A.F.', Secretary to Minister of Industries and Commerce, dated 15 October 1969, Alexander Turnbull Library, MS-Papers-1403-115/1.
26 ibid.
28 'Jet Trainer For RNZAF', CP (70) 1212, dated 13 November 1970.
29 ibid.
32 The Marlborough Express, 6 June 1966.
33 Annex C to JSO 2/1/1 dated 5 May 1961, National Archives, ‘Cabinet Meeting -26 .6 .61 ’, AAFD, 807, Acc w3738/8, CM (61) 29.
35 The Marlborough Express, 6 June 1956.
37 ‘Jet Trainers for RNZAF’, Cabinet Committee on Foreign Affairs and Defence memorandum, D(70) 9, dated 16 December 1970.
38 ‘Jet Trainers for RNZAF’, Deputy Secretary to the Treasury to the Minister of Finance, dated 18 December 1970.
41 Gerald Frawley, 2FTS - RAAF Flying Training back to the future’, in Australian Aviation, No 164, August 2000, p.27.
42 Ibid.
43 Ibid.
44 The Airtourers were retained.
46 Ibid.
47 Ibid.
48 Ibid.
52 That is 80 hours out of 213 hours total.
53 This study had been undertaken in response to a Danish requirement, and the Ministry of Defence became aware of it while completing a contract with Aerospace Industries to purchase Airtrainers.
54 Ibid.
55 Ibid.
56 Ibid.
56 ibid.
Chapter Nine

The Medium-Range Transport Role and the Andover

In 1976 the Government purchased ten ex-RAF Hawker Siddeley Andovers for the RNZAF. These aircraft replaced the Dakotas, which had been in service since 1943, and the Bristol Freighters that had been purchased in 1951. Bentley and Conly stated that in 1976 'the Chief of the Air Staff, Air Vice-Marshal R.B. Bolt, learned from his RAF counterpart, Air Chief Marshal Sir Andrew Humphrey, that surplus Hawker Siddeley Andover aircraft were available in the United Kingdom'. Bolt proposed purchasing Andovers to replace the Bristol Freighters and Dakotas. Humphrey assisted the negotiations, and in July the Government announced the purchase of ten Andovers.

Lockstone and Harrison mentioned that in 1975 'the Government was continually pressured by reports of the growing problems faced by the RNZAF in maintaining the Bristol Freighters and Dakotas'. However, there was insufficient funding to obtain two new types. The purchase of second-hand Andovers was appealing, and 'the Labour Government’s Defence Minister, William Fraser, was soon able to report that he had approval in principle to buy the Andovers'. The Government changed at the 1975 election, but the new National Cabinet agreed that the deal should proceed. 'This was despite the fact that the new Prime Minister, Robert Muldoon, had strong objections to the proposal as there was no money in the Defence Capital Equipment Programme'. An RNZAF team travelled to the UK in 1976 and confirmed that the Andover would be suitable for the medium-range transport role and for VIP flying. On 28 June 1976 the purchase of ten Andovers was announced, at a cost estimated to be one quarter the price of buying a new aircraft.

This chapter will show that the RNZAF had intended to replace the Bristol Freighter during the 1960s. It will explain why the Government bought new medium/short range
transport aircraft, and why the Andover was chosen. Furthermore, it will argue that the selection of the Andover was influenced by a shift in the focus of New Zealand's defence commitments from South East Asia to the South West Pacific. The role of economic considerations will also be considered.

In 1957 the CAS advised the Minister of Defence that the Bristol Freighters were scheduled for re-equipment because of normal wastage in 1960/61. In 1963 the RNZAF planned to replace its eight Bristol Freighters with four C130s, subject to the Army's transport requirements. This was consistent with the intention to reduce the diversity of types, as the C130 was favoured for the maritime and long-range transport roles. The plan would also reduce the number of aircraft in service. The debate over the replacement of the Sunderlands was underway, with the Army asserting the priority of transport aircraft. The CGS 'emphasised the requirement for a plane which could operate in forward areas and mentioned the requirements for the replacement of the Bristols in due course'. He was told that a Hercules with a reduced load could operate from airfields similar to those used by the Bristols, and that four C130s could serve as replacements.

The Army was also keen to secure helicopter support for operations in South East Asia, including larger types for transport roles. In 1964 the Joint Warfare Committee considered New Zealand's helicopter requirements and advised that a 'further study is required of SRT helicopter types, when the replacement of Bristol Freighters in 41 Squadron, RNZAF, comes under consideration'. By 1965 Air Staff's policy was 'in due course to replace our Bristol Freighters with a Wessex type helicopter'. The Westland Wessex was a British development of the Sikorsky S-58, and a utility variant had entered service with the RAF in 1964.

The Defence Programme for 1965 - 1970 proposed replacing the Bristol Freighters in the tactical transport role with two C130s and six short-range transport helicopters. The
two C130s would also reduce the shortfall in the RNZAF’s long-range transport capability. Officials concluded that the extra capacity of the larger C130 fleet, together with some suitable helicopters, would be sufficient to cover the medium/short range transport role. However, this was only a tentative proposal, as the Defence Council had not considered the question of replacing the Bristols, which were expected to remain in service until around 1968.

The 1966 White Paper drew attention to the need to replace the Bristols, possibly with ‘short-range transport helicopters or other aircraft’. The interest in transport helicopters was also evident during the drafting of the Military Sales Arrangement with the United States Government. A list of equipment that could be purchased under the agreement included the CH-21 ‘Cargo Transport’ helicopter. This helicopter, which had served in Vietnam, was an elderly type and was being replaced in United States service. While it appears unlikely that New Zealand would have purchased CH-21s, the inclusion of a transport helicopter on the list of possible purchases is indicative of the interest in this type of aircraft.

However, the Minister of Defence advised Cabinet that the replacement of the Bristols was not urgent and could be postponed if necessary. The RNZAF’s first priority was the replacement of the Canberra, and there was a pressing need for more C130s. The financial crisis of 1967 then intervened and Cabinet deferred consideration of all major equipment purchases. The Defence Council warned that deferring of orders for combat aircraft or other major RNZAF equipment over the next year or two will give rise in due course to serious competition between completion of such projects and other major air purchases planned for the period beginning 1970. Principal among these [is] the replacement of the Bristol Freighters which in the early 70s will be reaching the end of their useful
operational life. Despite the need to limit government expenditure, Cabinet consented to the purchase of two C130H aircraft in May 1967. Cabinet also asked the Minister of Defence to consider whether No 41 Squadron should be recalled to New Zealand. The Squadron’s four Bristols were a contribution to the Commonwealth Strategic Reserve, operating as part of the British Far East Air Force in the medium, short-range and tactical transport roles. They also supported New Zealand units in Vietnam, Thailand and Malaysia. The Minister explained that while some of these tasks could be carried out by the C130s, it would be uneconomic to do so. ‘Operations involving relatively small loads over short distances, call essentially for unsophisticated aircraft.’ For reasons of economy and flexibility it was preferable to operate smaller aircraft alongside the C130s. It was estimated that the Bristols could remain in service until 1972.

In December 1967 the Minister of Defence stated that there would ‘be a need for the introduction of heavier lift (cargo) helicopters... for the support of the Combat Brigade Group’. However, he acknowledged that the costs and difficulties associated with obtaining these aircraft made it unlikely that they would be purchased in the near future. He also advised that although ‘the Bristol aircraft, with suitable improvements to the avionics, could continue to fly well into the 1970s, Defence Council considers that a more effective MRT/SRT aircraft should be introduced as soon as finance permits’. He suggested that planning be based on the introduction of a new aircraft between 1972-75, at an estimated cost of $12.5 million. The type of aircraft selected would depend on developments in South East Asia, but consideration would be given to utilising heavy lift helicopters, or additional C130s. It appears that defence planners, keen to obtain heavy lift helicopters for service in South East Asia, considered that such helicopters might suffice to replace the Bristols, possibly in conjunction with a fixed-wing aircraft.
In February 1968 Cabinet discussed the possibility of replacing the Bristols and Dakotas with Andovers. They were advised that no recommendation would be made until further studies had been undertaken. A query was raised over the cost of the Andover in comparison to the civilian HS 748 from which it was derived. Mount Cook Airlines was buying HS 748s, and perhaps some thought that it would be suitable for the RNZAF. Some members of Cabinet believed that the RAAF was planning to operate approximately thirty of these aircraft. In fact, the RAAF planned to operate ten HS 748s, not Andovers, and these aircraft would not be used in the medium/short range transport roles.

The following year the Minister of Defence warned that 'Medium Range Transport capability, of critical importance in all mission priorities, would be lost when the existing Bristol Freighters reach the end of their useful life - currently forecast as 1971/72'. It was only possible to extend the lives of the aircraft for a short period, and they would become increasingly expensive to operate. The Defence Review forecast spending $15 million from 1972/73 to purchase replacement aircraft.

Clearly the RNZAF had intended to replace the Bristol Freighter during the 1960s. Consideration had been given to using C130s in this role, but it would have been uneconomical to do so. Indeed, that was one of the main reasons for retaining a separate short/medium range transport force. There was the possibility of using helicopters in this role, but it appears that defence planners aimed to purchase cargo helicopters anyway, recognising their great value in South East Asia. No firm decisions were made in the 1960s because of the relatively low priority of the Bristol replacement.

In January 1975 the Defence Council drew attention to the need to begin replacing the RNZAF's Bristols, Dakotas and Devons over the following three to five years. This was part of a larger plan aimed at improving the RNZAF's strategic and medium/short range transport capability. Cabinet authorised the Ministry of Defence to include VIP flying in its
planning, and to submit proposals for replacement transport aircraft. The acquisition of medium/short range transports was a higher priority than the provision of further strategic capability, due to the greater deficiencies in the medium/short-range fleet and the much higher cost of purchasing long-range aircraft.

There were two principal reasons for purchasing replacement aircraft. Firstly, the Bristols and Dakotas were obsolete and increasingly expensive to maintain. Cabinet was advised that ‘the Bristol Freighters and Dakotas operating costs are escalating abnormally, failure rates are increasing and there are significant spares support problems. The reliability of these aircraft is diminishing, further reducing their already low operational effectiveness. Finally, the Bristol Freighter and Dakota avionics systems... are increasingly a flight safety hazard’. Without effective medium/short range transports, the RNZAF was forced to operate the C130 uneconomically in roles better suited to less costly aircraft.

The second reason for replacement was that changing strategic circumstances had led to an increased requirement for air transport. W.A. Fraser, the Labour Minister of Defence, informed his colleagues that the ‘present mix of 5 long range (Hercules) and 15 medium/short range transport aircraft (Dakotas and Bristols) was appropriate to the range of operational contingencies associated with our forward defence posture of the 1960’s and early 1970’s and the concept of deploying and supporting a NZ force through a forward base in Singapore’. However, the anticipated withdrawal from Singapore meant that future operations would have to be mounted from New Zealand. The Defence Council concluded that ‘there will be a need to provide our forces with a greater measure of mobility to facilitate their deployment and support in the Pacific area from the NZ base’. Neither the Bristols nor the Dakotas could carry a useful payload overseas, so they could not participate in the type of deployments envisaged.
The Defence Council aimed to reduce both the diversity of transport types and the number of aircraft in service while increasing the RNZAF's airlift capability. Accordingly, the Council favoured replacing the Bristols and Dakotas with a single type. An opportunity to obtain replacement aircraft emerged before the Defence Council had decided upon the most cost-effective combination of transport types. In June 1975 the British Ministry of Defence advised that a number of Andover transports would be available for sale in 1976. The British preferred to give New Zealand first option on these aircraft for political and strategic reasons. The submissions to Cabinet do not explain what these reasons were, but it is difficult to imagine how ten second-hand Andovers could be considered politically or strategically significant.

Lockstone and Harrison have provided an account of how the British offer arose. In mid-1975 the CAS, Air Vice-Marshal Richard Bolt dined with the British CAS, Sir Andrew Humphrey. He suggested to Bolt that some ex-RAF Argosy transports might be suitable medium transport replacements. Bolt knew of the problems associated with the Argosy, and preferred an aircraft like the Andover. He was told that the RAF was to retire a number of Andovers and that they might be available for a good price. Soon Bolt put a good case to the Defence Minister for the purchase of ten Andovers to replace the nine Bristol Freighters and six Dakotas.

The Andover was a military variant of the HS 748. It was a twin-engined aircraft capable of short take-off and landing (STOL) from rough airfields. Indeed, it could operate from airfields that were unsuitable for the Dakota. The Andover also had rear-loading doors, which were described as 'an essential basic characteristic for a military transport aircraft'. It was much more capable than the aircraft it would replace. It could carry a greater load further and faster, and it had the range required to assist in operations in the South West Pacific. The Ministry of Defence believed that the Andover was 'a near ideal
multi-purpose replacement for the Bristol Freighters and Dakotas and also offers a complementary and significantly more economical alternative for various Government and Defence tasks now flown by the Hercules' 35. The Ministry of Defence believed that ten Andovers would be sufficient to replace the fifteen Bristols and Dakotas without the loss of flexibility or capability.36

The Andover was a versatile aircraft capable of performing a variety of roles. The Minister of Defence stated that the Andovers would provide 'a very considerable and useful increment to coastal and resource surveillance'.37 The Andover's weather radar was suitable for search and rescue and surveillance, and it could perform some maritime tasks more economically than the Orion.38 In addition to its basic transport duties, the Andover would also 'Provide for the diversity of other military and non-military tasks such as VIP flying, support for civil defence, para-troop training, search and rescue and casualty evacuation'.39 It would also prepare aircrews to operate the more complex C130s and Orions.

A more capable medium/short range aircraft could discharge some of the roles currently undertaken by the C130. This would have the effect of increasing the RNZAF's strategic capability by freeing the Hercules for long-range tasks. Conversely, improvements to the RNZAF's strategic capability through the purchase of further long-range aircraft would enable the C130s to carry out more tactical work. This would reduce the requirement for additional medium/short range aircraft.

The case in favour of the Andover was strengthened by the lack of contending types. Cabinet was advised that there were no 'other “half life” aircraft of comparable performance presently available in this price range'.40 The new aircraft available were the military version of the HS 748, and the De Havilland Canada Buffalo. However, the Andover was preferred to both of these aircraft for technical reasons. The HS 748 did not
have rear loading doors, while the Buffalo was not pressurised. The United States forces
did not possess an equivalent type as they operated the C130 in the medium/short range
transport role, something that less wealthy nations considered uneconomic. Furthermore,
while a smaller number of C130s would have provided a greater lifting capability than the
Andovers, overall flexibility would be reduced.

The Andover was also preferred for financial reasons. These aircraft were initially
estimated to cost $600,000 each, with a total project cost of $11.8 million. The Buffalo
would cost $3 million each, while the military version of the HS 748 was expected to cost
$2.2 million. The Labour Minister of Defence stated that 'the indicative costs for the
Andover package represent no more than about one third of the total costs for a similar
number of new aircraft'. Treasury agreed that this was an attractive offer, and believed
that it 'would be a pity to miss this opportunity. The replacement of the Bristols and DC3s
cannot be deferred indefinitely. The foreign exchange cost of about $11 million is
unwelcome, but there is a likelihood of credit arrangements being available to spread this
over five years or more'. By the time the new National Government considered the
proposal, the project cost had risen to $13.761 million. However, Cabinet was advised
that the cost of purchasing a new aircraft type would be $68 million. The high cost made it
unlikely that ten new aircraft could be purchased within five years. Such expenditure
would also prejudice the acquisition of further strategic capability. In addition, it would
cost $3-$4 million to extend the lives of the Bristols and Dakotas if no replacements were
ordered.

The purchase of Andovers also offered the prospect of savings. Replacing the Bristols
and Dakotas with a smaller number of aircraft flying a lower number of hours would reduce
direct operating costs by $300,000 annually. Furthermore, NAC's Rolls Royce Dart
overhaul line could accept the Andover's Dart engines with the addition of specialist tools
worth $100,000. A new overhaul facility for a different type of engine would cost up to $1 million. Credit was available to spread the cost of the Andover. The British Ministry of Defence would provide credit to cover costs excluding $600,000 to pay civilian contractors. That amount could be covered by British Government Export Credit Guarantee arrangements. The Andover could also be supported by a co-operative logistics scheme with the RAF. The availability of credit and logistics support from Britain calls into question the extent to which such considerations favoured a shift to the United States.

On 6 November 1975 the Labour Cabinet authorised the Minister of Defence to inform the British of New Zealand’s interest in the Andovers and to commence negotiations. The National Cabinet subsequently confirmed the purchase of ten Andovers on 8 June 1976, and the final authority to proceed was granted by the Cabinet Committee on Defence on 24 June 1976. Thus there was consistent interest in the Andover purchase despite the change in government. Treasury also supported the purchase throughout, while the views of the Defence Council remained unchanged.

Rolfe pointed out that ‘Often New Zealand equipment projects involve the purchase of second-hand equipment which becomes available at short notice’. He went on to say that in each case where additional equipment has been proposed, the argument has been that the offer has been too good to refuse. This does not necessarily represent an improvident ‘take what is available, it may come in useful one day’ approach. Rather, each purchase is justified in terms of some earlier decision that additional items are needed, but for financial reasons not yet. It makes some sense then to acquire the additional equipment when it does become available at a less than expected cost.
Rolfe cited a number of purchases, but did not make mention of the Andover project. However, it is a good example of the kind of opportunity purchase to which he was referring. There had been a long-standing need to acquire new medium/short-range aircraft, but a lack of finance and low priority meant that no purchase was made. The Andover became available at a much lower cost than had been anticipated, and it was unlikely that a similar deal would be available at a later date. It was also the aircraft most suited to the RNZAF's requirements.

Rolfe has also suggested that a feature of New Zealand’s defence policy between 1972 and 1984 was ‘increasing interest in the Pacific (particularly the South West Pacific region...).’ Rolfe pointed out that ‘By 1972, the South West Pacific was recognised as the area of “immediate and primary concern”.’ The arguments offered in support of the Andover purchase provide evidence of this shift in defence thinking. In 1976 the National Cabinet was told that ‘we now have a need to provide our forces with a greater degree of mobility to facilitate their deployment and support in a range of limited operations within the Pacific area from a NZ Base’. This was consistent with National’s pre-election defence policy, which called for ‘mobile units capable as task forces of... ready deployment throughout the Pacific region’. It was also the same message that had been delivered by the Defence Council to the Labour Government the previous year. Cabinet was told that the ‘Andover will contribute significantly to the deployment air-lift in the SW Pacific region’. Planning was based on the airlift of a light scale Battalion with helicopter support within the South West Pacific. Five C130s could accomplish this task in ten days, while five C130s and ten Andovers could complete the deployment in six days. The wing tanks of the Andovers were modified to ‘increase [their] usefulness for operating over long distances in the South-west Pacific’.
The requirement to operate throughout the South West Pacific influenced the choice of aircraft types. Helicopters had been considered as replacements when New Zealand forces were committed in South East Asia. In that theatre helicopters would only have to fly relatively short distances, and they would have been especially valuable in places without airstrips. However, the requirement to operate throughout the South West Pacific favoured the purchase of a fixed-wing aircraft with the speed and range to participate in rapid deployments.

The purchase of Andovers to replace the Bristols and Dakotas was a part of the programme to re-equip the RNZAF that had begun in the 1960s. Although early plans had envisaged replacing the Bristol with the Hercules for the sake of commonality, the Defence Council wanted an aircraft to complement the C130 for the sake of economy. Consideration was given to the purchase of transport helicopters, which would have been particularly useful in South East Asia. By the time the Government was ready to purchase replacements, the Defence Council sought an aircraft with the range, speed and capacity to assist deployments in the South West Pacific. Indeed, the purchase of the Andover is evidence of the shift in planning that followed the end of forward defence. The Andover was more capable than its rivals and, perhaps more importantly, it was a good deal cheaper.
Notes

1 Bentley and Conly, p.161.
3 ibid.
4 ibid., p.138.
8 Annex to 'Light Aviation in the New Zealand Services - Phase 1 - Helicopters', JWC (64) 2, National Archives, 'Armed Forces Helicopter 1965', T, 1, 42/255/72/1, box 38.
15 The document does not name the Minister who raised this question.
17 ibid.
18 ibid.
20 ibid.
28 'Replacement Medium/Short Range Transport Aircraft For RNZAF', CP (75) 815, dated 4 November 1975.
29 ibid.
31 'Replacement Medium/Short Range Transport Aircraft For RNZAF', CP (75) 815, dated 4 November 1975.
33 ibid.
34 'Replacement Medium/Short Range Transport Aircraft For RNZAF', CP (75) 815, dated 4 November 1975.
35 ibid.
37 ibid.
40 ibid.
46 'Replacement Medium/Short Range Transport Aircraft For RNZAF', CP (75) 815, dated 4 November 1975.
51 ibid., p.143.
52 ibid., p.2.
53 ibid., p.4.


Chapter Ten

The Friendship and the Cessna 421C

The Fokker Friendship and the Cessna 421C were selected to complete the replacement of the de Havilland Devons. Harrison stated that 'Approval had been given in 1978 for the RNZAF to investigate replacing the Devons used for navigator training.' Three ex-NAC Fokker Friendships were acquired, described by Ewing and Macpherson as 'early-model 100-series aircraft, bought in the early days of NAC but now orphaned and outdated by later models'.

Bentley claimed that 'Because the newly acquired Friendships had been in service with the national airline... for 19 years, some thought their purchase a retrograde step'. Wright noted that 'Three Cessna 421C Golden Eagles were procured in 1980 to replace the de Havilland Devons in the communications role'.

Ewing and Macpherson mentioned that 'Initially it had been envisaged that a turbine-powered aircraft would be procured but the cost factor led to an order for three Cessna 421C light piston-engined twins'. Thus in explaining the purchase of these aircraft, authors have pointed to the dominance of cost-saving in each case. This chapter will explain why the Friendships and Cessnas were purchased for the RNZAF, and assess the role that economic considerations played in the selection of these aircraft types. It broadly agrees that such considerations predominated.

In June 1976 the Cabinet Committee on Defence was advised that the Devons would have to be replaced in the navigational training role. It was suggested that two Andovers or two 'well-used' Friendships would suffice, but there 'was nothing definite contemplated at this stage'.

When the Committee met to discuss the 1978 Review of Defence the Friendship was the favoured replacement. The RNZAF was thus considering the purchase of aircraft that
were, like the DC6, elderly by airline standards. However, the life of the aircraft depended on the number of cabin pressurisations it experienced. In civilian use the F27s typically made short flights with a large number of changes in cabin pressure; military service would involve longer flights and fewer pressurisations, which would extend the life of the aircraft. Officials had been aware that the Friendships would be retired and had been considering them for the navigation training role since at least 1976. Like the DC6 purchase, the aircraft would simply be transferred from one government concern to another.

The published white paper announced that the replacement of six Devon navigational trainers with three Friendships was under consideration. It also placed considerable emphasis on the RNZAF’s role in patrolling the EEZ. The bulk of the maritime duties were performed by the Orions, but the review stipulated that other service aircraft were to assist. This would free up the Orions for long-range patrolling and the ASW role. It would also be more economical to use aircraft with lower operating costs in less demanding inshore tasks. The Andovers had already been earmarked for this role, but there would still be a need for more aircraft. The review stated that ‘Replacement navigation trainers employed in resource protection as a secondary task will be expected to meet any such shortfall in the foreseeable future’.

In June 1979 the Minister of Defence asked Cabinet to approve the transfer of three Friendships from Air New Zealand to the RNZAF. The aircraft would be converted to navigational trainers, with a total project cost of $3.7 million. This would allow the disposal of six Devons, which were expected to realise a whopping $27,000.

The RNZAF expected that navigators would be required at least until the current transport and maritime aircraft were retired around 2000. Training would have to continue until 1995 to meet this demand, but the Devons ‘as training platforms are no longer relevant to the operational aircraft in service’. These aircraft could be operated for another five
years, but it would cost $700,000 to fit them with replacement radios and navigation aids. The Minister stated that ‘expenditure to extend the life of an operationally inadequate and uneconomical aircraft could not be justified’.12

The Friendship had an estimated life of 10-15 years as a navigational trainer, and it could assist in patrolling the southern regions of the EEZ. The purchase of Friendships would minimise the expenditure of overseas funds, and the Minister acknowledged that ‘The cost of new aircraft could not be justified when used, ex-airline aircraft such as the F27s are capable of providing a satisfactory and far more economical solution’.13 Air New Zealand and SAFE would continue to provide maintenance and spares support, which would benefit local industry and reduce the RNZAF’s need for additional manpower and equipment.

Treasury had investigated alternatives to the proposed Friendship purchase.14 The use of operational types to conduct navigator training was not favoured due to the high costs involved and the reduced availability of aircraft for operational roles. It was for these reasons that air forces retained specialist navigational trainers. The purchase of additional aircraft to preserve the level of capability would involve a much greater capital outlay than the Friendship purchase - Treasury estimated that it would cost up to $12 million to acquire an additional C130. Training navigators overseas had been considered previously, and in 1966 Morrison had predicted that students would be trained in Australia.15 However, the Australian practice of cross-training air-electronics officers as navigators did not match RNZAF requirements.16 Furthermore, the RAAF would not be able to accommodate any New Zealand students for at least three years. Choosing to train students overseas rather than buying the Friendships would also deprive the RNZAF of additional aircraft for resource protection.
Treasury acknowledged the benefits of the Friendship purchase and recommended that Cabinet approve the proposal. There was some pressure to make a quick decision, and Cabinet was warned that the aircraft might be leased or sold overseas if they were not transferred to the RNZAF. The acquisition of the Friendships was then approved on 11 June 1979.

By 1980 it was clear that the Devon would have to be replaced in its last remaining roles. The Minister of Defence explained that there had been ‘recognition since the 1978 Defence Review that the existing Devon aircraft would be too costly to maintain in service for the purpose of providing Captaincy training, general communications and VIP flying’. The RNZAF proposed purchasing three new Cessna aircraft at an estimated cost of $1.866 million to replace the last four Devons. It would have cost $1.5 million to keep the Devons in service, and the RNZAF argued that the purchase price of the Cessnas would be offset by lower operating and support costs over a ten year period. Although there was a global shortage of av-gas, the piston-engined Cessna would cost $1.5 million less than a suitable turbo-prop aircraft. The Cessnas would also be able to undertake limited EEZ surveillance, search and rescue and Army/Navy co-operation. The plan was referred to Cabinet for consideration for inclusion in the 1980/81 financial programme.

In February 1980 Cabinet approved the inclusion of the purchase of replacement light transport aircraft in the 1980/81 Estimates. In April Cabinet authorised the expenditure of $67,902 as a deposit on three Cessna 421C aircraft from the 1981 production run. However, only $0.6 million had been included in the Main Estimates as officials had anticipated financing the purchase with credit from the manufacturer. The terms offered were unacceptable to Treasury, so the full cost of $2.361 million would have to be paid during 1980/81. The Minister of Defence asked for the balance to be included in the 1980/81 Supplementary Estimates, but Treasury recommended that the purchase be deferred
until 1981/82. Other Defence proposals for inclusion in the Supplementary Estimates already accounted for $3.67 million, and Treasury doubted that capital equipment priorities could be re-ordered to accommodate the extra cost of the Cessna project. On Treasury’s recommendation, the amount previously allocated to the Cessnas was diverted to other defence projects.

The decision to defer the purchase would mean that new aircraft would not be available until October/November 1981. In the interim, the cost of the project could rise up to 15%, while additional expenditure would be required to keep the Devons in service. There was also the possibility that the deposit would be forfeited. To avoid these penalties the Ministry of Defence was compelled to make saving elsewhere within the 1980/81 Vote: Defence to fund the full price of the aircraft. Once these savings were identified, Treasury supported the proposal to order aircraft that year to avoid further increases in the estimates for 1981/82. Cabinet approved the purchase of three Cessna 421C aircraft on 1 December 1980.

The fact that it took three types to replace the Devon was proof of that aircraft’s versatility, and evidence of the RNZAF’s ability to make do with its available resources. Previously the RNZAF had attempted to reduce the number of types in service for economic and operational reasons. This was evident in the plan to operate the C130 in the transport and maritime roles, and the proposal to purchase a single helicopter type. More recently, the Andover had successfully replaced two aircraft types. The replacement of the Devon, while reducing the number of aircraft in service, increased the number of types. This occurred because defence planners sought to economise by purchasing aircraft that were suited to specific tasks. The RNZAF would then be spared the need to pay the higher operating costs associated with aircraft whose performance exceeded that required. The navigation training role required an aircraft of sufficient size to accommodate students,
instructors and equipment. On the other hand, the light transport role could be
accomplished with a much smaller aircraft with correspondingly lower operating costs.
The replacement of the Devons showed that despite the capital outlay involved, it was
cheaper to acquire a small number of newer types than to attempt to keep elderly aircraft
flying.

The Friendship was another example of an opportunity purchase made amidst attempts
to keep defence spending in check. Officials were aware that the RNZAF's Devons and Air
New Zealand's Friendships had to be replaced and were quick to realise the benefits of
transferring the F27s to the Air Force. It was a good deal cheaper than purchasing a new
aircraft, and it minimised the expenditure of overseas funds. Thus while some may have
preferred the purchase of new aircraft, as Bentley claimed, it is doubtful that the
Government could have been persuaded to part with more money when the Friendship was
adequate to the task. The RNZAF would have preferred a turbo-prop aircraft to replace the
Devon in the light transport role, but once again financial constraints meant that a more
modest aircraft was acquired. The difficulty that was experienced in securing even a
relatively small amount of funding for the Cessna purchase in 1980/81 is evidence of the
strong desire to limit defence spending.

The emphasis given to surveillance of the EEZ was a notable feature of the proposals
put forward for the replacement of the Devons. Treasury had once pointed out that military
aircraft gave no economic return on overseas funds expended; patrolling the EEZ was one
way that the RNZAF could contribute to the economy, and be seen to be occupied during a
period of conspicuous peace. However, surveillance was only a secondary function as the
RNZAF required these aircraft for other purposes. Besides, any aircraft capable flying over
water could assist with resource protection to some degree. Nor should it be assumed that a
capacity for resource protection would suffice to secure spending. The Navy, like the
RNZAF, emphasised its role in securing marine resources when trying to obtain funding. However, on one occasion the Prime Minister pointed out that 'it was necessary to weigh the cost of the surveillance of the Exclusive Economic Zone against the Defence Budget. The proposed refit of the "Taranaki" would mean that it would cost more to police the EEZ than the profits the country gained from licensing of foreign fishing vessels.' Cabinet must have had similar considerations in mind when approving the purchase of aircraft.
Notes

2. Ewing, and Macpherson, p.240.
5. Duxbury, Ewing, and Macpherson, p.28.
7. Cabinet Committee on Defence, minutes of meeting held 8 August, D (78) M 7, National Archives, 'Defence - Defence Committee - General - 1961 - 1978', AAFD, 811, Acc w4198, 222/2/1, box 87.
11. Ibid.
12. Ibid.
16. 'Navigation Trainer and EEZ Surveillance Aircraft for the RNZAF', Secretary to the Treasury to the Minister of Finance, dated 7 June 1979.
In 1981 the Government purchased three Boeing 727-100C aircraft for the long-range transport and VIP role. Wright stated that ‘A 1978 defence review recommended dedicated VIP transports. Until that time the RNZAF had used the Hercules for the task’. The RNZAF considered second-hand Boeing 737-200s from Air New Zealand before purchasing three second-hand 727-100Cs from United Airlines. One aircraft was bought as a source of spares. Duxbury, Ewing and Macpherson mention that ‘Additional capacity for Whenuapai-based No. 40 Squadron was forecast in the 1978 Defence Review when comment was made on the heavy commitments faced by the Hercules fleet’. The RNZAF considered the transfer of Boeing 737s from Air New Zealand, then in February 1981 the Government the purchase of three ex-United Airlines Boeing 727s for $15 million. Lockstone said that ‘Three Boeing 727s were purchased from United Airlines in 1981 to augment 40 Squadron’s Hercules capability’. These aircraft would reduce the C130 commitment to passenger flying. Clark said that ‘the prime minister of the day, Robert Muldoon, floated the idea of acquiring a part-life Boeing - either a 707 or 737 - in June 1980. The thought of arriving in one’s “own” VIP jet no doubt had a strong appeal for Government’.

This chapter agrees that the 727s were purchased to provide additional air transport capacity. However, it will demonstrate that the RNZAF had attempted to acquire civilian passenger jets for VIP flying in the early 1970s. After 1975 this plan merged with proposals to acquire part-life civil jets to provide additional long-range transport for New Zealand forces based at home.
In March 1973 Air Staff issued a requirement for ‘a modern jet aircraft to meet the VIP air transport commitments both within New Zealand and overseas. The aircraft will replace the DC3 and will obviate the need to divert operational aircraft from their primary task’. The RNZAF wanted a multi-engined jet capable of high speed, high altitude flight with sufficient range to carry VIPs to Australia, the Pacific and South East Asia.

The Air Force received nineteen proposals representing fifteen different aircraft and two VIP modules for the C130s. However, the RNZAF did not want to operate the Hercules in this role. One officer wrote that ‘our C130 fleet is already very heavily engaged so that commitment to a VIP role would be an embarrassment….one of the strongest arguments in favour of a new VIP aircraft is that we must end the practice of diverting operational aircraft from their primary roles for this purpose’.

Preliminary studies identified four aircraft worthy of further evaluation. They were, in order of priority, the Boeing 737-200, the DC9-20, the BAC 111 and the Fokker Fellowship F28. The 737 was also considered suitable for transporting troops. Air Staff also considered various combinations of aircraft that would satisfy the requirements of cost, performance and flexibility. For example, it suggested that the RNZAF could operate two smaller jets, either HS 125s or Falcon 20s, alongside a larger jet like the 737. There was also some reluctance to consider turbo-prop aircraft like the Friendship, with the initial evaluation advocating the use of jets for all VIP tasks.

The RNZAF was reluctant to consider the acquisition of second-hand aircraft to minimise the cost of replacement. One senior officer wrote ‘Such a suggestion could be seized upon so that we were committed to a policy which required comparatively high annual purchase instalments but bought aircraft of lower technical integrity and therefore involved us in higher running costs’.
The variety of aircraft on offer was in contrast to previous roles where fewer types were available, and it led to increased competition. The willingness of aircraft salesmen to approach politicians directly had been a notable feature of the combat aircraft purchase, and the practice was again apparent in the VIP project. Hawker Siddeley, for example, informed the RNZAF that 'we may be conspicuous by our absence in presenting a direct approach to Ministerial level on the evaluation of our Executive Aircraft'. They then advised the Minister of Defence that they had made an approach to the Prime Minister. The RNZAF was not the Government's only source of information on matters concerning aircraft purchases.

In November 1973 Norman Kirk was asked by the press if Cabinet had received any submissions on VIP aircraft. 'No', he replied, 'nor is there likely to be for a long time yet. Some other countries do have much better planes, and that's fine, but for someone who rode a bike to work once even a DC-3 is a considerable improvement.' Kirk pointed out that the DC-3 could operate from airfields that would be unsuitable for larger aircraft. He acknowledged that replacements would have to be considered, 'but that's not soon. Left to my own devices I would sooner see the money spent on things that we need more urgently'. Kirk was equally content to fly on civilian aircraft, and he reminded the press that when he had traveled to Australia on an Air New Zealand flight 'we had no problem but when Mr Whitlam was coming in January you will remember they did though that's not a crucial test of the thing'. Presumably he was referring to an incident when an RAAF BAC 1-11 carrying Whitlam suffered an engine failure over the Tasman and was forced to return home. The Civil Aviation Department was also operating a VIP aircraft, and the Prime Minister was more concerned with 'whether there should be rival concerns operating under the one Government roof. Civil Aviation have their group of planes, Air Force have theirs. Our service people have a lot of training to do. They don't have foreseeably any
involvement in any sort of military situation yet you have to keep some interest in the Air Force, otherwise it's pretty hard to keep the spirit of the Air Force high... But a merger might be a very good thing'. Kirk believed that the ceremonial aspects associated with some VIP flights would require Air Force involvement. However, he assured reporters that as far as the replacement of the DC-3 was concerned, 'I am not lying awake sweating over that'.

The Prime Minister was not the only one aware that VIP flying was a sensitive political topic. Donald Baird, once again acting on behalf of the French, asked 'Just what sort of acceptance will V.I.P. flying get, carrying a few people around in an aeroplane the size of National Airways Boeing 737, which carries over a hundred people in airline service?'. He believed that the smaller Falcon 10, seating seven passengers, was a more sensible solution. Officers within Air Staff were also aware that 'For political reasons, there may be opposition to RNZAF operating a Boeing 737 type of aircraft into secondary airfields. The general public may well ask NAC to provide a regular service with their 737's'.

Kirk's dismissal of the need for replacement aircraft did not end the project. In April 1974 Air New Zealand informed Defence that Air Pacific had a BAC 111 available for sale or lease. The Secretary of Defence believed that 'we should follow this up as this may be a quick and effective intermediate or even final answer to our VIP aircraft problem and one which might well secure Government's blessing'. Then in September 1974 the Hon. R.D. Muldoon announced National's policy for the 1975 election, which stated that 'As the personnel of the R.N.Z.A.F. are fully trained to perform V.I.P. flying, this work will be assigned to the Air Force'. In January 1975 Cabinet authorised the Ministry of Defence to include provision for VIP flying when planning for replacement transport aircraft.

The decision to charge the RNZAF with VIP flying coincided with the push for greater capacity to deploy and support forces from bases in New Zealand. In 1976 the Defence
Council proposed improving the RNZAF’s long-range transport capability by purchasing additional Hercules or medium twin jets. However, the high cost of both new and part-life long-range aircraft, and the more serious deficiencies in the medium/short range fleet, meant that the purchase of Andovers was favoured at that time.

In August 1978 the Cabinet Committee on Defence agreed that while there was a need to secure additional long-range transport capacity, this was not an urgent requirement. The 1978 Review of Defence emphasised the importance of air transport and stated that ‘Our geographical isolation makes the retention of an effective air transport force fundamental to our defence. While the national civil air fleet can be relied upon to make a major contribution to this requirement there remains a wide range of air transport tasks which can be met only by the Air Force’. In the event that additional air transport capacity was required, then consideration would be given to the acquisition of more C130s or part-life civilian jets.

While the Government had acknowledged the importance of air transport, they did not yet make a firm commitment to purchase more aircraft. The Review noted that ‘New Zealand is caught in a pincer movement between inflation and agricultural protectionism. These are at present the most serious issues facing New Zealand’. While these economic difficulties prevented a major rise in defence spending, the Government acknowledged that a small increase was necessary to achieve the aims of the Review.

By 1980 the RNZAF had decided that the acquisition of part-life civilian jets, rather than additional C130s, was the best way to strengthen the transport force. While financial restrictions must have been influential, these aircraft were also intended for a different role than the Hercules. The Defence Council sought an aircraft that could provide for overseas VIP flying while ‘making the greatest possible contribution to long range troop lift’. These were roles for which the C130 was not ideally suited. In February the Cabinet
Committee on Defence noted that a 737-200 would be suitable for the long-range transport role, and that one might be available from Air New Zealand. While charter arrangements were in place, 'it would be unwise to depend on civil airlines for ad hoc charters to unusual places in situations less than a national emergency'. Cabinet then endorsed a New Policy proposal to purchase two long-range transport aircraft with initial expenditure of $2 million in 1981/82. Defence was authorised to commence a study of suitable part-life civilian jets.

In August 1980 the Minister of Defence sought approval in principle for the acquisition of two 737-200 aircraft from Air New Zealand. The 737 did not meet the RNZAF’s payload/range requirements, but the Air Force believed that increased fuel tankage and more powerful engines would enable it to perform usefully in the South West Pacific and South East Asia. The 737 would also be restricted in the VIP role as its limited range and the fact that it was only twin-engined meant that it did not meet the safety criteria for some routes.

Treasury agreed that there was a requirement for further transport aircraft, 'for rapid and efficient deployment of troops on operations (a consequence of the ready reaction force concept)'. There was also the prospect of an increased number of overseas training deployments following the return home of forces based in South East Asia. Treasury also made it clear that 'military transport capability should be the primary motive for acquiring additional aircraft; any VIP transport capability would be in the nature of a bonus, given the current availability of suitable civil air services'. Therefore, aircraft should be evaluated primarily on their suitability as troop transports, where they would be required to carry a company of 120 personnel 'within our stated area of interest, the South Pacific basin and possibly South East Asia'. The 737-200 could carry a sufficient number of troops, but with a reduced range. Furthermore, if it was permanently configured as a dual role
VIP/troop transport it would reduce its seating capacity to 70 soldiers. Treasury concluded that the 737-200 was not really suitable for either of its proposed roles.

The Air Force favoured the ex-Air New Zealand aircraft because it would cost twice as much to purchase a 737-200 overseas, with all expenditure in overseas funds.\textsuperscript{33} However, while the Defence Indicative Budget only included $12 million for two aircraft, the estimated cost of acquiring and modifying the first 737 was $7 million.\textsuperscript{34} Treasury also pointed out that while the RNZAF required two aircraft, Air New Zealand only had one 737 available. The airline operated one -200 series aircraft, which it planned to sell, and three later model -200C series aircraft. The last 737-200C had only been delivered that year, and there was no indication that any would be available for transfer to the RNZAF. If the Government was forced to buy a newer aircraft to complete the purchase it would be even more expensive than the Air New Zealand 737-200. Treasury warned that the 'total cost therefore is likely to be well in excess of the budgeted figure, for a capability that may not adequately meet the full operational requirements'.\textsuperscript{35} Treasury recommended that Cabinet should confirm the need for additional transport aircraft and invite the Secretary of Defence to investigate possible aircraft types.

Despite the limitations of the 737-200, and the misgivings of Treasury, Cabinet agreed that 'the acquisition of two part-life Air New Zealand Boeing 737-200 aircraft appears to offer a financially attractive option to meet the requirement for additional air transport capacity in the RNZAF'.\textsuperscript{36} Cabinet then approved in principle negotiations for the purchase of the first aircraft, subject to confirmation of suitability, cost and the date of transfer.

Remarkably, it does not appear that any questions were raised about just where the second part-life Air New Zealand 737-200 was going to come from. As the airline was a Government concern, it would not have been any cheaper to transfer a second aircraft to the RNZAF and replace it with another new one.
In November 1980 a joint RNZAF/Air New Zealand team travelled to the United States to discuss the proposed modifications with the aircraft’s manufacturer. The team reported that even with modifications, the 737 would only be able to carry half the required payload on long-range flights. Operating at weights sufficient to provide a useful payload would reduce the fatigue life of the aircraft. Furthermore, the cruising speed would be reduced to such an extent that the average speed over long ranges would be little better than the Hercules. The total cost of acquiring and modifying the 737 to this unsatisfactory state was estimated to be more than $25 million.

When one opportunity disappeared another appeared in its place. Boeing informed the team that a number of second-hand Boeing 727-100C aircraft would soon be available. This was a three-engined aircraft that was larger than the 737. The RNZAF had previously considered the 727 to be the type most suited to their requirements, but those that were available were too expensive. The aircraft now on offer had been built in 1968 and leased to United Airlines. They were now being returned to Boeing, and the company was preparing to offer 28 aircraft as a package to brokers. The aircraft, described as ‘very attractive and saleable’, would then be sold by brokers at much greater prices. However, Boeing was willing to make three aircraft available at reduced cost provided that options were taken up by 16 February 1981.

In January 1981 the Minister of Defence sought approval to purchase three 727s at a total cost of $15,003,000. One aircraft would be used as a source of spares, which would save $1.5 million on the cost of acquiring parts by conventional means. The Minister advised Cabinet that ‘An opportunity now exists to acquire better aircraft which not only meet the performance requirement at a cost significantly less than the 737s but also at a project cost well below the currently planned level of $18,000,000’. The 727 could carry
123 troops and was suitable for VIP flying and freight operations. It was also a well proven aircraft, with an expected life in RNZAF service of 20 years.

There were other financial benefits attached to the proposal besides the lower capital cost. The submission claimed that earlier consideration of the 737 had been influenced by Air New Zealand’s wish to dispose of some of their 737 aircraft within New Zealand. The airline now intended to sell any surplus aircraft overseas, and the submission argued that this would result in a gain in overseas funds as the sale price of the 737s would be higher than the cost of acquiring the 727s. The 727 also promised savings in operating expenses when compared to the C130. In one hour the C130 could carry 60 passengers and their equipment 300 nautical miles while the 727 could carry 123 passengers and their equipment 450 nautical miles. Therefore, while the hourly direct operating costs of the 727 were higher than those of the C130, the jet had a lower cost per passenger/mile. However, operating the cheaper 727s alongside the C130s would not yield any direct savings as any additional Hercules capacity was required to meet tasks that were currently being turned down. ‘A key user in this sense is the MFA whose aid programme will be considerably enhanced by the additional capacity’.39 This is another example of the emphasis given to the RNZAF’s non-military roles at this time.

The 727s would also reduce the requirement for service personnel to travel on expensive civilian flights. For example, 1700 one way seats were booked each year on Air New Zealand flights between New Zealand and Singapore at a cost of $906,100. The same task could be accomplished by the C130s at a cost of $812,574. However, it would take 70 C130 flying days and this could not be accommodated within the annual task. The 727 could carry those passengers in 21 flying days at a cost of $427,820, which was less than half of what Air New Zealand charged. The RNZAF concluded that ‘the savings in cost of operations derived from the acquisition of Boeing 727-100Cs can be estimated with
confidence as considerably in excess of the $778,672 per year... and more likely in the region of the $1m'.

Treasury agreed that the 727 was a more suitable aircraft than the 737, and that ‘the Boeing offer is a possibly unique opportunity to acquire high quality, versatile aircraft at an attractive price’. They concurred that the foreign exchange costs of acquiring the 727s would be less than those of the 737 proposal. However, Treasury raised a number of concerns. Firstly, the additional manpower and operating costs associated with the project, estimated to be $2.39 million annually, had not been considered by Ministers. Secondly, the programmed funding requirements for Vote: Defence would have to be adjusted to meet the demands of the current proposal. Defence planned to divert $8 million dollars from the RNZAF’s replacement helicopter project to the 727 purchase and sought an additional $2.377 million in 1981/82 as new policy. However, Treasury noted that the purchase of additional transport aircraft was not a high priority within the capital equipment programme, and that with the exception of the helicopters, Defence would not defer any other projects to see it achieved. Treasury believed that the project would therefore have a low priority in the competition for funds available for new policy. Their view was that ‘if the additional costs cannot be accommodated within the department’s existing resources, the proposal should be declined’.

Treasury’s other major concern was that a review of maritime defence requested by Cabinet could force a reconsideration of defence spending priorities. By committing to purchases like that of the 727, the Government would lose the flexibility to re-order equipment priorities without committing extra funding. Treasury argued that ‘any further new projects which would commit resources for some years ahead should not proceed until such time as agreement has been reached on funding priorities for the future’. 
On 20 January 1981 Cabinet deferred a decision on the purchase of 727s for one week to await further information on the wider implications of the purchase. Cabinet was most interested in the impact that the purchase of 727s would have on Air New Zealand, making this another case of "two concerns under one Government roof". The Airline responded that "while they regret the forecast reduction in Defence passenger revenue they welcome the increased engineering work and find that, on balance, more attractive". The company had anticipated the need to make some engineers redundant following the introduction of the 747, but the work associated with the 727 proposal would provide opportunities for further employment. On 26 January 1981 Cabinet approved the purchase of three 727-100C aircraft at a total cost of $15,003,000. The Minister of Defence stated that "The purchase of these aircraft will allow the Air Force to carry increased payloads quickly throughout New Zealand's primary area of strategic concern, the South Pacific, in support of both national and defence tasks".

The RNZAF had sought a civilian jet aircraft for the VIP role. Later the plan to acquire a VIP aircraft merged with the drive for greater air transport capacity, with the emphasis on providing improved troop lift. Part-life civilian jets were suitable for both tasks, cheaper than C130s and less costly to operate. When the RNZAF was looking to buy a VIP jet they were reluctant to purchase a second-hand aircraft. By 1980, they were more accustomed to such purchases, and aware that there was not enough funding available to meet the cost of new aircraft. The first opportunity to present itself was a 737, which had been considered previously for the VIP role. Transferring an aircraft from the national airline to the Air Force would minimise expenditure, particularly in overseas funds. In this respect the proposal was similar to the purchase of the DC6 and Friendships. It was also similar to the DC6 proposal in that the aircraft, while not entirely adequate, was readily available and better than nothing at all. When the 737 proved inadequate a better opportunity emerged.
The 727 was suited to the RNZAF’s requirements and cheaper than the 737. The Government weighed the benefits of the purchase against the cost to Air New Zealand and agreed to go ahead. Like the Andover, the 727 was purchased to improve the RNZAF’s airlift capability particularly in the South Pacific. Although the size of New Zealand’s commitment had shrunk to a battalion group - the smallest it had ever been - to be committed close to home, the RNZAF’s airlift capability was now greater than ever before.
Notes

1 Wright, p.161.
2 Duxbury, Ewing and Macpherson, p.27.
5 RNZAF Air Staff Requirement 29/Air: Replacement VIP Aircraft, Air 51/1/29, dated 9 March 1973, National Archives, 'Air Staff Requirements for a VIP Aircraft 1972 - 1975', ABFK, 7281, 51/1/29, box 171.
7 Replacement VIP Aircraft, Group Captain Jamieson to Group Captain Hughes, Air 51/1/29, dated 4 May 1973, National Archives, 'Air Staff Requirements for a VIP Aircraft 1972 - 1975', ABFK, 7281, 51/1/29, box 171.
8 ASR 29/Air: VIP Replacement Aircraft, prepared by Ops 3, Air 51/1/29, dated 3 August 1973, National Archives, 'Air Staff Requirements for a VIP Aircraft 1972 - 1975', ABFK, 7281, 51/1/29, box 171.
10 J Lorentz to CAS, dated 23 October 1973, National Archives, 'Air Staff Requirements for a VIP Aircraft 1972 - 1975', ABFK, 7281, 51/1/29, box 171.
13 ibid.
14 ibid.
17 ibid.
18 'Falcon 10/Oil and Aeroplanes', by Donald W. Baird, 3 December 1973, National Archives, 'Air Staff Requirements for a VIP Aircraft 1972 - 1975', ABFK, 7281, 51/1/29, box 171.
19 'VIP Replacement Aircraft', Air 51/1/29, dated 3 May 1974, National Archives, 'Air Staff Requirements for a VIP Aircraft 1972 - 1975', ABFK, 7281, 51/1/29, box 171.
20 'VIP Aircraft', Dep Sec Def to CAS, dated 16 April 1974, National Archives, 'Air Staff Requirements for a VIP Aircraft 1972 - 1975', ABFK, 7281, 51/1/29, box 171.
22 See the earlier chapter dealing with the Andover purchase.
23 Cabinet Committee on Defence, Minutes of meeting held 8 August 1978, D (78) M 7, National Archives, 'Defence - Defence Committee - General - 1961 - 1978', AAFD, 811, Acc w4198, 222/2/1, box 87.
25 ibid., p.38.
27 Cabinet Committee on Defence, Minutes of meeting held 19 February 1980, D (80) M 2, National Archives, 'Cabinet Committees - Defence 1979 - 1984', AAFD, 7581, Acc w4646, 11/7/5, box 48.
28 RNZAF - Additional Transport Aircraft', CS (80) 793, dated 1 August 1980.
29 ibid.
31 ibid.
32 ibid.
34 'Additional R.N.Z.A.F. Transport Aircraft', Secretary to the Treasury to the Minister of Finance, dated 31 July 1980.
35 ibid.
42 ibid.
Conclusion

New Zealand’s military aircraft purchases have been influenced by factors such as aircraft performance, financial constraints, standardisation with allies, changing defence commitments and trade concerns. Some influences, like the desire to standardise equipment with allies, occupied the background in purchasing decisions. At the forefront were clashes involving the cost and performance of contending aircraft. Both the amount that the Government was willing to spend, and the types of aircraft it was willing to buy were in turn affected by New Zealand’s defence commitments and the strategic environment.

Previous authors, most notably David Filer, have suggested some broader factors influencing New Zealand’s aircraft acquisitions during this period. The first of these trends was the move away from British aircraft towards purchasing from the United States. Hoadley said that “In the early 1960s the obsolescence of the RNZAF’s surviving machines, reorganisation of the defence establishment, appointment of an energetic chief of air staff, and growing tensions in Indo-China focused New Zealand’s attention again on the United States. Also, Australia was turning increasingly to US weapons.” Harrison said that “In a major shift away from the traditional British orientation, American Hercules and Orion aircraft were obtained, along with the RNZAF’s first helicopters.” Filer went further and connected this shift with changes in New Zealand’s defence ties. “The most significant development in the RNZAF during the 1946-72 period was the turn, from the late 1950s on, towards the United States as a source of new aircraft, a development that was doubly significant in that in the early post-war years the Air Force had decided to revert to British aircraft. This move to American planes was part of the Air Force’s response to the general
defence trend in the period away from ties with the United Kingdom and towards ties with the United States and Australia.'³

The first thing to consider in assessing these claims is the relationship between the change in New Zealand's defence commitments and the move towards American aircraft. Filer suggested that 'The move towards the United States could have been an outcome of the shift in New Zealand's regional commitments in 1955'. But then he rightly pointed out that 'This is unlikely, however, for New Zealand's early commitments in South-east Asia were in a British context as part of the Commonwealth Strategic reserve'.⁴ Furthermore, the RNZAF's interest in American aircraft was apparent even before 1955 and the change in New Zealand's defence commitments. In 1951 the CAS had mentioned the possibility of acquiring American flying boats to replace the Catalina. After 1955, when the RNZAF was planning to obtain British aircraft such as the Canberra, the Provost and the Whirlwind, it was again contemplating the purchase of American flying boats. The British were no longer producing such aircraft, so the RNZAF was forced to look elsewhere. The first move towards American aircraft was not a response to new defence commitments but an effort to preserve a traditional role within the Commonwealth, a role that now only American aircraft could fill.

Filer said that 'Another important defence development in the 1960s which loosened traditional ties with Britain was the British withdrawal of most of its forces east of Suez, a policy first stated in early 1966, altered in July 1967 and accelerated in January of the following year.'⁵ Reese claimed that 'Australian and New Zealand defence planning was also affected after 1964 by indications that Britain intended to modify its military posture east of Suez'.⁶ Even if Reese's earlier date is taken, the RNZAF had already secured the Hercules and Orion before the decline in Britain's presence was signalled. In addition, the Sioux and Iroquois were already the favoured helicopters. The move towards American
aircraft preceded the substantial changes in Britain's presence in the Far East, and New Zealand began purchasing American aircraft while ties with the United Kingdom remained strong.

How then do we account for the shift towards American aircraft? In a footnote Filer wrote 'The move also was related to the fact that the United States over the last decade has dominated the production of military aircraft in the West.' Hoadley said that 'The RNZAF became convinced that the United States had the best aircraft for New Zealand's needs and the Treasury found out that prices and terms of finance were more favourable in the United States than in Europe.' The dominance of the United States in the production of military aircraft is evident in the individual purchasing decisions.

In the case of the combat role, Filer stated that 'Britain was not producing modern combat aircraft suitable for New Zealand's requirements, a fact which accelerated the Air Force's shift away from links with Britain and the RAF.' Given that the British were not competing with American manufacturers in the sale of combat aircraft to New Zealand, the decision to purchase from the United States was not a deliberate move away from the United Kingdom. Indeed the RAF and Royal Navy were also forced to look towards the United States as a source of combat aircraft. In February 1965 the British Prime Minister announced the cancellation of the P.1154 V/STOL supersonic interceptor in favour of American Phantoms. Then in April, the TSR 2 project was cancelled in favour of F111s. Thus the RAF and RNZAF were interested in the same American aircraft. Furthermore, the British CAS endorsed Morrison's preference for the F4 on the grounds that the RAF would also be operating these aircraft in the region.

Filer also stated that 'the heads of the Services tend to ask the Government to obtain the best equipment available, regardless of cost. This occurred in the RNZAF, for example, when Air-Vice-Marshal Morrison said that F111s should be obtained.' He went on to say
'the Air Force recommended the dearest and technically best plane, the Phantom, to replace the Canberras'.

On the other hand, 'The greatest factor in the Skyhawk’s favour was that it was cheaper... than the Phantom or Mirage'.

The RNZAF’s primary concern was the performance of the contending aircraft; the Government was most concerned with cost.

The origins of the aircraft were much further down the list of considerations.

The availability of the British-built Argosy was noted by Filer, but he acknowledged that the Hercules was the best transport aircraft. Again, the selection of the C130 had received an endorsement from a senior RAF officer - AOC Transport Command. The RAF ordered several squadrons of C130s in the 1960s following the cancellation of the HS 681 V/STOL transport project. The RNZAF thus achieved a degree of commonality with the RAF by purchasing from the United States.

The re-equipment of the maritime role was another example of the priority of considerations other than the country of origin. The Marlin had been selected because the RNZAF wanted flying boats. Then the maritime C130s had been favoured because it would help to reduce the diversity of types in service. The British did not have any new ASW aircraft available at the time the RNZAF ordered the Orion; the Nimrod did not enter service until 1969, and the replacement of the Sunderlands was a matter of urgency. The Shackletons that the RAF was using at the time had entered service in the early 1950s. This aircraft could not even match the ASW capability of the Marlin. The Orion by contrast was the most modern and sophisticated aircraft available. It is clear that the RNZAF’s selection was made based principally on the technical merit of the P3.

Filer also said that 'while the Air Force was obtaining new transport and maritime aircraft and, in doing so, establishing bonds with the United States, similar developments were occurring over the purchase of helicopters'. Furthermore, 'British helicopters were available, but American helicopters were purchased, a development which reflected the
moves in New Zealand defence policy away from Britain and towards the United States. Significantly, he added ‘Admittedly, the United States dominated helicopter production in the West’. The RNZAF’s desire to operate a single helicopter type predominated in the recommendation of the Alouette. The fact that it was a French helicopter did not trouble the RNZAF at all. The Army favoured the Iroquois because of its superior performance in the battlefield utility role and remained unconcerned that it could not fit on the frigates. The Navy wanted the British-built Wasp because they had little choice: their ships had been built around it. The Sioux was another example of an American aircraft that was common to New Zealand and British forces. Furthermore, the LOP and utility helicopters were evaluated for their suitability to operate with the Commonwealth Brigade, while the Wasp was chosen to serve in a Royal Navy environment. Therefore the selection of these helicopters can hardly be seen as a move away from Britain towards the United States.

New Zealand, like the United Kingdom, turned to the United States as a source of equipment because they had the best aircraft available. The move towards American aircraft is less significant because of the lack of British aircraft. There was no example where American and British aircraft of equal merit were separated by alliance considerations. An even stronger case would be the acceptance of an inferior aircraft from the United States over a superior aircraft from Britain, but this certainly did not occur. Rather than linking the move towards American aircraft with a perceived move away from Britain, it would be better to connect the decline of the British aviation industry with the same financial imperatives that would lead to the retreat from the Far East. On the other hand, America’s position as the greatest western power was reflected in its standing as the leading aircraft producer. The RNZAF may have had a policy of purchasing British aircraft in the early post-war period, but such a policy would have been untenable in the 1960s. The purchasing decisions reveal a policy of purchasing the best aircraft obtainable within
financial limits rather than a commitment to a particular supplier. Nor is it possible to tie the move to American aircraft with the move towards commitments in South East Asia, as New Zealand would have turned to American aircraft even if it had remained committed in the Middle East. Reese was correct in asserting that "New Zealand was better disposed than Australia towards British equipment... but in New Zealand's case too it was inevitable that the United States should become the main supplier".16 This awareness dawned early and doubtless informed some of the statements made in favour of standardisation with the United States. Treasury commented in 1957 that "It seems almost inevitable that sooner or later New Zealand would have no alternative but to obtain American equipment and it is a question whether that should be sooner or later."17 It is not difficult to declare an intention to purchase American aircraft if you do not expect any British contenders to complicate matters.

Australia, like the United States, was an important ally; it also manufactured some military aircraft. However, the RNZAF did not receive any Australian aircraft at all, despite repeated solemn declarations that standardisation with Australia should be a priority. Filer stated that "While the Air Force turned to American equipment, it did not similarly switch to Australian-made aircraft... Australian-produced planes always cost too much in comparison to their British and American competitors".18 However, he also said that "on both technical and financial grounds the Strikemaster was a better plane than the Macchi, as the former was more modern, more versatile and cost less than the latter".19 The Australian-built Canberra was not only more expensive than the British version on offer, it was also an earlier model. The RNZAF favoured British Canberras not just for their lower cost, but also for their superior performance. The Mirage was in the same price range as the F4 but it could not match its multi-role capability.
New Zealand's failure to purchase Australian aircraft is readily understandable if considerations of cost and performance are judged to have predominated. However, from the 1950s onward there had been broad recognition of the benefits of standardising with Australia and supporting its defence industry. In 1959 External Affairs' opinion was that 'New Zealand, while continuing to co-operate as closely as possible with the United Kingdom, should look more and more to Australia, with its growing defence industry, and to the United States, both accessible sources of supply in time of war, for military equipment'. However, Frank Corner was quick to question the belief that New Zealand should look to Australia as a source of military equipment. He asked 'do we seriously believe that Australia and N.Z. would continue a war after the U.K. and the U.S. have been knocked out by nuclear bombardment? I think its a sheer piece of fantasy. And if we would not be continuing a war in such circumstances we would not need the munitions industry in Australia for that purpose.'

Nevertheless support for Australian equipment persisted. In March 1965 the Minister of Defence, Dean Eyre, stated that since 1957 government policy had sought closer defence co-ordination with Australia, meaning that 'the two countries should work towards compatibility and, where possible standardisation of defence equipment'. The choice of 1957 was important: it was the year that New Zealand had purchased British rather than Australian-built Canberras.

The following year Morrison stated that the RAAF and RNZAF had been discussing standardisation since 1962. He said that 'Standardisation was simply a matter of requirement, which differed in some cases.' This was typified by the Mirage, which met Australia's requirement for a fighter but fell short of the F4 in the interdictor role. He could have added that it was also a case of differing budgets, as the New Zealand Government was not willing to send a large sum to purchase F111s as the Australian
Government had done. Morrison recalled that when discussions began, the Canberra was the only aircraft common to both air forces and that the two Canberra models were quite different. Now he cited the Hercules, the Sioux and the Iroquois as common aircraft types. However, the selection of the Iroquois owed more to the Army than it did to the plans of the Air Force, which had favoured the French Alouette. It is notable that all of the common types cited by Morrison were American aircraft and that none had been built in Australia. Furthermore, the significance of the talks on standardisation is open to debate as it is hard to imagine how New Zealand’s purchasing decisions would have differed had these staff discussions not taken place. After all, the aircraft chosen for the RNZAF were those that best satisfied the primary concerns of cost and performance. The dominance of the United States in aircraft manufacturing was such that it was inevitable that the RAAF and RNZAF would end up operating some common types.

In 1970 Australian and New Zealand defence officials observed that the importance of standardisation was being increasingly recognised by the Services in both countries, and that significant progress was being made, particularly between the two Armies. This growing awareness was not evident in New Zealand’s choice that year of the British Strikemaster over the Australian Macchi. It is also odd that awareness of the benefits of standardisation was still only growing when it had been government policy for more than a decade.

Military ties were only one aspect of New Zealand’s relationship with Australia. Trade was also an important concern, and this factor actually tended to count against the purchase of Australian-built equipment. The Government recognised the benefits of standardisation with Australia, but was concerned that buying equipment from that country would worsen the existing trade imbalance and damage trading relations with the United Kingdom. In July 1957 the Australian Minister of Supply and Defence Production was reminded that not only was the United Kingdom New Zealand’s traditional source of equipment, it was where
the bulk of New Zealand’s overseas funds were earned.\textsuperscript{25} In 1959 the CGS explained that ‘Although it was evident that the question of closer association with the United States was an important factor under consideration the real objective was a closer association with Australia. Compatibility with Australia necessitated, in the short term, the taking of some items of American made equipment.’\textsuperscript{26} However, the Cabinet Defence Committee drew attention to the substantial imbalance in trade between New Zealand and Australia and cautioned that any reduction in New Zealand’s purchases from the United Kingdom might harm the sale of New Zealand produce in that country.

The trade considerations associated with broader debate over purchasing Australian equipment were evident in the attempts made to sell Mirages and Macchis to New Zealand. In 1967 Australia offered New Zealand credit facilities to purchase Australian-built Mirages.\textsuperscript{27} At the same time, Keith Holyoake spoke of a ‘natural and understandable sense of frustration and disappointment’ on New Zealand’s part over the workings of the Free Trade Agreement between the two countries.\textsuperscript{28} With New Zealand concerned at the trans-Tasman trade imbalance, it was hardly an opportune time for Australia to try to make a large sale that would only have worsened the problem. The trade imbalance also counted against the Macchi. This time, New Zealand disappointment with the Agreement on Defence Co-operation and Supply served to justify a decision that went against both Australia and the agreement itself. On the other hand, trade considerations favoured the British-built Strikemaster. The selection of jet trainers for the RNZAF coincided with sensitive trade negotiations between New Zealand and Great Britain, and the New Zealand Government was keen to exploit the choice of a British aircraft. In neither the case of the Mirage nor that of the Macchi did trade concerns predominate over considerations of performance or cost. However, these factors tended to cancel out the professed enthusiasm for standardisation with Australia.
Trade factors also influenced the purchase of light fixed-wing aircraft, only this time the aircraft were being exported. However, the RNZAF was tardy in showing interest in the Airtourer and was apparently willing to consider purchasing foreign-built aircraft rather than especially favouring those made in New Zealand. Once again, performance was a more important concern to the RNZAF than the aircraft’s origins. The Government was also reluctant to buy any Airtourers and had to be convinced that even a small purchase was necessary. Trade considerations came into play, and the Government was convinced to buy, and the RNZAF to receive, a small number of Airtourers in the hope that it would boost overseas sales. The possibility of increased overseas sales was also used to strengthen the case for the modified Airtrainer.

The importance of performance in purchasing decisions calls into question Filer’s statement that ‘Two factors, therefore, have dominated in the type of military aircraft New Zealand has chosen - they have been relatively cheap in comparison to other planes and they have been tried and tested’. However, the Canberra, Hercules, Orion, Iroquois and Sioux were rated the best aircraft available for their respective role. Even the Skyhawk, which was not the RNZAF’s choice to replace the Canberra, was an excellent choice for the role the Government had specified. In fact the United States Marine Corps had chosen to continue operating the Skyhawk in the close support role rather than acquire the A-7 that had been intended to replace it. It would not be fair to say that New Zealand has always purchased cheap aircraft, particularly as this suggests that more expensive better aircraft were available, which was not always the case. It would be more accurate to conclude that the roles chosen for the RNZAF have been influenced by financial limitations.

In addition to buying new aircraft, the Government also made a number of opportunity purchases for the RNZAF. The long-standing need to replace the Bristol was satisfied by the purchase of Andovers made available by the RAF. The requirement for additional long-
range air transport was satisfied by the acquisition of the 727s. The purchases of the DC6 and Friendships involved pressing ex-airline aircraft into military service. This was cheaper than buying new aircraft and it reduced the expenditure of overseas funds. In the case of opportunity purchases the availability of aircraft within financial limits was the key. However, both the Andover and 727 were rated highly in their respective roles, so it would not be accurate to say that such purchases were made solely because the aircraft were cheap.

The change in New Zealand’s defence commitments was an important factor in purchasing decisions. Filer asserted that ‘while the move from the Middle East to South-east Asia did affect the RNZAF, it was altered more by the move from defence ties with Britain towards ties with the United States and Australia’. However, the change in commitments from the Middle East to South East Asia meant more than just moving flags to a new point on the map. The commitment in the Middle East had envisaged New Zealand participation in a global war, while planning in the South East Asian theatre was dominated by limited war scenarios. Emphasis also shifted from a large, ponderous army to mobile forces in being. The Air Force was reshaped to meet these new requirements. The RNZAF’s transport role changed from one of supporting the Air Force and Navy in time of war to assisting with the rapid deployment of the Army’s Brigade Group. This role was given the highest priority in the 1961 White Paper. The need to operate in the jungle meant that the acquisition of helicopters was also a matter of urgency, and this further committed the RNZAF to supporting the Army.

The RNZAF was also reshaped by financial constraints. The Prime Minister, Keith Holyoake, was reluctant to spend money on defence and was not alone in his desire to restrict spending on capital equipment. New Zealand was faced with balance of payments difficulties throughout the late 1950s/1960s, and this stiffened opposition to expensive
military purchases. There was also the lack of a direct threat to New Zealand. This meant that defence spending was more a matter of choice than necessity, and the Government chose to spend elsewhere. This was at the very time when the cost of military aircraft was rising rapidly with their increasing sophistication.

The limits on defence spending were most influential in the purchase of replacement maritime and combat aircraft. In the event of a limited war there was little threat to New Zealand from enemy submarines and surface vessels. Therefore, the need for, and priority of, ASW aircraft became a matter of controversy. The purchase of five Orions meant that the size of the RNZAF's maritime element had shrunk considerably from sixteen Sunderlands. The selection of the close air support role was also the result of the financial pressures. The possession of combat aircraft was fundamental to the RNZAF's identity as a fighting service. It was also held as the key to maintaining morale and attracting recruits. For these reasons, and because of genuine belief in the importance of offensive airpower, the RNZAF sought prestigious strike aircraft to replace the Canberra. However, the cost of such a purchase would have been too high. In 1954 25 Venom fighter bombers were estimated to cost £1,162,500. In 1965 Morrison estimated that F111s would be available for £1.5 million each. The cost of combat aircraft was rising out of all proportion to the threat, and it ruled out the purchase of new light bomber/interdictor aircraft.

Bomber/interdictor was also favoured by the RNZAF because it offered a measure of independence and the chance to make a major contribution to waging war. Penetrating to the heart of the enemy to deliver a lethal punch was something that the Air Force alone could do, and it need not be done in concert with the Army. On the other hand, the close air support role was tied to the Army's requirements in its operations on the ground. The Skyhawks, like the transport aircraft and helicopters, were purchased to support the land forces.
The balance of the RNZAF’s forces had shifted considerably. In 1960 the RNZAF included two squadrons of interdictors, three long range transports and no helicopters. By the early 1970s it had C130s, helicopters, and only a single squadron of close support aircraft. Filer noted that ‘To some extent the Air Force in the 1960s - with the purchasing of the Skyhawks and the adoption of the ground attack role in its combat arm, and the maintaining of Sioux and Iroquois helicopters in its transport arm - was adapted particularly to support the Army’s counter-insurgency operations in South-east Asia.’ This represents a more fundamental change than the choice of American aircraft.

The changes made to the RNZAF did not always accord with the Service’s wishes, and that raises the issue of the role played by the defence Chiefs in purchasing decisions. Pugsley said that ‘As Chief of Defence Staff, Thornton had to cajole Holyoake’s National Administration into buying essential capital equipment for each service. His success in this led to the purchase of... the A4 Skyhawks, the P3 Orions, the C130 Hercules’. Phipps was CDS until July 1965, so the purchase of the Skyhawk is the only one that can be credited to Thornton. However, it does raise the issue of the role played by individual officers in the purchase of military aircraft. McGibbon said of Morrison that ‘His tenacity and determination was the driving force behind a comprehensive re-equipment programme which included the first post-Second World War acquisition of American aircraft - the P-3 Orions, C-130 Hercules, and Bell UH-1 Iroquois’.

When considering the role played by the Service Chiefs in aircraft acquisitions, it is necessary to examine the circumstances in which the purchases were made. For example, changes in government policy had resulted in a clear requirement for transport aircraft and utility helicopters. Thus the need for these aircraft was not contested in the same way that plans to purchase ASW and combat aircraft were. The Army had pressed for priority to be accorded to transport aircraft and in this it was successful. Similarly, the Army was
particularly keen to obtain helicopters, while the RNZAF had no real use for them. The Army and Navy were also successful in obtaining the types of helicopters that they wanted, rather than those that the CAS had recommended. Thus these purchases were different in nature to those of the Orions and Skyhawks. Morrison's real triumph was the Orion, because proposals for maritime re-equipment had encountered stiff opposition from Treasury. It would be unfair to be overly critical of Morrison's predecessors and their apparent failure to secure new aircraft. The financial restrictions that confronted the Services at the end of the late 1950s meant that proposals such as the purchase of the Marlin were doomed to deferral, regardless of who was arguing the case.

The changes in the RNZAF are evident when plans to equip it for service in the Pacific at different times are compared. In 1948 the Government approved a plan for the RNZAF to create a balanced force that could operate in the South West Pacific or elsewhere. The regular Air Force was to include two bomber squadrons, one fighter bomber squadron, one flying boat squadron and one transport squadron. This force would be supported by a territorial Air Force of one bomber squadron and four fighter squadrons. That meant a total of eight squadrons out of ten would be operating in the combat role. When attention returned to the South West Pacific in the 1970s the RNZAF had only a single combat squadron.

Paradoxically, the end of forward defence and the planned retirement to New Zealand resulted in the need for even more transport aircraft to deploy forces based at home. When forces were committed to South East Asia they could rely on allies such as Britain to assist with transport requirements. Such help was no longer so readily available, so the requirement for air transport had grown while the size of the force to be deployed had shrunk considerably. The purchase of the Andovers and 727s was influenced by the change in defence commitments, and it further strengthened the RNZAF's transport role.
The most significant factor in shaping the Air Force was the increasing importance of financial limitations. This had been evident in the long delay associated with the Canberra and had become obvious in the debate over the Marlin. Financial restrictions determined the choice of the combat role and led to the selection of the Skyhawk rather than the F111 or F4. On the other hand, if the Government had provided sufficient finance to purchase two squadrons of strike aircraft, then the growth of the RNZAF’s transport roles would not have had such an impact on the shape of the Air Force. The most important decisions involving aircraft purchases were those made by the Government, for whom financial considerations were the greatest concern.
Notes

1 Hoadley, p.66.
3 Filer, p.110.
4 ibid., p.200.
5 ibid., p.33.
6 Reese, p.293.
7 Filer, p.110.
8 Hoadley, p.66.
9 Filer, p.103.
11 Filer, p.152.
12 ibid., p.105.
13 ibid., p.106.
14 ibid., p.100.
15 ibid., p.102.
16 Reese, p.292.
18 Filer, p.110.
19 ibid., p.108.
29 Filer, p.111.
30 ibid., p.112.
31 ibid.
34 'The Size and Shape of New Zealand's Armed forces', National Archives, 'Part 1 -Defence - 1955-57', AAFD, 811, 224/8/2, box 149g.
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