

**MILITARY AIRCRAFT PROCUREMENT AS A LEVER OF GOVERNMENT
POLICY – THE NIMROD AND THE DECISIONS OF THE WILSON
GOVERNMENT, 1964-65**

by

THOMAS PETER YONGE

A thesis submitted to the University of Birmingham for the degree of
DOCTOR OF PHILOSOPHY

Department of History
School of History and Cultures
College of Arts and Law
University of Birmingham

December 2023

UNIVERSITY OF
BIRMINGHAM

University of Birmingham Research Archive

e-theses repository

This unpublished thesis/dissertation is copyright of the author and/or third parties. The intellectual property rights of the author or third parties in respect of this work are as defined by The Copyright Designs and Patents Act 1988 or as modified by any successor legislation.

Any use made of information contained in this thesis/dissertation must be in accordance with that legislation and must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the permission of the copyright holder.

ABSTRACT

Against a prevailing trend for off the shelf American aircraft and collaborative European programmes, an outlier in the form of the low-volume British-made Hawker Siddeley HS.801 Maritime Comet – the Nimrod MR1, was selected by the Labour government in 1964-65 as the new maritime patrol aircraft for the RAF. The continuation of this niche domestic aircraft procurement is rarely placed alongside the emotive cancellation of the TSR.2, or the technological marvel of Concorde, as events that shaped the aviation industry and British policy, yet it forms an essential element to understanding the wider picture of British ambitions in the period. This thesis will seek to understand both the factors that influenced the selection of the HS.801 and how it fitted into this wider British strategy. To achieve this, it will examine the contributing factors of the British relationships with the United States and Europe, defence spending and strategy and the domestic aviation industry – all under the umbrella of a period of economic stringency for defence and particularly defence procurement brought about by the balance of payments crisis of 1964.

From this examination, it will be argued that the Nimrod procurement provided an essential measure of work for the embattled aviation industry, and when placed alongside the other concurrent programmes serves to define British strategy, intent and ambition of the mid-1960s. From this, it demonstrates how the Wilson Government approached the needs of the economy, defence, and Britain's place in world affairs during the precariously balanced first six months of the administration.

ACKNOWLEDGEMENTS

I am indebted to the support, guidance and motivation of my supervisors at the University of Birmingham over the course of my studies: Dr Peter Gray, Dr Armin Grünbacher and Dr Jonathon Boff.

My grateful thanks go to my colleagues in the Royal Air Force and United States Air Force for their patience in listening to my ideas, reading the chapters, and providing thoughtful advice. To the staff of the National Archives of the United Kingdom, National Archives of the United States, the British Library, Library of Congress and the Pentagon Library for their assistance and enthusiasm.

I would like to thank the RAF Museum, Hendon, for their award of an in-year PhD bursary, and the Royal Air Force Enhanced Learning Credits scheme for helping support my research.

CONTENTS

Abstract	p. i
Acknowledgements	p. ii
Abbreviations	p. iv
Aircraft Programmes and Terms	p. v
Note on Style	p. viii
Introduction and Review of Literature	p. 1
Chapter 1 The Economic Crisis and Labour's Immediate Response	p. 42
Chapter 2 The Influence of the USA	p. 76
Chapter 3 The Washington Talks, December 1964	p. 118
Chapter 4 The European Dimension	p. 154
Chapter 5 The Review of Defence Spending and Strategy	p. 194
Chapter 6 The British Aviation Industry	p. 218
Chapter 7 The Selection of the HS.801 – Nimrod	p. 254
Conclusion	p. 289
Bibliography	p. 297

ABBREVIATIONS

ACAS	Assistant Chief of the Air Staff
AM	Air Marshal
ANF	Atlantic Nuclear Force
AOC	Air Officer Commanding
AST	Air Staff Target
ASR	Air Staff Requirement
ASW	Anti-Submarine Warfare
BAC	British Aircraft Corporation
CAP	Common Agricultural Policy
CAS	Chief of the Air Staff (UK)
CSAF	Chief of Staff of the Air Force (USA)
DCAS	Deputy Chief of the Air Staff
DEA	Department of Economic Affairs
DoD	Department of Defense (USA)
EEC	European Economic Community
FAA	Fleet Air Arm
FO	Foreign Office
FRUS	Foreign Relations of the United States
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
HS	Hawker Siddeley
IMF	International Monetary Fund
MEA	Middle East Airlines
MLF	Multilateral Force
MoA	Ministry of Aviation
MoD	Ministry of Defence (UK)
MoS	Ministry of Supply
MPA	Maritime Patrol Aircraft
MR	Maritime Reconnaissance (variant)
MRBM	Medium Range Ballistic Missile
NATO	North Atlantic Treaty Organisation
OPD	Overseas Policy Committee for Defence
OR	Operational Requirement
R&D	Research and Development
RAF	Royal Air Force
RN	Royal Navy
TFX	Tactical Fighter Experimental
TNA	The National Archives (UK)
USAF	United States Air Force
VCAS	Vice Chief of the Air Staff
VG	Variable Geometry
V/STOL	Vertical/Short Take Off and Landing

AIRCRAFT PROGRAMMES AND TERMS

Air Staff Requirement (ASR)	Ministry of Defence document laying out the specification for a proposed aircraft requirement, often based on the capabilities of a preferred platform and providing a framework for manufacturers reference.
Air Staff Target (AST)	Ministry of Defence document detailing the conceptual requirement for an aircraft at a functional and performance level. Used in the early stages of specification setting alongside Operational Requirement (OR) for manufacturer reference.
Avro Shackleton	Fixed-wing maritime patrol aircraft in RAF service as the Mk.1,2 and 3. The Mk.1 and 2 variants were suffering fatigue issues by the early 1960s, precipitating the need for an interim replacement ahead of the introduction of the advanced AST.357 programme.
BAC TSR.2	All-weather nuclear capable strike aircraft, designated Tactical Strike and Reconnaissance 2. A technologically advanced aircraft design that was over budget and behind schedule by the 1964 general election and was cancelled in early 1965.
BAC VC-10	British airliner that was proposed in modified form as both an interim Shackleton replacement under ASR.381 and the more advanced AST.357. Assessed as too expensive and unable to meet required timelines. Did enter RAF service in troop, cargo transport and air-to-air refuelling roles.
BAC/Sud Aviation Concorde	Anglo-French supersonic airliner in development during the period. Entered commercial service with Air France and BOAC under the French spelling 'Concorde'.
BAC/Dassault AFVG	Anglo-French variable geometry strike aircraft programme developed after the period. Following French withdrawal and German and Italian entry, a version entered service as Panavia Tornado.
Breguet Atlantic	Twin-engined maritime patrol aircraft developed during the period by a European shared working consortium. The ASR.381 specification was built around the aircraft. Entered service with multiple European nations and revised into Mk.2 form as the 'Atlantique' in the 1980s.

General Dynamics F-111	Developed as the Tactical Fighter Experimental (TFX) during the period as a consolidated design for the US Air Force and US Navy. Selected as the replacement for TSR.2 in RAF service but cancelled due to increased costs and development delays in 1968.
Hawker Siddeley HS.681	Heavy transport aircraft in development for the RAF during the period, but still in the design phase. Cancelled in early 1965 in favour of American Lockheed C-130.
Hawker Siddeley HS.801	Modified Comet airliner proposed under ASR.381 and accepted into RAF service as Nimrod MR1. MoA principally referred to design as 'Maritime Comet' during the period. Featured Comet 4C wings on Comet 4 fuselage and an adapted under-fuselage bomb-bay and radar pannier from the ASR.381 Hawker Siddeley Trident proposal.
Hawker Siddeley HS.802	Proposed replacement for the HS.681 after programme was cancelled. Featured the HS.681 fuselage with Comet 4C wings. Dismissed as unsuitable within days of being proposed and C-130 introduced into RAF service instead.
Hawker Siddeley P.1127	Lightweight V/STOL development aircraft undertaking trials with Britain, the United States and West Germany during the period. Entered RAF service as the Harrier GR1.
Hawker Siddeley P.1154	Supersonic V/STOL strike aircraft design intended for service in the RAF and RN and still on the drawing board during the period. The RN variant was cancelled in 1963 and the RAF version in 1965, with both replaced by American F-4s.
Hawker Siddeley Trident	British airliner proposed as a direct rival to the BAC VC-10 against the ASR.381 specification. Similarly rejected on development and financial timelines.
Lockheed C-130	American heavy transport aircraft procured in place of the cancelled HS.681 as part of the American package with the F-111 and F-4.
Lockheed P-3	Four engined American maritime patrol aircraft considered against ASR.381 but not selected for RAF service.

McDonnell Douglas F-4	American strike aircraft procured in place of the P.1154 for both the RAF and RN. Re-engined with Rolls-Royce Speys and with components built under licence in Britain as part of the offset of work for the domestic aviation industry.
North American B-70	American supersonic strategic bomber under development prior to the period. Subject to confrontation between McNamara, Congress and US Air Force during later development and cancelled in 1962.
SEPECAT Jaguar	Anglo-French advanced trainer and light strike aircraft, developed after the period and entered RAF service as a combat aircraft.
Short Belfast	British heavy transport aircraft developed during the period and subsequently entered limited RAF service.
Short Seamew	Lightweight British maritime patrol aircraft, rejected by RN and then proposed for RAF service prior to the period. Cancelled due to a lack of required role.

NOTES ON STYLE

Over the course of an aircraft development, the given name evolves.

Throughout this thesis, where appropriate and when discussing the platform in-service, the operational name has been used, otherwise period developmental names have been used. For example, the term Tactical Fighter Experimental (TFX) was applied to what would become the F-111 aircraft once in service with the U.S. Air Force. For the Nimrod aircraft, there were two terms used during selection and development, and then Nimrod once operational. HS.801 was the internal Hawker Siddeley project designation, with Maritime Comet frequently used by the MoD and MoA. These terms are used interchangeably where it is most suited to convey the original meaning and intent from the source documents and argument structure.

The Anglo-French supersonic airliner entered service as Concorde, with the French spelling as standard. During 1964-65 the British term of Concord was used in government and press writings, so that is the term used throughout here. The spelling of the European maritime patrol aircraft as Atlantic refers to the original variant developed during the period, whilst the second-generation model developed during the 1980s was renamed as Atlantique and thus are considered as two distinct airframes.

American and British spelling of terms such as Defense and Defence have been retained when referring to titles and governmental departments. Unless used in a direct quote, British spellings have been used throughout the wider text regardless of topic.

INTRODUCTION AND REVIEW OF LITERATURE

“It may be possible to use developments in the arms industry to forward our political objects [sic]...Arrangements with the Americans will help to preserve some arms industry in Britain and to give reality to Anglo-American partnership in defence matters. Arrangements with European consortia for other weapons would help to prevent us from becoming isolated from Europe and would also be good for our arms industry.”¹

Sir John Thomson, Foreign Office, 7 Jan 1965

A military aircraft procurement does not occur in isolation. It is driven by a combination of wide-ranging domestic and international political objectives, the prevailing economic conditions of the time, the aims and ambitions of allied nations, and, invariably lastly, by the needs of the Service. The selection of the Hawker Siddeley HS.801 Maritime Comet – the Nimrod MR1, as a purely British built design represented an outlier during a frantic first six months of the Labour government following the October 1964 general election. It occurred during a period of cancelled British aircraft programmes and a move to both increased overseas purchases in the shape of the American F-111, C-130 and F-4, and in international collaborative efforts in the form of the Anglo-French Concord and the P.1127 vertical/short take-off and land (V/STOL) research and development programme. The continuation of this niche domestic maritime patrol aircraft procurement is rarely placed alongside the emotive cancellation of the TSR.2, or the technological marvel of Concord as events that shaped the industry and policy, but it is an essential element to understanding the wider picture of British ambitions in the mid-1960s.

This thesis will seek to understand why the Nimrod aircraft came to be chosen as the replacement maritime patrol aircraft for the RAF. This will be achieved by

¹ The National Archives of the UK [TNA] FO 371/184320, *US/UK Military Cooperation*, Memo, Thomson (FO) to Lord Hood (FO), *Decisions on Military Aircraft*, 7 January 1965.

examining how the selection was shaped by the sterling and balance of payments crisis inherited by Labour, the influence of American aims and ambitions, by British considerations for the European Economic Community (EEC) and particularly de Gaulle, and how all these elements contributed to define the review of defence spending and strategy and the subsequent implications for the British aviation industry. This will endeavour to address three main areas. Firstly and principally, how and why a low-volume domestic aircraft procurement was able to succeed and enter service whilst similar concurrent domestic programmes were cancelled. Secondly, through this process, to understand the breadth of diverse factors that weighed into the selection of an aircraft at the political, economic and military level during the period. Thirdly, when placed alongside the choices made on the other military and civilian procurements of the period, how this increases the understanding of British strategy, intent and ambition during the early months of the 1964 Labour government.

The period under examination commenced with the election of the Labour government under Harold Wilson in late October 1964 during a balance of payments crisis and the threat of a devaluation of sterling, and culminated in the announcement in Parliament by the Prime Minister of the decision to cancel the new RAF strike aircraft, the TSR.2, in April 1965. Alongside the TSR.2 strike aircraft, the HS.681 transport aircraft and the P.1154 supersonic V/STOL fighter were also cancelled, with all three British designs being replaced by American aircraft. The Anglo-French Concorde supersonic civilian airliner was also placed upon the block, but survived the cull, as did the highly experimental P.1127 V/STOL lightweight fighter concept which was under-going trials with Britain, the United States and West Germany at the time.

The economic travails of the incoming Government, along with the TSR.2 development and cancellation saga form the backbone of existing research into the period. What has not been examined is why, in spite of the near total shift by Labour away from independent British military aircraft manufacturing, the one other large scale aircraft procurement programme of the time – the replacement for the Avro Shackleton – resulted in a British airframe being selected that was based on an already outdated civilian airliner, and offered very little in the way of export opportunities. The selection of the Hawker Siddeley HS.801, titled the Nimrod MR1 in RAF service and which was based on the ageing Comet airliner, ran counter to the economic and political planning of the Wilson government. As such, the decision demonstrates the limitations of this shift and the inherent importance of retaining a domestic military aircraft manufacturing capability during the period.

The Nimrod procurement stands out as an outlier as the sole large scale domestic military programme of the period that continued whilst all others bar the experimental V/STOL P.1127 were cancelled. The rationale behind the selection of the Nimrod and the relationship with the other concurrent programmes provides a greater understanding of the interlinked nature of procurement policy during the period and places the other procurements decisions in a more complete context. This aspect has been lacking in existing research on the decisions of the period. Throughout this thesis, and its examination of how the Wilson government used aircraft procurement as a policy tool, it will be noted that a preferred option for a Shackleton replacement was broadly conspicuous by its absence during discussions on the futures of the aircraft programmes – particularly on the international stage. Instead it was within the domestic arena that the programme demonstrated its significance as a valuable

element of work for the reduced and embattled aviation sector. Therefore when placed alongside the other programmes, it highlights that domestic military aircraft production did have to continue in a cost effective form during a period of competing priorities, and was not completely discarded by the Wilson government in favour of the overseas and collaborative programmes that will be considered in context first.

Thus, when the wider actions are examined in turn, it will be shown that this reasoning behind the selection of HS.801, Nimrod, identifies it as the missing key to unlocking and understanding the important roles that the military aircraft programmes all played in both serving and shaping a wide spread of political, economic and strategic considerations during the period. No single programme occurred in isolation, and all were constituent parts of the jigsaw of the period, reflecting and impacting differing governmental requirements. Nimrod, as the outlier, helps complete the puzzle and provide the hitherto missing context for the procurement choices and government decisions of the period.

The domestic and international factors that surrounded all the procurement decisions of the period and ultimately shaped the HS.801 selection will be assessed, and through this lens enable a greater understanding of, as outlined by Sir John Thomson in the opening quote, how powerful the lever of defence procurement was in enabling the Wilson government to balance domestic economic output with the foreign policy objectives of maintaining a close relationship with United States and of showing a commitment to European neighbours to ensure that the door to the EEC remained opened. All this was carried out whilst trying to maintain the value of sterling and press ahead with domestic reforms embracing the 'white heat of technology'. By examining this most unlikely of aircraft selections within the context of

the other procurement choices, a much wider understanding can be gained of Britain's place and role in world affairs during a pivotal six-month period.

The timing of the Labour victory in the General Election of 15 October 1964 arguably framed the wider military and foreign policy need to ensure a replacement for the Shackleton far more than the fragile economic state of the country. In the twenty-four hours prior, Nikita Khrushchev was deposed as leader of the Soviet Union, and the People's Republic of China successfully tested their first nuclear weapon.² Less than a month later Lyndon B Johnson won the American presidential election in a landslide and continued to press ahead with an ever increasing military intervention in Vietnam, with, in the words of Bornet, a conviction that the "...1964 election had given him an unlimited mandate to follow his inclinations at home and abroad."³ Britain was already in the midst of an agonising debate over its ongoing role in world affairs. The question of maintaining an expensive military presence in the Middle East and Asia, particularly in countries that had since the end of the Second World War gained independence from Britain, was continually being posed under newspaper headlines such as 'Seeking Common Anglo-U.S. Approach: Sharing Western Burdens'.⁴ The socio-economic benefits of effectively maintaining an empire by another name were considered dubious at a time when closer European integration was seen as the way forward, and grand collaborative projects such as the Concord supersonic airliner were

² H. Conroy, *Callaghan* (London: Haus, 2006) p. 33.

³ V.D. Bornet, *The Presidency of Lyndon B. Johnson* (Lawrence: University Press of Kansas, 1983) p. 117.

⁴ Our Own Correspondent, "Seeking Common Anglo-U.S. Approach: Sharing Western Burdens", *The Times*, 10 February 1964.

symbolic of this shift.⁵ This existing posture was known simply as East of Suez, and came to symbolise Britain's relationship with the world in the first half of the Cold War, at a time when British influence and power projection was on the wane, and the economic and ideological might of both the United States of America and the Soviet Union were filling the void of the diminished European powers.

The support offered by the Marshall Plan to Britain and continental Europe after the Second World War enabled the continental powers in particular to reinvigorate their economies and strive towards the unified economic market model championed by Clayton and others within the US State Department, combined with aspirations of political unity to stave off the threat of war.⁶ Britain had been slow to realise the benefits of the European Economic Community, and after making overtures for membership in the early 1960s was firmly rebuffed by French President General de Gaulle in January 1963, who saw British membership as a threat to French power on the continent.⁷ The Anglo-French Concord offered both a means of demonstrating British commitment to Europe, whilst also playing directly to de Gaulle's desire to present France as an advanced world-leading power. Both the extreme costs involved, and the significant industrial efforts required, necessitated the project being considered alongside the military programmes as ripe for the cull in early 1965. The refocusing inwards of the European powers brought with it the final gasps of empire, and could most clearly be seen in the earlier struggles of the French to hold onto

⁵ The Anglo-French supersonic airliner had, during development, two naming variants. In Britain it was referred to as *Concord*, whereas the French used *Concorde*. As such *Concord* will be used throughout as it ties directly to the archival material.

⁶ T. Healey, "Will Clayton, Negotiating the Marshall Plan, and European Economic Integration", in *Diplomatic History*, Vol.35, No.2 (2011) pp. 230-233.

⁷ TNA, BT 241/2690, *Prime Minister's reaction to President de Gaulle's press conference held on 14 Jan 1963*, Note, Carey, President de Gaulle's Press Conference, 15 January 1963.

power in Indochina as resistance movements driven by Marxist ideologies and support from the leading communist nations began to dominate into the 1950s. Even prior to the 1964 American election, there was a gradually increasing American military involvement in the region as part of their policy of containing and then rolling back communism across the globe. Britain, under the previous Conservative governments, had refrained from direct British military involvement in Vietnam, and this was a stance that Wilson was determined to maintain, much to the personal annoyance of Johnson who was experiencing a similar balance of payments crisis driven by large scale international military efforts.⁸ With China now joining the nuclear club, the importance of British nuclear defence policy, which under Macmillan had become an intertwined relationship of manufacturing and deployment with the United States could not be overstated, and so finding a means of keeping President Johnson close took on an even more challenging aspect in light of the refusal to deploy British troops in combat in the Far East.

This need for an ever closer relationship with the United States was reflected in the field of defence procurement, and particularly that of aircraft procurement. The Hawker Siddeley HS.681 transport aircraft and P.1154 V/STOL combat aircraft alongside the British Aircraft Corporation (BAC) TSR.2 combat aircraft were either in advanced design stages or as flying prototypes when Labour won the General Election. All three aircraft programmes were ultimately terminated and replaced with American aircraft designs, some of which incorporated British elements but were predominately

⁸ W.I. Cohen, *A Nation Like All Others; A Brief History of American Foreign Relations* (New York: Columbia, 2018) p.180 and H. Parr, "Britain, America, East of Suez and the EEC; Finding a Role in British Foreign Policy, 1964-67" in *Contemporary British History*, Vol.20, No.3, (2006) p. 405.

off the shelf imports.⁹ With the reluctance of the Wilson government to join the United States in ground operations in Vietnam, moving towards closer ties in defence research and development and procurement represented a clear olive branch to an American president whose focus on domestic issues would have been aided by a series of British purchases providing some additional work for a consolidating American defence industrial establishment which was seeing its aircraft programmes slashed under Secretary of Defense McNamara.¹⁰ For McNamara himself, the move helped validate this strategy of bringing the methods of commercial manufacturing into the sphere of defense procurement. An additional benefit to the Royal Air Force of this ploy was that it promised an accelerated programme of bringing capabilities into service at a time when the new political instability in the Soviet Union and a newly nuclear weapon equipped China in the Far East represented both a threat to Europe and the wider international system.

The purchasing of off the shelf American aircraft designs necessitated the spending of scant government funds overseas at a point when the country could ill-afford to do so. The Labour government had inherited an £800 million balance of trade deficit, at a time of fixed exchange rates, from the Conservative administration and the economic situation was seen as an essential priority for the incoming Chancellor of the Exchequer James Callaghan.¹¹ As described by Susan Howson, “A balance-of-payments deficit with fixed exchange rates will oblige the monetary authorities to sell foreign

⁹ S. Broadberry, & T. Leunig, *The Impact of Government Politics on UK Manufacturing since 1945* (London: Government Office for Science, 2013) p. 29.

¹⁰ M. Lorell, *The U.S. Combat Aircraft Industry* (CA: Rand, 2003) p. 80.

¹¹ Conroy, *Callaghan*, p. 36.

currency in exchange for pounds in order to maintain the value of the pound.”¹² To counter this, the presumed course of action for Callaghan was to devalue the pound in order to make sterling more competitive on the global markets, thereby boosting the opportunities for British exports. Devaluation was a well-trodden route for previous Labour led and majority governments, having been a consequence of sterling coming off the Gold Standard during the Great Depression in 1931, and then formally in 1949 in a move that Pollard has viewed as a failure as it “...did not improve Britain’s international competitive position.”¹³ It was ruled out immediately as an option by the new government as it would have been calamitous for Wilson’s progressive Labour ideals to be seen to have taken a step back to traditional safe Labour policies within the first few months of taking office.¹⁴

Wilson was at the helm of a progressive Socialist movement within the Labour party, and continually stressed that they were a forward looking and dynamic party.¹⁵ Not all in his party were convinced, with Jobson of the opinion that the rank and file party members were, “...on the whole, suspicious of the new scientific and technological age.”¹⁶ For Wilson and his allies there was a need to demonstrate the validity of his vision through government organised stimulation of the economy and thus increasing the living standards for all in Britain. To achieve this, the country would have to embrace the new manufacturing fields and techniques and become a world

¹² S. Howson, ‘Money and Monetary Policy Since 1945’ in, Ed. R. Floud & P. Johnson, *The Cambridge Economic History of Modern Britain* (Cambridge: Cambridge UP, 2004) p. 140.

¹³ S. Pollard, *The Development of the British Economy, 4th Edition 1914-1990* (London: Edward Arnold, 1992) p. 197.

¹⁴ A. Shrimley, *The First Hundred Days of Harold Wilson* (London: Weidenfeld & Nicolson, 1965) pp. 13-14.

¹⁵ C.J. Bartlett, *A History of Postwar Britain* (London: Longman, 1977) p. 217.

¹⁶ R. Jobson, *Nostalgia and the Post-War Labour Party: Prisoners of the Past* (Manchester: Manchester UP, 2018) pp. 77-78.

leader in computing and technology. The announcement of this policy in the 1963 Scarborough conference gave rise to the term, 'the white heat of technology', and it was by this name that the wider Labour policies to invigorate the economy became known.¹⁷ As part of this, Wilson wanted to move away from costly prestige projects such as domestic military aircraft programmes with limited export potential, and move the research and development workforce into the commercial civil sector where their skills could revolutionise British prospects of competing with the United States in the high value technology markets. That the newly created Ministry of Technology lacked the ability, unlike in wartime, to move the workforce around to suit did little to limit the enthusiasm for the concept.¹⁸ There was also the risk that without this transition, the highly skilled workers would leave Britain and move to the United States where their expertise would be more highly valued and would enable them to continue working within their particular niches. All of Labour's grand plans had a fundamental limitation in the shape of their parliamentary majority of four.¹⁹ From the outset it was understood that a second election would have to follow in short order, and thus short-term popular developments would have to take priority over the idealistic embracing of the white heat of technology.²⁰

The condition of the domestic aviation industry, and the expectations of government during the period, had been defined by the 1957 Defence White Paper and its aftermath. This had laid out a clear and immediate expectation from the Conservative government that, in order to improve the competitiveness of the aviation

¹⁷ Political Correspondent, "Mr. Wilson waves new banner of revolution", *The Times*, 2 Oct 1963.

¹⁸ R. Coopey, *Industrial Policy in the White Heat of the Scientific Revolution* in Ed. R. Coopey, S. Fielding & T. Tiratsoo, *The Wilson Governments 1964-1970* (London: Pinter, 1993) p. 116.

¹⁹ P. Foot, *The Politics of Harold Wilson* (Harmondsworth: Penguin, 1968) p. 155.

²⁰ Bartlett, *A History of Postwar Britain*, p. 217.

sector and its effectiveness within wider British industrial output, there was a need to consolidate and rationalise the large number of companies involved in airframe and aeroengine manufacture, with an expectation that the companies would work cooperatively on programmes. A key element was, as viewed by Fearon, that there were high levels of costly duplication of effort from the multitude of companies, particularly in the challenging market for civil aircraft orders.²¹ For Devereux these competitive problems instead stemmed from British companies being, “...too numerous and too specialized, and none were sizeable enough to take on growing producers like Boeing.”²² The point of agreement however, was that the sector was too large for both the reduced post-Korean War defence requirements and the emerging era of American-dominated civil aviation.

Duncan Sandys, as Minister of Defence in 1957, saw the future of warfare as centring on ballistic missile technology, and this position brought about a significant reduction in manned strike and interceptor aircraft requirements and the cancellation of multiple programmes under development, such as the Avro 730 high-speed, high-altitude reconnaissance aircraft, which would be vulnerable to advanced surface-to-air missile systems.²³ By the late 1950s, 70% of the output of the domestic aviation sector fulfilled military contracts, and such a significant change in policy inevitably resulted in a need to reduce the overall size of the aviation sector.²⁴ The policy also placed a

²¹ P. Fearon, “The Growth of Aviation in Britain”, in *Journal of Contemporary History*, Vol.20, No.1 (1985) p. 36.

²² D. Devereux, “State Versus Private Ownership: The Conservative Governments and British Civil Aviation 1951-62”, in *Albion: A Quarterly Journal Concerned with British Studies*, Vol.27, No.1 (1995) p. 85.

²³ T. Buttler, “The 1957 Defence White Paper: The Cancelled Projects”, in *Journal of Aeronautical History*, Paper No.2018/03 p. 88.

²⁴ K. Hayward, “The Formation of the British Aircraft Corporation (BAC) 1957-61”, in *Journal of Aeronautical History*, Paper No.2012/01 p. 4.

greater importance on promoting the profit-earning civil aviation side of the various businesses. These government-led consolidation efforts on private companies were achieved, in the words of Keith Hayward, "...through 'persuasion' and the selective allocation of government contracts."²⁵ The process continued into 1960, led by Sandys following his move to the new Ministry of Aviation in late 1959.²⁶ The rationalisations resulted, in some cases reluctantly, in the creation of British Aircraft Corporation (BAC) from the merging of Bristol, English Electric, Vickers and Hunting, with de Havilland joining the Hawker Siddeley group.²⁷ This significant upheaval and the reduction in orders were not universally viewed as the correct solution to the problem of an oversized industry. The MP for Belfast West, Patricia McLaughlin, referencing the reduction of work allocated to government-owned Shorts within her constituency, stated that, "It is an unusual kind of company when the majority shareholder sits complacently and allows the firm to go down the drain."²⁸ Such a perceived lack of consideration for Shorts typified the problematic view of how to manage the industry in the late 1950s and early 1960s, yet by 1964 the new conglomerates and the expectations of collaborative work were the accepted status quo, with no further amalgamations weighing on the procurement processes of the period.

The aspirations of the Wilson government to further reform and refocus the sector into a profitable segment of British industrial output were therefore not new or novel ambitions. Yet they did take on an increased speed and importance given the economic pressures and the wider aspirations of technological reform for the British

²⁵ Hayward, "The Formation of the British Aircraft Corporation (BAC) 1957-61" p. 4.

²⁶ Hayward, "The Formation of the British Aircraft Corporation (BAC) 1957-61" p. 11.

²⁷ Devereux, "State Versus Private Ownership" p. 82.

²⁸ House of Commons Debate, 22 May 1958, *Hansard*, Vol. 588, Col. 1600.

economy as a whole with the need to free up research and development capacity and a skilled workforce.

Of the aircraft procurements that were at various stages of development during the period only two British designed and built aircraft survived the cull and saw front line service. The Hawker Siddeley P.1127, which would see service under the name Harrier, was a world leading project introducing V/STOL technologies into combat aircraft in a small, compact and dynamic package. This opened up a wide range of export possibilities, including to the United States, who along with West Germany were contributing to the early research and development work at Hawker Siddeley.²⁹ With Britain leading the world in this capability the decision to continue with its development appeared logical. The P.1127 fitted Wilson's vision of Britain leading the way in this new forward-looking age. The same could not be said of the Hawker Siddeley HS.801 which was ultimately selected as the replacement for the ageing British built Avro Shackleton Mk.1 and 2 maritime patrol aircraft.³⁰ The HS.801 was based around the Comet airframe, which was the first jet powered airliner in the world when it entered service in the late 1940s. By the mid 1960s it was fast becoming obsolete and in the process of being retired by the few operators who had persisted with it long after Boeing had captured the lead in commercial aviation with the 707 model of long-range airliner. The HS.801 did not offer any of the technological advancements of the P.1127, and certainly not the clear export, and thus economic, advantages. In early 1965 it was still on the drawing board, whereas the United States already had the Lockheed P-3 Orion in service and available for export, which

²⁹ The Harrier was re-named the AV.8B in U.S. Marine service.

³⁰ T. Yonge, 'A Historical Perspective on Defence Procurement - The Competition for the Replacement of the Avro Shackleton Mk.1 & 2, 1963-1966', *Air Power Review*, Vol. 16, No. 1 (2013) p. 94.

represented a capable, cost-effective option that would have fitted into the model of replacing expensive low-volume British aircraft with American off the shelf offerings. The total purchase requirement was certainly modest when compared to the TSR.2 and thus an additional overseas purchase would not have made a great impression on the already stretched government fiscal plan. It would however have ensured that the aviation industry retained a stream of work at a time when other programmes were being cancelled, and at a level that would not have significantly detracted from the ambition of moving the highly skilled workforce into the more economically competitive fields.

Therefore, by understanding how these greater elements shaped the rationale behind the procurement of the HS.801, so the complete picture of both Britain's position in the world, and of how the various procurements both shaped and reflected the new reality can be assessed. The economic dilemma of devaluation and the press of the white heat of technology, particularly for the aviation industry, framed the domestic situation. Internationally, the urgings from the White House over British support in Vietnam was balanced against the uncertainty over continued British involvement East of Suez and a rapidly changing global landscape. In Europe, the problem of de Gaulle and how to prepare for another bid for EEC membership must also be considered. Out of all of this, a most unlikely low volume domestic military aircraft procurement emerged. One that has been ignored by the majority of academia, yet may well hold the key to forming a more focused understanding of how and why the complex British domestic and international machine worked the way it did in those crucial early months of the Wilson government and beyond.

The well-established academic literature of the period that focuses on Britain can generally be broken down into two groups; those works focusing on the performance of the British economy, and those examining the political machinations of Harold Wilson and his government on both the domestic and international stage. Amongst the more specialist authors, studies have been made of the TSR.2 and Concord programmes, whilst others have chosen to examine the period as an element of the broader Cold War or the decline of the British aviation industry. Despite this wide variety of texts, there is no work dedicated to the understanding of the HS.801 procurement, and how it sat within the context of the period.

To economic historians, the early months of the Wilson government are seen as a stepping-stone on the route to the devaluation crisis of 1967. The actions of Callaghan as Chancellor in fighting off devaluation through a series of trade tariffs and an emergency budget in November 1964 are seen as the crucial focal points.³¹ Those studies which examine the Labour administration's policies, such as Beckerman's volume *The Labour Government's Economic Record, 1964-1970* and Blackaby's *British Economic Policy 1960-74* see the efforts of Callaghan as a failure, undoubtedly due to the fact that devaluation would still occur just a few years later.³² Such studies dwell heavily on economic performance numbers and are clearly aimed at a specific audience. They are also notable for the fact that although defence spending does get fleeting mentions, the only aircraft procurement that is deemed worthy of comment is the TSR.2, and even then as providing only a small saving to government

³¹ G. O'Hara, 'Dynamic, exciting and thrilling change; the Wilson government's economic policies 1964-70', in *Contemporary British History*, Vol.20, No.3, (2006) pp. 383-402.

³² Ed. Blackaby, F.T., *British Economic Policy 1960-74* (Cambridge: Cambridge UP, 1979) and Ed. Beckerman, W., *The Labour Government's Economic Record, 1964-1970* (London: Duckworth, 1972).

expenditure.³³ Domestic industrial performance outside of defence research and development (R&D) is often viewed as the primary hindrance to growth.³⁴ The government's efforts to promote growth in the economy and the subsequent failures of such policies with the spectre of devaluation always hanging heavy in the background are how the period is characterised. Booth presents the 1964-1970 Labour period as, "[A] tragi-comic slide...from promises of faster growth to devaluation and ultimately to major retrenchment [marking] ...a key stage in the development of the postwar economic policy."³⁵ Contemporary works such as the Hacketts' *The British Economy; Problems and Prospects*, first published in 1966, present a different viewpoint, principally because they do not have the benefit of hindsight over devaluation.³⁶ Here the balance of payments crisis of 1961 is assessed as a far more serious hindrance to the economy than the one of three years later.

Economic historians who examine the wider post-war and twentieth century periods, such as Alec Cairncross and Sidney Pollard, place the events of 1964-65 within the context of Labour's intentions of shifting the economy away from the boom and bust cycles seen under the previous Conservative government.³⁷ Such texts, often aimed at a university undergraduate audience, do not have the space to venture into great detail on the period, and as such defence expenditure is only considered in sweeping terms, and aircraft procurement does not receive a mention. Given that the decline of the British aviation industry represents part of the overall decline in British

³³ Blackaby, *British Economic Policy*, p. 112. & Beckerman, *The Labour Government's Economic Record*, p. 195.

³⁴ B.W.E. Alford, *British Economic Performance, 1945-1975* (Hong Kong: Macmillan, 1988) pp. 74-88.

³⁵ A. Booth, *The British Economy in the Twentieth Century* (Basingstoke: Palgrave, 2001) p. 177.

³⁶ A-M. & J. Hackett, *The British Economy; Problems and Prospects* (London: Allen & Unwin, 1967)

³⁷ A. Cairncross, *The British Economy Since 1945, 2nd Edition* (Oxford: Blackwell, 1995) & Pollard, *The Development of the British Economy, 4th Edition*.

manufacturing throughout the post-war period, the omission of what represents a watershed moment is somewhat surprising.³⁸ The economic texts do not view defence matters as having been a major element of Labour's reaction to the economic crisis, yet the decisions taken over the procurements, and the intriguing selection of the HS.801 in particular had profound financial and industrial implications for Britain.

Studies on the economics of defence procurement represent a subdivision of the broader economics discipline, rather than placing the defence industry within the history of political decision making. They are however useful sources of statistics on the financial and labour aspects of the industry, alongside framing the ever-increasing consolidation of the sector. As new works are published so the era under examination shifts to the recent past, such as Taylor and Hayward's study of 1989 which examines the period 1979-1987.³⁹ Where the 1964-65 cuts are discussed, the focus is on the big three cancelled programmes, without reference to the HS.801.⁴⁰ Keith Hartley's multiple works do provide valuable insights in the nature of the relationship between political ambitions and procurements over a broad sweep on time, but are not primarily aimed at the historian, as identified in *The Economics of Defense*, it is instead, "...designed for upper-level undergraduate and graduate students in economics."⁴¹ Hartley and Sandler's vast two volume *Handbook of Defense Economics* does address the fundamental political choice inherent in any procurement, stating the options,

³⁸ Pollard does cover the shift in responsibility for aircraft design and production away from the Ministry of Aviation and to the new Ministry of Technology but does not place this in the context of spiralling defence costs and diminishing exports.

³⁹ T. Taylor & K. Hayward, *The UK Defence Industrial Base; Development and Future Policy Options* (London: Brassey's, 1989).

⁴⁰ W.A. Chin, *British Weapons Acquisition Policy and the Futility of Reform* (Aldershot: Ashgate, 2004) p. 54.

⁴¹ T. Sandler & K. Hartley, *The Economics of Defense* (Cambridge: Cambridge UP, 1995) p. 11. and K. Hartley, *The Economics of Defence Policy* (London: Brassey's, 1991).

“...of support for a national DIB [defence industrial base] or importing foreign arms (either with or without offsets) or the ‘intermediate’ solutions of international collaboration and licenced/co-production.”⁴² Such economic studies on procurement are however primarily concerned with the detailed breakdown of the what and how, rather than the why.

Political studies of the period, particularly those that examine the early months of the administration, centre on the attempts of the Wilson government to stabilise the economy. The incoming government is viewed as being light on experience of high office and dominated by the figures of Wilson as Prime Minister and Callaghan as Chancellor.⁴³ Given the urgency of providing a workable solution to the deficit in the balance of trade it is unsurprising that the actions of Callaghan have come under such scrutiny. Biographies of Callaghan, such as that by Henry Conroy, and indeed Callaghan’s own autobiography focus on the budgets of November 1964 and April 1965 as the cornerstones of these efforts, yet defence matters are rarely touched on as having shaped these budgets.⁴⁴ Owen’s study on British industry dedicates a chapter to the post-war aviation industry, but for him the civilian side is the dominant piece, and only briefly mentions the cuts of 1965 in the context of the need for the Wilson government to cut wider costs. Here, as with almost all studies, the HS.801 is not mentioned alongside the other four military and civilian Concord programmes.⁴⁵

⁴² K. Hartley, ‘The Arms Industry, Procurement and Industrial Policies’, in Ed. T. Sandler & K. Hartley, *Handbook of Defense Economics; Defense in a Globalized World, Vol.2* (Amsterdam: Elsevier, 2007) p. 1171.

⁴³ G.J. Fry, *The Politics of Decline, an Interpretation of British Politics from the 1940s to the 1970s* (Basingstoke: Palgrave, 2005) p. 184. and A. Sked & C. Cook, *Postwar Britain; A Political History, 4th Edition*. (London: Penguin, 1993) p. 201.

⁴⁴ J. Callaghan, *Time and Chance* (Glasgow: Collins, 1988) pp. 158-187. and Conroy, *Callaghan*, pp. 33-37.

⁴⁵ G. Owen, *From Empire to Europe; The Decline and Revival of British Industry Since the Second World War* (London: Harper Collins, 1999) pp. 312-313.

As with economic studies, so political studies of Callaghan see the implementation of tariff restrictions as a means of avoiding devaluation of sterling as central to the government's thinking. Callaghan himself does mention the benefits of moving the highly skilled workforce away from the Concord and TSR.2 programmes and into the car industry where they were desperately needed, yet he does not state whether the cutting of the aircraft procurements was principally done to aid in the redistribution of the workforce to more profitable areas, or to combat the economic crisis.⁴⁶

Harold Wilson has been portrayed within the historiography as a characterful leader, ideally suited to the ever-important medium of television alongside radio.⁴⁷ Like Callaghan, his actions in the first few months in office are seen in relation to the economic reforms balanced against his ambitions for long term regeneration after thirteen years of Labour in opposition. As the dominant figure within the Cabinet, much of the political examinations of this period focuses on Wilson as the originator and decider of Labour policy, rather than to it being the work of his Ministers. Peter Hennessy observes in his substantial history of the Civil Service, *Whitehall*, that as Wilson had served in the Civil Service during the Second World War he was expertly placed to understand what could or could not be achieved at the Treasury in tackling the deficit.⁴⁸ Whilst Hennessy contents himself with assessing the working of the Department of Economic Affairs (DEA) in this period, rather than the direct management of the economic crisis, he does provide the opening for understanding how the powerful and influential briefing committees who would have advised the Ministers on their decisions worked. This aspect of Civil Service influence is not

⁴⁶ Callaghan, *Time and Chance*, p. 168.

⁴⁷ Sked & Cook, *Postwar Britain*, p. 201.

⁴⁸ P. Hennessy, *Whitehall* (New York: Macmillan, 1989) pp. 181-182.

normally explored in political texts, as these tend to favour appraising the Ministers rather than their teams. Jeffery's edited volume, *Labour Forces*, is a perfect example of providing fairly neutral character assessments of leading figures without necessarily exploring how they interacted with their department staff.⁴⁹ The other oft cited cause for the crisis and the subsequent decision-making process is the previous Conservative Government. Jenkins, as Minister of Aviation, argued in his autobiography that the military and civil aircraft programmes were a Conservative commitment that was overburdening the industry, and whilst he refrained from going into the specifics of all save the TSR.2, he suggested that the cutting of all the over-budget and crucially un-exportable designs would save both money and win political ground.⁵⁰ The HS.801, based on the second of these concepts should therefore almost certainly have gone to the gallows. Come the summer of 1965, and thus after the period directly under examination, defence and aircraft procurement does begin to become a more prominent feature within writings on Labour policy, yet the apparent knee-jerk reaction to the crisis of driving through procurement cuts remains under-examined.

One area where the political views of Wilson and Callaghan aligned with Healey and other senior figures within the party was over a desire to maintain British influence on the wider stage, particularly East of Suez.⁵¹ It is here that debate takes place on defence expenditure, not as a means of defence of the realm, but as an economic and political tool in both the colonies and former colonies in the Far East.⁵²

⁴⁹ K. Jefferys, *Labour Forces; From Ernest Bevin to Gordon Brown* (London: I.B. Tauris, 2002) pp. 105-177. Covering Jenkins, Crossland, Healey, Brown and Castle.

⁵⁰ R. Jenkins, *A Life at the Centre* (London: Macmillan, 1991) pp. 160,172.

⁵¹ Royal Historical Society, *Harold Wilson's Cold War; the Labour Government and East-West politics, 1964-1970* (Chippenham: RHS, 2009) p. 85.

⁵² Alford, *British Economic Performance*, p. 82.

Authors such as Parr highlight the delusion of Wilson's vision of the frontier of British responsibility sitting at the foothills of the Himalayas, and use this to argue that Wilson demanded a high degree of military capability in order to maintain this presence, despite the ever increasing importance of gaining EEC membership and his ambitions for the re-energisation of the domestic economy.⁵³ Joseph Frankel, however, cites Healey as having said in 1965 that, "...our military presence East of Suez is...[for] the maintenance of peace and stability where sudden withdrawal of colonial rule has often left the local people unable to maintain stability without some sort of external aid."⁵⁴ Frankel's view of Healey suggests a more altruistic motive, yet whilst both offer different reasoning for the sustainment of a worldwide British military commitment, neither author delves into how procurement decisions contributed to making it financially viable. The basic concept that British overseas military expenditure was too high is agreed upon by the majority of authors, and Frankel offers up that in purely economic terms the purchasing of aircraft from the United States was a more cost effective solution, backed up by Fry who sees the cheaper F-111 purchase as one designed to ensure the continuation of the East of Suez role despite the need to cap the defence budget.⁵⁵ Equally, although authors such as Colman and Dockrill have written on the notion of American support for sterling in exchange for Britain maintaining a presence East of Suez, the use of defence procurement as a tool in gaining this support and going beyond simply saving money is not addressed.⁵⁶ These

⁵³ Parr, "Britain, America, East of Suez and the EEC" pp. 404-405.

⁵⁴ J. Frankel, *British Foreign Policy 1945-1973* (London: Oxford University Press, 1975) p. 300.

⁵⁵ Frankel, *British Foreign Policy*, pp. 290-291. and Fry, *The Politics of Decline*, p. 192.

⁵⁶ J. Colman, *A 'Special Relationship': Harold Wilson, Lyndon B. Johnson and Anglo-American Relations 'at the summit', 1964-68* (Manchester: Manchester UP, 2004) pp. 81-85. and S. Dockrill, *Britain's Retreat for East of Suez; The Choice Between Europe and the World?* (Basingstoke: Palgrave, 2002) p. 119.

works address the 'why' motivation for having a non-specific capability, yet do not address the particular question of 'what aircraft and why' of a certain purchase. This is not surprising from a technical standpoint, as the matters exist within the political realm rather than the particular capabilities of the various aircraft and if they were suited for the various environments. The 'what' aircraft question is important for understanding the political impact that a specific aircraft proposal could have, and is central to understanding how each selection fitted into, and arguably even shaped, foreign policy decision making. The central focus of this thesis is on the selection of the HS.801 Nimrod as the aircraft to replace the Avro Shackleton, rather than the wider strategic concept of whether a maritime patrol aircraft was a military capability worthy of retaining. The main tenet is therefore how the decision to buy a British rather than American or Pan-European maritime patrol aircraft fitted both into wider Labour priorities and served as a lever for meeting these policy objectives, coming as it did at a time of economic stringency and a pronounced move away from domestic low-volume military aircraft procurements.

Within the wider geo-political strategic space, there is the important consideration of whether Britain was still seriously attempting to be considered as a global power, with close ties to the United States, or whether the nation was now fully focused on Europe and content to operate as the first among equals to the United States. Historians of the Special Relationship such as Burk and Arnold view the period as a low point in trans-Atlantic relations, with it offering limited benefits to America.⁵⁷

⁵⁷ G. Arnold, *America and Britain; Was There Ever a Special Relationship?* (London: Hurst & Company, 2014) p. 84. and K. Burk, 'Old World, New World: Great Britain and America from the Beginning', in Ed. E. Dumbrell & A.R. Schäfer, *America's 'Special Relationships', Foreign and Domestic Aspects of the Politics of Alliance* (London: Routledge, 2009) p. 36.

Value and dependence are two different variables, and Chris Wrigley is one of the authors who views Britain as being reliant on the United States in both economic and defence matters.⁵⁸ This viewpoint reaffirms the notion that the more important aspect of the period was not that the British aircraft designs were culled, but that American aircraft were procured in their place. This argument does not however address why the two other aircraft designs survived the cull, particularly the HS.801, where there was a suitable American aircraft available in the shape of the P-3 Orion.

Central to understanding why there was a move towards American purchases in the first place requires an examination of the relationship between Wilson and Johnson, and particularly the summit meeting in Washington in December 1964. In a book published in 1965, the journalist Anthony Shrimley, who covered the event for *The Sunday Mirror*, stated in broad terms that discussions took place at the White House on future Anglo-American cooperation on defence research and development and production.⁵⁹ Jonathan Colman, in his doctoral thesis turned book on the relationship between Wilson and Johnson devoted an entire chapter to the Washington talks, yet makes no mention of discussions on defence procurement and the impact these could have on shaping this relationship.⁶⁰ Colman instead highlights the discussions over the economic crisis, the planned Atlantic Nuclear Force, and Vietnam. In Bennell's official RAF Air Historical Branch study into the 1964-1970 period, published in 1994, the sole consideration of the Shackleton replacement in the period is in a passing reference in the pre-Washington Summit Chequers briefings,

⁵⁸ C. Wrigley, 'Now You See It, Now You Don't: Harold Wilson and Labour's Foreign Policy 1964-70' in Ed. R. Cooney & T. Tiratsoo, *The Wilson Governments 1964-1970* (London: Pinter, 1993) p. 128.

⁵⁹ Shrimley, *The First Hundred Days of Harold Wilson*, p. 95.

⁶⁰ Colman, *A 'Special Relationship'?*, pp. 37-49.

where the costs of the various platforms were discussed and the P-3 Orion was assessed as being slightly cheaper than the proposed Comet modification. His coverage of the Summit itself includes only a brief mention on TFX, but no further discussion on the wider procurements.⁶¹ To American authors the meeting barely even commands a footnote. Political historian Robert Dallek, in his weighty and thorough biography of Johnson does not even mention the meeting, and, as with others, chooses to focus on the domestic issues which, alongside Vietnam, have come to dominate literature on the Johnson administration.⁶² The efforts of Johnson's Secretary of Defense, McNamara, to reorganise the Department of Defense, increase exports to aid the balance of payments and reduce the budget did, in the process, play a central role in there being an American package on offer to Britain. Biographers of McNamara devote whole chapters to the F-111 programme as an example of McNamara fighting against the Services and Congress to impose his methods, but do not mention the impact that Britain as a customer would have had in proving the effectiveness of his plans.⁶³ Christenson's *Expanding the Secretary's role in Foreign Affairs; Robert McNamara and Clark Clifford 1963-1968* focuses on the direct aspects of hard military power projection, and does not mention the political impact of sales as a variation on soft power projection.⁶⁴

⁶¹ A.S. Bennell, *Defence Policy and the Royal Air Force 1964-1970* (London: Air Historical Branch (RAF), 1994), pp. 1-8-9.

⁶² R. Dallek, *Lyndon B. Johnson; Portrait of a President* (Oxford: Oxford UP, 2004) also see J.A. Califano Jr., *The Triumph and Tragedy of Lyndon B. Johnson; The White House Years* (New York: Touchstone, 1991).

⁶³ L.S. Kaplan, R.D. Lande, E.J. Drea, *History of the Office of the Secretary of Defense, Vol IV: The McNamara Ascendancy 1961-1965* (Washington D.C.: Historical Office, Office of the Secretary of Defense, 2006) pp. 415-473.

⁶⁴ J.C. Christenson, *Expanding the Secretary's role in Foreign Affairs; Robert McNamara and Clark Clifford 1963-1968* (Washington D.C.: Historical Office, Office of the Secretary of Defense, 2014).

The question of British involvement in Vietnam, and the viewpoint that the East of Suez policy was maintained in order to appease the United States over a lack of a direct military contribution in Vietnam is a widely held one.⁶⁵ This is based around the concept that in order to maintain American support for sterling, Britain had to be seen to be contributing to the stabilisation of the Far East whilst America was focused on Vietnam.⁶⁶ The contradiction in the policy is that in order to keep the economy moving, a large proportion of government spending had to be continually invested in the Far East, a fact that Callaghan addressed in his memoirs by stating that overseas defence expenditure became unsustainable by the middle of 1965.⁶⁷ Despite this, in order to maintain such a stance would also have required capable long range military strike, transport and patrol aircraft, as aircraft, then as now, represented a cost effective means of power projection. The first two of these roles saw similarly capable American options procured in place of the British offerings, whereas the patrol requirement, in the form of the HS.801, stayed British. Given that the placation of America for the sake of the economy has been portrayed as being of such vital importance, the lack of analysis in the imbalance of purchases is notable and requires assessment. For Vietnam specifically, even works that look at the role of America's allies, such as Blang's detailed examination of the roles that Britain, France and West Germany played does not identify the aircraft procurements as tools for Wilson to promote an East of Suez stance as a means of staying clear of direct military

⁶⁵ Colman, *A 'Special Relationship'?*, pp. 40-41. & M. Donnelly, *Sixties Britain; Culture, Society and Politics* (Harlow: Longman, 2005) p. 109. & B. Pimlott, *Harold Wilson* (London: Harper Collins, 1992) pp. 383-386.

⁶⁶ Donnelly, *Sixties Britain*, p. 109.

⁶⁷ Callaghan, *Time and Chance*, p. 187.

involvement in Vietnam.⁶⁸ Whilst the specific needs of the growing conflict in Vietnam can be viewed as having been a short term issue, and the East of Suez question representing the last vestige of British international influence and prestige on a grand scale, the short termism of the Labour government presented by authors such as Chris Wrigley, suggests that any East of Suez matter would have had to have been actioned through the needs of America and Vietnam, rather than as a stand-alone British foreign policy stance.

Where the issue of Vietnam and the wider development of equipment for defence, if not the actual procurement programmes themselves, have come under analysis is in the wider context of the Cold War. Here authors have tended to stay within the geopolitics at play during the period, with those such as Walker's *The Cold War* and Gaddis's tome of the same name typical of a field where sweeping coverage of the important events are covered, but not the small movements in between.⁶⁹ The period under examination falls into the latter category, yet the repercussions were central to how Britain would play its part in the Far East aspect of the Cold War. The East of Suez commitment is raised by Trachtenberg in *Between Empire and Alliance*, which examines the relationship between America and Europe during the stand-off, yet only in the context of what was to follow with the ever increasing European integration of defence programmes, and the need to make such bold overseas commitments financially viable.⁷⁰ The topic of maritime patrol aircraft does not feature

⁶⁸ E.M. Blang, *Allies at Odds: America, Europe, and Vietnam, 1961-1968* (Lonham: Rowman & Littlefield, 2011).

⁶⁹ J.L. Gaddis, *The Cold War* (London: Allen Lane, 2005) and M. Walker, *The Cold War* (London: Holt & Co, 1994).

⁷⁰ Ed. M. Trachtenberg, *Between Empire and Alliance – America and Europe during the Cold War* (New York: Rowman & Littlefield, 2003).

in this area of the literature, even with regard to the then emerging threat of nuclear powered submarines.⁷¹ Thus the military situation that led to there being a definitive need for the procurement of a replacement for the Shackleton in the first place is only covered indirectly with the 1962 agreement of the sale of American Polaris missiles to the United Kingdom.⁷²

To an author who must cover the entire scope of the Cold War, the six-month window after Labour came to power is too narrow to receive detailed assessment. The general direction that the stand-off was taking does however inform the situation in which the decisions to proceed or not with the procurements were made. Within the context of the strategy of the Cold War, rather than the historical narrative, there is further reinforcement of the prevailing mood of the time. Paret's *Makers of Modern Strategy* deals primarily with the United States and the Soviet Union but serves to contextualise the period, particularly with regard to the limited developments in anti-submarine warfare, while Peden's history of British strategy does touch on the question of the Shackleton replacement, but only to say that it took a long time to come to fruition due to unspecified 'cancelled projects'.⁷³ These volumes stand apart from the general line of studies in strategy, such as Gray's *Modern Strategy*, where the focus is on the conceptual nature of international political and military strategy, rather than how the outputs of strategy inform procurement decisions, and how these purchases shape the next iteration of strategy through the capabilities they can offer

⁷¹ J.W. Young, *Cold War and Détente 1941-91* (Harlow: Longman, 1993) p. 185.

⁷² C.S. Gray, *Strategy and History; Essays on Theory and Practice* (London: Routledge, 2006) p. 163. and D. Keohane, *Labour Party Defence Policy Since 1945* (London: Leicester UP, 1993) p. 22.

⁷³ Ed. P. Paret, *Makers of Modern Strategy; from Machiavelli to the Nuclear Age* (Oxford: Clarendon, 1996) p. 757 & G.C. Peden, *Arms, Economics and British Strategy; From Dreadnought to Hydrogen Bombs* (Cambridge: Cambridge UP, 2007) p. 291.

the government of the time.⁷⁴ As a result, the direction Britain was taking during the period with a move towards American aircraft purchases is simply passed over as a natural part of the decline of British power. This is particularly seen in defence manufacturing, with the ever-increasing influence of the United States on the world stage, and the perceived superiority of its military industrial complex. This was certainly the case with regard to procuring a capability to meet a strategic intent within an affordable financial framework, regardless of how unpalatable it was to increase the number of overseas purchases.

The declining international order book for British aircraft predated the period under examination, and thus when the question arose over continuing with the high cost yet low yield domestic designs it was more a matter of the industry having to accept the shift in governmental spending as a result of long-term trend lines. This position is held by historians of the British aviation industry such as Hayward and Edgerton, where the decline in successful British aircraft designs is presented as resulting from failings in both government and industry to recognise the changing nature of the world with the emergence of the United States as a major exporter of high technology products.⁷⁵ Even works that are aimed at a wider audience carry a similar theme. Comfort's *The Slow Decline of British Industry*, written in a highly critical and sweeping manner, highlights the failings in the Concord programme as an example of where British industrial focus was misplaced.⁷⁶ The Concord project was a survivor of the aviation cull, a decision which owed as much to the need to placate the French

⁷⁴ C.S. Gray, *Modern Strategy* (Oxford: Oxford UP, 1999).

⁷⁵ D. Edgerton, *England and the Aeroplane* (Basingstoke: Macmillan, 1991) pp. 90-97 and K. Hayward, *Government and British Civil Aerospace* (Manchester: Manchester UP, 1983) pp. 69-70, 93.

⁷⁶N. Comfort, *The Slow Death of British Industry; the Sixty Year Suicide 1952-2012* (London: Biteback, 2013).

over prospective EEC membership as it did to the supposed white heat of technology. The concept of high technological advancement does seem to be the antithesis of the aircraft cuts and Sandbrook's *White Heat* attempts to contextualise it within Labour's efforts to deal with the economic situation left by the Conservatives.⁷⁷ These works provide a basic understanding of the overall trend in the British aviation industry, but none address the detailed elements of the various procurements, and for those that do mention the aircraft by name the HS.801 is distinct in its absence. Given that it was relatively uncontroversial, and these books are, by and large, written to demonstrate failings in British industry this is perhaps not a complete surprise. Therefore, a more balanced assessment of the state of British industry could be achieved by placing the HS.801 alongside the cancelled designs and considering them equally.

The studies of the aviation industry that do go into greater detail on this period are those concerned with the procurements themselves, and the histories of particular aircraft. The procurements of the TSR.2 and Concord have received the greatest volume of focus, primarily as the decision to cancel TSR.2 and continue with Concord respectively, formed the cornerstone of the Government procurement shift, but also in the case of TSR.2 is seen as the aircraft that could and perhaps should have saved the British military aircraft establishment. Healey for one is scathing of both the RAF in changing their requirements for TSR.2, and the overly optimistic bidding by Industry as primary factors behind the programme running far over budget and far behind delivery estimates.⁷⁸ The interest shown in the TSR.2 in specialist works is predominately as a capability, and a balanced reasoning behind the decision to discontinue is often

⁷⁷ D. Sandbrook, *White Heat; A History of Britain in the Swinging Sixties* (London: Little, Brown, 2006).

⁷⁸ D. Healey, *The Time of My Life* (London: Politico's, 2006) p. 271.

lacking. Straw and Young's study does endeavour to provide a fair assessment of the TSR.2 and its replacement the F-111, but does not delve into the established background to the cuts, specifically the White Heat programme.⁷⁹ Equally Whitford's journal article focuses on the non-emotive aspects of the technical capabilities of the aircraft and only touches on the cancellation as being a result of it being an overly ambitious programme that was cut for purely financial reasons.⁸⁰ That the replacement for the TSR.2 never made it into RAF service further increased this tension. The Conservative MP Stephen Hastings entitled his book, published in 1966, as *The Murder of TSR-2*.⁸¹ The angry rhetoric often used on the TSR.2 cancellation was described dismissively by Barnett as being one that, "...often generated more heat than light."⁸² Studies concerning Concord, a programme that was given such importance as to outweigh the needs of the military side of British aviation, is also often dealt with in a very unbalanced manner. Works such as those by Skinner and Burney & Falconer, both titled *Concorde*, are not academic texts, and are characteristic of the topic in that attempts to cancel the project are viewed with distain and short-sighted Government mismanagement.⁸³ Feldman's *Concorde and Dissent* is one of the more balanced works, chiefly because it places the aircraft programme within the context of the EEC negotiations, and as such does give a general mention to how the military aircraft had to die for Concord to live.⁸⁴ However in all these works, the

⁷⁹ S. Straw & J.W. Young, "The Wilson Government and the demise of the TSR-2, October 1964 – April 1965", in *The Journal of Strategic Studies*, Vol.20, No.4, (1997).

⁸⁰ R. Whitford, "Lessons Learned from the British Aircraft Corporation TSR2 Project", in *Journal of Aerospace*, Vol.109, Sec.1 (2000), pp. 979-991.

⁸¹ S. Hastings, *The Murder of TSR-2* (London: McDonald & Co, 1966).

⁸² C. Barnett, *The Long Retreat; A Short History of British Defence Policy, 1945-1970* (London: Macmillan, 1972) p. 201.

⁸³ A. Burney & J. Falconer, *Concorde* (Runnymede: Ian Allan, 1992) and S. Skinner, *Concorde* (Hersham: Midland, 2009).

⁸⁴ E.J. Feldman, *Concorde and Dissent; Explaining high technology project failures in Britain and France* (Cambridge: Cambridge UP, 1985) pp. 88-92.

Nimrod programme does not receive a mention, and the other cancelled aircraft are never at the forefront of the examination, merely grouped together with TSR.2. The stove piped nature of many of these texts demonstrates the gap in the academic knowledge surrounding this area for, aside from TSR.2, there has been minimal study carried out on the processes that led to the decisions of February and April 1965. Edgerton briefly mentions the cuts in *Warfare State; Britain, 1920-1970*, but in his summary of the programmes that survived, the P.1127, both the Anglo-French variable geometry fighter aircraft and advanced trainer, helicopters and Concord are mentioned, but the Nimrod is not.⁸⁵ Carver's similar summary of the cuts does include the Nimrod alongside the P.1127 as being the programmes to survive, yet there is no additional details as to why both were selected and then able to continue, with Barnett taking a similar approach in his work, *The Long Retreat*, where he does not consider the political and economic aspects of the Nimrod procurement as requiring further examination.⁸⁶

A viable reason for the lack of specific study on the events of 1964 and 1965 is that by the summer of 1965 the government had put into action a series of measures to attempt to arrest the decline in the industry, even though it could be said that they had recently contributed to and thus deepened the predicament. These actions included the Plowden Report into the state of the aircraft industry, and the reorganisation of the responsible governmental departments with Roy Jenkins as the last Minister of Aviation, and Frank Cousins as the first Minister of Technology with

⁸⁵ D. Edgerton, *Warfare State; Britain, 1929-1970* (Cambridge: Cambridge University Press, 2006) pp. 241-243.

⁸⁶ M. Carver, *Tightrope Walking; British Defence Policy Since 1945* (London: Random Century, 1992) pp. 71-73 & Barnett, *The Long Retreat*, p. 205.

responsibility for the aviation industry.⁸⁷ Thus the majority of this reorganisation only occurred after the decisions on the existing procurements had been taken in the spring of 1965. It is logical to say that the need for the changes was driven by the choices made in the spring, however the ramifications for the British aviation industry of the great upheaval that followed these cuts falls out-with the scope of this study both in terms of time and focus.

Where academic study has positioned the aircraft of the period in a broader context, it is focused on Concorde. May's *Concorde – Bird of Harmony or Political Albatross* article places the debate on continuing with the programme as an element of British attempts to join the EEC.⁸⁸ Grieco is equally direct, stating that, "...the British state used the Concorde to rationalize its aircraft industry and to serve as one means of entering the European Economic Community..."⁸⁹ Both of these papers identify the ability of an aircraft programme to influence foreign policy, but stay within the realm of civilian aerospace and do not mention the concurrent decisions over the RAF programmes. These studies mark an established academic link between aircraft procurements and foreign policy, but solely for Concorde. This makes Concorde the exception, and highlights why, given their shared nature, all the procurements of the time should be considered in the same manner to understand how the choices could have been used as tools to advance specific policy objectives.

⁸⁷ Hayward, *Government and British Civil Aerospace*, p. 95.

⁸⁸ A. May, "Concorde – Bird of Harmony or Political Albatross: An Examination in the Context of British Foreign policy", in *International Organization*, Vol.33, No.4 (1979), pp. 481-508 and L. Johnman & F. Lynch, "The Road to Concorde: Franco-British Relations and the Supersonic Project", in *Contemporary European History*, Vol.II, No.2 (2002), pp.2 29-252.

⁸⁹ J.M. Grieco, "The Concorde SST and Change in the British Polity", in *World Politics*, Vol.31, No.4 (1979), p. 518.

Finally, there is the Hawker Siddeley HS.801 Nimrod itself. As a procurement it does not stand in isolation and is part of the processes at work during the six month period after Labour came to power. The aircraft is not mentioned alongside the cancelled designs nor the Harrier when authors discuss the impact of the financial crisis. Denis Healey does briefly mention the aircraft along with Harrier in the context of providing work for British industry, but his is a lone voice, albeit one that suggests he had been able to command a strong position in the negotiations.⁹⁰ As with the majority of works on Concord and TSR.2, the Nimrod is examined by general interest authors who look at the aircraft over its full time in service. As such the procurement period is briefly covered and poorly researched. Evans' *The Nimrod; Mighty Hunter* goes further than most in that the Air Staff Requirements are examined, however this is only viewed from the military side, and not from the political aspects that shape a procurement.⁹¹ The lack of understanding is ultimately typified in Loadsman's doctoral study *Government and the British Aircraft Industry, 1945-1979*, which only mentions Nimrod once in its later guise as an airborne early warning aircraft and was cancelled in the 1980s.⁹² In his footnote to this he considers it important enough for the reader to be informed that the aircraft was a modification of the Comet airliner, rather than being an additional variant of the Nimrod, which was, when he was writing, in active service in two different variants and with a further version under development.⁹³ This

⁹⁰ Healey, *The Time of My Life*, p. 274.

⁹¹ A. Evans, *The Nimrod; Mighty Hunter* (Stamford: Dalrymple & Verden, 2007) p. 6.

⁹² G.H. Loadsman, "Government and the British Aircraft Industry, 1945-1979", PhD Thesis, University of London, 2003, p. 233.

⁹³ The Nimrod MR2 and R1 were in service until 2010 and 2011 respectively, and the MRA4 was under development from the late 1990s until 2011.

last aspect highlights that there is a lack of awareness of not only the procurement, but also of the aircraft itself.

The first six months of the Wilson Government have understandably been characterised by the immediate need to stave off devaluation of the pound, but also as merely a stepping-stone towards the post-1966 Labour Government which, with a greatly increased majority, was able to strive to instigate Wilson's vision for Britain. The cancellation of TSR.2 and the continuation of Concord dominate the literature on the aircraft industry, in part because of the political ramifications of both enterprises, yet only Concord ventures into the foreign policy aspects of the decision. The apparently uncontroversial nature of the HS.801 Nimrod procurement and the subsequent lack of examination can thus be explained somewhat in that it sat in the shadow of two far more contentious programmes. Despite this it could hold the key to understanding how the jigsaw of British industrial requirements and pressures, combined with American political, military and economic relations were being shaped. There would have been a limit to how far the government was prepared to stretch sovereign capability requirements, industrial relations and financial expenditure overseas and the HS.801 would appear to define this limit. By utilising existing literature, a comprehensive outline of this can be derived, however this only serves to inform by reading between the lines and building an understanding out of what is not being said, thus any assessment from just these sources would be based on conjecture and hypothesis.

There is therefore a pronounced gap in the established literature for both using defence procurement as a lens for understanding British policy during the period, and

the role the Nimrod played. This thesis intends to lay out how a greater understanding of the Nimrod, framed by the other concurrent programmes, serves to define British strategy, intent and ambition at the time, demonstrating how the Wilson Government approached the needs of the economy, defence, and Britain's place in world affairs during the precariously balanced first six months of the administration.

The literature gap is not driven by a lack of primary sources. There is extensive primary material covering the discussions on possible economic measures within Whitehall in 1964-65, the 1965 Defence Review, the domestic aviation industry and the Nimrod and associated aircraft procurements in the British National Archives (TNA). These are concentrated in files from the Prime Minister's Office, Cabinet Office, Treasury, Ministries of Aviation, Defence, Economic Affairs and Foreign Office. Key announcements and MPs and Lords positions and views of the contentious decisions are recorded in Hansard, providing the formalised record of decisions from the discussion threads detailed in the governmental files. These materials provide a detailed insight into the options and resultant impacts that switching aircraft programmes to American off-the-shelf designs would have to both the economic health of the country and the defence posture. These discussions were heavily focused on possible financial savings from changes to defence priorities at home and particularly overseas, and demonstrate that the needs of the Treasury had primacy during the period. British archival papers on Concord and Anglo-European relations from the period provide a similar picture of the economic and political challenges of sustaining a posture of openness to European integration despite the continued resistance of de Gaulle. With the period under study more than fifty years in the past, the majority of files have been opened to the public. A handful are still closed, and, in

the case of a Hawker Siddeley company TNA file, a freedom of information access request was denied.⁹⁴ Similarly, access to the BAE Systems archive, as the successor company to Hawker Siddeley, was also denied.

The National Archive of the United States and the Library of Congress contain documents covering American foreign policy and the positions of key Administration figures, in particular the private papers of McNamara. American papers, such as Foreign Relations of the United States (*FRUS*), are available in curated volumes which provide an unavoidably biased focus on particular documents to detail the direction the Administration took. Offices of official historians within American governmental departments have also curated studies of government actions and provide a useful resource for primary materials, with an acceptance that their coverage is tailored. This is a particular consideration for the documenting of the war in Vietnam, which took a significant toll on the national psyche and thus various competing narratives exist over the events of 1964-65.

Contemporary secondary sources, in particular established newspapers such as *The Financial Times* and *The Times* are useful counterpoints to the official records, for although reserved in tone by nature, they do offer an understanding of which matters concerned the editorial board, and by extension the readership of the day, whilst often providing statistical information mirrored in government papers, thereby demonstrating the close relationship between reporters and Whitehall.

Through an examination of the available primary and secondary materials, this thesis will aim to understand the factors leading to the selection of the Nimrod as a

⁹⁴ TNA, DR 5/28, Hawker Siddeley Aviation Limited, FOI request denied 05 Mar 2018

unique procurement, which ran counter to the procurement strategy of the era, and as a result seek to demonstrate that the aircraft programmes of the period were not simply products of political and economic trends, but also served as tools to shape the strategic directions of a nation. To achieve this, the thesis will follow a thematic structure within a broadly chronological progression. This is driven by the manner in which decisions were intertwined and brought about both direct and indirect impacts to later decision points. An example of this is that the fundamental initial need to move away from domestic British aircraft designs to alternative off-the-shelf American and collaborative European projects would not have occurred during the period without the rapidly constrained economic environment of a reduced defence budget. This was coupled with a burdensome workforce requirement within a technologically advanced field possessed of limited economically exportable products – the domestic aviation industry.

This study will focus primarily on the events of autumn 1964 through to the spring of 1965, with earlier and later tied events included to provide the necessary framing to the decision-making process, and to understand the broader trends that directed and motivated the selections. It will not attempt to provide a detailed economic history of post-war Britain in pursuit of the wider causation of the economic situation that ultimately presented itself in the threats to the viability of sterling and the balance and payments crisis when Labour came to power. Equally, although it is important to understand the motivations of Britain and the United States in the period as with the aims and ambitions of Wilson and the European leaders, in particular de Gaulle, the intent is not to provide a similarly scoped detailed analysis of Britain's post-war relationships with the United States and Europe. Both of these fields are

comprehensively covered in works such as Floud, Humphries and Johnson's edited volume *The Cambridge Economic History of Modern Britain*, Garnett, Mabon and Smith's *British Foreign Policy Since 1945* and Edgerton's *Rise and Fall of the British Nation*.⁹⁵ That sterling was ultimately devalued in 1967 and Britain joined the EEC in 1973 cannot be ignored as it has shaped the secondary literature, however the reasoning for the procurements during the period under study must be assessed on their merits at the time, and not simply within the wider chronological series of later events.

This thesis will first examine the 1964 balance of payments and sterling crises and how Labour responded. The requirement and subsequent actions to support sterling and avoid a devaluation of the currency initiated firm economic constraints on defence, which alongside the initiation of an economic modernisation effort, drove the necessity for far-reaching cuts and realignments to the military aircraft programmes underway at the time.

That the choice was to shift a large portion of the programmes to American designs requires an assessment of the position and priorities of the Johnson administration to understand why such an approach was accommodated. This was not only in the form of economic support to sterling but also in how the American agenda for their own domestic aviation industry and the garnering of support for action in Vietnam shaped their position on the importance of Britain as an ally, and by extension the options for the RAF programmes.

⁹⁵ Ed. R. Floud, J. Humphries & P. Johnson, *The Cambridge Economic History of Modern Britain, Vol.II 1870 to the Present* (Cambridge: Cambridge UP, 2014), M. Garnett, S. Mabon & R. Smith, *British Foreign Policy Since 1945* (Basingstoke: Routledge, 2017) and D. Edgerton, *The Rise and Fall of the British Nation: A Twentieth Century History* (London: Penguin, 2019).

The positions of the two administrations set the negotiating framework for Wilson's visit to the White House in December 1964. It was here that transactional nature of the special relationship in the period was laid bare in British attempts to show the Johnson administration that, with American help, Britain could stay active on the world stage. The meetings fundamentally defined the fate of the big three procurements.

Britain was not just courting the United States, but also nations on the European continent, and in particular de Gaulle, to try and prise open the door for a future entry into the EEC. The importance placed by both Wilson and de Gaulle for continuing with the Concord programme defined these efforts during this period with their associated financial, employment and research and development burden and the significant resultant impact on the aviation sector.

Switching procurement programmes from domestic to overseas suppliers presumes a continued operational requirement for a platform. Such defence requirements should ultimately be defined by defence strategy, with airframe procurements then often refined by political requirements. Having examined the contributing central relationships with America and Europe, so the actions of the defence review which commenced in this period must also be examined to understand the direction Britain was attempting to take despite the limits imposed on the defence budget.

The state of the domestic aviation industry as the counterpoint to these international political objectives will then be assessed, as the ability of the industry to deliver on time and on budget greatly influenced the political perspective of the viability of the sector. With the economic landscape, the domestic and international

political objectives, and the industrial structures and contributory factors presented as to define the requirement for a domestic programme to replace the Avro Shackleton, so the selection of HS.801 itself can be analysed, contextualised and placed as a key element of how the Labour government used defence procurements generally, and the Nimrod in particular, to – in the manner of the opening quote from Sir John Thomson – advance British political objectives.

This thesis will therefore demonstrate that the decision to procure a low volume, domestic maritime patrol aircraft based on an outdated commercial airliner was an understandable and logical decision when viewed in the context of the events of the time and the situation facing the Wilson government. It will show that military aircraft procurement requirements were used as tools of British policy and strategy when viewed in the wider context of the period. Taken in isolation, the Nimrod concept was inferior to both the European consortium Atlantic aircraft and the American P-3 Orion. Equally, the decision to increase the pressure on the economic situation by spending American dollars to procure American aircraft to replace TSR.2, P.1154 and HS.681 appears equally flawed. When both sets of decisions are, however, placed against the requirement to retain a certain level of expertise and employment within the domestic aviation industry at the lowest possible expenditure level, and the need to retain American support for sterling alongside an East of Suez posture that excluded direct action in Vietnam respectively, so the manner in which these procurements both influenced and reflected British strategy becomes clearer. This can also be seen in the decision to continue with Concorde, as despite the high financial burden, it was a means of retaining amicable relations with the de Gaulle government in order to solidify Britain's role in European affairs and to keep the option of EEC

membership on the table by acting as a good European. When viewing aircraft procurement choices as political tools, the Concord answers the question as to why the Atlantic was not the preferred option as the Shackleton replacement, in the same manner that the P-3 was not a central pillar for both Britain and the United States in negotiating the American support package at the Washington talks and beyond.

No procurement decision is taken in isolation, thus the analysis cannot be made in isolation. Only by assessing the key themes of Labour's reaction to the balance of payments crisis, the objectives of the American administration, British aims and actions in Europe, the reshaping of defence spending and strategy in the new financial climate along with the needs and challenges of the domestic aviation industry can a full picture be understood, and the choices made that resulted in the Nimrod procurement be presented in the correct context.

CHAPTER 1 – THE ECONOMIC CRISIS AND LABOUR’S IMMEDIATE RESPONSE

The urgent need for reviewing the aircraft programmes underway for the RAF and the resultant implications for the aircraft industry were a direct result of the perilous state of the British economy within the international system when Labour entered office. The global economic framework of the period was defined by the system of agreements and concepts initiated at the close of the Second World War. These were not solely a response to that conflict, but also a reaction to the economic turbulence of the 1930s. The economic crisis of late 1964 was not simply driven by an unsustainable British economy and uneven balance of payments, but was also a culmination of the pressures exerted by the weight of the international currency and trade system. The response by Labour to this crisis was, initially, a continuation of the Conservative government’s thoughts formed over the summer of 1964. The inability of these initial measures to reassure the markets and stabilise the value of sterling led to additional escalatory measures being put in place, first in the shape of a formalised November Budget as an addition to the regular Spring Budget, and secondly by a raising of the Bank Rate at the end of November 1964. These events, carried out to stave off the threat of devaluation, placed the new Administration in an awkward position. Not only did Wilson have to manage a small majority in the Commons, but also ran the risk of antagonising the United States of America – a country that Britain was highly dependent on for economic support, and also deeply tied to militarily within NATO and as a partner in maintaining the East of Suez role. The events of the autumn of 1964 framed the need for keeping the United States tied to supporting

sterling, and thus presented the option of using the extant defence requirements and their procurement options as tools in this endeavour. They also provided the impetus to a situation where if difficult decisions had to be made, then some political advantage should be gained from it. The state of the Treasury drove this agenda, and the seriousness of it required an immediate reaction. As Wilson put it in his memoirs, "The pattern our first hundred days would have to take was set in the first hundred minutes."⁹⁶

The economic precariousness experienced in the mid-1960s had deep roots, with the traditional core British industries of coal, textiles, steel and engineering already suffering before the First World War.⁹⁷ A detailed examination of the continued decline in these industries and their implications for the economic landscape of Britain and the state of sterling can be found within Floud et al's *Cambridge Economic History of Modern Britain, Volume II*.⁹⁸ Beckerman, who was a member of the Department of Economic Affairs during the period and later wrote as an economics professor, saw four schools of thought on the causes of the economic troubles; namely the pressures of high demand driving deficits, of a failure to manage this demand, of an over-valuing of sterling within the fixed exchange rates, and the structuralist argument that put the issue as stemming from slow growth within Britain which hampered exports and of particular note – the carrying of, "...excessive

⁹⁶ Wilson, H., *The Labour Government 1964-1970; A Personal Record* (London: Weidenfeld & Nicolson and Michael Joseph, 1971) p. 3.

⁹⁷ Pollard, *The Development of the British Economy, Fourth Edition*, p. 1 and Turner, R., 'Introduction', in Ed. Turner, R., *The British Economy in Transition; from the Old to the New* (London: Routledge, 1995) p. 2.

⁹⁸ Ed. R. Floud, J. Humphries & P. Johnson, *The Cambridge Economic History of Modern Britain, Vol. II 1870 to the Present* (Cambridge: Cambridge UP, 2014) Chapters include K. Harley, 'The Legacy of the Early Start' pp. 1-25, C.R. Schenk, 'Sterling and Monetary Policy 1870-2010' pp. 448-475.

commitments inherited from the past. The UK could no longer play the part of both policeman and banker to the rest of the world.”⁹⁹ It is these commitments that formed the basis for the requirement for both the Nimrod programme and the other military aircraft procurements. The pre-war industrial malaise and a continued post-war decline in productivity are central to Pollard’s assessment of Britain’s poor economic performance in the period, shaped by an inability of successive governments to plan and address export performance.¹⁰⁰ Pollard’s view is mirrored by Lovering in the context of the aviation industry where in Britain, unlike in France or the United States, there was no long term governmental planning for the sector.¹⁰¹ Like Pollard, writers such as Owen and Tomlinson place the origins of the decline at the end of the nineteenth century, accelerated by the relative strong performances of the United States and Germany during this time, and latterly, for Tomlinson in particular, a further acceleration during the post-1945 rebuilding of Europe.¹⁰² These viewpoints share the concept that British economic struggles were not just a factor of economic exhaustion from the Second World War, and that although certain key elements came to a head in late 1964, it was not a surprising development despite the urgency given to it by Wilson. There is also a concept that the decline in the British economy was merely relative, driven in part by comparisons to competing growing markets, particularly the United States and the rapidly recovering European countries, which was insufficiently countered by economic growth in emerging fields. This view, held by authors such as

⁹⁹ Beckerman, *The Labour Government’s Economic Record*, pp. 13-16.

¹⁰⁰ Pollard, *The Development of the British Economy, Fourth Edition*, p. 301.

¹⁰¹ J. Lovering, ‘Opportunity or Crisis? The Remaking of the British Arms Industry’, in, Ed. Turner, R., *The British Economy in Transition; from the Old to the New* (London: Routledge, 1995) p. 88.

¹⁰² Owen, *From Empire to Europe*, p. 9 and J. Tomlinson, “‘Inventing ‘Decline’: The Falling Behind of the British Economy in the Postwar Years”, in *The Economic History Review*, Vol.49, No.4 (1996) pp. 731-732.

Pemberton, Kitson and Michie, focuses on a failure to reinvent the traditional industrial sectors of which, despite the high labour requirement, arguably aviation is not one.¹⁰³ Such positions hold that it was not a lack of governmental planning that shaped the poor economic output of the country. The longer-term causes and ramifications of changes in the British economy are essentially outside of the bounds of this study, for it is the knee-jerk reaction to the state of the economy in late 1964 that drove the changes to defence procurements and opened up opportunities to use such events as useful tools for furthering governmental ambitions. The key strategies that contributed to the balance of payments crisis do however need to be understood in order to frame this reaction.

This chapter will argue that the system of international agreements laid down after the First World War and magnified by the total economic disruption of the Second World War and the role of sterling as a global reserve currency, pegged at a fixed rate to the dollar, resulted in a critical inflection point for the British Treasury in late 1964. This, combined with a small parliamentary majority shaped the Labour response which prioritised the stability of sterling with American support alongside the need to retain publicly popular policies. Whilst the short-order nature of the Autumn Budget focused on reassuring the international markets and partner nations, it also drove the review of expenditure on military aircraft programmes. It will be argued that without this necessity, the division between aircraft procurement cancellations and continuations would not have been made, therefore it is important to understand the

¹⁰³ H. Pemberton, "Relative Decline and British Economic Policy in the 1960s", in *The Historical Journal*, Vol.47, No.4 (2004) pp. 989-991 and M. Kitson & J. Michie, "Britain's Industrial Performance since 1960: Underinvestment and Relative Decline" in *The Economic Journal*, Vol.106, No.434 (1996) pp. 196-198.

immediate response to the balance of payments crisis to frame the subsequent decisions and the motivations behind them.

Proactive measures aimed at arresting the declining performance, relative or otherwise, of the British economy had increased after the First World War and saw the introduction of several measures that would have a significant impact for the period under study. At the close of the war Britain was faced with a pressing need to rebuild the Exchequer and stimulate domestic and Empire economic performance. The Finance Act of 1919 and the Key Industries Duties introduced in 1921 were designed to achieve this. The premise was to place higher tariffs on select goods imported into Britain from outside the Empire, whilst those imported from within were either at a much lower rate, or tariff free. These measures were renewed with the Finances Act of 1926 and were as much an effort at protectionism as they were at generating revenue for the Treasury.¹⁰⁴ The gradual recovery of the European economies should have been accompanied by a shift in economic policy back to more open models, however the Great Depression put a halt to that. The sharp fall in raw material prices that accompanied the Wall Street crash led to calls from around the Empire for increased protectionism.¹⁰⁵ The Ottawa Agreements of 1932 laid down the framework of what would come to be known as Imperial Preference and worked around floating exchange rates.¹⁰⁶ The Bill detailed the customs tariffs charged for importing goods into the United Kingdom from outside of the Empire, whilst at the same time exempting the

¹⁰⁴ G.L. Glickman, "The British Imperial Preference System", in *The Quarterly Journal of Economics*, Vol.61, No.3 (1947) p. 441.

¹⁰⁵ Glickman, "The British Imperial Preference System", p. 442.

¹⁰⁶ TNA CAB 24/232/38, *Ottawa Agreements Bill*, 28 Sept 1932.

same goods from within the Empire, thus creating a so-called colonial preference.¹⁰⁷

The result of this move was to in effect narrow the market for Empire goods to just the United Kingdom and tie them to the movement of sterling, codifying an issue that was to become a central factor for discussions over British entry into the EEC during the period under study. Such an outcome was indeed beneficial to both sides in the difficult times of the early 1930s, but of less benefit to the exporting countries once the world economy once again began to grow and the demand for foreign currencies increased to meet it. Imperial Preference was also an attempt by Britain to maintain worldwide economic dominance and hold off the advances of the United States, when in reality all it did in the long term was antagonise the United States, where in Clairmont's view, it was seen as acting as a limiter to economic growth.¹⁰⁸ Britain was swiftly losing the dominant market position for the countries of the Empire during the 1930s, which to Glickman resulted in a situation where "...the United Kingdom was becoming more dependent on the Empire as a market, [however] the principle Empire markets were becoming less dependent on the United Kingdom as a source of supply."¹⁰⁹

The rebuilding after the Second World War included American led measures aimed at stabilisation and growth whilst continuing the move towards open markets which favoured American made goods. The Bretton Woods agreement of 1944 formed one key part, and was aimed at stabilising the international system through re-affirmed fixed exchange rates tied to the dollar and were then in turn pegged to

¹⁰⁷ TNA CAB 24/232/38, p.4, para.35

¹⁰⁸ F.F. Clairmont, "The Grand Malediction: Bretton Woods in Retrospect", in *Economics and Political Weekly*, Vo.29, No.42 (1994) p. 2727.

¹⁰⁹ Glickman, "The British Imperial Preference System", p. 468.

gold.¹¹⁰ With pegged currency rates, countries and companies could engage in longer term planning with stable values for their exported goods. The downside to this arrangement was that any perceived drop or speculative attack on the value of a currency could lead to deviation from the peg value. It is this weakness, combined with a potential disconnect between domestic policy and international markets that Bordo, MacDonald and Oliver view as the greatest failing of Bretton Woods.¹¹¹ If the deviation became too big or unmanageable, then for a government to re-adjust their currency to a new value required sanctioning by the International Monetary Fund.

In 1949, the post-war Attlee Labour government had, in response to a similar set of issues to those seen in 1964 of a balance of payments deficit and low international confidence in sterling, made the decision to devalue the currency.¹¹² The move saw the value of sterling drop from \$4.09 to \$2.80 to the pound, which resulted in a peg tolerance of 2 cents above and below in 1964.¹¹³ The dilemma with a pegged rate was, as detailed by Schenk, that to “[protect] the value of sterling...requires strict controls on who could buy and sell sterling since, if the market price began to fall below the pegged rate, the Bank of England had to intervene to buy up ‘surplus’ pounds using foreign exchange reserves.”¹¹⁴ These international trading agreements and pegged exchange rates directly contributed to the crisis of 1964 and limited the scope for Labour action upon Wilson entering office.

¹¹⁰ Bordo, M., MacDonald, R., Oliver, M.J., “Sterling in Crisis, 1964-1967”, in *European Review of Economic History*, Vol.13, No.3 (2009) p. 437 and Booth, *The British Economy in the Twentieth Century*, p. 69.

¹¹¹ Bordo et al, “Sterling in Crisis”, p. 437.

¹¹² J. Tomlinson, “Balanced Accounts? Constructing the Balance of Payments Problem in Post-War Britain”, in *The English Historical Review*, Vol.124, No.509 (2009) pp. 867-869.

¹¹³ D. Blaazer, “‘Devalued and Dejected Britons’: The Pound in Public Discourse in the Mid 1960s”, in *History Workshop Journal*, No.47 (1999) p. 122

¹¹⁴ Schenk, ‘Sterling and Monetary Policy’ in Ed. Floud et al, *The Cambridge Economic History of Modern Britain, Vol.II*, p. 459.

The devaluation of 1949 followed closely after the Exchange Control Act of 1947.¹¹⁵ This act was a response to Bretton Woods and the nature of pegged exchange rates. Under the act countries including those in the Commonwealth, but excluding Canada, the Colonies, Burma, Ireland, Iceland, Iraq, Kuwait and the Persian Gulf Emirates had their currencies pegged to sterling.¹¹⁶ Those countries also held the majority of their reserves in sterling, and made their transactions in the currency.¹¹⁷ For Britain this represented both a means of staying central to world economic policy through the retention of sterling as a reserve currency, but also a burden as poor economic performance and devaluation would affect a large number of other countries. Should those countries subsequently lose faith in the management and stability of sterling and move their reserves to the dollar, the economic impact would be compounded both through the outflow of sterling and the falling demand for the currency. The sterling area arrangement was also beneficial to the United States, for it reduced demand on the dollar during a period of guaranteed dollar/gold convertibility and post-war regeneration, which had, by extension, begun to produce a balance of payments deficit for America. This deficit was compounded by American overseas defences spending, and America used defence sales and burden-sharing measures in part to address this. The American approach to mitigate the impact of their deficit will be covered in chapter two.

The pre-war methodology of protectionism through tariff barriers was progressively being broken down after the war by a United States intent on rebuilding

¹¹⁵ C.R. Schenk, "The Sterling Area and Economic Disintegration", in *Geschichte und Gesellschaft*, Vol.32, No.2 (2013) p. 179.

¹¹⁶ Schenk, "The Sterling Area and Economic Disintegration", p. 179.

¹¹⁷ H. Gaitskell, "The Sterling Area", in *International Affairs*, Vol.28., No.2 (1952) p. 170.

Europe as a market for American goods under the Marshall Plan, whilst also seeking to limit the influence of the Soviet Union both politically and economically. The later of these was expressly laid out in the Trade Expansion Act of 1962.¹¹⁸ The Act stated that aside from the ambition of expanding the American economy and enlarging the markets for American goods, there was also a need to prevent “...Communist economic penetration.”¹¹⁹ In signing the Act into law in October 1962, President Kennedy remarked that, “...we cannot protect our economy by stagnating behind tariff walls, but that the best protection possible is a mutual lowering of tariff barriers among friendly nations so that all may benefit from a free-flow of goods.”¹²⁰ This ambition to open up trade barriers was a deliberate attempt to move away from a protectionist past, and working within the framework of stable exchange rates brought about by Bretton Woods, the Kennedy Round of negotiations of the General Agreement on Trade and Tariffs (GATT) commenced in 1962, and would run until 1967.¹²¹ Britain was an integral part of these negotiations and was committed to the economic policy of free trade. Yet for the United States, the focus of the European negotiations was on the EEC – an organisation that Britain had at first disregarded, and had then subsequently been denied membership by President De Gaulle, who was fearful of Britain becoming the dominant member. Thus, the United Kingdom was, by 1964, in need of remaining on side with the American administration over GATT, whilst also placating the French government over possible entry to the EEC.

¹¹⁸ Public Law 87-794, “Trade Expansion Act of 1962” *Bills and Statutes of 87th Congress, 2nd Session, Vol.76* (GPO, October 1962) p. 872.

¹¹⁹ Public Law 87-794. p. 872.

¹²⁰ J.F. Kennedy, *Remarks upon signing the Trade Expansion Act*, 449 (11 October 1962).

¹²¹ H.G. Johnson, “The Kennedy Round”, in *The World Today*, Vol.23, No.8 (1967) p. 326.

The most challenging aspect of maintaining the sterling peg rate against the dollar was managing the demand for sterling. The most visible manifestation of this took the form of the balance of payments. The balance sheet between the value of British imports and exports dominated this aspect and formed the main area of concern for successive governments. If demand for British goods overseas fell, so the demand for sterling would fall with it. Sterling crises were not new in 1964, having occurred in both 1957 and 1961, with a Treasury briefing paper of June 1964 stating plainly that, "At no time have we appeared to have overcome the critical post-war balance of payments problem and got our external finances on to a firm footing, although world trading conditions have been very favourable."¹²² By the summer of 1964 the balance of payments deficit for 1964/65 was projected at £800m.¹²³ Whilst this figure was not made public prior to the general election, it was widely understood on the world markets that Britain was in a difficult position, for although a surplus of £200m had been recorded for 1956-1963, the boom and bust nature of Conservative economic policy had seen a dramatic increase in short term money moves over the first half of the decade, adding to the pressure on the peg.¹²⁴ In order to maintain the value of sterling the Conservative government had to resort to using the reserves and overseas credit to support the currency. The impact of this was noted in both *The Times* and *Financial Times* on 3 October 1964 when the reserves fell from £923m to £907m, with the credit facility of \$500m, established in 1963 between the Bank of England and the United States Federal Reserve in order to facilitate support for

¹²² TNA, T 318/38, *Balance of Payments Group Correspondence and Briefs*, Treasury Paper, *The Next Five Years*, 3 Jul 1964, p. 2.

¹²³ TNA T 318/38, *The Next Five Years*, p. 3.

¹²⁴ TNA EW 16/2, *A tax instrument for adjusting the balance of payments*, Briefing paper, *Enquiry into the position of sterling 1964-65: Report*, undated est. 1966, pp. 5-8.

sterling, seeing an increase in usage.¹²⁵ This support was essential, as problems with sterling had a knock-on effect to both the countries within the Sterling Area, whose financial stability was tied to the currency, but also to the United States and the pricing of the dollar. Balance of payments calculations were not just concerned with commercial trade, but also with governmental spending overseas. This did encompass economic investments, and whilst the performance of the investment portfolios were in line with expectations, the near zero balance in the current account compared with, in 1964, that of £1,000m in France and £600m in Germany hampered the ability to grow overseas investments and offset the balance of payments through foreign currency gains.¹²⁶ Overseas defence spending also featured in the calculations, to a value of £233m in 1964 – in effect more than a quarter of the deficit.¹²⁷ This could often be offset to a degree by both the export of military equipment, and the defence spending of other nations on British products and services, particularly the United States who contributed £301m in 1964.¹²⁸ Therefore British defence policy and the associated overseas military costs formed a fundamental aspect of both government spending and the need to balance the books. This could not be ignored by the incoming Labour government and presented an opportunity for reducing the deficit whilst operating within the constraints of the existing international agreements. Although there were these and other factors influencing the balance sheets,

¹²⁵ TNA PREM 11/4777 1961-1964 – *Financial Policy*, cuttings- Financial Times Reporter, “Gold Reserves fall by £16m, U.K. draws on Central Bank Credits”, *Financial Times*, 3 Oct 1964, and Staff Writer, “£40m Support for Sterling”, *The Times*, 3 Oct 1964.

¹²⁶ TNA T 318/30, *United Kingdom Balance of Payments – Financing the Deficit 1964/65*, Memo, A. Cairncross to Sir Denis Rickett, the balance of payments, 18 Feb 1964.

¹²⁷ TNA T 318/40, *The Effect on the U.K. BoP of Overseas Military Expenditure 1964*, Memo, G. Downey to Mr Uffen; The effects of defence expenditure on the balance of payments, originally issued Jun 1964 and subsequently updated on 6 May 1965, p. 1.

¹²⁸ TNA T 318/40, Memo, G. Downey to Mr Uffen, p. 1.

fundamentally the post-war Western financial system, which itself had come about to cure the ills of the inter-war and now post-war periods, could conceivably have collapsed as a result of the inability of the British economy to manufacture high quality and in-demand products and export them to the world.

Whilst the issue of the balance of payments deficit and the stability of sterling was not new in 1964, it did take on a degree of urgency due to the rising nature of the deficit and continual market pessimism over the currency. The perfect solution to both was a rise in the level of exports, accompanied with a fall in the level of imports, but these showed little signs of occurring naturally. During the summer of 1964 the Treasury began to consider ever more drastic and unlikely options for stabilising sterling, emphasising that all options were considered, regardless of apparent scale. One that was put forward internal to the Treasury in June 1964 concerned the access British citizens had to foreign currencies. As the exchange rates were pegged, there was no free international movement of currencies. Alex Cairncross had proposed broader taxation measures for resolving the balance of payments earlier in the summer, and had also mentioned that £50m could have been saved through the implementation of travel expenditure restrictions. Samuel Goldman commented on the plan stating that a limit of £50 per person per year would be required to achieve the stated £50m saving.¹²⁹ The purchase and spending of foreign currencies by private citizens outside of the Sterling Area was expected to total £200m in 1964, and rise to £250m in 1965.¹³⁰ This made it a sufficiently substantial factor in the balance of payments calculations as well as pure currency movements. Both Goldman and

¹²⁹ TNA T 318/38, Cover note, S. Goldman, *Restricting Travel Expenditure*, 29 Jun 1964

¹³⁰ TNA T 318/38, *Restricting Travel Expenditure*.

Rawlinson of the Bank of England noted that such a move would bring about a negative response from the public, particularly since restrictions had been lifted in November 1959, and a proposed limit of £100 per person had been rejected in 1961.¹³¹ That such a relatively small financial measure, yet with potentially large political ramifications, could have been considered within the Civil Service suggests that there was little confidence in achieving success with the main instruments of economic planning. This example demonstrates the importance of reducing the outflow of sterling in exchange for foreign currencies, yet the decisions made over the aircraft procurements carried, on paper, a sizeable dollar purchase requirement. That the two scenarios co-existed suggests that the political advantages to realigning the RAF aircraft programmes outweighed any short-term sterling outflow disadvantages.

This wider lack of confidence in sterling was reflected in an expectation that there would be a run on the pound by the autumn if the situation failed to change.¹³² The lack of innovation within British industry was of deep concern to the Treasury. Despite a buoyant and upward trend in world trade, export volumes had failed to increase during 1964, and whilst the growth in productivity had slowed, wages were continuing to increase at a similar rate to the rest of Europe. Kalder wrote in October 1964 that, "The conclusion is inescapable that the restoration of our competitive power will necessarily involve a reduction of our wage level in terms of international currencies (in dollars)."¹³³ This was in part driven by the high levels of employment and the subsequent demands that placed on the labour force, particularly the aviation

¹³¹ TNA T 318/38, Cover note, A.K. Rawlinson, *Exchange Control Restriction of Travel Expenditure*, 25 Jun 1964.

¹³² TNA, T 318/38, Treasury Paper, *The Next Five Years*, 3 Jul 1964, p. 3.

¹³³ TNA, EW 16/2, Briefing note, N. Kalder, *A tax instrument for adjusting the balance of payments*, 25 Oct 1964 p. 1.

industry with its requirement for a highly skilled manufacturing and research and development workforce. The problem was that an increase in the level of unemployment, whilst financially beneficially in terms of a decrease in wage levels and in potentially freeing up of skilled workers, would be seen as carrying a negative political implication, and a short-term fall in tax receipts.¹³⁴ Stagnant industrial performance with rising costs fuelled this fear of a run on the pound, with oil companies expected to lead with withdrawals from their sterling holdings.¹³⁵

Promoting increases in industrial performance and the Labour drive to embrace a white heat of technology with economic re-invention were long term considerations, but they would not prevent a run on the pound within the year. The possibility of devaluation is conspicuous in its absence throughout the summer, undoubtedly due to the knock-on effect it would have to the Sterling Area, but it would also have been disastrous for the government to make such a move immediately prior to a general election. The Governor of the Bank of England, Lord Cromer, had made his position clear as early as 1962 that devaluation would be highly damaging to the Sterling Area.¹³⁶ This unwavering line from the Bank of England reinforces the impression that devaluation was almost a taboo subject within Whitehall. Out-with devaluation, the options were the same before the election as they would be after it – namely the question of imposing import tariffs or a rise in the bank rate. Despite this, the line taken by the Chancellor, Reginald Maudling, was different from how his successor at Number 11 would approach the matter. In July 1964, at a meeting between the

¹³⁴ TNA, T 318/30, letter, Rickett to Sir William Armstrong, *Balance of payments prospects*, 12 Mar 1964.

¹³⁵ TNA, T 318/30, A. Cairncross to Sir Denis Rickett, the balance of payments, 18 Feb 1964.

¹³⁶ TNA, PREM 11/4777, Note, Cromer to Chancellor (Selwyn Lloyd), 22 Jan 1962.

Chancellor, Lord Cromer and their advisors, the Chancellor made it clear that he opposed the imposition of an import duty, instead favouring short term borrowing from abroad.¹³⁷ This was reflected in the attainment of a further £179m of credit from the Bank of Canada and European central banks, alongside an IMF standby of £357m over the next five years.¹³⁸ Maudling perceived that borrowing from abroad would shore up the value of sterling and make the requisite short term gain, but long term the answer had to lie in industrial change and innovation. Over the matter of the bank rate, Lord Cromer believed that a rise would be required at some stage before the year was out, but that he was against it at that stage.¹³⁹

Those various measures proposed by the civil service throughout the spring and summer of 1964 were not enacted upon by Home's government. Despite not treating the matter with any real degree of urgency, the government was fully aware of the damage the matter could do to their chances of re-election. Two weeks before the election, on 1 October, the Chancellor was made aware of a line by Wilson in a routine press conference, where the Labour leader had stated words to the effect "...that it is not the custom for any Government to disclose the extent to which it has drawn on foreign credit facilities."¹⁴⁰ Maudling was strongly against releasing the value of the credit facilities, despite newspaper articles printing accurate figures, for fear of scaring the markets.¹⁴¹ Wilson had indeed stated that the government should keep

¹³⁷ TNA, T 318/30, Note of a meeting at 11 Downing St., 21 Jul 1964.

¹³⁸ TNA, T 318/30, Treasury briefing G.B. (64)28, *Immediate problems of reserve movements and financing the deficit*, 15 Oct 1964.

¹³⁹ TNA, T 318/30, Note of a meeting at 11 Downing St., 21 Jul 1964.

¹⁴⁰ TNA, PREM 11/477, Note for the record, Chancellor (Maudling), *Announcement of gold and convertible currency reserves, September, 1964*, 2 Oct 1964.

¹⁴¹ TNA, PREM 11/4777, Letter, Cromer to Maudling, 7 Oct 1964 for Maudling's position. TNA, PREM 11/4777, Cuttings- Financial Times Reporter, "Gold Reserves fall by £16m, U.K. draws on Central Bank Credits", and Staff Writer, "£40m Support for Sterling", for the newspaper coverage. TNA, T 318/30, Treasury briefing G.B. (64)28, 15 Oct 1964 for the internal Government financing figures that corroborate the newspaper coverage.

such matters in house, a source of relief for the government. The question over what Wilson had or had not said, and therefore whether it would or would not be an election issue demonstrates how nervous the Conservative government was over the truth leaking out and the damage it could do. Aside from the question of the details getting into the public domain, within the civil service there was equal concern that either the Chancellor or Lord Cromer would inform Wilson of the state of the finances regardless. Wilson would speak on this lack of action during the Labour Party Conference in December 1964, stating that the “...gravity [of the situation] was denied and denied again for political purposes before the election.”¹⁴² On 1 October, R.W.B. Clarke, referring to the possibility that the Chancellor would indeed speak to Wilson, asked whether “...it [is] wise to spread the knowledge of the figure to one person more than absolutely necessary?”¹⁴³ The confusion that preceded the general election was typified by a contradictory note on the same day from the Chancellor to the Prime Minister stating that Sir William Armstrong, Permanent Secretary to the Treasury, was to ensure that Lord Cromer did not divulge all to Wilson, as the Chancellor was against such a move.¹⁴⁴ Therefore between the civil servants and their elected masters there was a degree of disarray and confusion, not only over what to do about the balance of payments and the state of sterling, but also how to prepare for the possibility of a change of government after thirteen years of Conservative rule.

The lack of action over the balance of payments meant that the incoming Labour government was given no room to manoeuvre by the outgoing Conservative

¹⁴² Harold Wilson, *Leader's Speech*, Labour Party Conference – Brighton, 12 Dec 1964. <http://www.britishpoliticalspeech.org/speech-archive.htm?speech=162>, Recalled 22 Apr 2015.

¹⁴³ TNA, PREM 11/4777, Note, Clarke to Caulcott, 1 Oct 1964.

¹⁴⁴ TNA, PREM 11/4777, Note, Chancellor to Prime Minister, 1 Oct 1964.

government. As Wilson would ultimately admit defeat and devalue sterling in 1967, it would be understandable to expect the option to have at least been considered upon Labour entering office. For writers such as Bordo et al, and observers such as Ponting, the case for devaluation was as strong in 1964 as it would be in 1967 on the basis of the balance of payments alone.¹⁴⁵ For Middleton and Newton the case was not so clear, and that later factors beyond the balance of payments such as the changing shape of the international economy, played a greater role in the ultimate decision.¹⁴⁶ Such arguments stand in hindsight of the 1967 decision to devalue sterling, and the decisions taken in late 1964 reflect the differing political positions of the outgoing and incoming governments of the time. For Labour in that moment, the line was clear. On the evening of 17 October the decision was taken between Wilson, Callaghan and Brown not to consider devaluation as a possibility.¹⁴⁷ With Labour having been responsible for the devaluation of 1949, and Wilson, as President of the Board of Trade at the time and closely involved in the requirements and effects of the measures, it would be logical to presume that this drove his thinking against devaluation, and instead towards import tariffs and a rise in the Bank Rate. The Treasury briefing pack prepared prior to the general election for a – not the – incoming government was fronted by a note from Armstrong to his number two at the Treasury, Bancroft, which outlined the need to deal with the balance of payments deficit within the next few weeks of October if there was to be any chance of securing the borrowing amounts

¹⁴⁵ Bordo et al, “Sterling in Crisis”, p.438 and C. Ponting, *Breach of Promise; Labour in Power 1964-1970* (London: Hamilton, 1989) p. 295.

¹⁴⁶ R. Middleton, *Charlatans or Saviours? Economists and the British Economy from Marshall Meade* (Cheltenham: Edward Elgar, 1998) p. 262 and S. Newton, “The Sterling Devaluation of 1967, the International Economy and Post-War Social Democracy”, in *The English Historical Review*, Vol.125, No.515 (2010) p. 914.

¹⁴⁷ TNA, PREM 13/2931, Note of a meeting, 23 Nov 1967.

required in order to support sterling.¹⁴⁸ Armstrong also made it clear that devaluation and deflation were still not options worth considering, and that resources devoted to non-economic purposes should begin to be reduced with reference made to defence and prestige projects – with the inference being Concord.¹⁴⁹

The central importance of re-evaluating defence and in particular the military aircraft programmes was emphasised in an October 1964 Treasury brief prepared on economic policy and the balance of payments as, “Our present defence expenditure and the deployment of our forces in the world imposes a two-fold cost on the economy; it entails, first, heavy and rising overseas expenditure, which is a direct cost to the balance of payments, and secondly, the pre-emption, primarily for non-economic purposes, of a very large part of the productive potential of some of our most important and technologically advanced industries – the aircraft industry, the electronics industry and many sections of the engineering industry.”¹⁵⁰ The brief on expenditure abroad reinforced the overseas cost element by stating that between 1952 and 1963 overseas military expenditure had risen from £141m to £240m.¹⁵¹ Thus the option of using defence cuts, both in terms of production, and in particular aircraft production, and of the scaling back overseas military commitments were put forward by the Treasury as a key medium term means of tackling the balance of payments deficit. The central element was not the specifics of the aircraft designs themselves, nor how they contributed to the defence strategy, but instead simply the role of the

¹⁴⁸ TNA, T 171/758, *Treasury Briefs for Incoming Government*, Note, Armstrong to Bancroft, Undated (est. early Oct 1964).

¹⁴⁹ TNA, T 171/758, *Treasury Briefs for Incoming Government*, Note, Armstrong to Bancroft, Undated (est. early Oct 1964).

¹⁵⁰ TNA, T 171/758, Brief, G.B. (64)24, *Economic policy and balance of payments*, 15 Oct 1964.

¹⁵¹ TNA, T 171/758, Brief, G.B. (64)27, *Government expenditure overseas*, Oct 1964.

programmes played as financial instruments. This demonstrated the tie between the need for an immediate response to the economic crisis and the resultant need for action over the aircraft programmes, aside from any political advantages that could be gained from where such choices ultimately landed.

The civil servants in the Treasury also laid out their short-term advice for a new Prime Minister and Cabinet, and the advice did not differ from that offered to their predecessors. The question of import controls was laid out as an option that would see savings of between £200m and £250m per annum, with an acceptance that any such measures would most likely have to be accompanied by a deflationary element, such as rise in the Bank Rate, to assist with lowering the domestic demand.¹⁵² Whereas tariffs had been considered and then ruled out by Maudling, Callaghan accepted the advice, and the imposition of a 15% import tariff on manufactured goods formed the central element of the Government's White Paper released on 26 October.¹⁵³ McKean drafted the Chancellor's position as being that such a levy would "...divert demand from imports to home production...[and] the export tax rebate would divert production from satisfying home demand to satisfying export demand."¹⁵⁴ The government were explicit both in the White Paper itself and the press coverage that accompanied it that such moves were temporary in nature and only being imposed due to the need to halt the rise in imports and stimulate exports.¹⁵⁵

¹⁵² TNA, T 171/758, Brief, G.B. (64)22, *Import Controls*, 13 Oct 1964.

¹⁵³ TNA, T 171/776, *1964 Autumn Budget* General, Draft of brief, McKean for Chancellor, *Taxation Prospects*, 23 Oct 1964 and HMG, *The Economic Situation, A Statement by Her Majesty's Government 26th October 1964* (London: HMSO, 1964) p. 4.

¹⁵⁴ TNA, T 171/776, Draft of brief, McKean for Chancellor, *Taxation Prospects*, 23 Oct 1964.

¹⁵⁵ HMG, *The Economic Situation*, p. 2 and Our Own Correspondent, "Washington welcome for British measures", *The Times*, 27 Oct 1964.

Whilst the import tariff represented Ministers taking civil servants' advice, the same could not be said for the revelation of the size of the deficit. Under the Conservatives, both Ministers and advisors had been against revealing the figure of £800m, and given the interest shown by Wilson in the state of the finances prior to the election, it was no surprise that the figure was included on the October statement. As late as 21 October, Goldman received a memo at the Treasury from Hubbuck outlining that, "To give a figure of £800 million now could be bad for confidence, and bring about just the outflow [of sterling] which we do not want to happen."¹⁵⁶ That the statement on 26 October would be followed by an Autumn Budget and a rise in the Bank Rate suggests that Hubbuck's advice should have been more closely followed.

Regardless of the merit in releasing the figures, no plan to halt the slide could be successful without the support of the United States. By imposing import tariffs, Wilson was in effect returning to the pre-war world typified by the Ottawa Agreements. In the 1930s the tariffs had been designed to favour the Empire and Commonwealth, and as a result were detrimental to the economy of the United States. Britain now found itself in need of both raising tariff walls and maintaining American support for securing the additional credit facilities required to ride out the storm. Tariff barriers also went directly against the Kennedy Round of GATT negotiations which were underway. Two days before the announcement, Wilson telegraphed President Johnson, who was himself busy running for re-election and two weeks away from polling day. Although Johnson was in a very strong position, Wilson had to be careful not to portray Britain as being against the President's

¹⁵⁶ TNA, T 318/30, Memo, D.F. Hubbuck to S. Goldman, *Statement on Economic Policy*, 21 Oct 1964.

ambitious Great Society policy, which centred on social and economic reform. In the telegram Wilson outlined the planned measures and stressed that he was against devaluation. He was also at pains to point out, as would be the running theme throughout the autumn, that all measures were only temporary due to the unique circumstances, and that he “...set great store by close and continuing co-operation with the American administration..., my colleagues and I are most grateful for the co-operation we are receiving in these difficult times from the United States authorities.”¹⁵⁷ As would typify the nature of their relationship, and will be explored in the following two chapters, Wilson’s gushing telegram was not returned with the same enthusiasm for trans-Atlantic relations by Johnson, who merely stated that he regretted the tariffs, but understood their necessity to protect sterling. Johnson was also clear that he was relieved that there was to be no increase in interest rates.¹⁵⁸

The primary aim of the Statement on 26 October had been to address the defence of sterling and the balance of payments trade deficit, yet it did not fully target the aims and ambitions of the Labour Government save for the acknowledgement that government expenditure programmes did not meet the “...nation’s social or economic needs.”¹⁵⁹ Whilst also saying that a “...strict review of all Government expenditure...” would have to take place.¹⁶⁰ The Treasury machine had been fully aware prior to the election that Labour campaign promises would require additional funding to be implemented, or at the very least require cuts to existing programmes.¹⁶¹ The question

¹⁵⁷ *Foreign Relations of the United States (FRUS)*, 1964-1968, Vol. VIII: *International Monetary and Trade Policy*, Document 13: T57W/64, Telegram from Wilson to Johnson, 24 Oct 1964.

¹⁵⁸ *FRUS*, 1964-1968, Vol. VIII, Document 14: CAP 64270, Telegram from Johnson to Wilson, 24 Oct 1964.

¹⁵⁹ HMG, *The Economic Situation*, p. 3.

¹⁶⁰ HMG, *The Economic Situation*, p. 4.

¹⁶¹ TNA, T 171/758, Brief, G.B. (64)1 (Revise), *Public expenditure and taxation*, 14 Oct 1964.

therefore was over whether such measures could feasibly be delayed until spring 1965 and the regular Budget, thus allowing the markets to focus on the government's intent to tackle the deficit in the meantime.

Even before the announcement on 26 October, Callaghan was not convinced there was a need for an Autumn Budget.¹⁶² The Treasury position was forthright that any increases in expenditure would have to have additional funding, and therefore tax rises would be unavoidable.¹⁶³ Given that an immediate, and in effect emergency, tax rise would further demonstrate to the markets that the government did not have their finances on a stable footing, such a rise would not have been enacted right away. The debate over a tax rise was not whether one was required, but how large a rise it would be, and when it could feasibly be introduced. During a meeting between the Prime Minister and the Chancellor on 27 October, Callaghan put forward that he was open to either a 6d or 9d rise, which would bring in revenue of £122m or £183m respectively.¹⁶⁴ This would have a twofold benefit. Firstly, there was the additional revenue for the Exchequer, allowing the government to push ahead with social reforms and attempts to consolidate popular support amongst Labour voters at time when it only had a working majority of four in the Commons. Graham and Beckerman consider all economic policy up to the 1966 general election as being "...subservient to the need to main unity within the Labour Party and achieve re-election with an increased majority."¹⁶⁵ Secondly, by reducing the purchasing power of the population,

¹⁶² TNA, T 171/775, Note, Bancroft to Jay, 22 Oct 1964.

¹⁶³ TNA, T 171/776, Brief, Clarke to Bancroft, *Autumn Budget*, 24 Oct 1964.

¹⁶⁴ TNA, T 171/776, Note of meeting, Prime Minister and Chancellor, 8.15pm Tuesday October 27, 27 Oct 1964. Callaghan held a meeting with Treasury officials earlier in the day where these options were discussed, and TNA, T 171/776, Note of Meeting, Chancellor and Treasury officials, *Autumn Budget 1964*, (held 27 October), 28 Oct 1964.

¹⁶⁵ Ed. Beckerman, *The Labour Government's Economic Record*, pp. 18-19.

some of the pressure could be taken out of the economy. This was particularly important when considering that the potential price rises brought about by the import tariffs would be starting to take effect by the spring of 1965 and there was therefore a need to avoid the inflationary side effects. At the same meeting the Prime Minister voiced that a 6d rise was his preference, and that it should be announced as soon as possible and to take effect in April 1965. Wilson also wanted to see increased business tax and the introduction of capital gains tax.¹⁶⁶ An increased corporation tax would have impacted the aviation industry alongside all elements of British industrial output, thereby indirectly decreasing the relative cost of domestic defence procurement purchases by a small amount.¹⁶⁷ The aspiration to announce the tax rises at the earliest opportunity went against Treasury advice, which, whilst advocating the need for an increase, put forward that an autumn announcement would not leave much room to manoeuvre come April should the economic climate change.¹⁶⁸ Having been uncertain about the need for a Budget on 22 October, the continual struggles of sterling meant that by the time of a meeting with Treasury officials on 2 November, Callaghan now saw a “...strong case for an Autumn Budget,” and he was in agreement with Wilson’s favoured tax rise of 6d as the preferred choice.¹⁶⁹ The subsequent timelines for the decisions on the aircraft programmes was established by Callaghan bringing this decision point forward to the autumn.

¹⁶⁶ Ed. Beckerman, *The Labour Government’s Economic Record*, pp. 18-19.

¹⁶⁷ TNA, T 171/776, Note of Meeting, Chancellor and Treasury officials, *Autumn Budget 1964*, (held 27 October), 28 Oct 1964 – The 2.5% profits tax would only bring in earnings of £15m in 64/65, rising to £60m in 66/67 and their value was assessed by the Treasury as largely symbolic.

¹⁶⁸ TNA, T 171/776, Brief, Clarke to Bancroft, *Autumn Budget*, 24 Oct 1964.

¹⁶⁹ TNA, T 171/776, Note of Meeting, Chancellor and Treasury officials, *Autumn Budget 1964*, (held 2 November), 3 Nov 1964.

Stability for sterling was undoubtedly the primary focus, and although the traditional line of placing the blame on the preceding administration was offered up in drafts to the new government, it was only ever used sparingly with regard to prestige projects and the unachievable spending plans.¹⁷⁰ The new government's spending objectives centred around social welfare, with the abolition of prescription charges alone costing an estimated £22m per year.¹⁷¹ Savings of £50m from the Defence budget were mooted, but the intent to review and cut back on government expenditure was not seriously entertained for the purposes of the Autumn Budget beyond some well-meaning phrases.¹⁷² Instead, this aspect was referred to committee suggesting that although action on defence spending to include the aircraft programmes was a priority, it was too large a consideration for inclusion in the snap budget.

The Public Sector Programmes Committee was designed to address these larger issues of excessive expenditure and identified four areas where savings could be realised: those of defence, social services, civil expenditure with an economic aspect and civil expenditure without a direct economic output. Traditional Labour policy was against having a large defence budget, and due to the reduced figure of £2,000m set aside for the budget in 1969/70 there was a "...manifest need for [a] review of our commitments against our resources on the one hand and of effectiveness and economy on the other."¹⁷³ A later internal Treasury note from Clarke, this time to

¹⁷⁰ TNA, T 171/758, Draft minute, Chancellor to Prime Minister, attached to G.B. (64)1 and HMG, *The Economic Situation*, p. 3.

¹⁷¹ TNA, T 171/776, Note, Morehall to McKean, 3 Nov 1964.

¹⁷² TNA, T 171/776, Note of meeting, Prime Minister and Chancellor, 8.15pm Tuesday October 27, 27 Oct 1964.

¹⁷³ TNA, T 171/777, 1964 Autumn Budget General, Memo, Clarke to Armstrong, *Public sector programmes committee*, 4 Nov 1964.

Bancroft, added the line, "They will also be reporting quickly on the three aircraft but the Chancellor should not volunteer this."¹⁷⁴ The emphasis was on the three high cost programmes of TSR.2, HS.681 and P.1154, but any decision on these would have a carry-over impact onto all domestic activity given the heavy reliance within the sector for these programmes. Domestic military aircraft production was in effect being marked not only in terms of defence spending, but also over the reassessment of civil expenditure. Here the focus was to be areas with scientific and technological elements, particularly those that "...absorb industrial and scientific manpower and capital and management without adequate economic and financial return."¹⁷⁵ The broader inference was further emphasised in the conclusion to the initiation memo with the overall aim being that, "...where the priorities are wrong, to free valuable men and plant for work which strengthen the economy and help expansion...Our object is to find the cases where expenditure is not yielding full value for money in social and economic terms; and this is what we intent to do."¹⁷⁶ Despite this wide ranging and potentially decisive remit the committee did not, even at its initiation, have a regular meeting slot . Having been ordered by the Chancellor at the beginning of November, the committee was still yet to meet by early December.¹⁷⁷ The efforts and implications of the reassessment of the aviation industry are covered in chapter six, with the discussions at this stage introducing the concept of using aviation cuts as effective sweeping savings due to their large costs and large labour force commitments.

¹⁷⁴ TNA, T 320/521, *Public Sector Programme Committees Working Papers*, Memo, Clarke to Bancroft, *Public Sector Programme Committee*, 3 Dec 1964.

¹⁷⁵ TNA, T 171/777, Memo, Clarke to Armstrong, *Public sector programmes committee*, 4 Nov 1964.

¹⁷⁶ TNA, T 171/777, Memo, *Public sector programmes committee*, 4 Nov 1964.

¹⁷⁷ TNA, T 320/521, Memo, Chancellor to PSP Committee, *Work of the Committee*, PSP(64)2, undated, est. 4 Nov 1964 and TNA, T 320/521, Memo, Clarke to Bancroft, *Public Sector Programme Committee*, 3 Dec 1964.

Wider defence expenditure was a natural target for the financial review. As early as July 1964 the projected defence budget of £2,000m had been assessed as too large, and placing too great a strain on the balance of payments. Even once taking the presence of American forces stationed in Britain into account, who were contributing some £42m within the year, the defence balance of payments figure for 1964 sat at £233m when it was assessed in spring 1965.¹⁷⁸ Johnson and McNamara would use the basing of American forces as a financial tool in the aircraft package agreement, with United States resident military expenditure biased towards British government agencies. In the second quarter of 1964/65, which ran to December 1964, just over £13m was spent in Britain. Of that, £10m went to government agencies, and only £3m into the wider British economy.¹⁷⁹ When considered over the course of a year there was a useful inflow of currency to aid the balance of payments, however there was only a marginal benefit to the economy, and it was the stagnation and lack of exports that were hurting the economy the most, rather than small sales that were in effect domestic in nature. These figures did however represent an increase on the £12m recorded for the entirety of 1963.¹⁸⁰ Of a defence budget of £2,000m, £650m was allocated to the Mediterranean and East of Suez roles, whilst £300m was for the defence of Europe.¹⁸¹ A high research and development provision of £300m highlighted the Chancellor's ambition for re-evaluating civil expenditure and redistribution of skilled labour, for the R&D on defence was not directly linked to

¹⁷⁸ TNA, T 318/140, *The effect on the U.K. B.o.P. of overseas military expenditure 1964*, Memo, Downey to Uffen, *The effect of defence expenditure on the balance of payments*, Jun 1964, updated 6 May 1965, p. 1.

¹⁷⁹ TNA, CAB 139/659, *United States defence expenditure in UK, treatment in balance of payments, quarterly returns from United States*, Brief, Struve (Assistant Financial Attaché, U.S. Embassy) to Drown (Treasury), 17 Mar 1965.

¹⁸⁰ TNA, T 171/758, Brief, G.B.(64)27, *Government expenditure overseas*, Oct 1964.

¹⁸¹ TNA, T 318/38, Treasury Paper, *The Next Five Years*, 3 Jul 1964, p. 10.

economic advancement. One third of all UK scientists worked on military projects, and defence as a whole accounted for 10% of all industrial output.¹⁸² It was for this reason that Wilson stated in December 1964 that, “we are planning...to redeploy our scientific and technological resources so that scientists and engineers who have hitherto been working on costly research and development projects for defence can be turned over to R&D in civil industry to produce new processes, new inventions, [and] new industries...”¹⁸³

Alongside a review of public expenditure, there was also the need to boost economic performance, with the redistribution of R&D representing a key element. The creation of the Department of Economic Affairs (DEA) to enact and develop the National Plan was vital to the new Labour social reforms. In order to achieve sufficient funding for these programmes, GDP was required to grow at 4% per annum.¹⁸⁴ This represented an increase on the 3% targeted under the Conservative government, which itself had placed a serious challenge to British industry, requiring growth in the volume of exports of 5% per annum to maintain parity with imports.¹⁸⁵ Such a move would require a concerted redirection of technologically advanced industries such as aircraft manufacture to achieve this. The Treasury saw the DEA as needing to provide the means of achieving faster and consistent economic growth through “...the improvement of industrial techniques and the development of capacity.”¹⁸⁶ The scope for directed reallocation within the aviation industry was limited as it was

¹⁸² TNA, T 318/38, The Next Five Years, 3 Jul 1964, p. 11.

¹⁸³ Wilson, *Leader's Speech*, Labour Conference, 12 Dec 1964.

<http://www.britishpoliticalspeech.org/speech-archive.htm?speech=162>.

¹⁸⁴ TNA, EW 25/115, *Plan co-ordinating working party papers – 1964*, Brief, *The objective and methods of the plan*, 16 Dec 1964.

¹⁸⁵ TNA, T 318/38, Treasury Paper, The Next Five Years, 3 Jul 1964, p. 5.

¹⁸⁶ TNA, EW 25/115, ‘Note by the Treasury’, *The Plan and the balance of payments*, 16 Dec 1964.

predominately in private ownership, despite the majority of business coming from government contracts. Whilst the sector was not directly targeted in the formalised National Plan objectives, as later announced by George Brown in August 1965, the wider aspect of the need to limit the defence budget did receive attention with the intent that “...the rise defence spending will be brought to an end.”¹⁸⁷

The Autumn Budget, announced on 11 November, set out a more formalised framework for the import and export measures to cut the deficit, detailed the range of social benefits and how they would be financed, and initiated reforms to the tax system.¹⁸⁸ What it failed to address was the impression in the international markets that Labour had firmly grasped the issues affecting sterling, and put in place sufficient measures to guarantee it. As a result, and despite *The Times* saying the day after that, “For the City...[the] autumn Budget has brought widespread relief,” speculative runs on sterling continued.¹⁸⁹ Welfare and social issues, whilst important domestically, carried no weight overseas where only the health of the economy mattered.¹⁹⁰ The government was left with very few immediate levers to remedy the situation, chief amongst which was the long proposed rise in the Bank Rate.

Speaking in the Guildhall at the Lord Mayor’s Banquet on 16 November, Wilson stated that, “We shall not hesitate to take any further steps that at any time are or become necessary. If anyone, at home or abroad, doubts the firmness of that resolve and acts upon their doubts, let them be prepared to pay the price for their lack of faith

¹⁸⁷ TNA PREM 13/274, *The National Plan; What has to be done*, Aug 1965, p.19.

¹⁸⁸ TNA, T 171/777, Guidance Note, Chancellor to Private Secretaries, *The Economic Situation*, 10 Dec 1964.

¹⁸⁹ City Editor, “Initial Relief at Budget Measures”, *The Times*, 12 Nov 1964.

¹⁹⁰ TNA, EW 16/2, Briefing paper, Enquiry into the position of sterling 1964-65: Report, undated est. 1966, p. 20.

in Britain.”¹⁹¹ The steps he was referring to were at that time the subject of heated debate within the Treasury, for whilst the question of a rise in the Bank Rate was not new, there was still a lack of universal agreement on its necessity. The failure of the October Statement and subsequent Autumn Budget to quell the fears over sterling left the government with two requirements. Firstly, a deal had to be struck with the United States Federal Reserve, European central banks and the IMF over additional credit facilities for Britain as vast sums were being spent daily supporting the peg rate. Secondly was addressing the fundamental need for this additional credit – namely achieving stability for the currency.

Civil servants within the Treasury had been aware since the spring that the position of the Bank of England was that a rise in the Bank Rate might well have to come before the end of the year, and that Lord Cromer wanted to hold off for a long as was feasible.¹⁹² A key reason for Cromer’s reluctance was that the United States was firmly against any rise in the rate.¹⁹³ The imposing of tariff barriers had not impressed an American administration that was actively engaged in a broad policy of breaking down such barriers through the Kennedy Round. As previously covered, when Wilson had informed Johnson of the intention to announce the import tariffs at the end of October, Johnson’s curt response had simply been that he was glad there was no increase in interest rates, yet this was now the situation in Whitehall and the Bank of England.¹⁹⁴ For the United States, any increase in London would have had to have been

¹⁹¹ Home News, “Faith in Sterling”, *The Times*, 17 Nov 1964.

¹⁹² TNA, T 318/30, Briefing note, Cairncross, *Note for the record*, 13 May 1964 and TNA, T 318/30, Note of a meeting at 11 Downing St., 21 Jul 1964.

¹⁹³ TNA, T 171/769, *Bank Rate Increase, General*, Memo, Armstrong to Bancroft, *Monetary Policy*, 16 Nov 1964.

¹⁹⁴ *FRUS*, 1964-1968, Vol. VIII, Document 14: CAP 64270, Telegram from Johnson to Wilson, 24 Oct 1964.

matched across the Atlantic, for the nature of the peg meant that there could not be a large outflow of funds from dollars into sterling to take advantage of the rate rise, and thereby placing the dollar at risk.

The Bank Rate – the interest figure at which short-term borrowing of sterling from the Bank of England was charged at, was running at 5% through 1964. Lord Cromer, whilst remaining against a rise in principle, expressed concern that the European Central Banks did not believe the Autumn Budget went far enough in the short term. In the days after the Budget he recommended a 1% rise to the Chancellor to show confidence in the actions of the Government and to slow demand at home, whilst being small enough to not overly concern the Americans.¹⁹⁵ This slowing of demand was also crucial in avoiding inflationary side effects from the imposition of import tariffs. Aside from the United States, the European Central Banks still had to be convinced in order to guarantee the additional credit facilities. The Treasury, in response to Cromer's suggestion, stated that "...an increase in Bank Rate to 6 per cent would not be appropriate in the present circumstances."¹⁹⁶ They believed that the Central Banks could be persuaded to support sterling without resorting to such a rise.¹⁹⁷

There was a high degree of concern within the government as to the reaction of the United States. Wilson sent a telegram to Johnson at lunchtime on 19 November testing the water for a rise in the Bank Rate to halt the run on sterling and requesting American support in an application to the IMF for a \$1,000m credit facility. Wilson also posed the unusual proposition that should the United States raise their discount rate,

¹⁹⁵ TNA, T 171/769, Letter, Cromer to Callaghan, 13 Nov 1964.

¹⁹⁶ TNA, T 171/769, Memo, Armstrong to Bancroft, *Monetary Policy*, 16 Nov 1964.

¹⁹⁷ TNA, T 171/769, Memo, *Monetary Policy*, 16 Nov 1964.

which was the U.S. Federal Reserve equivalent to the Bank Rate, then Britain would be obliged to follow suit.¹⁹⁸ This may well have been an optimistic play by Wilson, for although the dollar was slightly fragile, and indeed the chairman of the Federal Reserve, William McChesney Martin, would later go on to say that, “From some points of view the dollar was almost as delicately placed as sterling,”¹⁹⁹ an American led rise would lift some of the pressure from the Labour government. Although the effect would have been the same it would not have presented a rise as being a desperate last effort by Labour. In any case, Wilson had his reply by the evening. Johnson stated that the United States would indeed support an IMF application, and that they had a “deep interest” in maintaining the peg. He was however categorical that, although the Federal Reserve was independent of the Executive, he had been informed that there was no intention to raise the discount rate.²⁰⁰ The choice of liaison dispatched from Whitehall to the White House through this process was Eric Roll, who as well as being a distinguished academic economist and civil servant, had also recently been appointed to the DEA as Permanent Secretary. Roll reported back to Wilson on the 20 November that the United States expected the Bank Rate to rise imminently, and for the Federal Reserve to follow shortly after.²⁰¹ Such a match would not have been made because British policy carried weight with the United States, but simply that under the limitations of Bretton Woods both nations were effectively tied together when it came

¹⁹⁸ TNA, T 171/769, Telegram, Foreign Office to Washington, No. 13117, Wilson to Johnson, lunchtime, 19 Nov 1964.

¹⁹⁹ TNA, PREM 13/252, *US-UK talks at the White House*, Minutes, 7 Dec 1964.

²⁰⁰ TNA, T 171/769, Telegram, Lord Harlech (Ambassador to the United States) to Mitchell (No.10), No. 3807, Johnson to Wilson, evening, 19 Nov 1964.

²⁰¹ TNA, T 171/769, Telegram, Washington to Foreign Office, No. 3837, Roll to Prime Minister, 20 Nov 1964.

to their central banks and their currencies, and any divergence would present challenges for industrial competitiveness.

Callaghan announced the rise in the Bank Rate from 5% to 7% in the House of Commons on the morning of 23 November, and stated that it had been made to demonstrate the government's determination to maintain the parity of sterling and also to put a halt to the outflow of funds.²⁰² This was followed on 26 November with the announcement of the securing of \$3,000m in credit facilities, including \$1,000m from the United States and \$500m from Germany. This "...massive support...demonstrates the vital importance of the strength of sterling."²⁰³ On the evening of the Callaghan's announcement of the rise, Whitehall was made aware that the Federal Reserve would be following suit and raising the discount rate from 3½% to 4% effective the following day.²⁰⁴ This was carried out to ensure there were no outflows or disparities in the major rates, and to "...maintain the international strength of the dollar."²⁰⁵ The Federal Reserves of New York, Boston, Philadelphia, Chicago and St Louis raised the rate on the 24 November, with the other seven boards following on 30 November.²⁰⁶ When it came to the additional credit, the message from America was also clearly spelt out, "Eleven countries and the United Kingdom today made arrangements providing \$3 billion to back up Britain's determination to defend the pound sterling."²⁰⁷

²⁰² TNA, T 171/769, Statement for the House, *Chancellor in House of Commons*, morning, 23 Nov 1964.

²⁰³ TNA, T 171/769, Statement for the House, *Chancellor in House of Commons*, 26 Nov 1964 and TNA, T 171/769, Note, *Central Bank Co-operation*, undated, est. 25/26 Nov 1964.

²⁰⁴ TNA, T 171/769, Telegram, Washington to Foreign Office, No. 3869, evening, 23 Nov 1964.

²⁰⁵ New York Fed, 'The Money and Bond Markets in November', *Monthly Update Bulletin*, (2 Dec 1964), p. 245.

²⁰⁶ New York Fed, 'The Money and Bond Markets in November', *Monthly Update Bulletin*, p.245.

²⁰⁷ New York Fed, 'The Money and Bond Markets in November', *Monthly Update Bulletin*, p. 246.

The resulting rise in the Bank Rate was a direct consequence of the failure of the earlier economic moves to restore confidence in sterling. When placed alongside the allocation of additional credit facilities there was indeed a decrease in the outflow of sterling, whilst the amount of support forward that the Bank of England had to provide to the currency also fell.²⁰⁸ It did however represent a line that the United States had not wanted Britain to cross. The economic inaction of the Conservative government through the first part of the year did nothing more than delay the inevitable, and as any policy changes announced in the Budget would take time to have an effect, the Bank Rate rise had a sense of inevitability about it.

Wilson had a bold vision for how he wanted to transform Britain economically through the 'White Heat of Technology' and improve social welfare, and the majority of the domestic economic focus in both the October Statement and the Autumn Budget were based around this ambition. Defence spending as part of the balance of payments was a considerable burden and made worse by the heavy commitment defence procurement placed on the highly technologically advanced industries, such as aviation, that Wilson wanted to free up for commercial gain. The broader piece on reviewing government expenditure also placed defence near the top of the list for areas where savings and revisions could be made. Yet if Britain was to be able to scale back any overseas spending and commitments, it would have had to carry American support. The first six weeks of the Labour Government saw the imposition of import tariffs and a rise in the Bank Rate, combined with requested for increased American credit facilities. These economic policies were never likely to win favour with the

²⁰⁸ TNA, EW 16/2, Briefing paper, *Enquiry into the position of sterling 1964-65: Report*, undated est. 1966, p. 51. This support totalled £838m over the period Oct 1964 to Aug 1965.

Johnson Administration, regardless of how they were packaged, and placed Wilson on the back foot in relations with the newly re-elected President.

In this chapter it has been argued that although the rigid international economic system limited the options for both the Conservative and Labour governments to take drastic action to address the balance of payments crisis in 1964, there remained a reticence to take any firm line on the issue without strong American support. The reluctance of the Johnson administration to accept the imposition of British tariff barriers and to agree to a raise the discount rate exposed the difficult nature of the trans-Atlantic relationship during the period and increased the importance of the British East of Suez posture that shall be examined later. The economic crisis exposed the two core issues for defence in the period, with the heavy burden of both manufacturing and expenditure on domestic programmes combining with this East of Suez overseas military spending to weigh heavily on government planning. The severity of the financial pressures on sterling, the speed and depth of action taken in response to the crisis, and the impact on the special relationship is thus fundamental to framing the subsequent decisions on the aircraft programmes. The crisis therefore presented both the need for domestic realignment of defence industries such as the aviation industry, and the need to retain the support of the United States in all decisions, thereby initiating the chain of events that led to an increased focus on the reappraisal of the ongoing aircraft procurement programmes and greatly increased the pace at which such action was taken. The United States had its own reasoning and priorities for supporting sterling and British international political and military positions which also directly contributed and shaped these aircraft procurement decisions, and these shall be assessed in the next chapter.

CHAPTER 2 – THE INFLUENCE OF THE USA

The United States represented the key partner for Britain in both the economic and wider foreign and defence policy realms. The significant steps taken by the Johnson administration to ensure the stability of sterling in autumn 1964 were not simply the altruistic actions of a benevolent partner nation. Any turmoil in Britain, as with other key European allies, would impact the economic and political power of the United States. The relationship between the two countries was certainly close, but by early 1965 it was not clear whether it could still be expressed as 'Special'. The movement away from the wartime alliance, driven by the continued rise of the United States and decline of Britain in both economic and political terms had been brought into stark relief with the financial assistance delivered by the United States to Britain a few months earlier. Although the signing of the Nassau Agreement in 1962 had kept Britain at the top table as a nuclear power, the earlier Suez Crisis of 1956 had signalled a changing in the tone of the relationship to one of Britain as, at best, the first among equals amongst America's allies. John Dickie viewed the Wilson-Johnson dynamic as the start of a "...decline which continued for fifteen years until Margaret Thatcher rekindled the special warmth of the partnership with Ronald Reagan."²⁰⁹ Whilst it was undoubtedly not as friendly as both the earlier and later partnerships at a personal level, the functional nature of the ties between the two countries continued, as the warm and hospitable language that came out meetings and the December 1964 Summit talks confirmed. As Ben Pimlott described in his biography of Wilson,

²⁰⁹ J. Dickie, *'Special' No More: Anglo-American Relations, Rhetoric and Reality* (London: Weidenfeld & Nicolson, 1994), p. 135.

“America’s involvement in South East Asia, and Britain’s increasingly urgent need for financial help, provided the basis for a working relationship with the new President.”²¹⁰

The Gulf of Tonkin incident in August 1964 and the subsequent progress of the war in Vietnam defined the military priorities for America, and fundamentally shaped the American position in dealing with allies such as Britain. In the same manner that without the pressure on sterling in autumn 1964, Wilson would have been in a much stronger position within the trans-Atlantic relationship, the same can be said for Johnson and the struggles in Vietnam. The strain of the American worldwide role and escalation in Vietnam gave urgency to the financial pruning efforts by McNamara to reform the Department of Defense and promote the TFX aircraft programme. The shift in the relationship through the period was not just over Vietnam and East of Suez, but also one where a Britain that was increasingly focused on the European continent and was actively pursuing the role of the bridge between America and Europe, as the talks on the future of the Multilateral Force (MLF) and the proposed Atlantic Nuclear Force (ANF) in the next chapter will show. The economic and wider geo-political dilemmas facing Britain during the period were also to some extent mirrored across the Atlantic.

For the United States, the post-war shift in the balance of global power had required the assumption of many of the worldwide roles previously occupied by the now greatly reduced European powers. This posture brought with it a similar problem to that experienced by Britain from the opposite direction – that of an imbalance in the balance of payments. For authors such as Pollard, the continual decline in British productivity and the rising costs of British products drove this and resulted in both an

²¹⁰ Pimlott, *Harold Wilson* p. 365.

overdependence on imported goods and limited exports.²¹¹ For America it was driven by vast military overseas expenditure and an associated outflow of gold reserves upon which the value of the dollar was based.²¹² The TFX aircraft, later termed the F-111, which McNamara would so strongly encourage the Labour government to procure during the Washington Summit was the result of a need to consolidate the procurement of airframes into more cost-effective and shared designs. This would then have helped to reduce the overall defence budget whilst maintaining an effective military force and allowing for a strong and innovative defence industry. The central figure here was Secretary of Defense Robert McNamara, who for Joel Christenson, “...was at or near the height of his power and reputation when Johnson took office [having mastered]...the unwieldy Pentagon bureaucracy and for bringing a level of efficiency and effectiveness to the defense establishment.”²¹³ McNamara had staked his reputation on maintaining this tight grip on financial expenditure and on driving through large scale savings at the Department of Defense, with increasing exports as a key element. This was particularly effective if negotiated as offset payments against overseas American troops that limited the foreign currency costs for all involved.

There were a number of key parallels behind the desired end-states for military spending and the military manufacturing industries in both America and Europe, albeit on vastly different scales. For the Johnson administration, these attempts came with the backdrop of a continually worsening military and political situation for South Vietnam, which the United States was politically committed to supporting. This made the need for financial efficiencies all the more challenging, yet reinforced the

²¹¹ Pollard, *The Development of the British Economy, Fourth Edition*, p. 302.

²¹² Cohen, W.I., *A Nation Like All Others*, p. 180.

²¹³ Christenson, *Expanding the Secretary's role in Foreign Affairs*, p. 4.

importance of allies in sharing the worldwide role. A result of this was that, in the words of Ian Buruma, a demand by Johnson that “...after years of decrying British imperialism, that Britain continue to play an important military role ‘east of Suez’”.²¹⁴ For Guy Arnold, the imbalance in the relationship over Vietnam resulted in a situation whereby “...the special relationship was turning into a struggle by the US to make its client give open military support, which the client was resisting to the best of its ability.”²¹⁵ These two works are typical of the wide range of studies on the special relationship in that they do not address the active role that the aircraft programmes played in providing broader British support East of Suez, and as such provided a means of remaining out of the spiralling war in Vietnam. For the Johnson administration, a central element of the strategy for gaining the support of a key ally was the tying of support for sterling in October 1964 to a commitment by Wilson to maintain the East of Suez role, even if furnishing it would require both countries to continue running problematic balance of payments deficits. The need to manage these costs whilst retaining effective military capabilities, balancing the outputs of domestic industry, all whilst ensuring the stability of the international order does offer a means where aircraft procurement programmes were able to serve as both a tool of diplomacy and as reflectors of these broader ambitions of the administrations.

This chapter will examine these American priorities and challenges which shaped the immediate requirements for the relationship with Britain during this period, and how the American package of aircraft procurement programmes was defined by the needs of the Johnson administration over and above the ambitions of

²¹⁴ I. Buruma, *The Churchill Complex, The Rise and Fall of the Special Relationship from Winston Churchill and FDR to Trump and Johnson* (London: Atlantic Books, 2021) p. 109.

²¹⁵ Arnold, *America and Britain*, p. 84.

the Wilson government. It will be argued that although Wilson was able to secure a preferential arrangement for military aircraft from America, it was achieved to meet the requirements of Johnson for a continued British involvement East of Suez during the escalating conflict in Vietnam, and for McNamara to demonstrate the success of his TFX initiative to the American political and military machine. The negotiations that took place during the Washington Summit talks of December 1964 to select F-111, C-130 and F-4 to replace TSR-2, HS.681 and P.1154, but not to include the P-3 to replace Shackleton, will be assessed in the next chapter. It is important to fully frame the American ambitions first to understand the direction and motivations behind those talks and why the American priority of East of Suez did not present a compelling argument for either nation to include P-3 in the package. Throughout the period, it is clear that American interests always had primacy in dealings with all allies, and although Wilson was able to use the requirement for military aircraft to achieve domestic economic and industrial progress, Britain continued to fulfil the role of an ally considered the first among equals, rather than the illusionary peer status conferred by the moniker of a Special Relationship.

The relationship between Britain and the United States has often been given this prefix of Special, implying a closeness not shared between America and any of her other allies. That it is a case of America being the central partner and Britain as the fortunate one to be considered special, speaks to the decline of Britain's power on the world stage in the post-war era. Historians of the topic, such as Kathleen Burk, tend to

portray the 1960s and 1970s as the low point of British and American relations.²¹⁶ This viewpoint is understandable when considering the sweep on the relationship across the second half of the twentieth century and onwards, as the close personal relationships of both Churchill and Roosevelt during the Second World War, and then of Thatcher and Reagan in the 1980s, puts the difficulties of the post-Suez world into stark relief. Despite this it was not a case of a relationship that had completely soured. The signing of nuclear agreements with Macmillan by first Eisenhower in 1958 and then Kennedy in 1962, which excluded another close ally in de Gaulle, had demonstrated that Britain could still have been justifiably regarded as at least the first among equals. The natural imbalance in the relationship that might lead to it not being regarded as sufficiently special does not mean that either side was always left wanting during this time. George Ball, the Under Secretary of State during the period, put it in 1968 that, "Many in Washington regard Britain as our natural ally and collaborator in far-ranging enterprises. Many in London look on the United States as Britain's strong and affluent friend, propping up her world interests and giving her entrée to that most exclusive club, 'the Summit'."²¹⁷

The Suez Crisis of 1956 can be said to have marked the true end of the Special Relationship based on the wartime alliance and close personal bond of Churchill and Roosevelt, and as a low point when seen as part of the decline of British power during the post-war period. For writers such as Owen, the rapid post-war independence movement within the British Empire hurt a British economy that was heavily reliant on such countries as export markets, and an economic output that was rebounding at a

²¹⁶ Burk, 'Old World, New World', in Dumbrell et al., *America's 'Special Relationships'*, p. 36.

²¹⁷ G.W. Ball, *The Discipline of Power; Essentials of a Modern World Structure* (Boston: Little-Brown, 1968) p. 90.

far slower rate than Germany or France led to a situation where, in the words of Frederick Nothedge, there was a general acceptance in post-war Britain that America would be taking the lead against Russia.²¹⁸ The crisis resulted from the nationalisation of the Suez Canal Company by Egyptian President Nasser, and the subsequent decision by Britain and France to use the pretext of an Israeli-Egyptian conflict to regain control. The unilateral action by the European nations was done with neither the political nor military support of the United States, whose response of initiating the mass sell-off of sterling bonds and limiting International Monetary Fund access had the desired effect of halting the military action and leading to a swift military withdrawal.²¹⁹ Lord Beloff assessed the subsequent Conservative Party mindset as one where, “The crisis...brought into play feelings...that Britain’s retreat from her place in world affairs had been largely due to American pressure.”²²⁰ Yet when considering the trans-Atlantic relationship, specialist studies of the crisis are far kinder. Bowie highlights that prior to the invasion there was broad alignment between the United States and Britain that Nasser had to be kept out of the Soviet sphere of influence, with their proposal to co-fund the Aswan dam project in early 1956 an example of this.²²¹ The divergence between the countries centred on the British belief that Nasser was, by the middle of 1956, firmly within the orbit of the Soviet Union, and therefore beyond a point where dialogue would achieve the desired ends of Egypt remaining pro-British. For the Eisenhower administration, and in particular on the advice of the American embassy in

²¹⁸ Owen, *From Empire to Europe*, p. 459 and F.S. Northedge, *Descent From Power; British Foreign Policy 1945-1973* (London: Allen & Unwin, 1974), p. 35.

²¹⁹ A. Dobson, *Anglo-American Relations in the Twentieth Century; The Policy and Diplomacy of Friendly Superpowers* (London: Routledge, 1995) p. 117.

²²⁰ M. Beloff, ‘The Crisis and its Consequences for the British Conservative Party’, in Ed. W.M. Roger Louis & R. Owen, *Suez 1956; The Crisis and its Consequences* (Oxford: Clarendon, 1991) p. 1328.

²²¹ R.R. Bowie, ‘Eisenhower, Dulles, and the Suez Crisis’, in Ed. W.M. Roger Louis & R. Owen, *Suez 1956; The Crisis and its Consequences* (Oxford: Clarendon, 1991) p. 190.

Cairo, the impression was that Nasser was and would remain, free from foreign influence.²²² Therefore, despite the Egyptian president being unpopular within the White House, maintaining a pro-Western peace in the region was the primary goal. American action to halt the British and French military offensive is seen by Henkin as not being driven by anti-imperialist action intended to humiliate key allies, but instead carried out to preserve the wider American policy of limiting Soviet influence.²²³ For Kingseed however, there was an element of limiting the influence of European powers in the region, where “Eisenhower’s position was a principled approach that happened to coincide with his interest in retaining friendly terms with the Arab community to forestall Soviet intervention in the region.”²²⁴

This pragmatic position taken by Eisenhower demonstrated both the limited nature of British and French power and the role of America as the overarching power in the Western alliance, and serves as an important example where America’s interests overrode all considerations of an ally, irrespective of how long standing and significant they may be. Despite the crisis clearly marking a significant milestone in the realisation of this power dynamic, it is agreed by authors such as Dobson and Ishii that there was no long-lasting damage done to the relationship between Britain and America, and that, “By the start of the new decade Britain and the USA had repaired their fences.”²²⁵

²²² Bowie, ‘Eisenhower, Dulles, and the Suez Crisis’, in Ed. Roger Louis & Owen, *Suez 1956*, pp. 191-192.

²²³ Henkin, Y., *The 1956 Suez War and the New World Order in the Middle East; Exodus in Reverse* (Lanham: Lexington, 2016) pp. 202-204.

²²⁴ C.C. Kingseed, *Eisenhower and the Suez Crisis of 1956* (Baton Rouge: Louisiana State UP, 1995) p. 91.

²²⁵ Dobson, *Anglo-American Relations in the Twentieth Century*, p. 120, and O. Ishii, ‘U.S. Foreign Policy in the Twentieth Century’ in *Foreign Policy of the Major Powers; Politics and Diplomacy since World War II, Vol.I – United States of America*, Ed. P. Eadie & L. Pettiford (London: I.B. Tauris, 2007) p. 31.

The nature of the Special Relationship varied with the personalities that occupied the respective offices. The Conservative government of Macmillan had enjoyed close ties with Kennedy, and to an extent this carried forward to that of the Home government and Johnson. When Home visited Washington in February 1964 the cordial language on arrival typified the public face of the relationship, with Johnson stating that, "There is, between our two countries the invisible cord of respect and understanding and affection...too strong ever to break." Home had replied with, "Our firm desire is to keep as close as we can to the United States as partners and as allies and as two countries upon which the peace of the world may well depend."²²⁶ This closeness was tested on that visit with the British intent to complete the sale of British manufactured buses to Cuba against the wishes of the United States – a situation that Home saw as no different to the ongoing export of grain from America to Russia.²²⁷ These spiky elements of the meeting framed the Washington Summit preparations in the winter of 1964 for both Wilson and Johnson.

The perception to the home affairs focused Johnson that a visit from a British Prime Minister was more about addressing their own domestic political needs than helping American global commitments would be further reinforced by the hurried offer of an in-person meeting from Wilson to press for a peaceful resolution in Vietnam in February 1965, in response to the attack on American personnel at Camp Holloway in South Vietnam. Wilson discussed the hot-line conversation in his memoirs, where he recalled that an angry Johnson told him, "...I won't tell you how to run

²²⁶ Our Own Correspondent, "Sir A. Home Seeking to 'Keep Close to U.S.'", *The Times*, 13 Feb 1964.

²²⁷ Own Correspondent, "Home Seeking to 'Keep Close to U.S.'", and P. Kennedy, *The Rise and Fall of the Great Powers; Economic Change and Military Conflict from 1500 to 2000* (London: Unwin Hyman, 1988) p. 411.

Malaysia and you don't tell us how to run Vietnam...If you want to help us some in Vietnam send us some men...and announce to the press that you are going to help us."²²⁸ The relationship was never one to stay tense for very long, for although Johnson denied the in-person aspect of the visit request, Bundy acted as an intermediary to pass to the Foreign Office the next day that, "The President...asks me to repeat that he welcomes consultation by cable and telephone at any time the Prime Minister thinks it useful...[and] is glad to have it known that he and Prime Minister are in closest communication."²²⁹ The imbalance in the relationship was magnified by this continued British resistance to providing support to American action in Vietnam. For all the kind words delivered to the press, this reluctance presented, in the words of American writer James Cronin, "...further evidence that the special relationship was no longer delivering special benefits."²³⁰

The question of asymmetric benefits for the Johnson administration was centred on this issue of a British presence East of Suez, and America's ever-increasing preoccupation on the conflict in Vietnam. The economic conditions in Britain, combined with the growing importance of European integration exacerbated the decline in perceived symmetry. For Britain, the agreements at the Washington Summit for a package of American aircraft highlighted how effective defence procurements could be as a tool for demonstrating the intent of a country to support an ally without the need for large scale commitment. The American focus on Vietnam made it understandable that, from their perspective, offering Britain the long-range strike

²²⁸ Wilson, *The Labour Government*, p. 80.

²²⁹ TNA, FO 371/180594, *US Military Action in North Vietnam*, Telegram, Bundy to Wright for Prime Minister, 11 Feb 1965.

²³⁰ J.E. Cronin, *Global Rules; America, Britain and a Disordered World* (New Haven: Yale, 2014) p. 16.

capabilities of the F-111 and C-130 transport aircraft over a more specialist platform needed to replace the Shackleton was centred on facilitating British support in this part of the world. This power dynamic is particularly evident if considered in the framework demonstrated by the Suez Crisis of American interests having primacy within the trans-Atlantic relationship. The attention sapping nature of the problems in Vietnam had shifted into a high gear prior to the Washington talks, with the Gulf of Tonkin incident of August 1964, and the reaction to these events demonstrated how Johnson would not have been open to polite overtures by Wilson unless they were accompanied by a preferably firm display of support, or at the very least the maintenance of a military capability East of Suez.

The Gulf of Tonkin incident represented an important psychological mark on the Johnson administration and their approach to the East of Suez matter, and demonstrated a fragility in the American psyche that would lead to the generous arrangement for aircraft that would aid in this theatre. It also highlighted the centralised control of McNamara within the Department of Defense and the willingness of Johnson to commit American forces to an anti-Communist foreign policy. As part of the continual escalation of American efforts to shore up support for the government of South Vietnam there was a steady increase in American military activity in and around Vietnam, with the Joint Chiefs of Staff ordering a naval patrol, by the destroyer *USS Maddox*, to be on-station in the Gulf of Tonkin from 31 July 1964.²³¹ On 2 August 1964, in the recollections of the Commander of Pacific Forces, Admiral Sharp, the *USS Maddox* was “...approached by [North Vietnamese] patrol craft at high speed

²³¹ Part II, The Robert S. McNamara Papers, Manuscript Division, Library of Congress, Interview transcript, E.B. Kitchen and Admiral U.S. Grant Sharp, U.S. Navy (Retired), Vol.I, Oral History Department, U.S. Naval Institute, 10 Jan 1970.

and took them under fire when they approached in a threatening manner...”²³² Two days later, on 4 August, and with the *Maddox* having been joined by the *USS Turner Joy*, there were confused reports of a second attack as the two ships believed they were coming under further seaborne assault with both destroyers engaging suspected targets and reporting the launching of incoming torpedoes. The uncertainty over whether there had actually been a second attack was discussed by McNamara and Admiral Sharp later that day, with Sharp stating that “...the reports are a little confusing on what happened. Neither ship saw a ship or a wake.”²³³ The telephone discussion included the following exchange, “McNamara: ‘There isn’t any possibility there was no attack, is there?’ , Sharp: ‘Yes, I would say that there is a slight possibility...””²³⁴ The ambiguous nature of the second incident did not prevent the launching of extensive retaliatory air raids from US naval carriers against North Vietnamese military and supply installations.²³⁵

The Gulf of Tonkin incident swiftly led to the Gulf of Tonkin Resolution on 7 August 1964. The Resolution gave sweeping powers to Johnson to conduct military operations in defence of South Vietnam without the need for a formal declaration of war from Congress, and despite some reservations in the Senate, passed the upper chamber by 88 votes to 2, and the House unanimously, being signed into law as Public Law 88-408 by Johnson on 10 August 1964.²³⁶ The questionable justification used for

²³² Part II, The Robert S. McNamara Papers, E.B. Kitchen and Admiral U.S. Grant Sharp, U.S. Navy (Retired), Vol.I, 10 Jan 1970.

²³³ Part II, The Robert S. McNamara Papers, Manuscript Division, Library of Congress, Telcon transcript, McNamara and Adm Sharp [PACOM], 4:08pm, 4 Aug 1964

²³⁴ Part II, The Robert S. McNamara Papers, McNamara and Adm Sharp [PACOM], 4:08pm, 4 Aug 1964.

²³⁵ Bornet, *The Presidency of Lyndon B. Johnson*, p. 79.

²³⁶ Executive Sessions of Senate Foreign Relations Committee with Senate Armed Services Committee, Vol.XVI, 88th Congress, Second Session, 1964 (Washington D.C., U.S. Government Printing Office, 1988).

expanding the American military response in the region has been thoroughly assessed and criticised, particularly when placed in the context of how the Vietnam War would progress and the impact it would have on the American psyche. Vaughn Bornet in his study of Johnson's presidency wrote that the "Tonkin Gulf was not Johnson's finest hour."²³⁷ Max Hastings went further with one of the more critical views on the doubtful nature of the second attack and the subsequent statements to Congress by McNamara in particular, as being a case where, "...The US fabricated the August 4 clash to justify bombing the North."²³⁸

The event marked a transition from American position of primarily maintaining an advisory role to South Vietnam, to one committed to direct offensive military action, and can be seen in James Patterson's view of the Resolution as the "...turning point in the history of the Vietnam War."²³⁹ R.B. Smith is not as forthright, instead seeing the event as one where, "In itself the crisis did not amount to an escalation of the war in Vietnam. But its failure to avert a more general intensification of the revolutionary conflicts in South-East Asia made an eventual escalation in Vietnam all but inevitable."²⁴⁰ The rapid increase in deployed troops to the country certainly suggests a marked escalation of the conflict and an accompanying focus for the Johnson administration. From 25,000 troops in country in November 1964, to 75,000 in July 1965 and 165,000 by November the same year, American involvement was only going in one direction.²⁴¹

²³⁷ Bornet, *The Presidency of Lyndon B. Johnson*, p. 78.

²³⁸ M. Hastings, *Vietnam, an Epic Tragedy, 1945-1975* (New York: HarperCollins, 2018) p. 223.

²³⁹ J.T. Patterson, *The Eve of Destruction; How 1965 Transformed America* (New York: Basic Books, 2012) p. 25.

²⁴⁰ R.B. Smith, *An International History of the Vietnam War; the Kennedy Strategy* (New York: St Martin's Press, 1985) pp. 302-303.

²⁴¹ Cohen, *A Nation Like All Others*, p. 171.

The situation in South Vietnam would continue to decline in the months following the Gulf of Tonkin incident in such a manner as to understandably frame the increase in American troop numbers, with McNamara's deputy, McNaughton, writing just a month later that, "Even before the government sank into confusion last week, the course of the war in South Vietnam has been downward, with Viet Cong incidents increasing in number and intensity and military actions becoming larger and successful, with less and less territory meaningfully under the control of the government."²⁴² Commander Pacific Force wrote to the Chairman of the Joint Chiefs, General Wheeler, just a few weeks later that, "The political situation in RVN [South Vietnam] is now so unstable as to raise some serious questions about our future courses of action."²⁴³ The continued problems within the country drove the ever increasing troop commitments, yet the initial firm response, both militarily and within the legislative by Johnson were in part tied to the need for him to display a sound measure of control during campaigning ahead of the November 1964 election.

Although ultimately the election would see a clear victory for Johnson, in late summer 1964 his Republican challenger, Barry Goldwater, had been attempting to use question marks over the serviceability of American nuclear weapons and the need for a strong projection of military power over Vietnam to make up ground in the polls.²⁴⁴ The tactic of questioning nuclear weapons exposed a lack of understanding by Goldwater on the American military system, and was exploited by the Democrat

²⁴² Document 188, *McNaughton: Plan of Action for South Vietnam*, 3 Sep 1964, The Pentagon Papers, Vol.III, The Defense Department, History of the United States, Decision Making on Vietnam (Boston: Beacon Press, 1971) p. 556.

²⁴³ Document 198, *CINCPAC25 to JCS Exclusive for Wheeler*, 25 Sep 1964, The Pentagon Papers, Vol.III, p. 569.

²⁴⁴ Our Own Correspondent, "Pressure on U.S. Defence Policy Tightens" *The Times*, 21 Sep 1964.

campaign to paint the challenger as unfit for high office.²⁴⁵ Nancy Young, writing on the 1964 election in 2019, described Johnson as having “...no respect for Goldwater, believing if he won terrible consequences would result for the country.”²⁴⁶ The combination of the low opinion of Goldwater as a potential president and his hawkish overtones placed Johnson in a bind of needing to act over the deteriorating state of South Vietnam, and the Gulf of Tonkin Resolution was the result of this political need. A correspondent for *The Times* stated in September 1964 that, “Under constant attack from the Goldwater camp, President Johnson can clearly ill afford further setbacks in Vietnam before the election.”²⁴⁷ Cohen has written that the strong military response and political action in Congress after Tonkin was a result of it being “...an opportunity to demonstrate American power and determination and to undercut Goldwater’s criticism. The peace candidate left no doubt he would respond fiercely to provocation.”²⁴⁸ A Louis Harris poll, conducted after the passing into law of the Gulf of Tonkin Resolution increased Johnson’s approval rating from 42% to an essentially unassailable 72%.²⁴⁹ Herring, writing critically of Goldwater in 1986, whilst the still Senator Goldwater was sponsoring the Goldwater-Nicholls Act that attempted to learn the lessons from the inter-service struggles of Vietnam, wrote that Johnson “...effectively neutralized Goldwater on Vietnam, a fact which contributed to his overwhelming electoral victory in November.”²⁵⁰ The firm stance taken by Johnson played well with a public for whom a strong anti-communism foreign policy was still

²⁴⁵ N.B. Young, *Two Suns of the Southwest, Lyndon Johnson, Barry Goldwater, and the 1964 Battle Between Liberalism and Conservatism* (Lawrence: University Press of Kansas, 2019) p. 166.

²⁴⁶ Young, *Two Suns of the Southwest*, p.166

²⁴⁷ Our Own Correspondent, “Pressure on U.S. Defence Policy Tightens” *The Times*, 21 Sep 1964.

²⁴⁸ Cohen, *A Nation Like All Others*, p. 170.

²⁴⁹ G.C. Herring, *America’s Longest War: The United States and Vietnam, 1950-1975 – Second Edition* (Philadelphia: Temple University, 1986) p. 123.

²⁵⁰ Herring, *America’s Longest War*, p. 123.

seen as a central pillar, in the same manner that it had been for Eisenhower in the build-up to, and conduct of, the Suez Crisis in 1956. Johnson's foreign policy actions were led by Rusk and McNamara, who were trusted figures within the administration as legacy figures from when Johnson had been Kennedy's vice-president. The position of Secretary of State was of vital importance to Johnson as he had seen little of the world beyond America prior to becoming vice-president, and Johnson held Rusk in high regard, describing him as "hard working, bright and loyal as a beagle."²⁵¹ With the domestic political battle won on the matter of foreign policy, there was the requirement to actually continue the aggressive support of South Vietnam on the battlefield, and for this McNamara was Johnson's key figure. An inescapable aspect of an increased focus on Vietnam was the financial and materiel cost that such an escalation would bring, at a time when overseas military spending was already causing a significant imbalance in the balance of payments. The question of allies sharing the burden in Vietnam was frequently raised from the second half of 1964 onwards, both for countries from whom there was a risk of the communist domino effect spreading across their own borders, and from America's traditional allies in the region, which included Britain.

British military activity in the region had been centred on the uprising in Malaya, which despite being officially concluded in 1960, still presented a significant draw on British resources.²⁵² Johnson himself acknowledged in December 1964 that Britain was too focused on the new state of Malaysia to be able to contribute

²⁵¹ G.C. Herring, *From Colony to Superpower; U.S. Foreign Relations Since 1776* (Oxford: Oxford University Press, 2011) p. 730.

²⁵² Document 246, Bundy, W.P.; *Memorandum for Southeast Asia Principles*, 24 Nov 1964, The Pentagon Papers, Vol.III, p. 681.

significant force numbers to Vietnam.²⁵³ During the 1950s and into the early 1960s, up to 54,000 British and Commonwealth troops had been fighting in Malaya representing both a significant financial and manpower drain for Britain.²⁵⁴ Alongside ground forces of the British Army and locally raised units, the RAF had deployed a full spectrum of strike and support capabilities into the country including Canberra light bombers, F-86 fighters, maritime patrol aircraft including the Shackleton operating in an offensive role and later the Whirlwind helicopter.²⁵⁵ The British experience of the jungle environment, confronting a mobile and decentralised enemy force who were fighting in their own familiar conditions would have proved a great asset to America in Vietnam, yet there appears to be an acceptance in the latter half of 1964 that achieving British military involvement would be challenging at best. Police advisors were dispatched to Saigon after 1961 to train the South Vietnamese police in the anti-guerrilla methods learnt during the Malayan Emergency, but that was the extent of the British presence in the country.²⁵⁶ With this in mind, Bundy proposed in November 1964 that, “The President will explain the concept and proposed actions fully to Prime Minister Wilson, seeking full British support but without asking for any additional British contribution in view of British role in Malaysia.”²⁵⁷

There were proposals for a broad coalition based approach, similar to that employed during the Korean War, with the key allies identified as Britain as the

²⁵³ Part II, The Robert S. McNamara Papers, Minutes (handwritten by McNaughton), Cabinet Room, *South Vietnam*, LBJ, Rusk, Bundy, McNamara et al, 1 Dec 1964.

²⁵⁴ Wilson, *The Labour Government*, p. 48.

²⁵⁵ Ed. A.H. Peterson, G.C. Reinhardt & E.E. Conger, *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Malayan Emergency*, RAND Memorandum RM-3651-PR (Santa Monica: RAND, Jul 1963) p. 12 & 35.

²⁵⁶ J.W. Young, “The Wilson Government and the Davies Peace Mission to North Vietnam, July 1965”, in *Review of International Studies*, Vol.24, No.4 (1998) p. 549.

²⁵⁷ Document 246, Bundy, W.P.; *Memorandum for Southeast Asia Principles*, 24 Nov 1964, The Pentagon Papers, Vol.III, p. 681.

traditional ally, Australia and New Zealand as strong regional allies, and Thailand and the Philippines as the allied countries most at risk of spill-over, but this approach was ultimately not recommended as their “...interests are too diverse.”²⁵⁸ The list did not include France and West Germany – countries that would in the normal course of NATO and the European theatre be allies that the United States would automatically turn to. France, under de Gaulle and recently free from a gruelling colonial war in Algeria, was the former colonial power in Vietnam, and determined stay away from being drawn into a conflict in the region where they still maintained wider economic interests, and as such took up a similar position to Britain in favouring a peaceful resolution to the conflict.²⁵⁹ The desire of de Gaulle to return France to a dominant position in global affairs is discussed in the chapter four, with a distracted United States serving as a useful tool for these ambitions. The American relationship with West Germany was far closer, with the country highly dependent on America for military support. The continual sub-surface battle between Britain and Germany to fulfil the role of America’s closest ally in Europe did not appear to sway either country’s position on Vietnam, for despite continual pressing, Chancellor Erhard highlighted to Johnson that the post-war West German constitution did not allow for military engagement, and refused to yield to Johnson’s aggressive demands for German involvement beyond supportive political rhetoric.²⁶⁰ Johnson went so far as to demand ever more aggressive offset payments for troops stationed in Germany which Erhard could never meet, and which will be covered shortly, and thus demonstrated

²⁵⁸ Document 239, *Memo for Rusk, McNamara, Wheeler, Ball, Bundy; Issues Raised by Papers on South East Asia*, 24 Nov 1964, The Pentagon Papers, Vol.III, p. 650.

²⁵⁹ Blang, *Allies at Odds*, p. 3.

²⁶⁰ Blang, *Allies at Odds*, p.5.

how, in the words of Erhard biographer Alfred Mierzejewski, that “the American president was apparently quite willing to sacrifice his most loyal ally on the alter [sic] of his hopeless war in Vietnam.”²⁶¹ A reminder that even in the tangled situation developing in Vietnam, it was always America’s interests that came first, and that allies could either yield or fall by the wayside.

In the build-up to the Washington Summit of December 1964, McNaughton’s handwritten minutes of a Cabinet Room discussion on 1 December noted Rusk observing that, despite Johnson’s opinion to the contrary, the “UK can do more”, with McNamara taking a more pragmatic position that, “Aust. and UK not make much diff. militarily, but much politically.”²⁶² The narrow majority Wilson enjoyed in the House of Commons made extensive political support over Vietnam as impossible as would the deployment of thousands of British troops or the RAF. Back-benchers on both sides of the House were vehemently critical of American military action, leaving no room for Wilson to act even if he had wanted to.²⁶³ Multiple attempts at restarting the Geneva Agreements with the Soviet Union and with Foreign Secretary Michael Stewart traveling to Washington to promote peace talks in March 1965 all came to nothing.²⁶⁴ There was not a particularly high opinion of Britain and especially Wilson as a negotiator in Washington with Johnson generally sceptical of gaining any meaningful British involvement in Vietnam.²⁶⁵ Eisenhower, in a meeting with Johnson and his staff in the week following the frantic efforts by Wilson to fly to Washington in February

²⁶¹ A.C. Mierzejewski, *Ludwig Erhard* (Chapel Hill: University of North Carolina Press, 2004) p. 201.

²⁶² Part II, The Robert S. McNamara Papers, Minutes (handwritten by McNaughton), Cabinet Room, *South Vietnam*, LBJ, Rusk, Bundy, McNamara et al, 1 Dec 1964.

²⁶³ Wilson, *The Labour Government*, p. 79.

²⁶⁴ Wilson, *The Labour Government*, p. 80 and Blang, *Allies at Odds*, p. 139.

²⁶⁵ Note, Bundy to Johnson, *Re: The British and Vietnam*, 3 Jun 1965, NS File, M Bundy Files, Memos to President, Box 3, LBJ Library.

1965, was noted as saying that any British negotiations from the present position of weakness and inexperience were to be avoided, and that, “we, however, have learned that Munichs [sic] win nothing; therefore his answer to the British would be ‘not now boys’.”²⁶⁶ Wilson’s continual pressing for peaceful involvement did reinforce the firm position that he was prepared to act as a mediator for a peace settlement and no further, as any direct military involvement would compromise this. The negative American view of this strategy was not confined solely to the former president, as the British preference for negotiation as the initial action often, in the words of Dobson, “...elicited charges of disloyalty and appeasement from Washington.”²⁶⁷ Despite the negative view of Wilson’s entrenched position, there was still a desire to keep the principle of the Special Relationship with Britain alive as America still needed British support in the wider East of Suez role, and freezing Wilson out over Vietnam would have been counterproductive to this. Bundy noted that, “My own feeling is that it is well worth our while to keep the British onboard...by keeping them fully informed and giving them the feeling that they are in the know as we go ahead.”²⁶⁸ John Young has written that South East Asia was important to Britain for both trade and defence, particularly with the former colonies of Malaysia and Singapore.²⁶⁹ However in an Overseas Policy Committee for Defence (OPD) report of November 1964 the region was presented as being of limited direct economic value. The report did however highlight the political importance of the area in order to be seen as an effective

²⁶⁶ Memorandum of Meeting with the President; Present Johnson, Eisenhower, McNamara, Wheeler, 17 Feb 1965, Meeting Notes File, Box 1, LBJ Library.

²⁶⁷ Dobson, *Anglo-American Relations in the Twentieth Century*, p. 101.

²⁶⁸ Note, Bundy to Johnson, *Re: The British and Vietnam*, 3 Jun 1965, NS File, M Bundy Files, Memos to President, Box 3, LBJ Library

²⁶⁹ Young, “The Wilson Government and the Davies Peace Mission to North Vietnam, July 1965” p. 545.

partner of the United States, noting that “...Britain’s power to influence American policy will depend on our making a respectable contribution.”²⁷⁰ The inference is that such a contribution could and should be within the wider geographical region, rather than specifically within the borders of South Vietnam, and as such the maintenance of a respectable East of Suez military capability, which would have been aided and enhanced through the procurement of American long range strike and transport aircraft, could satisfy such objectives.

Thus the American ask of Britain in this particular narrow period of the Vietnam War prior to Operation Rolling Thunder was primarily concerned with ensuring that Britain would and could maintain an effective posture East of Suez, such that with American eyes firmly on Vietnam, the rest of the region would not be ignored. The ever-increasing escalation in the country would continue to drive American foreign policy and military considerations with allies, and initiated a new focal point for the relationship with Britain that though it could not be exploited on the ground in Vietnam, could instead be leveraged through defence initiatives, in particular tied to the wider support to sterling and the options for the aircraft programmes discussed at the Washington Summit. Eugenie Blang, in her work examining the detailed machinations of the relationship between America and the major European allies of Britain, France and West Germany during the Vietnam War, lays out the disconnect between the allies, yet does not make the link to wider worldwide roles serving as a substitute for direct involvement in Vietnam. She does however summarise that, “In light of the worldwide obligations of the United States, the European positions

²⁷⁰ TNA, CAB 148/17, *Defence and Overseas Policy (Official) Committee*, Paper, O.P.D.(64)10, *British Policy Towards South-East Asia*, 19 Nov 1964.

appeared parochial and detrimental to America's effort in South Vietnam. Washington was even more dismayed by the fact that European misgivings over the Vietnam question left the United States fighting alone in Southeast Asia, while at the same time America also provided for the security of Western Europe."²⁷¹ In part this was a result of, in the words of Gaddis, "...an assumption of all postwar administrations that the disproportionate economic and military strength of the United States gave it unique responsibilities in maintaining the world balance of power."²⁷² It was unfortunate for America that this particular motivation was not shared by all allies, all of the time.

The Truman Doctrine of containment, born out of the threat of Soviet expansion in Greece and Turkey in 1947, and a driver behind Eisenhower's stance over British and French action in Suez in 1956, had set the tone for American support to any country under the threat of communism, irrespective of whether they were externally or internally driven.²⁷³ Johnson had spoken about South Vietnam at the University of California in February 1964 that, "For ten years, our country has been committed to the support of their freedom and that commitment we will continue to honor."²⁷⁴ The broader trend of an increased military presence with a political root cause displayed, in the view of Ishii, that, "Crusading anticommunism took much the same form as British and French colonial imperialism, and it led to escalating U.S. military intervention."²⁷⁵

²⁷¹ Blang, *Allies at Odds*, p. 2.

²⁷² J.L. Gaddis, *Strategies of Containment; A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982) p. 205.

²⁷³ Ed. J.T. McNay, *The Memoirs of Ambassador Henry F. Grady; From the Great War to the Cold War* (Columbia: University of Missouri Press, 2009) p. 136.

²⁷⁴ TNA, FO 115/175493, *US Policy in Vietnam*, Telegram, Harlech to FO, *FO Telegram No.90*, 22 Feb 1964.

²⁷⁵ Ishii, 'U.S. Foreign Policy in the Twentieth Century' in *Foreign Policy of the Major Powers*, Ed. Eadie & Pettiford, p. 29.

Britain's new place in the world and the measures taken to maintain an effective two-way relationship with America, when viewed alongside the American position over Suez eight years earlier, showed an apparent reversal in positions that highlighted yet again that America's interests always came first. Allies had to be able to either adapt to a specific posture, or be able to provide a wide range of options as Britain was aiming to do with the procurement and continuance of an East of Suez capable military, whilst also pursuing their own non-interventionist stance over Vietnam.

For America in this period, increasing exports of military equipment to allied nations took on increased importance, both for the balance of payments issue, but also for McNamara's attempts to reduce the overall defence budget through the various efficiencies in procurement and sustainment learnt through his years with the Ford Motor Company. McNamara had taken over at the Department of Defense at the start of the Kennedy administration, having told the then president-elect that his first condition for taking up the role was that he was to be free to organise and run the department in the manner he saw fit, with the ability to appoint figures of his choosing.²⁷⁶ The civilian position of Secretary of Defense was, by 1964, still comparatively new, having being created in 1947 to bring centralised oversight to various armed services. In the words of Ford Dixon, the role of the Secretary was, however, seen as being "...nothing more than an administrator and such areas as strategy and weaponry should rest with the Joint Chiefs of Staff."²⁷⁷ The limited influence that the role was able to exert, and the sense that the Secretary was

²⁷⁶ D. Shapley, *Promise and Power; the Life and Times of Robert McNamara* (Boston: Little, Brown and Co., 1993) p. 85.

²⁷⁷ F. Dixon, *McNamara, General Dynamics, and the F-111; A Business and Political History* (Ann Arbor: University Microfilms, 1983) p. 12.

essentially there to provide window dressing led McNamara was make his second condition for accepting the position; that he would not attend social events or just be a socialite secretary.²⁷⁸ The awkward status of the role was one that McNamara's immediate predecessor had tried unsuccessfully to address to allow him to wield greater authority over the Joint Chiefs, however in Dixon's opinion, Thomas Gates Jr. "...lacked the time and the management tools to harness the independent-minded services."²⁷⁹ Management skills were something that McNamara certainly possessed having risen to become President of Ford, and the Defence Reorganization Act of 1958 had given the Secretary both control of the military budget and a clear line of authority from the President to the Joint Chiefs that only went through the Secretary of Defense.²⁸⁰ Eisenhower had stated in an address to Congress in April of that year that, "The Secretary of Defense is accountable to the President and the Congress...[and] we look to him for sound management of programs...that gravely concern the survival of our country. ...I regard it as fundamental that the Secretary, as civilian head of the Department, should have greater flexibility in money matters, both among and within the military departments."²⁸¹ McNamara set about relentlessly using these levers to enact a detailed reassessment of both military spending, with the intention of reducing the overall defense budget, and also streamlining the military-industrial complex to provide greater value to the Services with a more effective fighting force. Although a

²⁷⁸ Shapley, *Promise and Power*, p. 85.

²⁷⁹ Dixon, *McNamara, General Dynamics, and the F-111*, p. 12.

²⁸⁰ Ed. A.C. Cole, A. Goldberg, S.A. Tucker, R.A. Winnacker, *The Department of Defense; Documents on Establishment and Organization 1944-1978* (Washington D.C., Office of the Secretary of Defense Historical Office, 1978) p. 161.

²⁸¹ Ed. Cole et al., *The Department of Defense*, pp. 183-184.

difficult challenge, Johnson noted that McNamara was, "...like a jackhammer...he drills through granite rock until he's there."²⁸²

The military-industrial complex was a term coined by Eisenhower during his televised farewell address to the nation on 17 January 1961 as he warned that, "In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex."²⁸³ Ledbetter defined the term in his study of the military-industrial complex, as "...a network of public and private forces that combine a profit motive with the planning and implementation of strategic policy."²⁸⁴ For a country such as America that practised distinct lines of ownership for corporations away from government management the relationship between parties was something to be warned against, however it shows many similarities with the situation in Britain and Europe more generally. State ownership of companies, such as within the aviation industry at Shorts in Northern Ireland, that produced military equipment for government contracts, continued into the post-war era where companies were able to tender a non-competitive bid for a contract. The Short Seamew, designed for the Royal Navy as a short range maritime patrol aircraft, was rejected by both them and subsequently by the RAF in the mid-1950s, but only after heavy lobbying by the Ministry of Supply had tried to push it into service to preserve jobs in Northern Ireland.²⁸⁵ The actions of the Ministry of Supply, and later the Ministry of Aviation, operating in tandem with a

²⁸² Herring, *From Colony to Superpower*, p. 730.

²⁸³ President Dwight D. Eisenhower's Farewell Address, 17 Jan 1961, Transcript, <https://www.archives.gov/milestone-documents/president-dwight-d-eisenhowers-farewell-address>, Recalled 07 Mar 2023.

²⁸⁴ J. Ledbetter, *Unwarranted Influence; Dwight D. Eisenhower and the Military-Industrial Complex* (New Haven Yale, 2011) p. 6.

²⁸⁵ TNA, AIR 20/6955, *Aircraft Production: General: Maritime aircraft: policy*, Air Ministry; multiple loose minutes from February to May 1955.

theoretically commercially driven company to furnish the military with substandard equipment epitomised the concern that Eisenhower was addressing in 1961. The nature and state of the British aviation industry in this period and how it shaped the decision to continue with the HS.801 programme is covered in detail in later chapters, however what was an accepted if problematic norm in Britain was viewed as something to be feared in America. A system where state and industry were closely tied together would not automatically ensure that the finished product would be either the best possible solution, or that it would offer the greatest value for money – two elements highly prized by McNamara.

The third of McNamara's key elements was commonality and multi-purpose, and the highly advanced B-70 programme for the US Air Force represented an example of the type of procurement that McNamara was trying to eradicate from the Department of Defense. Johnson had delivered a speech at the Pentagon in July 1964 on the effectiveness of McNamara's savings drive. In it, he had put forward the public image of an all-powerful superpower, but one with a large caveat, "We are the richest nation in the history of the world. We can afford to spend whatever is needed to keep this country safe and to keep our freedom secure...but we cannot afford to spend one dollar more than is absolutely necessary..."²⁸⁶ The B-70 reflected this dilemma, and it manifested itself again with the TFX programme and in part drove the push for both it and the C-130 and F-4 to be offered on favourable terms to Britain later in 1964. The B-70 was a high-altitude strike aircraft, capable of nuclear delivery and flying at speeds

²⁸⁶ Public Papers of the Presidents of the United States, Lyndon B. Johnson, Containing the Public Messages, Speeches, and Statements of the President, 1963-1964, Book II (Washington D.C.: U.S. Government Printing Office, 1965) 467. Remarks at the Defense Department Cost Reduction Week Ceremony, 21 Jul 1964, p. 875.

of up to Mach 3.²⁸⁷ Although far larger, the basic requirements were very similar to the British TSR.2 and they shared a number of design characteristics. They were also similar in suffering from both high cost and being highly complex. Whilst still in early development when McNamara took office, the aircraft was quickly identified as unnecessary and obsolete to McNamara, who saw that, by 1962, guided missiles and ICBMs would represent the future of long-range nuclear delivery, with manned aircraft, even ones flying at great height and speed, as being unable to stay ahead of Russian surface to air missile technology.²⁸⁸

For General LeMay, the Chief of Staff of the Air Force, the B-70 was, in the words of biographer Kozak, "...his pet project."²⁸⁹ McNamara's instance that the programme was to be cut extended to refusing to spend the funds appropriated by Congress for the aircraft in 1961, and then declining Air Force requests that \$398m in 1962 and \$675m in 1963 be allocated to the programme.²⁹⁰ This put him in direct conflict with LeMay, who approached the chair of the House Armed Services Committee, veteran Congressman Carl Vinson, to get the development back on track.²⁹¹ With 21 of the 37 members of the Committee having B-70 work in their districts, it was unsurprising that the Committee put forward language in early March 1962 mandating that \$491m of R&D funding to be spend on the aircraft to compel McNamara to move forward.²⁹² Ultimately, it took direct intervention from Kennedy, who agreed with McNamara on the viability of the project, to talk to Vinson directly

²⁸⁷ Ledbetter, *Unwarranted Influence*, p. 138.

²⁸⁸ Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, pp. 59,63.

²⁸⁹ Kozak, W., *LeMay; The Life and Wars of General Curtis LeMay* (Washington D.C., Regnary, 2009) p. 337.

²⁹⁰ Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, p. 86.

²⁹¹ Kozak, *LeMay*, p. 338.

²⁹² Ledbetter, *Unwarranted Influence*, p. 138.

and persuade him to back down and to allow the bomber project to be discontinued, with only a couple of development frames authorised as notional work on a reconnaissance variant.²⁹³ When this too was ultimately cancelled in 1967, \$1.46bn had been spend on the whole programme.²⁹⁴ Although the cancellation could be seen as a victory for McNamara against an anticipated ten year programme cost of over \$10bn, it was still a sizeable spend when framed against Johnson's ambition that not a single unnecessary dollar was to be wasted.

The episode did however represent two fundamental victories for McNamara. Firstly, albeit with firm support from the president, he was able to use the powers of the 1958 Defense Act to sidestep Congressional appropriation requests and not be dictated to on what he had to spend the Defense budget on, and by extension in which districts the spending would fall. Secondly, he had exerted clear civilian authority over the military leaders within the Pentagon in a manner that his predecessors had been unable to do. LeMay, speaking to his biographer Coffey in 1984, said of his and his fellow members of the Joint Chiefs of Staff relationship with McNamara that, "We started off trying to talk to him. It was like talking into a brick wall. We got nowhere. Finally it was just a waste of time and effort. ...We in the military felt we were not in the decision making process."²⁹⁵ Both victories allowed McNamara to move forward with reductions and efficiencies within the Defense budget, and the TFX, which would again result in a conflict with the Joint Chiefs of Staff, was the centrepiece of this, but with both sides coming from the opposite directions that they had on the B-70.

²⁹³ Shapley, *Promise and Power*, p. 107.

²⁹⁴ M.L. Weidenbaum, *The Economics of Peacetime Defense* (New York: Praeger, 1974) p. 63.

²⁹⁵ T.M. Coffey, *Iron Eagle; The Turbulent Life of General Curtis LeMay* (New York: Crown, 1986) p. 372.

The TFX programme was the result of McNamara's insistence that a shared aircraft design could meet the needs of both the US Navy and US Air Force for a long range strike aircraft, presenting a similar aspiration to the Hawker Siddeley P.1154 for the RN and RAF.²⁹⁶ McNamara laid down three objectives for the aircraft – it was to replace the F-105 and F-4 aircraft in service with the two branches and be capable of serving as the primary fighter aircraft for at least the next twenty years, secondly that it should have a high degree of serviceability and reliability, and thirdly that overall costs should be minimised.²⁹⁷ McNamara testified before Congress in March 1963 that such a design would result in a saving of \$1bn without compromising operational effect.²⁹⁸ The difficulty of achieving a design that was agreeable to both Services was essentially insurmountable, with both LeMay for the Air Force, and Russell for the Navy, believing that the differing specifications meant the concept could never be made to work in practise.²⁹⁹ Two companies, Boeing and General Dynamics, led the bids for the initial contract for 23 development aircraft at a price cap of \$630m. The TFX was to bring in as-yet unproven technological advances such as swing-wing, where the sweep angle could be moved in flight, and reverse thrusters, aiding short field performance. Boeing, who had only built large bomber and transport aircraft in the post war era, had their proposal come in under budget at \$482m. General Dynamics, a more experienced manufacturer of fighter aircraft, had their bid come in at the \$630m target.³⁰⁰ Both Services agreed that the more advanced Boeing proposal came closest to meeting

²⁹⁶ Our Washington Correspondent, "Firm Civilian Grip on Pentagon", *The Times*, 29 May 1963.

²⁹⁷ TFX Contract Investigation, Hearings Before Senate Committee on Government Operations, 88th Congress (Washington D.C., U.S. Government Printing Office, 1963), McNamara Testimony, 26 Mar 1963.

²⁹⁸ TFX Contract Investigation, 88th Congress, McNamara Testimony, 26 Mar 1963.

²⁹⁹ Coffey, *Iron Eagle*, p. 363.

³⁰⁰ TFX Contract Investigation, 88th Congress, Allen (President of Boeing) Testimony, 2 May 1963.

their requirements as the most operationally superior design, and that their team was more capable of managing the demands of developing swing-wing technology.³⁰¹ McNamara, however, considered both designs to be of equal performance, but that the more conservatively designed General Dynamics proposal was most likely to meet objectives two and three of serviceability and lower costs despite the higher bid.³⁰² Zuckert, the Air Force Secretary, felt that the higher bid price was simply more realistic, and that the Boeing bid was excessively optimistic, coming at a time when McNamara had just cancelled additional Boeing B-52 bombers and thereby placing additional pressure on the company to win the TFX contract.³⁰³ McNamara agreed and went against the advice of the military leadership in the same manner as he had with the B-70, and selected the General Dynamics proposal. Just as with the B-70, LeMay felt he had been side-lined, stating that, “We expressed our surprise at his decision and told him we thought it was wrong...he didn’t discuss any details with us.”³⁰⁴

Boeing challenged the decision as being driven by political favouritism and interference, and the Senate Committee on Government Operations under Senator McClellan agreed to look into it with hearings into the awarding of the TFX contract carried out in spring 1963. There, the President of Boeing, William Allen, stated that “...our low price is one of the principal [sic] reasons given for awarding the contract to our competitor.” It was a situation that he claimed he had never encountered before in procurement negotiations.³⁰⁵ McClellan had requested in late 1962 that McNamara hold off on the formal awarding of the TFX contract to General Dynamics while his

³⁰¹ TFX Contract Investigation, 88th Congress, LeMay Testimony, 4 Apr 1963.

³⁰² TFX Contract Investigation, 88th Congress, McNamara Testimony, 26 Mar 1963.

³⁰³ Shapley, *Promise and Power*, p. 208.

³⁰⁴ Washington Correspondent, “Firm Civilian Grip on Pentagon”.

³⁰⁵ TFX Contract Investigation, 88th Congress, Allen (President of Boeing) Testimony, 2 May 1963.

committee examined the entire awarding process, yet McNamara refused and the result was, in the words of Shapley, "...out-and-out war between two enemies who believed not a word the other said."³⁰⁶ Although McClellan's enquiry could find no evidence of political bias in the awarding of the contract to General Dynamics, the episode demonstrated that for McNamara, the TFX now had to be a success. The advanced nature of the aircraft design and associated high developmental risk caused issues for the programme immediately, with the prototypes suffering from high drag and for the naval variant, excessive weight that would render it unsuitable for carrier operations.³⁰⁷ The troubled programme was persisted with, and in May 1964 a fixed price contract was issued to General Dynamics which included a 30% profit allowance.³⁰⁸ In this manner the risk for cost escalation was held with the company rather than the government, and whilst the profit margin was far in excess of what would become the acceptable percentages in Britain within a year following the Ferranti scandal, it did put the Department of Defense ahead of the Ministry of Defence in recognising its advantages for keeping a procurement on track. The Ferranti scandal will be examined in chapter six.

Authors such as Dixon and Shapley state that McNamara ended up in a position where the F-111 simply had to work because he had staked too much on the programme to let it fail, with Shapley putting it that, "...McNamara was practically fanatical about making 'his' plane work."³⁰⁹ What they do not discuss, but can be seen in the fervent manner in which McNamara proposed the F-111 to Healey at the

³⁰⁶ Shapley, *Promise and Power*, p. 215.

³⁰⁷ Shapley, *Promise and Power*, p. 220.

³⁰⁸ Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, p. 471.

³⁰⁹ Shapley, *Promise and Power*, p. 221.

Washington Summit, is the important role that having the aircraft flying with allied air forces would present in demonstrating the success of the programme. The offering of F-111 to Britain thus achieved two targets, firstly of aiding the British in maintaining the East of Suez role, and secondly of helping to justify the decision to continue with the aircraft programme. The Wilson government saw the TSR-2 as a financial burden they could ill afford, and as it was initiated by the previous Conservative government it was therefore far easier to remove, whereas the F-111 was a problem all of the Johnson administration's making and thus remained their burden to carry. The initial motivation for McNamara in pushing the F-111 so hard was fundamentally about reducing the vast outlay of both material resources and money that America put into defence. In the case of the proposal for F-111 sales to Britain, the matter of a financial offset was vitally important to both sides. This would help reduce foreign currency spend for Britain and aid the balance of payments crisis, whilst the covering offset of American defence spending in Britain would ease the American balance of payments deficit driven by the maintenance of a worldwide role. With the balance of payments issue a key target for McNamara, defence procurements and spending served as a central tool in this endeavour.

American government overseas spending was driven primarily by defence commitments, and in 1961 was running at a \$2.7bn net cost, which resulted in a number of initiatives instigated by McNamara to try and bring down the figure.³¹⁰ A key measure was to increase the export of military equipment to allies and to use the Department of Defense to aid in this, with McNamara stating that such efforts were,

³¹⁰ Part II, The Robert S. McNamara Papers, Transcript of McNamara Press Briefing, 9 Feb 1965.

“...dictated entirely by our desire to see our allies’ military forces strengthened and at the same time obtain foreign exchange for ourselves.”³¹¹ Sales were not made in isolation as purely military and financial levers, as Rusk pointed out in a letter to McNamara in July 1963, it was important to have an “...opportunity to provide political guidance in relating these sales to other foreign policy objectives.”³¹² As an element of the strengthening regional allies as the war in Vietnam increased, there was a significant sale of equipment to Australia in early 1965 that demonstrated both the weakened state of British sales efforts to a Commonwealth nation that, even allowing for the 1951 ANZUS Pact, would otherwise have been presumed to in the British orbit for defence equipment, and also in presenting a factor in the choices made over the Shackleton replacement for the RAF.³¹³

Arms sales to various countries had generally conformed to within traditional spheres of influence, with Commonwealth nations primarily the domain of Britain. For countries such as India, Pakistan and Nepal there was essentially a shared position between Britain and America, yet in the Middle East and North Africa, as displayed by the actions of Eisenhower during the Suez Crisis, there was movement towards the region being considered an American domain.³¹⁴ In 1964, a diplomatic incident occurred over a planned sale of Bedford trucks to Libya when an American delegation pressured the Libyan government to reject the British sale and favour their offering instead.³¹⁵ This had followed a similar incident over the proposed sale of British

³¹¹ Part II, McNamara Papers, Transcript of McNamara Press Briefing, 9 Feb 1965.

³¹² *FRUS*, 1961-1963, Vol. IX: *Foreign Economic Policy*, Document 171. Letter, Rusk to McNamara, 26 Jul 1963

³¹³ Northedge, *Descent From Power*, p. 31.

³¹⁴ TNA, FO 115/4631, *UK/US Arms Policy*, FO Report, *Anglo-U.S. Problems Over Arms Sales*, May 1965.

³¹⁵ TNA, FO 115/4631, FO Report, *Anglo-U.S. Problems Over Arms Sales*, May 1965.

helicopters to Iraq the previous year, and which had prompted the Foreign Office to act. A Foreign Office report of spring 1965 detailed how the Iraq incident, "...led to F.O. circular instruction No.010 laying down that as a general rule and unless there are good policy reasons for doing otherwise, we should now only inform the Americans of arms sales when a contract has actually been signed."³¹⁶

The Australian package marked a continuation of this pattern of American dominance and was announced in February 1965 whilst the debate continued in Britain over the fate of the various aircraft programmes. It comprised a spend of \$350m over the following three years and included C-130 aircraft – which was similarly part of the package for Britain as a replacement for HS.681, \$100m for army equipment including helicopters and artillery, and a \$40m buy of P-3A ASW aircraft.³¹⁷ The P-3A was an option for the Shackleton replacement for the RAF and was thus clearly a design that America was willing to export to allied nations. Both countries' decisions occurring concurrently, albeit in this instance it was not a platform that would advance America's aims of keeping Britain committed East of Suez. On the same day, McNamara briefed the press on the wider British defence sales, and his comments demonstrate an understanding of the balance that the Wilson government had to strike between maintaining the domestic aviation industry, equipping the RAF with suitable aircraft and ensuring American support for sterling. McNamara stated that, "...obviously we're not interested in nor should we take part in the domestic politics of the United Kingdom, but are very much interested in the desire of one of our allies to strengthen their military forces, and at the same time to do it in a way that doesn't

³¹⁶ TNA, FO 115/4631, FO Report, *Anglo-U.S. Problems Over Arms Sales*, May 1965.

³¹⁷ Part II, The Robert S. McNamara Papers, Communique; *Joint Australian & United States Following Defense Meetings*, 9 Feb 1965.

unduly penalize their industrial capacity.”³¹⁸ This last part referred not only the aviation industry in Britain as a whole, but also to the intention to equip the three US aircraft with a substantial amount of British-made parts. This included fitting Rolls-Royce Spey engines, Martin-Baker ejection seats and Ferranti radars in the F-4s, which were expected to account for up to 40% of the total build.³¹⁹ There was a tacit understanding by America that whilst large scale sales to Britain would help with the two primary goals of military sales, it had to be balanced against the economic health of a major ally. Where sales were far more aggressive, and in a manner that served to highlight that the British-American relationship was actually still ‘special’ during this period, was how Johnson approached the need for addressing the financial implications of the extensive military outlay in Germany.

As discussed earlier, the relationship between Erhard and Johnson had been strained over the latter’s persistent calls for a constitutionally unachievable German commitment to Vietnam, and this spilled over into the financial aspects of both the arming of West Germany and the stationing of American troops in the country. West Germany was near totally reliant on both Germany-based American forces acting as a deterrent, along with the flow of American military equipment for their own forces. Sales to Germany had totalled \$1.3bn in 1961-62, and both countries had reached an agreement to share the development of a new main battle tank.³²⁰ Although the M.B.T.70 was ultimately never built, 352 UH-1 helicopters were partly built under licence by Dornier, Messerschmitt and Heinkel within the country.³²¹ Direct sales

³¹⁸ Part II, The Robert S. McNamara Papers, Transcript of McNamara Press Briefing, 9 Feb 1965.

³¹⁹ Our Aeronautical Correspondent, “Talks with U.S. on Aircraft Deals”, *The Times*, 22 Jun 1965.

³²⁰ Our Own Correspondent, “U.S. and Germany to Bring Out New Tank”, *The Times*, 3 Jun 1965.

³²¹ Own Correspondent, “U.S. and Germany to Bring Out New Tank”.

would aid the balance of payments most, and for the Department of Defense, in the words of Kaplan, Landa and Drea, “The best hope of offsetting DoD overseas expenditure lay in persuading Allied countries to agree to share the U.S. troop costs.”³²² Johnson took a very direct route to this and threatened to remove six divisions worth of troops from the country in 1964 unless Germany covered the troops costs – an unaffordable negotiating position if Germany was to keep a balanced budget which gave Erhard no room to manoeuvre.³²³ Germany had already been paying an offset for American troops brought in during the Berlin crisis on 1961, and although this additional request would ultimately be resolved with compromise on both sides, the negative impact it had on the authority of Erhard is cited by Blang as directly leading to the fall of the German Chancellor.³²⁴

An element of John Sislin’s concept of arms influence, whereby a military equipment supplier is able to use their dominant position to coerce the recipient’s political position, was played out in this aspect of the Johnson-Erhard relationship.³²⁵ The use of the supply of weaponry, although a key component of the British retention of a worldwide role, did not reach such a critical point, most likely because Britain was, unlike West Germany, not heavily reliant on the supply of American equipment. This possibility reinforced the need to retain domestic arms production through procurements such as the HS.801.

The increasingly aggressive nature of American military sales promotion under Henry Kissinger within the Pentagon’s department of International Security Affairs had the

³²² Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, p. 451.

³²³ Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, p. 451.

³²⁴ Blang, *Allies at Odds*, p. 6.

³²⁵ J. Sislin, “Arms as Influence: The Determinants of Successful Influence”, in *The Journal of Conflict Resolution*, Vol.30, No.4 (1994) p. 672.

desired economic effect for McNamara.³²⁶ Over the period 1961-1965 there were \$6bn of international orders for American military equipment, predominately from Western allies. Prior to Kuss and McNamara the average had been only \$300m a year.³²⁷ It proved so successful that *The Times* noted in 1965 that, “Arms exports were first promoted officially to reduce the balance of payments deficit, but now it seems are designed to bring about a healthy surplus.”³²⁸ In this manner the hard power aspect of the policy was straightforward to see its benefits, whilst enabling allies to limit their spending through offset costs which helped with the soft power dynamics.

In his testimony to the Senate Foreign Relations Committee and Senate Armed Services Committee in 1967 on the sale of American aircraft to Britain, McNaughton stated that, “Of the \$2.5 billion package, there is a \$2 billion package with the British, and [in] this \$2 billion package they wanted some business running the other way. We ultimately agreed that provided they could meet competitive terms on price, delivery, quality, that we would buy from them or find things to buy from them, \$325 million, and the \$400 million, Senator McCarthy, that was part of that package.”³²⁹ The offset approach of covering troop costs and purchasing equipment from Britain formed fundamental aspects to making the British package palatable, and is the element that led McNamara to declare to Healey that an F-111 purchase was essentially a cost neutral procurement, even if the figures for American troop spending in Britain was

³²⁶ Shapley, *Promise and Power*, p. 225.

³²⁷ Part II, The Robert S. McNamara Papers, Transcript of McNamara Press Briefing, 9 Feb 1965.

³²⁸ Own Correspondent, “U.S. and Germany to Bring Out New Tank”.

³²⁹ Sales of Military Equipment by the United States, Tuesday, February 7, 1967; Statement by John T. McNaughton, Assistant Secretary of Defense for International Security Affairs, *Executive Sessions of the Senate Foreign Relations Committee Together with Joint Sessions with the Senate Armed Services Committee* (Historical Series); Volume XIX, 1967 (Washington D.C., U.S. Government Printing Office, 2016)

placed on the high side to make the maths work at \$1.8bn through to 1977.³³⁰

McNamara had been firm in his lines to the press that, “We aren’t going to enter into any more Skybolt arrangements with anybody, in which they get something for nothing.”³³¹ Despite this claim, the realities of the arrangements offered by McNamara, who desperately needed his F-111 project to succeed, displayed the American intent to balance the fiscal picture with the political requirements of ensuring that Britain remained a capable strong ally. This need was not lost on the Wilson government, whose actions at the Summit would display the crucial fact that although Britain desperately needed American monetary support, America equally desperately needed British power projection.

A Foreign Office memo on May 1965 from the British Embassy in Washington laid out how this relationship was fully understood within the government, stating that, “...the Americans only forgo competitive selling for strong political reasons, for instance, their wish that we should continue our role in the Indian Ocean.”³³² The British position covered spheres of influence and the aircraft procurements, with an aim to expand the offsets beyond domestic troop costs and spending in the British economy, with the observation that, “The Americans are selling in Europe and elsewhere in the West as hard as they can, and at home they are allergic to equipping their own services with arms or equipment of any but American manufacture...We may be able to make a small dent in this policy by achieving some offset sales of British equipment as part of the aircraft deals now under discussion.”³³³ Thomson, at the

³³⁰ TNA, PREM 13/716, Telegram from BDS Washington [Armstrong] to MoD [Cooper], 4 Jan 1966.

³³¹ Part II, The Robert S. McNamara Papers, Transcript of McNamara Press Briefing, 6 Apr 1965.

³³² TNA, FO 115/4631, Memo, Everett (British Embassy, Washington), 27 May 1965.

³³³ TNA, FO 115/184320, *US/UK Military Cooperation*, Letter, British Embassy Washington to Sankey (FO), 29 Apr 1965.

Foreign Office, was more direct, stating that, “It may be possible to use developments in the arms industry to forward our political objects [sic].”³³⁴ This was further reinforced in the response of Hardman, the Permanent Secretary at the MoD, that, “...we should try to gain some advantage with the Americans for the orders which we shall be placing with them.”³³⁵ Avoiding involvement in Vietnam was a central objective for Wilson, and with the British position in world affairs at this time there was a need to balance the close relationship with America with increasingly important ties to Europe and the EEC. Procuring three aircraft designs from America showed a commitment to the world stage, but achieved in a manner that was not overly financially taxing and freed up a skilled domestic workforce to aid Wilson’s ‘white heat of technology’ drive. The short-term priority though was to ensure American support for sterling and to avoid a devaluation in the pound.

For the Johnson administration, the intent during this period was to garner British support for Vietnam that went beyond public overtures, and at the very least to ensure Britain remained a player on the world stage. This chapter has demonstrated that the offering up of highly favourable terms for military aircraft and equipment addressed this issue in materialistic terms and served as a validation of McNamara’s cost saving methods through the F-111 programme and his use of wider financial tools through savings and exports. For McNamara the package achieved the goal, telling the press that, “...when we talk about worldwide responsibilities of the British, we’re talking about, particularly, their responsibilities in the area between Aden and Hong Kong, which is an area for which the F-111, for example, is highly suitable because of

³³⁴ TNA, FO 115/184320, Memo, Thomson to Hood, 7 Jan 1965.

³³⁵ TNA, FO 115/184320, Memo, Hood to Thomson, 7 Jan 1965, citing Hardman speaking to FO P.U.S..

its long range and versatility.”³³⁶ As American author Weidenbaum put it, “...such sales were looked upon as adjuncts to U.S. foreign policy – an effective but inexpensive way of bolstering the defense efforts of our friends and allies while relieving this nation’s balance of payments problem.”³³⁷ It was the need for American support for sterling that was the crucial objective for Britain, and in return America expected Britain to maintain a military presence East of Suez, and if that presence could also be achieved with American military equipment then so much the better. Dobson, writing in the 1990s, did not see the two as linked, stating that, “James Callaghan, in fact, has specifically denied any knowledge of such an agreement. There is no hard evidence to contradict him.”³³⁸ Other writers have however come down on the side of there being at least a tacit understanding between the nations, with Dumbrell, Ponting and Schwartz among those who consider that it existed, albeit short of being a formal agreement.³³⁹ These views also remain in the purely abstract political realm or centre on Wilson’s resistance over Vietnam, and authors such as Colman and Dockrill do not mention how aspects such as defence procurements were used as a means to display a commitment to the worldwide role ahead of the defence review and at a time when the balance of payments crisis was most acute for Britain.³⁴⁰ The American internal position, even if not tied to Vietnam was clear. Bundy wrote in a memo to Johnson following a meeting with Wilson in September 1965 that it had taken two discussions for Ball to get “...Wilson to agree to the association between our defense of the pound

³³⁶ Part II, The Robert S. McNamara Papers, Transcript of McNamara Press Briefing, 6 Apr 1965.

³³⁷ Weidenbaum, *The Economics of Peacetime Defense*, p. 126.

³³⁸ Dobson, *Anglo-American Relations in the Twentieth Century*, p. 132.

³³⁹ Dumbrell, *A Special Relationship*, p. 69, Ponting, *Breach of Promise*, p. 99 and T.A. Schwartz, *Lyndon Johnson and Europe; In the Shadow of Vietnam* (London: Harvard University Press, 2003) p. 82.

³⁴⁰ Colman, *A 'Special Relationship'*, pp. 81-85 and Dockrill, *Britain's Retreat for East of Suez*, p. 119.

and their overseas commitments. The one thing he was apparently trying to avoid was a liability in Vietnam.”³⁴¹ The minutes of this meeting laid bare not only the link between support for sterling and East of Suez, but the fine line that Wilson was determined to tread, as the minutes read that, “...it would be a great mistake if the United Kingdom failed to understand that the American effort to revive Sterling was inextricably related to the commitment of the United Kingdom to maintain its commitments around the world...The Prime Minister agreed to all of this, noting that he had expressed his earlier qualifications merely to make the record clear that the United Kingdom would not accept an additional demand for a United Kingdom contribution to Vietnam as a quid pro quo for U.S. Government short-term assistance for Sterling.”³⁴²

Thus the selection of American aircraft played the key role in ensuring American support for sterling without having to resort to a formal agreement over a commitment to Vietnam that would have given the perception that British forces were able to be hired by America to fight foreign wars. The result also positioned Britain as the favoured ally in Europe at a time when the trans-Atlantic relationship with Germany was in difficulties and the Special Relationship needed continual attention to ensure both sides felt they were getting something meaningful from it. The British position, which was re-affirmed at the Washington Summit, had been for the maintenance of the East of Suez commitment. The American position, particularly following the Gulf of Tonkin incident was for a British commitment to Vietnam. The

³⁴¹ *FRUS*, 1964-1968, Vol. XII, *Western Europe*, Document 250. Memorandum from the President’s Special Assistant for National Security Affairs (Bundy) to Johnson, 10 Sep 1965.

³⁴² *FRUS*, 1964-68, Vol. XII, Document 250. Memorandum from the President’s Special Assistant for National Security Affairs (Bundy) to Johnson, 10 Sep 1965, Minutes of Meeting in London, Ball, Wilson, Bruce, 9 Sep 1965.

aircraft programmes provided a political middle ground that kept the door sufficiently open to both options.

CHAPTER 3 – THE WASHINGTON TALKS, DECEMBER 1964

The respective positions of the Wilson and Johnson administrations had been set by the previously discussed series of events prior to the planned talks in Washington D.C. in December 1964. For Wilson, the pressing need for continued American support for sterling and a realignment of the high technology sectors of British industry to a more commercially viable posture were key. For Johnson, the continued escalation in Vietnam and the need for offsetting a growing balance of payments deficit driven by military spending were central considerations. The meeting of Wilson, Johnson, Healey and McNamara over 8-9 December 1964 came immediately after the dominant and crushing performance of Johnson in the November general election. Johnson had received the largest popular vote in history, providing him with the assurance that the country still supported both his domestic agenda and his foreign policy objectives originally laid down by Eisenhower and Kennedy.³⁴³ For Wilson, the timing of such a visit in the immediate aftermath provided an opportunity to try and quickly establish a better relationship with the president following the negative American reaction to the rise in the British import tariff. Within the broader economic situation, defence was the primary rationale behind the summit, which from the British position represented a need to balance a reduction in defence spending with maintaining the American economic support.³⁴⁴ For the Americans the focus was on holding Britain to its worldwide role and gaining a commitment on troop

³⁴³ Craig, G.M., "President Johnson's Victory", *International Journal*, Vol.20, No.1 (1964/65) p. 79.

³⁴⁴ TNA CAB 130/213 *Atlantic Nuclear Force: Meetings 1-8; Papers 1-14*, Minutes, Cabinet; Defence Policy, Chequers, 10.30 am 22 Nov 1964.

deployments to Vietnam.³⁴⁵ The matter of defence spending and commitments took on two aspects; firstly that of the MLF, a construct that was threatening to tear apart the NATO alliance, and secondly over the efficiencies to be made through a shift in British overseas posture and the cutting of British military aircraft procurements and replacing them with American designs. This element, and the political gamesmanship behind it, is central to the shaping of the cancellations and continuations of the various programmes.

Ultimately, neither Wilson nor Johnson could be said to have fully achieved their aims from the meeting, but that both were able to write the outcomes in the manner which suited them best, even if these did not represent a complete closing off of any specific aspect. The abandoning of the MLF concept was a success for Wilson, as was the agreement from McNamara to supply American aircraft on favourable terms against pre-Summit aims of either securing American support for worldwide commitments, or if that failed, to dramatically scale them back. For McNamara, the export of his highly contentious TFX programme represented a victory, and for the administration as a whole, the successful commitment by Britain to the maintenance of a worldwide role was timely. The Summit reaffirmed that the relationship between the two countries was still sufficiently close as to provide adequate benefits for both sides, with the question of aircraft procurements central to the outcomes and displayed the key role such programmes played in shaping British foreign policy with the United States. This chapter will therefore argue that the Summit emphasised that the American focus on South East Asia, and particularly Vietnam, shaped the

³⁴⁵ *FRUS*, 1964-1968, Vol. XII, Document 236, Memo of conversation, Defence Problems, Washington, 3.45 pm 7 Dec 1964.

discussions and drove their focus on support for aircraft programmes that would aid in the continuation of the British East of Suez posture, of which the Shackleton replacement did not form a central element, and thereby defining why the P-3 was not discussed as part of the American military package.

Both British and American press coverage prior to the visit focused heavily on the MLF and this scrutiny of nuclear strategy reflected the deep concerns of the period, with only a few years having passed since the Cuban Missile Crisis and Macmillan's commitment to purchase Polaris at Nassau.³⁴⁶ In the context of the RAF procurement programmes, the MLF represented a negotiating token for Wilson over how far American support for British defence policy and influence could go, and therefore how much financial and equipment support could be garnered. Dockrill, in her study of the Washington meetings, focused entirely on the MLF as the military aspect of the discussions, rather than placing it as one of the contributory elements that made up the balancing act at play by Wilson during the talks.³⁴⁷ She presents the MLF, alongside the growing crisis in Vietnam, as one of the primary foreign policy issues facing the Johnson Administration by late 1964.³⁴⁸ A similar level of attention is also given by Colman, so the MLF as both a concept and political tool needs to be understood.³⁴⁹ The MLF was born out of the increased medium range ballistic missile

³⁴⁶ Our Own Correspondent, "U.S. Ready for Discussion on Nuclear Strategy", *The Times*, 1 Jan 1963, and Our Own Correspondent, "Washington Welcome for British Measures", *The Times*, 27 Oct 1964.

³⁴⁷ S. Dockrill, "Forging the Anglo-American global defence partnership: Harold Wilson, Lyndon Johnson and the Washington summit, December 1964", in *The Journal of Strategic Studies*, Vol.23, No.4 (2000) pp. 107-129.

³⁴⁸ Dockrill, "Forging the Anglo-American global defence partnership", p. 114.

³⁴⁹ Colman, *A 'Special Relationship'* pp. 37-45.

(MRBM) threat posed by the Soviet Union in the late 1950s.³⁵⁰ The deployment of interim land based missiles throughout Western Europe by the United States gave some reassurance to the European nations that they could be defended against Soviet aggression, but the fundamental concern for Europe was whether the United States would, if it truly came down to a hot war, step forward and defend the continent.³⁵¹ As a result a concept began to take shape whereby a system with multi-national involvement would commit all parties to military action. Senator Jackson stated to Congress in 1957 that, "...the bonds of the NATO alliance could now be strengthened by a co-operative program to develop and support a sea-based missile system."³⁵² Such a system would provide for the defence of Europe at a lower cost than the existing land-based systems. The proposal was shaped by the United States into one consisting of 25 surface ships, each armed with 8 Polaris missiles and with a force of 10,000 to man them. To increase the sense of collective security each ship would have 3 nationalities making up the crew, with no single nationality comprising more than 40% of each ship. The ships themselves were to be based around commercial hulls and were to operate in the shipping lanes around Western Europe in order to make them harder for Soviet weapons systems to target.³⁵³ The mixed manning concept was in part designed to spread the costs of deploying a MRBM system, but also to tackle a wider concern over the involvement of the United States, as addressed by the Ministry of Defence in 1964 as, "One more declared aim of the M.L.F. is to strengthen the trans-

³⁵⁰ J.W. Boulton, "NATO and the MLF", in *Journal of Contemporary History*, Vol.7, No.3/4 (1972) p.276.

³⁵¹ W.L. Kohl, "Nuclear sharing in NATO and the Multilateral Force", in *Political Science Quarterly*, Vol.80, No.1 (1965) p. 88.

³⁵² National Archives, Washington D.C., Records of the 85th Congress, 1st Session, Congressional Record: Senate, Vol.103, Part 6, 27 May 1957, p. 7676.

³⁵³ Kohl, "Nuclear sharing in NATO and the Multilateral Force", p. 92.

Atlantic link and thereby bind the U.S. more closely to the defence of Europe.”³⁵⁴ The same briefing paper reflected the mood of the early 1960s, whereby the MLF as a concept was fast falling out of favour in Britain due to the difficulties of implementing it in practice leading to highly politically charged environment. Alongside this the system was sea based, and thus was difficult to consider as a tactical asset. The procurement of Polaris as the replacement for the independent nuclear deterrent placed the MLF as a greatly reduced military option for the British.³⁵⁵ Regardless of this there were two sides to the MLF argument in much the same manner as with the aircraft procurements; the military and the political. Whilst the military aspect was proving harder and harder to justify by 1964, the political dimension was as important as ever.

Even contemporary authors such as Kohl did not shy away from this aspect, highlighting in 1965 that the MLF served an important purpose of heading off attempts by De Gaulle to assume the mantle of the defender of Europe.³⁵⁶ This reflected the greatest concern for the United States and Britain in the build-up to the Washington talks, for whilst the economic situation was dire, and defence spending already too high, it would have been far worse for Britain to find itself side-lined in Europe by a resurgent France. The French government was keen to pursue the cause if it led to greater European integration, but as ever this was to be under French leadership, and with France serving as the link between Europe and the United States.³⁵⁷ Ultimately, the central political issue that vexed Whitehall was really West Germany, rather than

³⁵⁴ TNA DEFE 25/102, *NATO MLF*, D.O.(O)(64) *The NATO Multinational Force*, 21 Sept 1964.

³⁵⁵ TNA DEFE 25/102, *NATO MLF*, D.O.(O)(64) 21 Sept 1964.

³⁵⁶ Kohl, “Nuclear sharing in NATO and the Multilateral Force”, p. 94.

³⁵⁷ Own Correspondent, “French Warning on E.E.C. and NATO”, *The Times*, 3 Nov 1964.

France. As Wilson recorded in his memoirs, the issue for both him and as he saw it, Britain as a collective whole, was the concept of a German finger on the nuclear trigger with the consideration that, "What matters was not so much whether we in the West were satisfied that the Germans had no power to influence a decision to use nuclear weapons, but whether the Soviet Union would believe it."³⁵⁸ The motivation for France was the same as it had been for half a century; essentially to keep Germany in check. French military leadership in Europe was far less about the spirit of collective defence, and more about ensuring Germany could not grow in power such that it could threaten France again. This move was very much the personal mission of Charles De Gaulle who wanted France to lead the continent forward. These motivations and actions of de Gaulle will be fully appraised in chapter four. By having no sole European nation in the lead, the MLF as a concept represented the best means for the United States of heading off this French resurgence.³⁵⁹ Thus by 1964 the main cheerleaders for the MLF had become Germany and the United States.³⁶⁰ The rise in prominence of West Germany created a concern that escalated political manoeuvring, increasingly led by a concerned France, could result in a split to NATO.³⁶¹ Crucially it created a concern in Westminster that Britain could be usurped as the United States' principle ally in Western Europe by either Germany or France, with Germany looking the most likely. The language used within the Ministry of Defence was suitably frank, "The hitherto happy marriage between the U.S. and the U.K. is beginning to be 'on the rocks';

³⁵⁸ Wilson, *The Labour Government, 1964-1970*, p. 49.

³⁵⁹ Kohl, "Nuclear sharing in NATO and the Multilateral Force", p. 94.

³⁶⁰ TNA DEFE 4/176, *Chief of Staff Committee, Minutes of Meetings Nos 63-68*, Briefing paper, AVM J.H. Lapsley, *Multilateral Force*, 23 Oct 1964.

³⁶¹ TNA FO 371/179120, Telegram, Shuckburgh to Sir F. Roberts, *Bonn M.L.F. Talks*, 21 Jul 1964.

Germany is now the most favoured wife in the international harem.”³⁶² This produced two possible alliances, both of which were equally concerning for the Wilson administration. At Chequers in November 1964 Gordon Walker observed that a Franco-German nuclear alliance had to be prevented at all costs, alongside the possibility of a widening of a United States-Germany military alliance.³⁶³ Prior to the Chequers meetings the United States and Germany had released a joint statement reaffirming their commitment to bringing the MLF to fruition.³⁶⁴ As discussed in the previous chapter, the continued purchase of American military equipment by Germany, if not always done voluntary, resulted in an impression of increased favouritism by the United States, and therefore the limited level of British commitment and procurement spending would not have gone unnoticed in either Whitehall or Washington.³⁶⁵ The German drive to conclude the MLF negotiations tied in with their upcoming federal election, due in the autumn of 1965, with the feeling in the British delegation to the negotiations in Bonn was that the United States would go along with this timeline regardless of whether Britain was willing and ready to participate.³⁶⁶ This made it an imperative subject of discussion in the Washington talks. Even though Britain was highly vulnerable following the run on the pound, Whitehall needed to find an alternative proposition to increase the likelihood of successfully terminating the expensive aspects of the programme, whilst still shoring up the Anglo-American relationship.

³⁶² DEFE 13/726, *NATO Strategic Concept*, Memo, Wg Cdr Le Hardy to VCDS, *Discussions in Washington on the M.L.F.*, (est) 13 May 1964.

³⁶³ CAB 130/213, Minutes: Cabinet, *Defence Policy*, 5.30pm 21 Nov 1964.

³⁶⁴ Own Correspondent, “Washington and Bonn Reaffirm Belief in the M.L.F.”, *The Times*, 12 Nov 1964.

³⁶⁵ TNA DEFE 13/726, Memo, Wg Cdr Le Hardy to VCDS, *Discussions in Washington on the M.L.F.*, (est) 13 May 1964.

³⁶⁶ TNA DEFE 13/726, Telegram, Sir E. Shuckburgh to Foreign Office, No. 191, *Multilateral Force*, 21 Apr 1964.

The proposed ANF served two main purposes. Firstly, as a means of extracting Britain from the MLF framework and re-affirming the close alliance with the United States, and secondly as a means of providing a suitable role for the TSR-2 and thereby keeping it as a viable option going forward. For the Ministry of Defence any nuclear force had to make military as well as political sense, which was understandable given the increasing fiscal pressures and the desire of Wilson to trim the defence budget. By promoting the viability of the TSR-2 and offering up three squadrons of aircraft, each armed with two nuclear weapons, the ANF was to have given the air and land mix that was missing from the sea-borne MLF and was considered essential to achieving a feasible military posture.³⁶⁷ The land based elements were to comprise four American Pershing missile battalions, each with four batteries and two missiles per battery.³⁶⁸ The Chiefs of Staff had expressed their desire to avoid a sea-based solution due to the vulnerability of the ships, and the Polaris system was a strategic asset and thus of limited use in the tactical role for which the MLF had been intended to fill.³⁶⁹ The use of TSR-2, expressed within the D.O.(O)(64) brief from just prior to the autumn general election, would not only provide a lifeline to the troubled aircraft programme, but would also provide a fillip to the balance of payments by reducing any required dollar spend.³⁷⁰ Despite the claims emanating from the Ministry of Defence, such a system effectively disregarded the political dimension of the larger scale MLF as it focused on

³⁶⁷ TNA DEFE 25/102, D.O.(64), *The NATO Multinational Force*, 21 Sep 1964.

³⁶⁸ TNA DEFE 25/31, Memo, AVM Lapsley (Sec. Chiefs of Staff) to Sec Defence Planning, *Variants to the Multilateral Force*, 25 Jun 1964.

³⁶⁹ TNA DEFE 25/31, Memo, Lapsley to Sec Defence Planning, *Variants to the Multilateral Force*, 25 Jun 1964.

³⁷⁰ TNA DEFE 25/31, Memo, Lapsley to Sec Defence Planning, *Variants to the Multilateral Force*, 25 Jun 1964.

bilateral Anglo-American relations at the expense of those in continental Europe, reducing their involvement to just a small contribution to the crewing of the aircraft.³⁷¹

Irrespective of how Whitehall viewed the proposed shift from MLF to ANF, the ambition of either killing the MLF off entirely or at the very least transforming it into a low cost, low priority element using existing military equipment and dispersal could not have succeeded without the controlling vote of the Johnson administration, given the dominance of the United States in all trans-Atlantic relations. From the earliest days of Nassau, there had been a formative idea from within the Kennedy administration to expand on the original MRBM concept and assemble a multinational force with Polaris at the forefront. George Ball promoted the clause that the British purchase of Polaris would enable them to form a central element of this, alongside the notion of co-manning.³⁷² This position had been reaffirmed by Kennedy in a note to Macmillan later in December 1962 that participation in the multinational force should not just be limited to the nuclear members of NATO.³⁷³ The implicit message within this was to allow the Germans in – a concept that the then Earl of Home was firmly against.³⁷⁴ Yet by 1964 opinions within the White House were split on the merits of any system. Bundy, Special Assistant for National Security, writing in a memorandum to Johnson in November 1964 ahead of the Wilson visit, recognised that Britain was against buying a new weapon system only two years after Nassau and as such it was understandable that a solution involving current inventory aircraft and perhaps

³⁷¹ TNA DEFE 25/31, Memo, Lapsley to Sec Defence Planning, *Variants to the Multilateral Force*, 25 Jun 1964.

³⁷² *FRUS*, 1961-1963, Vol. XIII, *Western Europe and Canada*, Document 402, Memo of conversation, *Nassau*, 19 Dec 1962, *Skybolt*.

³⁷³ *FRUS*, 1961-1963, Vol. XIII, Document 409, Memo, *Kennedy to Macmillan, Nassau*, 21 Dec 1962.

³⁷⁴ *FRUS*, 1961-1963, Vol. XIII, Document.402.

submarine launched Polaris missiles would be their preference.³⁷⁵ Regardless of his apparent considerations for the British position, Bundy was aligned with the view that, “...the MLF is the least unsatisfactory means of keeping the Germans well tied into the alliance.”³⁷⁶ This would reaffirm that on this political level he saw Germany as more important than Britain. McNamara’s position was that there was “...no military requirement for the MLF.”³⁷⁷ This position was later echoed by Ball, who, having evidently shifted his position, or perhaps in wanting to be seen as having done so, wrote in his memoirs that the MLF had no real value as a military proposition, “...but that was not the point; I saw it as serving a political objective.”³⁷⁸ This political objective of remaining close to Germany and holding back the French was evidently strong enough for Wilson to write in his own memoirs that during the Washington meetings Johnson was pushed hard, principally by Ball, to be enthusiastic about proceeding with the MLF.³⁷⁹ Bundy’s biographer Kai Bird saw the MLF as being Ball’s plan, and credited Bundy with having effectively killed it off in a memo to Johnson on 25 November 1964.³⁸⁰ This position ran counter to Bundy’s support of it in his aforementioned memo from just a few weeks earlier. If indeed though this had been the case, then there would have been little point in it being one of the major discussion points in the Washington talks between Johnson and Wilson, nor would Whitehall have felt it necessary to develop a complex and only slightly less unpalatable

³⁷⁵ *FRUS*, 1964-1968, Vol. XII, Document 46. Memo, President’s Special Assistant for National Security Affairs (Bundy) to President Johnson, *NATO Nuclear Policy*, 8 Nov 1964.

³⁷⁶ *FRUS*, 1964-1968, Vol. XII, Document 46.

³⁷⁷ Kaplan et al., *History of the Office of the Secretary of Defense Vol IV*, p.412.

³⁷⁸ G.W. Ball, *The Past has Another Pattern; Memoirs* (New York: W.W.Norton & Company, 1982) p. 262.

³⁷⁹ Wilson, *The Labour Government*, p. 42.

³⁸⁰ K. Bird, *The Color of Truth, McGeorge Bundy and William Bundy: Brothers in Arms* (New York: Simon & Schuster, 1998) p. 298.

alternative in the form of the ANF. Wilson evidently saw the threat of Germany becoming the principle European partner of the United States as a significant enough threat to keep a nuclear force of some description on the table. Equally, as the United States did not simply act independently to either forge ahead with the MLF to achieve their political objectives at the expense of Britain, nor cancel the entire enterprise unilaterally suggests that Britain still carried a degree of weight for the United States on the international stage, particularly with regard to European affairs. This posturing within Europe would also impact the British position on EEC membership, as all aspects of trans-Atlantic relations, whether economic, political or military were intrinsically linked. The MLF debacle serves to demonstrate that whilst Whitehall was right to be concerned about the general drift of the United States towards Germany and alternative European partners, they were not completely cut out of the picture. Despite this the question of possible defence purchases, when placed alongside the ANF concept, raises the question of how far Wilson was prepared to go in order to remain the principle partner of the United States, and shore up the vital fiscal support. The other side of this coin was what the Johnson administration wanted to achieve during the meetings.

As discussed in the previous chapter, Johnson had hosted a visit from Home earlier in 1964 at which the Prime Minister had stood on the White House steps and used the occasion to 'sell London buses'.³⁸¹ This event had soured the idea of a Wilson visit from the start, as Johnson did not want a repeat of the incident. Despite this, relations between Home and Johnson had been far from troubled. Home had, in a

³⁸¹ Staff writer, "London calls Cuba bus deal good business", *Chicago Tribune*, 09 Jan 1964.

March 1964 telegram to Johnson, requested that Amery, the Minister of Aviation, be permitted to view an experimental US Air Force reconnaissance aircraft, the A-10. Johnson's reply stated that due to the secretive nature of the aircraft not everything could be shown to Amery, but that "...an informal look at the airplane for an old friend is another matter, and it will be arranged."³⁸² Such a friendly and relaxed address to someone who had previously irritated him, when compared to his view of Wilson, suggests that Wilson was at a significant disadvantage from the start. As Ball noted in his memoirs, Johnson had held Macmillan in high regard, yet saw Wilson as "...too much like other politicians with whom LBJ had dealt, and Johnson took an almost instant dislike to him."³⁸³ For Alex Danchev, "Johnson did not like to be denied [over Wilson's refusal to send troops to Vietnam]. He was resentful. Wilson started low in his estimations and sank lower."³⁸⁴ Undoubtedly the decision to raise the bank rate had played a significant part in this, and Colman has observed in his work on the Washington talks that Johnson rebuked Wilson over his poor handling of the economic crisis during one of their meetings on 7 Dec 1964.³⁸⁵ The American official record of the meeting, in which several advisors were present, includes the comment from Dillon, US Secretary to the Treasury, and who would have been the nominal expert in the room, that the policy measures, if not the messaging, being put in place by Wilson and his Cabinet were basically sound.³⁸⁶ This apparent confliction reiterates the fact that Johnson was very much his own man, and a distinct personality within

³⁸² TNA FO 1109/511, *Messages exchanged between Prime Minister and President Johnson*, Telegram, Johnson to Home, No.3353, 3 Mar 1964.

³⁸³ Ball, *The Past has Another Pattern*, p. 336.

³⁸⁴ A. Danchev, "Tony Blair's Vietnam: The Iraq War and the 'Special Relationship' in Historical Perspective", in *Review of International Studies*, Vol.33, No.2 (2007) p. 200.

³⁸⁵ Colman, *A 'Special Relationship'?* p. 38.

³⁸⁶ *FRUS 1964-1968*, Vol. XII, Document 237, *Record of Meeting; Johnson, Wilson & Roll, Armstrong, Sec. Dillon, Charmin, Martin, Ackley, Bundy & McNamara*, Washington, 7 Dec 1964, 4:45-6:00pm.

Washington who thought nothing of contradicting his advisors. It also hints at the problems of understanding where the rhetoric of the man ended and his political position began.

Johnson is described by George Herring as being “...an extraordinary individual. A large man with oversize and eminently caricaturable features, he had ambitions the size of his native Texas, and insecurities to match.”³⁸⁷ A large portion of these insecurities may have stemmed from his non-Ivy League education, but could also have been a well-honed tactic for putting the Washington establishment off balance. Rusk recalled that during the Washington talks, Johnson observed that, “...I see we have four Oxford men and three Cambridge men and four Harvard men and three Yale men and a man from San Marcos State Teachers College.” The response was one of gentle laughter, but Rusk was left, as he had been before, with a sense of uncertainty as to whether it was genuine insecurity or an act.³⁸⁸ Denis Healey was far more direct with his opinion of the president in his memoirs, “Johnson exuded a brutal lust for power which I found most disagreeable.”³⁸⁹ Despite the clear personality differences between Johnson and his predecessor, his resounding victory in the election of November 1964 was seen as a continuation and endorsement of the policy and plans put in place by Kennedy, and this sense of continuity could be further seen in the advisors and staff that Johnson surrounded himself with. McNamara, Rusk, Bundy, Ball and others had all served in the same positions under Kennedy.³⁹⁰ Not only had Johnson put forward the notion of stability in government as part of his election

³⁸⁷ Herring, *From Colony to Superpower*, p. 729.

³⁸⁸ M.K. Updegrave, *Indomitable Will; LBJ in the Presidency* (New York: Crown, 2012) p. 41.

³⁸⁹ Healey, *The Time of My Life*, p. 314.

³⁹⁰ Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, p. 413.

campaign, but he had been aided by the complete failure of the Republican Party to make a compelling argument with their candidate Barry Goldwater.³⁹¹ Combined with a strongly performing domestic economy, and a natural preference for domestic matters, Craig assessed the result in the immediate aftermath as one where, “...Johnson was probably an unbeatable candidate against anyone except Eisenhower, but only Goldwater could have given him such a crashing landslide.”³⁹² Johnson was therefore in a position of political strength by the time of the Washington talks. Whereas Wilson had a slender parliamentary majority and a poorly performing economy, Johnson did not have to bow to pressure and compromise. Politically, between the leaders, Wilson was the one who had to be cautious and conservative with his approach. Bundy noted to Johnson in November 1964 that Labour were showing signs of being more flexible in government than they had intimated in opposition, and that there was a “...very close relationship between Labour’s current attitude and that of the Home Government – the only important differences are those of political imagery...”³⁹³ For Johnson, who was always more at home with domestic rather than foreign affairs, the talks represented an opportunity to stamp his authority on the cross-Atlantic relationship. However it was his inherited advisors and staff who represent the clearest idea of what the United States wanted to achieve from the meetings, and thus whether Britain was to be able to extract any additional support in the time of economic crisis.

McNamara, as Secretary of Defense, was the key player during those meetings in which defence formed the primary focus, which is to say the majority. For Wilson’s

³⁹¹ Craig, “President Johnson’s Victory”, p. 81.

³⁹² Craig, “President Johnson’s Victory”, p. 81 & 83.

³⁹³ *FRUS*, 1964-68, Vol. XIII, Document 46.

government to stand any chance of success in achieving American support for a cut to the defence budget, a reduction in commitments and a re-evaluation of military aircraft production, it was vital to win over McNamara. As discussed in the previous chapter, Robert McNamara had been brought into the Department of Defense following a successful career in the private sector with Ford and believed that the public sector could be made as efficient as the private one.³⁹⁴ Having come from the commercial sector McNamara did not trust military advisors, instead relying heavily on academic John McNaughton as his deputy. Crucially, McNaughton was close friends with Bundy.³⁹⁵ With this relationship, and as McNaughton had the ear of McNamara, and Bundy the ear of Johnson, this aspect of the Administration was tightly interlocked, and the freedom given to McNamara by Johnson bore this out. McNamara had begun pursuing an aggressive overseas sales policy, of which Britain was a target market. These sales formed part of his continued drive to rationalise the defence industry through consolidation and programme efficiencies. That 55% of all defence spending went through appropriations to defence contractors, including the aircraft manufacturers, placed the onus on the contractors to produce substantial savings, and the previously covered TFX programme represented an ideal opportunity to showcase this new efficient approach.³⁹⁶ The consolidation of the Navy and Air Force competitions down to a single aircraft design, chosen by McNamara against the advice of the military leadership, demonstrated that McNamara was in ultimate control of his

³⁹⁴ Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, p. 453.

³⁹⁵ L. Freedman, "Vietnam and the Disillusioned Strategist", in *International Affairs, Vol. 72, No. 1* (1996) p. 138-139.

³⁹⁶ Kaplan et al, *History of the Office of the Secretary of Defense, Vol IV*, p. 459.

department. To back up this policy he needed to ensure that the aircraft was an export success.

The Washington Summit talks provided that platform for an early success for McNamara against a backdrop of a Britain in need of American support on the international markets. The coverage of TFX at the talks is a key element in understanding how the various procurements interlocked with the wider strategic aims and ambitions of both nations.

It was understood within the Johnson administration that Britain was considering the TFX as a replacement for the struggling TSR-2, and whilst this represented an opportunity, it also represented a potential problem given McNamara's approach to the programme. In the pre-visit memo to Johnson in November 1964, Bundy wrote that, "Bob McNamara is sometimes torn between his very sound political assessments and his obligations as a salesman of dollar-earning hardware. For example, one significant element in the British position may be their need to keep in the business of producing useable and saleable aircraft. The best way of doing this politically is probably to licence the TFX for production under a British name and paint-job, but that might cut into our own TFX market, and so Bob may be resistant."³⁹⁷ This observation is fundamental to the concept that the health of the British aviation industry represented a negotiating element throughout. The Wilson Government would have seen the option of producing licenced manufacturing of the TFX as a crucial aspect, for it was a means of safeguarding British jobs – thus to in effect allow Wilson to extricate the Government from a financially perilous

³⁹⁷ *FRUS*, 1964-68, Vol. XIII, Document 46.

development programme, whilst maintaining a military capability, protecting some aspects of the aviation industry, whilst also increasing the level of cooperation with the United States. Without a licenced production element, alternative works would be required to maintain the viability of the industry, such as will be discussed later for the P.1127 and HS.801. The problem from the American side was put succinctly by Bundy in same memo, "One of our jobs is to introduce McNamara the statesman to McNamara the merchant and make sure they do not get in each other's way."³⁹⁸ For the Johnson administration, and particularly McNamara, the need to promote overseas sales of the TFX aircraft was fundamental to their approach to the talks. TFX was the sole programme mentioned by the Administration in both the pre-Washington briefings and in the records of the conversations with Wilson and his delegation. As such, although there was no mention of the possible sale of P-3 to Britain as a replacement for Shackleton, there was equally no mention of the C-130 or the F-4 either. The American approach was therefore very much business first, not necessarily the wider provision of political and economic support to Britain with regard to the other aircraft programmes. This was most likely because such aspects were considered to be covered by the need to have Britain maintain the worldwide role, and ideally the deployment of British troops into Vietnam. The use of these elements could serve as the price paid for economic assistance, rather than procurement sales directly.

The New York Times had reported prior to the talks that Britain would be seeking a means of reducing the burden of defence, highlighting that the Johnson administration would have been prepared for such an approach.³⁹⁹ During the Summit

³⁹⁸ *FRUS*, 1964-68, Vol. XIII, Document 46.

³⁹⁹ S. Gruson, "Wilson Expected to Seek U.S. Help on Defense Costs", *The New York Times*, 6 Dec 1964.

Rusk was recorded as stating that, "The UK role has a multiplying effect on our own role."⁴⁰⁰ With the United States heavily involved in Vietnam, there was a clear need for the United States to push Wilson on committing to a continued worldwide role.

When the two parties sat down for the second set of meetings on 7 December, first in the British Embassy and then later in the White House, Denis Healey opened discussions with the frank observation that, due to the economic difficulties facing Britain, there was no choice but to re-evaluate defence spending.⁴⁰¹ Healey noted that the most obvious means of achieving a significant reduction in spending was to make manpower cuts, which would make it even harder to maintain a worldwide role. Consequently, Healey stated that the "...only other way was to economise in equipment."⁴⁰² A reduction in either manpower or equipment would have the knock-on effect of requiring a reduction in the worldwide role that Britain had thus-far fulfilled. Healey's further reasoning was that the majority of defence capabilities were suitable across a broad range of eventualities and peacetime deterrence, however those capabilities that represented a more specialised and particularly the expeditionary form of warfighting sat in the top five percent of defence spending and were inordinately expensive by comparison.⁴⁰³ Without this high order and advanced weaponry, Britain would be unable to fulfil a worldwide role. These advanced systems were, in the main, American in origin, yet the government did not want to completely side-line the domestic armaments industry. The British minutes of the meeting record

⁴⁰⁰ *FRUS*, 1964-1968, Vol. XII, Document 236, Memo of conversation, *Defense Problems*, Washington, 7 Dec 1964, 3:45pm.

⁴⁰¹ TNA CAB 133/266, *Minutes and Papers (Cabinet Office)*, P.M.V.(W)(64) 2nd Mtg, *Record of a meeting held at the British Embassy, Washington D.C. and later at the White House, on 7th December, 1964 at 3:30pm*, 14 Dec 1964.

⁴⁰² TNA CAB 133/266, P.M.V.(W)(64) 2nd Mtg and *FRUS*, 1964-1968, Vol. XII, Document 236.

⁴⁰³ TNA CAB 133/266, P.M.V.(W)(64) 2nd Mtg

Healey as having posed the question of, "...whether it might be possible for the Americans to cover this outstanding 5 per cent of contingencies. By the same token Britain could ill afford to not buy the best weapons that were available most cheaply and most quickly. This might mean in some cases buying American equipment and he [Healey] hoped to discuss with Mr. McNamara certain possibilities in this direction. There would be, however, a legitimate requirement for Britain to retain a research and development capacity in certain fields of exploration."⁴⁰⁴ McNamara's response was, according to the British minutes, one of an expectation of the American public that allies pull their weight around the world, and that as such the British cannot make substantial manpower savings and must ideally remain the same size.⁴⁰⁵ In the American minutes, McNamara stated that manpower sizes should, at the very least, stay the same, and ideally increase. He then went further to put forward that, "We could help by working out a co-operative R&D development programme with the UK. He [McNamara] said that, speaking frankly, the UK was financing certain projects which made no sense militarily and really represented a waste of money, in particular the TSR-2, as well as certain other projects. He thought both the UK and US could benefit through greater integration, but he realized that this was a very painful process in terms of domestic problems for the UK."⁴⁰⁶ McNamara's negative opinion of the TSR-2 was recorded far more derisively in the British minutes as the aircraft being "...an expensive and nearly worthless project."⁴⁰⁷ Healey had, quite deliberately, pitched to the Johnson administration a deal whereby if they wanted Britain's help on

⁴⁰⁴ TNA CAB 133/266, P.M.V.(W)(64) 2nd Mtg.

⁴⁰⁵ TNA CAB 133/266, P.M.V.(W)(64) 2nd Mtg.

⁴⁰⁶ *FRUS*, 1964-1968, Vol. XII, Document 236.

⁴⁰⁷ TNA CAB 133/266, P.M.V.(W)(64) 2nd Mtg.

the world stage, it would come at a cost, using the ongoing aircraft procurements as a tool of international politics. Yet whilst it was clearly staged in order to get a concerned American delegation to commit to financial and materiel support, it was still a play with only a partial hand and healthy dose of bluff. Neither would the proposal have been a total surprise to the Americans, for Ball had held meetings in London with Wilson, Healey, and Gordon Walker the previous week as part of the preparatory work for Washington.⁴⁰⁸ Wilson was still firmly against sending troops to Vietnam, and had to defend a firm reiteration of the request from Johnson who saw such a move as sending a vitally important political message.⁴⁰⁹ McNamara had focused on the TSR-2 in his approach, undoubtedly because, as Bundy had feared in his memo to Johnson before the summit, McNamara the salesman had taken over, and only seen the British request in the context of his TFX programme, leaving aside all other elements, which would have included the P-3 as a Shackleton replacement. Healey's play had all the hallmarks of someone patting down their pockets and feigning surprise at the absence of their wallet when the bill arrives in a restaurant, only for their companion to willingly spring into action and settle the tab.

Alongside the equipment and manpower elements of overseas expenditure, there was also the broader defence basing and posture which represented the non-procurement aspects that could still yield significant savings. This was fundamental to the wider review of defence strategy that will be assessed in chapter five, however early considerations of the matter were prepared ahead of the Washington Summit and influenced the direction of discussions. The need for scaling back on British

⁴⁰⁸ Diplomatic Correspondent, "Mr. Ball Meets the Prime Minister", *The Times*, 1 Dec 1964.

⁴⁰⁹ TNA CAB 133/266, P.M.V.(W)(64) 2nd Mtg.

overseas commitments that Healey put forward in Washington had been proposed by the Ministry of Defence over the preceding weeks, particularly in meetings at Chequers on the future of defence, held over the weekend of 21 and 22 November 1964. A few weeks prior to this, the Chiefs of Staff had backed a Ministry of Defence position that, "...they can only reduce expenditure if their commitments are reduced."⁴¹⁰ Despite this the Chiefs were adamant that such a stance would require political direction before it could be explored in any great detail.⁴¹¹ Whilst the military leaders saw this as the only feasible means of achieving savings in the defence budget, the political leaders disagreed, as Wilson in particular wanted to retain the totemic position of a presence East of Suez.⁴¹² The discussions prior to Washington centred around the perilous position of the budget, and the implications of a revision to international strategy. There were multiple briefing papers prepared outlining the financial costs of maintaining the world-wide role, suggesting that the military command was focused on winning the argument with the Cabinet over the need to reduce commitments if true budgetary savings were to be made. Within this context studies were carried out examining the future of the Singapore, Aden and European areas of operation. These concluded that British policy could no longer be considered fully independent, and that a reliance on the United States for any major overseas action was unavoidable. With defence spending accounting for a third of all government expenditure and overseas spending adding £265m to the balance of

⁴¹⁰ TNA FO 371/179120, Memo, G. Arthur, *Item.2: Matters for discussion at OPD(O). Defence Expenditure*, 13 Nov 1964.

⁴¹¹ TNA FO 371/179120, *Defence Expenditure*, 13 Nov 1964.

⁴¹² TNA CAB 130/213, Minutes, *Cabinet; Defence Policy, Chequers, 10.30 am 22 Nov 1964* [Misc.17/4th Mtg].

payments costs, the strain on the British economy was too much to be sustained.⁴¹³

Thus if military expenditure was to be maintained at the present level, it would result in “...other national objectives [having] to be abandoned.”⁴¹⁴ The pressing need to invigorate the domestic economy to restore confidence in and balance to sterling, combined with allowing for the manifesto pledges on social reform to be carried out would have been too great to have been ignored, and the focus on reducing defence expenditure highlights where the focus of the Wilson government lay.

The nature of the discussions at Chequers was such that very few topic papers were produced from the meetings, and the political figures present simply referred to events in passing. Peter Hennessy has put forward that the overly centralised nature of how Wilson organised his Cabinet lead to the key decisions being taken by the small group of Wilson, Healey, Gordon Walker and Callaghan, which suggests that the lines to take in Washington were already set prior to the wider meeting at Chequers.⁴¹⁵ This was in much the same way as the decision was made to resist a devaluation of sterling on 17 October 1964.⁴¹⁶ This style would have contributed to the limited material available on the discussions, yet the flow of the minutes do suggest that the objectives for the Washington Summit were formed at the Chequers weekend. Prior to Chequers, a Ministry of Defence memorandum dated 18 November posed several key questions on whether the government was prepared to accept a withdrawal from East of Suez, and if the government was willing to buy, rather than develop, future aircraft and

⁴¹³ TNA CAB 148/40, *Minutes and Papers: Meetings 1-9 (1964 Oct-Dec) Papers 1-29 (1964 Oct-Nov)*, O.P.D.(O)(64)3, *Report of the long term study group*, 23 Oct 1964, and TNA DEFE 6/95, *Defence Policy Notes 1-19*, DP Note 31/64, *Briefs for the Prime Minister's visit to Washington. United States support for United Kingdom commitments, Note by the Directors of Defence Plans*, 24 Nov 1964.

⁴¹⁴ TNA CAB 148/40, O.P.D.(O)(64)7, *Defence Costs*, 21 Oct 1964.

⁴¹⁵ Hennessy, P., *The Prime Minister; The Office and its Holders since 1945* (London: Penguin, 2000) pp. 289-290.

⁴¹⁶ TNA PREM 13/2931, Note of a meeting, 23 Nov 1967.

missile systems. The memorandum also outlined the major expenditure items, for which the Shackleton replacement was one. It detailed costs for a conversion of the Comet 4 at £20m for the research and development, £90m on capital outlay, and then £70m in initial operating costs through to 1974/75. This £180m was smaller than the £290m for HS.681, £505m for P.1154, and the daunting £1,150m required for TSR.2 over the same period.⁴¹⁷ That the Comet 4 maritime programme was mentioned in the same table as the TSR.2, HS-681 and P.1154 demonstrated that all four programmes were, as far the Ministry of Defence was concerned, on the table for consideration as part of possible budgetary cuts.⁴¹⁸ This represented one of only a handful of occasions where all four programmes were grouped together, as the minutes of the first Chequers meeting at 10.00am on 21 November only noted discussions on the implications of cancelling and re-allocating the other three projects.⁴¹⁹ This would suggest that politically the focus was solely on the most problematic in terms of expenditure and those for which cancelling would result in the most pronounced impact for the aviation industry. The possibility was discussed that up to 20,000 people would be affected by cancelling the three programmes, and that Preston, Bristol and Weybridge would be the hardest hit.⁴²⁰ This interlinked aspect of procurement cuts was mentioned in the context of there being "...possibilities of effecting major economies in the cost of defence if we were to buy our weapons in the cheapest market irrespective of United Kingdom production but this would have other serious implications, notably for our

⁴¹⁷ TNA CAB 130/213, Memo, MoD, *Defence Expenditure*, 18 Nov 1964.

⁴¹⁸ TNA CAB 130/213, Memo, MoD, *Defence Expenditure*, 18 Nov 1964.

⁴¹⁹ TNA CAB 130/213, Minutes, *Cabinet; Defence Policy, Chequers, 10.00 am 21 Nov 1964* [Misc.17/1st Mtg] 23 Nov 1964.

⁴²⁰ TNA CAB 130/213, Minutes, *Cabinet; Chequers, 10.00 am 21 Nov 1964*.

aircraft industry.”⁴²¹ To buy from overseas would, however, increase the dollar spend and hurt the balance of payments at a time when reducing this was a high priority. Therefore the suggestion was made to encourage the United States to buy British equipment in exchange.

The minutes and discussion papers do not mention nor seem to consider the need to request an exemption to the Buy American Act of 1933. The Act laid down that, in order to protect American domestic industry, a multiplying percentage would be added to foreign contractual proposals providing the domestic offering with a higher price threshold. In effect this stopped overseas proposals undercutting domestic offerings yet had the side effect of allowing domestic industry more freedom to charge a higher price for their products. As the American system only permitted, unless in exceptional circumstances, for the cheapest item to be procured, there was little foreign companies could do to break into the American market. The percentage adjustment varied between departments, but in the case of the Department of Defense, foreign bids had an additional 50% added to their costs.⁴²² As the implications of the Act were not discussed in either pre-briefs or during the weekend, it would suggest that either Wilson was supremely confident that the political importance to the Americans of a British world-wide role would allow for exceptions to be made, or that it was tacitly accepted that any proposal would amount to nothing more than a move on the chess board, and that a suggestion of American purchases would have to be seen to have come from the American side first, rather than from the British. To conform with McNamara’s drive on the export sales it could have been a move with

⁴²¹ TNA CAB 130/213, Minutes, *Cabinet; Chequers*, 10.00 am 21 Nov 1964.

⁴²² K.M. Manuel, *Buy American Act – Preferences for “Domestic” Supplies: In Brief* (Congressional Research Service, 26 Apr 2016).

the expectation of more favourably priced American equipment. Ultimately, the offset factor of American purchases did play a significant role in the makeup of the American package. The previously discussed political advantages of ensuring well equipped and effective allies sharing the military burden and allowing for a reduced American overseas presence overrode the domestic economic protectionism of the period. A note by Sir Burke Trend prior to Chequers suggests that regardless of the motivations, the actual likelihood of both a successful and sufficient financial effect would be so unlikely that, "A more fruitful approach [to American purchases] might be to press the Americans to explore again the possibilities of co-operative research and development and production."⁴²³ As with European projects such as Concord, and the wider direction that civil aviation was taking with the emergent Air Bus [sic] and the militarily with the development of the Anglo-French jet trainer, the concept of international collaboration was taking on increased prominence throughout this period. Multi-national research and development provided an additional avenue for maximising both domestic and international political influence, with such an approach providing a degree of counter to the negative impact of cancelling the RAF programmes with the result of fewer redundancies and a more limited overall impact on the health of the aviation industry.

The question of Britain retaining either a degree of the potentially lucrative research and development field, or going down a shared R&D route as articulated by both Healey and McNamara at the Washington Summit stemmed from the alternative proposals to the cut to commitments option, and was widely discussed at the

⁴²³ TNA CAB 130/213, Minute, Sir B. Trend, *Possible reductions in British defence expenditure*, 17 Nov 1964.

Chequers weekend.⁴²⁴ One option that had been expressed by the Chiefs of Staff in early November 1964 was that there was “...scope for large savings without reducing our commitments, by giving up research and development in the aero-space industry and purchasing military aircraft from abroad. Foreign aircraft might possibly be built under contract in this country and might release highly talented research workers without causing widespread unemployment.”⁴²⁵ Such a move had been expressed as the preferred Ministry of Defence position if something had to give, even though, “[The MoD] realise that it will cripple the British aircraft industry; but many of them, including R.A.F. officers, have never thought a great deal of the aircraft industry.”⁴²⁶ The constant delays and cost overruns to programmes, combined with apparently substandard equipment compared to American aircraft undoubtedly drove this viewpoint. If procurement decisions were purely driven by the needs of the military then this position would have been the straightforward negotiating stance in Washington and beyond. The political position, therefore, represented a middle ground between the military application focused position of the MoD, and the need to achieve a balanced domestic economy, particularly with regard to putting a large skilled workforce out of work. The preference for continuing with aspects of R&D offers an explanation as to why the P.1127 V/STOL aircraft was not mentioned in the pre-Washington discussion. The P.1127 represented a cutting-edge technological advance in a relatively cost-effective frame, albeit one that was considered developmental in nature rather than suitable for front line employment. The inclusion

⁴²⁴ TNA CAB 130/213, *Minutes, Cabinet; Chequers, 10.30am, 22 Nov 1964.*

⁴²⁵ TNA DEFE 4/176, *Minutes of Chiefs of Staff Committee, Tues 10 Nov 1964, 67th Mtg/64.*

⁴²⁶ TNA FO 371/179120, Memo, G. Arthur, *Item.2: Matters for discussion at OPD(O). Defence Expenditure*, 13 Nov 1964.

of the front-line Shackleton replacement alongside the three main programmes demonstrates that, unlike P.1127, it sat outside of the preferred R&D fields and was therefore suitable for cancellation and replacement provided there was sufficient American support.

The aims for the Washington talks were aligned during the Chequers meetings and comprised firstly of a reduction in the British forces contributed to NATO and retain the Middle East and Far East commitments but with an emphasis on the need to share the burden of logistics with the United States. Secondly to press for Anglo-American co-operation in arms production and R&D, and to encourage the United States to purchase British equipment. Finally, the Government would continue to oppose the MLF, and to push the concept of the ANF as an alternative.⁴²⁷ The pre-Summit briefing pack focused heavily on the key message of why Britain had to reduce defence spending, and how the United States could assist should it so wish, with the intent for the delegation to emphasise that without American help there would have been a scaling back of commitments.⁴²⁸ It did, however, come with the caveat that, “...substantial savings in defence expenditure might be achieved through greater co-operation with the United States...[but] such co-operation should not include either handing over British commitments to the United States or getting involved in South Vietnam.” The brief concluded with, “The only way in which substantial short- and medium-term economies could be achieved would be through American financial

⁴²⁷ TNA CAB 130/213, *Minutes, Cabinet; Chequers, 10.30am, 22 Nov 1964.*

⁴²⁸ TNA CAB 133/266, Brief, *Washington & Ottawa talks; December 1964, Defence Issues and Expenditure*, 2 Dec 1964.

assistance in the provision of military equipment.”⁴²⁹ In order to prompt the Americans into providing financial assistance there had to be an incentive. This took two forms, firstly that of tempting McNamara the salesman into offering the TFX as a discounted export sale to Britain, and secondly by stating that the worldwide role could be continued if such assistance was forthcoming. Healey executed this plan to perfection, and whilst it did not come as a complete surprise to the American side, it demonstrated just how highly they prized the British worldwide role. The most visible manifestations of this post-Washington were the decisions over the aircraft programmes, yet outside of the TSR.2 and TFX matter, they did not feature that prominently in the discussions.

The theme throughout the preparatory discussions for Washington was one of the need to economise on defence spending, and aircraft procurement was central to this. Despite this, the minutes and accounts of the meetings in Washington show very little discussion of the wider aircraft programmes outside of the TSR.2 and TFX, and even in the case of this programme it was more of a lead-in to the broader notion of favourable American support. Dockrill and Colman do not mention the TFX nor any other procurement discussions at all in their studies of the Summit, as their focus is instead given to the MLF question, yet when considered against the MoD need for producing large economic savings and how to best win favour with America this appears an oversight.⁴³⁰ The aircraft programmes were central to both of these aims. When considering price escalation, the costs per man within the defence budget for

⁴²⁹ TNA DEFE 6/95, *Defence Policy Notes 1-19*, DP Note 31/64, *Briefs for the Prime Minister's visit to Washington. United States support for United Kingdom commitments, Note by the Directors of Defence Plans*, 24 Nov 1964.

⁴³⁰ Colman, *A 'Special Relationship'*, pp. 37-45 and Dockrill, “Forging the Anglo-American global defence partnership” pp. 107-129.

the RAF had increased from £4300 in 1959/60 to £5675 by 1964/65, which was still second to the Navy's £5125 and £7175 over the same period.⁴³¹ The significant growth area was however in the costs of procuring domestic aircraft for the RAF, which had risen dramatically over a similar period, with the cost per aircraft, excluding R&D, having risen from £250,000 for the Canberra to £2.8m for TSR.2. In addition, the TSR.2 was expected to have an additional £2m of R&D costs per airframe.⁴³² It was therefore not a case of the wider RAF costs representing a wildly out of control segment of the budget that needed to be reined in, but instead the ever-increasing expense of a technologically advanced Service. The worldwide role that Wilson was determined to see retained could not have been achieved without the capabilities of the RAF, in particular the heavy strategic air transport role of the HS.681, and the long-range strike capabilities of the TSR.2. This placed pressure on the need to retain the role, but at reduced costs.

Alongside the pure expense of developing and purchasing the aircraft, the majority of the discussions centred on the need to free up technologically skilled workforces to aid in the regeneration of the economy.⁴³³ Thus the aviation industry as a whole represented a significant opportunity for cutting costs and pushing forward the 'white heat of technology' movement. The briefing material for the Summit included summaries on the aircraft programmes that could be substituted for American alternatives. This listed the Shackleton replacement alongside the three established and priority programmes. Immediately after the conclusion of the talks a

⁴³¹ TNA CAB 148/40, OPD(O)(64)9 (revised), *The future size of the Defence budget*, 11 Nov 1964.

⁴³² TNA CAB 148/40, *The future size of the Defence budget*, 11 Nov 1964.

⁴³³ TNA CAB 148/40, *The future size of the Defence budget*, 11 Nov 1964, also see TNA DEFE 4/176, *Minutes of Chiefs of Staff Committee, Tues 10 Nov 1964* and TNA CAB 130/213, *Minutes, Cabinet; Defence Policy, Chequers, 10.30 am 22 Nov 1964*.

party from the Ministry of Defence and the Ministry of Aviation quietly visited the USA to examine the options and capabilities of the TFX, F-4, C-130, C-141 and the P-3 Orion. The visit, led by Deputy Chief of the Air Staff (DCAS), Air Marshal (AM) Hartley, further demonstrated that the RAF were keen to consider the option of the P-3, even if politically it was held in the background.⁴³⁴ Extant works on the period do not mention the Shackleton replacement alongside the TSR.2, P.1154 and HS.681. Should these three have been substituted for TFX, F-4 and C-130 then the savings were forecast to be in the region of £250m, £183-213m and £128m respectively.⁴³⁵ The Shackleton replacement was at this stage still in the competition phase, but the Comet option appeared to be the leading candidate, and selection of the Orion aircraft would have seen savings of £40m over the Comet.⁴³⁶ Therefore detailed studies and numbers were made available to the British delegation to aid in informing the discussions, alongside the suggestion of encouraging the United States to join the Concord programme and share these development costs as well.⁴³⁷

These elements were not discussed in the recorded meetings in Washington, and there is no way for certain of knowing what was covered in all the off-the-record discussions. Colman, as one of the few academics to examine the Summit in any detail notes that the private talks between Wilson and Johnson went un-recorded, however other off-the-record meetings were noted down by the participants after the event, such as that which took place at 4:45pm on 7 December between Johnson, Wilson and

⁴³⁴ TNA FO 371/178944, *US-FRG-UK Collaboration*, Letter, Dole, MoD, to Graham, FO, *Fact Finding Mission to Washington*, 11 Dec 1964.

⁴³⁵ TNA CAB 133/266, Brief, *Washington & Ottawa talks; December 1964, Defence Issues and Expenditure*, 2 Dec 1964.

⁴³⁶ TNA CAB 133/266, Brief, *Washington & Ottawa talks*.

⁴³⁷ TNA CAB 148/40, P.M.V.(64)20, Brief, *Washington Talks: December 1964; Concord*, 3 Dec 1964.

staff.⁴³⁸ It seems likely that if any further deliberations on the wider aircraft programmes did take place on the matter, they would have been restricted to personal conversations between the leaders, but there is nothing to suggest such matters were discussed.

The record suggests therefore that holding the British to the worldwide role was so important to the Johnson administration, and that securing American financial assistance for defence spending and the stability of sterling was of such paramount importance to the Wilson government, that however these goals were arrived at was almost irrelevant at this stage. This would explain why the talks included vague references to R&D in the generic sense, rather than in particular fields such as aircraft production as would follow in the early months of 1965. Healey's memoirs give a passing reference to the Chequers meetings in the context of the MLF, but no reference to the Washington summit beyond the MLF question.⁴³⁹ This is despite his prominent role in the discussions and in securing his broader defence budget objectives. The American record of the meetings cover Wilson highlighting the need develop interdependence on R&D, to make cuts on prestige projects and "...some types of defense expenditure."⁴⁴⁰ Wilson did not see this as worthy of mention in his memoirs, as comment on R&D and procurement are missing from his recollections.⁴⁴¹ Yet in his address to Cabinet after returning to London, Wilson was keen to point out that Johnson had "...willingly endorsed our suggestion that both countries might profit from a detailed examination of the possibilities of closer co-operation on the defence

⁴³⁸ *FRUS* 1964-1968, Vol. XII, Document 237, *Record of Meeting; Johnson, Wilson et al*, 7 Dec 1964, 4:45-6:00pm – notes were compiled by Ackley.

⁴³⁹ Healey, *The Time of My Life*, pp. 304-314.

⁴⁴⁰ *FRUS* 1964-1968, Vol. XII, Document 237.

⁴⁴¹ Wilson, *The Labour Government*, pp. 37-50 covers the period from Chequers to Washington.

research and development and in weapons production.”⁴⁴² Such positivity suggests that at the time Wilson was far more confident of what lay ahead, yet once it came time to write his memoirs the virtual defeat resulting from the devaluation of the pound, economic woes and the withdrawal from East of Suez coloured his opinion of the importance of this outcome.

The positive tone expressed by Wilson immediately after his return was reflected throughout the remainder of his Cabinet address, where he portrayed the visit as a roaring success. Wilson stated that the Johnson administration truly understood the value of Britain’s worldwide role, and that the burden that both it and defence spending generally had placed on the economy was too great to be sustained.⁴⁴³ In Washington, Secretary to the Treasury Dillon, who had answered on behalf of Johnson, informed Wilson in a manner akin to a rebuke that previous economic statements by Wilson and his Cabinet had had a negative impact on the economic situation, and contributed to the worsening of the position of sterling.⁴⁴⁴ Despite this, Wilson only presented a positive response to Cabinet that “...Johnson had indicated his political sympathy with the steps which we had already taken to rectify our balance of payments.”⁴⁴⁵ This positivity continued in the coverage of the MLF and onto the matter of Vietnam, where Wilson stressed that he had successfully resisted American pressure to stand up a military presence in the country, and dismissively mentioned that he had “...merely undertaken to increase slightly the various types of support facility which we already provided... [to South Vietnam].”⁴⁴⁶

⁴⁴² TNA CAB 128/39, Minutes, *Cabinet Conclusions*, 11 Dec 1964.

⁴⁴³ TNA CAB 128/39, Minutes, *Cabinet Conclusions*, 11 Dec 1964.

⁴⁴⁴ *FRUS* 1964-1968, Vol. XII, Document 237.

⁴⁴⁵ TNA CAB 128/39, Minutes, *Cabinet Conclusions*, 11 Dec 1964.

⁴⁴⁶ TNA CAB 128/39, Minutes, *Cabinet Conclusions*, 11 Dec 1964.

For Johnson, the failure to secure a British commitment on troop deployments in Vietnam signalled the summit as being a partial failure. There was no commitment by Wilson to even make a public statement of British support for the American cause in South-East Asia. Bundy had to try and convince Johnson that the talks had been of value, which portrays the American reaction as being the polar opposite to that of Wilson.⁴⁴⁷ There was tentative commitment over the purchase of TFX, which could be considered a successful outcome but for the fact that it came in response to the British request for financial and military aid. Therefore in terms of presentation it demonstrated a success for the revolutionary model of consolidated defence aircraft production championed by McNamara, however on the face of it there was no immediately identifiable economic benefit to the United States. Politically there is nothing to suggest that Wilson went up in Johnson's estimations. Johnson was a president too focused on domestic affairs to overly concern himself with the international scene, as could be seen in the decision to delegate many of his responses during the talks to his advisors.⁴⁴⁸ The blunt, old-fashioned personality of Johnson as a man who had been thrust into the presidency in the first instance through misfortune, was according to G. M. Craig, one who saw the workings of the world beyond the United States in "...rather conventional, even simple, terms."⁴⁴⁹ He was always going to struggle when confronted with Wilson, who, in the words of Peter Hennessy, had spent his whole life preparing for the role of national leader, "...[and] couldn't wait to be Prime Minister."⁴⁵⁰ Wilson saw the opportunity to make a mark on the world stage

⁴⁴⁷ Colman, *A 'Special Relationship'*, p. 45-46.

⁴⁴⁸ For examples see comments by Dillon and Martin in *FRUS* 1964-1968, Vol. XII, No.237.

⁴⁴⁹ Craig, "President Johnson's Victory", p. 83.

⁴⁵⁰ Hennessy, *The Prime Minister*, pp. 287.

as vitally important, whereas Johnson saw the visit by the British prime minister as an inconvenience. Therefore Wilson was always going to come away from the talks with a greater sense of satisfaction regardless of the details discussed. This would help explain why a large amount of the discussions were kept rather vague, despite the detailed preparation of negotiating positions.

These vague sweeping gestures allowed Wilson to take the optimistic line from the talks, and whilst there was no monetary value placed on American financial support, there was also no sense that the United States was going to withdraw their support for sterling at this stage. In the short term this represented the biggest success for Wilson as it served to reassure the financial markets of the viability of the measures introduced by Callaghan. The statement released by Wilson and Johnson was as similarly vague as the discussions, covering sweeping statements on the need for international stability, further talks on the MLF and nuclear weapons generally, and the requirement for close co-operation acted out in a financially viable manner.⁴⁵¹ What was missing was any specific mention of aircraft procurement. Much in the same manner as Wilson's subsequent briefing to the Cabinet, there was reference to "closer cooperation between [the] two countries in defense research and development and in weapons production."⁴⁵² Yet this fails to reflect the specific coverage of TFX given by Healey and McNamara in particular. It certainly gives no suggestion that the other aircraft, including the Shackleton replacement, had been addressed or a decision arrived at. At the Labour conference in Brighton on 12-13 December neither Wilson nor Brown, as the keynote speakers, referred to the Washington talks.⁴⁵³ The inference

⁴⁵¹ Staff writer, "Text of Wilson-Johnson Communique", *The New York Times*, 9 Dec 1964.

⁴⁵² Staff writer, "Text of Wilson-Johnson Communique".

⁴⁵³ Political Correspondent, "Mr. Wilson Goes on the Defensive", *The Times*, 14 Dec 1964.

from this being that, much like the initial press releases, the possible implications of taking the Americans up on the offer of aircraft sales would require further difficult discussions with the British aviation industry.

The Washington talks were focused on defence policy and direction, but predominately in the vague, general sense of reaffirming the Anglo-American bond, rather than firmly establishing a new direction. The threat posed to British interests by the MLF and the ambitions of France and Germany highlighted that the Special Relationship could not be allowed to remain static. That Johnson was prepared to meet Wilson so soon after his own re-election demonstrated that regardless of movements on the European continent, Britain was still an important ally to the United States. The test of this closeness was the American wish for British military support in Vietnam, yet the stubborn refusal of Wilson to yield on the matter should have damaged the relationship. Such a negative outcome did not occur, and this could be attributed to the machinations over procurement. By showing a willingness to join Germany, Italy and others in purchasing American equipment, albeit under different terms, Britain was able to maintain American financial support without the politically difficult, over-reaching and expensive military commitment that would have come with sending troops to Vietnam. The relationship with America over foreign policy was predicated during this period with the American desire to see Britain maintaining the East of Suez commitment to both share the burden of supporting Western ideals, but also the increasing American presence in Vietnam. America did not act at the Washington Summit in a purely altruistic manner, as American interests must always be considered to have primacy in any relationship, even with one considered to be exceptionally close. Britain was, to them, an ally of first among equals in Europe. The

British relationship with the European nations was significantly different, however also represented an essential facet on the road to replacing the Shackleton and the use of the aviation industry to shape Britain's place in world affairs during the period.

CHAPTER 4 – THE EUROPEAN DIMENSION

The nature of the relationship between the United States and Britain was one of a patron and client, and the manner in which both countries used the procurements reflected this. The relationship between Britain and the European nations was distinctly different, in which the focus was more of Britain competing with France in particular to be the first among equals on the continent. Aside from the three main procurement choices, the comparatively minor military programmes and the major civilian project of the supersonic Concorde airliner reflected British ambitions towards European integration. The focus of British foreign policy had continued to shift from East of Suez towards the continent of Europe since the end of the Second World War, and was thus a core element of British defence policy, even though the thawing in the relationship between the USA and USSR had lessened the immediate threat of a major land war in Europe. The economic realities highlighted by the balance of payments and sterling crises had reinforced the ever-increasing importance of the European market for British goods and by the mid 1960s it exceeded that of the Commonwealth. Not all domestic political figures were unified in accepting the ever more noticeable transition from a Britain as a global power with the Commonwealth at its core, towards one with the status of a European power where Britain was but one of several players within a much smaller arena. Defence spending and geographic economic priorities go hand in hand, particularly when considered in the context of a domestic defence industry. The need to rationalise the industry with increased international co-operation in both the expense of research and development and production resulted in an increased number of projects with European allies, and particularly the French. Uncoincidentally, the

French president, General Charles de Gaulle, held the key to Britain's application to join the group of six countries that made up the European Economic Community. The expansion of joint aircraft programmes in both the civilian and military fields was deeply intertwined with the British need to further ties with the continental European powers and demonstrate to General de Gaulle that they could be good Europeans, meriting of inclusion in an expanded EEC.

This chapter will examine the significance of the British relationship with Europe throughout the period encompassing both the political and economic spheres and the role of the aviation industry. It will firstly examine the differing positions of British political figures in either embracing or decrying the building of closer ties to the European Economic Community as defining characteristics of a broader British movement towards acceptance of regional power status. Secondly the attention given to understanding and appeasing the central figure of de Gaulle as a key element of this policy during the period will be examined. These two aspects are tied together with the decision to continue with the Concord programme, demonstrating both the utility of the aviation industry to meet political objectives, and also to the allocation of work within the sector and the implications of this for the selection of the Shackleton replacement.

The defence procurement relationship with Europe differed from that with the United States with a focus on collaborative development rather than the transactional nature of the trans-Atlantic arrangements. The most significant military or civil programme of the period was Concord, with the decision to continue with the project driven by political imperatives against the stated economic priorities of the Labour ambition to cut expensive prestige projects and realign the domestic aviation industry.

The proposal of the Atlantic collaborative maritime patrol aircraft would have represented a cost-effective solution for replacing the Shackleton. Yet when placed alongside Concord, both programmes would have addressed the same British political ambitions of building closer ties with the EEC, and particularly with France under de Gaulle, and as such there was no political imperative to duplicate effort in this area during this period, particularly as Concord was a far more powerful tool for gaining favour with the French president.

The increasingly proactive nature of post-war British foreign policy towards Europe had been highlighted by contemporary authors such as Younger and Wallace, who placed it as transitioning from the “sectoral policy” of trade and commerce to the “high policy” realm of national significance with increased involvement of the Foreign Office and Cabinet.⁴⁵⁴ To observers such as Ponting, Europe represented the primary avenue for Britain to remain a key world power.⁴⁵⁵ Relatively recent writers such as Milward see this as being a willing move, whilst others writing closer to the period such as Northedge saw it as a near defeatist result of declining British power and the retreat from Empire.⁴⁵⁶ The continental economies, particularly those countries most ravaged by the war, were quickly rebuilt and had outpaced British growth by 4.9% to 2.9% during 1953-1961, despite all sharing the extensive support of the American Marshall Plan, aided, as Owen has pointed out, by having large agricultural workforces

⁴⁵⁴ K. Younger, “Public Opinion and British Foreign Policy”, *International Affairs*, Vol.40, No.1 (1964) p. 29 and W. Wallace, *The Foreign Policy Process in Britain* (London: RIIA, 1975) p. 13.

⁴⁵⁵ Ponting, *Breach of Promise*, pp. 204-206.

⁴⁵⁶ A. Milward, *Politics and Economics in the History of the European Union* (Abingdon: Routledge, 2005) p. 55 and F.S. Northedge, “Britain as a Second-Rank Power”, in *International Affairs*, Vol.46, No.1 (1970) p. 40.

that could move across to the growing industrial sectors.⁴⁵⁷ The importance to successive British governments of maintaining the relationship across the Atlantic as the first priority is emphasised by Wallace as the Anglo-Saxon mentality of A.J.P. Taylor, with the Suez Crisis of 1956 marking a crucial turning point in the need a balance between the two priorities.⁴⁵⁸ The position of exceptionalism until this point had no choice but to give way to one of pragmatism in the 1960s. This view was held by Woodward in 1968 and a year later by Edward Heath, writing on this need for realism in British overseas policy in *Foreign Affairs*, where he stated that since the end of the war, “...farsighted Englishmen have seen that the movement for European unity holds enormous benefits for Britain.”⁴⁵⁹ Ever closer ties to the European mainland were an increasingly prominent component of British policy, and the technologically advanced field of aircraft development and procurement was well positioned to serve as a tool for this.

That there was a drive toward collaborate aircraft development with Europe was not mirrored with a policy of pursuing the outright purchase of off the shelf platforms from France, Italy or Germany, as was seen in the nature of the transactional aircraft procurement relationship with the USA. The political need to impress on European governments that Britain was keen to be an active participant in European affairs could be met by longer term programmes that would see the financial costs and operational benefits shared between nations. The short-term nature of the crisis over the balance of payments in autumn 1964 and the need to ensure financial and

⁴⁵⁷ Milward, *Politics and Economics*, p. 42 and Owen, *From Empire to Europe*, p. 31.

⁴⁵⁸ W. Wallace, “Foreign Policy and National Identity in the United Kingdom”, in *International Affairs*, Vol.67, No.1 (1991), p. 72.

⁴⁵⁹ L. Woodward, “British Foreign Policy in Retrospect”, in *International Journal*, Vol.23, No.4 (1968) p. 519 and E. Heath, “Realism in British Foreign Policy”, in *Foreign Affairs*, Vol.48, No.1 (1969) p. 40.

industrial savings to stabilise both the economy and Britain's standing did not lend itself to long term thinking, within which the continuation of the Concord project stood out as an exception. Undeniably technologically advanced, and representing the white heat of technology, the extent to which it was a political programme first and technological second is central to understanding the lengths to which activity within the aviation industry could be both a reflection and driver of Britain's efforts to forge a new role in the world during the period.

The political landscape of Europe was not solely shaped by the burgeoning EEC. The division of Europe at the end of the Second World War created a Soviet sphere of influence and centred the political tensions of the Cold War on the continent of Europe. These tensions reached their peak just prior to the period under study. In 1961, tensions between the occupying powers in Germany reached their zenith with the building of the Berlin Wall along the demarcation line around West Berlin, and the ratchetting up of pressure with the subsequent positioning of heavy armour at the crossing points.⁴⁶⁰ The erecting of the wall and constant threats to political stability highlighted the continued importance for Britain of maintaining an effective and sustained military presence in Europe, despite the increasing costs. The continued posturing suggested that the attentions of both the USA and the USSR would be centred on the continent and that as such a strong NATO with America at the head was required to ensure stability for Western Europe.

This rise in Cold War tensions playing out in Europe was followed in 1962 by the nadir of east-west relations during the Cuban missile crisis. The crisis developed

⁴⁶⁰ J.L. Gaddis, *We Now Know; Rethinking the Cold War* (Oxford: Clarendon Press, 1997) p. 115 and T. Aono, "'It Is Not Easy for the United States to Carry the Whole Load': Anglo-American Relations during the Berlin Crisis, 1961-1962", in *Diplomatic History*, Vol. 34, No. 2 (2010) p. 348.

through the Soviet move to position ballistic missile on the island of Cuba, placing the USA for the first time within range of weapons that would offer minimal warning time and increasing the threat of an effective first strike capability for the USSR.⁴⁶¹ The brinksmanship that played out and ultimately resolved the crisis over six days in October 1962 was a direct resolution between the two superpowers in a manner which not only bypassed the traditional negotiating roles of the European powers, but also the continent of Europe itself. For the first time since the Korean War the focus shifted from Europe and presented the opportunity for a relationship with the principles of détente at its core. The balance between possessing the deterrence threat of nuclear weapons as a means of maintaining stability and political influence against the risks of a similar crisis in the future saw Britain remain firmly within the nuclear camp with the Nassau Agreement in December 1962. The agreement saw the USA agree to provide Polaris submarine launched ballistic missile systems with full British control of the warheads in place of the recently cancelled American made air-launched Skybolt programme.⁴⁶² Despite the reliance on American technology, the procurement of Polaris was seen in the British press at the time as a means of retaining Britain's independent nuclear force, even though questions were raised over how independent the system could truly be when American political influences would always be hovering in the background.⁴⁶³ To historians such as Kennedy, nuclear weapons allowed Britain a cost effective means of remaining a world power, regardless of the lack of true independence in delivery and application.⁴⁶⁴ The issue

⁴⁶¹ W. Taubman, *Khrushchev; the Man and His Era* (New York: W.W. Norton, 2003) p. 530.

⁴⁶² TNA CAB 21/5967, Meetings between Macmillan and President De Gaulle in Paris and President Kennedy in Nassau December 1962, Memo, *UK delegation in Nassau to FO*, 21 Dec 1962.

⁴⁶³ Defence Correspondent, "Defence and the Effect of Polaris", *The Times*, 8 Jan 1963.

⁴⁶⁴ Kennedy, *The Rise and Fall of the Great Powers*, p. 370.

over who did or should have ultimate control over nuclear weapons within the context of NATO and the defence of the west would rear up fully as the MLF discussions advanced and ultimately failed in the winter of 1964. By the early 1960s it was not just Britain that possessed nuclear weapons within Europe, for the French had developed a truly independent capability with their first successful test in February 1960.⁴⁶⁵ The rejection of a Kennedy offer of Polaris by de Gaulle on 14 January 1963 was in part driven by the French desire to maintain a fully independent capability – a reflection of their position on the MLF and later NATO.⁴⁶⁶ The stance in Britain, shaped by the perception that the special relationship was a vital and core element of British foreign policy underpinned the acceptance that a compromised nuclear deterrent was a worthy price to pay to demonstrate the role Britain could still play for the USA, both within Europe and the wider world.

The close alignment of Britain to the United States, both politically and in the shape of the ultimate military capability formed a key point of friction for Britain's relationship with France and thus any possible entry into the EEC. The EEC had developed as an economic trading arrangement with the founding of the European Coal and Steel Community at the Treaty of Paris in 1951, and subsequently expanded in scope to the fuller EEC at the Treaty of Rome in 1957, with the stated long term aim of bringing Europe closer together politically and staving off the risk of yet another costly war among European nations.⁴⁶⁷ The history of these early years of the EEC prior to the period under examination can be found in works such as Milward's *The*

⁴⁶⁵ Martins, V., 'Deterrence', University of Luxembourg – CVCE.EU, 25 Oct 2016.

⁴⁶⁶ Martins, 'Deterrence', CVCE.EU, 25 Oct 2016.

⁴⁶⁷ A. Milward, *The European Rescue of the Nation State, 2nd Edition* (London: Taylor & Francis, 2000) p. 1.

European Rescue of the Nation State, and Gillingham's *Coal, Steel, and the Rebirth of Europe, 1945-1955*.⁴⁶⁸ An expectation of members having reduced economic ties to former colonial nations put Britain at odds with the concept of the Community in its formative years, but as the positive impact of the EEC became more apparent, and as the economic and social ambitions aligned with British policy, so the position of Britain remaining on the outside became more challenging to justify.⁴⁶⁹

There is no clear-cut answer as to whether the British political establishment was truly committed to the principle of joining the EEC during this period. Certain politicians across the parties were in favour, whereas others were vehemently against. This is a key aspect to understanding how aircraft procurements both shaped and reflected the relationship, as the decisions over Concord and the ramifications for the wider aviation industry would not have taken place without a concerted effort by political figures to tie the country more closely to the Continent. The political divisions mean that a sweeping statement incorporating the idea of an entire country having a shared viewpoint is impossible. What can be assessed though is that even if there was not a full bore attempt to overturn the veto of de Gaulle by the mid-1960s, there was a tacit understanding that all avenues should be left open should an opportunity emerge that would prove beneficial to Britain as a whole, but would also allow for the more amorphous notion of remaining at the top table of global politics and for the associated close alliance with the United States to remain.

⁴⁶⁸ Milward, *The European Rescue of the Nation State*, 2nd Ed. and J. Gillingham, *Coal, Steel, and the Rebirth of Europe, 1945-1955; The Germans and French from Ruhr Conflict to Economic Community* (Cambridge: Cambridge UP, 1991).

⁴⁶⁹ TNA EW 5/13, Economic Implications of United Kingdom Membership of E.E.C. – Management of the Economy, Memo, Forsyth (Treasury), *Management of the Economy*, 9 Jun 1966.

Hugh Gaitskell, whose wider career is thoroughly covered by biographers such as Brivati and Williams, was the Labour leader in opposition from 1955 until his death in January 1963.⁴⁷⁰ As leaders, Gaitskell and Wilson took very different approaches, with Wilson described by Ponting as “...emphasising consensus at the expense of conflict.”⁴⁷¹ An unsuccessful earlier leadership challenge by Wilson in 1960 at the Labour party conference centred on the need to retain nuclear weapons and saw an easy win for Gaitskell, but by the time the conference came around the following year Gaitskell had moved to a more pro-nuclear stance.⁴⁷² The potential to change his position on key policy aspects did not appear to extend to the question of joining the EEC, where he was the most outspoken of the major political figures of the time and thus shaped Labour party thinking on the matter during the period. At the 1962 conference Gaitskell stated that he was firmly against any prospect of a federalised Europe as it would “...end one thousand years of history...” and result in the break-up of the Commonwealth.⁴⁷³ His opinion was that there was no guarantee that Britain would be better served as a member of the EEC, and that the Commonwealth was a more important trading block, whilst also losing the ability to negotiate independent trade agreements would be too heavy a price to pay.⁴⁷⁴ Gaitskell’s position was not universal within the Labour party, with Jenkins, at the same 1962 conference, stating in his speech that, “Those of us who believe as I do are still as convinced as ever that Britain’s destiny lies with Europe and that unless we go in we shall be both poorer and

⁴⁷⁰ B. Brivati, *Hugh Gaitskell* (London: Richard Cohen, 1996), P.M. Williams, *Hugh Gaitskell: A Political Biography* (London: Jonathon Cape, 1979) and Staff writer, “Obituary; Mr Hugh Gaitskell”, *The Times*, 19 Jan 1963.

⁴⁷¹ Ponting, *Breach of Promise*, p. 11.

⁴⁷² Staff writer, “Obituary; Mr Hugh Gaitskell”.

⁴⁷³ Our Own Correspondent, “Conference back Labour stand on Common Market”, *The Times*, 04 Oct 1962.

⁴⁷⁴ Our Own Correspondent, “Must ask six for precise trading agreements”, *The Times*, 22 Sep 1962.

weaker than we are now.”⁴⁷⁵ When he died in early 1963, Gaitskell’s autumn 1962 speeches of were described in his obituary in *The Times* as, “...mounting the most formidable anti-European case which had yet come from any British politician.”⁴⁷⁶ Yet the same obituary also gave him a more middle ground position saying that “...his cautious approach to it [the EEC] exposed him to the charge of sitting on the fence. During 1962 he steadily resisted demands that his party should declare itself for or against, and was content for many months to play a waiting game.”⁴⁷⁷

As the Labour leader for eight years and a former chancellor in the Atlee government, Gaitskell’s opinions held great sway over the party as evidenced in his sweeping aside of Wilson in 1960 with votes of more than two to one. Gaitskell’s strategy of sitting on the fence and waiting to see how things played out undoubtedly influenced Wilson’s position on the EEC, as evidenced when he used a speech to the southern region of the Labour party in early 1965 to recite all the key aspects of Gaitskell’s policies, “Entry into the Common Market at the present time is not a real issue. If it were to become one we should be prepared to consider negotiations for entry if, and only if, we can secure those conditions vital to British interests, vital to Commonwealth interests and vital to the pursuit of an independent foreign policy...but we are prepared to take any measures that are open to us to end the costly economic division of Europe.”⁴⁷⁸ The absence of overt declarations of enthusiasm for closer ties to Europe are possible reasons for writers such as Ian Buruma seeing the early years of the Wilson government as a time when Wilson was actively engaged in keeping Britain

⁴⁷⁵ Our Own Correspondent, “Conference back Labour stand on Common Market”, *The Times*, 04 Oct 1962.

⁴⁷⁶ Staff writer, “Obituary; Mr Hugh Gaitskell”.

⁴⁷⁷ Staff writer, “Obituary; Mr Hugh Gaitskell”.

⁴⁷⁸ Staff Writer, “Mr. Wilson says: ‘We welcome advice but we decide’”, *The Times*, 22 Feb 1965.

out of the EEC, however the continuation of the huge investment in Concord with its central political dimension runs counter to this viewpoint.⁴⁷⁹ Denis Healey's position was closer to Gaitskell than Wilson, but not for the same reasons of loyalty to the Commonwealth. Healey saw the economic arguments of dropping trade barriers and tariffs within the bloc as being reflective of "...the crudest [elements] of nineteenth century dogmatism...[as] tariffs were far less relevant to the flow of international trade than exchange rates."⁴⁸⁰

The cautious tones of Wilson and Healey were not reflected in those of Jenkins, nor those of the Foreign Secretary Gordon Walker, whose favourable discussions with a German delegation at the WEU in late 1964 resulted, in the interpretation of *The Times* correspondent, as "...removing any persisting reservations in the minds of the Federal Government about British Labour Government's aims in Europe."⁴⁸¹ Positivity on a potential British entry was not universal within German political spheres, with Ball writing in his memoirs that Adenauer had been suspicious of British intentions, and that membership would be a hinderance rather than accelerator of EEC growth. Adenauer's view was primarily directed at Macmillan, having asked Ball in late 1962 that, "...you don't think for a minute that Harold Macmillan is really ready for Europe, do you? You don't think he is ready to get on the European bus?"⁴⁸² Adenauer, described by Adam Seipp as a towering figure of German politics, understood the need for increased European integration and normalised relations, particularly with the

⁴⁷⁹ Buruma, *The Churchill Complex*, p. 110.

⁴⁸⁰ Healey, *The Time of My Life*, p. 210.

⁴⁸¹ Our Own Correspondent, "Mr. Gordon Walker convinces Bonn of British sincerity", *The Times*, 18 Nov 1964.

⁴⁸² Ball, *The Discipline of Power*, p. 83.

France of de Gaulle.⁴⁸³ His policies were seen by some as belonging to a former era, with John F. Kennedy describing him in 1960 as “...too rigid and unyielding to changing currents in European politics.”⁴⁸⁴ His successor, Erhard, was more firmly tied to America – a position that reduced his ability to influence American policy but also as a result had a negative effect on Franco-German relations.⁴⁸⁵ Any doubts though over the British intentions did not deter Gordon Walker’s successor at the Foreign Office, Michael Stewart, who used his first speech to emphasise that Britain was a European power, with a focus on seeing progress towards the ultimate aim of political unity on the continent.⁴⁸⁶ He did also state that the Atlantic Alliance was an essential element of European policy, a position that, coming amidst the fall of the MLF, would not have been warmly received by the French who were growing increasingly distrustful of NATO and Britain’s ties with America, and highlighted the challenging balancing of relations with the United States and Europe that were reflected in the aircraft procurement choices.⁴⁸⁷ This position was also held by Callaghan, who told Wilson in 1966, that “we cannot ditch the Atlantic Alliance for the sake of getting into Europe...”⁴⁸⁸ This position was shared during the period by officials within the Foreign Office in that, “we are not going to reverse our policy towards the U.S.A. in NATO and Vietnam as the price of our admission.”⁴⁸⁹

⁴⁸³ A. Seipp, ‘A Reasonable “Yes”’: The Social Democrats and West German Rearmament, 1945-1956’ in Ed. J.S. Corum, *Rearming Germany* (Leiden: Brill, 2011) p. 56.

⁴⁸⁴ B.C. Etheridge, *Enemies to Allies: Cold War Germany and American Memory* (Lexington: Kentucky UP, 2016) p. 165.

⁴⁸⁵ Mierzejewski, *Ludwig Erhard*, p. 186.

⁴⁸⁶ Our Special Correspondent, “Britain presses for seat at European unity talks”, *The Times*, 12 Feb 1965.

⁴⁸⁷ Special Correspondent, “Britain presses for seat at European unity talks”.

⁴⁸⁸ TNA FO 371/188366, French attitude to UK entry to EEC, minute, Chancellor to PM, *FO notes on points*, 9 Dec 1966

⁴⁸⁹ TNAO FO 371/188366, Memo, Campbell to Statham, *The French Veto*, 28 Nov 1966.

The Conservative party, in power until the autumn election of 1964, held an equally varied selection of views over the merits of joining the EEC. Former prime minister Macmillan did not consider the question to be a simple choice between Europe or the Commonwealth as Gaitskell did.⁴⁹⁰ His biographer, Anthony Sampson saw Macmillan as never fully committed to Europe, unlike Edward Heath, who risked his whole career on Britain joining.⁴⁹¹ Heath's focus once Prime Minister was, in the view of Guy Arnold, unique as "...the only prime minister since 1945 who was wholly in favour of Britain in Europe and the only one who did not push the special relationship."⁴⁹² As Lord Privy Seal in 1962, Heath noted during a visit by future Australian prime minister Gough Whitlam, that the traditional British policy of "...divide and rule, or wielding the balance of power on the continent of Europe [could not] be brought into play...[and]...if we had not had the Commonwealth, but only our domestic interests to think of, the negotiations would probably have taken little more than a few weeks."⁴⁹³ Heath's position was that the motivations for joining the EEC were down to a necessity to maintain British influence on the continent rather than purely for the economic advantages membership could bring. The prioritisation of Europe over relations with the USA are most likely down to one of timings for Heath – for the early 1970s represented a continued quagmire for the United States in Vietnam alongside the economic pressures post-devaluation that could be lessened more by European integration than by the ties to America. His divide and rule position was not shared by academics such as Northedge, writing in 1974 shortly after Heath took

⁴⁹⁰ Our Special Correspondent, "Opportunity in Europe, says Mr. Macmillan", *The Times*, 11 Sep 1962.

⁴⁹¹ A. Sampson, *Macmillan, A Study in Ambiguity* (London: Bloomsbury, 2012) p. 222.

⁴⁹² Arnold, *America and Britain*, p. 93.

⁴⁹³ TNA FO 371/164814, Implications for Commonwealth of UK entry into EEC, Note, *FO; Visit of the deputy leader of the Australian Labour party*, 20 Jun 1962.

Britain into the EEC, who wrote that, “contrary to a common suspicion abroad that Britain’s European policy has always been in the spirit of divide and rule, British Governments have generally sought to reconcile the European Powers with one another and maintain a concert between them.”⁴⁹⁴ Heath’s pro-Europe position was also shared by Peter Thorneycroft as Minister of Defence in the final years of the Macmillan and Home governments, and Julian Amery, the then Minister of Aviation whom Annabelle May describes as “...perhaps the most committed European of them all.”⁴⁹⁵ The pro-European viewpoints of these ministers, and Jenkins as Amery’s successor after the 1964 election, show a clear belief within the political members of the aviation sector that Europe was an important pillar for both the political and economic aspects of policy and makes the support and choices made over collaborative projects such as Concorde and later the nascent Airbus programme logical. Of the military aircraft procurements on the table in late 1964, none went to a purely imported programme from a European power, with Concorde and shared smaller programmes and R&D being seen as the best means of using the aviation industry to further the broader political objectives over Europe.

Of the three main political parties, it was the Liberal party that was the most cohesive with their support of entry into Europe, but although they were a very distant third in the polls, several notable figures from the party were able to campaign for Britain joining the EEC. Mark Bonham-Carter told the Liberal party conference in 1962 that, “...[we are] a part of Europe and cannot escape the consequences of what happens there. We must, therefore, do everything in our power to exercise the

⁴⁹⁴ Northedge, *Descent from Power*, p. 143.

⁴⁹⁵ May, “Concorde – Bird of Harmony or Political Albatross”, p. 493.

maximum influence in this crucial area.”⁴⁹⁶ He expressed a fear, shared by Heath, that, “for the first time in many centuries Britain would be at the outside edge and not at the centre of world affairs.”⁴⁹⁷ The conference voted through support for membership and joining on terms of political union within a federalised Europe.⁴⁹⁸ Lord Gladwyn, by this stage a former British ambassador to Paris and the United Nations, was a notable cautionary to the Liberal view, for in 1966 he reiterated the other side of the balancing act that drove the reality of political action, stating in a letter to the Foreign Office that “...if we ever did enter such a Community it would be on the understanding that we should never break with America and that the European policy...should be cleared with the U.S.A.”⁴⁹⁹

The concern over how any proposed entry would be seen by the USA is a recurring theme, and, coming only a few years after the Nassau Agreement and with the special relationship still a key aspect of British policy, as seen in Wilson’s visit to Washington in December 1964, is not surprising. It was also a clear point of friction with the French and de Gaulle in particular, who stated to Pierson Dixon, British ambassador to Paris in January 1965 that “the United Kingdom was a kind of Trojan horse for American domination of Europe.”⁵⁰⁰ The Johnson administration was in favour of Britain joining, for a variety of reasons that could be said to contribute to the trojan horse fear of de Gaulle. Ball, the American Under Secretary of State, was the most ardent supporter within the administration, who pressed for Britain to join at the

⁴⁹⁶ Our Special Correspondent, “Enthusiastic Liberals call for Britain to join the six” *The Times*, 21 Sep 1962.

⁴⁹⁷ Special Correspondent, “Enthusiastic Liberals call for Britain to join the six”.

⁴⁹⁸ Special Correspondent, “Enthusiastic Liberals call for Britain to join the six”.

⁴⁹⁹ TNA FO 371/188366, Letter, Lord Gladwyn to Thompson, (FO), 2 Dec 1966.

⁵⁰⁰ TNA DEFE 25/200, France and NATO, Briefing Paper, *France and NATO*, 6 Jun 1965.

earliest possible opportunity, regardless of the complications of trade with the Commonwealth.⁵⁰¹ Wilson described Ball in his memoirs as "...a committed pro-European...a fanatic of European unity."⁵⁰² Ball wrote in 1968 that, "If Britain can be persuaded to concentrate on the central objective of playing a major European role, the United States can well afford to forgo the evanescent advantages of a benign British presence in the Far East."⁵⁰³ This would have represented a significant shift from the near desperate actions in late 1964 and early 1965 over McNamara's hard sell on the F-111 as a tool for retaining British support East of Suez. Ball's motivations were seen within the Foreign Office as exactly what de Gaulle feared, with the hope of firstly British leadership within the EEC, and to then use this strengthened position to increase the worldwide military role of Western Europe beyond that which Britain alone could support.⁵⁰⁴ In the era of increasing American commitments to Vietnam the need for Western support beyond simply that of Britain across the globe was increasing and within the procurement landscape was apparent in the selection of the F-111 as the TSR.2 replacement alongside the ability of the C-130 to increase global airlift capabilities of the RAF. Wilson did not put great store on Ball's enthusiasm as being reflective of Johnson's personal feelings, most likely swayed by the preference for the special relationship, as he commented that, "...the President is not personally interested in the E.E.C., and one word about France's condition being the renunciation of the link with the United States would end it."⁵⁰⁵ American interest in the EEC did not

⁵⁰¹ TNA FO 371/188362, Discussions with US on UK entry to EEC, Letter, Dean (Ambassador to USA) to Trend, (CO), 11 Jul 1966.

⁵⁰² Wilson, *The Labour Government*, p. 46.

⁵⁰³ Ball, *The Discipline of Power*, p. 95.

⁵⁰⁴ TNA FO 371/188362, Discussions with US on UK entry to EEC, Dean to Trend, 11 Jul 1966.

⁵⁰⁵ TNA FO 371/188362, Note, Palliser (No.10) to Reid (CO), 13 Jul 1966.

exist solely in the context of Britain joining, for a strong European establishment, both politically and economically, met American foreign policy objectives of strengthening overseas markets and increasing liberalism, but also as a buffer to the Soviet Union and the Eastern Bloc.⁵⁰⁶ This facet did however still increase pressure on Britain to join the EEC, as to remain the favoured American ally in Europe would mean being in a position to successfully influence the other nations, in the manner that Heath had outlined to Whitlam in 1962. Stewart wrote to Wilson in February 1965 that if Britain remained on the outside for so long that de Gaulle was able to turn the EEC into a closed organisation then “the United States will be forced to make deals with the Six, by-passing Britain.” Stewart continued that it would not just be America that would be forced to by-pass Britain, but that the Commonwealth would inevitably have to do so too by building newly independent trade deals, as Nigeria had already done.⁵⁰⁷ The same year as Heath met with Whitlam, Ball had expressed the view to de Murville, the French Minister of Foreign Affairs, that, “while no British politician would dare to admit it...more and more thoughtful Englishmen recognized that their destiny no longer lay in being the center [sic] of a world system – a posture they could no longer afford – and that their historic role should now be played out within a European framework.”⁵⁰⁸ The views of the American politicians were as varied as the British on this subject, as Rusk told Wilson in early 1965 that, “The U.S. did not want to be the only country ready to intervene in any trouble spot in the world. We hoped the British would continue to uphold their world-wide responsibilities.”⁵⁰⁹ The position taken by

⁵⁰⁶ TNA FO 371/188362, Letter, Dean (Ambassador to USA) to O'Neill, 9 Dec 1966 and Kennedy, *The Rise and Fall of the Great Powers*, p. 403.

⁵⁰⁷ TNA FO 371/184288, Draft minute, SoS FO to PM, *Europe*, 26 Feb 1965.

⁵⁰⁸ *FRUS*, 1961-1963, *Vol. XIII*, No.39. Memorandum of Conversations, Paris 21 May 1962, p. 92.

⁵⁰⁹ *FRUS*, 1964-1968, *Vol. XII*, No.242. Memorandum of Conversations, 14 May 1965.

Healey during the Washington talks in December 1964 that Britain would be willing to maintain this posture if only some support on equipment, in this case the procurement of F-111, could be forthcoming reflected both the desire to appease America and to do so in a financially prudent manner in the face of American pressure.

These economic realities of the time and the broad acceptance that Britain's future lay within Europe meant that negotiations on entry were continually present in the background throughout. However these aspects both strengthened and hampered the argument for joining the EEC. The steps taken by Callaghan in the immediate aftermath of the general election to stabilise the value of sterling in the face of the significant balance of payments deficit included the imposition of a fifteen percent import surcharge, designed to reduce the outflow of sterling with the added benefit of a potential domestic market increase for British made goods.⁵¹⁰ The very nature of the protectionism which this promoted ran counter to the idea of Britain being a good European and supporting European manufacturers and markets. Although the EEC was itself a protectionist internal group, the effect of import barriers designed around sterling favoured those countries that either still used sterling as their trading currency, or held it as a reserve currency. These included many of the major nations of the Commonwealth, and in particular those who would be most affected by Britain entering the European trading bloc such as Australia, New Zealand, India, Pakistan and Ceylon. In 1964 the value of sterling holdings across the globe was approximately £4,000m, of which only £1,000m was under the control of Britain. Of the remainder, around £2,200m was held in reserve, placing a large commitment on Britain to

⁵¹⁰ TNA EW 5/12, British entry to EEC: UK economy; prospects within EEC, Brief, DEA *United Kingdom performance*, 5 Apr 1966.

maintain the viability of the currency whilst also preserving the utility of sterling as a trading currency.⁵¹¹ The long-held Commonwealth preference schemes formed a central element of the friction, with an example being the EEC requirement for tariffs on fabric imports from India and Pakistan. Britain pressed for no tariffs on goods from those countries providing the volumes imported were considered low enough to not to adversely impact the German and French textile fabrics industry, with the EEC position for a 30% external tariff on such goods entering the bloc if the volume was too high, to persist until levels fell. A similar proposal was made for the other major commodity from India and Ceylon of tea.⁵¹² If an agreement could not have been reached then tariffs of 30% would have made such trade unsustainable, such that the alternative proposal from the EEC was that if “...cotton textile exports from India and Pakistan fall below agreed levels as a result of the application of the Common tariff, corrective action would be taken in the form of suspension of the tariff on duty quotas.”⁵¹³ This, and many other challenging issues reflected the great difficulty of what to do about Britain’s close trading relationship with the Commonwealth. For New Zealand, their exports in 1959 totalled £290m, of which £170m were temperate foodstuffs of which £130m were sold to Britain. The Foreign Office “made clear to the Six the dependence of New Zealand on maintenance of the U.K. market and are trying to secure this...” a position that brought the response that, “The Six have, in general, recognised the very special position of New Zealand in relation to the U.K. market.”⁵¹⁴ It is entirely

⁵¹¹ TNA EW 5/18, British entry to EEC: Sterling problem, Treasury briefing paper, *The Common Market and the sterling balances*, 29 Jun 1966.

⁵¹² TNA FO 371/164814, Memo, FO to UK Embassy Rome, *Summary of British proposals for India, Pakistan and Ceylon*, 25 Mar 1962.

⁵¹³ TNA FO 371/164814, Note, FO to UK Embassy Bonn, 24 Jun 1962.

⁵¹⁴ TNA FO 371/164814, Note, FO internal, *E.E.C. Negotiations*, 10 Jul 1962.

understandable why Heath was of the opinion that without Britain's ties to the Commonwealth the negotiating positions for joining the EEC would be entirely straightforward. The aviation industry was one sector where there was little to no import considerations outside of existing raw materials, with the concern being more one of exports, of which none had been secured for the major procurements programmes by late 1964 whether to a Commonwealth nation or not.

Although the views of France and Germany, as the main power holders within both the EEC and on the continent as a whole were certainly central to the British approach to negotiations, there was a concerted effort to garner support from smaller nations too. For the smaller countries who were equally on the outside looking in, Britain represented an opportunity for greater involvement through mutually beneficial posturing. This stoked a fear in the French government that the entry of nations closely tied economically to Britain, such as Ireland, Denmark and Norway would swing the balance of power towards maritime focused countries who were more concerned with economic objectives and away from the integration of the continental power balance that favoured France.⁵¹⁵ For the part of the French, the support given to Britain by the northern European nations was a point of concern, as it emphasised the risks in allowing Britain entry as they would not only be able to challenge France as a major nation, but would have a grouping of allied countries who could vote against French policies and directives. Even for those inside the bloc there were concerns over French dominance, including in aircraft production with Belgium and the Netherlands concerned over the limited collaborative options such as the

⁵¹⁵ Milward, *The European Rescue of the Nation State*, 2nd Ed., pp. 11-12 and *FRUS*, 1961-1963, Vol XIII, No.39. Memorandum of Conversations, Paris 21 May 1962.

Transall transport aircraft being all that was available for their own aviation industries.⁵¹⁶ Such positions underline why within the procurement fields there were few immediate replacement aircraft options for Britain to take in early 1965 that would meet both the operational needs and serve as reminder of their position as good Europeans.

The concerns of the smaller nations were invariably focused on the power wielded by France within the Group of Six. The relationship between a Britain as a prospective candidate nation and the EEC was primarily centred on the position of France, and this was not purely across the broad range of political and industrial considerations, but with the singular figure of the French president, General Charles de Gaulle, as the focal point. It is this situation that provided a point of leverage for the Concord programme and illustrated the effectiveness of the aviation sector in helping to impact British policy. The British political establishment saw the primary stumbling block to British accession resting solely with de Gaulle, and went into great detail tracking his various moods and signals to try and understand what could be done to either shift his negative stance on British membership, or on how to wait out until de Gaulle was no longer in power. De Gaulle's personal view on the nature of the EEC and France's position within it shaped the approach taken by Britain and is reflected in the attempt to use aircraft procurement programmes as a means of both currying favour with the General and of shifting the domestic industry towards a more stable footing with an emphasis on international cooperation. When de Gaulle made his statement in January 1963 – the de Gaulle veto – it was not the beginning of a period of difficult

⁵¹⁶ Johnman & Lynch, "The Road to Concorde", p. 239.

relations between the two countries, but was instead a peak within of the ever-increasing desire of the French president to assert French dominance on the continent. It was not a surprise to Macmillan, given the French aims, and the prime minister was firm that it should not impact the work already underway on forging closer ties with the Six.⁵¹⁷ De Gaulle himself did not see the statement as a significant event, with his advisor St Legier describing it as merely the General “...[noting] certain facts which prevented Britain from entering the Community.”⁵¹⁸ Whilst the decision on British membership of the EEC in January 1963 was not the root cause of much of the manoeuvring in the period, it did reinforce the British view that the problem was always de Gaulle.

Following the creation of the French Fifth Republic in 1958, de Gaulle set in motion policies of returning France to great power status – an ideological process that greatly complicated British ambitions on the continent, as for the General, Britain represented a significant threat to this plan. These ambitions centred on ensuring that French became the dominant language, and that French culture had primacy, within Europe – and Britain within the EEC, particularly if still with close ties to the USA, would be a significant threat to this.⁵¹⁹ The concern over both the influence that Britain would exert within the EEC and the still significant worldwide commitments continued to grow, particularly in the context of sterling and the balance of payments. Whilst the pressing balance of payments crisis of late 1964 had been corrected with American assistance, itself a turn of events never likely to win praise from de Gaulle

⁵¹⁷ TNA BT 241/2690, *Prime Minister's reaction to President de Gaulle's press conference held on 14 Jan 1963*, Note, Carey, *President de Gaulle's Press Conference*, 15 Jan 1963.

⁵¹⁸ TNA FO 371/188366, Letter, UK delegation to EEC to Statham (FO), 24 Nov 1966.

⁵¹⁹ TNA FO 371/188366, Letter, O'Neill to PUS (FO); *France, Britain and the European Community*, 30 Nov 1966.

and his Trojan Horse mindset, it continued to be an issue into 1966 with the subsequent further devaluation of sterling. The fear within the French government was that Britain's continued efforts to join the EEC were an attempt to support sterling with de Gaulle describing British political discourse in the summer of 1966 as being "...in such a state of confusion. We hear nothing but the balance, the balance..."⁵²⁰ Former French prime minister Edgar Faure saw it as Britain being "...obliged to support its currency as one supports a drowning man."⁵²¹ The negative position over the state of sterling was tied and mirrored to the opinion of the economic performance of Britain, but this element must be considered in the context of Britain as a rival industrial power to France, as highlighted by the continual concerns expressed by France of British economic ties to the Commonwealth.

Another significant hurdle to winning French acceptance of a British role within Europe was the form NATO had taken by the mid-1960s. The implosion of the MLF had at its core the question of nuclear weapons – both in who had control of them and whether West Germany should be allowed to possess them. In 1958, at the very birth of the Fifth Republic, de Gaulle had made overtures to President Eisenhower and to Prime Minister Macmillan for a tri-national relationship on nuclear weapon technology.⁵²² At this point France had not yet tested a nuclear weapon, and such an arrangement would have accelerated this developmental process and strengthened French power on the continent. The request came a year after the *Declaration of Common Purpose*, where the USA and Britain agreed to lead an increased drive for greater inter-dependence, particularly in research and development, all within the

⁵²⁰ TNA EW 5/18, Letter, Reilly (Ambassador to France) to O'Neill (FO), 8 Jun 1966.

⁵²¹ TNA EW 5/18, Letter, Reilly to O'Neill, 8 Jun 1966.

⁵²² J. Raflik, 'Complementary or Dependence', University of Luxemburg – CVCE.EU, 25 Oct 2016, p. 2.

framework of NATO but centred on the notion that as the nuclear-armed Western powers, it fell to Britain and the USA to act as the leader of defence within the free world.⁵²³ The agreement itself came a year after the French Fourth Republic and Britain led Suez Crisis that had tested the closeness of the British-American special relationship and which Richard Rosecrance described in 1968 as a confirmation of the clear post-war limits of both Britain's ability to act unilaterally of America, and the now disproven presumption that America would support Britain in all affairs.⁵²⁴ The military campaign was not a NATO operation, and saw a division between member states as to how to act for national interests on the world stage. The declaration between Eisenhower and Macmillan thus served as a rapprochement of sorts, and presented to de Gaulle an expectation that France would be considered an equal partner within the alliance. Eisenhower, however, refused the request, framing it as the equality within the alliance existed outside of nuclear arms development and that no country should be given special treatment.⁵²⁵ This position is difficult to justify when placed in the context of the clear special relationship between Britain and America that side-lined the French position, and was made clearer still by the Nassau Agreement of 1962. Eden himself described relations between Britain and France at this time as "...neither so intimate nor so cordial as they have been or should be."⁵²⁶

This poor state of military relations, centred on nuclear weapons and the associated facets of power and prestige contributed to France's continual movement away from NATO following Suez with the removal of control of their Mediterranean

⁵²³ *Hansard*, HL Debate, 29 Oct 1957, Vol. 205, Col. 545.

⁵²⁴ Rosecrance, *Defense of the Realm*, p. 222-3.

⁵²⁵ Raflik, 'Complementary or dependence', p. 2.

⁵²⁶ A. Eden, *Full Circle – The Memoirs of the Rt. Hon Sir Anthony Eden* (London: Cassell, 1960) p. 195.

fleet from SACEUR in 1959 and then the Atlantic fleet in 1963 as the MLF negotiations floundered.⁵²⁷ The second element of the central concern of de Gaulle's was highlighted by the MLF with the concept of sharing control of these ship-borne nuclear weapons with West Germany, a move that the General believed would "encourage German ambitions."⁵²⁸ With Britain remaining outside of the Group of Six, it appeared that West Germany would instead become the favoured partner of the USA in Europe. This was one of the motivators for British attempts to shore up the closeness of the special relationship, of which the procurement of American aircraft designs which demonstrated a capability to act East of Suez was a useful element. For de Gaulle, this favouring of Germany would not only have strengthened a fierce historical rival, but also increased the risk of increased French subservience to America. Chancellor Erhard saw the matter of German integration within NATO, "...as an essential element not only of our own security but also of the security of the other partners in the alliance."⁵²⁹ This position would clearly have encompassed France, but only as long as they remained within the organisation. The French decision to step back from further NATO integration came at a time when European political and economic integration was high on the French agenda demonstrating that de Gaulle was not averse to international cooperation, but always on his own terms and when it suited him, and it was primarily when American influence was involved that the barriers were raised. To de Gaulle, America and Britain were the same adversary, and in the Anglo-French relationship, de Gaulle always held the upper hand. The view of the American

⁵²⁷ TNA DEFE 25/200, Briefing Paper, France and NATO, Annex A., 6 Jun 1965.

⁵²⁸ TNA FO 146/4623, Memo, Dixon to FO, *General de Gaulle*, 13 Nov 1964.

⁵²⁹ TNA PREM 13/1042, NATO, Future of NATO, Note, British Embassy Bonn to FO, *F.O. telegram no 297*, 10 Mar 1966.

administration of de Gaulle was hardly flattering, depicting a relationship that was sour in both directions. Dean, British Ambassador to the United States, reported in spring 1965 that, “Mr McNamara said that he was extremely worried at the way in which it appeared to be increasingly French policy to embarrass the Americans at every turn, whether in Europe specially vis-à-vis the Germans, Viet Nam [sic], the United Nations and Santo Domingo.”⁵³⁰ The French policy referred by McNamara was focused on de Gaulle the man, as under the reforms of the Fifth Republic the office of President held much greater dominance on affairs of state, with the role of the Prime Minister greatly reduced and with no meaningful opposition political structure to hold the leadership to account outside of general elections.⁵³¹ In April 1964, Bohlen, the American ambassador to Paris, in speaking to Dixon, the British ambassador, was not confident that de Gaulle could even be influenced at all, and that some of his views, particularly those that ran counter to American ambitions, could cause serious damage in the same manner as those raised by McNamara over Vietnam and Mexico.⁵³² De Gaulle was a firm believer that it was fundamentally wrong for the United States to attempt to “become masters” of Vietnam and the South-East Asia region – an area that he informed Wilson in 1965 that France wanted nothing to do it.⁵³³ For Rusk, as secretary of state, there was equal concern that France held too great a sway over the other members of the EEC, and that a weak and divided Germany remained central to de Gaulle’s strategy for the continent.⁵³⁴ The negative view held by the Johnson

⁵³⁰ TNA PREM 13/1042, FO Telegram, Dean to FO, 27 May 1965.

⁵³¹ May, “Concorde – Bird of Harmony or Political Albatross”, p. 490.

⁵³² TNA FO 146/4623, Memo, Dixon to FO, *United States views on the problem of de Gaulle*, 3 Apr 1964.

⁵³³ TNA DEFE 25/200, *Record of a meeting between the Prime Minister and the President of the French Republic at the Elysée Palace at 11am on Friday 2 April, 1965*.

⁵³⁴ TNA PREM 13/1042, Minutes, *Conversation between foreign secretary and Mr. Rusk at B.E. Tehran*, 7 Apr 1966.

administration reinforced their requirement for the presence of either a stronger Germany or of Britain inside the EEC to counter the effect of de Gaulle, and these views encapsulate the expressed concern of de Gaulle that Britain would be a Trojan Horse within the Six. Dixon's impression of Bohlen's opinions on de Gaulle in the spring of 1964 sums up what appears to have been the primary tactic of the United States outside of the Germany and Britain partnership options as Bohlen's "...main hope appeared to lie in the ultimate disappearance of the General from the scene, either as the result of increasing years or of economic difficulties in France, or a combination of both."⁵³⁵

Whilst the American government were critical of de Gaulle, the decrease in tensions after the Cuban missile crisis also changed the dynamic from the General's perspective. In early 1965 de Gaulle discussed with Wilson that, as the direct threat of war on the continent with the Soviet Union diminished, so the need for a close military alliance with America also reduced.⁵³⁶ The General was intending to move still further away from America through overtures to the Soviet Union as a strategic ally in their place.⁵³⁷ The motive was the common concern over a nuclear-equipped Germany, and the Soviet resistance to any suggestion of a united Germany with all the economic and military power such an outcome would bring.⁵³⁸ The British Embassy in Paris noted the fact plainly in September 1965 that "de Gaulle intended to move towards a rapprochement with the Russians if Germany were associated with the control of

⁵³⁵ TNA FO 146/4623, Memo, Dixon to FO, *United States views on the problem of de Gaulle*, 3 Apr 1964.

⁵³⁶ TNA DEFE 25/200, *Record of a meeting between the Prime Minister and the President of the French Republic*.

⁵³⁷ TNA DEFE 25/200, France and NATO, Briefing Paper, *France and NATO*, 6 Jun 1965.

⁵³⁸ TNA FO 146/4623, Memo, Dixon to FO, *General de Gaulle*, 13 Nov 1964.

nuclear weapons.”⁵³⁹ That relations with America had reached such a low that de Gaulle was more comfortable entertaining an alliance with the Soviet Union speaks not only of the difficulty that an American-aligned Britain would have in joining the Group of Six, but also of the complexity of the character of de Gaulle. This therefore highlights the scale required for any collaborative gesture.

The Foreign Office attempted on many occasions during the period to capture the mood of the French President, and to suggest a suitable path forward that would allow for British interests to be satisfied. Concord served as a key element of this strategy, as it played directly to the General’s ego, but the economically costly decision to continue with the supersonic programme only makes political sense when de Gaulle the person is understood from the British perspective. As leader of the Free French in London during the Second World War, there was a consensus that the General should have been favourable to British overtures, and that his resistance to British membership attempts were “...a poor return for what Britain did for him and for France in 1940.”⁵⁴⁰ Assessments of de Gaulle included that he was “...completely egocentric”, such that for Wilson to refer to his proposals in a face to face meeting, in this case the 1958 strategic alliance document that Eisenhower had refused, would give de Gaulle, “...some pleasure to know that what he had written had been once more studied and this would presumably incline him to benevolence.”⁵⁴¹ Gordon, in *A Certain Idea of France*, described that the standard retrospective view was of de Gaulle having a “historical reputation for intransigence and stubbornness”, yet Gordon also

⁵³⁹ TNA FO 146/4625, *France and NATO: French policy and intentions*, Note, J. Pedler, British Embassy Paris, 14 Sep 1965.

⁵⁴⁰ TNA FO 146/4639, *French opposition to British entry to E.E.C.: British policy*, Memo, Gore-Booth, 20 Dec 1967, also B. Ledwidge, *De Gaulle* (London: Weidenfeld and Nicolson, 1982) p. 284.

⁵⁴¹ TNA CAB 21/5967, Letter, British Embassy Paris to Reilly (FO), 5 Dec 1962.

favoured the idea that de Gaulle would adapt to the prevailing winds to achieve his aims.⁵⁴² Kedword, in *France and the French*, took the view that, "To much of American and British opinion there was little logic in de Gaulle's foreign policy beyond the obstreperous promotion of policies which advertised the autonomy of France without affecting the structural realities of the a bipolar world."⁵⁴³ Bohlen, as American Ambassador in 1964, saw the General as a mixture of the two, as both "deeply set in his approach...[yet] as a pragmatist...was capable of...making retreats or swerves when a particular policy was...working out to the detriment of French interests."⁵⁴⁴ The British correspondence of the time however shows continual frustrations within the Foreign Office, in particular at the difficulties of breaking down de Gaulle, with a "selective approach" to areas of concern often required.⁵⁴⁵ The notion of the issue of de Gaulle being one of resistance was summed by Wilson following a meeting in 1967, where the prime minister described the General as having been in a "...profoundly negative and apocalyptic mood...[with moments] when that old phrase 'the Maginot line mentality' seemed paradoxically the most appropriate to describe his outlook."⁵⁴⁶ France and de Gaulle were one and the same, and with such a centralised system of government the views and actions of the man and the state were inextricably linked, such that any British efforts at moving towards a European focus would have to be agreeable to the General first and foremost.

⁵⁴² P.H. Gordon, *A Certain Idea of France; French Security Policy and the Gaullist Legacy* (Princeton: Princeton UP, 1993) p. 6.

⁵⁴³ R. Kedword, *France and the French; A Modern History* (Woodstock: Overlook Press, 2006) p. 393.

⁵⁴⁴ TNA FO 146/4623, Memo, Dixon to FO, *United States views on the problem of de Gaulle*, 3 Apr 1964.

⁵⁴⁵ TNA FO 146/4623, Memo, *United States views on the problem of de Gaulle*.

⁵⁴⁶ TNA FO 146/4639, Letter, Wilson to Reilly, 21 Jun 1967.

It would however be unjust to place the positions of de Gaulle as entirely on the whim of personality, for the theme throughout the period was of a determination to stand up to Britain, the United States and indeed the other members of the EEC on behalf of French domestic interests. Even though the EEC was functionally dominated by France, the negotiations around the Common Agricultural Policy (CAP) caused continual friction with German resentment to both the financial burdens and the fixed pricing that would favour French producers.⁵⁴⁷ The political importance of agricultural output being within the free trade area had been, as argued by Hjortshof O'Rourke, a major cause of British isolation during the creation of the EEC.⁵⁴⁸ Within France, and in part due to the militant nature of the main farmers union, the FNSEA, this area of policy took on a greater significance than the aviation industry for foreign policy machinations, particularly as the proportion of French labour working in agriculture as smallholding tenants was falling at 26.7% in 1954 and would drop below 10% by 1975.⁵⁴⁹ The CAP was a means of securing beneficial pricing and laying out French dominance of a central element of the economies of the Six. In late 1962 the British Embassy in Paris reported back that, "It is a fair assumption that one of the General's reasons for being unhelpful is that he is afraid that our entry would frustrate the fulfilment of the common agricultural policy from which he hopes to derive a lot of benefits for France."⁵⁵⁰ Two weeks later in mid-December de Gaulle told Macmillan that whilst British entry was problematic, he "...affirmed that...he wished Britain to

⁵⁴⁷ TNA EW 5/8, Letter, British Embassy Bonn to O'Neill (FO), 27 Jun 1966.

⁵⁴⁸ K. Hjortshof O'Rourke, 'From Empire to Europe: Britain in the World Economy' in R. Floud, J. Humphries & P. Johnson, *The Cambridge Economic History of Modern Britain, Vol.II 1870 to the Present* (Cambridge: Cambridge UP, 2014) p. 87.

⁵⁴⁹ Kedword, *France and the French*, pp. 399-400.

⁵⁵⁰ TNA CAB 21/5967, Letter, British Embassy Paris to Reilly (FO), 5 Dec 1962.

become a member.”⁵⁵¹ A month later came the infamous veto on British membership. The CAP was not easily solved, for in late 1964 de Gaulle threatened to take France out of the EEC if the policy was not enacted in the manner in which it had been agreed, behaviour that led a correspondent in *The Times* to caustically observe that, “This is not the first time that the French have made such threats when they have not had their way in Brussels, and repetition must tend to weaken their effect.”⁵⁵² This determination to stand up for French interests was reflected in the firm line taken over the Concord programme.

The Concord supersonic airliner project, when viewed purely from a technological standpoint, was clearly attractive on both sides of The Channel. To de Gaulle, it represented a shining example of France taking a leading role in a new and prestigious technological leap forward without the involvement of the USA.⁵⁵³ To Wilson it stood at the very edge of his white heat of technology concept promoting the excellence of British industry. When considered in the context of what British aircraft projects could offer in the political ring, it represented an opportunity to demonstrate to de Gaulle that Britain was serious about investing in European expertise and working co-operatively for the betterment of the continent. Under the Macmillan government, the responsible minister, Amery, saw a prospective entry to the EEC and the continuance and success of Concord as part of the same policy and thus mutually supporting.⁵⁵⁴ The argument became less practicable given the extremely high costs involved, particularly in the context of the balance of payments crisis with the Labour

⁵⁵¹ TNA CAB 21/5967, Memo, FO to Ambassadors globally; *The Prime Minister's talks with President de Gaulle*, 19 Dec 1962.

⁵⁵² Own Correspondent, “French Threat to Leave the Six”, *The Times*, 22 Oct 1964.

⁵⁵³ Ledwidge, *De Gaulle*, p. 274.

⁵⁵⁴ May, “Concorde – Bird of Harmony or Political Albatross”, p. 493.

economic white paper on 1964 singling out the need to "...[cut] out expenditure on items of low economic priority, such as 'prestige projects'".⁵⁵⁵ These costs prompted Callaghan to place the Concord programme as tied to the military aircraft projects both under development and under consideration.⁵⁵⁶ If military programme costs were reduced then it became more justifiable for Concord to be continued. Therefore the issues of expenditure, utilisation of the aviation industry and the political advantages of each programme, both for Concord and military aircraft, had to be taken in unison and adjusted accordingly to achieve the desired goals over and above their employment and function as simply aircraft.

When the Concord programme was approved on 31 July 1962 and then signed on 29 November 1962 by the pro-European Julian Amery for the British and by the French Ambassador in London, Geoffrey de Courcel, the estimated unit costs were a not unsubstantial £10m per aircraft.⁵⁵⁷ By comparison, at the other end of the technological scale, the HS.801 would be quoted by Hawker Siddeley in the summer of 1964 as costing £1.5m per aircraft.⁵⁵⁸ Unusually for a commercial development project the agreement was registered as an international treaty at The Hague.⁵⁵⁹ This decision effectively tied both parties into the programme and reduced the risk of one side withdrawing and leading to the prospect of either a costly cancellation for the remaining country, or an even more expensive choice to continue to fund alone. With

⁵⁵⁵ House of Commons Debate, 5 Nov 1964, *Hansard*, Vol. 701, Col. 469, and Staff Writer, "Means of Financing Social Programme", *The Times*, 27 Oct 1964.

⁵⁵⁶ TNA PREM 13/117, 1964-1965 - *Aircraft*, Loose Minute, Bancroft (Treasury) to Mitchell (No.10), 7 Jan 1965.

⁵⁵⁷ Jenkins, *A Life at the Centre*, p. 160 and Aeronautical Correspondent, "Early Review of the Concord Likely", *The Times*, 20 Oct 1964.

⁵⁵⁸ TNA AIR 2/17199, *Interim Shackleton Replacement (ASR 381) – Policy*, Letter, PUS MoD to PS MoA, 7 Jul 1964.

⁵⁵⁹ May, "Concorde – Bird of Harmony or Political Albatross", p. 499.

a financial penalty of £200m agreed, there was pressure to proceed over and above the actual development costs.⁵⁶⁰ The entire project was, by early 1964, anticipated to at best cost between £150-170m divided equally across the two countries, thus the penalty would theoretically allow the remaining country to complete the project should they wish, whilst also making being on the receiving end of the cancellation penalty highly undesirable.⁵⁶¹ By late 1964 however, the estimates had risen to around £280m and were expected to continue rising.⁵⁶² This led Labour to inform the French government immediately after coming into office that they intended to re-assess the viability of continuing with Concord. The British Embassy in Paris was instructed to emphasise that such a move was being carried out for purely economic reasons and not tied to any political motivations.⁵⁶³ In the same manner as the military aircraft programmes and arguable the MLF too, the ability of an incoming government to lay the blame for a failing procurement on the previous administration and begin afresh also applied to Concord. The significant difference in this case was that it was an international enterprise and therefore not fully in the gift of the British government to act unilaterally.

For the French, there was a suspicion that irrespective of which party was in power, Britain instead favoured a supersonic collaboration with the Americans, which in the case of Thorneycroft was true.⁵⁶⁴ This was a facet of the wider belief that the Special Relationship was more important to Britain than being a good European and

⁵⁶⁰ Jenkins, *A Life at the Centre*, p. 165.

⁵⁶¹ Political Correspondent, "Treasury's "failure" over financing of Concord", *The Times*, 16 Jan 1964.

⁵⁶² Aeronautical Correspondent, "Minister in Paris today for talks on Concord", *The Times*, 29 Oct 1964.

⁵⁶³ TNA PREM 13/117, FO telegram, FO to British Embassy Paris, *Future of the Anglo-French Concord project*, 26 Oct 1964.

⁵⁶⁴ May, "Concorde – Bird of Harmony or Political Albatross", p. 489.

focusing fully on the new political and economic shape of Europe. An American programme was notionally underway, with the Federal Aviation Authority having solicited bids from the major American manufacturers for proposals on a supersonic airliners with slightly superior specifications to Concord.⁵⁶⁵ Unlike in Europe, the American aviation industry was fully in private hands, so collaboration would not have been as direct as in the case of Concord. The success of the 707 airliner against British designs such as the VC-10 and the emergence of the Airbus programme is discussed later, but it emphasised that although Concord was a prestige project, it was also a significant marker of British commitments to Europe. For the French, there was an acceptance that although the engine work was divided between Bristol Siddeley in Britain and SNECMA in France, it was the British company that was the senior partner, and that the fruits of their labour would also allow for engines that could be employed in a future nuclear weapon delivery aircraft.⁵⁶⁶ Such an aircraft would enable de Gaulle's vision of a French nuclear force that was independent of the USA giving further motivation for ensuring Labour did not withdraw Britain from the project.⁵⁶⁷

Donald Nelson, writing in 1969, summed up the negative views around both the cost and viability of the programme, saying that, "it may never be fully understood, especially in light of the heavy criticism the project continues to receive, why the British and French decided to proceed with Concorde [sic]."⁵⁶⁸ This viewpoint downplays any significance of Concord as a tool for enhancing Britain's chances of winning over de Gaulle and improving the prospects of EEC entry, and runs counter to

⁵⁶⁵ Staff Writer, "U.S. Supersonic Plane Could 'Make a Profit'", *The Times*, 5 Nov 1964.

⁵⁶⁶ D.A. Nelson, "Concorde: International Cooperation in Aviation", in *The American Journal of Comparative Law*, Vol.17, No.3 (1969) p. 466.

⁵⁶⁷ Ledwidge, *De Gaulle*, p. 274.

⁵⁶⁸ Nelson, "Concorde", p. 453.

the line Gore-Booth, who was permanent under-secretary at the Foreign Office, took five years later in his memoirs. Gore-Booth was firmly of the belief that the merits of EEC, de Gaulle and Concord were fully intertwined, stating that, "The right policy...was to find things in which [the] French and British worked closely together in a way which would outlast the anti-Anglo-Saxon attitudes of the French President. One obvious item was the Concorde project. For this reason, I personally, and the Foreign Office departmentally, consistently supported its continuance when it was under threat."⁵⁶⁹ The threat of French legal action through the Hague, combined with reaching agreements with the United States over the military aircraft programmes that provided some financial headroom for Callaghan and the Treasury to allow the project to continue. However as Labour put in motion efforts to cancel Concord, it suggests a government with either less faith in the positive effect it could have on EEC membership, a low prioritisation of EEC membership – with both possibilities impacted by the de Gaulle veto in early 1963, or a situation where financial considerations and the reassignment of the aviation industry had total primacy over foreign policy manoeuvrings. Any decision in the context of the wider aircraft procurements represented a choice, as not every aircraft under development could be allowed to continue. Wilson, during a meeting with de Gaulle in April 1965, laid down the case that cancelling the TSR.2 programme would not impact the development of Concord, and would instead benefit it by allowing for a "redeployment [of] our aircraft industry with this sort of Anglo-French co-operation in mind."⁵⁷⁰ For de Gaulle during the same meeting, the emphasis was placed on his longstanding concern over European

⁵⁶⁹ P. Gore-Booth, *With Great Truth and Respect* (London: Constable, 1974) p. 354.

⁵⁷⁰ TNA DEFE 25/200, Record of a meeting between the Prime Minister and the President of the French Republic at the Elysée Palace at 10 a.m. on Saturday 3 April 1965.

independence from American dominance.⁵⁷¹ This concern was already manifesting in the withdrawal of France from the MLF and gradually from NATO as a whole, alongside the continual efforts for French dominance over the politics of the Continent. At the same meeting the General also expressed a desire for a continued expansion of British and French industrial co-operative programmes.⁵⁷² Concord could be seen as the centre piece of collaborative projects given the various notable benefits both politically and particularly technologically that it provided. International cooperation can also be measured by volume, and there were a number of Franco-British military aircraft programmes already under development during the period that likewise served to reinforce the concept of British commitment to France and the European ideal, albeit none as significant as Concord.

The most notable shared military programmes of the period were the advanced trainer aircraft and the variable geometry fighter aircraft. The decision to cancel the P.1154, HS.681 and TSR.2 opened up capacity in the aviation industry that, rather than being used for a purely domestic programme, could instead be redirected to collaborative efforts where crucially the costs and burdens were shared. This drive formed a key element of the post-Washington Summit communique on shared R&D. International efforts were not new, with the development of the Atlantic maritime patrol aircraft, considered by Britain as a possible Shackleton replacement, already well underway. However the Atlantic involved a wide range of contributing European companies taking advantages of the particular specialisations of each company, with

⁵⁷¹ TNA DEFE 25/200, Record of a meeting between the Prime Minister and the President of the French Republic.

⁵⁷² TNA DEFE 25/200, Record of a meeting between the Prime Minister and the President of the French Republic.

British company de Havilland manufacturing the propellers, and Rolls-Royce the engines.⁵⁷³ International co-operation with a political motivation at its core was often split on percentages rather than specialisations and became the established format going forward. The establishment of two major military aircraft programmes between Britain and France, when taken alongside Concord, further demonstrates that there was a clear identified need for Britain to show a willingness to work with France to further political and economic ambitions on the continent, even if it was not done in the most practical manner.

Technical alliances in aviation had already existed between the two countries, with France building the 1950s era de Havilland Vampire and Venom fighter aircraft and later the Hawker Hunter under licence.⁵⁷⁴ The main issues with international collaboration rather than supply arrangements centred on agreeing the specification and the division of labour. In the case of the advanced trainer/strike aircraft that would become the Jaguar, there was discussion over whether the aircraft design and production schedule was to be focused more on the trainer aspect or the attack aircraft requirement, with the French stating that, "Priority must be placed on the Trainer variant. The French Air Force has an essential requirement for 40 of these aircraft in service by the middle of 1971."⁵⁷⁵ In the same manner as Concord, work was shared equally between the countries with each nation taking the lead in the differing areas of design, however an independent company, SEPECAT, was created, leading to a requirement for equal roles on the management board. Lombard, the Director of

⁵⁷³ TNA AIR 2/17199, Letter from Messmer (French Minister of Armies) to Secretary of State for Defence, 22 Jun 1964.

⁵⁷⁴ Johnman & Lynch, "The road to Concorde", p. 233.

⁵⁷⁵ TNA AIR 2/17154; *NASR 362 (Gnat Replacement), Operational Requirement for Anglo-French advanced trainer and tactical support aircraft*, 21 Jul 1965.

Engineering at Rolls-Royce, whose company had the lead for engine development on the Jaguar programme alongside Turbomeca, informed the MoA in late 1965 that, “We were unable to get over the point that a system employing two men having equal authority is likely to lead to repeated stalemates, and if this were to happen it would not be possible to meet the programme on time.”⁵⁷⁶ In a normal company, an arrangement that risked such consequences would not have been tolerated, and it is a measure of the political importance of the drive for international collaboration that it was firmly encouraged to happen. In the Statement of Intent for the variable geometry aircraft it had to be explicitly laid down that neither BAC nor Dassault, “...shall seek to dominate the other.”⁵⁷⁷ Both these examples demonstrate the issues inherent in an international project, and in the case of the variable geometry programme the aircraft never even made it into active service. The French, clearly rattled by the British attempts to renege on Concord, continued developing their own programme which was seen by the MoD, “...as an insurance against the British withdrawing from the V.G. project.”⁵⁷⁸ The development of this alternative domestic design and continual disagreements over the specification resulted in France withdrawing from the variable geometry programme in 1967, and the concept would eventually enter service as a pan-European effort by Britain, West Germany and Italy as the PANAIA Tornado.⁵⁷⁹

BAC, with its near total commitment to the TSR.2, was the company most affected by the military aircraft cuts, and this impact was reflected in the assignment

⁵⁷⁶ TNA AVIA 65/1750, *Jaguar aircraft: government and policy aspects*, Letter, Lombard (RR) to Lloyd (MoA), 23 Dec 1965.

⁵⁷⁷ TNA AVIA 65/1750, *Statement of intent between B.A.C. and G.A.M.D. on the design and manufacture of a variable geometry fighter aircraft*, 31 Dec 1965.

⁵⁷⁸ TNA AVIA 65/1750, Letter, Marshall (US Air) to Sec to Shackleton (Sec of State for Air Force), *French Variable Geometry Research Aircraft*, 10 Nov 1965.

⁵⁷⁹ Owen, *From Empire to Europe*, p. 314.

of work for both the Jaguar and the variable geometry project. BAC had the lead for the variable geometry airframe with Dassault, and were second to Breguet for the Jaguar.⁵⁸⁰ Despite Hawker Siddeley having two programmes cancelled, and with BAC already the lead for Concord, they were not involved in the distribution of work on these two projects. The V/STOL work on P.1127 was fully under Hawker Siddeley and the decision to select the HS.801 to replace the Shackleton crucially ensured that both major aviation companies were provided with sufficient work.

This chapter has demonstrated how the importance of Britain refocusing on Europe as major pillar of economic and political thinking during this period was played out in the choices made within the aviation sector. The lack of certainty over whether Britain would continue to try and join the EEC resulted in an expensive hedging of bets whereby projects such as Concord were sustained. The highly divisive role played by de Gaulle absorbed much of the focus of European integration, and led to France being treated as special partner, in much the same way as the Special Relationship with America was. As with the military programmes and America, the various procurements were both key components and reflectors of political manoeuvring, and when taken as a whole, form a representative picture of the British balancing act for both domestic and foreign policy. The weight of Concord as a tool for European relations and the longer-term R&D and smaller collaborative programmes limited the significance of the Atlantic as a consideration for the Shackleton replacement, particularly with the manner in which work was distributed across the partner nations and companies.

⁵⁸⁰ TNA AVIA 65/1750, Letter, Mackay (MoA) to Sir George Edwards (BAC), 18 Nov 1965.

Collaboration between Britain and continental Europe was not limited to working with France, for there were also research and development and production arrangements with Germany, established in part to help offset the costs of maintaining British forces in Germany.⁵⁸¹ As Britain looked more and more towards Europe as the primary theatre over the long held East of Suez posture, so the balance of the armed forces including the British Army of the Rhine had to reassessed to ensure capability met the political need. This position necessitated a re-evaluation of the 'Strategy for the Sixties' plan in order to achieve the political intent within a reduced defence budget. A strategic re-evaluation would also bring about an associated equipment re-assessment to ensure that the composition met the need. Thus, an understanding of the new strategic direction of defence provides an understanding of how and why the military need and preference for one particular aircraft design over another shifted during the period and still met the political ambitions.

⁵⁸¹ TNA FO 371/1789344, *US-FRG-UK Collaboration*, Letter, Barnes (FO) to Hardman (MoD), *Interdependence*, 26 Nov 1964.

CHAPTER 5 – THE REVIEW OF DEFENCE SPENDING AND STRATEGY

Even with a political focus that was beginning to shift more toward Europe and the continued economic challenges, there was still minimal appetite within Whitehall to completely divest of the concept of Britain as a great power projecting military might ‘East of Suez’, resulting in, according to Dockrill, a Labour defence policy that remained broadly aligned with the previous Conservative government.⁵⁸² The direction the Washington Summit talks had taken, and the wider relationship with the United States, reflected this continued desire. Yet the clear need for financial concessions from America on equipment, particularly over long-range strike aircraft, had highlighted that any such posture would have to be maintained on a greatly reduced budget. The financial aspect of the defence review during the latter part of 1964 and throughout 1965 had primacy over the strategic considerations with the burden of defence weighing heavily on the ability of Britain to increase domestic industrial output and modernise the economy. The pressures on both the balance of payments and economic performance of the country as a whole meant that it was not just defence that would have to adjust, yet the manner in which it played out by 1965 suggests that defence, and the ongoing RAF programmes in particular, served as the public face of Labour’s efforts to tackle the state of the nation.

This chapter will consider the competing priorities within a review process where a tightened defence budget was set prior to the review of defence strategy. The strategic outcomes, including the continued need to secure the Atlantic wartime shipping routes and the gradual shift toward a Europe-centric defence posture,

⁵⁸² M. Dockrill, *British Defence Since 1945* (Oxford: Basil Blackwell, 1988) p. 86.

ensured that there was a requirement for replacing the Shackleton at the conceptual level. This chapter will examine how the initial financial constraints resulting from the balance of payments and sterling crisis caused the deferment of the advanced replacement for the Shackleton and resulted in a requirement for a lower cost interim solution. It will be argued that the timing of the outlay on this interim solution set it apart from the other aircraft procurements and thus contributed significantly to its survival. The chapter will also consider the extent to which the impacts to the domestic aviation industry factored into the decision-making process for the review, demonstrating the balance taken between military capability and political imperatives.

Making diplomatic hay out of the requirement for revisions to aircraft programmes ultimately stemmed from the need to reduce the size of the British defence budget and in particular the overseas expenditure. Without this pressing requirement it is unlikely that the largescale move toward American designs would have taken place given the domestic political unpalatability such a decision would bring - particularly for the TSR.2. Equally the vision for shared European projects that would become a core element of aircraft and defence procurement in the years ahead would not have taken on such urgency beyond Concord. Thus the need to conduct both a review of defence expenditure and the subsequent associated reassessment of defence strategy can be seen as a continuation of the immediate efforts taken by Labour in autumn 1964 to stabilise the value of sterling and reduce overseas spending. As in the United States, the impact of overseas military expenditure weighed heavily on the balance of payments, but unlike for the Johnson administration there was not a strong British export system in place to provide offsets for this. As seen with the

efforts at achieving a balance with relations with both the United States and the European powers, so a balance had to be struck between the budget and ambition. That the review of strategy followed the review of expenditure confirms that the priority was achieving financial savings and not the reappraisal of where Britain saw itself in the post-great power world, and the procurement choices reflect this. For Bennell, there was a political acceptance that the economic problems drove the decision making process, and that "...the scale of overseas political and therefore defence commitment had moved beyond the reach of national resources."⁵⁸³ The previously discussed pressures exerted by the Johnson administration for Britain to maintain this worldwide role resulted in what Ponting described as, "...incompatible decisions to contain defence spending at £2 billion a year and maintain a worldwide presence..."⁵⁸⁴ Wilson told the House of Commons on 16 December 1964 that, "I want to make it quite clear that whatever we may do in the field of cost effectiveness, value for money and a stringent review of expenditure, we cannot afford to relinquish our world role...[which] is sometimes called our 'east of Suez' role."⁵⁸⁵ However in his memoirs, written seven years later and after the Far East role came to end, Wilson took a different tack in referring to the same period as, "Something had to give: it had to be commitments."⁵⁸⁶

The concept of declining British worldwide power, when highlighted by writers such as Barnett and Northedge is not just confined to military power, but also encapsulates economic might and political influence. In the words of Correlli Barnett, a

⁵⁸³ Bennell, *Defence Policy and the Royal Air Force*, p. 17-1.

⁵⁸⁴ Ponting, *Breach of Promise*, p. 98.

⁵⁸⁵ HC Debate, 16 Dec 1964, *Hansard*, Vol. 704, Col. 423.

⁵⁸⁶ Wilson, *The Labour Government*, p. 42.

country's power is not "...only in its armed forces, but also in its economic and technological resources; in the dexterity, foresight and resolution with which its foreign policy is conducted; in the efficiency of its social and political organisation...[and] in the way all these factors are related to one another."⁵⁸⁷ It is also not something that can exist for a country in isolation, and the dramatic shift in global power away from Europe and towards a bi-polar world in the post-war era resulted in, for Northedge, a situation where no British action could have meaningfully arrested the decline of influence.⁵⁸⁸ Yet for the period under examination here the primary concern is the compression of a defence review into a response to an acute economic crisis to serve as an economic lever, rather than as part of a wider commentary on the perceived post-war decline in British power as viewed by authors such as Carver and Darby.⁵⁸⁹

The review itself occurred at the beginning of a new organisational era with the creation of a unified Ministry of Defence, which had control over the three Services and restricted the direct access to Cabinet and Downing Street that they had previously enjoyed.⁵⁹⁰ Although political oversight had previously existed through the various ministers, the change had parallels with the increasingly centralised control brought in by McNamara in the United States, and moved the Service infighting in-house. This element, as noted by McIntosh, was not fully addressed in the reform as it did not "...fully tackle one of the most deep-seated issues in Britain's defence

⁵⁸⁷ Barnett, C., *The Collapse of British Power* (Stroud: Alan Sutton, 1993) p. xi.

⁵⁸⁸ Northedge, *Descent from Power*, p. 359.

⁵⁸⁹ P. Darby 'East of Suez Reassessed' in Ed. J. Baylis, *British Defence Policy in a Changing World* (London: Croom Helm, 1977) pp. 52-64. & Carver, *Tightrope Walking* (1992) pp. 67-75.

⁵⁹⁰ Carver, *Tightrope Walking*, p. 70.

management, that of single service rivalry and competition for resources.”⁵⁹¹ It was this continual lack of resources that framed the financial aspects of the cuts, with the political dimension shaping the answers.

Prior to the balance of payments crisis in autumn 1964 British military power projection had been in decline following the Second World War through enduring economic pressures on the budget. For Goldstein this resulted in a situation where “the economic constraints governing Britain’s defence efforts have been so stringent that successive governments have refused to commit themselves over any length of time to a lasting set of policy priorities.”⁵⁹² To Baylis, the decline in the relative economic might of the country led to an equally relative decline in British defence capabilities, but that the economic reality alone did not determine the outcome. Instead, the political inclinations of the incumbent party also played a significant role.⁵⁹³ In the case of Wilson, there was a clear prioritisation of domestic issues such as the need to fund the abolition of the prescription charge. There was also a focus on nuclear weapons over conventional forces as providing power projection under Macmillan, representing the ‘power on the cheap’ model of Paul Kennedy and Roger Carey.⁵⁹⁴ This had not been endorsed by Wilson in opposition, yet on entering office the Labour position reversed and it was decided to continue with the construction of the Polaris carrying submarine fleet.⁵⁹⁵ Such weapons provided a seat at the top table, but did not in themselves enable power projection on a global scale. For that, there

⁵⁹¹ M. McIntosh, *Managing Britain’s Defence* (London: Macmillan, 1990) p. 20.

⁵⁹² W. Goldstein, “British Defense & Alliance Strategy: The Strategic Quandary of a Middle Power”, in *Polity*, Vol.3, No.2 (1970) p. 143.

⁵⁹³ J. Baylis, “‘Greenwoodery’ and British Defence Policy”, in *International Affairs*, Vol.62, No.3 (1986) p. 443.

⁵⁹⁴ Kennedy, *The Rise and Fall of the Great Powers*, p. 370 and R. Carey, “The British Nuclear Force: Deterrent or Economy Measure?”, in *Military Affairs*, Vol.36, No.4 (1972) p. 133.

⁵⁹⁵ Wilson, *The Labour Government*, p. 40.

was a requirement for significant manpower, and the ending of conscription in the review of 1957 in order to ease a labour shortage, had, in the opinion of Vasquez, limited Britain's "...ability to maintain its status on the world stage."⁵⁹⁶

The preceding defence review of 1957, which had also placed financial considerations at the forefront, was entitled *Defence: Outline of Future Policy*, but was colloquially known as the Sandys Review of 1957.⁵⁹⁷ This review had resulted in a fundamental reappraisal of the nature of defence and had provided a bitter pill for all elements of the Services. Whilst there was a strong focus on the dividend on both expenditure and manpower requirements from the technological revolution, the requirement to prune the economic burden of defence was front and centre. With the Korean War over and the military still holding the capacity built up during the early 1950s rearmament phases, the review laid-out a reduction to the size in the armed forces from 700,000 personnel to around 400,000. This was matched by a desire to refocus the posture of the fighting forces to one where the aim was to "...prevent war rather than to prepare for it."⁵⁹⁸ The move away from manned aircraft towards missile systems was central to this, and such measures were predicted to result in savings of over £150m per year.⁵⁹⁹ The Suez Crisis the previous year had, as Roger Carey pointed out, "raised the spectre that...a nuclear-weapon capability might not necessarily allow [for] the hoped cutback of the conventional forces."⁶⁰⁰ Financial considerations were however paramount, and the review set a budgetary target of £1,424m in the 1957/58

⁵⁹⁶ J.P. Vasquez III, J.P., "More Than Meets the Eye: Domestic Politics and the End of British Conscription", in *Armed Forces and Society*, Vol.37, No.4 (2011), p. 637.

⁵⁹⁷ TNA CAB 129/86/29, Note, Minister of Defence, *Statement on Defence*, 1957, 15 Mar 1957.

⁵⁹⁸ TNA CAB 129/86/29, *Statement on Defence*, 1957, 15 Mar 1957. p. 4.

⁵⁹⁹ TNA CAB 129/86/29, *Statement on Defence*, 1957, 15 Mar 1957. p. 10.

⁶⁰⁰ Carey, "The British Nuclear Force", p. 135.

cycle.⁶⁰¹ This reduction held true through to 1960/61, when defence expenditure rose slightly to £1,596m, however by late 1964 this had dramatically increased when the estimate for 1965/66 sat at £2,141m and was predicted to climb further to £2,400m by 1969/70.⁶⁰² The rise suggested a balance between worldwide commitments and minimal budgets could not be achieved, and the 1957 capability and budgetary revisions had not shown any intent of reducing these commitments. As contemporary writer Laurence Martins put it, “...Britain [faced] the universal military problem of limited resources and extensive commitments.”⁶⁰³ The retention of a military posture East of Suez, particularly with continued membership of the South-East Asia Treaty Organisation and the Baghdad Pact, had idealised goals aligned with the American policy of aiding countries in resisting the spread of communism, but also brought a requirement for military aircraft capable of achieving the desired effect – whether through deterrence or response.⁶⁰⁴ It was in attempting to meet this requirement that the big three RAF domestic programmes existed, and how they were able to germinate through the early 1960s and contribute to the rising defence budget. By extension, any programme under development would require examination for value for money in the first instance. The pressing need to rein in ever increasing expenditure was the first element of defence that the Labour review examined in late 1964.

At the pre-Washington Summit discussions at Chequers in November 1964, the MoD were tasked with achieving a budget of £2,000m, at 1964 values, by 1969/70 and

⁶⁰¹ TNA CAB 129/86/29, *Statement on Defence, 1957*, 15 Mar 1957.

⁶⁰² TNA PREM 13/18, Memo, Trend to P.M., *Defence Policy – Chequers discussions*, 19 Nov 1964.

⁶⁰³ L. Martin, “The Market for Strategic Ideas in Britain: The ‘Sandys Era’”, in *The American Political Science Review*, Vol.56, No.1 (1962) p. 23.

⁶⁰⁴ TNA CAB 129/86/29, *Statement on Defence, 1957*, 15 Mar 1957, p. 6.

to provide the military impact such a reduction would bring.⁶⁰⁵ This represented a reduction of £400m and would bring the budget down to 5% of GDP from the previous 7%.⁶⁰⁶ This tasking, whilst central to the Labour pre-election objective of reducing government outlay, only formed part of the issue.⁶⁰⁷ In order to effectively reduce expenditure, defence strategy and the commitments that shaped it required re-evaluation. The requirement of retaining a presence East of Suez formed the backbone of the worldwide role envisaged by successive post-war British governments. The question by the mid-1960s was centred on whether Britain's focus should be on the Far East or Europe. Hovering over this conundrum was the position of the United States. The Johnson administration had been firm on the expectation that Britain should retain a presence to the south and west of the American focus in South East Asia in the traditional British regions of influence around Singapore and Malaysia, but such a commitment would come at a significant cost to the balance of payments and the ability of Britain to earn foreign currencies.

As discussed in chapter two, preserving spheres of influence in military sales formed an important element of raising foreign currencies. The Foreign Office noted in May 1965 that, "It is explicit State Department policy, so far carried through successfully whatever the Department of Defense view may be, to encourage the United Kingdom to take on the whole burden of military aid and arms supplies to Commonwealth African countries."⁶⁰⁸ Supplying equipment brought responsibilities but also currencies, and whether through the division of sales markets, or as directly

⁶⁰⁵ TNA CAB 148/42 *Memoranda 1-27*, O.P.D.(O)(65)16 *Defence Expenditure Review 1964/65*, 18 Mar 1965

⁶⁰⁶ Carver, *Tightrope Walking*, p. 71.

⁶⁰⁷ H.A. DeWeerd, *The 1966 British Defense Review* (Santa Monica: RAND Corporation, 1966) p. 1.

⁶⁰⁸ TNA FO 115/4631, FO Report, *Anglo-U.S. Problems over Arms Sales*, May 1965.

linked elements of the 1964/65 defence packages, the suggestion is that America was at no point intending to completely usurp British military sales, even if that meant a reduction in their own economic success. As part of the aircraft package offered by America, and to help incentivise the British posture east of Suez, America yielded sales to Saudi Arabia with the expectation that the earned dollars would be spent on the American aircraft. The central element of this comprised the sale of BAC's Lightning aircraft.⁶⁰⁹ In essence this aspect of the package would, from a British perspective, remain financially the same, and America would still receive the money owed, with the only loss being from sales to a market that was traditionally considered British anyway. This represented an element of the multi-faceted nature of power projection detailed by Barnett, and was not secretive in nature. McNaughton testified to a joint session of the Senate Foreign Relations and Armed Services Committee in 1967 where, "Saudi Arabia is a case in which the balance of considerations, [with] everything taken into account, we, in effect, allowed part of that deal with Saudi Arabia to go to the United Kingdom."⁶¹⁰ The importance given to the aircraft programmes were thus key to the American position on British commitments and were central to both the financial and strategic aspects of the review.

The strategic aspect of the review was not solely focused on the East of Suez question, but also had to consider the growing importance of the EEC and the military relationships within NATO. This was of particular significance as de Gaulle continued to express dissatisfaction with the organisational structures and purposes of NATO. The

⁶⁰⁹ Barnett, *The Long Retreat*, p. 202.

⁶¹⁰ Statement by John T. McNaughton, Assistant Secretary of Defense for International Security Affairs, *Executive Sessions of the Senate Foreign Relations Committee Together with Joint Sessions with the Senate Armed Services Committee*, Vol. XIX.

divisive discussion over the MLF had highlighted this fragile nature of Britain's relationship with the European powers and of France under de Gaulle in particular. Thus the strategic considerations had two fundamental elements. Firstly, a movement away from a worldwide role, whilst economically efficient, would impact relations with the United States at a time when American support for sterling was of vital importance. Secondly and conversely, a resultant refocusing on Europe could improve relations with the EEC and provide economic and political advantages, yet would result in the acceptance that Britain was no longer a worldwide power. The lack of clarity and direction within the review of defence spending and strategy, and the associated aircraft programmes, demonstrated that this was an era of a nation in flux and uncertain over what role Britain was to take on the world stage.

The high degree of uncertainty is ably demonstrated by the primary focus being on reducing defence expenditure. The review of defence expenditure commenced in the winter of 1964, over twelve months prior to the publishing of the review of defence strategy.⁶¹¹ The problems posed by rising equipment costs offset against the economic crisis resulted in the previously stated ambition of a budget held at £2,000m per year by 1969/70. Whether a deliberate ploy or not, for there is nothing to suggest it was a targeted attack, the chosen financial year was where the bulk of the RAF aircraft programmes' costs fell, with an estimated saving of £43.9m in 1969/70 should the principle three programme be cancelled and replaced with American aircraft.⁶¹² The focus on the 1969/70 financial year was considered unfair by the Minister for the RAF, who in March 1965 urged Healey to consider the merits of the programme costs

⁶¹¹ HMG, *Statement on the Defence Estimates*, Cmnd. 2901 (London: HMSO, 22 Feb 1966).

⁶¹² TNA DEFE 24/444 *Defence Policy: Defence Expenditure Review 1965*, DP Note 2/65, *Defence Review 1965*, Note by the Directors of Defence Plans, 1 Feb 1965

as a whole, rather than simply taking the peak year.⁶¹³ Even with the adjustments to meet the requirements, this represented a mere 10% of the required £400m savings, and shows that when considered purely on cost savings, the aircraft programmes were a small element and far outstripped by the consideration of economic industrial output and political capital.⁶¹⁴

The Shackleton replacement was considered against the big three programmes as part of the spending review. The concept of a Shackleton replacement within this element was not the proposed maritime Comet, but a highly advanced long-term replacement that adhered to AST.357. Unlike the other three aircraft, the Shackleton replacement was still conceptual and intended for entry into service in the 1970s, so therefore did not carry a major financial penalty in 1969/70. Where the Shackleton replacement was discussed in this context, it was with reference to the replacement of the entire fleet of mk.2 and mk.3s, whereas ultimately the maritime Comet was proposed purely a replacement for the aging mk.2s. This split fleet concept and deferral of the AST.357 programme into the 1970s through the procurement of a maritime Comet resulted in projected costs in financial year 1969/70 of only £4.5m against £12.3m for AST.357.⁶¹⁵ A note from Director of Defence Plans in February 1965 considered the savings of all the programmes to be ones of long term benefit as, “The financial effect of purchasing American aircraft in place of TSR2, P.1154 and HS.681, of full development of P.1127 in part replacement for P.1154, and of the purchase of COMETS to replace the SHACKLETON 2 [emphasis in original], would be a budgetary

⁶¹³ TNA DEFE 13/829, Letter, Min. RAF to SoS Defence, *Defence Review*, 11 Mar 1965.

⁶¹⁴ TNA PREM 13/18, Memo, Trend to P.M., *Defence Policy*, Nov 1964 – estimated 1969/70 defence expenditure at £2,400m.

⁶¹⁵ TNA DEFE 24/444, Brief, DP Note 2/65, *Defence Review 1965*, Note by the Directors of Defence Plans, 1 Feb 1965.

saving of £600/800m in the next decade.”⁶¹⁶ The selection of a maritime version of the Comet therefore represented a cost saving measure worth considering alongside the American offerings.

The ambition of realising the cuts for 1969/70 and beyond meant that there were no immediate financial benefits from cutting back on the aircraft programme elements of defence expenditure. Thus for the reasoning behind the cuts to be a need for immediate cross-governmental economic stability, the other government departments would also have had to carry out reductions, both in the short and medium term. The Department of Health saw a budget increase from £796m in 1964/65 to £913m in 1965/66, primarily for the provision of the Labour priority of providing free prescriptions. The Department of Education received an increase of 17% to £264m, and Benefits rose from £584m to £701m. The only departments, aside from Defence, to see an immediate reduction in expenditure were External Relations, whose budget shrank from £267m to £230m, and Agriculture and Fisheries who saw a drop of £30m to £348m.⁶¹⁷ Such moves clearly represent domestic political motivations, as with a Commons working majority of four, the Labour party had to keep one eye on an inevitable general election. Increased funding for the NHS, schools and welfare were intended to play better at the ballot box than fisheries and overseas aid could. The coincidental introduction of corporation tax and capital gains tax were not direct measures to raise significant funds, and instead representing a long-required adjustment of the taxation system. Corporation tax, for instance, allowed for the

⁶¹⁶ TNA DEFE 24/444, DP Note 2/65.

⁶¹⁷ Political Correspondent, “Defence spending to rise by over £120m”, *The Times*, 23 Feb 1965 and “Historic Government Spending by Area”, *The Guardian*, <https://www.theguardian.com/news/datablog/2010/oct/18/historic-government-spending-area>, Recalled 11 Oct 2023.

setting of a specific tax rate for companies out-with that used for personal taxation.⁶¹⁸

This again should be considered as a potential vote winner, rather than a distinct economic movement designed to improve the balance sheets.

The impact of defence spending on the economy was not simply in government expenditure, but also in how the economic output of the country was disposed and managed. Aircraft programmes represented a relatively small portion of the budgetary savings, yet through the high levels of skilled labour required within the industry, represented a large pool of people who could be employed in high technology fields such as computing which had been championed by Wilson in his 'white heat' speech of 1963.⁶¹⁹ Trend mentioned to Wilson in late November 1964, prior to the Washington talks, that to achieve his stated aims of growing the domestic economy, the burden defence posed would have to be reduced.⁶²⁰ He also pointed out that maintaining a worldwide influence was tied to possessing a strong economy.⁶²¹ This highlights a fundamental consideration for Britain in this period – rather than the conventional display of hard power through the projection of military force, the ability to influence the course of world affairs through an economic based soft power, particularly in the newly emerging technological field, was taking on even greater significance. When paired with the notion that a redistribution of defence economic output would lead directly to an increase in wider economic performance, the perception that the savings were less about pure defence spending comes to the fore.

⁶¹⁸ R.C. Whiting, "Ideology and Reform in Labour's Tax Strategy, 1964-1970" in *The Historical Journal*, Vol.41, No.4 (1998) pp. 1122-1123.

⁶¹⁹ Political Correspondent, "Mr. Wilson waves new banner of revolution", *The Times*, 2 Oct 1963.

⁶²⁰ TNA PREM 13/18, Memo, Trend to P.M., *Defence Policy*, 25 Nov 1964.

⁶²¹ TNA PREM 13/18, *Defence Policy*, 25 Nov 1964.

The size of the workforces involved in both active service and manufacturing elements of defence activities were vast, particularly within research and development. The discussions at Washington and beyond had emphasised the shared ambition of both the Labour government and the Johnson administration, and particularly McNamara, to allow for increased collaborative development across British and American defence programmes.⁶²² This aim was also present when Britain looked across the Channel with the emerging variable geometry strike and training aircraft programmes and Concord.⁶²³ The key area of research and development was the one sector where Britain was able to bridge the twin expanding relationships with the USA and Europe. Although the defence and the aviation industry were large scale employers, accounting for one and a half million workers from a national workforce of 24 million, it had been steadily shrinking since the end of the Korean War.⁶²⁴ The manpower of the armed forces had been reduced to meet the 400,000 laid down in the Sandys Review, and the planning assumptions when Labour came to office were still in the 390,000-400,000 range.⁶²⁵ Previous cancellations of military aircraft programmes had seen significant job losses within the aviation industry, with the fall-out from the 1957 Defence White Paper and the move away from conventional aircraft seeing 23,000 job losses.⁶²⁶ A cancellation of the HS.681 was projected to result in 4,000 redundancies through the closure of the Hawker Siddeley plant at Baginton, whilst around 8,000 jobs would go at BAC with the cancellation of the TSR.2. For the

⁶²² TNA PREM 13/4, Telegram, PM to Canberra and Wellington, *Washington Talks*, 14 Dec 1964.

⁶²³ TNA PREM 13/117, Telegram from FO London to FO office in Paris, *Future of the Anglo-French Concord Project*, 26 Oct 1964.

⁶²⁴ TNA PREM 13/4, Telegram, PM to Canberra and Wellington, *Washington Talks*, 14 Dec 1964.

⁶²⁵ TNA DEFE 6/95, DP Note 28/64, *Defence Policy*, 28 Oct 1964.

⁶²⁶ TNA CAB 148/42, O.P.D.(O)(65)13, Note by Secretaries, *Economic and social consequences of the cancellation of the TSR.2*, 17 Mar 1965.

specialist suppliers, these cuts would result in losses at Bristol Siddeley aero engines with their 5,000 employees, although the number affected would be offset by purchasing F-4 Phantoms and TFX and fitting them with Spey engines. For avionics company Ferranti, over half of the 4,300 strong workforce would have been at risk through losing the work on TSR.2 and P.1154.⁶²⁷

The desire laid out by Wilson at Scarborough in 1963 to embrace the white heat of technology required the freeing up of these skilled workers from government contracts and the ability for them to move into more dynamic consumer focused sectors. The aim therefore was not a question of encouraging existing aircraft companies to shift focus from military to commercially sectors, but instead to accept the reduction in size of the aviation industry workforce, and to refocus on the labour market as whole. This was not done with the intent of disbanding the aviation industry in toto, as Nevin pointed out to Healey in November 1965 with a handwritten note that fundamentally addressed the aims and intentions of the Labour Government towards the aviation industry, and also suggested a central reason behind selecting the Comet as a Shackleton replacement, "I would reckon to being pushed into keeping the Spey/Phantom. This + AT engine etc shd [sic] keep the aero-engine chaps busy. The 2 Anglo-French projects provide an adequate airframe load + work on V. bombers & Maritime Comet."⁶²⁸ The intent is clear – a redistribution of a labour force that was not at the expense of the industry as whole, which would still allow for a rebalancing of the domestic budgetary and economic profile. The maritime Comet provided a means for this whilst still meeting the aims of reprofiling the defence budget for 1969/70. As

⁶²⁷ TNA CAB 148/42, *Economic and social consequences of the cancellation of the TSR.2*, 17 Mar 1965.

⁶²⁸ TNA DEFE 13/745, *Defence Review – 1965*, Handwritten note, Nevin to Healey, R.A.F. aircraft programme, 1 Nov 1965.

the lowest value programme, it also allowed for a demonstration of governmental commitment to the aviation industry whilst not having to absorb a large portion of the budget and committing a large-scale workforce to a government contract. Despite the headline figure of aiming for savings of £400m from the defence budget, the aircraft programmes as a whole represented a modest saving whilst there remained a requirement for a similarly capable replacement. The review of strategy was not on the agenda until later in 1965, however the implications of the strategy of East of Suez formed a major part of the in-year defence budget, but as it did not represent large ticket items, was a far more delicate matter to address in the quest for financial savings. The need here was potentially greater as it got to the heart of the economic crisis through the impact of overseas defence spending on the balance of payments.

In spring 1965 the Defence and Overseas Policy Committee laid out three options for reducing expenditure: a reduction in force and equipment without a corresponding reduction in commitments, the identification of fields where a small military reduction could be tolerated, and those where a wider ranging reduction in commitments would lead to financial savings. The research paper decisively came down on one side of these options, by stating that, "If we downgrade our general ability to meet unexpected military commitments we must accept the political consequences. We cannot afford to continue to carry the commitments but reduce the forces below the level at which they can meet them effectively."⁶²⁹ The statement laid bare the fundamental issue of make procurement choices within an urgent military spending review prior to conducting a strategy review.

⁶²⁹ TNA CAB 148/42, O.P.D.(O)(65)16, *Defence Expenditure Review 1964/65*, 18 Mar 1965.

The stated aims of British defence policy, as laid out in the Defence White Paper – *Strategy for the Sixties* and written in early 1962, were to: maintain the security of the United Kingdom, adhere to the obligation of protecting dependant territories around the world, and providing a contribution to the defence of the free world. These objectives were centred around the concept of contributing to collective security to prevent the outbreak of war.⁶³⁰ This model was to be achieved without reintroducing national service nor conscription, instead relying on the volunteer force introduced by the 1957 review. The maintenance of the independent nuclear deterrent, recommitted to that year by Macmillan at Nassau, combined with a policy of NATO first ensured that British military posture, and crucially influence, stretched across the globe, irrespective of the financial penalty. This influence, to John Darwin, was “...derived from [British leaders] claim to have close relations with Washington.”⁶³¹ The strategy contained two fundamental assumptions. First was that the obligation to defend dependant territories would naturally decrease in scale as more and more nations gained their independence, and second that defence spending would remain at 7% of GNP.⁶³² With the intention to hold defence spending at £2,000m, the second of these assumptions was already broken by late 1964. The first assumption brought with it an expected reduction in overseas basing, as the independence of previously dependant nations carried no guarantees of basing rights, and thus required a strategy centred on the use of “amphibious task groups and

⁶³⁰ TNA DEFE 7/2235, *Review of Future Policy 1960-1970*, Telegram, *Defence White Paper 1962*, 18 Feb 1962 and DEFE 6/95, DP Note 28/64, 28 Oct 1964.

⁶³¹ J. Darwin, *The Empire Project: The Rise and Fall of the British World-System 1830-1970* (Cambridge: Cambridge UP, 2009) p. 641.

⁶³² TNA DEFE 7/2235, Telegram, *Defence White Paper 1962*, 19 Feb 1962.

strategic reserves capable of rapid movement by air.”⁶³³ To meet this, the RAF procurement plan laid out orders for Comet IV and VC-10 troop transport aircraft, alongside orders for the Argosy and Belfast cargo carriers.⁶³⁴ It was from this model that aircraft requirements were set that encompassed the TSR.2, HS.681, P.1157 and Shackleton replacement. The TSR.2 and P.1157 were able to meet the NATO requirement, the HS.681 the strategic airlift need, whilst the Shackleton replacement was to serve as a guardian of international trade routes and fly in colonial policing roles. The 7% of GNP was, by late 1964, the primary element that was under threat, and as such, despite the political challenges, the commitments had to reduce in line with the financial realities. It was this point that the O.P.D. paper alluded to in March 1965.

The financial impacts of these defence commitments, and the possible savings which modifications to them could make formed the battle ground of the review. The concept of East of Suez was sacrosanct within the political hierarchy, as Wilson has laid out during the initial panic movements over sterling shortly after the election in October 1964. This ran contrary to the military Chiefs of Staff, who favoured option three of the O.P.D. report – that of reducing commitments as a means of reducing costs.⁶³⁵ This would have seen a positive response on the economic markets as it would have reduced the balance of payments across the globe and provided resilience to sterling as a result. Trend had written to Wilson in November 1964 that, in line with the discussions at Chequers, there needed to be a review of defence commitments

⁶³³ TNA DEFE 7/2235, *Defence White Paper 1962*, 19 Feb 1962.

⁶³⁴ TNA DEFE 7/2235, Telegram, *Defence White Paper 1962*, 18 Feb 1962.

⁶³⁵ TNA CAB 148/42, O.P.D.(O)(65)16, *Defence Expenditure Review 1964/65*, 18 Mar 1965.

outside of Europe.⁶³⁶ Such a move, whilst coming from the most logical of origins, was cautioned by Healey, who wrote to Callaghan that there was an inherent danger in using terms such as “reducing commitments”, as this suggested that a decision had already been taken to withdraw forces from East of Suez.⁶³⁷ At a time when maintaining American support for sterling was paramount, any suggestion of a withdrawal would have been highly problematic and again highlighted the near impossible balancing act required by the Wilson government in this immediate period after taking office. By the time the review of defence strategy fully commenced in mid 1965, and after the decisions on the aircraft procurements had already been taken, Healey told the Chiefs of Staff that, “Even a relatively small reduction in our defence effort will require disengagement from political commitments: this will...create diplomatic difficulties.”⁶³⁸ The unwillingness to be seen politically of stepping back from a military posture East of Suez, despite the clear economic advantages of doing so, had a very powerful driver in the continued form of the desire of America for British involvement in ideally Vietnam, but certainly in the wider region. Even following Johnson’s acceptance that British commitments in Malaysia were all encompassing at that stage, there was no expectation of it remaining so in the longer term, with McNaughton making the unusually direct request to Healey in autumn 1965 of wanting a degree of trans-Atlantic consultation in the review process to ensure these considerations were met.⁶³⁹ The Secretary of State, Dean Rusk, had told The Foreign

⁶³⁶ TNA PREM 13/18, Memo, Trend to P.M., *Defence Policy*, 25 Nov 1964.

⁶³⁷ TNA PREM 13/18, Letter, Healey to Callaghan, 30 Nov 1964.

⁶³⁸ TNA DEFE 13/745, Draft Paper, Healey to Service Chiefs, *Defence Review: Personal Paper*, 11 Nov 1965.

⁶³⁹ TNA DEFE 13/745, Minute, *Meeting Between the Rt. Hon. Denis Healey, Secretary of State for Defence, and Mr. John McNaughton*, 26 Oct 1965.

Secretary, Michael Stewart, earlier in spring 1965 that there was concern in Washington that Britain could pull out of South East Asia overnight, just as had been done in Greece and Turkey in 1947. Stewart paraphrased the American concerns to Wilson as, “i.e. don’t pull out Britain because we can’t do the job of world policeman alone.”⁶⁴⁰ Such a statement reinforces how Healey had, with apparent ease, won McNamara over during the White House meeting back in December, and secured highly favourable arrangements for the supply of American aircraft. The O.P.D., prior to the Washington talks, had advised that, “Britain’s power to influence American policy will depend on our making a respectable contribution.”⁶⁴¹ The political value outweighed the economic value, and as such made South-East Asia an anomaly within the rationalisation provided for proposed cuts.

The whole process of the defence review was fundamentally fractured along two distinct lines. On the one hand, the military figures would not countenance a reduction to force sizes without a reduction to commitments, regardless of the theatres of operation. The opposing view that was held within parliament and the civil service, and reflected in the overtures to both the United States and European powers, was that Britain should still be seen to be an active player on the world stage, and that military standing should be adjusted down along financial, rather than commitment lines. The agreement amongst the military chiefs of there being a need for a reduction in defence commitments were not matched with an agreement on which, if any, equipment could afford to be cut as part of the process. Proposals had been outlined for withdrawing from Aden, reducing force numbers in the Mediterranean and

⁶⁴⁰ TNA DEFE 13/829, Memo, Stewart to P.M., *PM/65/72*, 16 May 1965.

⁶⁴¹ TNA CAB 148/42, O.P.D. (64)10, *British policy towards South-East Asia*, 19 Nov 1964.

building up long-term alliances east of Suez, but these were not accompanied by corresponding equipment reductions.⁶⁴² Estimated saving, such as £58m in the Mediterranean and Near East, with £22m coming from the RAF, were produced by the Ministry of Defence, but could only come about with force sizes reduced to a minimum. Such proposals were clearly not intended to be viable, as the risks, particularly the vulnerability of Gibraltar, Malta and Cyprus to foreign interference outweighed the relatively small financial gain.⁶⁴³

The 1962 strategy had presumed that no prolonged conflict would occur throughout the decade, with the exception of stability operations in the Far East, and that the nuclear deterrent would negate the requirement for large scale standing conventional forces.⁶⁴⁴ The continued climb down in tensions across the Iron Curtain after the Cuban Missile Crisis had made the threat of a major European war unlikely and thus the review naturally centred on making savings in those regions where peace could be presumed, and political dismay at cutbacks would be minimal.⁶⁴⁵ Where larger scale items were considered, the three Services and their respective ministers split along Service lines, further fracturing and reducing the effectiveness of the unified Ministry of Defence to combat the cuts. The Minister for the RAF complained to Healey in March 1965 that too much focus was being given to the aircraft programmes, at the expense of examining both the replacement aircraft carrier programme and the nuclear deterrent.⁶⁴⁶ Conversely the Minister for the Army, writing to Healey four days

⁶⁴² TNA DEFE 13/829, Note, Nairn to Healey, *Defence Review; the path through the woods*, 24 May 1965.

⁶⁴³ TNA CAB 148/42, O.P.D.(O)(65)16 *Defence Expenditure Review 1964/65*, 18 Mar 1965.

⁶⁴⁴ TNA DEFE 6/95, DP Note 28/64, 28 Oct 1964.

⁶⁴⁵ TNA DEFE 13/829, Note, VCDS to CNS, CGS, CAS, 10 Mar 1965.

⁶⁴⁶ TNA DEFE 13/829, Letter, Min. RAF to SoS Defence, 11 Mar 1965.

later, complained that the proposed savings were all being made to the Army, and not enough attention was being given to the RAF or the Royal Navy.⁶⁴⁷ The Minister for the Royal Navy, perhaps acutely aware that if further large financial savings had to be made, and with the domestic RAF procurements effectively replaced by this time, that the future aircraft carriers were next in line – dismissively advised Healey that any decisions on future carriers and the Type 82 light cruiser were too big for the Ministry of Defence to consider alone, and should have a broader interdepartmental assessment.⁶⁴⁸ Such infighting, whilst hardly helpful, also marked the final hurrah for separate ministerial positions within the new Ministry of Defence. The centralising of political power solely on the Secretary of State was undoubtedly hastened by the experience of pushing through the defence cuts of 1965. In much the same way as Robert McNamara had sought to consolidate power within the Department of Defense to improve both the financial efficiency of the department and reduce infighting, so the inter-service squabbling that defined this aspect of the review highlighted the need for a similar approach in Whitehall.

The Defence White Paper was finally published in February 1966, providing the strategic considerations that had been unavailable in the initial cost savings discussion of late 1964 and early 1965. That the report commended the work done in early 1965 in cutting £220m from the budget without a reduction in capability emphasises this delineation.⁶⁴⁹ The review did highlight the painful overstretch that this had brought about, particularly to manpower, and reflected the fears expressed by the Ministry of

⁶⁴⁷ TNA DEFE 13/829, Letter, Min Army to SoS Defence, 15 Mar 1965.

⁶⁴⁸ TNA DEFE 13/828, Letter, Min for RN to SoS Defence, 22 Mar 1965.

⁶⁴⁹ TNA CAB 129/124/33, *Memo, Defence Review, The Statement on Defence Estimates 1966, Part I*, 11 Feb 1966, p. 2.

Defence throughout the review of defence spending. The worries of the Minister for the Royal Navy were ultimately founded, as the replacement aircraft carrier, CVA-01, was indeed cancelled.⁶⁵⁰ This carrier programme had been centred on the need for a sustained presence east of Suez, and the cancellation highlighted the inevitable refocusing on the European theatre.⁶⁵¹ Conversely, at the same time the review ensured an RAF capability that could operate in the American priority region of the Far East. The review served as the final confirmation for the aircraft, belatedly provided this strategic justification for the adjustments to the RAF aircraft programmes, and laid out the European co-operative developments for the variable geometry strike aircraft, and light strike/trainer aircraft. The maritime Comet order was confirmed, but the review, unlike for the P.1154 and TSR.2, did not dwell on the reasons behind the selection. It was however at pains to detail the large volume of work that the Ministry of Defence would provide for the British aviation industry through an annual spend of £130m on spares and equipment, alongside the “continued production in the United Kingdom of the Lightning, Belfast, Buccaneer, Andover, Basset and Jet Provost...[and] there will be major new aircraft programmes for British industry in the...P.1127 and the maritime Comet.”⁶⁵² Such a statement, coming less than a year after the axing of TSR.2, P.1154 and HS.681 suggests that, from the political perspective, and unchanged from how Burke Trend had advised Healey a few months prior, the domestic aviation industry was not to be fatally felled by the urgent move to reduce the defence budget before strategic requirements were even properly considered.

⁶⁵⁰ TNA CAB 129/124/33, *Defence Review, The Statement on Defence Estimates 1966*, p. 16.

⁶⁵¹ D. Hobbs, *The British Carrier Strike Fleet After 1945* (Annapolis: Naval Institute Press, 2015) pp. 412-413.

⁶⁵² TNA, CAB 129/124/33, *Memo, Defence Review, The Statement on Defence Estimates 1966, Part I*, 11 Feb 1966, pp. 19 & 21.

This chapter has presented that the order of the defence review process, with spending being decided before strategy, highlighted the primacy of political objectives in the military equipment considerations of the period in both the domestic and international arenas. It has been demonstrated that the timings of the financial outlays on the Shackleton replacement aided in its survival within the bounds of the defence review process, particularly as it did not primarily address the East of Suez posture requirement. It was this need to retain the worldwide commitments, in part to ensure harmonious relations with the United States, that framed the review above all else. All of the aircraft programmes represented a significant financial outlay, but the greater impact was within how any changes to the procurement plans would impact the make-up of the domestic aviation industry and how this factored into the wider balancing act for the Wilson government. It is this element that must therefore be considered next.

CHAPTER 6 – THE BRITISH AVIATION INDUSTRY

Any changes to defence procurements during the period, regardless of the reasoning, would have an outsized impact on the British aviation industry, as domestic output was dominant in the supplying of equipment to the British armed forces. The decision to continue with Concord served not only as a means of sustaining a favourable relationship with France, but also of keeping a highly advanced element of British industry in motion. McNamara was conscious of the need to maintain an effective British aviation industry which could sustain innovation in aircraft design during the never-ending arms race across the iron curtain, embodied in both the desire to purchase equipment from Britain, but also in the push for joint research and development programmes. The government also repeatedly made clear that their intention was not to cede the aviation business to foreign competition, but instead to realign and consolidate the sector to make it more profitable and less dependent on government contracts. The slow and expensive progress made on the designs such as TSR.2, which tripled in cost and had a multi-year rolling delay, was not a sustainable model in an increasing competitive international marketplace.⁶⁵³ Transforming the industry could not happen overnight, and the initiating of the Plowden Report formed a first step in this plan. The question was therefore on bridging the gap between cutting away the troublesome RAF programmes with their inherent benefits for international relations and the resultant freeing up of a labour force, whilst ensuring that there were sufficient skilled workers still within the sector once the knee-jerk reaction phase was over and a fresh attempt at revitalisation could be made. It was

⁶⁵³ Healey, *The Time of My Life*, p. 273.

into this breach that, amongst others, the HS.801 Nimrod entered as a tool for sustaining the domestic aviation industry in turbulent period.

This chapter will examine how the aviation sector functioned during the period, how it responded poorly to both previous cutbacks and the decisions made over the big three programmes by early 1965 in order to establish the requirement for a degree of continued government-contracted work. Firstly, earlier incidents such as the Ferranti scandal, which highlighted the failings in the existing system and yet not result in serious consequences, is examined alongside the contractual structures in place that favoured the industry. Secondly, the role of the aviation industry in the 'white heat of technology' drive is assessed, as the high R&D requirements for an industry that was underperforming as an exporter was of even greater concern during a balance of payments deficit. Thirdly, the response from both senior corporate leadership and the workforce to the cancellations of the big three programmes – particularly the TSR.2 – and their immediate impact on the companies' prospects is considered, as the element of panic within the senior leadership directly contributed to an environment where the successful allocation HS.801 took on a greater significance for the survival of the sector. From this it will be argued that the failings of the aviation sector were primarily self-generated, and that it was ultimately unsustainable under its existing model irrespective of the wider government ambitions on American and European political manoeuvrings. It will also conclude that, in the same manner that the timings of the expenditure on HS.801 made it viable economically, so the relatively low commitment of resources required set it apart from the larger procurement programmes and made it more a politically viable option.

Writings on the aviation sector tend to view it within the wider malaise of British industry, suffering from the issues outlined at the start of chapter one, whether it is considered a decline, as by Tomlinson, or the post-declinism works of Edgerton that attempt to champion the successes rather the travails.⁶⁵⁴ Government efforts at industrial reform are equally grouped together, with writers such as Sandbrook considering the Ministry of Technology, which did not include the aviation sector, and Department of Economic Affairs (DEA) as the broader answers to the need for modernisation in the entire economy, rather than mentioning specific sectors.⁶⁵⁵ Other writers such as Elbaum and Lazonick consider a lack of governmental action as a contributing factor, as to them, “...British industry in general required...the visible hand of coordinated control, not the invisible hand of the self-regulating market.”⁶⁵⁶ The aviation industry could be said to fall into the middle ground of this theory as it was not fully consolidated and nationalised at this stage, yet as has been seen, the government was proactive with using their market dominance to further domestic and international political ambitions. These studies rarely cover the aviation industry in any specific detail, preferring to centre on the general issue of productivity impacting all sectors, and, to Singh, Bacon and Eltis, the problem of a vastly shrunken post-war industrial base in Britain to generate market share and competitive exports.⁶⁵⁷ To Owen, the issues for aviation in particular stemmed from the narrow focus on domestic military and civil requirements which hampered the ability of the sector to

⁶⁵⁴ Tomlinson, ““Inventing ‘Decline’”, Edgerton, D., “The Decline of Declinism”, *The Business History Review*, Vol.71, No.2 (1997) p. 203, Edgerton, *The Rise and Fall of the British Nation*.

⁶⁵⁵ Sandbrook, *White Heat*, pp. 170-173.

⁶⁵⁶ B. Elbaum, W. Lazonick, “The Decline of the British Economy: An Institutional Perspective”, in *The Journal of Economic History*, Vol.44, No.2 (1984) p. 578.

⁶⁵⁷ Bacon, R., & Eltis, W.A., *Britain’s Economic Problem: Too Few Producers* (London: Macmillan, 1976) and Singh, A., “UK Industry and the World Economy: A Case of De-Industrialisation”, in *Cambridge Journal of Economics*, Vol.1, No.2 (1977) pp. 123-124.

be responsive to overseas market demands.⁶⁵⁸ Hamilton-Patterson breaks out a continual pattern of governmental mismanagement for the sector from the ending of the Korean War rearmament phase, accelerated through the 1957 Sandys Review and into the choices made in late 1964/65.⁶⁵⁹ The aviation industry was inextricably linked to the demands of government, with Fearon stating that, “Any study...of aviation in Britain must stress the close links which have always existed between, on the one hand the government, and on the other the manufacturers of aeroplanes and the operators of commercial aircraft.”⁶⁶⁰ That the concept of government ties and failings feature so prominently highlights both the overreliance that the sector had on government contracts and that it was effectively within the gift of the government to reorganise what was still fundamentally a private industrial sector.

The impact of cutting procurements, purchasing overseas aircraft, and re-evaluating R&D expenditure was wide ranging, with a particular impact on the manner in which the aviation industry conducted business. As an industrial segment, the aviation industry was a sprawling mass, incorporating a wide range of specialist subcontractors involved in all aspects of aircraft design, development and manufacture alongside the core aircraft manufacturers. The result of this is an often varied assessment of total employment within the sector in the early 1960s of between 260,000 and 365,000 people depending on the shock value attempted by the author.⁶⁶¹ The government investment in R&D is a narrower window, but is equally

⁶⁵⁸ Owen, *From Empire to Europe*, p. 310.

⁶⁵⁹ Hamilton-Patterson, J., *Empire of the Clouds: When Britain's Aircraft Ruled the World* (London: Faber and Faber, 2010) pp. 182-185.

⁶⁶⁰ Fearon, “The growth of aviation in Britain”, p. 21.

⁶⁶¹ Aeronautical Correspondent, “Prime Minister calls aviation leaders to Chequers”, *The Times*, 13 Jan 1965. (365,000) and McElheny, V.K., “Britain wields a modernizing ax [sic]” in *Science*, Vol.147, No.3664 (1965) p.1429 (260,000).

lacking in a definitive value, with £250-300 million a viable middle ground.⁶⁶² The lack of certainty is driven by the overlap and impact of the R&D within varying sectors of the wider British industry. This cross-over is important in understanding both the desire of government to make swingeing cuts to the aviation sector, but also in part explaining the confidence of the aviation industry to its importance and centrality to the economic health of the country. The desired shift of the Wilson Government to move away from government-centric contracts for the aviation industry, and towards public investment in more exportable and desirable industries such as computing had been signposted in early 1963 at Scarborough.⁶⁶³ This formed part of the overall post-war modernisation of the British economy which, for writers such as Turner, got fully underway during the 1960s.⁶⁶⁴ This shift did not automatically mean that instigating cuts to military aircraft programmes would bring down the aviation industry, nor that the cuts were driven purely by financial pressures, but it was a signal that the industry would need to be more self-sufficient, particularly through exports, in order to continue under the new economic model being pushed by Labour.

The 'white heat of technology' struck early through the creation of the Department of Economic Affairs and particularly the Ministry of Technology, with both displaying the intended direction the Labour administration was taking to embrace the new technological age and move away from the traditional departmental structures with the Ministry of Aviation being subsumed into the MoT. This particular move

⁶⁶² TNA EW 25/3, Defence – Economic Burden of Total United Kingdom Defence Effort, General Briefing, *Public expenditure and economic efficiency* (G.B.(64)5), 8 Oct 1964 (£250m) and TNA AIR 20/10089, Future of the aircraft industry, Lovelock suggested reply, *P.M. to Philip Hocking M.P. – future of aircraft industry*, 13 Sep 1962 (£300m).

⁶⁶³ Political Correspondent, "Mr. Wilson waves new banner of revolution", *The Times*, 2 Oct 1963.

⁶⁶⁴ Turner, 'Introduction', in Ed. Turner, *The British Economy in Transition* p. 3.

cannot however be wholly attributed to the Labour government, as Sir Arthur Harvey, Conservative MP for Macclesfield, raised the notion in the House of Commons in July 1963, only for Thorneycroft as Minister of Defence to decline the suggestion, but it was Labour that ultimately turned it into a reality.⁶⁶⁵ The earlier report of the Aircraft Industry Working Party in 1959 had included such stark lines as, "It is...by no means clear that the Aircraft Industry is a valuable economic asset." It also stated that, "Put shortly the Aircraft Industry as at present organised is too large and too expensive to secure the best return for defence purposes."⁶⁶⁶ Therefore the decisions taken by Labour should not have come as a complete surprise to those within the aviation industry, however the response, typified by the protest marches of the factory workers on 13 and 14 January 1965 and the urgent lobbying of industry leaders in the week leading up to Chequers, suggests otherwise.⁶⁶⁷ The protests were timed to coincide with these last ditch efforts of the leaders of the largest companies to reverse the government's course and keep the military aircraft programmes running. This meeting, held at Chequers on 15 Jan 1965, brought to a head the conflicting intentions of the Labour government and the ambitions of such a large and expensive industrial sector. The impassioned response from the various companies highlighted their differing concerns and preparedness in the sustainability of their order books, of which the proposed HS.801 Maritime Comet suggested a more aware posture from Hawker Siddeley than their rivals at BAC, and one where change and revisions to expectations would have a greater chance of bearing fruit.

⁶⁶⁵ House of Commons Debate, 31 July 1963, *Hansard*, Vol. 682, Col. 524.

⁶⁶⁶ TNA AIR 20/10089, Memo, Cooper to C.A.S & P.U.S., *The Aircraft Industry*, 8 Jul 1964.

⁶⁶⁷ Aeronautical Correspondent, "Growing Agitation in the Aircraft Industry", *The Times*, 14 Jan 1965.

By late 1964, the near constant stream of reviews to government defence expenditure following the end of the expansion programmes brought about by the Korean War on military equipment were commonplace, and this frequency may well have lulled the aviation industry into a sense of false confidence over the ramifications of the proposed cuts and replacement of the military aircraft under development with overseas offerings. The most prominent report into the nature of government aircraft contracts thus far was the Lang Report, published in mid 1964. The report was raised in response to perceived excessive profits generated by Ferranti, an electronics and radar subcontractor, on the Bloodhound missile programme. The report found that despite a profit allocation of £810,353 from the Ministry of Aviation, the programme had in fact resulted in profits of £5.77 million.⁶⁶⁸ The total cost of the contract had been £12.82m and the profits represented a return of 82% on costs incurred and 45% on selling prices.⁶⁶⁹ The Ferranti labour estimate had been 25% higher than the MoA estimate, yet both were questionable in accuracy, highlighting the wider difficulties of establishing realistic cost and time predictions for a procurement.⁶⁷⁰ The report was scathing of Ferranti, stating that, "Our principle criticism of Ferranti Ltd. is that they submitted quotations and agreed prices which they knew were very likely to yield profits that the Ministry would not regard as fair and reasonable, profits which can only be described as excessive."⁶⁷¹ The result was that Ferranti had to return £4.25m to the government to bring the case to a close.⁶⁷²

⁶⁶⁸ House of Lords Debate, 28 July 1964, *Hansard*, Vol. 250, Col. 991 and E.L. Normanton, *The Accountability of an Audit of Governments* (Manchester: Manchester UP, 1966) p. 177.

⁶⁶⁹ Political Correspondent, "'Excessive' profit on Bloodhound missile: Ministry lacked direction and drive", *The Times*, 29 Jul 1964.

⁶⁷⁰ Chin, *British Weapons Acquisition Policy*, pp. 34-36.

⁶⁷¹ Political Correspondent, "'Excessive' profit on Bloodhound missile".

⁶⁷² House of Lords Debate, 28 July 1964, *Hansard*, Vol. 250, Col. 991 – Letter, S. de Ferranti to Mr R.G. Way, 28 Jul 1964.

The profit formula in use by the Ministry of Aviation was centred on allowing 10% profits on risk free programmes, and 15% on risk work. In theory this system incentivised the companies to manage costs and keep the overall programme fair in terms of public expenditure whilst still providing for an adequate profit for the private companies. In effect keeping the taxpayer happy whilst also maintaining a viable defence industry.⁶⁷³ These risk contracts were not fixed price, so the 15% allowed could still result in a generous total figure for the companies, especially as the developmental risk was held by the Ministry of Aviation in the form of the £250m R&D allocation to the industry.⁶⁷⁴ As Kiely has pointed out, the expectation throughout the period was that R&D costs would be met by the government and not to fall to a company.⁶⁷⁵ Risk-less contracts were generally issued on a non-competitive basis, with 95% of all MoA expenditure going towards non-competitive contracts by the mid 1960s. For these contracts the calculation was structured around the estimated outlays plus the allocated profit margin to arrive at the contract figure.⁶⁷⁶ It was within this estimated outlays portion that generated the excessive profits from the Ferranti Bloodhound contract. A company could in theory be exceptionally efficient in both manufacturing techniques and working practises, thereby keeping the costs down and well within the estimates, leaving more headroom for profits. The head of Ferranti wrote to the Permanent Secretary to the MoA citing that the profits had been attained through “exceptional production efficiency” and the placing of additional personnel

⁶⁷³ K. Hartley, “Estimating aircraft production outlays: The British experience”, in *The Economic Journal*, Vol.79, No.316 (1969) pp. 863 & 865.

⁶⁷⁴ TNA EW 25/3, General Briefing, *Public expenditure and economic efficiency (G.B.(64)5)*, 8 Oct 1964.

⁶⁷⁵ D.G. Kiely, *Defence Procurement; The Equipment Buying Process* (London: Tri-Service Press, 1990) p. 30.

⁶⁷⁶ Hartley, ‘Estimating aircraft production outlays’, pp. 862 & 865.

within the programme.⁶⁷⁷ The Lang Report took a different line, however, citing overly generous estimates on the cost of labour and overheads associated with the project that would never be reached in reality.⁶⁷⁸ The calculating of estimates was a major weakness of the MoA contract letting process according to Keith Hartley, with some Bristol-Siddeley engine contracts having a 22% error in the calculations for required man-hours.⁶⁷⁹ The same author has also stated that military airframe programmes over the period 1945-55 cost 4-5 times their initial estimates, showing that whilst efficiencies could be achieved, when there was extensive government funded R&D required as part of a high risk contract the target costs were often missed.⁶⁸⁰ This was not the case with smaller fixed price programmes such as the Ferranti radar work on Bloodhound.⁶⁸¹

The HS.681, TSR.2, P.1154 and P.1127 were structured as conventional airframe programmes conforming to the high-risk contracts model with a high level of government investment for the research phase. In the case of the P.1127, and unusually for the period, the research burden of the V/STOL engine and airframe technology was shared internationally with funding also coming from the United States. The Maritime Comet proposal, uniquely amongst the aircraft programmes underway, was for a fixed price contract. This difference placed the onus on Hawker Siddeley to make the programme work financially, unlike with the other four domestic aircraft for which the risk was held by the British government, whilst their proposed

⁶⁷⁷ House of Lords Debate, 28 July 1964, *Hansard*, Vol. 250, Col. 991 – Letter, S. de Ferranti to Mr R.G. Way, 28 Jul 1964.

⁶⁷⁸ Political Correspondent, ““Excessive” profit on Bloodhound missile”.

⁶⁷⁹ Hartley, ‘Estimating aircraft production outlays’, p. 877.

⁶⁸⁰ Hartley, ‘Estimating aircraft production outlays’, p. 864.

⁶⁸¹ K. Hartley & P. Watt, “Profits, regulation and the U.K. aerospace industry”, in *The Journal of Industrial Economics*, Vol.29, No.4 (1981) p. 418.

American replacements were predominately fixed price as imports, all at a time when large financial outlays were under great scrutiny.

Despite this, there was clearly a feeling within the aviation industry that this period of reviews could be ridden out in much the same manner as previous reviews, particularly when considering that the Sandys Review of 1957 had been the most overt cull of aircraft programmes in the post-war era, yet had not resulted in the collapse of the industry nor the end of the contract letting model of the MoA. Indeed, as part of the exchange of letters between Sebastian de Ferranti and Sir Richard Way, the permanent secretary at the MoA in July 1964, the head of Ferranti asked, "I would be grateful if you can assure me that there will be no discrimination against Ferranti Limited so far as future contracts are concerned in consequence of what has happened." The response from Way would have reaffirmed to Ferranti and the wider aviation industry that nothing had changed, "I can assure you that there will be no discrimination against Ferranti Limited in the allocation of future contracts."⁶⁸² The continued flow of government contracts was central to the function of the aviation industry with the Sturmeys Report of 1963 showing that despite the sector having a healthy order book of £718m in March 1962, 60% of this was made up of domestic military contracts.⁶⁸³ Government ministers often reinforced support to the aviation industry, both within parliament and in statements with lines such as this one drafted for Macmillan in response to a concerned MP, "I can assure you that the Government has no intention of departing from the policy towards the aircraft industry as

⁶⁸² House of Lords Debate, 28 July 1964, *Hansard*, Vol. 250, Col. 991 – Letter, S. de Ferranti to Mr R.G. Way, 28 Jul 1964.

⁶⁸³ TNA AVIA 65/1084, *Future of the Aircraft Industry*, Draft of Dr Sturmeys Report on structure of the British aircraft industry, May 1963.

announced to Parliament in February 1960.”⁶⁸⁴ That announcement, from Sandys, read, “The Government regard it as essential that the United Kingdom should maintain a strong and efficient aircraft industry, capable not only of providing the Armed Forces with aircraft and guided weapons, but also of playing a prominent part in the world wide development of civil aviation.”⁶⁸⁵ This level of stated support, whilst typical of the previous Conservative government did carry with it the need for an increased presence in the civil aviation market, particularly for aircraft suitable for export. Exports had made £154m in 1959, but this had fallen to £114m by 1963.⁶⁸⁶ The three main military aircraft programmes had still not secured any export orders by early 1965, so whilst the aviation industry was undoubtably confident in receiving a measure of government support as a sector, there was very little progress to suggest they would continue to receive the same level in a time when export earnings were so important to bring down the balance of payments deficit and manage the fixed exchange rate with the US dollar.

If the prospect of reductions in government expenditure were to be realised, it was not expected by the industry to be at the expense of the high-risk category programmes that were well developed and at an advanced stage. During a 1964 campaign visit to Preston, home to a large BAC factory and the hub for TSR.2 development, Wilson stated that Labour had no intention of cancelling the TSR.2 and reiterated an election pamphlet which stated that, “Harold Wilson tells TSR 2 [sic] workers ‘your jobs are guaranteed under Labour. Labour will not cancel the TSR.2.

⁶⁸⁴ TNA AIR 20/10089, Lovelock suggested reply, *P.M. to Philip Hocking M.P. – future of aircraft industry*, 13 Sep 1962.

⁶⁸⁵ House of Commons Debate, 15 February 1960, *Hansard*, Vol. 617, Col. 958.

⁶⁸⁶ TNA EW 25/3, Defence – Economic Burden of Total United Kingdom Defence Effort, General Briefing, *Public expenditure and economic efficiency (G.B.(64)5)*, 8 Oct 1964.

Who are you going to believe, a discredited Tory Minister or your next Prime Minister?"⁶⁸⁷ This assurance had evidently been enough for the workforce in Preston, as the Preston North seat saw the majority for Amery, the Minister for Aviation, drop from 4,461 to just 14, and the Preston South seat swing to Labour in the 1964 election.⁶⁸⁸ Therefore at the time of the election, there was no expectation of sweeping cuts to the existing contracts, with only the previously announced Royal Navy purchase of American F-4s in place of the P.1154 denting the domestic order books.⁶⁸⁹ This American order had already been met with consternation within the sector, and represented a £150m loss for Hawker Siddeley.⁶⁹⁰ This loss as a signal for the future was identified by the Society of British Aerospace Companies (SBAC) as their biggest concern in 1964 when coupled with the fear that the remaining work on the P.1154 could go to foreign companies. The second concern of the SBAC was over the Atlantic aircraft, which was seen as the leading contender for the Shackleton replacement, and that, "The British Industry was not asked to submit proposals to meet the 'Atlantic' specification."⁶⁹¹ Despite this the Atlantic was an international co-operative aircraft programme rather than a direct foreign purchase and was scheduled to have de Havilland propellers along with engines from Rolls-Royce. In total 6% of the aircraft would have been built by British companies, rising to 10% if the RAF purchased the aircraft.⁶⁹² Whilst there were therefore profits and employment for British

⁶⁸⁷ Our Correspondent, "Labour Pledge Recalled", *The Times*, 13 Jan 1965.

⁶⁸⁸ D.E. Butler & A. King, *The British General Election of 1964* (London: Macmillan, 1965) p. 322.

⁶⁸⁹ TNA AIR 2/17197, *Interim Shackleton Replacement (ASR 381)*, Loose Minute from P.S. to DCAS to ACAS (OR), *Shackleton Replacement*, 11 Feb 1964.

⁶⁹⁰ A. MacPherson, "Missile Blow", *Daily Mail*, 17 Aug 1964.

⁶⁹¹ TNA AVIA 63/132, *Ministers Conference with the Aircraft Industry 1964*, S.B.A.C. paper, *The purchase of foreign defence equipment*, L/H/P(64)1, 1964.

⁶⁹² TNA AIR 2/17199, Letter, Messmer (French Minister of Armies) to Secretary of State for Defence, 22 Jun 1964.

companies, it may have been one of the few signs prior to the General Election that there was a risk of either international consortium projects or simple off the shelf purchases becoming the dominant form of aircraft procurement.

The aviation sector was still perceived as being at the technological forefront of British industry, certainly from within. The level of R&D investment and the importance of military power in the years immediately following the Cuban Missile Crisis lead the sector to underestimate the importance the incoming Labour government would place on achieving wider economic stability and reforming the entirety of British economic output. The aviation industry contained the majority of British R&D scientists and received the majority of government R&D funding. As such it could be considered the central pillar of Labour's desire to focus on technological innovation as the new direction for Britain, or as the sector that needed thinning out the most to allow for the redistribution of a skilled workforce into the new emerging areas such as computing.

Wilson's speech at Scarborough in October 1963 laid out a four-pronged attack on this new direction with the need to; train additional scientists, to keep them in Britain, to make better use of their talents, and to organise industry such that the fruits of their research would better serve national production, and therefore the national economic output. Whilst the fears over a 'brain drain' of newly skilled scientists overseas, particularly to America, were at the forefront of Wilson's speech as he cited that 12% of those awarded PhDs each year were moving overseas to work, it was the redistribution of the scientific endeavour that formed the thrust of the speech

and shaped the Labour position going into 1964.⁶⁹³ The ‘white heat of technology’ phrase was not a direct quote from the speech, yet the term and its encompassing ideal of British regeneration in the period has come to express the era defining political shift towards a technological mindset for economic growth and as a result the 1960s as a whole. Dominic Sandbrook titled his 2006 history of the decade as *White Heat; A History of Britain in the Swinging Sixties*, and a BBC drama series made in 2012 chronicling life in Britain from the 1960s onwards was titled *White Heat*, where both used the term as a device for centring the audience on the period. Wilson actually stated that, “...[in] our plans for the future, we are redefining and stating our socialism in terms of the scientific revolution...the Britain that is going to be forged in the white heat of this revolution will be no place for restrictive practises or outdated methods on either side of industry.”⁶⁹⁴ The aviation industry in its existing form of the cycle of Ministry of Aviation contracts and a dominant grip on the R&D resources of the country was a prime candidate for Wilson’s planned revolution, despite Sir George Edwards of BAC claiming that his industry was, “...Great Britain’s technological spearhead and that to blunt it in any significant manner would cause a sharp and irreversible decline in our leadership [and] our economy...”⁶⁹⁵ The resultant cuts, driven by the economic pressures of the balance of payments crisis and the need to show a worldwide commitment to the United States were not mutually exclusive from this broader modernisation plan. The white heat motivation centred primarily on the

⁶⁹³ Political Correspondent, “Technological progress must be part of the nation’s planning”, *The Times*, 02 Oct 1963.

⁶⁹⁴ Special Correspondents, “Ministry aid for research”, *The Times*, 02 Oct 1963.

⁶⁹⁵ Sir George Edwards, “Views of Leading Industrialists; the Aircraft Industry”, *Financial Times*, 1 Jan 1965.

R&D capacity of the sector looking ahead to long term change for the entirety of British industrial output, and was not necessarily the short-term motivating element.

Of all R&D expenditure in Britain, 40% of it in 1961/2 was within the military divisions of the domestic aviation industry. That a large proportion of the scientific body was employed within one sector formed a core issue for Wilson in his Scarborough speech, as it reduced the likelihood of broad economic growth, but equally it was within an industry that was struggling to compete on the world stage. The decline in exports of British aircraft, which were at a mere £114m by 1963, were showing no signs of reversing in the short term. Meanwhile the British electronics industry, a crucial sector if Britain was to embrace the technological revolution had seen a rise in exports of 50% over previous five years. Despite positive sounding numbers for British advancement, France had seen a 100% rise, and even greater increases of 150% and 160% were made by the USA and Japan respectively.⁶⁹⁶ Wilson's speech had highlighted the need for scientific research to benefit the economic output of the country as a whole, and export focused industries such as electronics were crucial to achieving this and bringing down the £800m balance of payments deficit in the longer term. There were however two elements that held this ambition back. Firstly, was the large number of scientists employed in the wider defence sector, and second was the highly subsidised nature of the aviation industry. It was not just financial considerations of R&D, as with one fifth of all research personnel within defence, there was a large highly skilled workforce that could be redistributed to other areas, of which the electronics sector was but one.⁶⁹⁷ The numbers were still a small

⁶⁹⁶ TNA EW 25/3, General Briefing, *Public expenditure and economic efficiency* (G.B.(64)5), 8 Oct 1964.

⁶⁹⁷ TNA EW 25/3, Briefing, *Public expenditure and economic efficiency*.

proportion of the overall workforce, with 10,290 employed in defence R&D out of a national pool of 48,545 in 1964, but combined with the high proportion of 17% of all public expenditure going into defence areas in 1963-64, a briefing paper of December 1964 put it starkly that, "The high level of expenditure on defence has been an important factor in the inferior growth performance of the United Kingdom."⁶⁹⁸ The TSR.2, HS.681 and P.1154 projects were, by late 1964, still yet to generate export sales.⁶⁹⁹ The P.1127, by receiving combined investment in its test and development from the USA and Germany, was the outlier of the developmental aircraft programmes and thus represented an advanced design that the aviation industry could use to try and defend the value generated by large-scale government R&D investment. Yet with the Sturme Report assessment of 60% of all aircraft orders being for the domestic market, the expenditure of £250m in defence R&D by the government did not truly represent good value for money. The effect of this expenditure was a subsidised sector; either through investment in R&D, favourable contract terms or, as in the case of Shorts, through majority government ownership.⁷⁰⁰

When considering the industrial impact, the decision to procure American replacement military aircraft and move towards international collaborative efforts suggests that the aviation industry was not viewed as a central element of Labour plans for the British economy, however there were both civil and military aspects to the industry. Whilst neither could have been considered as export leaders by the early 1960s, there was still an ambition to focus on pushing civil aircraft production as a key

⁶⁹⁸ TNA EW 25/3, Briefing paper, *The Background of Defence*, Dec 1964.

⁶⁹⁹ TNA AVIA 63/132, minutes, *Minister of Aviation's meeting with leaders of the aircraft and aviation industries*, Lancaster House, 23 Jul 1964.

⁷⁰⁰ Aeronautical Correspondent, "Belfast Chief at Chequers Air Talks", *The Times*, 16 Jan 1965.

element of global strategy, not least given the need to continue with the Concord programme. The high level of R&D expenditure on a military half of the industry that was under performing, combined with a need to increase development on Concord presented a straightforward requirement for a redistribution of investment. Yet the notion of R&D expenditure is not simply one of a financial outlay, but also in terms of the labour force – both the scientific and the highly skilled manufacturing workforce assigned to the projects. The creation of the Ministry of Technology in October 1964 demonstrated both the ambitions and intentions of the *white heat* movement, but also commenced the shift from military to civil R&D taking the lead for the aviation sector.⁷⁰¹ Whilst this started with the need to drive Concord forward in a manner that limited its ever increasing costs without losing the political capital in Anglo-French relations, the broader move was clearly one that once started would be near impossible to reverse once that particular project was over. Civil programmes, such as the VC-10 and Trident airliners represented a far better opportunity for economic returns through exports and sustained servicing contracts than the military projects ever could. This was despite the fact that, in the twenty years after the end of the Second World War, only seven of the thirty airliners exported by British companies had seen sales exceed one hundred units.⁷⁰² Ultimately the VC-10 and Trident would not go on to achieve strong export sales, but the importance of the need for them to be a success in all domains was underscored in their selection as potential candidates for the Shackleton replacement.⁷⁰³ The Shackleton replacement competition was centred

⁷⁰¹ Hayward, *Government and British Civil Aerospace*, p. 72.

⁷⁰² Fearon, “The growth of aviation in Britain”, p. 36.

⁷⁰³ TNA AIR 2/17197, DCAS & VCAS, *Draft Air Council Paper, the Shackleton Replacement*, undated [est. Mar 1964].

on a specialised international maritime patrol aircraft in the Atlantic, but the other domestic proposals were all converted civil aircraft. Whilst there were practical reasons for this with the internal dimensions to accommodate a mission crew and large internal fuel tanks for range and time on station that were inherent in a civil airliner design, the need to drive forward the viability of civil aircraft for the British aviation industry were key. Sir George Edwards of BAC stated to *The Times* in January 1965 that, “I don’t believe that any Government will leave itself in a position where it has not got an aircraft industry capable of standing on its own feet.”⁷⁰⁴ His position did not however differentiate what type of aircraft industry that would be, for the prospects for civil and military were heading down different paths by early 1965.

The value of a domestic military aircraft industry is predicated firstly on the notion that sovereignty in offensive military capabilities is essential to ensure that equipment is optimised for the required task, such that in times of war there is no risk of either the technology being compromised through multiple foreign actors having access to it, nor of international supply lines being easily cut off should the manufacturing country not be in favour of the conflict, or worse to be the aggressor. The sovereignty argument does however require that the hardware supplied to the military is fit for the intended purpose, and not that the military are simply there as an unwilling customer for the benefit of maintaining an aviation industry.

Secondly the value of this sovereignty must be weighed against the export potential of the aircraft and the associated systems. As a revenue generating stream it is still an element that would provide value to the balance of payments, yet with so

⁷⁰⁴ Aeronautical Correspondent, “Growing agitation in the aircraft industry”.

few aircraft finding export customers the majority of the cost was shouldered by domestic concerns, whether that was the Ministry of Aviation or Ministry of Defence. Cooper put it to the Chief of the Air Staff in Jul 1964 as, "There is an obvious defence interest in a healthy British Aircraft Industry, but the use of this concept as a blank cheque is harmful to defence."⁷⁰⁵

The alternative position on sovereignty was for an industry based on an agreed international market of friendly allied countries for one nation's aircraft, and to possibly extend to collaboration and shared workloads as seen with the Atlantic and Concord. This would later become the standard model for western aircraft manufacturers starting with the Jaguar and Tornado. These were programmes that, in the view of Lovering, saved the British aviation industry from extinction.⁷⁰⁶ To pursue a common military model required agreement on the design and capabilities which, in the case of a proposed NATO V/STOL aircraft, was challenging to achieve. With the V/STOL technology one of multiple design concepts, and disagreements over the NATO Basic Military Requirement 3 for a supersonic V/STOL platform, for which the Dassault Mirage IIIV [sic] with multiple lift engines and the P.1154 with simpler vector exhausts were in direct competition.⁷⁰⁷ As the *Financial Times* put it in early 1964, "...everyone, especially if he has an aircraft industry, tends to want his own design submission adopted and decides to go his own way if it is not."⁷⁰⁸ For British industry this meant that the P.1154 had become a platform with an agreed design, but without a definite market, reducing the effectiveness of the sovereignty argument.

⁷⁰⁵ TNA AIR 20/10089, Memo, Cooper to C.A.S & P.U.S., *The Aircraft Industry*, 8 Jul 1964.

⁷⁰⁶ Lovering, "Opportunity or Crisis?", in, Ed. Turner, *The British Economy in Transition*, p. 93.

⁷⁰⁷ TNA AIR 2/17199, Loose Minute from ACAS (OR) to DCAS, Maritime Replacement, 21 Jul 1964 – The model of aircraft was the Mirage III (in Roman numerals) with the 'V' (Victor) denoting the variant.

⁷⁰⁸ M. Donne, "Mr Thorneycroft's Dilemma in the Air", *Financial Times*, 27 Jan 1964.

The gradually shrinking industry was, by 1964, beginning to display a shift in attitude to reduce the dependence on government contracts, through an increase in exports and a drop in pure governmental sales, along with a consolidation in the number of competing companies. The proportion of sales fulfilling British government contracts had fallen from 68% in 1954 to 40% by 1964. Equally, although the total value was lower, exports as a percentage had nearly doubled from 11% to 20%. This had come at a cost though, with the tougher non-subsidised world outside of risk-free contracts seeing profits drop from 13% to 6%, a figure below the capped rate of 10% and even further below the 14% average of wider British industry, demonstrating the struggles the sector was facing when up against strong government-backed or supported international competition, particularly the aggressive approach taken by McNamara to promote American exports.⁷⁰⁹

The drive by the British government to encourage multi-national R&D and production efforts suggested that the domestic aviation industry was important enough in Labour's plans to not be allowed to completely wither away, but instead to conduct business in a manner that reduced the workforce and economic burdens on the government, thereby expanding on the *white heat* movement for the economy. The pan-European work on the Atlantic aircraft, alongside the continued requirement to press ahead with Concorde demonstrated the benefits of both shared workload and technological advancement, even if, in the case of Concorde, the technological advantages were outweighed by the political ones. That the Plowden Report of 1966 occurred at all demonstrated the government's determination for the aviation industry

⁷⁰⁹ Hartley & Watt, "Profits, regulation and the U.K. aerospace industry", p. 414.

to move forward.⁷¹⁰ Its recommendations included increased international collaboration, with a focus on Europe, however advised against focusing R&D expenditure on American joint efforts due to the British industry being too small an offering for American companies.⁷¹¹ Discussions between Healey and McNamara on increased collaborative R&D during the Washington talks and in subsequent overtures highlighted again how the needs of domestic economics were hard to align with international political agendas. The notion did however open the door for European cooperation and Jenkins in particular was enamoured with the development of the European airliner programme, referred to pragmatically as the airbus.⁷¹² The four nation programme was led by France, in an example of the de Gaulle ambition of returning France to the role of European leader, with key support from Britain as both were the two European countries with the largest aviation industrial sectors and with prominent military divisions. Both were therefore nations that, according to Francis and Pevzner, understood the critical importance of maintaining both sides of their aviation industries.⁷¹³ Jenkins stated in the House of Commons in February 1965 that, “With the French we have the incentive of two industries that have a high degree of mutual interest in collaboration, and which are in many respects complimentary...These developments will, I believe, offer the British aircraft industry a worthwhile future based on realism and foresight, and the opportunity of making, or helping to make, planes for which there is a real demand both at home and abroad.”

⁷¹⁰ HMG, *Report of the Committee of Inquiry into the Aviation Industry, 1964-65*, Cmnd Paper No. 2853 (London: HMSO, 1966).

⁷¹¹ Hayward, *Government and British Civil Aerospace*, p. 73.

⁷¹² Hayward, *Government and British Civil Aerospace*, p. 78. “Airbus” as a term here refers to the concept of a European collaborative civil aircraft design, not the subsequent company ‘Airbus Industrie’.

⁷¹³ J.G. Francis & A.F. Pevzner, “Airbus and Boeing: Strengths and Limitations of Strong Sales” in *Political Science Quarterly*, Vol.121, No.4 (2006/2007) p. 630.

As the Minister of Aviation, it was only natural that Jenkins would be a strong advocate for the health of his industries, however his speech did carry with it a caution that, “No industry can live securely or healthily by forcing its products upon unwilling customers.”⁷¹⁴ This was a reflection of the concern held generally that the Ministry of Aviation was too focused on the needs of industry at expense of the customer. It was the view that Cooper had expressed to the Chief of the Air Staff in Jul 1964, and a position that he had expected to change should Labour be returned in the autumn election.⁷¹⁵ Jenkins’ passion for the European collaborative project laid out the future direction for the sector as a whole, and was aided by the British European Airways specification request in 1964 for a low cost airliner that could carry 150 passengers 350 miles, yet none of this would solve the thorny economic and tied labour force issue of the expensive and late military programmes already underway.⁷¹⁶

Not all in the Labour administration were so enthusiastic on the potential opportunities facing the aviation sector, with Healey in particular being clear on warnings of the industry expecting a strong domestic market for their products, regardless of the value proposition. Jenkins, in his February statement in the House of Commons, stated that, “[some] Members opposite talk as though the correct role of the Government was to be not the customer, but the prisoner of the aircraft industry – forced always to buy to keep the industry at a given size, and unable to end a project that is going wrong.”⁷¹⁷ Jenkins was enthusiastic on the possibilities open to the civil sector, yet was in agreement with Healey’s position that there were serious

⁷¹⁴ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 239.

⁷¹⁵ TNA AIR 20/10089, Memo, Cooper to C.A.S & P.U.S., *The Aircraft Industry*, 8 Jul 1964.

⁷¹⁶ Aeronautical Correspondent, “Air Bus Project Welcomed”, *The Times*, 10 Feb 1965.

⁷¹⁷ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 239.

shortcomings in the existing system when it came to military aircraft. Following the initial communiques from the Washington talks, government and industry discussions were eventually coming to a head as both industry communications made to the government and in the press reinforced the importance the aviation industry put upon their contribution to the economic success and defence posture of the country. This progression culminated in talks between Healey and Industry leaders on 13 January 1965 and then again at Chequers two days later. Both these meetings say as much about the needs of the industry as how untenable the situation was fast becoming for those invited to attend and the programmes they represented.

The series of meetings was called as a reaction to the public direction that the aircraft procurements had taken after the announcements by Wilson following the visit to Washington in early December. Whilst not uncommon, meetings between multiple members of the aviation industry and the government frequently signified a growing concern amongst the companies and were often followed by platitudes in public by ministers reaffirming their commitment to a strong domestic aviation sector.

Earlier, in July 1964, the then Minister of Aviation Julian Amery had met, among others, with Sir George Edwards of the British Aircraft Corporation, Sir Roy Dobson from Hawker Siddeley Aviation and Sir Reginald Verdon Smith representing Bristol Siddeley Engines. The meeting was prefaced on the notion that, "...industry did not feel that it had the Government's confidence in questions of policy and long-term planning." This had arisen from the decision of the Royal Navy to purchase the F-4 Phantom in place of the P-1154, a decision justified by Amery as, "...because of experience with other projects, the Government had not the same confidence in the

industry's time and cost estimates as in its technical capabilities."⁷¹⁸ The matter for the Royal Navy had centred on the ability of Hawker Siddeley to deliver the promised specification within the required timeline, brought all the more pressing by the ongoing discussions over the continuation of the new aircraft carrier force that would not be answered until the defence review concluded in 1966. The decision was estimated to have cost Hawker Siddeley over £150m and had implications that could be viewed in two different manners.⁷¹⁹ Firstly was that the cancellation placed additional pressures on retaining the order for the RAF variant of P.1154, as even with the government paying the developmental bill, there were still no export customers nor multi-national development agreements in place, unlike for the development of the more limited and experimental P.1127 with the United States and Germany. Secondly, the decision of the Royal Navy may have narrowed the focus within Hawker Siddeley that the P.1154 was now a doomed project, and that greater emphasis had to be placed on turning the P.1127 into a viable on-going concern. Jenkins visited the P.1127 testing at Dunsfold Aerodrome on 10 Jan 1965, and after which Hawker Siddeley did not feel the need to request any additional meetings with the Minister at a time when BAC were leaning heavily on the MoA for support.⁷²⁰ Equally, an acceptance that the P.1154 was on borrowed time could explain the efforts undertaken by Hawker Siddeley to securing the Shackleton replacement with the lower cost modified Comet. Their last-minute proposal for an alternative aircraft to the HS.681 in the form of the HS.802 shared a similar compromise basis to that of the

⁷¹⁸ TNA AVIA 63/132, Minutes of '*Minister of Aviation's meeting with leaders of the aircraft and aviation industries*', Lancaster House, 23 Jul 1964, p. 1 & 3.

⁷¹⁹ TNA AIR 2/17197 and MacPherson, "Missile Blow".

⁷²⁰ Aeronautical Correspondent, "Prime Minister Calls Aviation Leaders to Chequers".

Maritime Comet, being a combination of Comet wings and Rolls-Royce Spey engines with the HS.681 fuselage, and will be discussed later.⁷²¹ For the Shackleton replacement, and in response to continued discussions on the Atlantic as the preferred option, Hall had, in July 1964, stated that unless the government was determined to purchase from overseas, then British proposals should be given full consideration.⁷²² In the latter half of 1964 the Hawker Siddeley offerings still comprised modified Tridents or the re-engined and modified Maritime Comets, with Amery stating in early October 1964 that the "...designs submitted by Hawker Siddeley and the British Aircraft Corporation look most promising."⁷²³ The heavy reliance on the TSR.2 by BAC, with over a quarter of their workforce employed on the programme, coupled with the clearly exposed nature of the programme demonstrates why Edwards was less accommodating than Hall in the months that followed the July 1964 meeting.⁷²⁴

The July 1964 meeting had concluded, with a familiarly positive sounding line in the minutes, that, "The meeting agreed that if, in exceptional circumstances, the Government decide to purchase foreign defence equipment it should [be] set in such a way as to enable an adequate quid pro quo for British industry to be obtained if [at all] possible." This reinforced the belief within the wider aviation industry that the government would always look to support the sector, and was particularly strong during the Conservative government, as the industry representatives viewed the F-4 order as the only setback for the sector, and that the remaining programmes would proceed as planned. The MoA did pose the question of whether the lack of exports for

⁷²¹ Aeronautical Correspondent, "Air Bus Project Welcomed".

⁷²² TNA AIR 2/17199, Letter, PUS MoD (Hardman) to PS MoA (Way), 7 Jul 1964.

⁷²³ Air Correspondent, "No Shackleton Replacement Decision Yet", *Financial Times*, 8 Oct 1964.

⁷²⁴ Aeronautical Correspondent, "Prime Minister calls aviation leaders to Chequers".

P.1127, P.1154 and TSR.2 was due to the increased American export activity under Kuss and the Pentagon's International Security Affairs department, or instead due to shortcomings in the British programmes – however the response was unfortunately not recorded in the minutes.⁷²⁵

The concept that foreign purchases would only be made in exceptional circumstances did not survive into the new Labour administration. Whilst there were strong elements in the American package that could have been considered as quid pro quo, such as the sales of around \$400m of defence equipment and offset cost of American troops stationed in Britain, there were limits on how this could be presented with McNamara firm on the line when speaking to the American press that: "...[whilst] we're spending very substantial sums in the United Kingdom for the maintenance...of our forces over there. This is not a quid pro quo."⁷²⁶ This reflected the difficulty for the government of balancing the overseas spending on aircraft as carrying a quid pro quo, however defined, from American expenditure in Britain. Whilst it would reduce the foreign currency burden required to finance the aircraft, such an arrangement favoured the Treasury and did not aid domestic industry. Thus the lobbying and drive for the industry meeting at Chequers in January 1965 can be viewed as either a last-ditch effort to save the main three aircraft programmes, or as an opportunity to press the case for a reciprocal equipment purchases from the United States. The former could be seen as misguided optimism brought about by a long entrenched belief that the government would not abandon such large-scale programmes, with the latter as a

⁷²⁵ TNA AVIA 63/132, Minutes of '*Minister of Aviation's meeting with leaders of the aircraft and aviation industries*', Lancaster House, 23 Jul 1964, p. 4,5,9.

⁷²⁶ Part II, The Robert S. McNamara Papers, Manuscript Division, No.47, Transcript, Secretary of Defense Robert S. McNamara Background Briefing for the Press, Washington D.C., 9 Feb 1965.

surprising display of awareness and adaptability. Between the various companies it could have been a spread of the two.

Whilst Hawker Siddeley had stepped back from pressuring the MoA and the MoD in the days prior to Chequers, Sir George Edwards and Lord Portal, both representing BAC, had done the opposite. It was reported in *The Times* that they had pushed Jenkins on the need to continue with the TSR.2, not for the technological advantages it would offer the RAF against the F-111, but instead that a cancellation would endanger the survival of the entire company. The essential element of their approach was that such an outcome would threaten the politically sensitive Concord programme.⁷²⁷ The importance of the aviation industry was not just divided into the wider concepts of civil and military, for Concord sat in a unique middle ground of requiring military aircraft design and manufacturing expertise to combine with civilian airliner requirements, whilst having an outsized impact on political thinking. For all that the aviation industry could be considered as coming from a position of hopeless optimism that their military programmes would be retained, the symbiotic relationship of political prestige and technological corporate development and domestic earnings that the Concord programme brought was a far easier lever to pull on the government than the more amorphous ideals of sovereignty in defence. BAC were not alone in having a vested interest in leveraging the Concord project – Bristol Siddeley had 5,000 employees working on the Olympus engine programme alone, and with engine developments representing a more manageable exportable element of the aviation sector there was a need to retain this expertise within the workforce.⁷²⁸

⁷²⁷ Aeronautical Correspondent, “Prime Minister calls aviation leaders to Chequers”.

⁷²⁸ Aeronautical Correspondent, “Prime Minister calls aviation leaders to Chequers”.

From the government perspective it is doubtful that there were any expectations for the Chequers meeting aside from mitigating the fallout of the proposed American purchases, which was demonstrated by those members of the aviation industry who were or were not invited to attend. The four industry figures who convened in the Buckinghamshire countryside were Edwards from BAC and Hall from Hawker Siddeley as the airframe manufacturers involved in the TSR.2, HS.681 and P.1154. Sir Denning Pearson from Rolls Royce and Sir Reginald Verdon Smith from Bristol Siddeley were the engine companies involved in the three central programmes. There was no representation from the sub-contractor and radar manufacturer Ferranti, nor from other defence industrial companies or sub-divisions such as BAC Missiles who would have had a vested interest in the wider governmental intentions for the aviation sector. There was however a last-minute addition to the talks in the form of Mr Wrangham, the chairman of Shorts.⁷²⁹

Shorts were heavily involved in the HS.681 programme as a sub-contractor and went on the offensive in the press stating that should the aircraft be cancelled then it would "...inevitably lead to substantial redundancy among the labour force of between 7,000 and 8,000."⁷³⁰ As a majority government owned company there would have been an additional expectation of political support for their cause. The question of how to manage the Shorts workforce and the employment picture in Northern Ireland was not a new problem for the government. By the 1950s, even the declaration that all future flying boat contracts would go to Shorts had not halted the decline in business as the flying boat market had dried up such that as early as 1951, with the impending

⁷²⁹ Aeronautical Correspondent, "Belfast Chief at Chequers Air Talks".

⁷³⁰ Aeronautical Correspondent, "Belfast Chief at Chequers Air Talks".

cancellation of the R.2/48 flying boat, the Air Ministry had questioned whether, "...in the event of the contract not going ahead you could...find enough work to keep them usefully employed."⁷³¹ The company had also designed a short range maritime patrol aircraft for the Royal Navy, and in a similar turn of events to those that would surround the P.1154, it was first cancelled by the Navy and instead a compromise order was placed and mandated for the RAF.⁷³² The Seamew design had included the heavy weight folding wings required for carrier operations and a naval equipment suite that was not changed for RAF use. This would have given the RAF an aircraft for which there was no clearly defined mission requirement or use, and who were thus relieved to see the Treasury kill off the programme in 1955.⁷³³ David Hobbs, in his work *The British Carrier Strike Fleet After 1945* stated that he could see no logical reason for the programme persisting as long as it did.⁷³⁴ Yet the archival discussion papers, combined with the nature of the ownership of Shorts and the government prioritisation of sustaining employment in Northern Ireland demonstrate that the aircraft was persisted with as a political tool over and above the requirements of the Services. The Seamew debacle came less than ten years before the question marks over the major programmes, and subsequent firmer line taken by the Labour government demonstrated how the broader political position had shifted.

The HS.681 was not the only transport aircraft with which Shorts were pinning their hopes on, as the Belfast was already in limited production. Beset by similar

⁷³¹ TNA AIR 2/10749, *AIRCRAFT: Seaplane and Flying boats: Long range maritime aircraft for Coastal Command: future requirements*, loose minute, DOR(A) to DGTD(A), R.2/48 Flying Boat, 12 Feb 1951.

⁷³² TNA AIR 20/6955, loose minute from DDO(F) to S.8(A) *Requisition for Seamews Aircraft*, 3 Feb 1955.

⁷³³ TNA AIR 20/6955, multiple loose minutes covering the period February to May 1955 as the RAF attempted to reject the order.

⁷³⁴ Hobbs, *The British Carrier Strike Fleet After 1945*, p. 220.

compromises to the Seamew, the Belfast was ahead of the HS.681 in terms of development as it was already conducting test flights, with a series of trials in Spain completed in October 1964.⁷³⁵ By December the initial production run of ten aircraft was well underway with the first aircraft almost ready for handing over to the RAF.⁷³⁶ The flight trials put the Belfast at a comparable programme stage to the TSR.2, and ahead of the HS.681 and P.1154. Unlike the TSR.2 though, there was a need to maintain employment at Shorts to support the Northern Ireland economy so the ten aircraft under order were permitted to continue, however there were to be no further orders placed as the C-130 purchase from America took primacy in the RAF transport fleet.⁷³⁷

The Belfast demonstrated the fine balance present in both the timing of the cuts and the proposal of American alternatives, for it was an aircraft that was already underway, and yet despite falling into the category of vested American interests in sales, it represented such a small purchase that it would not have affected American global sales. The Maritime Comet perhaps represented the absolute upper limit of this idea with a purchase of 49 aircraft despite the availability of a suitable American alternative in the P-3 Orion. In this regard the Belfast could be considered as the only realistic template in which a non-exportable domestic procurement could succeed, for it was able to provide a strong enough political messages on the government's commitment to maintaining employment in a particular region, and in this case an especially difficult region, yet did not compromise wider political ambitions. With the majority of Shorts' work coming as a sub-contractor, the limiting of lead contractor

⁷³⁵ Correspondent, "Flight Tests in Spain for Shorts' Belfast", *Financial Times*, 03 Oct 1964.

⁷³⁶ Correspondent, "Good Progress on Belfast Freighters", *Financial Times*, 24 Dec 1964.

⁷³⁷ Political Correspondent, "Short Bros Might Get State Aid", *Financial Times*, 04 Feb 1965.

programmes was not as significant as it would be at the other major manufacturers, even though the cancellation of the HS.681 would have a significant impact on Shorts. Equally, as a sub-contractor, the company was well placed to take advantage of the new direction of international co-operative developments planned by the Labour government for the aviation sector, particularly in the light of Jenkins' declaration in the House of Commons on 9 Feb 1965 that, "...whether we like it or not the all-British plane is out."⁷³⁸ At the same Commons debate, Sir Arthur Harvey, the Conservative MP for Macclesfield who had pushed for reform of the sector in 1963, warned that the American intention was to destroy the aerospace industry of Western Europe, and that caution should be exercised in relying too heavily on them for joint programmes.⁷³⁹ His wording almost exactly mirroring the line taken in the SBAC paper on 'The Purchase of Foreign Defence Equipment' from the previous year, reflecting a very real fear that American intentions were far from simply providing economic assistance in a time of difficulty for a close ally.⁷⁴⁰ International cooperation was not a silver bullet to solve the problems of the aviation sector, nor the specific issues concerning Shorts and engineering employment in Northern Ireland. The ambitions of strong relations with the United States were always tempered against the fear that Britain's place in the world was being ever more eroded by the United States, whether politically or economically, and that whilst there were important moments such as the balance of payments crisis and the need to stay out of the Vietnam War, the hardwired idea of

⁷³⁸ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 234.

⁷³⁹ Political Correspondent, "Joint Efforts the Key: Mr. Jenkins Tells of Projects with America and France", *The Times*, 10 Feb 1965.

⁷⁴⁰ TNA AVIA 63/132, S.B.A.C. paper, *The purchase of foreign defence equipment*, L/H/P(64)1, 1964.

Britain as a global power was still present. The commitment to the East of Suez role in the Defence Review that followed in 1965/66 reaffirmed this.

Ultimately, despite the example of strong political reasons to support Shorts in the near term, and by extension their involvement in the Chequers discussions and a limited continuity of work, the wider desire to modernise the sector overrode localised employment concerns, and the international political ambitions and requirements within the financial issues of the balance of payments took primacy. Shorts was not allowed to fail, but neither was it allowed to be immune to the needs of modernisation.

The tension within the aviation sector ahead of the Chequers meeting was played out extensively in the press in the days prior, and the feeling that the Labour government was turning against the needs of the working population came to the surface with a march on Westminster by aviation factory workers on the day before the discussions. The protest marches demonstrated the inevitable that regardless of the higher level significance of the need to both modernise the sector and cancel the aircraft programmes, this was of scant interest to the factory workers who would be affected by the plans. This was particularly evident in the response of the BAC workers at Weybridge who would suffer the brunt of losses in the event of the TSR.2 being cancelled. 3,000 workers marched from Weybridge to London as part of the demonstration on 14 January 1965 to place pressure on the government to reverse course.⁷⁴¹ Despite the headlines generated by the marches in the press, there were not the widespread strikes or disruptions that would have been expected if the entire

⁷⁴¹ Aeronautical Correspondent, "Growing agitation in the aircraft industry".

sector had been in uproar at the proposals. Equally, given the slender Labour majority in the House of Commons, the threat of negative events hurting them in the polls was not significant enough to force a change of course.

The focus on the TSR.2 by its workforce and the press is not surprising given that it was still only being viewed as under threat, rather than as a clear casualty. The statements from the talks in Washington the previous December had paved the way for the cancellation of the HS.681 and P.1154, but the TSR.2 debate had been allowed to continue in public, even if the actual closed-door discussions in Washington had clearly laid out both the intentions of the British government and those of Johnson and McNamara. The TSR.2 was already flying in test prototype form, in much the same way as the Belfast. It was viewed as a highly advanced and capable aircraft that, just like Concord, was an example of world-class British engineering. That it was late and over budget was not viewed by those involved, particularly Sir George Edwards, as being sufficient reason to cancel the programme, spurred on by Wilson's 1964 campaign pledge to keep the aircraft and highlighted in the *Daily Express* at the time as, "Labour will not cancel the TSR2".⁷⁴² Wilson was challenged on this statement in the House of Commons on 9 February 1965 by Peter Thorneycroft, to which Wilson would read out a latter passage from the same 1964 newspaper article which stated, "Our position on TSR2 is exactly the same as the Government's. If it works, and does what is expected of it, and at reasonable cost, we shall want it—though not for a nuclear role. We shall want it for its original tactical and reconnaissance role."⁷⁴³ The blind confidence of the aviation industry that the government would not allow them to fail presupposed that

⁷⁴² Our Correspondent, "Labour pledge recalled", and House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 224.

⁷⁴³ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 224

the government would retain an industry at its existing size with a steady stream of contracts, of which the TSR.2, HS.681 and P.1154 were examples where despite cost overruns, the aircraft would still make into service. The reality was that a smaller industry could be considered essential for providing sovereignty of some military programmes and to provide technologically relevant research and development opportunities, but one that would not, as the BAC workers were discovering to their dismay in February 1965, be at all costs. Jenkins' earlier mentioned statement in the House of Commons on 9 February 1965 on the dangers of a government being held prisoner to the aviation industry had concluded with, "That way lies total immobility of British industry, and a level of defence costs that will strangle the possibilities of social advance."⁷⁴⁴ It represented a far more pragmatic approach than the industry appeared prepared for, particularly when international considerations were factored into the choices being made.

The exchange of views in the House of Commons on 9 February followed on from the statement in the House of 2 February where the proposed cuts and American purchases were laid out. McElheny, writing in the journal *Science* the following month, stated that the cuts would have been far worse, but for the actions of the protestors and the intense lobbying by company leaders.⁷⁴⁵ Yet when the choices are considered in the context of the American package and the economic and political advantages of it, it would appear that the noises made by the sector made no difference at all. The two programmes that did emerge from the cuts, the P.1127 and HS.801, were not central to the protestations by industry as they were constructed differently and with

⁷⁴⁴ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 239.

⁷⁴⁵ McElheny, "Britain wields a modernizing ax [sic]", p. 1430.

different implications, although the approach taken by Hawker Siddeley for the HS.801 offering did mirror the HS.802 offering made in place of the HS.681. The similarities in the structure of the 801 and 802 proposals and their distinctly different outcomes further demonstrated that the political reasoning for favouring the aircraft offered by the United States was the key element to the fate of the wider aircraft programmes in early 1965.

This chapter has argued that the aviation industry had consistently existed in a privileged position of a continual flow of government work providing an agreeable level of profits, often with minimal financial developmental risk, to a point where it was inherently unsustainable and requiring significant realignment. The direct action taken in early 1965 was not fundamentally different in immediate result to that of the 1957 defence review nor other periodic reassessments of defence need. As has been demonstrated, the difference lay in the longer-term intentions of the government of the day to attempt a redistribution of labour and R&D funding, to move the sector away from the reliance on government contracts, all whilst trying to ensure that the industry did not collapse completely. The cancellation of the big three programmes was fundamentally a response to the economic crisis that came to a head immediately after Labour took office and the political manoeuvrings with the United States as discussed in earlier chapters. In the same manner, the selection and continuation of the HS.801 Maritime Comet was fundamentally a response to the need to provide a bridging solution for the industry in the wake of the massive upheaval initiated by these cancellations. No event occurred in isolation, and the route taken to where a design such as the HS.801 was even in a position to be considered for selection for the RAF maritime patrol aircraft requirement must be examined to give the complete

picture to how it served as a vital piece of the jigsaw of Labour's reactive policies of the period.

CHAPTER 7 – THE SELECTION OF THE HS.801 – NIMROD

Aside from the clear difference in their intended military roles, the concepts behind the HS.801 Maritime Comet and the developmental P.1127 V/STOL fighter programmes had little in common. One was a modification of an aged airliner that did not represent the future intended direction of British civil aviation. The other was a promising but largely unproven advancement in highly deployable short-range fighter aircraft design with multi-national involvement in its development. Yet despite this, they were the only two survivors of the five major military procurements underway during the period that went to British manufacturers, and indeed both went to the same one in Hawker Siddeley. The HS.801 had more in common with the failed effort by Hawker Siddeley to push the HS.802 as the replacement for the HS.681 in place of the American C-130 selected by the Labour government. The P.1127 had more in common with the supersonic P.1154 V/STOL fighter for which it was a technological development mule and had been replaced by the American F-4. The P.1154, like the HS.681 and notionally the HS.802, fell prey to the decisions of early 1965 to cut back on domestic expenditure and free up a large tranche of a highly skilled workforce for other purposes, thereby theoretically removing the immediate requirement for the P.1127 beyond conceptual V/STOL development. The route to the HS.801 being confirmed as the replacement for the Shackleton took in multiple design options; from Britain, Europe and the United States, and ultimately served as an effective allocation of work to a sector that had been decimated by the economically driven cuts. This concept presupposes that a domestically built aircraft was required to fill this gap, yet it does not automatically follow that it should have been the HS.801. The proposed

offerings of modified VC-10 and Trident designs would have had commonality with civil aircraft already in production and served as a greater benefit to the aviation industry. Instead, the low price offered for the HS.801, in the form of fixed price contract, offered the government with a financially viable means of adding work to the sector, even if it meant that one of the unlikeliest of designs made it into service with the RAF.

This chapter will examine the direct factors that lead to the proposal of the HS.801 Maritime Comet as the replacement for the Shackleton Mk.1 and Mk.2. It will be argued that the selection of the HS.801, when placed alongside the concurrent choices made on the other procurements, enabled the Labour government to initiate a low-cost and low-risk domestic programme that meet their domestic political and economic targets, along with the military requirements of the period. It will therefore firstly consider the military requirement of the time, shaped by the movement towards a submarine launched nuclear capability that increased the importance of maritime patrol aircraft and provided a key requirement for the continuation of the role. Secondly, the competing aircraft proposals will be assessed to understand how the financial and political objectives removed them from the competition, including the more advanced domestic proposals from both BAC and Hawker Siddeley. With the alternative proposals deemed unsuitable, the manner in which the HS.801 was proposed must be assessed to understand why this programme succeeded where others had failed, including the similarly proposed offering to replace the HS.681 with the HS.802, which notionally shared many of the same perceived political and economic advantages as the HS.801. The failure of the HS.802 to match its maritime patrol aircraft stablemate serves as a final highlight to how the success of the HS.801

procurement was a result of it being part of a broader jigsaw that incorporated the previously discussed international political and economic considerations to complete Labour's balancing act of their first six months in office.

This multitude of factors that played into the replacing of the Shackleton with the HS.801 represents a gap in existing literature that is not just confined to the period under study and this procurement, but also to the way the RAF maritime role is considered. Works such as that by Hendrie on the actions of Coastal Command during the Second World War favour the term 'Cinderella Service' to reflect the neglected and oft forgotten nature of their endeavours.⁷⁴⁶ Ashworth's study across the history of Coastal Command focuses on the operational and technical aspects of the Shackleton rather than the contributing political and economic factors that lead to the selection of the HS.801 as the subsequent replacement.⁷⁴⁷ Gibson has examined the technical side of the selection process including the alternative British designs, yet he only places the original requirement against the other larger scale procurements, rather than the manner in which a British design would have satisfied a need for sustaining domestic industry.⁷⁴⁸ One of the few academic studies of the period and topic is Yonge's wider examination of post-war maritime patrol aircraft procurement, with other researchers such as O'Dell examining the operations of Coastal Command over the broader post-war timeframe.⁷⁴⁹ Considerations of the wider aviation industry in existing literature leap over the Nimrod procurement and go from the big three cancellations to Concord

⁷⁴⁶ A. Hendrie, *The Cinderella Service: RAF Coastal Command 1939-1945* (Barnsley: Pen & Sword, 2010).

⁷⁴⁷ C. Ashworth, *RAF Coastal Command 1936-1969* (Yeovil: Patrick Stephens, 1992).

⁷⁴⁸ C. Gibson, *Nimrod's Genesis: RAF Maritime Patrol Projects and Weapons Since 1945* (Manchester: Hikok, 2015) pp. 155-158.

⁷⁴⁹ Yonge, 'A Historical Perspective on Defence Procurement', and T.P. Yonge, 'What Drove Maritime Patrol Aircraft Procurement in the Post-War Era?', MPhil Thesis, University of Birmingham, 2013.

and the Jaguar and Tornado programmes later in the decade and beyond, bypassing the MPA question completely.⁷⁵⁰

In part, this can be explained by nature of the mission the Shackleton replacement was expected to fill. Unlike the other aircraft programmes, it was not primarily intended to meet the East of Suez strategic requirements, instead focusing on the surface and subsurface defensive roles around the British Isles. As the aircraft was replaced by a British design it represented continuity rather than the break towards reliance of overseas expertise and thus does not fit into the declinism narrative of Tomlinson and Rosecrance on the wider retreat from great power status.⁷⁵¹ When considered alongside the other programmes, the greatest difference, as discussed in chapter five was one of financial timings. The TSR.2, P.1154 and HS.681 were intended to be cutting edge and thus unavoidably expensive designs, yet the intent behind the replacement for the Shackleton was one of finding a low-cost interim solution to the issue of a rapidly aging aircraft, rather than the broader ambition of the RAF to move the MPA concept forward. That is not to say that the longer-term aim had been removed, but this shorter-term vision was reflected in the manner in which the competition for the replacement of the Shackleton Mk.1 and Mk.2 generation of aircraft played out within the requirement for an MPA during the period. Within this, the process took place against a backdrop of increased interest in monitoring Soviet naval activity and the anti-submarine warfare domain as a means of defending the new Polaris-armed submarines.

⁷⁵⁰ Owen, *From Empire to Europe*, pp. 312-314.

⁷⁵¹ Tomlinson, “‘Inventing ‘Decline’” and R.N. Rosecrance, *Defense of the Realm: British Strategy in the Nuclear Epoch* (New York: Columbia UP, 1968).

The decision to procure Polaris submarine-launched nuclear missiles, made at Nassau in December 1962 by Harold Macmillan, focused the need for a submarine hunting aircraft, but due to airborne technological limitations, the tactical employment of an MPA changed very little in the short term.⁷⁵² The Nassau discussions and subsequent Polaris Sales Agreement committed Britain to shifting the nuclear deterrent from an airborne model with the RAF to one held by the Royal Navy. The shift represented a continuation of the policy laid down in the 1957 Defence Review that Britain should retain a nuclear deterrent, and came during a time when the concept of employment for nuclear weapons had changed. As put by Wyn Rees, "In the Defence White Paper of 1957 it was acknowledged that there would be no defence against nuclear bombardment and therefore the only strategy that would deter aggression would be a strategy based on the threat to retaliate with nuclear weapons."⁷⁵³ This viewpoint encapsulates the subsequent Kennedy approach of 'flexible response', whereby the first line of defence against Soviet aggression was the use or threat of use of nuclear weapons.⁷⁵⁴

The nuclear world shifted again on the same day as the British general election, 15 October 1964, when China reported that they had successfully tested their first nuclear weapon and Khrushchev was removed as the Soviet Premier.⁷⁵⁵ Labour's election campaign had included the intention to renegotiate the Nassau Agreement as part of a move away from the nuclear stalemate of both sides ready to deploy such

⁷⁵² N. Fisher, *Harold Macmillan, A Biography* (London: Weidenfeld and Nicolson, 1982) p. 303.

⁷⁵³ G. Wyn Rees, 'Brothers in Arms: Anglo-American defence co-operation in 1957' in Ed. A. Gorst, L. Johnman & W. Scott Lucas, *Post-war Britain, 1945-64: Themes and Perspectives* (London: Pinter, 1989) p. 209.

⁷⁵⁴ Royal Historical Society, *Harold Wilson's Cold war*, p. 29.

⁷⁵⁵ Healey, *The Time of my Life*, p. 250.

large arsenals onto one focused on conventional forces.⁷⁵⁶ This had in part come from the protracted discussion on the MLF and the concept that nuclear independence could still be considered as being maintained, even if it were part of a multi-national force. The issue was not a contentious subject during campaigning as a poll in the penultimate week placed the issue of defence as only being an important issue to 12% of voters, whereas the cost of living held a 72% importance. The two main parties approached defence completely differently, with it a leading manifesto item for the Conservatives, yet for Labour it was relegated to the last page. Douglas-Home had put great store by the need to maintain a strong nuclear deterrent, whereas Wilson stayed away from it, giving only one speech on it during the campaign.⁷⁵⁷ This difference in prioritisations can be seen in the early moves of the Labour government to focus on domestic matters and the introduction of free prescriptions and adjustment to the tax system to both help balance the books and appeal to the voters who would need convincing again in short order given the small majority of the incoming government. The prescriptions element required funding, and drove in part the previously discussed requirement to decrease defence spending and reallocate the monies to social welfare. Therefore a reduced defence budget carried with it a prioritisation of nuclear weapons as a means of sustaining power projection on a more limited budget. Combined with the seismic events of 14 and 15 October, the strong 'Atlanticist' values of Wilson, Healey and Gordon Walker ensured the continuation of the Polaris programme.⁷⁵⁸ This brought with it an increased focus on Soviet naval activity that could threaten the security of the incoming submarine force, and also the need to

⁷⁵⁶ Our Own Correspondent, "Labour and U.S. Agree About Nuclear Sharing", *The Times*, 20 Feb 1964.

⁷⁵⁷ Butler & King, *The British General Election of 1964*, pp. 128 & 130.

⁷⁵⁸ Pimlott, *Harold Wilson*, p. 383.

counter any similar moves in Soviet nuclear arsenals shifting to a submarine-launched system. A fundamental issue in this escalation of deterrence was that anti-submarine technology had been stagnant for a number of years. The RAF acknowledged in mid-1964 that there was, “[No]...real chance of a technical breakthrough in the maritime field until the second half of the 70s.”⁷⁵⁹ The outcome of this was that from an on-board capability perspective, the Shackleton MPA force was as suitably equipped as it could realistically be for countering the Soviet threat.

The need for a replacement to the Shackleton came about from the design of the three different models in service, and the rapid ageing of the platform due to the burden placed upon it. The Shackleton had been initially procured as a replacement for the Lancaster GR.3, with requirement OR.200 issued in 1946 as a non-competitive tender for a modification of the Avro Lincoln aircraft for the maritime role.⁷⁶⁰ The Lincoln itself was a derivative of the Lancaster, so by the mid-1960s the MPA fleet was made up of an aircraft whose roots were firmly in Second World War heavy bomber designs. It was not just the design, but also the operational framework that was outdated. The requirement had envisaged an aircraft that would operate as convoy protection in the middle of the Atlantic, in ‘the gap’ – the area in which long range patrol aircraft had been unable to cover during the early years of the Second World War and which had resulted in heavy shipping losses from German submarine activity. The Shackleton Mk.1 and Mk.2, despite the requirement, were unable to cover this area. This failing was masked by the premise that carrier based aircraft would take over the duties in this area of the ocean, a point that the Royal Navy emphasised as a

⁷⁵⁹ TNA AIR 2/17198, Loose Minute, Minister of Defence (RAF) to Secretary of State, Undated est. Jun 1964.

⁷⁶⁰ TNA AVIA 15/3900, *Research Aircraft 11089 Part I*, Air Staff Requirement OR.200, Mar 1946.

reason for all anti-submarine warfare to be carrier based.⁷⁶¹ The RAF, however, stressed that the increased payload and resilience of land based aircraft, combined with the vulnerability of aircraft carriers, meant that any future MPA should be land based, and therefore under the control of the RAF.⁷⁶² Thus there was a need to improve the Shackleton Mk.1 and Mk.2 to close this long range coverage gap, and that aircraft would become the Shackleton Mk.3. This design came from OR.320, a requirement aimed at providing an interim solution to the range issue.⁷⁶³ Whilst there had been alternative designs proposed to meet OR.320, including the Bristol 175 MPA variant of the Britannia airliner and maritime Varsity, neither could deliver on the required timescale driven by the massive rearmament programme of the Korean War.⁷⁶⁴ The consideration of the 175 and the Varsity, a decade before ASR.381, was an early indication that competition, albeit domestically, would be a greater element of procurements in the future.

The requirement laid down for yet another interim aircraft in ASR.381 was to address the need to replace the Shackleton Mk.1 and Mk.2 and to fly alongside the more capable Mk.3s until maritime technology changed significantly enough to justify a new generation of aircraft. It was not just the limited capabilities of the aircraft that necessitated that move, but also the fatigue life of the airframes. The Griffon piston engines on the Shackleton Mk.2s were experiencing high failure rates and needed

⁷⁶¹ TNA ADM 1/23062, *Report of Maritime Air Committee; Investigation into relative merits of the Shackleton 2A and Gannet*, Loose Minute, Director Naval Air Warfare to Maritime Air Committee, 12 Dec 1952.

⁷⁶² TNA AIR 2/12101, Comments by DCAS to COS(M.A.)(52)7, undated est. Jun 1952.

⁷⁶³ TNA AIR 2/11845, *Air Staff Requirement No. OR.320 Development of the Shackleton Mark 2 for long range ant-submarine duties*, 20 Mar 1953.

⁷⁶⁴ TNA AIR 2/11846, *Shackleton Mk.III O.R.320*, 1 Sep 1953.

replacing with more modern units.⁷⁶⁵ There had been a request by the MoA for an additional six aircraft to supplement the aging force in 1960, but this had been denied by the MoS, who at the time were still paying off redundancy payments of £440,000 related to the decision to cancel 17 Shackletons in 1956 as part of the end of the rebuilding and strengthening of forces process necessitated by the outbreak of the Korean War and which had left the RAF oversized.⁷⁶⁶ The strategic shift from the concept of convoy protection to one of maintaining a constant watch on Soviet naval activity had increased the operational flying demand placed on the Shackletons of Coastal Command from 260 hours in 1960 to 6000 hours by 1963.⁷⁶⁷ The longer term intent to procure an advanced next-generation MPA in the late 1970s is carried throughout the ASR.381 discussion papers with almost all carrying the word ‘interim’ in their titles. Despite this, aircraft historical works such as Evan’s *The Nimrod: Mighty Hunter*, most likely guided by the longevity of the Nimrod, do not place much emphasis on this fact, even though it is one of the fundamental drivers of why the HS.801 survived the cuts of early 1965.⁷⁶⁸ This can in part be understood in that the upgrade from Nimrod MR1 to MR2 specification in the late 1970s conformed to the intent of the AST.357 and the technological advancements in radar and submarine detection systems, albeit within the same limited airframe.

The move from a primarily domestic air-launched nuclear deterrent to an American supplied submarine-launched one would bring a presumption of increased

⁷⁶⁵ TNA AIR 2/17200, *Interim Shackleton Replacement (ASR 381) – Policy*, Brief, *Comet HS 801 Maritime Aircraft*, undated, est. Jan 1965.

⁷⁶⁶ TNA DEFE 13/206, *The Shackleton Force*, Loose Minute, Montgomery (MoA) to Minister Ministry of Supply, The Shackleton Force, 16 Dec 1960.

⁷⁶⁷ TNA AIR 2/17197, *Interim Shackleton Replacement (ASR 381)*, Loose Minute Dir Ops to DGSR(A), *The interim Shackleton replacement*, 6 Mar 1964.

⁷⁶⁸ Evans, *The Nimrod: Mighty Hunter*, Technical studies such as Gibson, *Nimrod’s Genesis* discuss the interim nature of HS.801 within the wider context of failed aircraft proposals throughout the post-war era.

American focus on the maritime surveillance capabilities of the RAF, yet the perceived invulnerability of the submarine during the era did not place the American P-3 Orion design as superior to the other aircraft being proposed at the time.⁷⁶⁹ This lack of perceived requirement, coupled with the aircraft not fulfilling a central role East of Suez could in part explain why McNamara did not see the P-3 as serving a central function to his efforts to support the British worldwide role. Within the RAF, Coastal Command wavered between the Atlantic and the P-3 with the P-3 seen as preferable with its four engines compared to the two of the Atlantic and an increased ferry range. That it had the vast American research and development system behind it and the potential for more advanced detection equipment as time went on made it more operationally attractive in the longer term.⁷⁷⁰ Despite this, the immediate cost and performance balance swung in favour of the Atlantic, particularly as the need was to replace a rapidly aging fleet.⁷⁷¹ All this was measured against the lower ASR.381 proposal as a means of bridging the gap to where the RAF ultimately wanted to be with the maritime force and an aircraft designed to AST.357. Equally importantly, the P-3 was not specifically discussed at the Washington talks in December 1964 as an element of the American package. With the purpose of a maritime patrol aircraft being centred on surface rather than sub-surface surveillance, the connection of an MPA to the protection of a submarine force was not, unlike from the 1980s onwards, considered relevant during the procurement processes of the time. Diesel-electric submarines, with their requirement for frequent surfacing to run engines and recharge

⁷⁶⁹ Yonge, 'What Drove Maritime Patrol Aircraft Procurement in the Post-War Era?', p. 36.

⁷⁷⁰ TNA AIR 2/17197, Letter, AOC Coastal Command to DCAS, The Shackleton Replacement, 13 Mar 1964.

⁷⁷¹ TNA Air 2/17197, Study, 'A Proposal for Keeping Coastal Command Viable from 1970 until the Introduction of New Aircraft to AST 357', Feb 1964.

batteries were considered the sole submarine threat, and that was a threat to surface activity in much the same way as it had been during the Second World War. The expectation of the Ministry of Defence was that this would remain the extent of the threat until the mid-1970s.⁷⁷² Such a timeframe naturally aligned with the expected increase in submarine detection equipment and thus the planned introduction of the AST.357 based airframe at the end of that decade. The P-3, as a pure ASR.381 competitor would have met the off-the-shelf low-cost requirement, but falling outside of any American political overtures would have been an additional dollar spend, thereby increasing the balance of payments issues. Unlike the Atlantic, it was considered as a complete purchase without any domestic involvement, a move that was acknowledged by the RAF as difficult to support unless “it can be part of a package deal which will put work into British Industry.”⁷⁷³ That it was not considered in Washington demonstrates how the American purchases were driven by American proposals designed to further American ambitions, rather than the requirements of Britain. Alongside the dismissal of the Atlantic and the ultimate decision to select a compromise British design, the HS.801 showed how domestic industry was favoured by the government for this procurement to maintain an element of continuity of domestic output for an industrial sector that required reforming.

With AST.357 both unaffordable and unjustifiable at the time, the selection process for ASR.381 saw offerings from domestic industry that sat more broadly and considered ASR.381 criteria and the potential to ultimately develop into an AST.357

⁷⁷² TNA AIR 2/16777, *Maritime Reconnaissance Aircraft – Shackleton Replacement, Type Requirements*, Loose Minute DCAS to Secretary of State, 27 Mar 1963.

⁷⁷³ TNA AIR 2/17197, ACAS (OR) reply to P.S. on DCAS paper 690/64, *The Shackleton Replacement*, 28 Feb 1964.

capable platform. The primary offerings of domestic industry presents a sector that was both confident that their proposals would win out, whilst also hedging their bets by working to both specifications, and is reflective of the previously discussed notion that the aviation industry did not truly believe that significant cuts and changes to their way of doing business with the government was on the horizon. The ASR.381 requirement had been written purely around the Atlantic aircraft and formed the first serious attempt to build towards a multi-national aircraft. It was seen as a relatively straightforward combined effort that would show the way for the future light strike and trainer aircraft, what became the Jaguar, and an internationally designed helicopter in the Westland G.7.⁷⁷⁴ The spread of hybrid AST.357 and ASR.381 designs was very much a strong effort by British industry and reflected both an industry that did not sense the impending move away from expensive low volume British aircraft, and also a sector that was looking to boost sales of their new commercial designs by presenting them as highly effective military aircraft. Such a move could be viewed as either an understanding of the weak sales position which even the latest commercial British aircraft were in against American offerings to airlines, and therefore a precursor to the discussed emergence of the airbus concept, or as another example of the overconfidence of the sector for the government to always buy British.

The two primary offerings from domestic industry were the BAC VC-10 and Hawker Siddeley Trident aircraft, with subsequent proposals of the BAC 1-11 and Maritime Comet respectively as the competition progressed, all with extensive modifications to make them suitable for military use over the mid-Atlantic. The key

⁷⁷⁴ TNA AIR 2/17197, Loose Minute DOR(B) to PS to DCAS, *Anglo-French Collaboration*, 14 Feb 1964.

appeal for industry of putting forward the VC-10 and Trident designs with the advanced specifications of AST.357 in mind was the expected requirement of 50-60 aircraft – a not inconsiderate fleet size considering the meagre civilian sales performance of both aircraft by early 1964.⁷⁷⁵ A military aircraft based on a current civilian design would have allowed for shared equipment suppliers, design teams and concurrent modifications at a larger scale throughout the service life, thereby providing greater profit margins for the companies involved. Neither design was considered a straightforward solution though, as despite the VC-10 already entering service as a transport aircraft with the RAF, it was assessed as still being an expensive aircraft to operate, and the Trident would need reheat fitting to the engines to meet the performance targets.⁷⁷⁶ Aside from the requirement for near supersonic performance in AST.357, the greatest differentiator across the standards would have been the detection equipment onboard, and as this was not expected to arrive for at least a decade, the most positive viewpoint BAC could muster on the VC-10 was to say that it could nearly meet AST.357, and that as an interim aircraft this should be key.⁷⁷⁷ The Deputy Chief of the Air Staff assessed the issue as being one where “...the choice of aircraft is perhaps less difficult than the question of what equipment to put in it.”⁷⁷⁸

The RAF flight test assessments of the VC-10 and Trident favoured the Trident for the role, citing that the low-level handling was excellent and agile to manoeuvre, whereas although the VC-10 was found to highly capable, it was too large for

⁷⁷⁵ TNA AIR 2/17197, Loose minute, P.S. to DCAS to ACAS(OR), *The Shackleton Replacement*, 28 Feb 1964.

⁷⁷⁶ TNA AIR 2/171197, Loose minute, DCAS to Controller of aircraft at MoA, 4 May 1964.

⁷⁷⁷ TNA AIR 2/17197, Letter, EE Marshall (BAC) to Probert (DGSR(A)), *VC10 as Interim replacement for the Shackleton Reconnaissance Aircraft*, 2 Mar 1964.

⁷⁷⁸ TNA AIR 2/16777, Loose Minute DCAS to Secretary of State, 27 Mar 1963.

operations at low level. The test flights also confirmed that jet engines were preferable to propeller propulsion such as the turboprops on the Atlantic.⁷⁷⁹ For the Trident to be suitable for sustained operations at low level, extensive modifications, including the installation of a form-fitting panier under the fuselage, would be required as the pure civilian variant was unsuitable in this regard. The process showed how neither platform truly met the requirement of AST.357 nor ASR.381 and that the perception remained within the RAF that the experiences of the Shackleton, and indeed many other post-war aircraft, was in danger of repeating itself as, “There are signs that a body of opinion within [the] MoA would force an adapted British aircraft on us at almost any price.”⁷⁸⁰ Pressure from the MoA was understandable given the recent Royal Navy cancellation of the P.1154 and, at that stage, the continued difficulties of the TSR.2, P.1154 and HS.681. The interdependent issues with these other aircraft programmes were not limited just to the aggressive buy-British approach taken by the MoA and the aviation sector, but also to one of the central pillars of the issue – that of financial timing.

As discussed in earlier chapters, the key financial issue was not just the figures involved, but when they occurred. The aim of the Wilson government to reduce the expenditure on Defence from 1969/1970 onwards, which played such an important role in the demise of the other procurements, was also a factor here. A purchase of the Atlantic, followed by a subsequent procurement of a design that met AST.357 would see an outlay of £120m up until 1978 for the Atlantic, with the bulk of the outlay to follow with £275m in 1978-1982 to bring an AST.357 aircraft into service. This

⁷⁷⁹ TNA AIR 2/17265, *Maritime Reconnaissance Aircraft – Shackleton Replacement, Type Requirements – AST/OR 350/357*, Letter, AoC Coastal Cmd to DCAS, 23 Mar 1964.

⁷⁸⁰ TNA AIR 2/171197, Loose minute, DOR2 to S.6, Shackleton Interim Replacement, 10 Mar 1964.

distribution was aided by the Atlantic being an existing design, so the risky and expensive development work was not a factor. The Trident and VC-10, as hybrid AST.357 aircraft, would see that higher outlay occur much earlier in the lifecycle, and in the less favourable cost-plus contractual model which was then causing issues for the three main procurement programmes. Both aircraft designs would require £30m before 1969, but then Trident would incur £200m and the VC-10 £300m during 1969-1973. The costs would not be finished there with an additional £110m and £135m respectively from 1973-1980 as the detection technology advanced.⁷⁸¹ With these aircraft being new conversions, and in the case of the Trident one requiring extensive modification, there was minimal scope to bring both the in-service date and this peak expenditure forward. Equally this outlay timescale demonstrated the limited operational suitability of the platforms as the weakened Shackleton fleet required shoring up in the near term, and could not wait for the development of a replacement to occur after 1973. This financial distribution, with the peak expenditure occurring in the period where cuts were essential, fundamentally doomed the viability of the projects. The identification of the need for a more favourable financial curve, such as that with the Atlantic, and the need to avoid an expensive overseas purchase along with the concept of a lower cost interim design to avoid falling victim to the financial pressures of 1969-73 do, when taken in isolation, appear to show that the RAF was fully aware of the impending issues and expected cuts. When considered alongside the other aircraft programmes and how those were cut and replaced does, however, suggest a disconnect within the one Service. If this was the case, then only Coastal

⁷⁸¹ TNA AIR 2/171197, Loose minute, AUS(AS) to PS to Minister (RAF), *The Shackleton*, 8 May 1964.

Command was thinking clearly and understanding the risks to the viability of the planned aircraft posed by the prevailing financial winds. Such praise for Coastal Command places too much emphasis on a perceived importance of the maritime fleet and presumes that the Command, as the aforementioned Cinderella Service of the Second World War for its apparent second class status, was the equal of the newly created Strike Command and the offensive requirements fulfilled by the TSR.2 and P.1154.⁷⁸² The reality was that, from the perspective of the RAF, there would always have to be new combat and transport aircraft, it was merely a matter of which particular design and from where.

This secondary element gave the government far more scope to achieve other more pressing political objectives through the process – typified by the manner in which the discussions played out in Washington during December 1964. The previously mentioned invulnerability of the submarine and the diminished importance of the mid-Atlantic gap did not provide such certainty to the RAF retaining a large-scale maritime fleet. Handwritten comments to a DOR2 report from June 1964 highlighted that the predicament of the Shackleton Mk.1 and Mk.2 was a case of the “RAF paying the price for neglecting [the] maritime role, but at least [the] force has not been cut.”⁷⁸³ This final aspect reinforced that maintaining a fleet was the first objective for the service, for having something that could be replaced was far more feasible than having to build up from scratch, but that this had primacy over having an effective combat element. There was also the competing notion of to whom the responsibility for the protection

⁷⁸² Contemporary RAF term for appearing unfavoured within the hierarchy, now closely associated with Coastal Command through works such as; Hendrie, *The Cinderella Service* and detailed in; Neate, J., “The Royal Navy and the Royal Air Force in Anti-Submarine Warfare Policy, 1918-1945”, MPhil thesis, University of Birmingham, 2013

⁷⁸³ TNA AIR 2/171197, Summary to Report by DOR2, 17 Jun 1964.

of both convoys and the wider maritime domain should fall, with both the RAF and the Royal Navy jostling for primacy. For the Royal Navy, the Gannet carrier-launched aircraft had previously been considered as effective in supporting fleet operations.⁷⁸⁴ The failing of the earlier variants of the Shackleton Mk.1 and Mk.2 to operate in the mid-Atlantic gap and thus the natural advantages possessed by a carrier based platform made the Gannet far more appealing to the Navy a decade earlier, although its limited range and payloads would always ensure that there was never a direct inter-service rival to the patrol aircraft requirement by the mid-1960s.

At no stage in the selection process was the option of handing the programme to the Royal Navy discussed, and the process was focused on the requirement to find a solution that worked in the timescales shaped by the impending demise of the Shackleton Mk.1 and Mk.2, and within the financial constraints of the defence budget rather than a complete reappraisal of the need for an MPA force. The perception from within the RAF that their prospects of acquiring the best aircraft for the task were being hampered by a Ministry of Aviation insistence of a British aircraft actually reinforces the political aspect of the procurement.⁷⁸⁵

The selection process that resulted in the HS.801 being the preferred choice commenced in the months prior to the cancellations of the other aircraft programmes, with the initial discussions that made it the front-runner occurring under the Conservative administration from July 1964 onwards. The MoA was, as previously discussed, the champion of the domestic industry, and had taken the view in the

⁷⁸⁴ TNA ADM 1/23062, *Report of Maritime Air Committee; Investigation into relative merits of the Shackleton 2A and the Gannet*, 2 Dec 1952.

⁷⁸⁵ TNA AIR 2/17197, Minutes by P.S. to DCAS, Shackleton Replacement [Meeting] on 1 April 1964, 9 Apr 1964.

spring of 1964 that the money, around £100m, for any replacement for the Shackleton fleet, "...would be much better spend in the British aircraft industry."⁷⁸⁶ Despite wanting the money, the MoA were also pushing for an aircraft that would combine the two requirements in a cost effective package, as the Lang Report had highlighted the continued perception problem of having an industry that could rarely deliver on time or on budget, yet frequently achieved profit margins far in excess of those previously agreed on state contracts. The desire of the MoA to meet these two aspects suggests an effective lobbying effort, but the success of the HS.801 was predominately down to timing, and that was essentially the opposite of perceived MoA thinking. ACM Elworthy, Chief of the Air Staff, wrote to the Minister for RAF in June 1964 that, "It seems to me very important on several counts that we should secure a decision before the summer break. At the same time, the current progress of discussions does nothing to dispel the impression that the Ministry of Aviation, who want of course a different outcome, would welcome delay."⁷⁸⁷ This withering assessment depicted a Service Chief highly frustrated with the actions of the MoA, undoubtably not just from the Shackleton, but also with the ongoing challenge of bringing the TSR.2, HS.681 and P.1154 into service. ACAS(OR) highlighted the problematic relationship between the Service and the Department, stating annoyance in July of that year over, "The fuss the British industry has made over this exercise." He also laid down that, due to the campaigning against the Atlantic by both the MoA and domestic industry, final British bids would have to be received by August, in order to make a decision the following

⁷⁸⁶ TNA AIR 2/17198, Letter from Bullock (Min of Av.) to Cooper (Min of Def.), *Shackleton Replacement*, 25 May 1964.

⁷⁸⁷ TNA AIR 2/17198, Loose Minute, CAS to Minister (RAF), *Shackleton 2 Replacement*, 24 June 1964.

month.⁷⁸⁸ This did not meet the Chief of the Air Staff's target of the summer parliamentary recess, but did place the whole process prior to the General Election, an unusual tactic given the inherent risks to pre-existing programmes that would be fully borne out over the coming months. The short amount of time taken to shift away from both the dedicated ASR.381 aircraft design, led by the Atlantic, and the more advanced AST.357 concept offered by the modified VC-10 and Trident, to one that attempted to bridge the gap in a cost efficient manner enabled British industry to, in very short order, propose alternative designs and use the considerable leverage of the MoA to achieve primacy in the selection process.

The first mention of the Maritime Comet as an option was only in July 1964 at a meeting between Henry Hardman, the Permanent Under Secretary at the MoD, and Sir Arnold Hall, the Managing Director at Hawker Siddeley. In Hardman's recollections of the meeting, Hall went on the attack, criticising the government and saying that if they had, "...resolved to 'go French and buy the Atlantique [sic]' ...[as]...unless HMG had obligations to the French, or had decided as Hall put it that 'under no circumstances would they buy British aircraft.'"⁷⁸⁹ Hawker Siddeley had been involved in the development of the Atlantic as part of the NATO programme in 1958 – a programme that Britain had ultimately decided to stay out of, costing Hawker Siddeley a slice of the work that a subsequent purchase would not have restored. Hall instead proposed a modified version of the Comet that would cost the same as the Atlantic at £1.5m per aircraft. Hall undoubtedly had an affinity for the Comet and would have been understandably passionate about the proposal, having been head of the team at RAE

⁷⁸⁸ TNA AIR 2/17199, Loose Minute, ACAS(OR) to DCAS, *Maritime Replacement*, 21 Jul 1964.

⁷⁸⁹ TNA AIR 2/17199, Letter, PUS MoD to PS MoA, 7 Jul 1964.

Farnborough that discovered the critical weaknesses around the square windows in the early airliner versions that had led to multiple fatal crashes. Hardman saw Hall's aggressive approach as one of "...striving to make my flesh creep."⁷⁹⁰ At this early pitch the characteristically optimistic bidding figures continued as the £1.5m per aircraft was revised up substantially to £2.2m by October which placed it at the same figure as the more advanced Trident proposal, but as was noted at the time, the Trident's costs would fall in the difficult 1970-1973 period, and the Comet's would occur significantly earlier.⁷⁹¹ Hall's position was firm, that if the Comet could cost the same as the Atlantic and have equal or better performance, then it should be considered as an option.⁷⁹² This last opinion was backed up by the Chief of the Defence Staff writing to Minister for Defence Thorneycroft, that comparable British aircraft should be given equal consideration.⁷⁹³

By October 1964, despite the increase in price, the Comet was being discussed as forming the future backbone of the maritime fleet with a requirement for 38 aircraft to fulfil a UK-based patrol role, with the remaining Shackleton Mk.3 fleet reduced to 31 aircraft for overseas internal security operations.⁷⁹⁴ A progression which was aided by the ultimately wise choice of the MoA and Hawker Siddeley to propose the aircraft on a fixed price contract.⁷⁹⁵ This pricing model had been another of the recommendations of the Lang Report as a means of avoiding both spiralling costs and

⁷⁹⁰ TNA AIR 2/17199, Letter, PUS MoD to PS MoA, 7 Jul 1964.

⁷⁹¹ TNA AIR 2/17199, Minutes, *Meeting held on 27 Oct 1964 on Shackleton Replacement [MoD & MoA]*.

⁷⁹² TNA AIR 2/17199, Letter, PUS MoD to PS MoA, 7 Jul 1964.

⁷⁹³ TNA AIR 2/17199, Loose Minute, CDS to SofS Thorneycroft, *The Shackleton Replacement*, 15 Jul 1964.

⁷⁹⁴ TNA AIR 2/17199, Report, *The size and shape of a mixed Shackleton mk.3 and Comet MR.1 Maritime Air Force*, [undated], est. Oct 1964.

⁷⁹⁵ TNA AIR 2/17199, Minutes, *Meeting held on 27 Oct 1964 on Shackleton Replacement [MoD & MoA]*.

excessive profits and suggested that Hawker Siddeley were either highly confident in their ability to meet the targets, or were suitably desperate for the work that they agreed to such terms. Sir Roy Dobson, the Chairman of Hawker Siddeley, boldly and arguably inaccurately stated to the press in February 1965 in the wake of the wider aircraft cuts that, “We have been putting in schemes for the Maritime Reconnaissance Comet since 1958. There has been no decision until now and it has cost us a lot of money out of our own pockets.”⁷⁹⁶ If they had existed, then such schemes had apparently gone unnoticed within the RAF selection process, as the priority for Hawker Siddeley had been the modified Trident as a modern and exportable civil airliner design. There is no mention of a HS.801 prior to July 1964, and the last-minute nature of the design would be echoed in the HS.802 transport aircraft concept in February 1965. That the Maritime Comet had gone from being an unheard of possibility to the clear front runner in a matter of weeks did not mean it carried the full support of the RAF, with DUS (P&B) seeing it as the RAF being forced away from the preferred off-the-shelf and international interdependence solution offered by the Atlantic by the efforts of British industry,⁷⁹⁷ and DDOR8(RAF) seeing a danger of the RAF being forbidden from procuring a foreign aircraft in the future.⁷⁹⁸

The fixation on the perils of a low volume domestic aircraft procurement were understandable in the context of both the ongoing programmes and the recent history of the MoA, however the HS.801 would still make it through to RAF service despite the near immediate turn towards foreign aircraft. The relatively low fixed price nature of the contract undeniably aided in this, as it made the programme attractive to the

⁷⁹⁶ Our Correspondent, “Aircraft Chief Blames Conservatives”, *The Times*, 11 Feb 1965.

⁷⁹⁷ TNA AIR 2/17199, Loose Minute, Peck (DUS(P&B)) to AUS(AS), *Shackleton*, 23 Sep 1964.

⁷⁹⁸ TNA AIR 2/17199, Notes for DOR2 by DDOR8(RAF), ASR 281, [undated], est. Oct 1964.

Labour government as a means of keeping a functioning domestic industry going whilst still achieving their international political ambitions and reducing the defence budget. The procurement formed one of the measures of support to the domestic aviation industry, and at a speed that made it attractive to both sides. By January 1965, Hawker Siddeley had informed the RAF that their intention was for aircraft deliveries to commence within 36 months at a fixed price of £1.96m per aircraft and for production to run at 2 aircraft per month until the 38 aircraft order was complete.⁷⁹⁹ In the procurement climate of the time, Hawker Siddeley were evidently more comfortable at proposing fixed price contracts than the MoA to ensure that yet another contract was not lost.

The Vulcan v-bomber upgrade work mentioned by Nevin in his note to Healey as part of the package to “provide an adequate airframe load + work...” was partly responsible for the timeline of 36 months.⁸⁰⁰ The same factory, at Woodford in Manchester, was to be used by both programmes with the HS.801 build able to commence only once the Vulcan work had finished, highlighting the aspect of providing continuity to British industry in the selection. The chief executive of Woodford, Sir Harry Broadhurst, had expressed concern to the RAF that keeping the workforce together was both challenging and vital, and that as such the HS.801 work would need to commence as soon as possible.⁸⁰¹ By agreeing to the more expedient fixed price model, work could commence on the first prototype immediately and this

⁷⁹⁹ TNA AIR 2/17200, Letter, Jenkins (Hawker Siddeley) to Air Cdre Knott, *HS 801 Maritime Reconnaissance Aircraft*, 4 Jan 1965.

⁸⁰⁰ TNA DEFE 13/745, Handwritten note, Nevin to Healey, *R.A.F. aircraft programme*, 1 Nov 1965.

⁸⁰¹ TNA AIR 2/17200, Loose Minute, DCA(RAF) to ACAS(OR), *Maritime Comet*, 8 Mar 1965.

gap for the workforce could be reduced.⁸⁰² This plan still represented a streamlining effort by the company as it meant no additional factories would have to be kept open for the contract to be fulfilled, and for the work to be carried out at the same site as where the Shackleton fleet had been built. The Manchester factories, along with those in Coventry, had been due to receive a large share of the HS.681 workload with 4,000 additional staff required by 1970 once the HS.681 production had commenced, so the new work for Vulcan and HS.801 would in part offset these losses.⁸⁰³ Without the HS.681, and if the HS.801 had not been approved and assigned to Woodford, then the factory would have seen the workforce reduced from 3,000 to 500 personnel at the conclusion of the Vulcan upgrades.⁸⁰⁴ This further highlights that the purchase of a domestic programme was not just of providing a financially suitable contract for British industry, but one done so in a manner that would allow a continuation of employment in particular geographical areas and the retention of design teams. Although the Comet was not a new civil design, the selection of it as the basis for the Shackleton replacement did still play a tangential role the drive to increase exports in the new generation of aircraft, particularly the unsuccessful attempt to sell VC-10s to Middle East Airlines (MEA) in a move that highlighted the importance of regional international relations over and above the requirements of the RAF.

In March 1965 a proposal was made to defer VC-10s destined for RAF Transport Command to enable the sale of civilian versions to Middle East Airlines in Lebanon.⁸⁰⁵

⁸⁰² TNA AIR 2/17200, *Notes of a meeting held in office of DCA(RAF) to discuss Maritime Comet Contract*, 30 Mar 1965.

⁸⁰³ TNA CAB 148/20, *Papers 28-68*, O.P.O.(65)28, *Cancellation of H.S.681 – Effect on Shorts Bros. and Harland*, 28 Jun 1965.

⁸⁰⁴ TNA AIR 2/17200, Loose Minute, Lawrence-Wilson (MoD) to DCAS, *Comet – Maritime Reconnaissance*, 24 Mar 1965.

⁸⁰⁵ TNA AIR 2/17200, Loose Minute, PS to USoS(RAF) to PS VCAS, *Middle East Airlines Comets*, 26 Mar 1965.

There were two aspects to this, with the sale of VC-10s forming one part, and the other being the buy-back of existing Comets in service with MEA. The concern within the MoA was if a good price could not be offered to Sheikh Najib then he would publicly state that Britain had failed him and MEA would purchase American Boeing 707 aircraft instead.⁸⁰⁶ At the time, MEA was rapidly expanding and was the 16th largest airline in the world, and the only profitable one within the Middle East.⁸⁰⁷ The suggestion was passed around the Ministry of Defence that the Comets could either be used by Transport Command, who already operated a fleet of the aircraft, or in either the production line for HS.801 or as trainer aircraft for converting the crews over from the piston engined Shackletons.⁸⁰⁸ The Transport Command suggestion was dismissed as the lack of loading doors and strengthened floors would limit payload capacity, whilst the reduced range offered by the Comet compared to the VC-10 would limit operational effect. The expectation was clearly that it would not simply be a deferment of the VC-10s on order, but an unacceptable replacement platform. As a maritime training aircraft, this was equally dismissed as unworkable given the different handling characteristics expected from the Maritime Comet and the reworked fuselage and combination of Comet 4 wings with a shortened body.⁸⁰⁹ There was however, a suggestion that reconditioned MEA Comets could be integrated into the HS.801 production line, provided costs were the same as for new build aircraft, and that the weight penalty of the longer fuselages was kept below 600lbs.⁸¹⁰ Neither of the

⁸⁰⁶ TNA AIR 2/17200, Loose Minute, PS MoA to PS Minister RAF, 26 Mar 1965.

⁸⁰⁷ Our Correspondent, "Middle East: The Flying Sheikh", *Time*, 4 Sep 1964.

⁸⁰⁸ TNA AIR 2/17200, PS to USoS(RAF) to PS VCAS, *Middle East Airlines Comets*.

⁸⁰⁹ TNA AIR 2/17200, Loose Minute, ACAS(Pol) to PS USoS(RAF), *Middle East Airlines Comets*, 26 Mar 1965.

⁸¹⁰ TNA AIR 2/17200, Loose Minute, DCAS to DCA(RAF), *Middle East Air Line [sic] Comets*, 19 Mar 1965.

compromises for Transport Command nor Coastal Command came to pass as MEA went with Boeing rather than BAC, but it was an example of where, if required, the needs of the RAF could come second to those of industry. When taken in the context of the time, it reinforced the concept that the aircraft programmes that were cancelled and replaced with American aircraft were not done so for the publicly stated operational reasons to benefit the RAF, but instead that political objectives and manoeuvring would always be paramount. In the case of MEA, it was a combination of support for British industry through increased sales of the VC-10 against American domination, and continued influence in the Middle East as a region where Britain was begrudgingly given primacy over by the United States due to the well-established relationships in the area. The episode would not have resulted in a cancellation or drastic change to the HS.801 procurement, but served as a reminder that all programmes could be modified at the whim of Whitehall.

The successful insertion of the HS.801 into the Shackleton replacement bidding process represented an example of a successful last gasp change of direction from the aircraft industry, and Hawker Siddeley used the experience and possible confidence to attempt something similar with the HS.802 in February 1965 following the cancellation of the HS.681 programme. The different outcomes of these reinforces the notion that the purchase of the HS.801 was sufficient to address the need for a domestic, and in particular Hawker Siddeley, programme, and that the HS.681 replacement was a decision rooted on the international political stage.

The RAF heavy transport cargo fleet sat alongside the existing modified Comet strategic transport aircraft, which were by 1964 about to be replaced by the aforementioned newly ordered VC-10s. The cargo fleet was high fragmented,

comprising, in November 1964, an all-propellor powered fleet of: 28 Beverleys, 48 Hastings, 48 Argosies and 6 Vallettas. The HS.681 programme had been intended to provide the RAF with a single jet powered replacement for the Beverley and Hastings aircraft, which by 1970 would have been in service for 14 and 22 years respectively, and which would in time also replace the Argosies.⁸¹¹ The HS.681 would also have provided a STOL capability, greatly improving performance in the East of Suez role. This would have been achieved with a bespoke engine design from Rolls Royce with the Medway.⁸¹² The aircraft was announced as the platform of choice under the Conservative government on 26 February 1964, however there was no expectation of signing a production contract until early 1965.⁸¹³ This gap was a major factor in making the programme vulnerable to cuts by the new Labour government as it was still on the drawing board, which although at an advanced stage, there had been only a minimal amount of industrial preparation and manufacturing work.⁸¹⁴ The outcry that followed the decision to replace the TSR.2 with the TFX can in part be attributed to there already being 2 TSR.2 prototypes flying by early 1965, and the perception that this was therefore not a cancellation of a conceptual capability for the RAF, but instead a termination of a proven aircraft.⁸¹⁵ This argument, which would occur again in 2010 with the timing of the cancellation of the successor to the HS.801, the Nimrod MRA.4, and is popular with aviation writers but only takes into account the technical aspect of the airframe and not the wider political considerations that place the decision in the

⁸¹¹ TNA AIR 19/1141, *HS 681: Feasibility Study*, Letter, Cooper to Paymaster General, *The HS 681*, 19 Nov 1964.

⁸¹² M. Donne, "The Aircraft Industry after the Cut-Back", *Financial Times*, 4 Feb 1965.

⁸¹³ TNA AIR 19/1141, Letter, Cooper to Paymaster General, *The HS 681*, 19 Nov 1964.

⁸¹⁴ TNA AIR 19/1141, Briefing Notes for SoS(RAF), *HS 681*, [undated], est. Apr 1965.

⁸¹⁵ Hamilton-Paterson, *Empire of the Clouds*, p. 237.

appropriate context.⁸¹⁶ It would also provide a possible reason why Hawker Siddeley moved at pace to place the HS.801 under a production contract as early as January 1965.

The Lockheed C-130 Hercules, proposed as part of the package by the United States at the Washington talks in December 1964 to replace the HS.681 was not viewed favourably in the press or within the aviation industry. Sir Roy Dobson, in an off-the-cuff remark to *The Times* prior to boarding an aircraft for Australia in February 1965 described it as a “...clapped-out propellor-driven aircraft.”⁸¹⁷ The *Financial Times* considered the C-130 as a poor choice as it would “...need to be retired as obsolete sometime in the 1970s.”⁸¹⁸ The perception was that the HS.681 would have been vastly superior to the C-130 from a capability standpoint, particularly as the intent was to replace much of an RAF transport fleet that, in the case of the Argosy, had first flown around the same time as the C-130 and had a similar turboprop design of engine. The proposed cost of the C-130 purchase was £73m, whereas the HS.681 programme was expected to cost £220m for the 62 aircraft.⁸¹⁹ The C-130 had been considered several years earlier as an option prior to the selection of the HS.681, and from a technical standpoint had been found to meet the requirements laid down in OR.351 in terms of payload, hold size, usable tactical range and ferry range. Where it did not meet the specification was in the lack of a STOL capability.⁸²⁰

The decision by Hawker Siddeley to enter the Shackleton replacement programme with a Comet design modified to include the under-fuselage pannier from

⁸¹⁶ See Evans, *The Nimrod*, and Hamilton-Paterson, *Empire of the Clouds*.

⁸¹⁷ Our Correspondent, “Aircraft Chief Blames Conservatives”.

⁸¹⁸ Donne, “The Aircraft Industry after the cut-back”.

⁸¹⁹ TNA AIR 19/1141, MoD lines to take on HS 681 cancellation, est. Feb 1965.

⁸²⁰ TNA AIR 19/1141, *Joint Requirements for Tactical Transport Aircraft*, p.7, 7 Nov 1962.

the new Trident maritime concept and which, despite the protestations from Sir Roy Dobson, had been not in detailed development for over 6 years but had been put together at short notice once the Trident had fallen out of favour, is at the root of the decision to propose the HS.802 for the transport role. The design of the HS.802 had been, according to Hawker Siddeley director Charles Bayly, one where “...design teams had worked day and night for three days to produce the new specification...”⁸²¹ The compromise aircraft was, like the HS.801, a combination of two designs, with in this case the fuselage of the HS.681 mated to the wings of the HS.801.⁸²² The wings, as an existing Comet 4 design would aid in keeping costs low, and would also present to the government a modification of an existing platform rather than a clean sheet design. Given the time taken to produce the specification and that it never left the drawing board it can only be speculated as to whether the design would have worked in practice. Like the C-130, the new design did not have a STOL capability, which placed it as a rival to the C-130 rather than a more cost-effective means of achieving the capabilities of the HS.681. In this context, and without the international political advantages of the C-130, and with the need of the government to provide suitable continuation work for British industry already having been met by the HS.801, the design did not achieve support from the government. It is also questionable as to how committed Hawker Siddeley were to the project, or whether it was merely a public relations effort to demonstrate to their workforce that they were notionally prepared to fight for their jobs. The unrest caused by the proposed cancellations had already led to factory workers marching to Whitehall in protest, and not all the blame could be

⁸²¹ Our Correspondent, “Utility Version of Transport at Half Cost Suggested”, *The Times*, 4 Feb 1965.

⁸²² Our Own Correspondent, “Delivery in 2 or 3 years”, *The Times*, 10 Feb 1965.

laid at the door of the government, for mismanagement by Hawker Siddeley in being slow to get the aircraft into production could also make them the focus of workers' anger. To distract from this, Bayly's announcement of the aircraft, which was carried in *The Times*, was made to shop stewards at the firm's Coventry factories yet gave the government only 48 hours to decide on the proposal. He went on to state that if HS.802 was accepted by the government then the factories would be saved from closure, but if not then 5,000 jobs would be lost.⁸²³

The politization of the issue carried forward into the House of Commons where Thorneycroft pressed Jenkins to consider the HS.802 on the basis that if the matter was solely about saving money, then the HS.802 was suitable for the task.⁸²⁴ The HS.802 was proposed to cost £69.1m, slightly undercutting the C-130 so considered against this narrow metric it could have been a suitable alternative.⁸²⁵ However this does not take into account both the likelihood of the design proving viable and the American political capital gained by the purchase of the C-130. Jenkins responded to Thorneycroft that he had "...looked carefully at the imaginative last minute Hawker Siddeley proposal...but with great regret...we are not able to go back on...the purchase of the C-130."⁸²⁶ The matter was closed only 6 days after surfacing, yet in the same debate in the Commons Jenkins stated that, "There is a big Comet order coming in, to which very little attention has been paid."⁸²⁷ Thus in the same speech Jenkins both

⁸²³ Our Correspondent, "Utility Version of Transport at Half Cost Suggested".

⁸²⁴ Our Parliamentary Correspondent, "The All-British Aircraft is Out, Jenkins tells MPs", *Financial Times*, 10 Feb 1965.

⁸²⁵ TNA AIR 19/1141, *MoD lines to take on HS 681 cancellation*, [undated], est. Feb 1965.

⁸²⁶ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 237.

⁸²⁷ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 235

took away from Hawker Siddeley and also reaffirmed government support for the company with the HS.801.

The HS.801 succeeded where the HS.802 failed as it was theoretically just a lightly modified Comet with the anti-submarine detection equipment carried over from the Shackleton, whereas the HS.802 was an unproven concept. Equally the HS.801 worked politically in the same manner as the C-130 whilst the HS.802 did not. Finally, there was the question of how determined Hawker Siddeley was to have each aircraft succeed. The HS.802, at £1.1m per aircraft, was significantly cheaper than the other last minute effort by domestic industry, the Shorts SC5/15B variant of the Belfast transport aircraft, which the MoD estimated at nearly twice the estimate of the HS.802 at £2.5m per airframe.⁸²⁸ The estimate for research and development on the HS.802, where the wings were not designed to pair with the fuselage was suggested at a mere £3.5m, whereas the HS.801, admittedly with a complicated mission system to integrate, was initially set at £21.4m.⁸²⁹ The HS.802 would likely have proven impossible for Hawker Siddeley to manufacture at the quoted prices irrespective of the intentions of the government. Very little material exists in the National Archives on the HS.802, with only a few mentions at the end of the handful of HS.681 files. The majority of the references are in contemporary newspaper articles, and BAE Systems refused requests to open the archives of Hawker Siddeley relating to the period, so it is difficult to gain a rounded impression of the aircraft. Despite this it serves as a useful counterpoint to understanding how astute the pitch of the HS.801 was, and how it performed a function for both Hawker Siddeley and the Labour government. The other

⁸²⁸ TNA AIR 19/1141, *MoD lines to take on HS 681 cancellation*.

⁸²⁹ TNA DEFE 24/67, *Aircraft – Shackleton Replacement*, Loose Minute, ACAS(OR) to DCDS(OR), *ORC Re-submission-Nimrod MR Mk1*, 27 Mar 1968.

major programme to survive the cuts, albeit as a flying development aircraft, was also made by Hawker Siddeley, and the P.1127 equally demonstrates the complex balancing act performed by RAF procurements during the period. The two aircraft also sat at very different ends of the technological spectrum, and highlights the political gains that could be made out of the turbulent times.

The P.1127 had originated as a testbed aircraft for the new V/STOL technology that was to be employed in the supersonic P.1154 fighter which had been scheduled to replace the subsonic Hunter under ASR.356.⁸³⁰ The emergence of V/STOL engine technology and the concept of variable geometry swing wings in fighter aircraft design were seen as areas critical to the national interest, and which Thorneycroft boldly described in the House of Commons as the “...two great break-throughs in aeronautics since the days of the Wright Brothers...”⁸³¹ The European variable geometry programme, which by early 1965 was still in the early stages of political negotiations, was viewed as one suited to multi-national cooperation.⁸³² Particularly in the light of the technology being employed on the F-111, it was an accepted advancement that all nations were actively and comparably involved in developing variable geometry designs. The V/STOL engine technology however, was not as widespread and the work undertaken by Rolls-Royce, combined with the P.1127 airframe from Hawker Siddeley was perceived at the time as giving Britain a two year lead on what could prove a highly-exportable advanced technology.⁸³³ The success of what the P.1127 became,

⁸³⁰ TNA AIR 2/17661, *P.1127(RAF) aircraft*, Memo, OR16(RAF) Air Staff Requirement No 384 for close offensive support fighter aircraft with V/STOL capability, Nov 1965.

⁸³¹ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 222.

⁸³² TNA AVIA 65/1750, *Statement of intention between B.A.C. and G.A.M.D. on the design and manufacture of the variable geometry fighter aircraft*, 31 Dec 1965.

⁸³³ Shrimmsley, *The First Hundred Days of Harold Wilson*, p. 125.

the Harrier, and particularly following the Falklands War, has led to it being lauded as a great British success story, with Hamilton-Paterson in *Empire of the Clouds* placing it as, "...the very last great aircraft Britain produced...[and a] design that so elegantly solved the complex engineering problems yet retained the characteristics of a high-performance strike/attack aircraft."⁸³⁴ These commonplace impressions of the Harrier as a success would present the case for its survival during the cuts as being down to Britain having a game-changing aircraft in development that was too important to lose, yet this is in stark contrast to the views of the RAF at the time.

The Tripartite Agreement to evaluate V/STOL technology in the form of the P.1127 was signed between Britain, the United States and West Germany on 22 February 1963 and gave the development a certain amount of financial cushioning as the expenditure was spread between the three nations.⁸³⁵ The evaluations by Germany and the United States did not carry guarantees of procuring further aircraft, and the Air Ministry had stated the previous December that, "We have no interest in the aircraft as an operational aircraft...[but that] we are nevertheless pledged to buying 30 P.1127s if this were necessary to ensure that the German Air Force adopted it as an operational aircraft."⁸³⁶ The Ministry were even more sceptical of the likelihood of sales to the United States as, "It seems open to question whether the U.S. Army's interest in the P.1127 will result in their acquiring it on any considerable scale."⁸³⁷ The MoD in response to the Air Ministry put forward that it was, "...an aircraft which could not live in the battle area at the time of its introduction and which,

⁸³⁴ Hamilton-Paterson, *Empire of the Clouds*, pp. 242-243.

⁸³⁵ TNA AIR 19/1086, *P.1127*, Memo, A.S. Air B.2. (Airey), *P.1127 Tripartite Agreement*, 26 Feb 1963.

⁸³⁶ TNA AIR 19/1086, Letter, AUS(A) (Kent) to MoD (Wheeler), *The P.1127*, 21 Dec 1962.

⁸³⁷ TNA AIR 19/1086, AUS(A) (Kent) to MoD (Wheeler), *The P.1127*.

indeed, the Air Commander might not even dare commit to the battle against potential opposition of the calibre which could be mounted against us today.”⁸³⁸ The Air Ministry had summed up the crucial element that whilst the technology was promising, the platform was less so as their “...requirement [was] for the P.1154.”⁸³⁹ It was the cancellation of the P.1154 that allowed the P.1127 to survive as the means of continuing development of a V/STOL engine, but not the fighting capabilities of the aircraft on its own merits. ACAS(OR) had stated in early 1966 that when the “...P1154 design was cancelled some way had to be found for continuing with Britain’s lead in V/STOL strike and close support aircraft technology.”⁸⁴⁰

Although Boeing were concurrently developing V/STOL technology, there was later a move to include a sale of the P.1127 to the United States as part of the offset element of the package of sales, particularly by Healey in early 1967 when the intent was to expand the level of relief from \$325m to \$360m.⁸⁴¹ Healey was informed, in no uncertain terms, that “...the U.S. Government would not buy the P.1127 at any price, since the operational performance was too low.”⁸⁴² This led Peck to summarise the broader feeling within the RAF and MoD as a whole that “we are now stuck with this aircraft...”⁸⁴³ The export possibilities may have been overstated by Labour in their justification for keeping the programme going, yet it did serve alongside the HS.801 as another means of retaining a highly specialised design and manufacturing team together at the Hawker Siddeley factory in Kingston-upon-Thames, with the

⁸³⁸ TNA AIR 19/1086, Letter, MoD (Wheeler) to AUS(A) (Kent), *The P.1127*, 17 Jan 1963.

⁸³⁹ TNA AIR 19/1086, AUS(A) (Kent) to MoD (Wheeler), *The P.1127*.

⁸⁴⁰ TNA AIR 2/17661, Paper, ACAS(OR) to PS to DCAS, *P1127(RAF) – Up-rated engine*, 28 Feb 1966.

⁸⁴¹ TNA DEFE 24/170, *Aircraft (Future) Kestrel (P1127)*, Letter, Healey to Equipment Minister MoD, *P.1127*, 17 Jan 1967.

⁸⁴² TNA DEFE 24/170, Letter, Equipment Minister MoD to Healey, *P.1127*, 2 Feb 1967.

⁸⁴³ TNA DEFE 24/170, Loose Minute, DUS(P&B) Peck, *P.1127*, 23 Feb 1967.

production contract for 110 aircraft being responsible for securing 85% of the 3,700 workers at the factory.⁸⁴⁴

The enforced procurement of an aircraft they didn't need did allow the RAF to develop the aircraft over time and several generations into an effective platform that merited the flattering view of Hamilton-Paterson, however the distinction must be made between what became the Harrier, and the P.1127 of 1965. This is in very much the same vein as how the Nimrod MR2 has been presented as an advanced design due to having jet power when all other maritime patrol aircraft were turboprops, whereas the HS.801 was simply a cost-effective means of satisfying the military and domestic industrial requirements.

This chapter has demonstrated how the timing, costs and differing concepts of both successful programmes allowed the government to achieve part of their ambitious balancing act between American and European relations and domestic sustainment in the aviation industry. The decision not to accept the HS.802 and to continue with the C-130 purchase serves to underline this interlinked concept and can be viewed from two different angles. First is that the package from the United States as part of the support for sterling and an enabler for a continued worldwide role had primacy. The second is that, of the major programmes, the target level of support to domestic industry was achieved through the HS.801 and P.1127 rendering the HS.802 surplus to military, industrial and political requirements. Healey would champion this later aspect in his autobiography that he was "...able to provide valuable work for the British aircraft industry by ordering the Nimrod maritime reconnaissance aircraft

⁸⁴⁴ TNA DEFE 24/170, Note, Minister MoA to Minister MoD, *P.1127(RAF)*, 8 Mar 1966.

and...the Harrier.”⁸⁴⁵ The language Healey used here also supports the notion that the timings of each programme, specifically the act of placing a production order, by occurring once Labour were in power, added to their attractiveness as a good news story for the Wilson government which was attempting to embrace the white heat of technology. The three cancelled programmes could be viewed simply as expensive mistakes by the previous Conservative administration whereas the technologically forward looking P.1127 and cost effective HS.801 would go down as Labour successes.⁸⁴⁶ The much more higher risk design principle of the HS.802 did not fit this mould and, even without being overruled by the politically and economically advantageous American package, would have been unlikely to have taken to the air. The allocation of work to Hawker Siddeley, whilst at the same time continuing with the Concord programme at BAC enabled the domestic aviation industry to be maintained at a level that did not overly impact the desire to move manufacturing capacity and R&D across to emerging civilian exportable fields such as computing. Thus it has been demonstrated that, in the same manner as the American package and Anglo-French aspects of Concord achieved political capital out of a difficult economic situation, so the choices made over HS.801 and P.1127 did the same for the domestic sector.

⁸⁴⁵ Healey, *The Time of My Life*, p. 274.

⁸⁴⁶ Yonge, ‘What Drove Maritime Patrol Aircraft Procurement in the Post-War Era?’ p. 55.

CONCLUSION

*"First priority, indeed, overlying all our policies, is urgent action to deal with the economic position...we had to act quickly and relevantly to stop the bleeding."*⁸⁴⁷

Harold Wilson, Labour Party Conference, Brighton, 12 Dec 1964

*"...Whether we like it or not the all-British plane is out."*⁸⁴⁸

Roy Jenkins, House of Commons, 9 Feb 1965

*"I would reckon to being pushed into keeping the Spey/Phantom. This + AT engine etc shd [sic] keep the aero-engine chaps busy. The 2 Anglo-French projects provide an adequate airframe load + work on V. bombers & Maritime Comet."*⁸⁴⁹

Nevin to Healey, Ministry of Defence, handwritten note, 1 Nov 1965

This thesis set out to address three key areas. Firstly and principally, to understand how and why a low-volume domestic military aircraft, based on an outdated civilian airliner, was able to be selected for entry into the RAF at a time when the prevailing attitudes were to buy American aircraft or to enter into international collaborative efforts with Europe. Secondly, whilst building this understanding, to assess the broad range of factors, both domestic and international, that impacted the procurement process for the Shackleton replacement to form a picture of how aircraft procurement policy was influenced during the early months of the Wilson government. Thirdly, to consider the Nimrod programme in the context of the other major military and civilian aircraft procurements to propose that Labour used the multitude of aircraft programme choices to exert influence, push strategic objectives, and achieve economic and political gain within the broader ambitions of the administration. This

⁸⁴⁷ Wilson, *Leader's Speech*, Labour Conference, 12 Dec 1964.

<http://www.britishpoliticalspeech.org/speech-archive.htm?speech=162>.

⁸⁴⁸ House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 234.

⁸⁴⁹ TNA DEFE 13/745, Handwritten note, Nevin to Healey, *R.A.F. aircraft programme*, 1 Nov 1965.

thesis has demonstrated that the HS.801 procurement represented an essential lever of government policy by providing tightly controlled support to a struggling industrial sector that had been marginalised in the pursuit of wider governmental goals. It has argued that the needs of the RAF across all the procurements of the period, along with the strategy of defence, came second to these wider political ambitions of maintaining relationships and gaining advantages with the United States and the European Community. The economic imperative of a cut to defence spending was the trigger for the review of the aircraft programmes and resulted in a fundamental and enduring shift in aircraft procurement policy from domestic programmes to international collaborative efforts. The early international co-operative testing and evaluation of the P.1127 left the HS.801 as the outlier of the period, and as the Nimrod, represented the most recent purely domestic designed and manufactured front line aircraft introduced into RAF service, outside of a number of small specialised tactical transport and reconnaissance aircraft.⁸⁵⁰ As such, this study poses that the first six months of the Labour government represented a turning point in post-war British military aircraft procurement policy and enabled aircraft programmes to take on a greater significance as a lever of government policy in the international arena, alongside the already established domestic industrial aspect.

This is a concept befitting of further broader study, particularly out into the maritime domain to understand why this shift was fundamentally constrained to the field of aircraft manufacture and not to the other large-scale procurements of naval

⁸⁵⁰ The BAe 125 business jet, BAe 146 regional airliner variant and the Britten-Norman Islander/Defender lightweight transport/reconnaissance aircraft saw subsequent service in the RAF. The BAe Hawk T.1 fulfilled a secondary wartime air-to-air role in the late 1980s, but was primarily in service as a training aircraft.

fighting vessels, which are principally still built in British dockyards under the National Shipbuilding Strategy. Ongoing research by Hollins into the shift towards a European collaborative model for procurement in the 1970s with the Tornado will further expand the historiography, as will Dawson's examination of British post-war grand strategy through combat aircraft procurement.

The economic crisis of the autumn of 1964 was the result of a continued underperformance of the British economy on the world stage and a monetary system weighed down by both the international use of sterling as a reserve currency and the obligation to support a fixed exchange rate. Wilson had been scathing of the inaction of the Conservative government to control the ever-widening gap between imports and exports and on the need to modernise the economy to restore a British competitive edge. As highlighted by Wilson in the opening quote, all subsequent actions stemmed from the need to address the economic crisis. His firm line to rule-out devaluation and a heavy reliance on the United States to support credit facilities, coupled with the need to modernise the economy, provided the catalyst for change in the ongoing RAF and Concord programmes. The displeasure of the Johnson administration at Labour's raising of the bank rate and the imposing of import tariffs only increased the pressure to use all available means to ensure continued American support. Without the economic events of the autumn and the resultant requirement to make significant savings in the defence budget, all of the extant aircraft procurements might have continued onwards and into service.

There were four key ongoing policy areas for the Wilson government that, once the immediate remedial economic actions had calmed the markets and the need for

industrial realignment been identified, presented opportunities to use the aircraft procurements as levers. First was in relations with the United States over the preferred-partner status within Europe and the continuing worldwide role. Second was with the European nations, particularly France, over increased British involvement in the emerging European Economic Community. These represented the key foreign engagement points, and the prioritisation of these demonstrated the ambitions and direction of the Wilson government during the 1964/65 period. Third, there was the need to stabilise and rationalise the domestic British aviation industry and ensure viability for the future without tying up excessive manpower and research and development funds in a sector that was underperforming. Finally, there was the need to bring the defence budget under control as a central pillar for reducing the balance of payments deficit, stave off the threat of a devaluation of sterling and free up government funding for a welfare focused domestic agenda. The economic crisis thus represented the catalyst for placing the ongoing aircraft programmes front and centre in all these policy areas.

The relationship with the United States was not just a one-way street with Britain requiring support for sterling, for the Johnson administration had their own aims and ambitions for the relationship with Britain. The internal battle for modernising the Department of Defense and the aircraft industry drove engagement with Healy and McNamara such that Labour was in a position to achieve the desired financial savings whilst still procuring, in the TFX, an aircraft capable of force projection East of Suez. The increasingly tangled nature of the Vietnam War provided both an opportunity and a potential hazard for Wilson, yet the fact that he was able to achieve American support for sterling and the purchase of British military equipment by

America without committing forces to Vietnam demonstrated the continued importance of the trans-Atlantic relationship even at its nadir. This importance was reflected in the favourable financial terms for American aircraft and provided an outlet for reducing the financial and industrial burdens inherent in the big three programmes, and the TSR.2 in particular. The P-3 would have presented a capable platform for the RAF, but its absence from the discussions at the Washington talks reflected where the priorities and requirements lay for both sides in the use of procurements as strategic levers.

Similarly in the relationships with European nations, there were points to be gained by both sides. In this period, European integration and the EEC effectively meant France, and specifically de Gaulle as the personification of the state. De Gaulle outmanoeuvred successive British governments from his vantage point as the gatekeeper to the EEC, forcing Wilson to play the only card he possessed at that point – Concord. The supersonic airliner was a contradiction as both a perfect demonstration of Wilson's white heat of technology and exactly the type of highly expensive prestige project that the government wanted to divest, yet as its value to the French state was equally pronounced, it served as a vital piece of the jigsaw in attempts to woo de Gaulle over to the value of British membership. To the Americans the crucial element was the British commitment to a worldwide role, to the French it was the vision for Europe embodied in Concord. That it continued alongside smaller military aviation projects such as the Jaguar and VG programme highlighted the value placed upon both civil and military collaborative aviation as an effective tool of British foreign policy. It was this shift to international programmes that is reflected in the opening quote from Jenkins, and which makes the HS.801 a clear anomaly. The option of the Atlantic

maritime aircraft would have demonstrated a British commitment to European industrial integration and collaboration, but when compared to the expense and prominence of the Concord, its impact would have been minimal. In much the same manner as the P-3, it did not represent a significant enough lever within its particular field to warrant consideration.

Maintaining the concept of Britain as a top-table world leader required resources that did not align with the realities of the period, particularly when operating within an economically constrained defence budget. Whilst the realigning and cancelling of aircraft programmes gave the aura of financial prudence, there was little immediate economic saving, yet the defence cuts and subsequent review of strategy served to reinforce the message that Labour was proactive in tackling the economic crisis whilst using the supported relationship with the United States to ensure that Britain continued to present an outward looking world role. The nurturing of improved relations and tacit understandings with Johnson and de Gaulle were significant, yet the requirement to retain this East of Suez role ultimately dictated the majority of choices made. As the opening quote by Sir John Thomson at the start of the introduction alluded to, there was a definite understanding within government, and particularly within the Foreign Office, that if difficult decisions had to be made then every effort should be taken to gain at least some benefit from them. This requirement for an East of Suez military posture did not directly require a maritime patrol capability, with the focus of the requirement instead centred on the Atlantic Ocean and therefore NATO functions. The manoeuvrings to place the bulk of the financial outlay for the Shackleton replacement outside of the peak 1969/70 years

through the focus on an interim aircraft contributed significantly to the survival of the programme through both phases of the defence review.

For the domestic aviation industry, deriving an immediate benefit from shifting procurement policy was a hard act to achieve. The double headed challenge of cutting expenditure on expensive unproven military aircraft and the freeing up a skilled workforce to aid in modernising the economy could never have occurred without significant upheaval. Dramatic realignment occurred in multiple industrial sectors in Britain throughout the twentieth century, and for the domestic aviation industry it was experienced at full force in the 1960s. The political intent was to rationalise and provide a more competitive base, not to abolish the sector completely, and thus there was a requirement to maintain a certain degree of government supported work for the aviation companies. The selection of a British maritime patrol aircraft design over the American P-3 or the European Atlantic to replace an airframe that needed replacing simply because of fatigue allowed for the rushed jigsaw to be completed. Represented by a fixed-price procurement, and eschewing the advanced proposals from industry, the HS.801 benefited both from a favourable financial timeline and serving as straightforward political statement of intent for the sector – as Nevin’s opening quote details. As such, it was the final yet crucial piece that resulted in the overall aircraft procurement landscape serving as a comprehensive tool across multiple key areas of political interest in both the domestic and overseas realms.

The longevity of the Nimrod in both MR1 and MR2 maritime guises, the use of the platform as the R1 intelligence platform, as the basis for the cancelled airborne early warning radar aircraft, the AEW3, and lastly as the shell for the MRA4 replacement maritime patrol aircraft, which was cancelled in 2011, suggests that the

most militarily effective choice was made in early 1965. The enduring nature of the platform does, however, place too great an emphasis on the procurement being a triumph of foresight, for the political manoeuvrings of the time paid little heed to the actual capabilities offered by the airframe, and instead considered it primarily through the lens of what it could offer the domestic aviation industry. The more advanced domestic proposals of the VC-10 and Trident, but for the economic crisis and the resultant budgetary limitations, may well have entered service in its place. It was therefore a product of convenience with an acceptable level of military capability at a cost and timeliness that met this political objective as part of the wider strategy.

All the procurement decisions were thus both reflective of the broader changing nature of British ambitions, and also served as key tools of diplomatic manoeuvrings. When considered together, they provide an effective case study of a pivotal time for Britain where domestic industry was shifting towards high technology and modernisation, where the old ties to the United States required constant attention, and European integration was of steadily increasing importance to a country that was taking its first significant steps to properly understand its place in the world in the post-great power era.

BIBLIOGRAPHY

PRIMARY SOURCES

UNPUBLISHED PRIMARY MATERIAL

NATIONAL ARCHIVES OF THE UNITED KINGDOM (TNA)

ADM 1	Admiralty, and Ministry of Defence, Navy Department: Correspondence and Papers
AIR 2	Air Ministry and Ministry of Defence: Registered Files
AIR 19	Air Ministry, and Ministry of Defence, Air Department: Private Office Papers
AIR 20	Air Ministry, and Ministry of Defence: Papers accumulated by the Air Historical Branch
AVIA 15	Ministry of Aircraft Production and predecessor and successors: Registered Files
AVIA 63	Ministry of Supply, Air Division, and Ministry of Aviation: Registered Files (AA Series)
AVIA 65	Ministry of Supply and successors: Registered Files
BT 241	Board of Trade and successors: Commercial Relations and Export Division: Registered Files (CRE (P, G & R suffix) Series)
CAB 21	Cabinet Office and predecessors: Registered Files (1916 to 1965)
CAB 24	War Cabinet and Cabinet: Memoranda (GT, CP and G War Series)
CAB 128	Cabinet: Minutes (CM and CC Series)
CAB 129	Cabinet: Memoranda (CP and C Series)
CAB 130	Cabinet: Miscellaneous Committees: Minutes and Papers (GEN, MISC and REF Series)

CAB 133	Cabinet Office: Commonwealth and International Conferences and Ministerial Visits to and from the UK: Minutes and Papers (ABC and other Series)
CAB 139	War Cabinet and Cabinet Office: Central Statistical Office: Correspondence and Papers
CAB 148	Cabinet Office: Defence and Oversea Policy Committees and Sub-Committees: Minutes and Papers (DO, DOP, OPD and OPDO Series)
EW 5	Department of Economic Affairs: External Relations Division: Registered Files (ER Series)
EW 16	Department of Economic Affairs: Minister of State: Background Notes and Briefings
EW 25	Department of Economic Affairs: Public Expenditure Division: Registered Files (PE Series)
DEFE 4	Ministry of Defence: Chiefs of Staff Committee: Minutes
DEFE 6	Ministry of Defence: Chiefs of Staff Committee: Reports of the Joint Planning Staff and successors
DEFE 7	Ministry of Defence prior to 1964: Registered Files (General Series)
DEFE 13	Ministry of Defence: Private Office: Registered Files (all Ministers)
DEFE 24	Ministry of Defence: Defence Secretariat Branches and their Predecessors: Registered Files
DEFE 25	Ministry of Defence: Chief of Defence Staff: Registered Files (CDS, SCDS and ACDS (OPS) Series)
DR 5	Air Registration Board, and Civil Aviation Authority, Aircraft Maintenance and Approvals Section: Registered Files and Manuals
FO 115	Foreign Office: Embassy and Consulates, United States of America: General Correspondence
FO 146	Foreign Office and Foreign and Commonwealth Office: Embassy and Consulates, France: General Correspondence
FO 371	Foreign Office: Political Departments: General Correspondence from 1906-1966

FO 1109	Lord Butler of Saffron Walden: Private Office Papers
PREM 11	Prime Minister's Office: Correspondence and Papers, 1951-1964
PREM 13	Prime Minister's Office: Correspondence and Papers, 1964-1970
T 171	Chancellor of the Exchequer's Office: Budget and Finance Bill Papers
T 318	Treasury: Finance (Statistics) Division and Finance (Balance of Payments) Division: Registered Files (2F(BP) Series)
T 320	Treasury: Public Income/Outlay Division: Registered Files (2PIO and 2PIO.EST Series)

NATIONAL ARCHIVES OF THE UNITED STATES OF AMERICA

M Bundy Files, Box 3, LBJ Library

Meeting Notes File, Box 1, LBJ Library

Records of the 85th Congress, 1st Session, Congressional Record: Senate, Vol.103

LIBRARY OF CONGRESS, UNITED STATES OF AMERICA

Part II, The Robert S. McNamara Papers, Manuscript Division

PUBLISHED PRIMARY MATERIAL

GOVERNMENT PUBLICATIONS – UNITED KINGDOM

HMG, *Statement on the Defence Estimates*, Cmnd. 2901 (London: HMSO, 22 Feb 1966)

HMG, *The Economic Situation, A Statement by Her Majesty's Government 26th October 1964* (London: HMSO, 1964)

HMG, *Report of the Committee of Inquiry into the Aviation Industry, 1964-65*, Cmnd Paper No. 2853 (London: HMSO, 1966)

GOVERNMENT PUBLICATIONS – UNITED STATES OF AMERICA

Executive Sessions of Senate Foreign Relations Committee with Senate Armed Services Committee, Vol.XVI, 88th Congress, Second Session, 1964 (Washington D.C., U.S. Government Printing Office, 1988)

Executive Sessions of the Senate Foreign Relations Committee Together with Joint Sessions with the Senate Armed Services Committee (Historical Series); Volume XIX, 1967 (Washington D.C., U.S. Government Printing Office, 2016)

Foreign Relations of the United States, 1961-1963, Vol. IX: Foreign Economic Policy

Foreign Relations of the United States, 1961-1963, Vol. XIII, Western Europe and Canada,

Foreign Relations of the United States, 1964-1968, Vol. VIII: International Monetary and Trade Policy

Foreign Relations of the United States, 1964-1968, Vol. XII, Western Europe

Foreign Relations of the United States, 1964-1968, Vol. XIII, Western Europe Region

Kennedy, J.F., *Remarks upon signing the Trade Expansion Act*, 449 (Washington D.C., U.S. Government Printing Office, 11 October 1962)

Manuel, K.M., *Buy American Act – Preferences for “Domestic” Supplies: In Brief* (Congressional Research Service, 26 Apr 2016)

New York Fed, *Monthly Update Bulletin*, (2 Dec 1964)

The Pentagon Papers, Vol.III, The Defense Department, History of the United States, Decision Making on Vietnam (Boston: Beacon Press, 1971)

Public Law 87-794, “Trade Expansion Act of 1962” *Bills and Statutes of 87th Congress, 2nd Session, Vol.76* (Washington D.C., U.S. Government Printing Office, October 1962)

Public Papers of the Presidents of the United States, Lyndon B. Johnson, Containing the Public Messages, Speeches, and Statements of the President, 1963-1964, Book II (Washington D.C.: U.S. Government Printing Office, 1965)

TFX Contract Investigation, Hearings Before Senate Committee on Government Operations, 88th Congress (Washington D.C., U.S. Government Printing Office, 1963)

PARLIAMENTARY DEBATES

House of Commons Debate, 22 May 1958, *Hansard*, Vol. 588, Col. 1600

House of Commons Debate, 15 Feb 1960, *Hansard*, Vol. 617, Col. 958

House of Commons Debate, 31 Jul 1963, *Hansard*, Vol. 682, Col. 524

House of Commons Debate, 05 Nov 1964, *Hansard*, Vol. 701, Col. 469

House of Commons Debate, 16 Dec 1964, *Hansard*, Vol. 704, Col. 423

House of Commons Debate, 09 Feb 1965, *Hansard*, Vol. 706, Col. 222-239

House of Lords Debate, 29 Oct 1957, *Hansard*, Vol. 205, Col. 545

House of Lords Debate, 28 Jul 1964, *Hansard*, Vol. 250, Col. 991

NEWSPAPERS AND PERIODICALS

Chicago Tribune

Daily Mail

Financial Times

The Guardian

The New York Times

The Times

Time

SECONDARY SOURCES

PUBLISHED SECONDARY MATERIAL

CHAPTERS

Beloff, M., 'The Crisis and its Consequences for the British Conservative Party',
in Ed. Roger Louis, W.M. & Owen, R., *Suez 1956; The Crisis and its
Consequences* (Oxford: Clarendon, 1991)

- Bowie, R.R., 'Eisenhower, Dulles, and the Suez Crisis', in Ed. Roger Louis, W.M. & Owen, R., *Suez 1956: The Crisis and its Consequences* (Oxford: Clarendon, 1991)
- Burk, K., 'Old World, New World: Great Britain and America from the Beginning', in Ed. Dumbrell, E. & Schäfer, A.R., *America's 'Special Relationships', Foreign and Domestic Aspects of the Politics of Alliance* (London: Routledge, 2009)
- Coopey, R., 'Industrial Policy in the White Heat of the Scientific Revolution' in Ed. Coopey, R., Fielding, S. & Tiratsoo, T., *The Wilson Governments 1964-1970* (London: Pinter, 1993)
- Darby, P., 'East of Suez Reassessed', in Ed. Baylis, J., *British Defence Policy in a Changing World* (London: Croom Helm, 1977)
- Hartley, K., 'The Arms Industry, Procurement and Industrial Policies', in Ed. Sandler, T. & Hartley, K., *Handbook of Defense Economics; Defense in a Globalized World, Vol.2* (Amsterdam: Elsevier, 2007)
- Harley, K., 'The Legacy of the Early Start', in Ed. Floud, R., Humphries, J. & Johnson, P., *The Cambridge Economic History of Modern Britain, Vol.II 1870 to the Present* (Cambridge: Cambridge UP, 2014)
- Hjortshof O'Rourke, K., 'From Empire to Europe: Britain in the World Economy' in Floud, R., Humphries, J. & Johnson, P., *The Cambridge Economic History of Modern Britain, Vol.II 1870 to the Present* (Cambridge: Cambridge UP, 2014)
- Howson, S., 'Money and Monetary Policy Since 1945' in, Ed. Floud, R. & Johnson, P., *The Cambridge Economic History of Modern Britain* (Cambridge: Cambridge UP, 2004)
- Ishii, O., 'U.S. Foreign Policy in the Twentieth Century' in *Foreign Policy of the Major Powers; Politics and Diplomacy since World War II, Vol.I – United States of America*, Ed. Eadie, P. & Pettiford, L. (London: I.B. Tauris, 2007)
- Lovering, J., 'Opportunity or Crisis? The Remaking of the British Arms Industry', in, Ed. Turner, R., *The British Economy in Transition; from the Old to the New* (London: Routledge, 1995)
- Seipp, A., 'A Reasonable "Yes": The Social Democrats and West German Rearmament, 1945-1956' in Ed. Corum, J.S., *Rearming Germany* (Leiden: Brill, 2011)
- Schenk, C.R., 'Sterling and Monetary Policy 1870-2010' in Ed. Floud, R., Humphries, J. & Johnson, P., *The Cambridge Economic History of Modern Britain, Vol.II 1870 to the Present* (Cambridge: Cambridge UP, 2014)

- Turner, R., 'Introduction', in Ed. Turner, R., *The British Economy in Transition; from the Old to the New* (London: Routledge, 1995)
- Wrigley, C., 'Now You See It, Now You Don't: Harold Wilson and Labour's Foreign Policy 1964-70' in Ed. Coopey, R., Fielding, S. & Tiratsoo, T., *The Wilson Governments 1964-1970* (London: Pinter, 1993)
- Wyn Rees, G., 'Brothers in Arms: Anglo-American defence co-operation in 1957' in Ed. Gorst, A., Johnman, L. & Scott Lucas, W., *Post-war Britain, 1945-64; Themes and Perspectives* (London: Pinter, 1989)

BOOKS

- Alford, B.W.E., *British Economic Performance, 1945-1975* (Hong Kong: Macmillan, 1988)
- Arnold, G., *America and Britain; Was There Ever a Special Relationship?* (London: Hurst & Company, 2014)
- Ashworth, C., *RAF Coastal Command 1936-1969* (Yeovil: Patrick Stephens, 1992)
- Bacon, R., & Eltis, W.A., *Britain's Economic Problem: Too Few Producers* (London: Macmillan, 1976)
- Ball, G.W., *The Discipline of Power; Essentials of a Modern World Structure* (Boston: Little-Brown, 1968)
- Ball, G.W., *The Past has Another Pattern; Memoirs* (New York: W.W.Norton & Company, 1982)
- Barnett, C., *The Collapse of British Power* (Stroud: Alan Sutton, 1993)
- Barnett, C., *The Long Retreat; A Short History of British Defence Policy, 1945-1970* (London: Macmillan, 1972)
- Bartlett, C.J., *A History of Postwar Britain* (London: Longman, 1977)
- Ed. Beckerman, W., *The Labour Government's economic record, 1964-1970* (London: Duckworth, 1972)
- Bennell, A.S., *Defence Policy and the Royal Air Force 1964-1970* (London: Air Historical Branch (RAF), 1994)
- Bird, K., *The Color of Truth, McGeorge Bundy and William Bundy: Brothers in Arms* (New York: Simon & Schuster, 1998)

- Ed. Blackaby, F.T., *British Economic Policy 1960-74* (Cambridge: Cambridge UP, 1979)
- Blang, E.M., *Allies at Odds; America, Europe, and Vietnam, 1961-1968* (Lonham: Rowman & Littlefield, 2011)
- Booth, A., *The British Economy in the Twentieth Century* (Basingstoke: Palgrave, 2001)
- Bornet, V.D., *The Presidency of Lyndon B. Johnson* (Lawrence: University Press of Kansas, 1983)
- Brivati, B., *Hugh Gaitskell* (London: Richard Cohen, 1996)
- Broadberry, S. & Leunig, T., *The Impact of Government Politics on UK Manufacturing since 1945* (London: Government Office for Science, 2013)
- Burney, A. & Falconer, J., *Concorde* (Runnymede: Ian Allan, 1992)
- Buruma, I., *The Churchill Complex, The Rise and Fall of the Special Relationship from Winston Churchill and FDR to Trump and Johnson* (London: Atlantic Books, 2021)
- Butler, D.E. & King, A., *The British General Election of 1964* (London: Macmillan, 1965)
- Cairncross, A., *The British Economy Since 1945, 2nd Edition* (Oxford: Blackwell, 1995)
- Califano Jr., J.A., *The Triumph and Tragedy of Lyndon B. Johnson; The White House Years* (New York: Touchstone, 1991)
- Callaghan, J., *Time and Chance* (Glasgow: Collins, 1988)
- Carver, M., *Tightrope Walking; British Defence Policy Since 1945* (London: Random Century, 1992)
- Chin, W.A., *British Weapons Acquisition Policy and the Futility of Reform* (Aldershot: Ashgate, 2004)
- Christenson, J.C., *Expanding the Secretary's role in Foreign Affairs; Robert McNamara and Clark Clifford 1963-1968* (Washington D.C.: Historical Office, Office of the Secretary of Defense, 2014)
- Coffey, T.M., *Iron Eagle; The Turbulent Life of General Curtis LeMay* (New York: Crown, 1986)
- Cohen, W.I., *A Nation Like All Others; A Brief History of American Foreign Relations* (New York: Columbia, 2018)

- Ed. Cole, A.C., Goldberg, A., Tucker, S.A., Winnacker, R.A., *The Department of Defense; Documents on Establishment and Organization 1944-1978* (Washington D.C., Office of the Secretary of Defense Historical Office, 1978)
- Colman, J., *A 'Special Relationship'; Harold Wilson, Lyndon B. Johnson and Anglo-American Relations 'at the summit', 1964-68* (Manchester: Manchester UP, 2004)
- Comfort, N., *The Slow Death of British Industry; the Sixty Year Suicide 1952-2012* (London: Biteback, 2013)
- Conroy, H., *Callaghan* (London: Haus, 2006)
- Cronin, J.E., *Global Rules; America, Britain and a Disordered World* (New Haven: Yale, 2014)
- Dallek, R., *Lyndon B. Johnson; Portrait of a President* (Oxford: Oxford UP, 2004)
- Darwin, J., *The Empire Project: The Rise and Fall of the British World-System 1830-1970* (Cambridge: Cambridge UP, 2009)
- DeWeerd, H.A., *The 1966 British Defense Review* (Santa Monica: RAND Corporation, 1966)
- Dickie, J., *'Special' No More: Anglo-American Relations, Rhetoric and Reality* (London: Weidenfeld & Nicolson, 1994)
- Dixon, F., *McNamara, General Dynamics, and the F-111; A Business and Political History* (Ann Arbor: University Microfilms, 1983)
- Dobson, A., *Anglo-American Relations in the Twentieth Century; The Policy and Diplomacy of Friendly Superpowers* (London: Routledge, 1995)
- Dockrill, M., *British Defence Since 1945* (Oxford: Basil Blackwell, 1988)
- Dockrill, S., *Britain's Retreat for East of Suez; The Choice Between Europe and the World?* (Basingstoke: Palgrave, 2002)
- Donnelly, M., *Sixties Britain; Culture, Society and Politics* (Harlow: Longman, 2005)
- Eden, A., *Full Circle – The Memoirs of the Rt. Hon Sir Anthony Eden* (London: Cassell, 1960)
- Edgerton, D., *England and the Aeroplane* (Basingstoke: Macmillan, 1991)

- Edgerton, D., *The Rise and Fall of the British Nation: A Twentieth Century History* (London: Penguin, 2019)
- Edgerton, D., *Warfare State; Britain, 1929-1970* (Cambridge: Cambridge University Press, 2006)
- Etheridge, B.C., *Enemies to Allies: Cold War Germany and American Memory* (Lexington: Kentucky UP, 2016)
- Evans, A., *The Nimrod; Mighty Hunter* (Stamford: Dalrymple & Verden, 2007)
- Feldman, E.J., *Concorde and Dissent; Explaining high technology project failures in Britain and France* (Cambridge: Cambridge UP, 1985)
- Fisher, N., *Harold Macmillan, A Biography* (London: Weidenfeld and Nicolson, 1982)
- Ed. Floud, R., Humphries, J. & Johnson, P., *The Cambridge Economic History of Modern Britain, Vol.II 1870 to the Present* (Cambridge: Cambridge UP, 2014)
- Foot, P., *The Politics of Harold Wilson* (Harmondsworth: Penguin, 1968)
- Frankel, J., *British Foreign Policy 1945-1973* (London: Oxford University Press, 1975)
- Fry, G.J., *The Politics of Decline, an Interpretation of British Politics from the 1940s to the 1970s* (Basingstoke: Palgrave, 2005)
- Gaddis, J.L., *Strategies of Containment; A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982)
- Gaddis, J.L., *The Cold War* (London: Allen Lane, 2005)
- Gaddis, J.L., *We Now Know; Rethinking the Cold War* (Oxford: Clarendon Press, 1997)
- Garnett, M., Mabon, S. & Smith, R., *British Foreign Policy Since 1945* (Basingstoke: Routledge, 2017)
- Gibson, C., *Nimrod's Genesis: RAF Maritime Patrol Projects and Weapons Since 1945* (Manchester: Hikok, 2015)
- Gillingham, J., *Coal, Steel, and the Rebirth of Europe, 1945-1955; The Germans and French from Ruhr Conflict to Economic Community* (Cambridge: Cambridge UP, 1991)
- Gordon, P.H., *A Certain Idea of France; French Security Policy and the Gaullist Legacy* (Princeton: Princeton UP, 1993)

- Gore-Booth, P., *With Great Truth and Respect* (London: Constable, 1974)
- Gray, C.S., *Modern Strategy* (Oxford: Oxford UP, 1999)
- Gray, C.S., *Strategy and History; Essays on Theory and Practice* (London: Routledge, 2006)
- Hackett, A-M. & J., *The British Economy; Problems and Prospects* (London: Allen & Unwin, 1967)
- Hamilton-Patterson, J., *Empire of the Clouds: When Britain's Aircraft Ruled the World* (London: Faber and Faber, 2010)
- Hartley, K., *The Economics of Defence Policy* (London: Brassey's, 1991)
- Hastings, M., *Vietnam, an Epic Tragedy, 1945-1975* (New York: HarperCollins, 2018)
- Hastings, S., *The Murder of TSR-2* (London: McDonald & Co, 1966)
- Hayward, K., *Government and British Civil Aerospace* (Manchester: Manchester UP, 1983)
- Healey, D., *The Time of My Life* (London: Politico's, 2006)
- Hendrie, A., *The Cinderella Service: RAF Coastal Command 1939-1945* (Barnsley: Pen & Sword, 2010)
- Henkin, Y., *The 1956 Suez War and the New World Order in the Middle East; Exodus in Reverse* (Lanham: Lexington, 2016)
- Hennessy, P., *The Prime Minister; The Office and its Holders since 1945* (London: Penguin, 2000)
- Hennessy, P., *Whitehall* (New York: Macmillan, 1989)
- Herring, G.C., *America's Longest War: The United States and Vietnam, 1950-1975 – Second Edition* (Philadelphia: Temple University, 1986)
- Herring, G.C., *From Colony to Superpower; U.S. Foreign Relations Since 1776* (Oxford: Oxford University Press, 2011)
- Hobbs, D., *The British Carrier Strike Fleet After 1945* (Annapolis: Naval Institute Press, 2015)
- Jefferys, K., *Labour Forces; From Ernest Bevin to Gordon Brown* (London: I.B. Tauris, 2002)
- Jenkins, R., *A Life at the Centre* (London: Macmillan, 1991)

- Jobson, R., *Nostalgia and the Post-War Labour Party: Prisoners of the Past* (Manchester: Manchester UP, 2018)
- Kaplan, L.S., Lande, R.D., Drea, E.J., *History of the Office of the Secretary of Defense, Vol IV: The McNamara Ascendancy 1961-1965* (Washington D.C.: Historical Office, Office of the Secretary of Defense, 2006)
- Kedword, R., *France and the French; A Modern History* (Woodstock: Overlook Press, 2006)
- Kennedy, P., *The Rise and Fall of the Great Powers; Economic Change and Military Conflict from 1500 to 2000* (London: Unwin Hyman, 1988)
- Keohane, D., *Labour Party Defence Policy Since 1945* (London: Leicester UP, 1993)
- Kiely, D.G., *Defence Procurement; The Equipment Buying Process* (London: Tri-Service Press, 1990)
- Kingseed, C.C., *Eisenhower and the Suez Crisis of 1956* (Baton Rouge: Louisiana State UP, 1995)
- Kozak, W., *LeMay; The Life and Wars of General Curtis LeMay* (Washington D.C., Regnary, 2009)
- Ledbetter, J., *Unwarranted Influence; Dwight D. Eisenhower and the Military-Industrial Complex* (New Haven Yale, 2011)
- Ledwidge, B., *De Gaulle* (London: Weidenfeld and Nicolson, 1982)
- Lorell, M., *The U.S. Combat Aircraft Industry* (California: Rand, 2003)
- McIntosh, M., *Managing Britain's Defence* (London: Macmillan, 1990)
- Ed. McNay, J.T., *The Memoirs of Ambassador Henry F. Grady; From the Great War to the Cold War* (Columbia: University of Missouri Press, 2009)
- Middleton, R., *Charlatans or Saviours? Economists and the British Economy from Marshall Meade* (Cheltenham: Edward Elgar, 1998)
- Mierzejewski, A.C., *Ludwig Erhard* (Chapel Hill: University of North Carolina Press, 2004)
- Milward, A., *Politics and Economics in the History of the European Union* (Abingdon: Routledge, 2005)
- Milward, A., *The European Rescue of the Nation State, 2nd Edition* (London: Taylor & Francis, 2000)

- Normanton, E.L., *The Accountability of an Audit of Governments* (Manchester: Manchester UP, 1966)
- Northedge, F.S., *Descent from Power; British Foreign Policy 1945-1973* (London: Allen & Unwin, 1974)
- Owen, G., *From Empire to Europe; The Decline and Revival of British Industry Since the Second World War* (London: Harper Collins, 1999)
- Ed. Paret, P., *Makers of Modern Strategy; from Machiavelli to the Nuclear Age* (Oxford: Clarendon, 1996)
- Patterson, J.T., *The Eve of Destruction; How 1965 Transformed America* (New York: Basic Books, 2012)
- Peden, G.C., *Arms, Economics and British Strategy; From Dreadnought to Hydrogen Bombs* (Cambridge: Cambridge UP, 2007)
- Ed. Peterson, A.H., Reinhardt, G.C. & Conger, E.E., *Symposium on the Role of Airpower in Counterinsurgency and Unconventional Warfare: The Malayan Emergency*, RAND Memorandum RM-3651-PR (Santa Monica: RAND, Jul 1963)
- Pimlott, B., *Harold Wilson* (London: Harper Collins, 1992)
- Pollard, S., *The Development of the British Economy, 4th Edition 1914-1990* (London: Edward Arnold, 1992)
- Ponting, C., *Breach of Promise; Labour in Power 1964-1970* (London: Hamilton, 1989)
- Rosecrance, R.N., *Defense of the Realm: British Strategy in the Nuclear Epoch* (New York: Columbia UP, 1968)
- Royal Historical Society, *Harold Wilson's Cold War; the Labour Government and East-West politics, 1964-1970* (Chippenham: RHS, 2009)
- Sampson, A., *Macmillan, A Study in Ambiguity* (London: Bloomsbury, 2012)
- Sandbrook, D., *White Heat; A History of Britain in the Swinging Sixties* (London: Little, Brown, 2006)
- Sandler, T., & Hartley, K., *The Economics of Defense* (Cambridge: Cambridge UP, 1995)
- Schwartz, T.A., *Lyndon Johnson and Europe; In the Shadow of Vietnam* (London: Harvard University Press, 2003)
- Shapley, D., *Promise and Power; the Life and Times of Robert McNamara* (Boston: Little, Brown and Co., 1993)

- Shrimpsley, A., *The First Hundred Days of Harold Wilson* (London: Weidenfeld & Nicolson, 1965)
- Sked, A. & Cook, C., *Postwar Britain; A Political History, 4th Edition*. (London: Penguin, 1993)
- Skinner, S., *Concorde* (Hersham: Midland, 2009)
- Smith, R.B., *An International History of the Vietnam War; the Kennedy Strategy* (New York: St Martin's Press, 1985)
- Taubman, W., *Khrushchev; the Man and His Era* (New York: W.W. Norton, 2003)
- Taylor, T., & Hayward, K., *The UK Defence Industrial Base; Development and Future Policy Options* (London: Brassey's, 1989)
- Ed. Trachtenberg, M., *Between Empire and Alliance – America and Europe during the Cold War* (New York: Rowman & Littlefield, 2003)
- Updegrove, M.K., *Indomitable Will; LBJ in the Presidency* (New York: Crown, 2012)
- Walker, M., *The Cold War* (London: Holt & Co, 1994)
- Wallace, W., *The Foreign Policy Process in Britain* (London: RIIA, 1975)
- Weidenbaum, M.L., *The Economics of Peacetime Defense* (New York: Praeger, 1974)
- Williams, P.M., *Hugh Gaitskell: A Political Biography* (London: Jonathon Cape, 1979)
- Wilson, H., *The Labour Government 1964-1970; A Personal Record* (London: Weidenfeld & Nicolson and Michael Joseph, 1971)
- Young, N.B., *Two Suns of the Southwest, Lyndon Johnson, Barry Goldwater, and the 1964 Battle Between Liberalism and Conservatism* (Lawrence: University Press of Kansas, 2019)
- Young, J.W., *Cold War and Détente 1941-91* (Harlow: Longman, 1993)

JOURNAL ARTICLES

- Aono, T., “‘It is not easy for the United States to Carry the Whole Load’: Anglo-American Relations during the Berlin Crisis, 1961-1962”, in *Diplomatic History*, Vol. 34, No. 2 (2010)

- Baylis, J., "'Greenwoodery' and British Defence Policy", in *International Affairs*, Vol.62, No.3 (1986)
- Blaazer, D., "'Devalued and Dejected Britons': The Pound in Public Discourse in the Mid 1960s", in *History Workshop Journal*, No.47 (1999)
- Bordo, M., MacDonald, R., Oliver, M.J., "Sterling in Crisis, 1964-1967", in *European Review of Economic History*, Vol.13, No.3 (2009)
- Boulton, J.W., "NATO and the MLF", in *Journal of Contemporary History*, Vol.7, No.3/4 (1972)
- Buttler, T., "The 1957 Defence White Paper: The Cancelled Projects", in *Journal of Aeronautical History*, Paper No.2018/03
- Carey, R., "The British Nuclear Force: Deterrent or Economy Measure?", in *Military Affairs*, Vol.36, No.4 (1972)
- Clairmont, F.F., "The Grand Malediction: Bretton Woods in Retrospect", in *Economics and Political Weekly*, Vol.29, No.42 (1994)
- Craig, G.M., "President Johnson's Victory", *International Journal*, Vol.20, No.1 (1964/65)
- Danchev, A., "Tony Blair's Vietnam: The Iraq War and the 'Special Relationship' in Historical Perspective", in *Review of International Studies*, Vol.33, No.2 (2007)
- Devereux, D., "State Versus Private Ownership: The Conservative Governments and British Civil Aviation 1951-62", in *Albion: A Quarterly Journal Concerned with British Studies*, Vol.27, No.1 (1995)
- Dockrill, S., "Forging the Anglo-American global defence partnership: Harold Wilson, Lyndon Johnson and the Washington summit, December 1964", in *The Journal of Strategic Studies*, Vol.23, No.4 (2000)
- Edgerton, D., "The Decline of Declinism", *The Business History Review*, Vol.71, No.2 (1997)
- Elbaum, B., Lazonick, W., "The Decline of the British Economy: An Institutional Perspective", in *The Journal of Economic History*, Vol.44, No.2 (1984)
- Fearon, P., "The Growth of Aviation in Britain", in *Journal of Contemporary History*, Vol.20, No.1 (1985)
- Francis, J.G., & Pevzner, A.F., "Airbus and Boeing: Strengths and Limitations of Strong Sales" in *Political Science Quarterly*, Vol.121, No.4 (2006/2007)

- Freedman, L., "Vietnam and the Disillusioned Strategist", in *International Affairs*, Vol.72, No.1 (1996)
- Gaitskell, H., "The Sterling Area", in *International Affairs*, Vol.28., No.2 (1952)
- Glickman, G.L., "The British Imperial Preference System", in *The Quarterly Journal of Economics*, Vol.61, No.3 (1947)
- Goldstein, W., "British Defense & Alliance Strategy: The Strategic Quandary of a Middle Power", in *Polity*, Vol.3, No.2 (1970)
- Grieco, J.M., "The Concorde SST and Change in the British Polity", in *World Politics*, Vol.31, No.4 (1979)
- Hartley, K., "Estimating aircraft production outlays: The British experience", in *The Economic Journal*, Vol.79, No.316 (1969)
- Hartley, K. & Watt, P., "Profits, regulation and the U.K. aerospace industry", in *The Journal of Industrial Economics*, Vol.29, No.4 (1981)
- Hayward, K., "The Formation of the British Aircraft Corporation (BAC) 1957-61", in *Journal of Aeronautical History*, Paper No.2012/01
- Healey, T., "Will Clayton, Negotiating the Marshall Plan, and European Economic Integration", in *Diplomatic History*, Vol.35, No.2 (2011)
- Heath, E., "Realism in British Foreign Policy", in *Foreign Affairs*, Vol.48, No.1 (1969)
- Johnman, L. & Lynch, F., "The Road to Concorde: Franco-British Relations and the Supersonic Project", in *Contemporary European History*, Vol.II, No.2 (2002)
- Johnson, H.G., "The Kennedy Round", in *The World Today*, Vol.23, No.8 (1967)
- Kitson, M. & Michie, J., "Britain's Industrial Performance since 1960: Underinvestment and Relative Decline" in *The Economic Journal*, Vol.106, No.434 (1996)
- Kohl, W.L., "Nuclear sharing in NATO and the Multilateral Force", in *Political Science Quarterly*, Vol.80, No.1 (1965)
- Martin, L., "The Market for Strategic Ideas in Britain: The 'Sandys Era'", in *The American Political Science Review*, Vol.56, No.1 (1962)
- May, A., "Concorde – Bird of Harmony or Political Albatross: An Examination in the Context of British Foreign policy", in *International Organization*, Vol.33, No.4 (1979)

- McElheny, V.K., "Britain wields a modernizing ax [sic]" in *Science*, Vol.147, No.3664 (1965)
- Nelson, D.A., "Concorde: International Cooperation in Aviation", in *The American Journal of Comparative Law*, Vol.17, No.3 (1969)
- Newton, S., "The Sterling Devaluation of 1967, the International Economy and Post-War Social Democracy", in *The English Historical Review*, Vol.125, No.515 (2010)
- Northedge, F.S., "Britain as a Second-Rank Power", in *International Affairs*, Vol.46, No.1 (1970)
- O'Hara, G., "Dynamic, exciting and thrilling change; the Wilson government's economic policies 1964-70", in *Contemporary British History*, Vol.20, No.3, (2006)
- Parr, H., "Britain, America, East of Suez and the EEC; Finding a Role in British Foreign Policy, 1964-67", in *Contemporary British History*, Vol.20, No.3, (2006)
- Pemberton, H., "Relative Decline and British Economic Policy in the 1960s", in *The Historical Journal*, Vol.47, No.4 (2004)
- Schenk, C.R., "The Sterling Area and Economic Disintegration", in *Geschichte und Gesellschaft*, Vol.32, No.2 (2013)
- Singh, A., "UK Industry and the World Economy: A Case of De-Industrialisation", in *Cambridge Journal of Economics*, Vo.1, No.2 (1977)
- Sislin, J., "Arms as Influence: The Determinants of Successful Influence", in *The Journal of Conflict Resolution*, Vol.30, No.4 (1994)
- Straw, S. & Young, J.W., "The Wilson Government and the demise of the TSR-2, October 1964 – April 1965", in *The Journal of Strategic Studies*, Vol.20, No.4, (1997)
- Tomlinson, J., "Balanced Accounts? Constructing the Balance of Payments Problem in Post-War Britain", in *The English Historical Review*, Vol.124, No.509 (2009)
- Tomlinson, J., "'Inventing 'Decline': The Falling Behind of the British Economy in the Postwar Years", in *The Economic History Review*, Vol.49, No.4 (1996)
- Vasquez III, J.P., "More Than Meets the Eye: Domestic Politics and the End of British Conscription", in *Armed Forces and Society*, Vol.37, No.4 (2011)

- Wallace, W., “Foreign Policy and National Identity in the United Kingdom”, in *International Affairs*, Vol.67, No.1 (1991)
- Whitford, R., “Lessons Learned from the British Aircraft Corporation TSR2 Project”, in *Journal of Aerospace*, Vol.109, Sec.1 (2000)
- Whiting, R. C., “Ideology and Reform in Labour’s Tax Strategy, 1964-1970” in *The Historical Journal*, Vol.41, No.4 (1998)
- Woodward, L., “British Foreign Policy in Retrospect”, in *International Journal*, Vol.23, No.4 (1968)
- Yonge, T., “A Historical Perspective on Defence Procurement - The Competition for the Replacement of the Avro Shackleton Mk.1 & 2, 1963-1966”, *Air Power Review*, Vol. 16, No. 1 (2013)
- Young, J.W., “The Wilson Government and the Davies Peace Mission to North Vietnam, July 1965”, in *Review of International Studies*, Vol.24, No.4 (1998)
- Younger, K., “Public Opinion and British Foreign Policy”, in *International Affairs*, Vol.40, No.1 (1964)

UNPUBLISHED SECONDARY MATERIAL

DISSERTATIONS AND THESES

- Loadsman, G.H, “Government and the British Aircraft Industry, 1945-1979”, PhD Thesis, University of London, 2003
- Neate, J., “The Royal Navy and the Royal Air Force in Anti-Submarine Warfare Policy, 1918-1945”, MPhil Thesis, University of Birmingham, 2013
- Yonge, T.P., “What Drove Maritime Patrol Aircraft Procurement in the Post-War Era?”, MPhil Thesis, University of Birmingham, 2013

MISCELLANEOUS

- Martins, V., ‘Deterrence’, University of Luxemburg – CVCE.EU, 25 Oct 2016
- Raflik, J. ‘Complementary or Dependence’, University of Luxemburg – CVCE.EU, 25 Oct 2016

President Dwight D. Eisenhower's Farewell Address, 17 Jan 1961, Transcript,
<https://www.archives.gov/milestone-documents/president-dwight-d-eisenhowers-farewell-address>, Recalled 07 Mar 2023

Various, 'Encarta 96, Encyclopaedia', CD-ROM (Redmond: Microsoft, 1996)

Wilson, H., "Leader's Speech", Labour Party Conference – Brighton, 12 Dec 1964, <http://www.britishpoliticalspeech.org/speech-archive.htm?speech=162>, Recalled 22 Apr 2015