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THE MEGATON MISSION: THE ROLE OF THE NUCLEAR ARMS RACE IN 1950S BRITISH IMPERIALISM

HOLDING JOSEPH DAVID DANIEL

MPHIL

LINGNAN UNIVERSITY

THE MEGATON MISSION: THE ROLE OF THE NUCLEAR ARMS RACE IN 1950S BRITISH IMPERIALISM

by
HOLDING Joseph David Daniel

A thesis
submitted in partial fulfillment
of the requirements for the Degree of
Master of Philosophy in History

Lingnan University

ABSTRACT

The Megaton Mission: The Role of the Nuclear Arms Race in 1950s British Imperialism

by

HOLDING Joseph David Daniel

Master of Philosophy

In August 1945, the Pacific theatre of the Second World War came to a dramatic close with the United States dropped two atomic bombs on Hiroshima and Nagasaki. Following this, tensions between the United States and the Soviet Union grew tremendously and the two superpowers set about developing even more destructive bombs in case these tensions reached a breaking point. The nuclear bomb came to symbolise power in the post-war era. However, they were not the only powers with nuclear programmes in the 1950s. Churchill, and successive Conservative governments, were keen in joining the nuclear arms race. Operation Grapple was conducted secretly from 1954-58 on Christmas Island, then part of the Gilbert and Ellice Islands in the Southern Pacific.

The Gilbert and Ellice Islands were a Crown Colony at the time, and this paper shall examine the connection between the nuclear experiments and the British Empire, and geopolitical power by extension. This thesis is divided into three thematic chapters. The first chapter explores how space and place shaped aspirations for power and vice versa. Not only did Operation Grapple bring about colossal environmental damage but major demographic changes with both the arrival of the British and Fijian military personnel as well as a new transient population who brought the resources necessary to sustain such a population. As well as the functions of the different islands being altered, they came to symbolise the long-term health issues which affected the Fijian veterans long after the experiments were over.

The second chapter examines how colonial rule in the Gilbert and Ellice islands was shaped by the nuclear experiments. It explores the rapid change in infrastructure needed to accommodate the new population and the friction it caused when the issue of financial responsibility was raised. This chapter also explores how colonial rule became increasingly reliant on the military and how the developing military complex at Britain extended to remote colonies. Finally, the limits of 'East of Suez' and various governmental departments' visions for the future are discussed as the South Pacific was useful for further developments of nuclear weaponry.

The third and final chapter gauges Britain's place in the world through their relationships with other nations. This is achieved by examining how Britain interacted with the United States, France, Japan, Australia, New Zealand, and Fiji. It concludes that Britain was in a weaker position to negotiate with other nations but were still able to wield some power in a softer way, despite their label as a 'superpower' being called into question.

This thesis shall reach the overall conclusion that the experiments elevated the status of the islands in the minds of the British government to one of high importance as well as offering the British the means of maintaining geopolitical relevance as well as recalibrating attention to the South Pacific, albeit briefly.

DECLARATION

I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.

SIGNED

(HOLDING Joseph David Daniel)

Date: 20 - 9 - 2021

CERTIFICATE OF APPROVAL OF THESIS

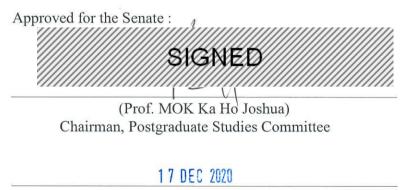
THE MEGATON MISSION: THE ROLE OF THE NUCLEAR ARMS RACE IN 1950S BRITISH IMPERIALISM

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HOLDING Joseph David Daniel

Master of Philosophy

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Introduction

Overview

The Second World War ended with a bang. Although the European theatre of the war had ended in May, the Pacific theatre carried on until August, primarily between Japan and the United States. A large part of the American war effort was achieved through the Manhattan Project, which launched in 1942 with the aim of producing weapons of mass destruction which had not yet been seen. With Japan showing no signs of surrender, President Truman decided to unleash two atomic bombs on the cities of Hiroshima and Nagasaki, which led to Japanese surrender and the end to the war. Yet, it was not only a new era of peace that the end of the war ushered in, but a new potential for warfare. Despite being on the same sides of the war, tensions soon rose between the capitalist west and the communist east, which set the tone for the remainder of the 20th century. The Soviet Union started their nuclear experiments in 1943 and had their first functioning bomb in August 1949.² This shook American confidence as they no longer had a monopoly on atomic weaponry. The nuclear bomb came to represent power in the aftermath of the Second World War, due to its ability to cause such damage in the event of another large-scale war breaking out. The size of the arsenal, and the sophistication of the technology furthered this in the nuclear arms race.

However, the nuclear arms race was far from a two-horse race. Churchill was keen on Britain having its own nuclear arsenal. One of his main reasons for this was Britain maintaining a strong geopolitical position.³ Although British scientists were involved in the Manhattan Project, Truman became paranoid about American nuclear secrets being too widely shared so passed the Atomic Energy Act 1946, more commonly known as the McMahon Act, which prevented international input to the development of such weaponry.⁴ This left Britain in a vulnerable position as in 1946, they did not have their own weaponry, but the idea was popular among the

¹ J. A. Hughes, The Manhattan Project: Big Science and the Atom Bomb, (London: Icon Books, 2003), p.54

² H. Heller, *The Cold War and New Imperialism: A Global History, 1945-2005*, (New York: Monthly Review Press, 2006), p.71

³ G. Farmelo, Churchill's Bomb: How the United States Overtook Britain in the First Nuclear Arms Race, (London: Faber and Faber, 2013), p.242

⁴ S. J. Ball, 'Military Nuclear Relations Between the United States and Great Britain Under the Terms of the McMahon Act, 1946-1958', *The Historical Journal*, Vol.38, No. 2, (1995), p.441

Conservative Party, who were out of office when the Act was passed. When returning to power in 1951, Churchill soon got to work on developing the British nuclear arsenal.

Originally, the experiments took place in Maralinga, in South Australia, and had a limited success. These initial rounds of experiments may have led to Britain having their own nuclear bomb in 1952 but only produced a small yield from fission bombs, which were rapidly becoming outdated compared to weapons belonging to the leading superpowers. However, with the changes of Conservative leadership in the mid-1950s, developing the nuclear bomb further was less of a priority but never completely out of mind of the British government. With the technology being out of date, the goal of the next round of experiments was a controllable weapon with a yield in the megaton range. Backward technology was a hindrance for the British government as it left them vulnerable to Soviet attack if the Cold War heated up, as Britain may have been the first European nation to be taken out if they had weapons of mass destruction. 6

Plans for a further series, known as Operation Grapple, began in 1954 with the intention of developing a bomb with a yield in the megaton range. The experiments moved from Maralinga to the Gilbert and Ellice Island Colony, in the central Pacific, as the nuclear experiments were increasingly unpopular with the Australian public. The series compromised of four rounds, the first was rather disappointing and only brought a maximum 0.72 megaton yield in June 1957. The next round, Grapple X, was the first to use nuclear fission but was rather too big at 1.8 megatons. The penultimate experiment, Grapple Y, was an even bigger explosion, and the highest the British tested to date, at 2.8 megatons. This reflected a breakthrough and success for the British scientists but the explosion was too big to control, and the final experiment, Grapple Z brought a manageable 1 megaton yield in September 1958. Ultimately, Operation Grapple was a success. Britain was the first European power in NATO to

⁵ L. Arnold, *Britain and the H-Bomb*, (Basingstoke: Palgrave Macmillan, 2001), p.66

⁶ M. J. Turner, *British Power and International Relations During the 1950s: A Tenable Position?*, (London: Lexington Books, 2009), p.82

⁷ N. MacLellan, *Grappling with the Bomb: Britain's Pacific H-Bomb Tests*, (Canberra: Australian National Press: 2017), p.35

⁸ Arnold, Britain and the H-Bomb, (2001), p.150

⁹ *Ibid*, p.161

¹⁰ *Ibid*, p.167

¹¹ *Ibid*, p.191

possess nuclear weaponry at the beginning of the 1950s. By the end of the decade, the technology was successfully updated meaning that Britain had evened out their position in the nuclear arms race and managed to maintain geopolitical relevance by developing what had become a symbol of power.

However, it is not only the nuclear bomb that Britain relied on for prestige on the global stage. By the 1950s, the British Empire was a long-established institution. Throughout the 19th century, Britain had colonised a large amount of the world, which gave the European power a lot of clout when it came to international relations and provided an important pillar in maintaining British strength in the world. This sustained into the 20th century, and even survived the world wars. However, this was changing as the loss of the Raj in 1947 and subsequent decolonisation movements in Africa suggested that the structure of Empire that Britain had relied on was no longer stable by the late 1950s. As well as being strategic in the Cold War, the Gilbert and Ellice Islands were part of this older colonial structure. The islands became a Crown Colony in 1882, primarily due to a growing German presence in the Pacific and proof of a viable copra trade. 12 The metropole rarely paid much attention to the islands as they were primary seen as a colonial backwater until the Grapple Task Force arrived. They were annexed by the Japanese in 1942 and liberated by the American military during the 'island hopping' campaign in the final stages of the war. 13 Although the Gilbert and Ellice Islands were far from an integral part of the Empire, they found a new role during the Cold War as the setting for the British government to develop its own nuclear bomb. This dissertation will focus on how Operation Grapple affected the British Empire, and British geopolitical power, in the late 1950s. This is an important issue to discuss as the link between nuclear weaponry and geopolitical status is still an issue being discussed today. The North Korea, Iranian, and Chinese nuclear arsenals are still high-profile issues discussed within the context of how powerful each nation is. The renewal of Trident often leads to questions of what Britain's role in the world is in the 21st century as well as the ethics of possessing such powerful weapons. Examining Operation Grapple is vital as it offers a parallel to the discussions governments around the world are having today. This project offers a window into

¹² B. MacDonald, Cinderellas of Empire: Towards a History of Kiribati and Tuvalu, (Canberra: ANU Press, 1982), p.87

¹³ *Ibid*, pp.147-151

how the British government used nuclear weaponry in the 1950s as a means of maintaining their status as a 'great power', which will shed light on the predicament the same government is in today.

Literature Review

The discussion of the link between Operation Grapple and the state of British imperialism, and geopolitical power, sits at the intersection of various historiographical categories. Primarily, this dissertation is part of the broader trend of Pacific history. Compared to other branches of scholarship, Pacific history is relatively new. Following the independence movements in the Pacific in the 1970s, academic attention turned to the region and the first wave of Pacific history began. Many of the works in the 1980s were responding to the recent independence movements and offered a contextualisation of them. 14 This meant that they tended to focus on the colonial eras. Discussions of the nuclear experiments that took place there were mentioned in general terms as they were an important part in the reason behind independence movements but due to the confidentiality surrounding the archival sources discussion was limited. Now that the archival sources are available, this piece of research will expand on the discussions of the first wave of Pacific historiography by offering a more in-depth analysis of the later part of the colonial era of the Pacific.

This initial interest in the Pacific came to a head in the mid-1990s when more edited collections were published but focused more on the peoples of the Pacific and were able to discuss the nuclear testing in more detail as many of the restrictions were lifted. 15 However, the British experiments were side-lined in favour of discussing the American and French tests as they had a more profound impact in the Pacific and lasted for a longer period of time. Interest in the Pacific dwindled until the 2010s, which has seen a renewed interest from historians that persists to the present. Recent scholarship has shifted from broader overviews of the Pacific toward more concrete areas of

¹⁴ Key examples include: MacDonald, Cinderellas of Empire, (1982), J. Smith, Clouds of Deceit, (London: Bloomsbury, 1985), R. Thakur (ed.), The South Pacific: Problems, Issues and Prospects, (London: Macmillan, 1991)

¹⁵ Key examples include: H. Hiery and J. Mackenzie (eds.), European Impact and Pacific Influence, (London: Taurus, 1997) D. Denoon, S. Firth, J. Linnekin, M. Meleisa and K. Nero (eds.), The Cambridge History of the Pacific Islanders, (Cambridge: CUP, 1997)

discussion, such as environmental issues, the effects of nuclear technology, and the impacts of colonisation and decolonisation movements. ¹⁶ This piece of research shall incorporate such themes into discussions surrounding the nuclear age of the Pacific by looking at environmental and political impacts of Operation Grapple. In 2017, Maclellan's Grappling with the Bomb was published and offered a thorough examination of Operation Grapple. It primarily focused on the reasons behind the experiments and the effects it had on those involved, as well as contextualising the legal battle launched by the Fijian veterans against the British government. Although Maclellan acknowledges the colonial context of the experiments, he does not go far enough in exploring the link between Operation Grapple and the state of the British Empire, instead he favours explaining Britain's place in the Cold War. This dissertation hopes to further Maclellan's argument by setting the experiments in an imperial context, rather than completely as part of the Cold War. Moreover, recent Pacific historians have broadened their scope of primary sources. The use of oral testimony, which has long been important in various cultures across the Pacific islands, has been incorporated. This thesis shall combine archival and testimonial sources to offer a much more rounded narrative of the British nuclear experiments.

However, Pacific history is not the only field that this dissertation fits into. The historiography of the British Empire is a much more expansive field than Pacific history, though there is much overlap between the two. An imperial perspective on Operation Grapple is one that looks at how the nuclear experiments fit within large narratives of the British Empire and geopolitical power. When it comes to conceptualising the British Empire in the post-war era, there have been many theoretical frameworks proposed. The Second World War has largely been agreed to be a turning point for the Empire, as it severely weakened the British state with its financial toll. For Samson, The Suez Crisis of 1956 was another turning point as it exposed British weakness and that decolonisation movements became inevitable. An examination of Operation Grapple demonstrates that this is a rather too simplistic way of approaching the issue of British imperial decline. The Gilbert and Ellice Islands

¹⁶ Key examples include: M.K. Matsuda, *Pacific Worlds: A History of the Seas, Peoples, and Cultures*, (Cambridge: CUP, 2012), W.D. McIntyre, *Winding up the British Empire in the Pacific Islands*, (Oxford: OUP, 2014), T. Banivanua-Mar, *Decolonisation and the Pacific: Indigenous Globalisation and the Ends of Empire*, (Cambridge: CUP, 2016), Maclellan, *Grappling with the Bomb*, (2017)

¹⁷ J. Samson, *The British Empire*, (Oxford: OUP, 2001), p.197

were small, remote and did not have the natural resources needed to sustain its population. They would not have been seen as a viable option for independence, compared to Nigeria for example. The nuclear experiments were spurred on by the Suez Crisis and managed to sustain Britain's presence in a small and remote colony for some time afterwards by giving them a new purpose as they were not a viable option for decolonisation.

This dissertation will challenge any notions of 'inevitable decline' in the postwar era and will extend Darwin's view to the smallest colonies in the Pacific. To Darwin, it was better to view the empire as a series of interconnected relationships which were constantly being renegotiated, which accounts for the longevity of British imperialism. ¹⁸ In his seminal work *The Empire Project*, Darwin uses a myriad of case studies from across the globe to demonstrate this to explain the rise and fall of the British Empire. Although it would be unfair to criticise Darwin for excluding a rather short-lived series of scientific experiments in a remote group of islands, his way of approaching the issue of decolonisation and decline is perhaps the best way to approach discussions of how Britain approached their Pacific colonies. Edgerton also took a similar approach of 'renegotiation' in explaining the transformation of the British state in the 20th century. He argued that the British state became more reliant on the military to sustain their position on the global stage. ¹⁹ Edgerton focused on how the British state itself became more militarised and offers little discussion on how this extended to overseas territories. This thesis seeks to further his arguments by examining how the furthest reaches of the Empire also became militarised. Operation Grapple is a key example of this change in attitude affecting colonial administration on the other side of the world. This dissertation will marry Darwin and Egerton's approaches to examine how Britain's renegotiation of its relationships and move toward a militarised state intersected. A parallel can be drawn with Daniel Immerwahr's recent work How to Hide and Empire, which examined how the United States invested in military bases in various territories to maintain influences in those regions as a form of informal colonisation.²⁰

¹⁸ J. Darwin, *The Empire Project: The Rise and Fall of the British World System, 1830-1970*, (Cambridge: CUP, 2009)

¹⁹ D. Edgerton, Warfare State Britain, 1920-1970, (Cambridge: CUP, 2006)

²⁰ D. Immerwahr, *How to Hide an Empire: A Short History of the Greater United States*, (London: Penguin Random House, 2019)

Pacific and Imperial history may be what underpins this piece of research but there are plenty of others that it belongs to. Thoroughly examining what 'imperialism' meant in the post-war era has been a major part of the historiography of the Cold War. However, this has primarily been used to discuss American, rather than British, foreign policy.²¹ The link between nuclear technology and imperialism has also been explored, but primarily from an American and French perspective. This project will offer a much-needed examination into where the British fit into these narratives. Moreover, the history of science and technology has naturally explored the history of nuclear weaponry. Arnold's Britain and the H-Bomb is the only other monograph than Maclellan's to be dedicated to Operation Grapple and frames the experiments as an example of British achievement and scientific breakthrough as the scientists in Britain worked out how to build their own functioning hydrogen bombs independent of American aid. 22 Although Arnold's work provides an important insight into the scientific side of the experiments, she primarily commented on the lives of the scientists at the metropole rather than commenting on those in the Pacific. This dissertation is less concerned with the science itself but will further Arnold's research by exploring the ramifications of the experiments, both globally and for those involved.

Methodology

To approach this issue, a variety of sources have been consulted. Primarily, the files in the Pacific and Indian Ocean Department in the Colonial and Commonwealth Office series, housed at the *National Archives* in London, will be of use. These concern the planning of the Grapple series and include the minutes of planning meetings and the correspondence between various governmental departments, and those on the working in the Pacific. These principally took place between the Foreign Office, Commonwealth Office, and the Ministry of Supply, but there is plenty form the Secretary of State for the Colonies, as well as the Gilbertese and Fijian governors. These will be especially useful as they will help shed light on the different perspectives the different people in the British government had when it came to the megaton mission. In turn, this will help to diversify discussions of how the metropole saw its

²¹ Heller, *The Cold War and New Imperialism*, (2006), J. Schofield and W. Cocroft (eds.), *A Fearsome Heritage: Diverse Legacies of the Cold War*, (London: Routledge, 2009)

²² Arnold, *Britain and the H-Bomb*, (2001)

place in the world and how they thought the Grapple series would affect it and what it meant to each department individually. The inclusion of the governors in the Pacific will also offer an insight into the changing role of the Pacific in the grander scheme of the British world system and how the nuclear experiments altered their portfolio. Ultimately, this shall provide an excellent grounding in exploring how the tests fit into larger discussions of British power in the late 1950s.

The archival sources shall be supplemented with autobiographical and testimonial sources. Vice Air-Marshall Oulton, who oversaw the experiments on Christmas Island, published his account of Operation Grapple in 1987.²³ This will add some diversity to the official archival sources by offering a glimpse into life on the ground as well as the perspective of the higher-ranking officers beyond correspondence. One of the pilots who flew the plane that dropped the bomb, Kenneth Hubbard also wrote an autobiography, which was published in 1985, reflecting on his time on the islands.²⁴ This will further the body of sources being used as it will allow for the voices of lower-ranking officers to be included, and allow for discussions surrounding what the role of the nuclear bomb in conjunction to British geopolitical power actually meant to those who witnessed the blasts first-hand. Together these autobiographies provide an insight into what the perception of the experiments as well as an insight into what geopolitical power meant, which would have been limited with relying on archival sources alone. Moreover, it is also important to consider the voices of colonial subjects. Many Fijian soldiers were transported to the Gilbert and Ellice Islands to provide the much-needed manpower, and subsequently made up the bulk of lower-ranking military personnel.²⁵ Throughout the 1990s, journalist Nick Maclellan conducted dozens of interviews with the veterans who served on Christmas Island. This was primarily due to a legal battle launched against the British government due to the adverse health effects many had in the decades following their return to Fiji. 26 The inclusion of these sources, and discussions of Fiji's role in the experiments, will

²³ W. E. Oulton, *Christmas Island Cracker: Account of the Planning and Execution of the British Thermonuclear Bomb Tests, 1957*, (London: Thomas Harmsworth, 1987)

²⁴ K. Hubbard and M. Simmons, *Operation Grapple: Testing Britain's First H-Bomb*, (Surrey: Ian Allen ltd., 1985)

²⁵ Tubanavau-Salaluba, L., Namoce, J.M. and Maclellan, N. (eds.), *Kirisimasi: Na sotia kei na lewe ni mataivalu e wai ni viti e na vakatovotovo iyaragi nei peritania mai Kirisimasi*, (Pacific Concerns Resource Centre, Suva: 1999)

²⁶ *Ibid*, p.70

allow for the discussion of Operation Grapple to be expanded and include an insight into settler-indigenous relations, which were a key part of the changing nature of geopolitical power in the post-war era. However, Maclellan's work did not entirely compromise of the testimonies of Fijian veterans, he also included two interviews with the widows of veterans as well as an interview with one of the few Gilbertese women who witnessed the experiments. Much of the indigenous population were removed from the islands during the experiments, making such sources scarce. It is important to include the sources from these women as they offer a reflection on the ramifications of Britain's determination to remain geopolitical relevant from sources which were uncommon in scholarship until recently. Giving a historical agency to colonial subjects from the Pacific is of the utmost importance as they were a key part of British geopolitical power that was directly affected by Operation Grapple.

Project Overview

This dissertation shall be trisected into thematic chapters. The first chapter explores how space and place shaped aspirations for power and in turn, how such aspirations shaped such places. Not only was the environmental damage colossal, but the function of the islands was transformed with an unprecedented population increase. The function of Christmas and Malden Islands were transformed with the higher-ranking officers living at Malden, whilst the lower-ranking ones lived at Christmas, where they all worked. In turn, the remote nature of the islands spurred the military personnel on to succeed as many of them wanted to return home, whilst being the embodiment of the health issues faced by the Fijians in the following decades. The chapter concludes that although small and remote, the islands had as much an effect on the experiments and the tests affected them.

The Second Chapter explores the theme of transformation in a different way. It explores how colonial rule in the Gilbert and Ellice islands was shaped by Operation Grapple. The colony saw a rapid change in infrastructure to accommodate the new population. This chapter also explores how the military complex affected Britain abroad and how colonial administration in the Gilbert and Ellice islands also became reliant on the military. Finally, this chapter explores the limits of the 'East of Suez' movement, and how there were plans to remain in the Pacific as it was a useful region

in the development of a nuclear arsenal and there were no plans for Britain to leave these smaller colonies as long as they could help it.

The third and final chapter will continue to broaden the scope of discussing the nuclear experiments by gauging Britain's place on the world stage. This shall be achieved by examining how Britain interacted with the United States, France, Japan, Australia, New Zealand, and Fiji, who are the nations frequently mentioned in correspondence between different governmental departments. The chapter concludes that Britain was in a weaker position to negotiate when it came to international diplomacy but were able to wield power in different ways as part of their renegotiation with other powers. Britain still managed to maintain a strong position globally, despite their label as a 'superpower' being called into question.

Overall, Operation Grapple had a small but profound effect on the Gilbert and Ellice Islands. Exploring this case study offers a window into how Britain became increasingly militarised in the 20th century, and how this extended to the colonies as well. The islands were not seen as viable candidates for decolonisation by the metropolitan government and the militarisation of the Pacific islands meant that they had a new purpose in the grander scheme of the British world system. Therefore, the 'East of Suez' movement did not extend to the small Pacific islands. Through the development of an up to date nuclear arsenal, there was a new-found legitimacy. Britain had a weapon of mass destruction, which was symbolic of power in the Cold War, and one which meant that they had evened out their position in the nuclear arms race and perhaps be hopeful of continuing this trend into the 1960s and beyond. However, developing a nuclear arsenal had a profound impact on the islands, and transformed them and both through increased infrastructure and the ways people perceived them.

Chapter I

Introduction

Operation Grapple had a profound impact on the Gilbert and Ellice Island Colony. Many have written about their experiences on Christmas Island and reflected on how the nuclear experiments shaped the islands and in turn, how the environment shaped their experiences and the tests. One of the more obvious ways Operation Grapple impacted the Gilbert Islands was it transformed it from a place to maintain a nuclear deterrent and further national prestige of the metropole. The furthering of a national agenda was reflected in the tests' ability to further personal goals. Kenneth Hubbard was one of the pilots that dropped the bombs who went to the island at a young age with the intention of career advancement. This sentiment was shared by Wilfrid Oulton, the Vice Air Marshall who was put in charge of overseeing the mission on the ground. Like Hubbard, he saw Operation Grapple as a means of proving his leadership abilities to those back in London. To them, the islands had a similar symbolic meaning and provoked feelings of awe for Hubbard which were shared by his Fijian counterparts. The main source of manpower for Operation Grapple came from the Fijian military. In the 1990s, journalist Nic McLellan interviewed many Fijian veterans about their experiences on Christmas Island. Many of which shared Hubbard's feelings of awe at witnessing the sheer power of a nuclear weapon being detonated but the similarities end there. Many of the interviewees, including the widows of the deceased veterans did not share the rather romantic view held by Oulton. To many of them, the islands came to represent the problems they faced after the bombs were dropped, such as chronic health issues, infertility, and premature death. Although the British government has long denied that this was due to radiation exposure, it has still affected how many Fijian perceive the islands and remember the British Empire as a whole: negligent and secretive, as many felt they were left out of the loop when it came to basic information about the experiments when they were being conducted as well as the levels of radiation they were being exposed to. Operation Grapple shaped the Gilbert and Ellice Islands by transforming their perception from a colonial backwater to a place to either further national and personal goals or a place where lifelong issues stem from.

However, this was not the only way the experiments affected the islands they took place on. They altered the relationships and bonds were formed and even created ones that would have been unlikely to occur in other contexts. A major change came

in the new divisions between Christmas and Malden Islands. Malden Island became the place where the higher-ranking officers lived whereas Christmas became the place of work and where lower-ranking officers resided. Due to the small size of the islands, Oulton bonded with his fellow commanding officers and the meetings became much less formal as time went on as a result. Hubbard also commented on how he came like family with the rest of his squadron, which most likely came from the close proximity they were living in, without much to do outside of work. Yet, the experiments also provided an opportunity for different nations to mix. Although many were evacuated from the islands, a small Gilbertese population remained to work on Operation Grapple. Due to the lack of sources from Gilbertese people, what is known of their interactions with the British soldiers primarily come from Oulton's autobiography. He remembers them fondly but still saw them as an 'other' when describing their customs which were strange to him.

The Fijians had a different experience. When discussing the earlier experiments, they found them to be an equaliser of sorts. Many discussed how they were regarded less on racial grounds but more on military rank and how officers of the same rank were warm and friendly. However, as the experiments went on, they found that they were marginalised by their fellow soldiers and that older colonial notions of the 'other' resurfaced. Operation Grapple transformed the islands into a melting pot where officers of various rankings were working together in close quarters as well as forging bonds with Pacific islanders. Although older hallmarks of colonialism did not disappear as quickly as the functions of Christmas and Malden Islands did.

Furthermore, it is important to consider how the islands affected British aspiration for power. The Gilbert and Ellice Islands have long been some of the most remote islands in the world. This meant that communication with the outside world was slow and difficult during the nuclear experiments. Moreover, this made it difficult to get resources to the islands, which were scarce prior to the arrival of the British military and was exacerbated by the increased population. This meant that morale was often low for those residing there and may have spurred them on to complete the mission quicker than originally planned. The amount of resources meant that Grapple brought a new, transient population to the islands to bring basic necessities. Moreover, there was little infrastructure outside of the experiments, which meant boredom was

frequently felt. Hubbard also commented on the poor weather conditions as there were frequent tropical storms, and experiments had to be arranged around the weather. The climate of the islands was an important part of the experiments. The environmental damage was a key theme of the Fijian testimonies, which is largely missing from other sources. Overall, it was not just the experiments which shaped the islands, but it was a symbiotic relationship. When discussing the relationship between Operation Grapple and British geopolitical power it is important to consider how the islands were affected as it offers a glimpse into how the British government saw the islands themselves as well as reflecting how colonial subjects from Pacific islands were impacted.

A Shift in Perspective

The experiments shaped the Gilbert and Ellice Islands as they became the setting for the British government to achieve their aim of national prestige through the development of a nuclear bomb. On the 15th March 1957, the Foreign Office wrote a telegraph to foreign representatives across Asia saying that abandoning the tests would "leave [Britain] in a position of inferiority to others". ²⁷ The metropolitan government saw Operation Grapple as the key to prestige on the global stage and this extended downward to those working at Christmas Island in the late 1950s. Hubbard, who was working for the military, saw the advancement of the warfare complex was paramount. Edgerton has described the British state as a 'Warfare State', in which the military rapidly grew during the 20th century, and the state generally became increasingly reliant on the military for legitimacy. ²⁸ When reflecting on the larger reasons surrounding the development of hydrogen bombs, Hubbard praised the government for maintaining a nuclear deterrent in what were uncertain times. In the third chapter of his account, he praised the commanding officers for doing their part in re-shaping "the required state necessary for a future deterrent nuclear force." ²⁹ The final chapter of his autobiography ends with a reflection of the nature of the experiments and nuclear weaponry in general. He concluded that Operation Grapple was ultimately for the best as it provided geopolitical stability and the fact that there had not been a nuclear war

²⁷ 'Telegraph from the Foreign Office to Certain of Her Majesty's Representatives; 15th March 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives*, London, CO1036/281, f.52

²⁸ D. Edgerton, Warfare State Britain, 1920-1970, (Cambridge: CUP, 2006), p.5

²⁹ K. Hubbard and M. Simmons, *Operation Grapple: Testing Britain's First H-Bomb*, (Surrey, Ian Allen ltd., 1985), p.20

by the time he was writing, in 1985, was proof that this aspect of the experiments were a success. 30 He noted that the British and American arsenals helped act as a balancing act which prevented the Cuban Missile Crisis. 31 Hubbard was reflecting as much on the time he was writing as much as the late 1950s. In the 1980s, Cold War tensions began to heighten and the discussion around nuclear weaponry became more prevalent. Perhaps Hubbard did not feel as strongly about the issue of Britain as a balancing force in the world at the time but used the chance to tell his story to also comment on contemporary issues. Therefore, the islands took on a different symbolic role in retrospect as they became a necessity for Britain's nuclear deterrent, for both the Foreign Office and the pilot who dropped the bomb, which was beneficial both in the 1950s and when he was writing in the 1980s.

Furthermore, the islands may have been a place to further national prestige, but they were also a place where Hubbard could advance his own career. He was still quite young before he arrived in Christmas Island, and he was looking to prove himself to the higher-ranking officers of the military. When he was chosen to fly the planes, which would drop the bombs, this excited him. In the introduction to his autobiography, he wrote that the ability to prove oneself at the "brutal" interview stage was a "clear indication of future career advancement". ³² In the introduction, he also thanked the higher-ranking officers for the opportunity to go to Christmas Island as it gave him the discipline necessary to advance in his career. ³³ Although Hubbard was unfamiliar with the South Pacific before he set off, it shaped his personal aspirations for power from an early stage. It was the idea of the islands that shaped his aspirations for power; the physical islands themselves were irrelevant as long as they could advance his career.

For the young pilot, the islands represented a way of pursuing his personal goals. This may have been common for many of the young soldiers, particularly for the ones in Hubbard's squadron. Operation Grapple was primarily carried out by young soldiers, some of which were conscripted but it was likely that many wanted to be involved with the nuclear programme was as means of career advancement. Therefore, the specific islands did not shape the aspiration for power but what they

³⁰ *Ibid*, pp.127-128

³¹ *Ibid*, p,128

³² Hubbard and Simmons, *Operation Grapple*, (1985), p.8

³³ Ibid

represented did. They offered a ladder to young military personnel, such as Hubbard, to advance their careers and prove themselves to higher-ranking officers by involving themselves in a mission of the utmost importance to both the British government and the military.

When describing dropping the nuclear bomb itself, he recalled the feelings of awe. When writing about the first time he saw the nuclear explosion, he described it as "a sight of such majesty and grotesque beauty that it defies adequate description". Hubbard was describing overwhelming sensations of wonder and dread; he was unable to fully describe what he saw, even when he was writing nearly thirty years later. The feelings of awe may have been symbolic of the power and ingenuity of the British scientists and, by extension, the military. In an unsure geopolitical era, such as the late 1950s, the bomb may have been symbolic of an assurance that Britain was still a great power, capable of producing something of such power and beauty. His description juxtaposed the "majesty and grotesque beauty" of the blast, which may have reflected his conflicted emotions about the bomb. Although in favour of the bomb, he found its beauty to be "grotesque" as he became aware of the sheer power of a weapon that had never been seen on such a scale before. To Hubbard, the bomb had been symbolic of personal and national achievement.

He was also in a unique position as he was one of few men that saw the explosion from above rather than from a ship like the vast majority of his colleagues. Once the bomb detonated, it perhaps evoked a sense of satisfaction that his time on the island had not been wasted. His aspiration for power transformed the islands as they became the place of success where the sheer power of the hydrogen bomb could be witnessed. In turn, this shaped Hubbard's aspiration for power as he was given a unique vantage point. He became awestruck and, in that, became convinced that Operation Grapple had not been a waste of time.

However, Hubbard was far from the only lower-ranking officer to be part of Operation Grapple. The Grapple planning committee also relied heavily on the Fijian military as it was far simpler, and cheaper, to move Fijian soldiers to Christmas Island than British ones. The British aspirations for power meant the islands took on a

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³⁴ *Ibid*, p.96

different role than for British soldiers, such as Hubbard and Oulton. They became a place which sparked fear and dread. As Filipe Rogoyawa, a member of the Fijian naval contingent in March 1957, said: "the explosion was really terrifying", especially when thinking of the bomb being dropped on the land.³⁵ This sentiment was shared by his fellow serviceman, such as Susitino Lasagavibau who remarked that having seen the power of atomic weaponry first hand none of the soldiers "would have gone". 36 Although many across the world in the 1950s felt fear of the newly emerged Cold War heating up, ³⁷ these fears became much more grounded for the Fijian soldiers, especially after Micronesia being a major setting for the Second World War. 38 However, Paul Ahpoy, an engineer at the time, felt a sense of relief. He noted that the "British tests were good" in the sense that they managed to get the Soviet Union to "reduce its military and nuclear weapons". ³⁹ This is a rather interesting contrast to the other Fijian testimonies as it Ahpoy saw a benefit to the nuclear weapons programme. For him, the British Empire trying to find a new source of power to remain relevant on the global stage had some benefit and being part of this was a lesser evil than being exposed to war with the Communist east. For these Fijian soldiers, British aspirations for power shaped the islands as they became the centre for fear. They also provided some, as in the case of Ahpoy, a sense of relief that they were part of avoiding a nuclear war if one had arisen.

Furthermore, it was not just fear, dread, and relief that the bomb evoked as many of the veterans noted a feeling of awe when they saw the mushroom cloud hovering about the ocean. Anara Bakale remembered the sound of the "frightening bomb" decades later. ⁴⁰ Many of the soldiers told to turn to the blasts by commanding officers, ⁴¹ suggesting a voyeuristic quality to the experiments. Afterall, there was no

³⁵ 'Paul Ahpoy – FRNVR 1140' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.32

³⁶ 'Filipe Rogoywa – FRN 1178' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999) p.34

³⁷ R.D. Burns and J.M. Siracusa, A Global History of Nuclear Arms Race: Weapons, Strategy and Politics: Volume 1, (Oxford, Praeger, 2013), p.284

³⁸ Firth, S., 'The War in the Pacific', in Denoon, D. and Meleisea, M., (eds.), *The Cambridge History of the Pacific Islanders*, (Cambridge: CUP: 1997), p.294

³⁹ 'Paul Ahpoy – FRNVR 1140' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.31

^{40 &#}x27;Anara Bakale - RFMF Engineers 10820' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), Kirismasi, (1999), p.54

⁴¹ N. Maclellan, *Grappling with the Bomb: Britain's Pacific H-Bomb Tests*, (Canberra: Australian National Press, 2017), p.209

practical need for hundreds of soldiers to witness these experiments. In the 1950s, the bomb represented geopolitical power. With the Fijian soldiers having to watch the explosions, these may have served as a reminder of British power to their colonial subjects, especially as the process of decolonisation had begun and the East of Suez movement was underway. However, the Fijians were not the only South Pacific islanders to witness the experiments. There was a small Gilbertese village near Christmas Island. Mrs Sui Kiritome, the only Gilbertese person to give her account of what happened, noted "the captain came to [her] husband and invited [them] to accompany him on the deck to see what happened after the blast". All Initially she was told she and her family were to be repatriated to Tarawa, but this didn't happen until after witnessing the blast.

Operation Grapple was not simply for the scientists and commanding officer, but a performative event for everyone involved. For the Fijians, it may have been symbolic of military might, but for the Gilbertese, the bomb also represented Britain's power over the Pacific Islands. The British were able to move the local population at will, for the goal of maintaining power and relevance on the global stage. Asking the Gilbertese population to witness the blast also served as a reminder that the British were in control of the colony, both the people and their islands. Therefore, Operation Grapple transformed into Christmas Island into a place where South Pacific colonial subjects could marvel at the power of the British Empire.

Although Christmas Island may be remembered as a place of terror, where people could marvel at the power of the British bomb and state, the commanding officer, Oulton, offered a more idyllic depiction of the islands. Throughout his autobiography, he held a rather romantic view of Christmas and Malden Islands. He was left with the impression that the South Pacific Islands were a place of outstanding beauty. Oulton even opened his autobiography describing the "brilliant light from the tropical full moon, turning the showers of coral into gleaming silver fountains". ⁴⁴ This set the tone for the best of the book, which often had dramatic flourishes for describing the events, but it is still a rather idyllic way of remembering the islands. Opening the

⁴² M.J. Turner, *British Power and International Relations During the 1950s: A Tenable Position?*, (New York: Lexington Books, 2009), p.153

 ⁴³ 'Mrs. Sui Kititome' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.60
 ⁴⁴ W. E. Oulton, *Christmas Island Cracker: Account of the Planning and Execution of the British Thermonuclear Bomb Tests*, 1957, (London: Thomas Harmsworth, 1987), p.1

autobiography with this description gives the reader a rather serene image of the islands which may have come from a desire to give the impression that the experiments were a success and that the islands provided a tranquil backdrop for them. Oulton oversaw the experiments and he wanted to give the impression that they occurred without any issues as it would have reflected badly upon him. His aspirations for power were successful, as Operation Grapple did produce a functioning hydrogen bomb. When writing retrospectively, this success was reflected in his descriptions of the islands themselves.

However, this stands in contrast to how the islands have been perceived by the veterans, who served there, and their widows. For the Fijian soldiers, the island came to be associated with fears of the future. As Filipe Rogoyawa, a member of the Fijian naval contingent in March 1957, said: "the explosion was really terrifying", especially when thinking of the bomb being dropped on the land. ⁴⁵ For him, the island was symbolic of what could become of the world if a large-scale war were to break out again. However, for the widows of the veterans, Operation Grapple marked the beginning of what came to make their married lives difficult. Cagimudre Levenilov, the widow of a Fijian solider, discussed how her husband was unable to take cold food and drinks and frequently had chronic diarrhoea and stomach problems. ⁴⁶ Sainimili Nakurama, the widow of a Fijian engineer, had a similar experience. She recalled how her late husband's life was plagued by illness and they regularly had to visit the hospital. ⁴⁷ For these widows, Christmas Island came to symbolise the origin of their husband's health problems, which impacted their married life.

Nakurama also noted having three miscarriages, which she attributes to her husband's radiation exposure. 48 She was not alone. Other Fijian veterans, such as Niko Buke, noted that he long suffered fertility issues due to his time on Christmas Island. 49

⁴⁵ 'Paul Ahpoy – FRNVR 1140' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.32

^{46 &#}x27;Mrs. Cagimudre Levenilovo' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.63

⁴⁷ 'Mrs. Sainimili Nakutama', in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.62

⁴⁸ Ibid

⁴⁹ 'Niko Buke - RFMF 17129' n Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.49

Those who were able to have children, such as Emori Ligicia, ⁵⁰ noted issues with their offspring. Whilst discussing the effects of witnessing the bomb, Sui Kiritome recalled how her daughter, born in July 1958, had blood coming out of every cavity when she was born. ⁵¹ The nuclear bombs and the islands where they were dropped perhaps became the physical embodiment for the grief they had to go through. Therefore, Christmas Island took on a symbolic role for them. For Oulton, Christmas Island was the place where his mission for a megaton weapon was a success, whereas for the Fijians, and their wives, it was the source of health problems for them and their families. The islanders were unable to have the family life they perhaps envisioned when they got married. Operation Grapple helped transform Christmas Island into an enduring symbol of loss for the ladies, who lost both their husbands to the effects of radiation exposure and their hopes for the future.

Moreover, the British metropolitan government were not only criticised for their negligent safety procedures but their secretive nature. The clandestine nature of the tests was always a key part of the planning due as the British government and military did not want their secrets to fall into the wrong hands. The Grapple Task Force outlined their security classifications numerous times, with the dates, design details and yield of each experiment being classified "Top Secret". ⁵² Although never stated outright, it is unlikely that the lower-ranking officers were included in this classification as they most likely wanted a few people to know as possible. Many, including Ratu Inoke Bainimara, the appointed leader of the Fijian branch, noted that the British government had not told them of the full extent of what the experiments would entail. ⁵³ As many Fijian soldiers have said since then, they would not have gone to the Gilbert Islands if they knew the true nature of Operation Grapple. ⁵⁴ Therefore, the British government was continuously secretive with imperial subjects in the 1950s.

⁵⁰ 'Emori Ligicia - RFMR 19612' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.51

^{51 &#}x27;Mrs. Sui Kititome' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), Kirismasi, (1999), p.61

⁵² 'Operation "Grapple-X"- Security Classifications', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives*, London, CO1036/282, f.45

⁵³ 'Ratu Inoke Bainimara – FRNVR 1104' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999) p.23

⁵⁴ 'Paul Ahpoy – FRNVR 1140' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.31

Although, it is worth noting that the Fijian soldiers were speaking retrospectively. The issue of colonial responsibility may not have been as strongly considered when they were on the island. But this recollection demonstrates how the Fijian soldiers remember the empire as a secretive structure. In this regard, the British colonial structure was inherently deceptive. Afterall, in order to ensure Fijian cooperation, the British government were selective in what information they gave.⁵⁵ Although this owed much to the geopolitical situation of the 1950s; not wanting to let the Soviet Union know the full extent of the nuclear trials. However, they were still acting disingenuously. Ultimately, how the Fijian veterans feel in respect to the empire when reflecting in the 1990s illuminates on the of the impacts of Operation Grapple memories of irresponsibility and deception. The megaton mission affected how the Fijian soldiers regard Christmas Island as it was a place of secrecy. It was a place where they were useful in carrying out the mission but not trustworthy enough to share vital secrets with, which in turn affected how the veterans would view the British Empire in the decades following the experiments. Ultimately, Operation Grapple was a part of the British Empire in the late 1950s as it affected how colonial subjects perceived it long after they were no longer formally part of Britain's world system.

Forming New Bonds

Operation Grapple did not just shape how the Gilbert and Ellice Islands were perceived by those who lived there, but the experiments helped shape the relationships what were formed there. A key example was the division between higher-ranking officers and those they commanded, as seen through the new divisions between Malden and Christmas Islands. Throughout his autobiography, Oulton went into detail about the different functions the two islands had. Both were used throughout Operation Grapple although they had different functions. Christmas Island was where most of the action took place with the majority of the military personnel residing there and most of the scientific data being stationed there. By contrast, Malden Island is much smaller and was used to house the higher-ranking officers, such as Oulton. ⁵⁶ The aspiration to develop a functioning hydrogen bomb transformed the two islands in the

⁵⁵ Maclellan, Grappling with the Bomb, (2017), p.190

⁵⁶ Oulton, Christmas Island Cracker, (1987), p.255

Gilbert and Ellice Islands by giving them separate functions. There was a clear divide for Oulton between the two as one was a place of work and the other for habitation.

However, it also provided a physical barrier between higher and lower-ranking officers. Malden Island arguably became a place of higher prestige compared to Christmas Island as in order to go there during Operation Grapple, one had to have earned a particular military ranking. This made sense at the time as Malden Island is much smaller and could not realistically house the rapid increase in population. This was most likely the main motivator in choosing Malden to house the higher-ranking officers. Although, Oulton did not necessarily speak of this divide positively, he wrote that he found the travelling between the islands rather tedious and unnecessary as it caused needless difficulties in communicating with those on Christmas Island, and therefore, organising the experiments.⁵⁷ The division caused by the new functions Christmas and Malden Island took on did not necessarily work in favour of Oulton and the other commanding officers. Their aspirations for fulling the British government's desire for a strong nuclear arsenal transformed the islands by giving them new functions which went beyond the sea which separated them. For the first time in the islands' history, they were divided by status. Such a division became a minor hindrance to the experiments as it led to unnecessary travel time which hampered communication with the other officers who lived on Christmas Island.

When it came to finer details being planned at Christmas Island, Oulton noted that the meetings became less formal as time went on. ⁵⁸ This may have been down to various factors, the time constraints on each experiment being one of them. The later grapple experiments were planned at haste at the metropole and this could have been reflected in the meetings taking place at the test site. ⁵⁹ However, the close quarters the commanding officers lived in may have also played a role. Unlike other military missions, the commanding officers were working and living in very close quarters. The close proximity of the living and working arrangements may have also led to the experiments being planned less formally as there may have been little separation between working and living. The small nature of the islands shaped Oulton and his

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⁵⁷ *Ibid*, p.134

⁵⁸ *Ibid*, p.388

⁵⁹ 'Draft Telegraph from the Colonial Office to the Ministry of Defence, 6th September 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.34

peers' aspirations for power by informalizing them. The close quarters and lack of resources may have led to the commanding officers sharing the British government's desire to complete the mission swiftly as they would have wanted to leave the islands to a much more comfortable environment as well as furthering national prestige and displaying effective leadership. The islands shaped the way Operation Grapple was run as the small and remote nature led to close interpersonal relationships.

In turn, this led to planning the finer points of the tests being decided on much more informally. Initially, the higher-ranking officers would have shared the government's desire to create a megaton weapon quickly and being able to do so would have reflected well on them. However, with little to do outside of Operation Grapple, they may have wanted to complete the mission as soon as possible just so they could leave. Ultimately, the islands helped to foster close bonds among the commanding officers, which helped to lessen the formality of the planning meetings.

Moreover, the bonding that Oulton most likely experienced extended to his interactions with the personnel he oversaw. Much like with his fellow higher-ranking officers, Oulton also had to interact with a variety of different people who worked on the islands due to his position of overseeing the entire mission. He noted that "immense and important task was only made possible by the close integration of the Royal Army Ordnance Corps and the Royal Electrical and Mechanical Engineering teams – not normal to Army practice". ⁶⁰ Operation Grapple helped to foster new relationships between different military groups who would not have worked with each other in previous contexts. Oulton's comment about the unusual nature of the Army and the engineering teams working together perhaps reflects the military's changing nature in the late 1950s.

The army was becoming more closely integrated with the scientific community in order to maintain relevance and prestige on the global stage. ⁶¹ This had a knock-on effect with those who lived on the islands as cooperation with different groups took place for the first time. British aspirations for power ultimately effected the relationships formed on Christmas Island as the nature for power shifted. Oulton also fondly remembered the comradery between the different members of the crew which

⁶⁰ Oulton, Christmas Island Cracker, (1987), p.175

⁶¹ Edgerton, Warfare State Britain, (2006)

led to high morale. 62 However, he may have been reluctant to admit that there were often periods of low morale, as Oulton reflected on as it would have reflected poorly on his leadership, which extended beyond the smooth running of testing weaponry, but the welfare of the soldiers as low morale could have damaged the running of the experiments. The space of Christmas Island was transformed into one where different groups of people interacted in a way which was not known to the British military beforehand as the soldiers and the scientists were working toward the same goal. This also reflected the changing nature of power, and British hegemony, as military operations became closely linked with scientific knowledge.

This sentiment was shared by Hubbard, who spoke of the familial bonds that formed between him and his fellow soldiers during their times on the island. Operation Grapple shaped the Gilbert Islands by providing a new social structure as the soldiers bonded. Due to the remote nature of the islands, many of the soldiers which Hubbard interacted with became like family to him. ⁶³ Throughout his autobiography, he regularly spoke of how close he and the rest of the squadron had become. It was only natural that such a close relationship would form given how remote Christmas Island is and how scarce communication with the outside world was. The island became a place of harmony. The men he formed a close bond with all shared the same goal of completing the megaton mission successfully and using it as a springboard for career progression. When it came to finishing their time on the island, Hubbard wrote that it was like a "tremendous wrench to hand over my beloved squadron to other hands". ⁶⁴ Even when reflecting nearly thirty years later, he still looked back on the squadron fondly.

Christmas Island may have taken on a symbolic meaning to Hubbard as a place for career progression and the chance for his country to make gains in the Cold War but whilst there, the remote nature of the islands helped shaped his perception of his fellow servicemen. In this aspect, the island became a place of harmony and added a new dimension to his goal of career progression as those working with and beneath him. This in turn would have shaped Christmas Island as a place. Prior to the Second World War, there had been very little military activity there. However, the Japanese

⁶² Oulton, Christmas Island Cracker, (1987), p.143

⁶³ Hubbard and Simmons, Operation Grapple, (1985), p.30

⁶⁴ *Ibid*, p.126

and American military efforts were in the context of aggressive battle. The military comradery that Hubbard describes would have been entirely unique. Operation Grapple helped shaped aspirations of power by transforming Christmas Island into a place where there was a less aggressive, familial structure.

However, it is worth noting that the only interactions that took place during Operation Grapple were not entirely between British soldiers, as a small indigenous population were not evacuated from the colony. Operation Grapple marked a new, extended, interaction between the British military and the Gilbertese population. Throughout his autobiography, Oulton recalled various interactions with the native population. He generally spoke highly of them, remarked that they were a "great help" to the mission and Operation Grapple's success relied as much on their aid as cooperation between different governmental departments. ⁶⁵ He also wrote that the emotional goodbyes at the end of the mission included a small platoon of Gilbertese police, ⁶⁶ which suggests that British officers managed some sort of integration into the society on Christmas Island.

Much like with the higher-ranking officers and the different departments collaborating, Operation Grapple changed Christmas Island into a place where the British military could integrate with the indigenous population that were not evacuated. Although in one chapter, he wrote of a party the Gilbertese hosted, which he was invited to. With the mission itself, Oulton may have regarded the Gilbertese as no different to the rest of the personnel under his leadership, but outside of that, he still saw them as an 'other' group. He noted the unusual dress with "some [wearing] a singlet, some topless". ⁶⁷ He went on to refer to the music in inverted commas, suggesting that it did not merit the description of 'music'. He also remembered that when the Gilbertese girls tried to include them in the party, they "without much ceremony plonked the garlands more or less around the necks of the other visitors". ⁶⁸ Operation Grapple may have transformed Christmas Island into a place where, according to Oulton, different groups worked together harmoniously but older attitudes regarding the indigenous population persisted. Although grateful for their

⁶⁵ Oulton, Christmas Island Cracker, (1987), p.156

⁶⁶ *Ibid*, p.401

⁶⁷ *Ibid*, p.265

⁶⁸ Ibid, p.266

contribution to the mission, Oulton did come to view them in the same way he saw the lower-ranking British officers. The Gilbertese remained an 'other' to Oulton, and a useful 'other' at that. His experiences on Christmas Island may have changed the groups of people he interacted with, but this was not necessarily enough to completely erode the attitudes British leaders had toward their colonial subjects. This reflected the changed in British aspirations for power more generally. The nuclear bomb came to represent power in the Cold War era, but even the nuclear bomb was not strong enough to entirely eradicate attitudes toward colonial subjects.

Whereas this was not necessarily the case for the Fijian soldiers who were conscripted to help with the megaton mission. During the early stages of Operation Grapple the commanding officers were still above all the other military personnel, ⁶⁹ but many of the Fijian soldiers noted that they found the British and New Zealand soldiers to be warm and friendly. Ratu Inoke Bainimara recalled a sense of comradery and the different groups "socialised really well" and "it seemed as if we all knew each other before meeting". ⁷⁰ The nuclear experiments equalised the Pacific islanders and the British forces, as they were seen as military personnel rather than members of the metropole and the colonies, which would have been commonplace before the Second World War. 71 Moreover, the flash suits themselves helped with the process. Ratu Inoke Bainimara noted that the only way to tell soldiers apart was by the badge they wore. 72 This sentiment was shared by Paul Ahpoy who noted that he could only tell the other soldiers apart by the language they spoke. 73 The flash suits themselves can be seen as symbolic of the change in attitude that mixing the different groups together. When aboard the ship, the military rank transcended national boundaries. Operation Grapple meant that the perceptions of British and colonial other no longer applied, although temporarily, it was the role on the island which became more important. Therefore, the experiences of the Fijian soldiers may have been marked by fear, dread

⁶⁹ 'Ratu Sir Penaia Ganilau' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.36

⁷⁰ 'Ratu Inoke Bainimara – FRNVR 1104' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.23

⁷¹ A. Smith, 'Colonialism and the Bomb in the South Pacific', in J. Schofield, and W. Cocroft, (eds.) *Fearsome Heritage: Diverse Legacies of the Cold War*, (Left Coast Press: California, 2007), p.53

⁷² 'Ratu Inoke Bainimara – FRNVR 1104' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.24

⁷³ 'Paul Ahpoy – FRNVR 1140' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.30

and a feeling of deception on part of the British, but the nuclear experiments allowed for a space for the soldiers to transcended colonial boundaries. Operation Grapple helped change Christmas Island into a place where it was not necessarily nationhood which divided people but military rank.

However, this was not to last. As the experiments went on, the Fijians faced 'othering' in a similar way as the Gilbertese officers did in Oulton's description. The inequality between the British and Fijian military personnel grew over the ten-month period on Christmas Island. Although there was inequality with pay and the amount of time spent on duty, ⁷⁴ perhaps the starkest noted was regarding safety procedures. Initially, flash-suits were given to every member of the crew on the ship which was sailed out to witness the explosions, and they acted as an equaliser between the different groups of military personnel present. Ratu Inoke Bainimara noted that the only way to tell who the other soldiers apart was by the badge they were wearing. ⁷⁵ This sentiment was shared by Paul Ahpoy who noted that he could only tell the other soldiers apart by the language they spoke. ⁷⁶ Perhaps the flash suits themselves were symbolic of the change in attitude that mixing the different groups together. When aboard the ship, the military rank transcended national boundaries. Operation Grapple meant that the perceptions of British and colonial other no longer applied, although temporarily, it was the role on the island which became more important.

However, this did not last. With pressures from the metropole to produce a controlled megaton blast, according to the Fijian veterans of the later experiments, safety procedures became relaxed. Pita Rokoratu recalled that they "just wore out normal daily working clothes. There were long pants, long sleeved shirts, hat and boots. That was all [they] wore". ⁷⁷ Epi Ratu also shared noted something similar recounting that "there was nothing else to protect [them] like a safety helmet or something to protect [their] ears", which was not the case for their British counterparts. ⁷⁸ Initially,

⁷⁴ 'Josera Vueti - RFMR 19565' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), pp.45-46

⁷⁵ 'Ratu Inoke Bainimara - FRNVR 1104' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.24

⁷⁶ 'Paul Ahpoy - FRNVR 1140' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.30

⁷⁷ 'Pita Rokoratu - FRNVR 1196' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.41

⁷⁸ 'Epi Ratu - FRNVR 1257' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.43

military rank may have superseded nationality, though this was not the case toward the end of the programme as the safety of the Fijian soldiers became less of a priority. A common feature of British Imperialism had long been the othering of other groups. However, this was more common in the pre-war era. In the late 1950s, the Empire was beginning to disintegrate, and the outward notion of othering was much less common. Operation Grapple may have transformed the colony into a place where military rank became more important than nationhood, but this faded as the pressure from the metropole for a functioning megaton weapon mounted and older attitudes came to the fore. As the experiments went on, Christmas Island's colonial roots resurfaced with attitudes toward the Fijians, much like how they did with the Gilbertese Oulton interacted with.

The Remote Island with Oppressive Weather

Aspirations for power may have shaped the Gilbert and Ellice Islands by affecting their symbolic nature and transforming them into a place where new bonds could form but it is also worth considering how the islands in turn affected such aspirations for power. One such example is the remote nature of Christmas Island. Even today, the republics which came of the Gilbert and Ellice Islands after independence, Kiribati and Tuvalu, are some of the most geographically remote nations on Earth. ⁸⁰ The remote nature of the islands affected the morale of the British who came there in the 1950s. Oulton noted that telephone communications with the outside world were infrequent and patchy. ⁸¹ The infrequent contact with the outside world may have affected the way he approached Operation Grapple by spurring him on to bring successful results so that he, and the other officers, may have been offered some respite, and return to the life he left behind.

Although, he also noted that the morale was high despite separation from families. 82 Oulton may have been playing down this aspect of life at Christmas Island as further missions were planned beyond Grapple Z. The success of the Grapple series would have shown the government that he was a capable leader that could excel in a

⁷⁹ As is part of the argument presented in E. Said, *Orientalism*, (New York: Pantheon Books, 1978)

⁸⁰ D. Scarr, A History of the Pacific Islands: Passages through Tropical Time, (Surrey: Curzon Press, 2001), p.12

⁸¹ Oulton, Christmas Island Cracker, (1987), p.204

⁸² *Ibid*, p.202

matter of the utmost importance. Moreover, when writing after his retirement in the mid-1980s, he was most likely aware that a state of poor morale would have reflected poorly on him and his leadership. Downplaying the negative aspects was perhaps a way of saving face and giving the impression that he was a strong and effective leader both in the 1950s and in the 1980s. Therefore, the remote nature of the islands affected Oulton's aspirations for power by lowering morale of the officers he oversaw, which may have been a contributing factor to his desire to succeed as he would have felt the effects of the lack of outside communication as well. In turn, he downplayed the effects it would have had as it could have reflected poorly on him and his ability to lead an issue which was of such importance to the British government.

Furthermore, the remote nature of the islands leading to low morale was also reflected upon in Hubbard's account of the experiments. He recounted that there were long periods of time spent along and there was often very little to do when he was not working. In the seventh chapter of his autobiography, he commented that "boredom in the evenings, after a while, was the problem". 83 He remembered bringing a paint by numbers set but commented that it wasn't enough to entertain him for very long and that there was little alternative. 84 Although the islands became a place for Hubbard to advance his career, and further his nation's prestige, they offered very little fulfilment out of that. Perhaps when reflecting on Operation Grapple, he realised that these aspirations were not enough to offer him a fulfilling life. His primary aim for going to Christmas Island may have been to further his career goals and, in turn, fulfil the aspirations for the British government, but this was not enough to sustain him over the entire period he was based at Christmas Island.

The metropolitan government chose the islands because their remote nature meant little potential backlash both from a domestic and international level. ⁸⁵ Those planning the experiments in London had little interest in the isolated colony outside of their function to fulfil the megaton mission. The central government and Grapple Task Force had little interest in the morale and wellbeing of the military personnel, outside of the effects of radiation exposure, which may explain why it was never discussed. Hubbard's personal aspirations shaped the island by changing its symbolic nature to

⁸³ Hubbard and Simmons, Operation Grapple, (1985), p.100

⁸⁴ Ihid

⁸⁵ Macdonald, Cinderellas of Empire, (1982), p.75

the centre for the development of a nuclear deterrent and a place for career progression, but the islands did influence these aspirations as well. The small and remote nature of the Gilbert and Ellice Islands meant they offered little in the way of entertainment. Therefore, the islands narrowed his focus toward these aspirations rather than offering a fulfilling life and showed the limits of such aspirations as they were only a small part of Hubbard's life, which he may have not realised until he was writing his autobiography decades later.

The low morale felt by many living on Christmas Island did not solely come from a lack of recreational activities but also the scarce resources also caused by the remoteness of the islands. Simply put, there were not enough food, clothes, and medical supplies to go around. In his autobiography, Oulton makes frequent references to the lack of resources and notably compared the facilities there to that of a "small industrial town". ⁸⁶ The periods of low morale may have owed much to the lack of recreational activities but also of the dearth of basic necessities. To carry out the experiments, a large population increase was required which was not sustainable for such a small and isolated island. Operation Grapple helped shape the space it took place in by stretching the resources the islands had to offer beyond breaking point with the dramatic influx of people they had to support.

Yet, it went further than this. Much like with Hubbard's complaints of a lack of infrastructure beyond those needed for the experiments, the metropolitan government were perhaps more focused on the experiments than the provisions for those carrying them out. The inconveniences caused by using Malden Island as a place to house the commanding officers demonstrates the mindset of those back in the metropole. They were completely focused on the development of the megaton bomb with little consideration for anything else when it came to those on the ground. This is perhaps why such issues were not discussed until much later in the planning process. Infrastructure for the new accommodation was raised as early as October 1956.⁸⁷ By contrast, it was not until December 1957 that the issue of food and water supply was

⁸⁶ Oulton, Christmas Island Cracker, (1987), p.162

⁸⁷ 'Telegram from the High Commissioner for the Western Pacific to the Secretary of State for the Colonies, 8th October 1956', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/238, f.23

raised by the Fijian military. ⁸⁸ Though, this would be expected from the British metropolitan government as their concerns were with geopolitical stability rather than the comfort of soldiers in a remote colony. However, this mindset extended to Oulton and his peers. At the time, he was most likely concerned with meeting the wishes of his superiors in London rather than ensuring the wellbeing of the officers he oversaw. When it came to plan the finer details of the mission, the distribution and flow of resources was in his portfolio, although he did not really acknowledge this in his autobiography. His lamentation of the lack of resources leading to low morale at times may have come from writing in retrospect. Writing some decades after the event would have allowed him the space to reflect on the causes of low morale. Overall, the remoteness of the Gilbert and Ellice Islands affected aspirations for power by highlighting then narrow focus of Whitehall and lowering morale on the islands themselves.

The scarce resources did not only lead to low morale, but also a change to the demographics of those on the island. Due to the need for basic resources, such as food and water, a lot of these good were imported, meaning there was a constant flow of people. Little is known about the transient population as they are largely absent from the body of sources from the different governmental departments, military, and commissioners in the Pacific. However, Oulton wrote about them in his autobiography. He noted that fresh water supply was an issue and the task force had to rely on navy ships from various nations to import it. ⁸⁹ Further on in his account, he noted that the experiments relied on cooperation from the West, ⁹⁰ not just for scientific input but for the basics as well. Many new faces were required to bring the resources needed to sustain the long-term population. The aspiration for a functioning megaton weapon may have changed the demography of the islands with the British making up a majority of the population for the first time in the history of the Gilbert and Ellice Island Colony.

Yet, it was not as simple to view this new population as homogenous. With the more permanent population, there was also a transient population required to sustain them. International cooperation was paramount to the success of the experiments (See

⁸⁸ 'Telegraph from the Colonel Commanding Fiji Military Force to the Ministry of Supply, 18th December 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.235

⁸⁹ Hubbard and Simmons, Operation Grapple, (1985), p.67

⁹⁰ *Ibid*, p.172

chapter III). The ships transporting the goods primarily came from Australia and New Zealand. 91 Historically, the British had left the two Pacific dominions to run the smaller colonies. Yet, this was often accomplished from afar. The scarce resources forced changes in the remote islands as it led to both low morale and a new stream of resources from other nations to sustain the more permanent population. In turn, Operation Grapple shaped the Gilbert and Ellice Islands by transforming the demography of the islands with the influx of British people, but also brought with it a transient population from nearby colonies. The islands shaped aspirations for power by furthering the need for international cooperation. The mission would not have been successful if it were not for other nations helping to sustain the long-term population.

It was not just the remote nature of the Gilbert and Ellice Islands that shaped British desire for a functioning hydrogen bomb. The environment itself played a role. Hubbard's first impression of the island was that it was barren due to the environment not encouraging the growth of much vegetation in the island's centre. 92 He may have wanted to go there for various reasons, such as the advancement of his career and national prestige, but he was not too keen on where he had to go in order to achieve these goals. Moreover, he noted the appalling weather conditions, such as the constant storms and tropical heat. The "uncomfortable weather conditions [...] made life made life uncomfortable for all concerned" he wrote about the later part of his post at Christmas Island. 93 Toward the end of his autobiography, he wrote that the tropical conditions made Grapple Z difficult to go ahead with. 94 The difficulties of the final experiments demonstrate how the environment shaped the experiments as they were weather dependent. The islands were prone to tropical storms and the event of rain meant that the experiments would have had to have been delayed. Hubbard saw Christmas Island as a small barren island that was oppressive due to the environmental conditions. This would have exacerbated the boredom felt outside of his military duties. Due to the small size and remote nature of Christmas Island, there was no infrastructure for things such as sport, radio, and other leisure activities. The

⁹¹ *Ibid*, p.67

⁹² *Ibid*, p.39

⁹³ *Ibid*, p.113

⁹⁴ *Ibid*, p.118

oppressive environment would have made him, and the rest of the military personnel, uncomfortable in their boredom.

On top of this, the experiments were weather dependent, which meant that the aspect of their time which gave any satisfaction on Christmas Island could have been held back by the climate. The environment shaped Hubbard's aspirations for power as they were dependent on it. Christmas Island may have been transformed into a place for personal and national prestige, but technological development was no match for something as basic as the weather conditions present in the South Pacific. The setting of the experiments shaped both Hubbard and his nation's aspirations for power by narrowing their focus entirely on Operation Grapple and dictating when the experiments could go ahead, if at all.

In addition, the climate and location of the islands shaped the experiments but there were profound changes to the islands in the form of environmental damage. It is difficult to separate the people of the South Pacific from the islands they inhabited. Many of the testimonies from Fijian veterans had environmental themes to them. Ravuama Vakatuturagania remembered Christmas Island as being a barren place that had already suffered major damage by the time he arrived to help construct some of the buildings. Malakai Niubasaga also had similar observations as he noticed that everything was black, and black up to 60 miles away from where the bombs were actually dropped. The shock is understandable, especially when considering Christmas Island would not have been too dissimilar to those in Fiji. The wildlife was also noted by Epi Ratu, who recalled the "burnt and dead birds" between 1958 and 1959.

The commanding officers were aware of the damage that was being done in the pursuit of a megaton bomb. Epeli Cama recounted the British showing them a video, which stated the South East portion of the island was off limits due to the

⁹⁵ D. Worster, 'Doing Environmental History', in D. Worster, *The Ends of the Earth: Perspectives of Modern Environmental History*, (Cambridge: CUP, 1988), p.299

⁹⁶ 'Ravuama Vakatuturagania - RFMF 19643' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.50

⁹⁷ 'Malakai Niubasaga - RFMF 19765' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.58

damage caused by the bombs of the earlier tests. 98 The diet was also entangled with the environment of Christmas Island. Eating contaminated fish was commonplace, 99 whereas Emori Ligicia noted that the "military had all the power to stop [them]. They knew the many effects of the bombs." Many of the veterans see being in the noxious environment as being the cause for the health issues faced in subsequent decades. The British possessing knowledge, and apparent apathy toward, the environment that the lower ranking officers had to inhabit added to the perception of the Empire being irresponsible and careless. British Imperialism was remembered as being reckless and uncaring about the islands themselves as well as a those who had to live there. Therefore, it becomes difficult to separate the islands from the Islanders as imperial policy seemed to have little regard for both of them. Overall, Operation Grapple had a profound impact on the Christmas Island as it led to environmental damage and represented a disregard to the environmental damage in the 1950s as long as it was the megaton bomb with was the most important thing.

Conclusion

British aspirations for power hinged on the nuclear bomb in the late 1950s, as evening out the Cold War was a top priority for the British government. This had a profound impact on the Gilbert and Ellice Islands. The most obvious impact being the environmental damage caused to the region through violent and destructive weaponry being tried for the first time there. However, in order for the mission to be completed in a short timeframe, a lot of people across various military and scientific departments were needed. The islands affected how the experiments were run, as they were weather dependent, and most of the resources needed to be imported. The scarce resources and small area contributed to periods of low morale as there was little space for infrastructure for leisure activities in the soldiers' free time. It also led to infrequent contact with the outside world. All of this combined meant that periods of low morale were inevitable. Although, this aspect is often downplayed as it may have reflected

⁹⁸ 'Epeli Cama - RFMR Engineers 19318' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.56

⁹⁹ For example, 'Osaia Colelala - RFMR Engineers 19679' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.57

¹⁰⁰ 'Emori Ligicia - RFMR 19612' in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi*, (1999), p.51

poorly on those writing the accounts and the lack of nuclear war afterwards may have demonstrated the efficacy of the nuclear deterrent.

In turn, the experiments affected how the islands were perceived as they had different meanings for various people. When examining the testimonial and autobiographical accounts the impact Operation Grapple had on the islands becomes clear. Many of them discuss the small and remote nature of the islands. One the one hand, this meant that the scarce resources Christmas Island could produce were stretched to breaking point. On the other, this helped to bring people together. Hubbard and his crew became like family, which may not have been as likely in another context. Oulton also extended this view by recounting that the bonding that took place transcended departments and led to collaboration which would not have taken place if not for the military's increasing reliance on the scientific community. However, it was not only new relations between departments that were forged on Christmas Island. The increased presence of the British in the islands meant that the relationship with South Pacific Islanders altered. The Fijian military proved to be invaluable to the Grapple Task Force as they made up the bulk of the lower-ranking officers involved in Operation Grapple. Initially, the Fijians recalled their experiences interacting with the British officers positively as they were treated with the same respect as British officers of the same ranking. Operation Grapple transformed Christmas Island into a place where the lines of division were based on the position in the military rather than nationhood.

However, this was not to last. As the experiments went on, the amount of safety equipment depleted which led to anecdotes about the British soldiers being given preference when distributing such equipment. Christmas Island may have been a place where rank mattered more than nationhood, but this ultimately had its limits. A common theme of colonialism was divisions based on ethnic, and national, grounds rather than job status. This seemed to lessen during Operation Grapple but did not entirely disappear. When it came to discussing the British Empire retrospectively, the Fijian accounts offer an interesting insight. By a minority, the British bomb was seen as a force for good as they provided a balancing force in the world which prevented a nuclear war in the 20th century. However, there were plenty who remembered the British Empire as irresponsible and negligent, which caused long-term health issues for the remainder of many lives. The Gilbert and Ellice Islands became a place where

the device which represented geopolitical relevance could be witnessed first-hand but it came to represent loss and lifetime of issues for the husbands and children of the widows of the men who were posted at Christmas Island.

Overall, when looking at the link between Operation Grapple and British Imperialism, the examination of space and place shows the changing nature of power and how the Britain, and its colonial subjects, responded to it. Christmas and Malden Islands may have been an obvious choice as they were extremely remote, and the experiments were unlikely to meet opposition because of this. However, the islands meant much more than that. The islands altered the experiments, and in turn the experiments shaped the islands. This extended to colonial rule as the changes Operation Grapple brought ran beyond the areas outlined to the administration of the colony itself.

Chapter II

Introduction

The Gilbert and Ellice Islands had their first contact with Europeans in the 1820s but were not formally annexed until the 1880s. Since their formal annexation, the Gilbert and Ellice Islands were considered no more than a colonial backwater which provided the metropole with a modest income. 101 With the onset of Operation Grapple in 1956, the most noticeable change to the colony was the increased British presence, which had been minimal until then. This was a rather dramatic transformation, and the question of how colonial rule in the Gilbert and Ellice Island Colony was shaped by Operation Grapple. This was apparent in many obvious ways. The population increase needed to carry out the experiments meant new provisions were needed, such as housing, food, and medical care. However, with this came the question of which branch of the government was to be funding this. It was soon decided that the Ministry of Supply, a new branch of the military, as to take on much of the financial burden of the experiments. This, in turn, raised issues of who administered the colony, its inhabitants, as well as the exchange of information. This then led to confusion and tension between the different departments, most notably the Ministry of Supply and the Colonial Office, who the commissioners that lived in the South Pacific answered to. Ultimately, the basis for keeping the colony in the post-war era was transformed by Operation Grapple as it became the centre for military exploits rather than economic provision. However, this was not necessarily a new phenomenon for the islanders, as the Second World War saw Japanese annexation, followed by American liberation, both of which saw a military administration of the islands. Therefore, it was only a big change on the part of the British, rather than the region itself.

The tensions between the newer branches of the military and the established Colonial Office did not necessarily extend to those on the ground. Fijian soldiers were moved to provide the manpower necessary to carry out the experiments, many of which noted that there was an atmosphere of camaraderie and that the British and Fijian soldiers integrated well. Perhaps the otherization between British and colonial subject lessened as they were part of the same military complex which formed the new

¹⁰¹ B. Macdonald, Cinderellas of Empire: Towards a history of Kiribati and Tuvalu, (Canberra: ANU Press: 1982), p.75

foundation of the Gilbert and Ellice Islands. However, this integration of the different forces hinged on proficiency in the English language, which was preferred by those planning the experiments. Overall, the basis for continuing colonisation in the region may have shifted but there were still some features which remained, of which the preference for speaking English was emblematic. Moreover, there were international repercussions of Operation Grapple. The colony briefly became the centre for the South Pacific Empire. Many of the other islands were used to house scientific equipment, some of which were not under British sovereignty. The experiments were a Pan-Pacific operation, and the desire to develop a megaton weapon was more important to the British government than where the boundaries between colonies lay. Operation Grapple was not contained by pre-existing colonial boundaries. The mission transformed colonial rule in the Gilbert and Ellice islands by making such boundaries more permeable.

Using islands which were not under British sovereignty also suggested that these boundaries were less relevant on a global scale as Britain developing their nuclear arsenal also had ramifications in the ongoing Cold War. The United States may not have directly aided in the success of Operation Grapple but would benefit from its success as Britain was a strategic ally in the European theatre of the Cold War. Also, once the experiments were over, the Gilbert and Ellice islands became symbolic of British power on a global stage. They were to be the centre of further experiments before the Test Ban Treaty in 1963 prevented them. This transformation saw the continued subordination of colonial subjects as well as the continued status of fluid colonial boundaries. The nuclear experiments also ushered in a new era of British imperialism by introducing military rule of the colony, with undefined boundaries. Although this was not a permanent change, it did shape the mindsets of those in power as a new form of imperialism in the region offered a chance to maintain geopolitical power in an era of uncertainty.

The continued presence of the United Kingdom in the South Pacific also demonstrated the limits of the 'East of Suez' movement. The British Empire was generally moving from a state of formal imperialism to becoming the Commonwealth known today. However, the new military empire in the South Pacific, with the intention of furthering military technology, shows that the British government were

not necessarily committed to decolonisation as much as they were committed to maintaining power and hegemony on the global stage. Operation Grapple ultimately shaped colonial rule as it offered a new form of imperialism in the region one with an increased British presence that offered them a platform to demonstrate their global relevance in the post-war era. Overall, Operation Grapple had a profound, if not short-lived, impact on colonial rule in the Gilbert and Ellice Island colony that extended beyond the tiny islands where the bombs were dropped.

The Improved Colony

In order to proceed with Operation Grapple, better provisions were needed to ensure its success, especially considering that the population of the islands was going to increase dramatically with an influx of white British soldiers and workers from Fiji. Prior to the Second World War, there were very few buildings or roads on the islands, meaning that the infrastructure needed to support long-term residents needed to be improved. This was one of the first issues to be raised in a planning meeting on the 8th October 1956. When discussing the forthcoming experiments, the Resident Commissioner of the Colonies stated that new medical staff were needed along with new housing for the military, and an extension to the school. The majority of these measures eventually came to fruition, ¹⁰³ meaning the Operation Grapple shaped the colony in the early years as it offered a chance for new infrastructure which had not previously been seen in the colony on this scale.

However, there was much doubt over who would be bankrolling this exactly. Normally, any funds would have come from the revenue generated by the colony, or from the Colonial Office if needed. When discussing the issue of financing the development needed for Operation Grapple, the Resident Commissioner suggested that the military should be the ones to pay for this as the new accommodation and medical staff were principally there for the military's benefit. ¹⁰⁴ This was a sign of things to come in regard to the planning of Operation Grapple as uncertainty within

¹⁰² 'Telegram from the High Commissioner for the Western Pacific to the Secretary of State for the Colonies, 8th October 1956', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/238, p.23

¹⁰³ Macdonald, Cinderellas of Empire, (1982), p.172

¹⁰⁴ 'Telegram from the High Commissioner for the Western Pacific to the Secretary of State for the Colonies, 8th October 1956', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/238, f.24

the different administrative departments would become a key part of the experiments. The nuclear tests shaped colonial rule of the Gilbert and Ellice Islands as it, at least theoretically, improved the facilities available on the islands. It is unclear exactly whether the islanders themselves benefited from this change. However, with the development of the colony, the administration of the islands changed as the economic uncertainty arose, which would last for years to come.

The economic confusion that arose with Operation Grapple also extended to the administration of the colony which. At times it was equally as unclear who was in charge of the islands. Prior to the disruption of the Second World War, the Gilbert and Ellice Colony was administered by a Resident Commissioner who reported to the High Commissioner of the Western Pacific, based in Fiji. 105 However, this changed with the increased interest from the British Government in regard to using the islands for Operation Grapple. Although officially the commissioners were still running the colony, the Ministry of Supply was in control of the experiments, which effectively put them in charge of the colony. The Ministry of Supply was an organisation which supplied the armed forces with any necessary equipment from 1939-59, including the development of any nuclear weaponry. 106 In a letter on the 25th August 1957 to the colony to the Secretary of State for the Colonies, the Resident Commissioner expressed his concerns over the administration of the colony. He discussed how the new air strips and military bases were making the colony difficult to administer due to their permanent nature disrupting the collection of copra supply. 107 His frustration most likely came from the lack of consultation regarding the building of such structures. This marked a change in the dynamics of the running of the colony. The planning and development were no longer left to the commissioners based in the Pacific, but a division of the military based in London. The Resident Commissioner ended his letter by suggesting that the military purchase Christmas Island from the government and that he essentially become an administrator. 108

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¹⁰⁵ B. Macdonald, *Cinderellas of Empire: Towards a history of Kiribati and Tuvalu*, (ANU Press, Canberra: 1982), p.77

¹⁰⁶ J. Baylis and K. Stoddart, *The British Nuclear Experience: The Role of Beliefs, Culture and Identity*, (Oxford: OUP, 2015), p.34

¹⁰⁷ 'Telegram from the Resident Commissioner of the Gilbert and Ellice Island Colony to the Secretary of State for the Colonies, 25th August 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/282, f.94 ¹⁰⁸ *Ibid*

The extent of the impact on the lives of the native Gilbertese population remains unclear. Although the suggestion of military purchase may have been written in frustration, it is also worth noting that he was writing in confidence to the Secretary of State for the Colonies. ¹⁰⁹ The Secretary of State for the Colonies was a senior position in the government at the time, so airing these concerns with him implies that the Resident Commissioner's concerns over the administration of the colony were serious and the power dynamic within the Gilbert and Ellice Islands had an uncertain future in the summer of 1957. Therefore, Operation Grapple altered the structure of the colony in which the bombs were dropped as the administration became uncertain as it shifted from the established commissioners to the military based at the metropole.

Also, the Colonial Office also shared the view that the Ministry of Supply as being in charge rather than the commissioners themselves. Prior to the development of a nuclear arsenal, the colonial office had little interest in the Gilbert and Ellice Islands, viewing them as a backwater that the management of which could be outsourced to commissioners based in the Pacific. 110 In a draft letter from the Colonial Office in 1957, D. J. Derx wrote how the department had been discussing the organisation of Grapple X with the Ministry of Supply but had failed to notify the Resident Commissioner of any plans being put in place. 111 Derx discussed the importance of involving the commissioner in these discussions, and how the Colonial Office was going to urge the Ministry of Supply to start consulting the existing administration present on the islands more. 112 Operation Grapple may have caused a schism between the elites in charge of the islands, but the Colonial Office was keen to bridge the divide. However, Derx cited the failure to keep the Resident Commissioner in the loop on the "speed with which [Grapple X] is having to be mounted". 113 When considering this in the light of the power dynamic moving in a way against the Resident Commissioner, the reason he may have been uninformed could have been an oversight. The administration of the colony not only moved away from the Pacific to London but perhaps also in the minds of the branches of the British government themselves, which suggests a greater

¹⁰⁹ Ibid

¹¹⁰ Macdonald, Cinderellas of Empire, (1982), p.75

¹¹¹ 'Draft Telegraph from the Colonial Office to the Ministry of Defence, 6th September 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/282, f.34

¹¹² Ibid

¹¹³ *Ibid*

strategic importance of the colony in the late 1950s. The Resident Commissioner may not have been fully informed because of his dwindling influence in the region. Therefore, a major change that Operation Grapple elevated the status of the Gilbert and Ellice Islands within the larger framework of a shrinking empire. The colony had temporarily become one of the most important to the metropolitan government. Whereas the role of the importance of those administering the colony shrank in conjunction to the growth of status for the colony.

Moreover, the Ministry of Supply were given financial control of the experiments, which gave them a say in the running of the colony during this period. In a letter from the Grapple Task Force on the 31st December 1957, Guy Western, a Captain for the Vice Air Marshall, wrote to the Colonial Office clarifying that the Ministry of Supply "agreed to meet the cost of pay and allowances of these personnel while they are employed on Christmas Island". ¹¹⁴ Although he only referred to responsibility for the military personnel, they did make up the majority of the population for the duration of Operation Grapple meaning that the Ministry of Supply were effectively given control of the colony for as long as they needed it.

However, this control was always constrained by the metropole. In a letter from 10th June the following year, the Treasury was displeased with paying for a substantial increase in Fijian soldiers on the island and a "less careful regard" for the Fijian budget had become necessary. With the financial control of the colony, their attention was firmly on improving conditions for the military personnel rather than the native population. Operation Grapple may have improved the infrastructure on the islands, but this was mainly for the betterment of the military who had to live there, meaning that these developments were made with the short term in mind. This is emblematic of the way the British government approached their nuclear arsenal, and their international position, in the 1950s. Financial control was given to the military as long as it needed it, which was primarily for a period of less than five years, which is what caused the Colonial Office to see their position as becoming increasingly irrelevant

¹¹⁴ 'Telegram from I. de L. Radice, Treasury Chambers, to G.M.P Myers, Ministry of Supply, 13th December 1957, Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/514, f.244

¹¹⁵ 'Telegram from G.M.P Myers, Ministry of Supply, to J.C. Leesing, Treasury Chambers, 10th June 1958, Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/514, f.157

and subsequent confusion arising. Operation Grapple shaped colonial rule of the Gilbert and Ellice Islands by handing financial control to the military and leading to the myopic view of how the colony could be administered.

However, this did not necessarily mean that the Colonial Office was completely disregarded. When the Task Force Committee decided to use Fijian soldiers, the Colonial Officer saw themselves, at least initially, as responsible for the Fijians present on Christmas Island. In a draft letter on the 19th May 1956, Derx asserted that "the government of Fiji should be our responsibility". 116 In the initial stages the Colonial Office took responsibility for negotiating with the Fijian government to get the required military personnel. Although the responsibility for the Fijians would eventually be transferred to the Ministry of Supply, the Colonial Office still retained responsibility for getting the officers to Christmas Island in the first place. It is unclear whether Derx envisioned this responsibility sustaining until the end of the mission, but it furthers the point that the Colonial Office may have also been thinking in the short-term when it came to the administration of the colony. The migration of Fijian forces could have had potential long-term ramifications for the Pacific islanders as they may have been required to stay on the island into the 20th century as the experiments continued. The improved infrastructure may have needed to become permanent, but this was never discussed. Ultimately, Operation Grapple shaped colonial rule by offering new resources to support a large-scale population increase. However, much of this was temporary, which is emblematic of how the Colonial Office, the Ministry of Supply, and the British government viewed the nuclear experiments: as a short-term issue.

Britain needed to update its nuclear arsenal to remain relevant on the global stage. Their nuclear technology was considered outdated by the late 1950s, ¹¹⁷ which meant that Britain was on the verge of losing its geopolitical influence and ran the risk of falling behind in the developing Cold War. The need to act quickly led to a myopic approach to the Gilbert and Ellice Islands in the early stages of Operation Grapple, which is perhaps why there was much confusion over who exactly was in charge of

¹¹⁶ 'Draft Letter from D.J. Derx, Colonial Office, to Holland, Ministry of Supply, 19th May 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/514, f.22

¹¹⁷ L. Arnold, *Britain and the H-Bomb*, (Basingstoke: Palgrave Macmillan, 2001), p.138

administering the colony. The British government did not necessarily envision a long-term military base until the later stages of the nuclear experiments. Infrastructure may have been put in place, but it was for the military and success of the nuclear experiments, rather than developing the colony in the long run. It was the attention on the military which led to the basis for colonisation shifting in the post-war era.

The Military Colony

Operation Grapple also changed the basis for the continued possession of the Gilbert and Ellice Island Colony. The British had upgraded the status of the colony from that of protectorate to Crown Colony in 1892 partly due to growing German influence in the region but also because it proved to be economically valuable with the copra trade. This remained the case until the arrival of the Grapple Task Force in the 1950s. When the first wave of Grapple tests was over, the acting High Commissioner of the Western Pacific noted that the continuation of experiments would cause "dislocation of the colony's economy and serious loss of revenue", with the Copra trade having an estimated value of £30,000 at the time. 119 Although this telegram was addressed to the Secretary of State for the Colonies, it was also distributed directly to the treasury, which was unusual for correspondence regarding Operation Grapple. The acting High Commissioner was perhaps trying to persuade the central government that the experiments would make the colony unsustainable in regard to their original purpose.

In a different telegram, the new High Commissioner also noted that the colony's resources were unable to provide for the expected influx of soldiers. ¹²⁰ The High Commissioner may have been threatened by the power balance shifting toward the Ministry of Supply and be trying to remind the central government of the reason for colonising the region in the first place. However, a change Operation Grapple brought to the colony was the basis for colonising the islands. The function of the colony changed from providing the British government with a small income to

¹¹⁸ D. Scarr, A History of the Pacific Islands, (Surrey: Curzon Press, 2001), p.130

¹¹⁹ 'Telegram from the Acting High Commissioner of the Western Pacific to the Secretary of State for the Colonies, 16th August 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/282, f.127

¹²⁰ 'Agenda for Meeting of Nuclear Weapons Trials Executive on Friday, 4th September 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/284, f.71

becoming a centre for scientific excellence. The experiments went ahead despite the economic dislocation it would eventually cause. The change of the basis for continuing colonisation led to the transfer of power from the commissioners to the Ministry of Supply. Once the rationale for proceeding with the colonisation of the islands became keeping them for the sake of military experiments, it only made sense that the military itself was given the power to preside over the colony. Therefore, Operation Grapple not only shaped the way the colony was administered but the very basis for claiming ownership of the islands in the post-war era.

Once the final round of experiments had finished, the future of nuclear technology as well as the future of the islands themselves also hanged in the balance. As whether any further experiments would take place remained ambiguous, the Colonial Office wanted the basis for continuing British sovereignty in the colony to return to an economic one, as it had been prior to the Second World War. ¹²¹ However, the military was not as keen to relinquish control so soon. As the prospect of experiments beyond Grapple Z were likely, a garrison was to remain on the island until further notice. ¹²² Therefore, the end of Operation Grapple did not mark an end of a military presence on the islands.

Since Japanese expansion during the Second World War, the islands had seen a continuous military presence, albeit from different countries. The prospect of using the islands as a test site in the future, meant that there was justification for the British military to maintain a strong presence into the 1960s. In a letter in January 1959, the Ministry of Supply outlined different states of activity on the island going forward. The plan outlined is one of military presence correlating to the level of nuclear activity in the future. As the military presence lessoned, the plan was for the economic infrastructure to become more prominent in the running of the colony. ¹²³ Therefore,

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¹²¹ 'Division of labour for non-established tasks, Notes by D.A.W. Trials from the Ministry of Supply, 25th August 1959' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/284, f.80 and 'Telegram from D.J. Derx, Colonial Office, to G.M.P. Myers, Ministry of Supply, 18th August 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/284, f.82

¹²² 'Reduction of the Christmas Island Base, Note by D.G.A.W, Ministry of Supply, 25th August 1959',Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/284, f.74

¹²³ 'Memorandum from the Ministry of Supply on the Use of Gilbertese at Christmas Island, 30th January 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), *National Archives, London*, CO1036/284, f.101

the future of the colony appeared to be one that merged the pre- and post-war underpinnings of the sustaining colonial status. The blending of an economic and military base is perhaps emblematic of the political climate of the time. The need for a strong economy and technological parity were key for superpower status in the post-war world. Ultimately, the British government wanted to sustain this, and the former colonial backwater may have represented a possible future for this. Moreover, this new proposal suggests that neither department in the government envisioned decolonising the region as long as it was both economically viable and a place to test nuclear weapons when needed. Therefore, Operation Grapple shaped the future of colonial rule in the Gilbert and Ellice Islands to one of continued British presence, whether colonial, military, or a mixture of the two whenever required.

However, it is also worth taking view the administration from a global perspective. In 1942, the Japanese annexed the islands and administered by the military until the American military liberated the islands during their 'Island Hopping' campaign. 124 Due to the ongoing war during Japanese annexation, the islands became strategic as they could prevent foreign powers from reaching the mainland. The Japanese military, therefore, was left in charge of administering the islands as part of the war effort. 125 This was perhaps the beginning of military rule on the Gilbert and Ellice Islands. Once liberated by the United States, many of the islanders received the Americans well, and saw their rule as an improvement as new roads, buildings and airstrips were built, which aided economic recovery after the war.

It remained unclear who precisely had sovereignty for some time following the war, ¹²⁶ the British government's readiness to use Christmas and Malden Island suggests that they reassumed they had sovereignty over the islands at some point. Consequently, the Gilbert and Ellice Islands had a continuous, foreign military presence for over a decade before the Grapple Task Force arrived. Therefore, Operation Grapple shaped colonial rule by providing a new form of rule, but this was nothing new to the Gilbertese people. The transfer of power to the military was only a

¹²⁴ D. Denoon, S. Firth, J. Linnekin, M. Meleisa and K. Nero (eds.), *The Cambridge History of the Pacific Islanders*, (Cambridge: CUP, 1997), p.296

¹²⁵ B. Macdonald, Cinderellas of Empire: Towards a history of Kiribati and Tuvalu, (ANU Press, Canberra: 1982), p.147

¹²⁶ A. Smith, 'Colonialism and the bomb in the Pacific', in J. Schofield and W. Cocroft (eds.), *Fearsome Heritage: Diverse Legacies of the Cold War*, (London: Routledge, 2007), p.54

change on the part of the British. The mindset of the British government may have shifted toward, what Edgerton refer to, the 'warfare state': one where all branches of the military grew, and the British state grew dependent on the military in turn. Operation Grapple was ultimately an extension of this as it was not only the British state which relied more on the military but far-reaching colonies as well. Therefore, colonial rule of the Gilbert and Ellice Islands was transformed by the nuclear experiments as the mindset of those in London became more focused on the military. The shift toward military administration of the islands was far from anything new for the Gilbertese, but it was for their colonial rulers.

However, this shift did not come without its problems. The transition of power from the Colonial Office to the Ministry of Supply caused an uneasy relationship between the two, with tensions coming from two fronts: concerns for the environment and the exchange of information. Environmental concerns were raised in letter from the 18th September 1957, D. J. Derx, noted that the main concerns of the Colonial Office regarding Operation Grapple were to ensure the safety of the inhabitants and to protect the economic interests. ¹²⁸ In the same letter, Derx noted that the nuclear experiments would interfere with the pre-existing plantations. The building and maintenance of military bases would require the land to be used for other purposes as well as the radioactive fallout contaminating the produce. The continuation of Operation Grapple threatened to disrupt the original reason for possession of the Gilbert and Ellice Islands. These concerns were raised at a planning meeting on the 8th January the following year but were put aside as the development of a nuclear bomb had to take precedent. ¹²⁹ Tensions soon arose within Whitehall.

The reason for continued colonisation was unclear during the transition from an economic basis to a scientific one. A compromise was made, as daily checks of the fish and water quality across the Pacific, albeit administered by the Atomic Weapons

¹²⁷ D. Edgerton, Warfare State Britain, 1920-1970, (Cambridge: CUP, 2006), p.5

¹²⁸ 'Draft Letter from D.J. Derx, Colonial Office, to Rogers and J.H. Robertson, Foreign Office, 18th September 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.6 and 'Draft Telegram from Rogers, Foreign Office to J. Martin, Foreign Office, 29th September 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.7

¹²⁹ 'Minutes from Meeting held at St. Giles Court on 8th January 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.67

Research Establishment, starting in Fiji. ¹³⁰ The notification was sent by the Secretary of State of the Colonies, suggesting that his role was an intermediary between those in control of the experiments, the military, and those administering them: the commissioners present in the Pacific. The Colonial Office had little say when it came to administering the checks on the quality of water and fish. All this marked a new, uneasy relationship within the various governmental departments. The Commissioners and the Colonial Office were becoming subordinate with the arrival of nuclear technology, which is perhaps why they asserted the original purpose of having the colony in September of 1957 and asking for provisions to be made in the January of 1958. Therefore, with Operation Grapple changing the rationale for ongoing colonisation, an uneasy relationship between the Colonial Office and the Ministry of Supply was forged.

Furthermore, the tensions between the two departments owed as much to the exchange of information as to the confusion over what the purpose of the colony was. It was noted that Grapple X was planned in haste, meaning that different people were left out of the loop, ¹³¹ perhaps due to an oversight. This role of the colonial administrators was not just dwarfed in the sense of their role becoming increasingly more redundant, but they were left out of the planning entirely. In a letter from the 18th October 1957 to the Secretary of State for the Colonies, the acting High Commissioner of the Western Pacific expressed his frustration of being ignored when it came to the exchange of information by ending his letter expressing his desire "to learn urgently what announcement has been made" in regard to the developments of the hydrogen bomb tests. ¹³² Also, when it came to official planning meetings, the Colonial Office also had significantly less representation than the other governmental departments, especially the branches of the military who chaired them. ¹³³ The underrepresentation

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¹³⁰ 'Telegram from the Fijian Governor to the Secretary of State for the Colonies, 11th January 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.70

¹³¹ 'Draft Telegraph from the Colonial Office to the Ministry of Defence, 6th September 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.34

¹³² 'Telegram from the Acting High Commissioner of the Western Pacific to the Secretary of State for the Colonies, 18th October 1957' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.167

¹³³ 'Minutes from Meeting held at St. Giles Court on 11th September 1957' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.238

of the Colonial Office was symbolic of how the Gilbert and Ellice islands were transformed by Operation Grapple from a colonial backwater, providing the metropole with a modest income, to a military playground where they could do as they pleased.

The commissioners may have been left out of the loop because they were not considered by the Ministry of Supply when it came to the exchange of information. The military saw the commissioners as simply administrators with no real power anymore. Therefore, a new relationship emerged as the military did not just have a monopoly on the running of the colony but the exchange of information regarding Britain's nuclear weapons programme. This dramatic change in the space of a few years led to an uneasy relationship as the Commissioners' roles were dwarfed and this exacerbation was expressed. Ultimately, the nuclear tests shaped colonial rule in the region by casting doubt onto who was responsible for issues beyond the development of a hydrogen bomb.

However, this was not the case for the military personnel. Although little has been written about the Gilbertese and their relationship with their metropolitan rulers during this experiment, the Fijian soldiers were regarded as integrating well with their British counterparts. In a memorandum sent by the Grapple Task Force concerning Fijian employees, it was remarked that they were "completely integrated with the UK forces at Christmas" island. ¹³⁴ This sentiment was held by the Fijian soldiers themselves. When speaking in the 1990s, Ratu Inoke Bainimara recalled a sense of community and that the different groups "socialised well" and "it seemed as if [they] all knew each other before meeting". ¹³⁵ Operation Grapple may have caused confusion and a communication breakdown between commissioners and governmental departments, but it opened up communication between colonial rulers and subjects in a way which had never happened before. Operation Grapple shaped colonial rule not only led to a military basis for continuing colonisation but integrated different armed forces which had little contact prior to the nuclear experiments. Previous boundaries

¹³⁴ 'Memorandum from the Headquarters Task Force Grapple concerning Employment of Fijian Army and Navy Personnel in Operation Grapple, 20th February 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.221

¹³⁵ 'Ratu Inoke Bainimara – FRNVR 1104', in Tubanavau-Salaluba, Namoce and Maclellan (eds.), *Kirismasi: Na sotia kei na lewe ni mataivalu e wai ni viti vakatovotovo iyaragi nei peritania mai Kirismasi*, (Pacific Concerns Resource Centre: Suva: 1999), p.23

that separated the British from their colonial subjects may have lessened in this new era of colonialism. Pacific Islanders may have become less of an 'other' as long as they were of service to the military.

Boundaries may have been erected between the different administrative departments during the transition toward the new military colony, but this did not necessarily apply to all levels of people present on Christmas Island. The differences between British and Fijian perhaps mattered less than in previous decades as they were both useful in ensuring the success of the development of a nuclear arsenal. Therefore, Operation Grapple shaped colonial rule in the region by removing the 'otherization' which had characterised British imperialism as long as the relevant subjects were useful to the military.

However, these boundaries were not entirely removed. There was still a preference toward those who spoke English from the colonial elites. When discussing the use of Fijian soldiers to help carry out Operation Grapple, it was decided that "some form of proficiency allowance [...] should be paid to those with a knowledge of English" in a planning meeting on the 25th March 1957. 136 Fluency in the English language may have been preferential to ensure that the experiments ran smoothly, but monetary compensation also implemented an incentive for Fijians with a more basic grasp of the language to improve. Spreading the English language has long been a major part of British imperialism, and with Operation Grapple, this mindset had firmly reached Fiji. Although in this instance, it was done through financial incentives rather than through coercion. Operation Grapple may have changed colonial rule in the region by changing the basis for continuing colonisation with a military rather than economic rationale, but the emphasis on the English language marked a sense of continuity. Communication between the metropole and the colony was key in ensuring that British power remained strong for the remainder of the 20th century. Ensuring that the subjects would remain speaking English on whilst part of the military complex was perhaps a way of ensuring colonial longevity.

¹³⁶ 'Minutes of a Meeting Held in Residence of District Officer Christmas Island of 24th March 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.177

Operation Grapple ultimately shaped colonial rule by altering what defined British colonialism. The military became the new base because that was a way of maintaining power on the global stage in the post-war era. Other than a strong economy, the superpowers of the day possessed knowledge of advanced weaponry which kept the balance of power in place. A strong military complex became key in ensuring power in the 1950s and beyond. The transition from an economic base to a military one was, therefore, vital, which meant that the dominance of the English language was also key in this new era as it ensured a successful military operation.

The Pacific Empire

Issues pertaining the development of a hydrogen bomb also extended to the collection of scientific data across Oceania. Much like with the Gilbert and Ellice Islands, the British government had little interest in their other claims in the Pacific, outside of Australia and New Zealand. Many of the smaller colonial possessions were administered by the Australian and New Zealand governments. 137 However, the changes to the level of interest in the Pacific did not end with the changes seen on Christmas and Malden Islands. Interest was also expressed in Fanning Island, which is also part of the Line Islands. On the 22nd August 1957, Vice Air Marshall Oulton asked the Colonial Office, Foreign Office and the Ministry of supply for permission to build bases with Decca stations on other islands across the Pacific, starting with Fanning Island. ¹³⁸ Oulton was the head of the Task Force for the later Grapple experiments. Although he had little vested interest in colonial affairs, he wanted to persuade the relevant departments to leverage their power to allow for more data to be collected from the radioactive fallout from the experiments. He was successful as the Secretary of State for Colonial Affairs soon granted this. 139 Such plans also extended to Fiji, with similar equipment being based there from mid-October of 1957. 140 With the use of a second colony in Melanesia, Operation Grapple became a Pan-Pacific

¹³⁷ K Pickles and C Colborne (eds.), *New Zealand's Empire*, (Manchester: Manchester University Press, 2016), p.2

¹³⁸ 'Telegram from Headquarters Task Force Grapple to F.M. Milligan, Group Captain, 22nd August 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.82

¹³⁹ 'Telegram from Resident Commissioner of the Gilbert and Ellice Islands Colony to the Secretary of State for the Colonies, 29th August 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.79

¹⁴⁰ D. Denoon, et. al. (eds.), The Cambridge History of the Pacific Islanders, (1997), p.324

programme. Fiji was perhaps no longer considered to be a separate entity, but part of the same system of Pacific colonies that could be utilised to achieve the megaton mission. Therefore, Operation Grapple did not only usher in new metropolitan interests of the Gilbert and Ellice Island Colony but the Pacific as a region. British Colonial rule was transformed in the region as the Gilbert and Ellice Islands became the epicentre as what has been described as the 'nuclear playground'. The activities there managed to elevate the islands to the status of becoming the centre for British activities in the region.

However, British geopolitical power was not without its limits. Afterall, the British still had to negotiate with the Australian and New Zealand governments to win over their continued support. Both Australia and New Zealand were independent by the late 1950s, but they still had close ties with Britain due to their alliance during the Second World War and the dominion status they enjoyed. 141 However, the Commonwealth Relations Office had to balance the public opinions of these countries with the British government's desire for a substantial nuclear arsenal. A letter from the Prime Minister's office noted that communication with the governments regarding Operation Grapple would only be done "if it becomes necessary". 142 This correspondence eventually came when the Commonwealth Relations Office requested the same level of support in Operation Grapple as they saw in the Maralinga experiments. 143 However, they also request that their plans are kept secret from the Australian public unless it became necessary in the same letter. 144 In a different telegram, from the Commonwealth Relations Office to the U.K. High Commissioners in Australia and New Zealand, the increasing unpopularity of nuclear weaponry within Australian and New Zealand society was also noted. 145 This marked a change in the relationship between the governments of the three countries. Whereas with the

W. D. McIntyre, Winging Up the British Empire in the Pacific Islands, (Oxford: OUP, 2014), p.12
 'Draft Letter from Grapple Task Force to Aubrey Jones, Ministry of Finance, 22nd June 1957',
 Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.190

¹⁴³ 'Telegram from the Commonwealth Relations Office to UK High Commissioner in Australia, 27th July 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.151

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¹⁴⁵ 'Telegram from the Commonwealth Relations Office to UK High Commissioner in Australia and UK High Commissioner in New Zealand, 27th July 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.152

Maralinga experiments, the British government were able to carry on with less consideration of balancing public opinion, in comparison to asking for support for the tests on Christmas Island.

Operation Grapple quickly became a Pan-Pacific operation. It required cooperation with both present and former colonies alike. Perhaps the megaton mission managed to transcend colonial and post-colonial boundaries as Britain had to garner support from across the Pacific in order to achieve their goal. The level of negotiation may have been different, but there is a commonality. Britain used its influence in the region to make sure that Operation Grapple was a success. Therefore, Operation Grapple managed to change the nature of colonial rule in the region by both piquing interest in the Gilbert and Ellice Island Colony as well as providing a platform for Britain to exert its influence in Oceania when needed.

Yet, the exertion of British influence in Oceania also went beyond the established colonial and post-colonial boundaries as American territories also became a key part in the British nuclear playground. With the McMahon Act of 1946, the exchange of information was severely restricted as gave the government complete control on the exchange of information as well as putting an end to international cooperation. The relationship between the two powers became strained as the British access to this scientific knowledge was stopped. This had ramifications lasting over a decade. In a report produced for the director of Operation Grapple, it was noted that information given to American authorities was on a need-to-know basis and that security measures were to remain strict when it came to allowing American ships access to the islands and the region surrounding them. The trust between the two nations was unsustainable, as those organising the experiments were as unwilling as their American counterparts to exchange information.

Moreover, their relationship remained complex with the territorial boundaries becoming blurred. In a report from 20th September 1957, it was suggested that equipment to monitor the radioactive fallout of the nuclear tests would be positioned

¹⁴⁶ M. J. Turner, *British Power and International Relations*, (2009), p.26

¹⁴⁷ 'Appendix to Annex I to C.O.S. (57)200, Operation Grapple – Communications Security Reported by Director, L.C.S.A, 9th September 1957' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.252

on Samoa and Hawaii, American territories, before consulting Washington about this. 148 The territorial lines may have become blurred as the organisation committee felt entitled to station equipment on American soil as measuring radioactive fallout took priority. Darwin has outlined four types of imperialism that Britain engaged in and this is perhaps an example of the final form: where Britain used shrewd diplomacy and investment to exert a more informal form of influence. 149 The British government was exploiting American desire for their close ally to have a functioning weapon to extend their influence in the Pacific Islands. Therefore, Operation Grapple complicated the Anglo-American 'special relationship'. The British military was unwilling to share information regarding their experiments with the United States, one of their closest allies, yet wanted to test the fallout of their experiments on American territorial possessions. Therefore, Operation Grapple shaped colonial rule in the South Pacific as it not only blurred the lines between colonial and post-colonial boundaries but managed to transcend them both. As nuclear weaponry had such an important role in the post-war era, the importance of sovereignty of the islands shrank as the nuclear arms race continued. Operation Grapple provided a means for the British to exert influence not only on other their own colonies, and former colonies, but on American territories also. Ultimately, this perhaps marked a new era of colonial rule, with the military administering the Gilbert and Ellice Islands, and the islands themselves becoming the centre of British influence within the region.

This influence could be seen when the British government had to negotiate with the Fijian government about using their forces in Operation Grapple. The Ministry of Supply did not have the authority to demand Fijian cooperation but instead had to enter a series of negotiations to ensure this. This involved incentivising the Fijian governor. On the 5th September 1958, the Sectary of State for the Colonies send a telegram suggesting that pensions would be given to the Fijian soldiers who partook in Operation Grapple. ¹⁵⁰ The minutes from a planning meeting on the 26th January the

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¹⁴⁸ 'Headquarters Task Force "Grapple" X, Operation Order No.8/57 Outlying Recoding Station, 20th September 1957' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.194

¹⁴⁹ J. Darwin, *Unfinished Empire: The Global Expansion of Britain*, (London: Penguin Publishers, 2012), p.400

¹⁵⁰ 'Telegram from the Secretary of State for the Colonies to the Fijian Governor, 5th September 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.131

following year, urged that the Ministry of Supply "take up any queries with Fiji" directly. ¹⁵¹ The planning committee for the experiments, which included the Colonial and Foreign Offices, saw Fiji as a distinct entity to be negotiated with rather than a colony which could be utilised as and when required. Operation Grapple may have influenced colonial rule in Oceania more generally by creating more fluid boundaries between separate colonies, even ones possessed by a different country, but it did not remove these boundaries entirely.

The development of a nuclear bomb took precedence over sovereignty of individual islands, and how they were governed prior to the Second World War. However, this still required a great degree of international cooperation. Fiji itself was still a British colony, but the 1950s saw a wave of colonies wanting greater autonomy, and even independence. Perhaps the British government were cautious of Fiji wanting this, and no longer being firmly under British control. Therefore, negotiations were a part of ensuring Fijian cooperation, who were seen as a separate entity to the Gilbert and Ellice Islands. Therefore, Operation Grapple shaped colonial rule in the Sothern Pacific by dissolving but not removing colonial boundaries. Fijian soldiers were still regarded as a resource to be utilised, but the Fijian governor was still someone that needed to persuade to allow access to said resources.

Moreover, it is worth considering the Gilbertese population as well. Afterall, the envisioned future of the region had implications for them. The Colonial Office recognised the imposition that constant evacuation would have on those that called the island home. The Colonial Office also raised concerns over the health and wellbeing of the islanders and the state of their homes being so close to the blast. More thorough health checks were preferred by the department to ensure that there were no long-lasting damages to the colonial subjects, which would have also been useful to knowing the potential impact hydrogen bombs could have had in the event of a nuclear war. It is worth noting that the Colonial Office, rather than the Ministry of Supply,

¹⁵¹ 'Conclusion of a Meeting held on Monday 26th January 1959 at St. Giles Court to decide the method of meeting claims for the employment of Fijian Naval and Army Personnel at Christmas Island', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.79

¹⁵² 'Telegram from J.C.T Western, Headquarters Task Force Grapple, to H.P. Hall, Colonial Office, 5th November 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.120

raised these concerns Perhaps due to their long-standing involvement with Gilbertese population, there was a greater culture of paternalism than with the military, who were more concerned with keeping up in the nuclear arms race. The Colonial Office wanted to ensure that the colonial subjects remained healthy and able to remain part of the nuclear experiments. Unlike their Fijian counterparts, whose support was assured through a period of negotiation, the Gilbert and Ellice Island commissioner was open to the increased presence of Fijian soldiers as long as the native population were not completely pushed aside. ¹⁵³

Also, concerns for their role on the island in the long-term were discussed and the decision to increase the Gilbertese labour force was made in the hopes of increasing their autonomy. 154 Their duties included the maintenance of the military bases as well as assisting in copra and food production to ensure a sustainable economy. 155 This has mutual benefits as it meant less labour required from elsewhere in the Pacific as well as giving the Gilbertese more employment opportunities. However, it meant continuously being moved around and subordinate to the metropole whilst the indigenous role on the islands was being decided. Whether being moved to test the weapons or working to sustain the military infrastructure and colonial economy, the Gilbertese were still firmly part of the Empire into the 1960s. Rather than seeing an increased autonomy like other parts of the British world system. Therefore, the future of the Gilbertese population was that of continued subordination. Much like the islands they inhabited, they were envisioned to remain part of the Empire with their use depending on what the orders from London were. Despite the change from migrants to labourers in the second half of the 1950s, there was little change in seeing the Gilbertese as much more than a resource to serve the larger colonial enterprise. Therefore, when it came to envisioning how the 1960s would pan out for the Gilbert

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¹⁵³ 'Telegram from the Officer of the Gilbert and Ellice Islands Colony to the Secretary of State for the Colonies, 28th March 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.195

¹⁵⁴ 'Telegram from the Resident Commissioner to the Secretary of State for the Colonies, 20th November 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.39 and 'Extension of the Christmas Island Tour, Note by D.A.W Trials, Ministry of Supply, 25th August 1959' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.81

¹⁵⁵ 'Telegram from the Resident Commissioner to the Secretary of State for the Colonies, 20th November 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.39

and Ellice Islands, one of being the centre of military control extending to the rest of the continent offered little for the indigenous population. Operation Grapple transformed the way the colony was perceived and administered, but there was a sense of continuity for the local population who were expected to remain subordinate to the British Empire, regardless of what form this took in the 1960s and beyond.

Overall, it is worth considering the larger context of decolonisation. It is largely assumed that the 1950s ushered in what has been called the 'East of Suez' movement. This was where the British government engaged in a series of negotiations to relinquish strategic outposts and withdraw troops in colonies East of the Suez Canal. However, Operation Grapple demonstrates that this is a rather simplistic way of approaching the issue of British imperialism in the post-war era. Operation Grapple occurred simultaneously with the decolonisation process of Africa. Yet, it is clear the government had no intention of letting the South Pacific colonies, in particular the Gilbert and Ellice Islands gain independence as long as they were needed for the development of nuclear weaponry. Coupled with the colony not being a viable option for independence, meant decolonisation for the islands was out of the question. The post-war decolonisation movements that were in full swing by the late 1950s meant that Britain could no longer rely on vast territories with plenty of resources to utilise in the event of another large-scale war and sophisticated weapons became a necessity in defending Britain both home and abroad.

In 1968, Australian leader of the opposition Gough Whitlam criticised the British government for their lack of commitment to decolonisation, declaring that the East of Suez movement was not a 'West of Panama' movement as well. 157 Whitlam was frustrated that the Australian government had essentially taken over governance of the South Pacific colonies after the test-ban treaty was passed in 1963. When considering Operation Grapple, perhaps Whitlam was correct that the East of Suez movement did not extend as eastward as the name suggests. There was little desire for independence in the immediate aftermath of the Second World War in the South Pacific, which was perhaps why the British government saw the region as being fair

¹⁵⁶ J. Darwin, *Britain and Decolonisation: The Retreat from Empire the Post-colonial World*, (London: Macmillan, 1988), p.290

¹⁵⁷ W.D. McIntyre, Winding Up the British Empire in the Pacific Islands, (Oxford: OUP, 2016), p.35

game for the nuclear experiments. Instead of transforming British influence toward incorporation into the Commonwealth, Operation Grapple shaped colonial rule by introducing military rule to the South Pacific and created a different system entirely. The Gilbert and Ellice Islands were to remain part of the British world system but as the temporary centre for the Pacific Empire under military control. Operation Grapple represented the limitations of the East of Suez movement as well as the development of a new form of imperialism in the South Pacific.

Conclusion

Operation Grapple had a profound impact on colonial rule in the Gilbert and Ellice Island colony as well as the South Pacific more generally. With the declining Empire, the justification for continuing to claim sovereignty on the islands on purely economic grounds became questionable at the beginning of the 1950s. The small and remote nature of the islands meant that they would have not been able to sustain themselves as sovereign nations, meaning they were not considered a viable candidate for independence by the British government either. However, as the nuclear arms race developed, the British government became engulfed in keeping up to date with the latest developments of such technology, meaning the islands gained a new purpose: to act as the focal point for the British 'nuclear playground'. Although temporary, the financial, and later administrative, responsibility was soon transferred away from the Colonial Office toward the Ministry of Supply. Afterall, Operation Grapple fell within the portfolio of the Ministry of Supply. This brought with it tensions, as issues regarding the environment and the exchange of information meant this process was not as smooth as would have been ideal for conducting scientific experiments. The link between technological development and the administration of the region between where experiments took place became more explicit. The two departments were unable to have a clear hierarchy which would have been commonplace prior to the war, which led to the Colonial Office having less of a say in matters pertaining to this specific colony. Tensions arose when issues which the Colonial Office would have previously presided over were encroached on by the military. Therefore, the staff at the Colonial Office may have felt insecure as they could see the end of their role was in sight.

With the decolonisation of various colonies across the globe, and the remaining colonies in the South Pacific becoming under the role of the military, the need and

significance of the Colonial Office shrank. Operation Grapple shaped colonial rule in the region by signifying a new era for Britain on the global stage. Nonetheless, the rationale for continuing colonising the region became a military and scientific one, marking a change on the part of the British. Yet, this was not necessarily a grand departure from how the islands had been administered since Japanese annexation in 1942. The move toward military rule was a change on the part of the British as the desire for a hydrogen bomb helped shift their mindset toward a militaristic one. The continuity of British rule for the Gilbertese islanders was expected to last long after the end of Grapple Z. Lives of continued military rule and subordination to the metropole were to persist. As long as the islands were useful in being part of the British 'nuclear playground' then the military was going to stay. Although the basis for colonisation continued there were features that persisted. Most notably, the subordination of Pacific Islanders and a preference for those who would assimilate into the imperial system, as seen through the financial incentive for the Fijian soldiers who could speak proficient English or were willing to improve their knowledge of the language. Therefore, the ethnic demographics may have dramatically changed in the late 1950s, but little changed for those living on the islands in terms of the pre-existing colonial structures.

Furthermore, Operation Grapple did not just end with the Gilbert and Ellice Islands. For the experiments to be a success, cooperation from the two dominions in Oceania was required, as well as labour and monitoring stations across the Pacific. The nuclear experiments helped change transform the colony into a focal point for the British Empire in the South Pacific, albeit temporarily.

The nuclear bomb transcended colonial boundaries and made them more fluid. The success of the megaton mission rested on it being a Pan-Pacific operation, which meant that boundaries between the islands had to become less rigid. However, these boundaries did not completely disappear as negotiations still had to take place, as seen with the Fijian governor and the colony's military. This fluidity also extended to boundaries with other nations' possessions. Despite what can be described as a tense relationship with the United States, Operation Grapple superseded this as the development of a megaton bomb was more important. Therefore, Operation Grapple did not only change colonial rule, but how the region was administered. Overall, Operation Grapple saw a new era for the South Pacific. Prior to the Second World War,

the boundaries between colonies, particularly those administered by different countries, would have been the basis for how each individual colony was organised. A new era was ushered in with the nuclear bomb as their development was more important than the colonies used to test them. The success of the megaton mission was important for the United States as it offered a chance to skew the balance of power toward the west and the Gilbert and Ellice islands were at the centre of this success both physically and symbolically. Ultimately, the South Pacific became the 'nuclear playground' for the British and Americans in the 1950s and the possession of a hydrogen bomb was more important than colonial boundaries in Oceania in the post-war era. Yet, Operation Grapple affected Britain's place in the world beyond changes to colonial rule and the government's vision for the Pacific in the 1960s. It is important to consider how Britain related to other nations within the new context of developing a nuclear arsenal.

Chapter III

Introduction

When examining the relationship between Operation Grapple and Britain's place in the world, it is important to look at how Britain related to other countries. This will make it easier to gauge how the British government viewed themselves, and the sort of power they were exerting. This chapter is divided into five sections. The first looks at Anglo-French relations and how Britain was initially wary of French interests but still relied on them for help when it came to manning bases to measure the radioactive fallout. The United States was also frequently mentioned in the correspondence of planning the Grapple series. The two powers had to work around the restrictive McMahon Act, which was passed in the aftermath of the Second World War and halted international cooperation on the development of nuclear technology. ¹⁵⁸ This set the tone of the relationship between Britain and America as they had to work around this piece of legislation as the two wanted to help each other with resources and scientific knowledge. This demonstrates the more subtle mean of exerting power Britain used in the late 1950s. They had to use methods such as witnessing tests and using bases to get around the secrecy that had become a hindrance at the height of the Cold War. These subtler means were also useful when dealing with the dominions of the South Pacific: Australia and New Zealand. Both countries had become increasingly distant from Britain since the end of the Second World War. 159 Yet, with the transition from formal Empire toward the Commonwealth, Britain was keen to keep these two former colonies on side as it would strengthen this newer structure. Both Australia and New Zealand were needed to supply resources but were hesitant as nuclear weaponry was a contentious political issue of the day. Instead of making demands, the British government persuaded Australia to view the experiments as being a continuity of those in Maralinga, South Australia, at the beginning of the decade as well as offering the chance for those with Dominion passports to visit the islands and witness the final rounds of experiments. Britain was in a position where it was more effective to negotiate and persuade rather than dictate.

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¹⁵⁸ S. Ball, 'Military Nuclear Relations Between the United States and Great Britain under the terms of the McMahon Act 1946-1958', *The Historical Journal*, Vol. 38, No.2, p.441

¹⁵⁹ K. Pickles, 'Southern Outreach: New Zealand claims Antarctica from the 'heroic era; to the twenty-first century' in K. Pickles and C. Colborne (eds.), *New Zealand's Empire*, (Manchester: Manchester University Press, 2016), p.229

Though, as discussed in the previous chapters, there were plenty of other colonies, both former and otherwise, in the South Pacific. Correspondence between Fiji and Britain was frequent as they were the colony which was supplying the most to the experiments primarily with manpower. However, the British government and the Grapple Task Force had to persuade the Fijian governor to send a workforce, rather than demanding it of him, despite Fiji still being a Crown Colony in the late 1950s. This primarily took place with the promise of a cashflow into the colony though a pension scheme and the ability to claim expenses. Britain was not only softly exerting power with more powerful countries like the United States, but this approach extended downward toward the remote colonies. To contrast this, was the disregard of Japan, where there were frequent protests against Operation Grapple, and appeared to have the backing of the Japanese government, at least in the eyes of those back at Whitehall. The reasons for the protests - fears of nuclear explosions, the proximity of the Japanese Islands, and the disruption to the fishing industry in the region - were ignored but handled delicately through careful diplomacy. Overall, a functioning hydrogen bomb was the key to maintaining a strong position on the global stage.

On the run up to succeeding in this, Britain was arguably still in strong position as it managed to keep the upper hand in most of these negotiations, although less so with the United States. Yet, the power exerted was far from harsh and dictatorial. British power during this period was soft. A paradox ultimately arose with soft power being exerted through military action. Instead of making demands, diplomacy was based more on a sense of give and take, with benefits being offered to the country being dealt with. This would have been beneficial when the British government were looking at the remainder of the 20th century as formal methods of imperialism Britain relied on prior to World War Two were being transformed into the Commonwealth system. This reflects other systems of negotiation, such as NATO or European bodies, where symbiotic relationships were more beneficial to keeping them harmonious. Overall, Britain was still in a position where they could exert power, but the power itself was soft and relied on a system of give and take, which stood in contrast to the harsh nature of nuclear weapons.

France

Anglo-French relations have a long and complex history, and the Cold War did not simplify things. During the Second World War, the two nations were allies and this cordial aspect of the relationship sustained into the post-war era but during the 1950s, this was starting to wear thin. 160 Despite theoretically being on the same side of the Iron Curtain, throughout Operation Grapple, the British government were often wary of French interests. In a telegram from the 4th August 1957 the acting High Commissioner of the Western Pacific expressed wariness over French interest in Flint Island. He requested the chance to consult the Resident Commissioner over the issue. 161 The British entry into the nuclear arms race piqued French interests, as by 1957, they were considering developing such technology themselves. However, the secretive nature of the arms race meant that the British were unable to fully trust their allies, including the French. On the 31st January 1957, the Foreign Office informed the French authorities in Papeete, French Polynesia, that their request to enter the islands and their surrounding water was denied with no possibility of this permission being granted in the future. 162 The Foreign Office and the commissioners on the ground perhaps felt that they were unable to fully trust the French with their nuclear secrets. Therefore, Anglo-French relations could be described as frosty as their alliance which was prominent during the Second World War was not strong enough to allow for the exchange of information. Branches of the British government wanted to keep the French at arm's length.

However, this is far from the entire picture. The French were still present in the South Pacific, with French Polynesia being integral from the transition from formal imperialism to the system of overseas territories familiar with the republic today. ¹⁶³ French Polynesia was of use to the British as the British scientists needed to monitor the radioactive fallout of the nuclear weaponry across a variety of different locations.

¹⁶⁰ M. J. Turner, *British Power and International Relations During the 1950s: A Tenable Position?*, (London: Lexington Books, 2009), p.136

¹⁶¹ 'Telegram from the Acting High Commissioner of the Western Pacific to the Secretary of State for the Colonies, 4th August 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.144

¹⁶² 'Telegram from the Foreign Office to Papete, 31st January 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.179

¹⁶³ S. Firth and K. von Strokirch, 'A Nuclear Pacific' in D. Denoon et.al, *The Cambridge History of the Pacific Islanders*, (Cambridge: CUP, 1997), p.348

Although the British may have kept the French from knowing all of their nuclear secrets, but the French government was supportive of the British in their endeavours. In a telegram from January 1957, the Foreign Office commended the Parisian government for their support in allowing equipment to be stationed in French Polynesia. ¹⁶⁴ This may have been down to the monitoring station providing the French scientists with an insight into the nature and success of the experiments at Christmas Island. After all, the French trials were within five years. ¹⁶⁵

Yet, it could have been due to allegiance in the Cold War, as the British nuclear programme worked in favour of the French. The British bomb provided a balancing force in Europe against the threat of the Soviet bomb, they were not entirely dependent on the United States. ¹⁶⁶ The relationship between the two European powers was not entirely frosty, but one of convenience as well. Both sides used each other to achieve what they needed at that moment. Perhaps this is the nature of allegiances in the Cold War, not one of altruism but one of convenience to stop the spread of communism and protect the interests of Western Europe. Therefore, Anglo-French relations cannot necessarily be described as extremely close but one where the other side could use each other to maintain the balance of power and interests in Europe.

Moreover, some other groups involved with Operation Grapple were keener on sustaining contact with their French counterparts than others. The Foreign Office may not have fully trusted the French to be involved with their South Pacific experiments, but this did not extend to everyone involved. The two nations were still on the same side in the divided world, and to advance nuclear weaponry in a limited timeframe relied on international cooperation, hence the monitoring stations on islands outside of British sovereignty. Lovelock, of the Ministry of Supply realised this. In a letter he wrote to Brown, of the Foreign Office on the 1st February 1957, he acknowledged that formal contact was not permitted but noted that there was a level of collaboration

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¹⁶⁴ 'Telegram from A.C.W. Jones, Grapple Task Force, to D.A. Lovelock, Ministry of Supply, 2nd July 1957' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.175

¹⁶⁵ A. Smith, 'Colonialism and the bomb in the South Pacific', in J. Schofield and W. Cocroft, *Fearsome Heritage: Diverse Legacies of the Cold War* (California: Left Coast Press, 2007), p.53

¹⁶⁶ Turner, British Power and International Relations During the 1950s, (2009), p.137

between the scientists in the Pacific. 167 The extent of the communication that took place remains unknown but there was still informal contact, nonetheless. Therefore, the frosty relationship which can be inferred from the denial of entry is a rather limited view and what allegiances meant during the Cold War depended on what a particular role was. For the Foreign Office, the French were to remain at arm's length, only useful when it came to positioning monitoring and scientific equipment. However, for those scientists, French input may have been important as they were under pressure to swiftly advance the nuclear arsenal. The French were useful for handing monitoring equipment and were held in high enough esteem for regular, informal contact but this was not extended to government officials as the bond was not strong enough for a thorough exchange of information about anything specific. When it comes to examining Britain's place in the world in the late 1950s, their approach to the French is rather insightful. There was a clear hierarchy of NATO allies. The French were not as useful as the Americans or those of Dominion status, and were therefore, not privy to closely guarded nuclear secrets. The British were able to use the French for their own ends whilst doing this, suggesting they still had the upper hand over the French in the Cold War. They may have been allies, but the British were still able to maintain the upper hand.

United States

When looking at the Cold War, it is difficult to ignore Britain's most important ally: The United States. The two nations had been allies and involved in the other's affairs long before Operation Grapple came around. Their 'special relationship' was perhaps best demonstrated when the issue of island sovereignty came up. During the Second World War, the American army liberated the Gilbert and Ellice Islands from Japanese control. The issue of sovereignty of a small and remote colony was not a pressing issue in the resolution of the war, meaning that it had not come up until the late 1950s. In a telegram from the 3rd September 1957, the Colonial Office informed the Treasury and the Foreign Office that "The United States is again being kept informed of our intentions in regard to Christmas Island as to avoid any trouble over

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¹⁶⁷ 'Telegram from D.A. Lovelock, Ministry of Supply, to G.G. Brown, Foreign Office, 1st February 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, Ff.157-158

the issue of sovereignty". 168 There was a clear trade-off for the British to achieve their goals. Strong Anglo-American relations were based on a mixture of mutual interests as well as negotiations.

The Colonial Office was aware that American support was not entirely unconditional and relied on a balance of give and take. The British government was keen on keeping their American allies in the loop with the experiments to avoid Washington taking a hard stance on the issue of island sovereignty. In order to buy American silence on the issue, some precious nuclear secrets, which were not available to other nations, had to be shared. It is also worth noting that the advancement of British nuclear weaponry worked in favour of the Americans at the height of the Cold War as it could help even out the balance of powers with the Soviet Union, as well as helping to provide a safeguard in Europe. Therefore, Anglo-American relations may have been strong but there was an element of give and take. For the issue of sovereignty not to be raised, the Americans were partially let in on the British nuclear secret.

Although the two nations had been bound together during the initial stages of the Cold War, they still were motivated by their own interests. Burk argued that the 'special relationship' between the two powers became strained during the Cold War and the McMahon Act marked a change in the balance of power as the American government were prioritising their own national interests over helping their old ally. 169 However, this cut both ways as the British government was firm that, as far as they were concerned, their security interests took precedent over American economics. In a letter from the Department of State in Washington on the 7th January 1957 to the Foreign Office, the American government noted that Operation Grapple may lead to "considerable financial loss" as South Pacific Air Lines would not be able to operate in the capacity it had become accustomed to. However, the same letter noted their respect of the "overriding military necessity of conducting the tests". 170 The end goal

^{168 &#}x27;Draft telegram from D.J. Derx, Colonial Office, to the Acting High Commissioner of the Western Pacific' Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/282, f.55

¹⁶⁹ K. Burk, Old World, New World: The Story of Britain and America, (Abacus: London, 2009) ¹⁷⁰ 'Telegram from the Department of State, Washington to the Foreign Office, 7th January 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC

of advanced nuclear technology was a shared goal by the two nations, which is why the American government was willing to take the limited financial hit in this pursuit.

The Cold War may have led to fluid boundaries between islands in the South Pacific (see Chapter II) and intertwined the national interests of the United Kingdom and the United States, the two nations still remained separate entities. The British government still had to put its own national interests before other nations. Therefore, Anglo-American relations can still be seen as strong as the Americans were willing to step aside for the greater good of a strong nuclear arsenal. Though, the strength of the 'special relationship' rested on the two nations goal's being aligned. Like with the issue of island sovereignty, Britain having a strong nuclear arsenal worked in favour of the United States, meaning that comparatively less important issues were not as high a priority. The strength of the 'special relationship' was based less on altruism, than on shared interests and values. The two nations had to negotiate the hierarchy of their interests so that issues such as island sovereignty and minor economic hits would not cause any friction during an era of high tensions, such as the Cold War.

Despite minor issues being raised, the Americans were not put out by this. In a telegram from the 19th December 1957 the Foreign Office thanked their counterparts in Washington for their continuous support in taking samples from the radioactive fallout. Fuelled by early Cold War paranoia, the McMahon Act 1946 prevented the exchange of information regarding nuclear weaponry, which prevented the two nations from working closely together, as was the case with the Manhattan Project. The minutes from a meeting held on the 4th December of the same year also noted that there were plans for an additional staging post at Florida for transporting goods and resources from the UK to the Gilbert and Ellice Islands. The British government could rely on the United States for support in Operation Grapple, as they were willing to work around the McMahon Act wherever possible. The issues of island sovereignty and economic impacts were put aside and the United States were willing to assist in

¹⁷¹ 'Telegram from G.G. Brown, Foreign Office to J.C.A. Roper, British Embassy in Washington, 19th December 1957, Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.86

¹⁷² S. Ball, 'Military Nuclear Relations Between the United States and Great Britain under the terms of the McMahon Act 1946-1958', *The Historical Journal*, Vol. 38, No.2, p.441

¹⁷³ 'Minutes from a meeting held at St. Giles Court on 4th December 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.94

the transportation of goods and measuring of radioactive equipment which shows how impractical the McMahon Act had become by the late 1950s. The paranoia of nuclear secrets falling into the hands of the Soviet Union led to a radical Act being passed by the American government, which became an obstacle for international cooperation with NATO allies in the following decade. The willingness to work around such restrictions perhaps demonstrates how Anglo-Americans relations were strong, but only as long as the British were working toward the same goals as the Americans.

The two nations may have a long, shared history but with the constant threat of nuclear war coming from the communist east. The need to help Britain modernise their nuclear arsenal was of the utmost importance in evening out, or even pulling ahead in the Cold War. Overall, Britain's place in the world hinged on the success of Operation Grapple. Yet, this was only possible with international cooperation, specifically American cooperation. Britain's ability to maintain global influence was only possible as long as they were working in step with the new, dominant superpower of the post-war era.

Moreover, the cooperation extended beyond governmental departments to the British military and scientists themselves. In December 1958, the Ministry of Supply wrote to the Chairman of the Grapple Task Force querying the possibility of having British observers in the Nevada desert. This would have been advantageous as the Grapple series was planned in haste and an input from American scientists may have offered an insight into the best way to achieve the megaton yield. However, this was a two-way street as American scientists were keen on observing Grapple Y, which came to fruition as two were granted permission by the Task Force in 1958. The was most likely older pieces of legislation, such as the McMahon Act, and secretive customs of the Cold War which prevented the militaries and scientists from achieving the higher level of cooperation which they may have desired.

The paranoia and secrecy which hallmarked the Cold War hindered cooperation and became a hindrance to those on the ground. In a planning meeting on

¹⁷⁴ 'Note by the Chairman of the Ministry of Supply on the Atomic Trials Executive, 11th December 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.108

¹⁷⁵ 'Minutes of a meeting held at St. Giles Court on 12th March 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.248

the 15th May 1958, Hainworth of the Foreign Office noted that the Americans had been told of the upcoming experiments but only in "general terms". ¹⁷⁶ Anglo-American relations were also cordial. The governments had to manoeuvre the customs of the Cold War to achieve their desired goals and managed to do so without much apparent friction. However, the friction may have been between the governments and those administering the experiments. The British military and scientists from both sides of the pond saw the benefit from cooperating and observing other experiments, as this may have excelled nuclear weaponry more quickly than the governments had hoped. Overall, it was American foreign policy that hindered cooperation from taking place. Anglo-American relations may have been strong as long as they were working toward the same goal, but the practicalities of achieving were made difficult with the secrecy that became a staple in the Cold War. Britain's place in the world may have relied on their goals being aligned with the Americans but they were equally trying to navigate the new norms of international diplomacy to maintain their strong position on the global stage.

Yet, strong Anglo-American relations also benefitted the British in another sense: it helped provided information about activities in Japan, who were a hindrance in the initial stages of Operation Grapple. When planning the first round of experiments, there were large scale protests in Japan, which were supported by the Japanese government who disapproved of the experiments for a variety of reasons. The British government wanted information about the protests but was unable to get hold of it. However, it was much easier for the Americans to get information about the exact nature of the protests due to their larger sphere of influence and closer relationship with the Japanese. In a letter dated 25th January 1957, Greenhill, of the Foreign Office, noted that their intel about the causes of the protests came from the American Embassy. ¹⁷⁷ The British were able to use the newly forged 'special relationship' to their own advantage as they were able to find out the exact nature of

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¹⁷⁶ 'Minutes of a meeting held at St. Giles Court on 15th March 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.186

¹⁷⁷ 'Telegram from B. Greenhill, British Embassy, Tokyo, to D.V. Bendall, Foreign Office, 25th January 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.185

protests which threatened to delay the experiments or lead to international backlash against them.

Anglo-American relations could then be summed up as one that relied on mutual benefits. When working toward the same goal, the two nations were more than happy to navigate the customs of international relations of the Cold War to achieve them. Issues such as island sovereignty, economic impact and assistance with monitoring radioactive fallout became moot as it helped achieve the greater good of a strong nuclear arsenal. The British government was able to use its American counterpart to gain information about what could have potentially been a stumbling block to getting Operation Grapple off the ground. It would be simplistic to suggest that the British were entirely reliant on the Americans in the late 1950s, as they still had other means of maintaining influence, as seen with the transformation of the Empire. Yet, the 'special relationship' was an important part of this.

Japan

When discussing how Britain related to other nations in the context of Operation Grapple, it is important to discuss other Pacific nations, especially Japan as it was the most vocal in its opposition to the experiments. During the run up to the tests, there were various large-scale protests across Japan. Despite citing various reasons for their disapproval, the protests primarily came out of fear. Japan had been the only power to be devastated by the horrors of nuclear war. By this point, the bombings of Hiroshima and Nagasaki were well within living memory for the Japanese. In a letter to the ambassador to Japan on the 14th February 1957, Selby noted that the feeling in Tokyo was one of fear as they were "the first known victim of [atomic weaponry's] use in practice". This trauma fuelled the protesters to urge the British government to avoid further damage at the hands of weapons of mass destruction. This sentiment was shared by the Japanese government who wrote to the Foreign Office on the 5th March of the same year stating that "thermonuclear devices should be banned" as they are part of "a dangerous attempt at a nuclear war and therefore a threat to world

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¹⁷⁸ 'Minute by Mr. Selby from a telegram from the British Embassy, Tokyo, to O.O. Morland, Foreign Office, 14th February 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.90

peace". ¹⁷⁹ The Japanese were desperate to avoid these weapons being used again. Ultimately, Anglo-Japanese relations were fraught.

From a Japanese perspective, Operation Grapple was threatening to move the world closer to the brink of nuclear war. Yet, Britain managed to maintain a strong position in this situation. The Japanese were pleading with the British government. In this situation the Japanese had little leverage to prevent the British from going ahead with Operation Grapple beyond appealing to their morality. Britain was in a strong diplomatic position as they were able to ignore the concerns raised by Japanese protesters.

The Japanese may have had little leverage but that did not mean that they had none whatsoever. The Japanese raised various reasons why Operation Grapple should not go ahead. Perhaps the most enduring was that it would disrupt fishing networks in the South Pacific. As early as late 1956 the issue of fishing was raised. The complaint was that radioactive fallout would contaminate the fish as well as disrupting the ships that had to travel through the region. The Foreign Office had to give assurance that the exclusion zone would be temporary, and that samples of the fish would be taken to ensure that contamination was not an issue. ¹⁸⁰ It is unclear whether such sampling came to fruition, but it demonstrates how determined the British were with the megaton mission. Whereas with the Americans were willing to wave away economic disruption, the Japanese were using it as leverage against the nuclear experiments. Although the importance of the fishing trade was later disproven as the Foreign Office found out in February 1957 that activity in the region was relatively recent. ¹⁸¹ Anglo-Japanese relations were strained, despite theoretically being on the same side of the Cold War.

Yet, this marked a shift as a combination of environmental and economic factors which were at the heart of international diplomacy, which gave the relationship with the Japanese a different edge when compared to the Americans and the French.

¹⁷⁹ 'Telegram from Tokyo to the Foreign Office, 5th March 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, Ff.78-79

¹⁸⁰ 'Draft Telegram from G.G. Brown, Foreign Office to the British Embassy, Tokyo', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, Ff.166-167

¹⁸¹ 'Telegram from H.C. Hainworth, Foreign Office to the British Embassy, Tokyo', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.93

Concerns for the environment, whether genuine or not, gave the Japanese a limited amount of leverage in dissuading the British from carrying on. Unlike appealing to morality over weapons of mass destruction, the environmental damage, which would in turn damage the economy, was harder to ignore. The Foreign Office had to investigate the particulars of the Japanese fishing industry to wave away this more enduring argument which further shows how determined the British government was in achieving their goals. Britain's status as a 'great power' hinged on the successful development of the hydrogen bomb, meaning they were willing to ignore the concerns of a country which could not yield the same level of power.

Moreover, the protests bothered those in the British government because they were seen as personal. After discussing the official reasons given for the protests, the Japanese ambassador wrote to the Foreign office on the 7th March 1957 about a rally in Tokyo. He suggested that the rally "proved to be as much anti-British as anti-bomb". This may have reflected the exacerbation felt by the ambassador who had endured weeks of protests against Operation Grapple. He, and the government back in London, may have been concerned that the protests could have spiralled. If the experiments got out of hand and spread to other countries, a fierce international backlash could have prevented both further experiments from taking place and the support from other countries that they had come to expect by this point. The British government feared that other nations would have permitted members of the Campaign for Nuclear Disarmament sailing into the exclusion zone and delaying time-sensitive experiments. 183

In the late 1950s, the British were able to ignore the reasons behind the protests but not the protests themselves. Britain was in a precarious position and still had to tread carefully. The Japanese protests may have been easier to ignore but the potential of them expanding beyond the Japanese islands was a cause for concern. The British government was not in a strong enough position where they could do whatever they wanted without thought of the consequences. Despite the protests surrounding a destructive military mission, soft power was key in the British government getting

¹⁸² 'Telegram from the British Embassy, Tokyo, to the Foreign Office, 7th March 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.69

¹⁸³ Maclellan, *Grappling with the Bomb*, p.90

what it wanted. The British did not completely ignore the Japanese but tried to ensure them that their reasons were out of proportion to the reality of the situation. This viewpoint also suggests that Anglo-Japanese relations were fragile. To the Foreign Office, the protests, which the Japanese government supported, were a personal attack. The experiments were part of national prestige and part of creating a powerful capitalist bloc, which Japan was supposed to be part of, yet their opposition was a hindrance to it.

As well as being anti-British, the protests were seen as being communist as well. On the 13th March 1957, the Foreign Office reported that it had intel that "the Socialists" in Japan "did not seem to make so much fuss about Russian explosions". 184 To the Foreign Office, there was a clear hypocrisy coming from what was supposed to be an ally in the Cold War. The Foreign Office also noted that the protests were frequently visited by communists and there was "no evidence whatsoever that the Japanese Government is taking any steps to damp down the situation" when the communists were involved. 185 The protests were less about non-proliferation but about the British not advancing their nuclear arsenal. When the large-scale protests had disappeared, the Tokyo Embassy reported on a meeting where a protest fleet was discussed in November 1957. The ambassador wrote that descent was "of course communist inspired". 186 Although the Foreign Office was more focused on the advancement of nuclear weaponry, the fear of the communist east was the ultimate driving force for the British going the nuclear arms race in the first place. Perhaps, the fragile and strained nature of Anglo-Japanese relations in the late 1950s was based less on their disapproval of the experiments but how the experiments were perceived. As the bomb represented power during the Cold War, it was a means of the British securing their status in the world. The Japanese may have had real concerns over the implications of Operation Grapple, especially after the bombings of Hiroshima and Nagasaki, but this did not matter as opposing the British bomb meant opposing the

¹⁸⁴ 'Telegram from H.C. Hainworth, Foreign Office, to the British Embassy, Tokyo, 13th March 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.57

¹⁸⁵ 'Telegram from the British Embassy, Tokyo, to the Foreign Office, 7th March 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, Ff.69-70

¹⁸⁶ 'Telegram R. Selby, British Embassy, Tokyo, to H.C. Hainworth, Foreign Office, 19th November 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.110

British. As long as the Japanese were protesting, the protests were perceived as communist, and anti-British in nature. To the Foreign Office, communist ideals had crept into the Japanese psyche meaning that they could not be fully trusted. Overall, this may have been why the British government were so quick to disregard the Japanese protests and the strained relationship it caused.

The causes of the protests may have struck fear into the Foreign Office, but the implications of the protests were just as serious. The International Campaign for Nuclear Disarmament was a threat as it could have disrupted the experiments in the immediate term. In a telegram from the Japanese ambassador to the Foreign Office, he explained that the protestors were in collaboration with the Australian Peace Council, 187 an organisation whose views were very much in line with the CND. The CND was keen on disrupting Operation Grapple when Eden announced it, and this was always in the back of the minds of those organising the experiments. On the 16th February 1957, the Foreign Office assured the ambassador in Tokyo that there would be no ships sailing from Yokohama to disrupt the Grapple series. ¹⁸⁸ This was a concern for those working in diplomacy, if the CND sailed from Japan into the exclusion zone around the Gilbert and Ellice Islands, the experiments would have been halted until further notice when the tests were already being planned in a narrow timeframe. This possibility was discussed in a telegram from the 5th March 1957 as there were rumours of a 'sit down fleet' sailing southward from Japan. 189 This never came to fruition, meaning that either the CND did not organise such a voyage or the Japanese helped to prevent it. There was still a cooperation between the two countries during this period as the British were trusting that the Japanese government would go beyond sharing the sentiments of the protestors to allowing them to disrupt Operation Grapple. After all, the Japanese government may have not approved but they were not necessarily part of the CND and the British had to trust that they would respect their decision. Overall,

¹⁸⁷ 'Telegram from Tokyo to the Foreign Office, 5th February 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.143

¹⁸⁸ 'Telegram from the Foreign Office to Tokyo, 16th February 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.103

¹⁸⁹ 'Telegram from Tokyo to the Foreign Office, 5th March 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.79

the British government had to remain mindful of other powers in the Pacific in order to succeed in their mission there.

Australia and New Zealand

Japan was far from the only Pacific nation to have a connection with Operation Grapple. Australia and New Zealand were both former colonies who offered support in different ways. Although the British had a good deal of support from the Australian government when it came to Operation Grapple, this level of support was not shared by New Zealand. Initially, the New Zealand government was reluctant to offer any practical support in the way of resources and soldiers on the ground. When planning the first round of experiments, the Foreign Office wrote to the Commonwealth Relations Office in January 1957 about approaching New Zealand about using their resources to help with the experiments. However, they were unsure whether there was much interest from New Zealand aviators in travelling to the region. 190 Later on, the British government was reluctant to approach the New Zealand government about positioning monitoring equipment on their islands. On the 30th September 1957, the Secretary of State for the Colonies explained to the Fijian governor that secrecy surrounding the experiments was to remain until very late in the day and that it would be "undesirable" to approach the New Zealand personnel about a monitoring station. ¹⁹¹ Although, the Secretary of State for the Colonies noted on the 10th October that it was "decided after all to ask New Zealand personnel [...] to operate this equipment". 192 Despite eventual cooperation there was a hesitation from the Secretary of State. He may have been tentative as the New Zealand authorities were perceived as unsupportive. When compared to Australia, New Zealand did not have as close as bond with Britain, particularly after the Second World War when an identity separate from 'Britishness' was being formed. 193 Both Australia and New Zealand were part of the

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¹⁹⁰ 'Telegram from B.W.G. Dolan to M.E. Allen, Commonwealth Relations Office, 21st January 1957, Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/281, f.216

¹⁹¹ 'Telegram from the Secretary of State for the Colonies to the Fijian Governor, 30th September 1957, Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.189

¹⁹² 'Telegram from the Secretary of State for the Colonies to the Fijian Governor, 10th October 1957, Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.168

¹⁹³ K. Pickles, 'Southern Outreach: New Zealand claims Antarctica from the 'heroic era; to the twenty-first century' in K. Pickles and C. Colborne (eds.), *New Zealand's Empire*, (Manchester: Manchester University Press, 2016), p.229

ANZUS, a treaty with the United States which protected military interests in the Pacific and shifted the strategic focus of the two nations toward America. ¹⁹⁴ Overall, Britain's relationship with New Zealand was a cautious one, they may have had close ties in the past but Britain had to tread more carefully when approaching their former colony to win them over again.

However, the New Zealand government were not entirely closed to offering support for the development of the British nuclear arsenal. Other than offering to man the monitoring station, they regularly sent resources to the islands, ¹⁹⁵ signifying that Operation Grapple had their seal of approval. However, this support was not guaranteed to continue. On the 2nd August 1957, the U.K. High Commissioner in New Zealand wrote to the Commonwealth Relations Office about the support offered and that it was unclear whether this would continue as New Zealand was due for an election toward the end of that year. ¹⁹⁶ The New Zealand election would have been a cause of concern for the British government as nuclear weaponry was a more contentious issue and the other political parties may have not have supported the experiments at Christmas Island in the same way, if at all. ¹⁹⁷

The foundation for the relationship between Britain and New Zealand in the late 1950s was unstable. For Britain, New Zealand was a preferred ally in the megaton mission as it was geographically close to the Gilberts as well as it being a former colony which became one of the original members of the Commonwealth. Yet, the support that Britain desired depended on political divisions within New Zealand. Britain had not been in a position to make demands of the Dominions for decades and had to rely on shrewd diplomacy to get what it wanted. This was symptomatic of the transformation from a formal empire to the Commonwealth. Britain was the head of this new structure but were far from an absolute power. The Commonwealth was perhaps one of a more equal footing as some New Zealand political parties were able

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¹⁹⁴ A. Kelly, *ANZUS and the Early Cold War: Strategy and Diplomacy Between Australia, New Zealand and the United States, 1945-1956*, (Cambridge: Open Book Publishers, 2018), p.93

¹⁹⁵ W. E. Oulton, Christmas Island Cracker: Account of the Planning and Execution of the British Thermonuclear Bomb Tests, 1957, (London: Thomas Harmsworth, 1987), p.67

 ^{196 &#}x27;Telegram from UK High Commissioner in New Zealand to the Commonwealth Relations Office,
 2nd August 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department:
 Registered Files (PAC Series), National Archives, London, CO1036/282, f.149

¹⁹⁷ M. K. Matsuda, *Pacific Worlds: A History of the Seas, Peoples and Cultures*, (Cambridge: CUP, 2012), pp.317-318

to object and withdraw support for one of the main goals of British foreign policy if they got into power. Britain may still have been a powerful figurehead of a different structure in the late 1950s, but power was much softer than it was a century earlier.

When dealing with Australia, the British government used a different tack. Gaining Australian support was a much easier experience as the Australian government were one of the most supportive of Operation Grapple in the planning stages. The British nuclear experiments initially started off in Maralinga, in South Australia, in the first half of the 1950s. Maralinga became a less viable option due to the growing opposition from the CND and the Australian public turning against the idea of weapons of mass destruction being detonated in their country. 198 When it came to Operation Grapple, in an effort to persuade the Australian government to continue their support, the planning committee of the Christmas Island series suggested that it would be better to view them as a continuation of the Maralinga trials. 199 Anglo-Australian relations were arguably much stronger as the Australian government were willing to continue to support their former colonial leaders in an effort to secure Oceania in the event of the Cold War heating up. Like New Zealand, Australian interests were focused more on the Pacific and there was an identity that was much less British being forged. 200 Yet, despite the CND contributing to the move to Christmas Island, the Australian government was firmer on its support for the capitalist west in the Cold War. The security of the Pacific depended on the success of the missions such as Operation Grapple as helped put Oceania firmly on the side of the west as it was the 'nuclear playground' of the main capitalist powers. This provides a reasonable explanation for Australian support, and the organisers of the Grapple series may have been aware of this and were able to use it to ensure ongoing Australian support. Britain was still a strong power when examining Anglo-Australian relations as they were able to convince them of the experiments' necessity. Yet, power relied on much softer means such as shrewd negotiation rather than simply demanding support. Despite power being militarised, it was ultimately soft. Like with dealing with

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¹⁹⁸ N. MacLellan, *Grappling with the Bomb: Britain's Pacific H-Bomb Tests*, (Canberra: Australian National Press, 2017), p.35

¹⁹⁹ 'Minutes from meeting held at St. Giles Court on 11th September 1957', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.239

²⁰⁰ Pickles, 'Southern Outreach' in Pickles, New Zealand's Empire, (2016), p.229

the New Zealand government, British power was based more on negotiation and persuasion, albeit on different terms.

However, the relationship with Australia was soon weakened. Whilst the experiments were underway, there was an issue with the security system used to send the messages, meaning that they temporarily became compromised. This led to a shortterm termination of communication to other countries, including Australia. On the 9th September 1957, a memo from the Ministry of Defence was circulated discussing this issue. They said that "there were difficulties in communications, which were the responsibility of the Air Ministry in collaboration with the Royal Australian Air Force" which led to correspondence being compromised and delayed until the issue was sorted.²⁰¹ Britain may have held Australia in high esteem as they were both a key part of the Commonwealth as well as one of the biggest supporters of Operation Grapple. Yet, when security was breached, there was little hesitation in stopping the communication with them. The Australian government was useful in their support and supply of resources, but the focus of the British government was the development of a functioning hydrogen bomb. The Ministry of Defence was quick to cut ties with a close ally to preserve their nuclear secret. It was the megaton mission that came first and keeping the former colony out of the loop was perhaps collateral damage. Overall, Britain's place in the world became more inward focused. The nuclear bomb was the key to maintain their position on the global stage and international cooperation, limited as it was, was an important part of achieving this. Yet, because of the McMahon Act, the British government saw this endeavour as something to be achieved by themselves. To an extent, Australia could have been part of the same system, but not entirely. The British government was quick to temporarily drop the Dominion when needed. The British world system had shifted. The Dominions were part of it, but the distance from the metropole persisted.

However, the Dominions were still the preferred international partners. On the 8th May 1958, the Ministry of Supply discussed changes to security clearances regarding the information about the results of the experiments. It was decided that

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²⁰¹ 'Communications with Christmas Island: Copy of a letter (Reference SJC5S.1163) dated 9th September 1957 from Chairman, British Join Communications-Electronics Board, to the Secretary, Chiefs of Staff Committee with Annexes', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/283, f.250

anything that was not the top level of secrecy of "U.K. eyes only" could be shared with the Dominions. 202 The British military was mindful of their allies when the Grapple series was coming to a close. The relationship was very strong as they were willing to share some closely guarded secrets with them. Toward the end of the experiments, the Ministry of Supply became more open to the idea of visitors coming to Christmas Island to learn some of the surface details of the experiments as well as admiring the success of the Grapple series. In August 1959, requests were made for visitors to come to the islands. There was hesitation from the Military of Supply, but it was more than willing for passengers in "possession of British or Dominion passports" to come and visit. 203 Various groups were suggested but it was preferred that the first lot of visitors come from the Dominions. The experiments ran parallel to decolonisation and the formation the Commonwealth. Inviting Dominion visitors was perhaps a gesture to Australia and New Zealand that they were close allies to the British and that they were able to be involved in what had become a top priority in foreign policy. Britain's relationship with the two nations was ultimately cordial. The experiments helped Britain reach two goals: a strong commonwealth going forward and project the image of scientific and military parity as the world entered the 1960s. Britain was arguably in a strong position in 1959 as Grapple Z was an undoubted success. Yet, the nature of power was both militarised and soft. Throughout the process, both the Foreign and Colonial Offices, and the Ministry of Supply had to negotiate with Australia and New Zealand to ensure their support, which they may well have needed in other areas as the 20th century progressed. After the experiments ended, soft power was exerted through offering tokens of appreciation through an invitation to the islands, which was most likely part of the scheme to ensure support from the Dominions in the long-term.

Fiji

Yet, the Dominions were far from the only colonies, former or current, in the Pacific. As discussed in the previous chapter, there was an array of small colonies of

²⁰² 'Atomic Weapon Trials: Security Classification, Ministry of Supply, 8th May 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.192

²⁰³ 'Enclosure of "Passengers Tasmania Star" from a telegram from the Task Force Grapple to the Base Commander at Christmas Island,28th August 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.65

various statuses. The most notable was Fiji, who were the other Crown Colony in the region, beside the Gilbert and Ellice Islands, and comprised a large amount of lowerranking military personnel during Operation Grapple. Much more than with Australia and New Zealand, Britain still maintained the upper hand in their relationship with Fiji. This power extended beyond the central government to the Ministry of Supply, who were in regular contact with the Fijian government. The Ministry of Supply wanted to control the exchange of information about the experiments and wanted to set the rules of what could be printed in the Fijian press.²⁰⁴ The British military was acting beyond what would have been expected from them. British colonial power was becoming increasingly reliant on the military in the post-war era (see Chapter II) which led to the military being legitimised in controlling the information published in the Fijian Press. This caused friction with the Fijian governor, who did not enjoy his experience working with the Ministry of Supply. In the minutes from a meeting on the 19th January 1959, it was noted that the Fijian governor had raised an issue over the payment of the soldiers. The planning committee noted that this was simply because the governor had not asked the Ministry of Supply, implying that the Fijian governor was not accustomed to working with the military over expense claims. Anglo-Fijian relations still had a clear hierarchy in the late 1950s. With the transition toward a military-based structure in the Pacific, the British government were willing to transfer power to the Ministry of Supply, which caused both an expansion of Military powers and the confusion of the Fijian governor. To keep the governor on side in the long-term, a different tack was needed to prevent him from becoming uncooperative.

One of these means was an alteration to the economies to ensure that they were more closely linked. The Ministry of Supply were in control of signing off on expenses claimed by the Fijian soldiers. On the 2nd September 1959, the Secretary of State for the Colonies clarified to the Fijian governor that the Ministry of Supply were in charge of all funds regarding Operation Grapple, with the Crown Agents acting as intermediary figures. The experiments at Christmas Island were a good opportunity

²⁰⁴ 'Draft Telegram to the Governor of Fiji from the Ministry of Supply, 29th January 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.71
²⁰⁵ *Ibid*

²⁰⁶ 'Telegram from the Secretary of State for the Colonies to the Fijian Governor, 2nd September 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/284, f.68

for young Fijian men as they were struggling with unemployment before being recruited.²⁰⁷ The offer of work from the metropole appealed to them, and by extension the Fijian governor as it was a way of bringing in money to the colony.

Yet, this worked in favour of the British government for various reasons. In the short term it helped supply an adequate work force for the experiments but in the long term, it helped keep Fijian reliant on Britain. The wages of hundreds of young men were coming from the metropole, and the Fijian governor was receiving expenses from the Ministry of Supply. Closely tying the economies in this way may have been a way of ensuring Fijian support in the megaton mission as there was a financial incentive. This may have ensured Fijian support and cooperation in the later activities in the South Pacific, which may have extended beyond nuclear testing as they were dependent on Britain. It may have also been to ensure Fiji were in a subordinate role for the foreseeable future as part of the Commonwealth, with the UK at the helm calling the shots. Britain did not have to negotiate with the Fijians in the same way as the Australians or the New Zealanders, and they were able to use different tactics to preserve old imperial power structures. Fiji was in a different position to the Pacific Dominions as it was not yet independent and may have been still looking to Britain for support, which the British were able to use to their own ends and ensure Fijian subordination.

Although, the British government was far from dictatorial when dealing with the Fijian governor. Their relationship was not as simple as merely colonial master and subject. The British still had to incentivise the Fijian governor as his support was not entirely unconditional. On the 5th September 1958, the Secretary of State for the Colonies wrote to the Fijian governor noting the economic benefits that partaking in Operation Grapple would have. He wrote that a once the experiments were over, the British government would supply the pensions for the veterans. If the veterans were to die before the money ran out, then the remainder could be used for anything the Fijian governor decided.²⁰⁸ The British did not rule Fiji with an iron fist, the government had

Tubanavau-Salaluba, L., Namoce, J.M. and Maclellan, N. (eds.), Kirisimasi: Na sotia kei na lewe ni

mataivalu e wai ni viti e na vakatovotovo iyaragi nei peritania mai Kirisimasi, (Pacific Concerns Resource Centre, Suva: 1999), p.14
²⁰⁸ 'Telegram from the Secretary of State for the Colonies to the Fijian Governor, 5th September 1958',

²⁰⁸ 'Telegram from the Secretary of State for the Colonies to the Fijian Governor, 5th September 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.131

to use a softer approach to ensure support in their nuclear endeavour. Much like with Australia and New Zealand, the British had to use softer means of rule rather than making demands of their smaller colonies. However, there is still an element of coercion. The incentive the Secretary of State for the Colonies used was an economic one. The British government ensured that there were close economic ties that worked in favour of the Fijians as well to make sure that they agreed to send resources.

Using economics as leverage in diplomacy was by no means new or even unique to British diplomacy but it was a key part in dealing with the Fijian governor. As seen with dealing with other nations, British power was quite soft and subtle. There is little doubt that they were still a strong force when it came to international relations, but to achieve their goal of a functioning hydrogen bomb, incentivisation and coercion were more powerful tools in ensuring cooperation than brute force. This is part of how the British were able to transform the Empire into the Commonwealth: through the use of soft power rather than making demands.

However, the Fijian governor was able to use the situation to his own ends. The British government were desperate for Operation Grapple to be a success, as their position in the Cold War, and geopolitical status, by extension, depended on it. The Fijian governor may not have wanted to remain subservient to the British government, and the military in the 1950s and beyond. He wanted greater autonomy for the Fijian military that were going. In a letter to the Secretary of State for the Colonies, he suggested that the finer details of the logistics of using the Fijian troops "should be worked out between the Commander of the Fijian Military Force and the Senior Officer of the Grapple area". ²⁰⁹ He did not want the Fijian soldiers to go to Christmas Island to merely be subservient but have a sense of equality with the commanding officers having to cooperate with their Fijian counterparts. The Fijian governor may have been aware of the colony's subordinate status, but also aware of the position Britain was in at the time. He used this as leverage to get the Fijian military better autonomy. However, the Grapple Task Force were keen on keeping the Fijian soldiers in their place. The Task Force noted that there was a "difference in powers and

²⁰⁹ 'Telegram from the Fijian Governor to the Secretary of State for the Colonies, 9th April 1958', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.191

responsibilities" for the roles available at Christmas Island. ²¹⁰ The Fijian soldiers were not needed to run the experiments but provide manpower. It is unclear what the relationship between the higher-ranking Fijian officers and the Task Force on the islands was like, and the extent that they were consulted but from the Task Force's point of view there was still a clear hierarchy in the Anglo-Fijian relationship. Overall, the British military still saw the Fijians as subservient, which may reflect how the central government saw them, but the geopolitical position Britain was in meant that the Fijian governor was able try and use this to his advantage. British power may have been militarised, but it was exerted through subtle means.

Although the Fijian governor may have tried to use Operation Grapple to the advantage of the Fijian military, he still supported the experiments in the Gilbert and Ellice Islands. In a telegram to the Secretary of State for the Colonies, on the 21st April 1958, he wrote that he was trying to recruit "experienced staff", but they were being "attracted away to other employment" with better pay. 211 Ultimately, Anglo-Fijian relations were cordial. Though, the Fijian governor may have been aware that the future of the islands depended on the strength of Britain. Without a strong Britain on the geopolitical stage, Fiji may have been vulnerable to communist, or American, expansion into the southern Pacific. Fiji may have been strategic for the British when conducting nuclear experiments, but a strong Britain was also useful to Fiji in the grander scheme of the Cold War. The relationship between Britain and the remote colony was cordial because it was symbiotic which had the potential to be useful both in the late 1950s and the remainder of the 20th century. Perhaps this is the best way to characterise Britain's place in the world at the height of the Cold War. It was a position where diplomacy was most effective when the nation being dealt with were useful in the megaton mission. Fiji, like Australia and New Zealand, was useful in supplying resources. The French and Americans were useful in manning stations on their remote islands, and information which could advance the nuclear arsenal. Whereas, Japan was of less use, which led to a frostier approach toward the Tokyo government. Japan was

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²¹⁰ 'Draft Telegram from the Ministry of Supply to the Fijian Governor, 29th January 1959', Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.74

²¹¹ 'Telegram from the Fijian Governor to the Secretary of State for the Colonies, 21st April 1958'Colonial and Commonwealth Office: Pacific and Indian Ocean Department: Registered Files (PAC Series), National Archives, London, CO1036/514, f.168

not necessarily useful in succeeding in the megaton mission beyond preventing the CND from disrupting it, which meant it could easily be ignored. Overall, British power may have been rather soft, but it was mainly wielded to achieve the larger goal of a functioning hydrogen bomb.

Conclusion

With the bombings of Hiroshima and Nagasaki, the potential for warfare changed forever. Possessing such powerful weapons was key to elevating geopolitical status. Britain was keen to developing its own functioning nuclear bombs, and by the late 1950s this had developed into a hydrogen bomb in the megaton range. Whilst Operation Grapple was going on, it is difficult to gauge what Britain's place in the world is without comparing it to other nations, and how it interacted with them. After all Britain did not exist in a vacuum and because of this, Britain needed the aid of other nations, to provide manpower, resources, and the use of territories to measure radioactive fallout. When negotiating for these things, Britain was able to maintain the upper hand, and were generally successful in getting what they wanted. Britain was still able to maintain a strong geopolitical position yet, was vulnerable as it was reliant on the resources of others and were not necessarily capable of doing so by themselves.

The British government, and military, were able to maintain a strong position in diplomacy primarily because of their ability to persuade and offer other nations what they wanted. The French and Americans were offered a glimpse into the experiments. Although, they were hindered by the atmosphere of secrecy with had become customary during the Cold War. The British government had to work around this but were perhaps more willing with the Americans as they were much further ahead in the nuclear arms race. Whereas the secrecy hindered the scientists who wanted to work with their French counterparts on the measuring stations. When it came to Australia, New Zealand and Fiji, the intention was rather different for keeping them onside. The three Pacific nations were useful in providing the most resources, but they were also integral in the formation of the Commonwealth. Britain offered them limited intel on the experiments, as well as a chance to visit the islands to see the blasts first-hand. Economic incentives were also put in place for the Fijian governor. British power was soft when dealing with colonies, both former and current. They were not acting in a way that was harsh and dictatorial but one where there was an element of give and

take, which was an unusual approach to dealing with small, remote colonies, such as Fiji. Overall, France, the United States, Australia, New Zealand, and Fiji had varying amounts of usefulness to the British government when perusing the megaton mission. British power became both increasingly militarised and softer during this period.

Yet, there was also frequent correspondence with the Japanese government and ambassador stationed there. Japan raised various concerns but were of little concern to the British. The ability to wave away these concerns further demonstrates how strong a position the British government were in as they could pay little attention to the pleas of the Japanese government over the potential effects of nuclear warfare. Through Britain may have been strong it was still vulnerable. The British government had to tread carefully as the Japanese protests could have spread elsewhere in the world, and the Campaign for Nuclear Disarmament could have launched ships to the exclusion zone which would have disrupted the experiments. Therefore, Britain was in a rather precarious position when planning Operation Grapple. They may have been in a powerful position, but this did not negate how vulnerable this was meaning that the power wielded was rather soft. Soft power was perhaps the most effective way of succeeding in developing methods of mass destruction.

Conclusions

Although short-lived, Operation Grapple had a profound impact on the Gilbert and Ellice Islands. The nuclear experiments marked a shift in British Imperialism and, by extension, geopolitical power in the 1950s. Most notably, British power became more reliant on the military. The Ministry of Supply took over many of the responsibilities which had traditionally belonged to the Foreign Office, Colonial Office, and the governors that resided in the colonies. This included many of the administrative duties, which caused tension during the transition toward the military being in charge. The arrival of a starkly increased military presence transformed the Gilbert and Ellice Islands from a colonial backwater to a military base at the heart of Britain's top priority in terms of foreign policy. This change appeared to be permanent with the plans for further experiments in the 1960s, as well as permanent infrastructure being put in place to accommodate this. Moreover, the Ministry of Supply were also in charge of the flow of information about Britain's closely guarded nuclear secrets, including the press, foreign governments, and foreign scientists. The British state was becoming increasingly reliant on the military in general, ²¹² as seen with the exchange of information, but Operation Grapple was a platform for this being extended to the furthest colonies. The discourse between scientists further demonstrates the dominating power of the military as they were not only in charge of information leaked to the press but also how individuals could talk about the experiments. Britain was not only a 'warfare state' but also part of a militarised world system as well. The military was also an integral part of international relations during the Cold War. The newer form of militarised power was realised through softer means of shrewd diplomacy and negotiation. Operation Grapple relied on cooperation from other nations, such as the United States, Australia and Fiji, the handling of this side of things would have traditionally been the role of the Foreign Office. The nuclear experiments helped transform British geopolitical power into a system that was reliant on the military to succeed.

However, it was not only the calibration toward the military that Operation Grapple changed, but it also centred the Pacific islands within the larger structures of Empire. Although the nuclear experiments at Christmas Island wound up lasting only five years, it marked a shift in the mindset regarding the smaller colonies in the South

²¹² D. Edgerton, Warfare State Britain, 1920-1970, (Cambridge: CUP, 2006)

Pacific. For as long as they were formally colonised, they were regarded as a colonial backwater that provided a modest income but were of little strategic importance in the British world system. ²¹³ However, Operation Grapple recentred colonial interests toward the Pacific, as the Gilbert and Ellice Islands became one of the most important colonies in the Empire as they became useful as a centre for developing a nuclear arsenal.

Power was in constant flux during the 20th century and was continuously being renegotiated. This renegotiation extended from Britain to the most remote colonies. Part of this was refocusing attention toward the Pacific. After all, the Grapple series ran parallel to independence movements in Africa and the 'East of Suez' movement. The British government was aware that the world system it relied on prior to the Second World War needed to evolve or it would crumble. The Commonwealth was still a new concept, with the structure and Britain's role in it still being established, so a mixed system with some of the colonies as part of it may have been appealing. Therefore, Operation Grapple helped re-establish the British Empire in the Pacific by giving it a new purpose. Taking the Pacific nuclear experiments into account also highlights the limits of the 'East of Suez' movement. Since the Suez Crisis, British interests eastward of the Suez Canal was limited beyond withdrawal. Yet, Operation Grapple shows that this was not necessarily the case. The British government had a responsibility to its smallest colonies and the Gilbert and Ellice Islands were not seen as being a viable option for independence in the 1950s. Operation Grapple gave them a new purpose and sustained Britain's presence in the South Pacific. With the islands becoming much more useful, the British government had little incentive and thus did not envision withdrawal and decolonisation in the short-term.

The islands may have been useful in terms of foreign policy, but they were a tool in Britain re-gaining geo-political legitimacy in the Cold War era. The nuclear bomb, rather than only being in control of a vast Empire, soon came to represent power. The mass destruction that managed to end the Second World War meant that if another large-scale war broke out again, it would have been better to be the one launching the missiles than receiving them. Operation Grapple was a success. Britain had managed

²¹³ B. MacDonald, Cinderellas of Empire: Towards a History of Kiribati and Tuvalu, (ANU Press: Canberra, 1982), p.75

to gain possession of a fully functioning, and controllable, hydrogen bomb by 1959. The outdated atomic bombs of the early 1950s were now a thing of the past, and Britain also succeeded in not falling behind in nuclear arms race. The link between the Grapple series and British geopolitical status is obvious in this respect, as it helped sustain it. However, the experiments also managed to sustain the Empire in the South Pacific, albeit briefly. Once the functioning bomb was completed, the Grapple task force were looking to the future. They envisioned a future where the Pacific would be the centre of British scientific operations to build on the Grapple series. This meant that the Gilbert and Ellice Islands, as well as other colonies in the region such as Fiji, were kept firmly under British control, meaning that the Empire was sustained. Although this did not last due to the Grapple series being short-lived. Overall, Operation Grapple may have not lasted for very long, but it represents the changing nature of British imperialism and geopolitical power. The British government were not keen on losing their long-established empire and recalibrated their attention toward a militarised system based in the Pacific where their part of the nuclear playground could give them a new sense of legitimacy.

It was quite vague as to when the Grapple task force and metropolitan government foresaw the experiments beyond the Grapple series, but they did not come to fruition partly due to the growing influence of Campaign for Nuclear Disarmament in Britain. Initially, the next round of tests was postponed until Britain signed the Test-Ban Treaty in 1963. The Test Ban Treaty was initiated by President Kennedy in response to the Cuban Missile Crisis at the end of the previous year, and essentially nulled the McMahon Act by banning the detonation of nuclear bombs but international cooperation could take place. ²¹⁴ The British forces merged with the Americans again in the 1960s, making the need for their own nuclear weapons programme redundant and the forces never returned to Christmas Island for further experiments.

The Test Ban Treaty also had a knock-on effect in terms of European Rule in the South Pacific. The 1960s saw political activism centred around ridding the Pacific of nuclear weapons altogether. This was primarily spearheaded by Fiji, but the sentiment soon turned into Pan-Pacific conferences discussing the nature of rule from

²¹⁴ N. MacLellan, *Grappling with the Bomb: Britain's Pacific H-Bomb Tests*, (Australian National Press, Canberra: 2017), p.275

foreign powers. Many soon came to the conclusion that the only way to ensure that the Pacific was no longer used as a nuclear playground was to push for independence. The 1970s saw many new nations being recognised by the United Nations after years of decolonisation negotiations. The Gilbert and Ellice Islands were separated in two, with the Gilbert Islands becoming the Republic of Kiribati in 1979 and the Ellice Islands the Republic of Tuvalu in 1978. Upon their independence, Kiribati signed the Treaty of Tarawa in 1979 with the United States which ensures military defence in exchange for the United States maintaining military bases on various islands, which is still in effect. Since its foundation, Tuvalu has never formed a military and instead has a similar agreement with New Zealand. The two nations may be free from nuclear weapons, but their defence arrangements are still reliant on other nations. Therefore, it is difficult to understand the decolonisation and independence of these republics without considering the impacts of Operation Grapple, which will remain an integral part of their histories.

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²¹⁵ W.D. McIntyre, Winding up the British Empire in the Pacific Islands, (Oxford: OUP, 2014), p.44 ²¹⁶ B. M. W. Ratter, Geography of Small Islands: Outposts of Globalisation, (New York: Springer, 2018), p.102

²¹⁷ United Nations Office of Legal Affairs, Treaties and International Agreements Registered or Filed and Recorded with the Secretariat of the United Nations: Cumulative Index No. 45, Volumes 2851 to 2900 (July 2012-March 2013, (United Nations, 2017), p.411

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