



Master's thesis

NTNU
Norwegian University of
Science and Technology
Faculty of Humanities
The Department of History
and Classical studies

Knut Ola Naastad Strøm

The devil to pay

**Kristiansand Nikkelraffineringsverk, the
British America Nickel Corporation and
British Economic Warfare 1914-1918**

Master's thesis in History
Trondheim, Spring 2012

Preface

This thesis is the culmination of two years of work at the Norwegian University of Science and Technology in Trondheim between 2010 and 2012, including a 6-month stay at King's College London in the spring of 2011. My thanks go to Pål Thonstad Sandvik, the professor who suggested the subject and guided me through this process. Additional thanks go out to family, friends, fellow students and others who have assisted me in my endeavours, and made my work as enjoyable as it has been.

Knut Ola Naastad Strøm

Trondheim, May 15th 2012

Table of contents

• Preface	1
• Table of contents	2
• Chapter I: Questions and sources	4
• Introduction	4
• Past works	6
• The private papers	8
• Departmental papers	10
• Definitions and language	11
• Chapter II: KNR, nickel and the origins of BANC	12
• The rise of nickel	12
• Three industrialists	14
• From Evje to Kristiansand	17
• Pearson, Dunn and Canadian nickel	18
• An ambitious project – a summary	21
• Chapter III: Economic warfare and the blockade of Germany	23
• The Royal Navy and the rights of neutrals	23
• Naval guns of August and the lack of grand strategy	25
• Little to gain, everything to loose	29
• Casting the net	30
• Plugging the gaps	34
• The strain of war	36
• The blockade – a summary	38
• Chapter IV: From Kristiansand to Canada – 1910-1915	40
• Foreign nickel for Kristiansand	40
• The birth of BANC	42
• Early financial hurdles	44
• War, Dunn and the British government	47
• The August agreements	51
• From Kristiansand to Ontario – a summary	53

• Chapter V: War, investment and collapse – 1915-1926	55
• Fostering domestic demand	55
• Committed to Canada	57
• Fire and finance	60
• A downward spiral	64
• London disengages	66
• Downfall	68
• An ignominious end – a summary	70
• Chapter VI: Commerce at war - discussion and conclusions	71
• To Canada!	71
• War and changing circumstances	72
• Nickel for Britain?	75
• Business ethics and experience	77
• The 1917 trade-off	79
• Boom, BANCruptcy and a Great War	81
• Abbreviations	84
• Literature and sources	85

Chapter I

Questions and sources

Introduction

Between 1914 and 1918, while huge armies of men were slogging it out in the trenches, a less visible – but no less hard-fought – war was being conducted in the economic sphere. The British blockade of Germany and her allies during the Great War played its part in the eventual victory of the Entente against the Central Powers, and among the trades affected was the Norwegian nickel industry.

The only nickel refinery operating in Norway during the war years was Kristiansand Nikkelraffineringsverk A/S (KNR) in southern Norway. KNR had invested huge sums in the Canadian nickel mining industry, and when its transatlantic partner – the British America Nickel Corporation (BANC) – went bankrupt in 1924 it proved impossible to keep the Norwegian firm afloat. It ran up significant profits between 1914 and 1918, but found these difficult to maintain during the subsequent years of peace. The gradual collapse of the company between 1924 and 1926 sent shock waves through both the Norwegian business community, and the nation as a whole. The ensuing scandal assumed massive proportions, and the domestic nickel industry received a blow from which it was never again to emerge as an independent player. It is impossible to accurately estimate the true losses and sufferings caused in Norway by the joint bankruptcy of BANC and KNR, yet the sums involved hurt the Norwegian government, banks and public to the tune of tens of millions of Norwegian kroner – the 2012 equivalent would be counted in the hundreds of millions, if not billions.

In 1922, as the crisis was unfolding, the Norwegian parliament appointed a commission to examine the possibility of mismanagement or wrongdoing. It reported in 1923, and although it resulted in no criminal charges being brought, it badly stained a number of Norwegian businessmen and investors. The report itself was published in 1925, and contained a thorough scrutiny of Kristiansand's Canadian transactions between 1910 and -23, with one important exception: It did not to any great extent examine the dealings BANC and KNR had with the British government.

During the Great War the British had become interested in both the Norwegian and Canadian nickel industry as part of its munitions and blockade efforts. In 1916 they became co-investors with Kristiansand in British America. Although not exposed to the same extent as the Norwegians, the British too lost money when the venture failed in the mid-1920s. Yet during the inter-war years political sensitivities made the blockade and war-finances a topic to be avoided in

Britain. Government papers were locked away, and war-time officials were prevented from publishing memoirs or other papers until well after the Second World War. As a result nothing much was written about Britain's war-time dealings with the nickel industry until the 1960s, and by then people had lost sight of the BANC débâcle.

In 1988 James Colussi wrote an MA-thesis at the Laurentian University in Ontario on the British America Nickel Corporation's turbulent history between 1912 and 1924. Pål Thonstad Sandvik at the Norwegian University of Science and Technology completed his history of nickel refining in Kristiansand in 2004, with subsequent books on the subject published by the same author in 2008 and 2012. Yet neither Colussi nor Sandvik looked at the British dimension in any great detail. In short – even though most government papers relating to the affair were made public in the late 1960s and early 1970s – as of 2012 no study of the British influence upon KNR and its Canadian affairs have ever been made.

The British struggle to blockade Germany during the First World War came to include direct intervention in the Norwegian economy, and KNR was among the firms which came to deal extensively with the London government. This essay is therefore an attempt at retelling the story of Kristiansand Nikkelraffineringsverk A/S and its involvement with the British America Nickel Corporation between 1910 and 1926, focusing especially on the years 1914 to 1918.

Building upon documents from British departmental archives and the work already done by the parliamentary nickel commission, Colussi and Sandvik, it should be possible to gain new insight into how British economic warfare came to affect Norwegian economic activity during the war. The imperial government intervened extensively in Norwegian industry, beginning as early as 1914,

By the time the Great War ended in 1918, British government involvement in Norwegian economic affairs was pervasive to say the least. Although several works are available on the Norwegian firms and the wartime economy, very little research has gone into looking at this involvement from the British perspective. This thesis is an attempt at rectifying that shortfall. Although a history of Kristiansand Nikkelraffineringsverk A/S and its dealings with the Canadian nickel producer BANC between KNR's founding in 1910 and the collapse of both companies in the mid 1920s, the focus of the essay is the years between 1914 and 1918. These years were formative for the two firms, and the extent of Norwegian investment in Canada was only made possible by the cooperation of the British government.

The study of KNR and its dealings with the Imperial authorities in London give new insight into how the British intervention in the Norwegian economy came about, and how it unfolded as the war dragged on. What approaches did the British use in their attempt at controlling Norwegian nickel exports? Did these approaches change over time, and if they did – why?

Past works

The literature on Norway's economic and diplomatic history between 1914 and 1918 is, as one might expect, substantial – but nonetheless limited when compared to that written on the main powers. Norway was not a combatant in the Great War, and the more traumatic experiences between 1940 and 1945, when the country was invaded and occupied by Germany, naturally came to dominate Norwegian history writing in the latter half of the century. In 1927 economist and historian Wilhelm Keilhau wrote a history of the Norwegian economy policy during the First World War, but it was not until Olav Riste began publishing in the late 1960s and early 70s that the importance of the subject again gained broader recognition – and then only gradually. Yet by that time, the national outrage over the “nickel affair” had subsided into obscurity. Riste and Roald Berg have both written substantive histories of wartime Norway¹, and more recently company histories of Norsk Hydro² and other firms have begun to rectify some of the gaps still left. Biographies of influential war-time businessmen like Sam Eyde³ have also gone some way towards this goal, but important work still remains to be done in this field. With both Norwegian, German and British government archives now open, and interest among scholars and students present, the future of the subject of Norway's history during the Great War is perhaps looking brighter than at any time before.

At the height of the “nickel affair”-controversy in the early 1920's the Norwegian parliament created a commission with the specific task of looking into the financial affairs of the then struggling KNR. The final report, published in 1925, is thorough, but limited in that it was defined solely as an inquiry into possible wrongdoing in Kristiansand's Canadian dealings. It deliberately neglected to look at the British role in the affair. Given the level of British government involvement in the BANC-KNR relationship, this makes the report severely lacking when it comes to fully explaining the events it describes. That said, the report is a valuable document which does a good job of tracking and describing the complicated financial structure of both the Norwegian and the Canadian company. Since it is also the only in-depth study ever made of Kristiansand Nikkelraffineringsverk A/S, it is given that it remains one of the chief sources of information for this essay.

Among the Norwegian company histories to have been written in recent years is Pål Thonstad Sandvik's 2004 work⁴ on the history of the Kristiansand refinery. After the failure of KNR

1 Berg, Roald; *Norsk utenrikspolitikk historie 1905-1920*, 2nd volume: *Norge på egen hånd*; Oslo 1995
Riste, Olav; *Norway's Foreign Relations: A History*; Oslo, 2005

2 Andersen, Ketil Gjølme; *Hydros historie 1905-2005*; Oslo, 2005

3 Grimnes, Ole Kristian; *Sam Eyde: Den grenseløse gründer*; Oslo, 2001

4 Sandvik, Pål Thonstad; *Falconbridge nikkelverk 1910-1929-2004 : et internasjonalt selskap i Norge*; Kristiansand, 2004

in 1924, and an attempted reorganisation as Raffineringsverket A/S in 1926, the estate and intellectual portfolio of the refinery was sold to the Canadian firm Falconbridge Ltd. Falconbridge continued to operate the Kristiansand plant as a subsidiary until the company merged with the Swiss mining giant Xstrata in 2006. The former KNR thus became Xstrata Nikkelverk A/S, under which name the refinery continues to operate to this day. Sandvik's chief source on KNR is the 1925 parliamentary report, and although his work deals briefly with the origins of the refinery and Kristiansand's early Canadian adventures, the focus of the company history is the period under Falconbridge management. The chapter on KNR is therefore necessarily brief. Sandvik's 2008 doctoral thesis⁵, and its 2012 edited edition⁶ expands on the subject somewhat, but remains largely concerned with the refinery's time as a Falconbridge subsidiary.

Perhaps the most obvious source of material for a study of this kind would have been the private company archives of Kristiansand Nikkelraffineringsverk and BANC. Unfortunately, the KNR archives were lost in the decades following the 1924 collapse, with only a few documents remaining in Falconbridge/Xstrata's possession. The British America Nickel Corporation archives are today part of the archives of Vale limited – the successor of the International Nickel Company (INCO) which bought the BANC estate following the 1924 bankruptcy. Given constraints of time and economy it has not been possible for me to visit these. Representatives of the parliamentary nickel commission requested and received access to some of BANC's papers as part of their investigation the 1920s, and noted the severe lack of information available. BANC held no annual meetings, and very few regular board meetings before 1917. Nor were there any proper budgets, company accounts or annual balance sheets made out between the firm's founding in 1913 and the refinancing of the company in 1917. Given this lack of pre-1917 papers and the fact that the British gradually withdrew from the firm's affairs after this refinancing, it is unlikely that much relevant information is present. Not having been able to access the archives is thus unfortunate, but it should not undermine the conclusions of this work as a whole.

James Colussi used the then INCO archives as a major source when he wrote his MA thesis⁷ on the history of the British America Nickel Corporation in 1988. Colussi was a student at the Laurentian University in BANC's hometown of Greater Sudbury in Ontario, and his work is squarely focused on domestic affairs. The thesis is a detailed account of BANC's ultimately doomed struggle to develop into a profitable venture, and is well written. It is also notable in that Colussi shows how the BANC management attempted to court local and federal Canadian politicians from

5 Sandvik, Pål Thonstad; *The making of a subsidiary, Falconbridge nikkelverk, 1910-1929-2004*; PhD thesis at NTNU; Trondheim, 2008

6 Sandvik, Pål Thonstad; *Multinationals, Subsidiaries and National Business Systems*; London, 2012

7 Colussi, James; *The Rise and Fall of the British America Nickel Corporation 1913-1924*; MA thesis at the Laurentian University; Sudbury, 1988

Prime Minister Borden and downwards – something they would also try with the Imperial authorities in London. Although Colussi too touches upon the subject of British involvement, his work is similar to Sandvik's in that it makes no use of British government sources and does not particularly expand upon that aspect of the company's history.

The Canadian literature on nickel and the Ontario mining industry and the literature on the British blockade as a whole is quite extensive. Perhaps most important for my work has been O.W. Main's *The Canadian Nickel Industry*⁸ as well as Avner Offer and John Coogan's respective works⁹ on the development of entente blockade policy. Although much has been written on the Canadian nickel industry, most published histories have been commissioned by the industry itself. Main's work is as such one of few purely academic entries on the subject, and although it is now more than fifty years old it remains an excellent introduction to the nickel industry. Offer and Coogan both wrote in the eighties, and were thus among the first academic authors to access the wealth of British departmental papers made public during the seventies. Building on the work of both is Hew Strachan in his new mammoth work on the Great War – of which only the first volume has as of yet been published¹⁰. The academic work available on the First World War is extensive, to say the least, but Strachan's *To Arms* and his *Financing the First World War*¹¹ have been my chief sources on the war as a whole.

The private papers

Admiral Børresen was the director of Kristiansand Nikkelraffineringsverk for most of its existence. He kept sporadic diaries through his working life, and although an interesting source of insight into his life and times using them in academic research is fraught with difficulties. The diaries themselves exist in two separate versions. The apparent originals – or those that have survived – are in the form of a series of handwritten notebooks kept by Børresen's descendants. The Admiral's grandchild – Jacob Børresen – together with Tom Kristiansen published an edited version of these diaries spanning the years 1896-1910¹², and have also been kind enough to allow me access to a transcript of the remaining diaries covering the years between 1910 and 1933. A second version of Børresen's diaries exists in the Norwegian National Archives. These books, covering the period of

8 Main, O.W.; *The Canadian Nickel Industry: A study in market control and public policy*; Toronto, 1955

9 Coogan, John W.; *The End of Neutrality: The United States, Britain and Maritime Rights 1899-1915*; Ithaca, 1981
Offer, Avner, *The First World War: An Agrarian Interpretation*; Oxford, 1989

10 Strachan, Hew; *The First World War: To Arms*; Oxford, 2001

11 Strachan, Hew; *Financing the First World War*; Oxford, 2004

12 Børresen, Jacob and Kristiansen, Tom; *Levende Breve fra de Dødes Rige: Admiral U.J.R. Børresens dagboksopptegnelser 1896-1910*; Bergen 2005

1899-1925 are machine typed, with notes in the margins written in what appears to be the admiral's own (and very characteristic) hand. The National Archives version differs from the family archive transcripts in a number of respects – entries are extended, shortened, added or removed altogether – and appears to me to be a later, edited version of the handwritten notebooks. It is also interesting to note that there is a gap in the handwritten diaries between the spring of 1915 and the spring of 1917 – the central period covered in this thesis and a source of great turbulence in the later life of the admiral. According to Børresen junior, the pages covering these two years appears to have been torn out of the original manuscripts, but it is unknown when, by whom or for what reason this may have been done. For a further discussion on the differences between the various editions of the diaries see Børresen and Kristiansen's *Levende Breve fra de Dødes Rige*.

The Børresen diaries are representative of the genre as a whole, and as such contains only the admiral's personal views of events. I've therefore not placed much reliance upon the diaries in my attempt to recount the story of KNR's involvement in the blockade, but rather used them to illustrate or confirm Børresen's central role in the events surrounding Kristiansand Nikkelraffineringsverk and the British America Nickel Corporation in the years between 1910 and 1926. I've also attempted to limit myself to referring to the family archive transcripts, returning to the National Archives version only when the events described within can be independently verified. The diaries as such have thus formed a secondary source for my work with this thesis.

Victor Hybinette – the Swedish-Norwegian engineer whose electrolytic nickel refining process was central to both KNR and BANC - and James Dunn - the long time president of BANC – have also left private papers behind. Hybinette's American descendants have graciously allowed me access to their grandfather's unfinished memoirs and a number of papers relating to his metallurgical work copied from the INCO archives. Unfortunately Hybinette himself died before he had completed his memoirs, and the text he left behind only cover the years up to about 1900. The INCO papers are mostly relating to his later work for the company, after he returned to their employ following the BANC débâcle. As such they've served to illustrate his early career and his early experiences with the Canadian nickel industry, but are lacking when it comes to describing the war years and his time at KNR.

James Hamet Dunn's massive personal archive is kept in the Canadian National Archives in Ottawa, and consists of correspondence, memorandums, maps and various other papers covering tens of meters of shelving. Unfortunately, as with the aforementioned BANC papers, constraints of time and economy have not allowed me to visit the Canadian archives. James Colussi used Dunn's correspondence extensively in his thesis on BANC, but as mentioned above, his work was concerned chiefly with operations in Canada. Dunn corresponded extensively with both Børresen

and Hybinette, and visited Norway on several occasions during the war. The lack of access to Dunn's papers thus remains the one great untapped source of information on KNR's wartime dealings.

Although the KNR and BANC archives are either lost or severely lacking, the historical archive of the Norwegian chemical company Elkem is relatively intact. Elkem partnered with the Kristiansand refinery in one of the early attempts at raising capital for the British America Nickel Corporation. The archive in question is today kept by the Norwegian Industrial Workers' Museum, and the papers therein detailing these pre-war negotiations have helped me paint a picture of the origins of Norwegian interest in the Canadian industry.

Departmental papers

The primary source for this thesis has been British departmental papers concerning the London government's involvement with KNR and BANC during the war years. To my knowledge no-one have yet made an in depth study of these, in the context of Norwegian industry between 1914 and 1918. This thesis is therefore breaking new ground. I've limited myself to looking at papers dealing specifically with Kristiansand Nikkelraffineringsverk and their Canadian investments, but the information available in the archives is vast also when it comes to other firms. The majority of the papers themselves – totalling close to 2 000 pages – were accessed and copied by me at the National Archives in Kew outside London, in the spring of 2011 and 2012 respectively.

The files in question covers everything from official reports and memorandums, minutes of meetings and correspondence between people ranging from the Governor General of Canada and various ministers to civil service officials, servicemen and departmental clerks. The papers themselves originates mostly with the Board of Trade, the Foreign Office, the Treasury and the Cabinet, yet wartime reorganizations of the British government meant that various new departments and even entire ministries were set up, on a temporary basis, under the aegis of old ones. There are therefore papers from the War Trade Department, the Ministry of Blockade and various other major or minor departments mixed in.

Finding relevant papers in the archives has been a challenge. Some departments – such as the Foreign Office – have often grouped documents relating to KNR together in large files, while other departments have spread them around in various correspondence folders under more or less cryptic headings. I'm therefore confident that I've found nowhere near all the documents relating to Kristiansand or the British America Nickel Corporation present in the archives. Those found and accessed does, however, serve to draw a fairly coherent picture of government involvement from

the British first became interested in the two companies in late 1914 until they unhandedly the last of their, by then worthless, holdings in BANC in the late 1920s.

Definitions and language

The work with this thesis has involved the use of sources of various origins – some British, others American, Canadian or Norwegian. They also cover a great range of fields and genres – government reports, private letters, balance sheets, memorandums and diplomatic correspondence. This has, of course, involved some challenges in respect to different styles and languages. I've tried as best I can to integrate the use of these disparaging sources, but the reader should perhaps pay extra attention to certain details.

Currencies used in the text are almost invariably Canadian dollars (\$), British pounds (£) and Norwegian kroner. Unless otherwise specified, when a currency is mentioned it refers to one of these three. Likewise imperial, US and metric units of measurements intermingle within the text. Although the differences are in most cases not major, I've attempted to use the term “long ton” when referring to the imperial ton of 2240lbs, while “tonne” refers to the metric ton of 1 000 kilograms. Although the term “imperial government” could apply to both the London and Berlin governments, in this thesis it is used exclusively to refer to the British.

Lastly it should probably be noted that Christiania is the old name of the modern-day city of Oslo. The official name of the Norwegian capital changed at the end of the nineteenth century from Christiania to Kristiania, but both the British and Norwegian sources I've used when writing this thesis consistently use the Christiania spelling. Even though strictly incorrect, I've therefore chosen to use that as well.

Chapter II

KNR, nickel and the origins of BANC

This chapter gives a short, generalised account of the worldwide nickel industry as it stood in August 1914, focusing especially on the national industries of Norway and Canada.

What were the origins of Kristiansand Nikkelraffineringsverk and the nature of their interest in Canadian nickel? Who were the people dominating these affairs, and how did their ideas and plans come to shape the future of the Norwegian nickel industry?

The rise of Nickel

Although not recognised as an independent metal, human use of nickel alloys goes back to ancient times. During the European mining-boom of the 15th and 16th century, silver extraction was often marred by the presence in the metal of a reddish ore, which omitted a foul and poisonous smoke when roasted. The unknown and unwanted ore quickly gained the moniker “the devil's metal”, or more colloquially - “old Nick's metal”. Nickel had been discovered.¹³

By the nineteenth century the chief uses of nickel were decorative. It was used as a substitute for the much more valuable silver in cutlery and utensils, as well as other minor metal objects. Nickel mining at this time was centred chiefly in Scandinavia, where bodies of ore had been extracted on an industrial since the 1830s. The world's first nickel smelter opened in Sweden in 1838. By 1870 there were around 40 mines in operation in Norway alone, altogether accounting for around 40% of world production. Yet with the discovery of richer ore bodies in New Caledonia, Canada and elsewhere, Scandinavian production declined rapidly, so that it had been almost completely eclipsed by the 1890s.¹⁴

The growth of the industry led to a rash of experimentation with new alloys containing nickel. Among these were several different grades of cupro-nickel, which came to be introduced in coins, gradually replacing the old silver- and copper coinage. Perhaps more important was the discovery, by the middle of the nineteenth century, that the addition of 2%-4% nickel to steel made the new alloy much harder than ordinary steel. The new nickel-steels found many uses in the developing mechanical industries, where a metal which could withstand high pressures and heavy usage was much sought after for use in engines. Yet the most dramatic development came in 1885,

13 Howard-White, Frank Buller; *Nickel: An Historical Review*; London, 1963: 24-25
Main, 1955: 18

14 Howard-White, 1963: 52, 54, 72
Sandvik, 2008: 31-32

when the Montataire steel works in Northern France produced the first nickel-steel armour plate.¹⁵ The worldwide nickel industry experienced rapid growth through the last decades of the eighteenth century, and in 1900 production reached 9 000 tons per annum. A decade later this had more than doubled to a total of 23 000 tons.¹⁶

As mentioned above, the world's leading nickel producing countries at that time were Canada and the French colony of New Caledonia. The New Caledonian nickel fields were dominated by the Société Anonyme Le Nickel (founded in 1880, and commonly referred to simply as “Le Nickel”), which generally smelted the ore in the Pacific, transporting the resulting 40-50%-nickel ore or “matte” to Europe for further refining. The Canadian mining scene – centred in Sudbury in Ontario – was more diverse, but it too was dominated by a few large companies. Chief among these were Mond Nickel and the Canadian Copper Company. Mond exported its ore to Britain, where it was refined at the company's facility in Wales. The larger of the two – the Canadian Copper Company began smelting at Copper Cliff in Ontario in 1888. Like Mond, Canadian Copper originally shipped most of its matte to Europe for refining, but beginning in the 1890s a majority share of the product instead went to the Orford Copper Company in New Jersey. The Canadian-Orford partnership proved highly successful, and in 1902 they merged together with a number of smaller firms to form the International Nickel Company (INCO).¹⁷

The rise of these two new centres of nickel production led to price wars, which came to dominate the international nickel scene during the last two decades of the nineteenth century. By 1886 nickel prices had fallen to only 16% of 1879 levels, and this forced most of the remaining uncompetitive Norwegian mines to close. Realising that large profits could be made through cooperation, however, producers ended the late-century price wars in 1896 with the formation of a nickel trust encompassing most of the major international players in the field. In the words of Pål Thonstad Sandvik “this sales cartel controlled most of the nickel industry for the next 60-70 years”^{18, 19}.

15 Howard-White, 1963: 98
Main, 1955: 18-19

16 United States Geological Survey; *Historical Statistics for Mineral and Material Commodities in the United States, Nickel Statistics*, <<http://minerals.usgs.gov/ds/2005/140/ds140-nicke.pdf>>; published December 7th 2011

17 Howard-White, 1963: 58, 76-77, 126
Main, 1955: 19-20, 22, 59

18 Sandvik, 2008: 32

19 Sandvik, 2008: 32

Three industrialists

Urban Jacob Rasmus Børresen was a well known personage both in Norway and abroad long before the “nickel affair” came to the attention of the press. Born in 1857 as the son of a Christiania ship owner, he went to sea at the age of 14. After a few years in the merchant marine he joined the Norwegian navy as an officer and went on to study technical engineering in Berlin, Germany.²⁰

Børresen became a formative and modernizing, if somewhat divisive, figure in the navy in the years leading up to Norway's independence in 1905. By the eve of independence he was a rear admiral, chief of the naval staff and commanded the navy's main battle fleet at sea. He wrote and published extensively on tactics and technical innovations in both Norwegian and international journals, and corresponded with characters such as Fred Jane of Jane's Fighting ships' fame. His naval career came to an abrupt end in 1910 after a public dispute with commanding admiral Christian Sparre, as a consequence of which both resigned their posts.²¹

After independence the new king, Haakon VII, and his British queen, Maud, became friends with Børresen. He acted as adjutant to Maud's brother – the Prince of Wales, later King George V – during the Norwegian coronation festivities, which resulted in him being appointed a Knight Commander of the Royal Victorian Order in the British honours system.²² Through his extensive writings he became a well known figure in international naval circles. In the years before the war Børresen therefore lectured widely, appearing at London's prestigious Royal United Services Institute in 1910, after which he became acquainted with a number of senior British officers.²³

The increasing speed of industrialisation efforts in early 20th century Norway made for many opportunities for the technically minded admiral while still on active duty. He took a great interest in the new mining and chemical firms which grew up around this time. In October 1904 he became the director of a small metallurgical company outside Trondheim, Norway – A/S Meraker elektriske kraft & smelteverk. The year after, December 1905, he resigned this position to take up a directorship at the newly started Norsk Hydroelektrisk Kvælstofaktieselskab. Norsk Hydro – as the company came to be known – quickly grew to become one of the leading industrial firms of Norway, specialising in the chemical production of nitre. The man who recommended Børresen for the directorship was one of the founders of the company – Sam Eyde.²⁴

By 1905 the 39 year old Sam Eyde was on the verge of become one of Norway's leading

20 Børresen, 2005: 9-10

21 Børresens diary, Family transcripts (BD I): 15/3 - 1910
Børresen, 2005: 15, 154

22 London Gazette, issue 27930, July 6th 1906: 4718

23 Børresen, 2005: 11

24 Børresen, 2005: 100
Grimnes, 2001: 165

industrialists. Like Jacob Børresen the son of a ship owner, he had as a young man joined the army as a reserve officer. Later he attended the same technical college in Berlin as Børresen had graduated from a few years previously, but where Børresen embraced to a career in the military, Eyde turned to entrepreneurship.²⁵

It is not known when the two first became acquainted, but Eyde must have gained a degree of respect for the admiral during the latter's short stint as director of Meraker – a company which competed directly with some of Eyde's business interests at the time. Børresen wrote in his diary that Eyde became very angry with him on several occasions.²⁶ When Eyde began the process of founding Hydro through a French-Scandinavian conglomerate he then poached Børresen, recommending him to the appointment as one of three Norwegian directors of the new company alongside Sam Eyde himself. This became the beginning of many years of business association between the two.²⁷

On the matter of why Eyde choose Børresen, there is little to do but speculate. Eyde may have been attracted to a man whose upbringing was so similar to his own – both sons of local shipping magnates, both officers, both educated at the same technical college. He certainly represented him as an intelligent and technically acute person when recommending him to the directorship. Their personal relationship is also something of a mystery. At times they certainly were very close. They appeared together socially on numerous occasions, and Eyde even asked Børresen to be best man at his 1913 wedding. Still, despite what came to be a long business association, Børresen seems to have waxed from complete friendship to a certain distrust of his colleague. Jacob Børresen's diary contains a number of question marks on Eyde. The admiral admonishing himself for suspecting Eyde's motives or depreciating his quest for personal wealth. Børresen certainly did not shy away from personal profits himself, but there seems to have been something about Eyde which at times made him somewhat uneasy.²⁸

The last member of the trio which came to dominate KNR in its early years was Victor Noah²⁹ Hybinette. Hybinette was born in the mining town of Falun, Sweden in 1867. His father was the head of a transport firm contracted to the mining works, and Victor grew up in the shadow of the local copper mine. At the age of seventeen he enrolled at Chalmers Technical Institute in Gothenburg, and graduated from there three years later, whereupon he returned to Falun and took up a job as an engineer at the mines. After some time at Falun, Hybinette then moved on to work at

25 Grimnes, 2001: 23, 44

26 Børresen, 2005: 150

27 Grimnes, 2001: 165

28 Børresen, 2005: 161

Grimnes, 2001: 165

29 Sometimes spelled Noa, Noak or Noach

a metal smelter near Hommelvik, just outside Trondheim, Norway. At Hommelvik they experimented with different ores, and it was here he first gained experience with processing nickel. Some of the nickel ore in question originated from Sudbury, Canada, and as such this also provided him with his first significant experiences with the Canadian mining industry.³⁰

Disappointed by the falling profits and what he perceived as a lack of ambitions of the Hommelvik management, Hybinette then moved to the United States where he in 1893 landed a job as a metallurgical engineer of the Orford Company in New Jersey. Orford was one of the world's leading nickel refineries at the time, and primarily worked ore supplied by the Canadian Copper Company. All the while Hybinette was working Canadian ore in New Jersey, the Ontario government sought to pressure both Orford and Canadian Copper to have the nickel refined within Ontario itself. Both companies successfully resisted it at the time, but this may have been where Hybinette first began thinking about the possibility of erecting a refinery in Canada.³¹

Hybinette had been successful at Orford, and when the firm merged with Canadian Copper in 1902 to become the International Nickel Company of Canada he became INCO's chief metallurgist. By the age of 35 he had thus risen to occupy the highest technical position at what had become the world's single biggest producer of refined nickel. While at Orford and INCO Hybinette had also worked part time spells at metallurgical research institution in New York, and in 1897 he patented a revolutionary new electrolytic process of refining nickel, a process which he continuously improved. Thus was born the Hybinette process.³²

For various reasons the new process was not implemented at Orford nor at INCO, and after a falling out with the management Hybinette left the company in 1905. Even though he had left his position at Hommelvik, he remained optimistic about the prospects of the Norwegian nickel industry and after resigning from INCO he returned to the country with a view to set up a new refinery. These first attempts failed meanwhile, and when he got an offer from the North American Lead company to run a pilot plant with his electrolytic process he quickly returned to the United States. The new plant in Missouri did not perform to expectations, but Hybinette's ceaseless advertising of his new process then bore fruit. Admiral Børresen, who had met him in Norway after Hybinette left INCO, sent the engineer Anton Martin Grønningsæter to study Hybinette's achievements. The Missouri plant may not have been a huge success, but Grønningsæter reported back favourably on the merits of the new process, and as a result Børresen invited Hybinette back to

30 Hybinette; *Experiences...*; unfinished memoirs

Report of the Royal Ontario Nickel Commission, Appendix; Toronto 1917; Interview with V. Hybinette, April 4th 1916

Svenskt Biografiskt Lexikon; Stockholm, 1973: Hybinette, Victor Noach

31 SBL, 1973: Hybinette, Victor Noach

32 SBL, 1973: Hybinette, Victor Noach

Norway in 1909 to participate in a new project at the southern port city of Kristiansand.³³

From Evje to Kristiansand

One of the major Norwegian nickel mines was situated at Evje in Setesdal. Established in 1872, both mine and smelter closed down in 1894 due to market conditions and the relatively low grade nickel ore. As the international cartel came into force prices recovered, and production was restarted at the Evje plant in 1899. Although not a member of the cartel, production at the mine was nowhere close to levels threatening the major players.³⁴

In spite of improving market conditions the plant at Evje failed to yield satisfactory profits, and had to be refinanced in 1908. Following the end of his naval career, Børresen had become one of the directors at Evje, and to run operations at the plant the admiral hired engineer Anton Martin Grønningsæter³⁵

Production at Evje was limited to mining and smelting operations. This resulted in a product known as nickel matte. In the matte unwanted minerals and elements had been removed by roasting and smelting. As a result it contained a substantially higher percentage of nickel than raw ore, but it was not pure enough to be used in the making of alloys. In order to remove the remainder of the unwanted elements the nickel matte had to be refined, and Grønningsæter argued that for nickel production at Evje to become profitable it would be necessary to refine the nickel in Norway itself. Norwegian matte alone would be unable to compete with the higher grade ore from Canada and New Caledonia on the international market. Establishing a Norwegian refinery would be easier said than done, however. A technical process cost efficient enough to be profitable would be required, and most of the processes already in use were patented to members of the cartel. Firms who would be unlikely to sell or lease the rights to a competitor.³⁶

This was where the interests of the Evje management and Hybinette came together. Victor Hybinette himself already had experience of running a financially successful refinery, and was eager finally to utilise his electrolytic process on a commercial scale. He also had personal knowledge of the Norwegian nickel ores to be processed. Børresen and Eyde on their side provided the managerial experience and facilitated the required funding to finance the new company. The Norwegian refinery was thus established in Kristiansand in 1910 under the name Kristiansand Nikkelraffineringsverk A/S (KNR). Kristiansand was chosen as a location for its proximity to Evje,

33 Sandvik, 2008: 35-36

SBL, 1973: Hybinette, Victor Noach

34 Sandvik, 2008: 33-34

35 Sandvik, 2008: 34

36 Sandvik, 2008: 35-36

for the abundant local supply of cheap power and labour as well as for the proximity of major port facilities. Hybinette had argued that matte from Evje itself would not be enough to supply the new refinery. He foresaw it operating on a scale where imports of foreign ore would be required.³⁷

The company was organized as a standard Norwegian A/S with stocks, but with the added provision of so called dividend certificates of which Victor Hybinette received half and the other half being divided among the shareholders. According to the laws of KNR, dividend was to be distributed accordingly – 10% to be divided among the shareholders, of the remaining 90% the board was entitled to one tenth with everything else being paid out to the holders of the dividend certificates. The board and management consisted of Børresen and Eyde, together with engineer Christian Wisbech, engineer Frimann Dahl and the two bankers Andersen and Maartens. In addition to these, Hybinette was also guaranteed a seat on the board for himself, while Anton Martin Grønningsæter became refinery manager. A selling contract between Evje and KNR was also set up which could not be renegotiated without the consent of Hybinette. Victor Hybinette was thus ensured both influence and a major financial interest in the new company. In return KNR received the sole rights to utilize Hybinette's refining process in Norway.³⁸

The process pioneered at the Kristiansand plant was the first to succeed in extracting nickel via electrolysis on an industrial scale, and while Hybinette had been the theoretical inventor, much of the honour of making it actually work has been given by later historians to Grønningsæter who oversaw and adapted the process to commercial production.³⁹

Pearson, Dunn and Canadian Nickel

To come to grips with the origins of the British America Nickel Company, it is necessary to look closer at two of its founders – American Frederick Stark Pearson and Canadian James Hamet Dunn.

James Dunn⁴⁰ may appear as a something of a fairytale character. Certainly his life was a story of “from rags to riches”. His father – a Canadian lumberjack – had died in 1874, when James was only a few months old. Dunn was therefore raised in impoverished conditions in rural New Brunswick, where his mother worked as a telegraph operator and housekeeper. One of his closest childhood friends there was a young boy named Max Aitken – later to be known as Lord

37 Sandvik, 2008: 36

38 Nikkelkommissjonen, 1925: 6-7

39 Colussi: 36-37

Sandvik, 2008: 36-37

40 For more on Dunn see the academical *Steel at the Sault* by Duncan McDowall, and the less so *Courage* by Lord Beaverbrook

Beaverbrook.⁴¹

Having saved up the money required for his tuition, Dunn enrolled at the Dalhousie Law School in Nova Scotia in 1895. This he did on the advice of a young lawyer named R.B. Bennett, whom he had met through his work as an assistant in a local law office. Bennett would later go on to serve as Prime Minister of Canada between 1930 and 1935. At Dalhousie Dunn thrived. He made a name for himself as an outspoken and bright student, and graduated in the spring of 1898. Later that same year he was called to the bar and became an authorised lawyer himself.⁴²

Following graduation James Dunn began working for the Halifax legal firm of Pearson and Covert. The senior partner in the firm – Benjamin F. Pearson – acted as a promoter of business ventures. He introduced his new young lawyer to the world of finance. Dunn became acquainted with many important people in Canadian business life, and it did not take long before Halifax became too small for his ambitions. After a stint as lawyer and railway lobbyist at the law firm Greenshields, Greenshields and Heneker in Ottawa and Quebec, he struck out on his own, purchasing a seat on the Montreal Stock Exchange in 1902.⁴³

Having established himself as an independent broker with the firm J.H. Dunn & Co, Dunn almost immediately enjoyed success trading in arbitrage and flotation. Arbitrage involved capitalising on marginal differences in the price of the same commodity between markets. Buying cheap and selling at slightly higher prices, a part of the art of arbitrage was the manipulation of markets. Even if he did suffer occasional setbacks Dunn proved adept at this game of rumormongering and financial juggling. The growth of his lucrative business led to the opening of a branch office in London in 1905.⁴⁴

Flotation differed from arbitrage in that it involved underwriting shares in companies and projects looking to raise capital through new issue. Brokers earned their profits through fees and percentages of share subscribed. Dunn engaged in this trade with a vigour, and it was through this business that he became involved with Fred Pearson for the first time.⁴⁵

Born in 1861 in Massachusetts and educated as an engineer at MIT, Frederick Stark Pearson came to be known in his day as an adroit entrepreneur. His skill lay not in inventing or developing new technologies, but rather in how to adapt and utilise existing ones to new purposes.⁴⁶

Specialising in introducing electricity to the American public transports system, he enjoyed

41 McDowall, Duncan; *Steel at the Sault: Francis H. Clergue, Sir James Dunn, and the Algoma Steel Corporation 1901-1956*; Toronto, 1984: 97-98

42 McDowall, 1984: 98

43 McDowall, 1984: 99

44 McDowall, 1984: 99-100

45 McDowall, 1984: 100

46 McDowall, 1984: 101

tremendous success in constructing and updating tramway, power and lighting systems in major cities like New York and Boston. By the beginning of the 20th century Pearson had made a name for himself in Canada as well, working as technical consultant to a number of the Dominion's larger firms. He became a recognisable face on the boulevards and streets of uptown North America.⁴⁷

Success brought wealth, and searching for even greater profits he turned his attention toward Latin America. Offering modern transportation and power services to the major cities of the southern continent seemed to guarantee greater returns, and Pearson soon came to set up a number of major utilities companies in Mexico and Brazil. The biggest success stories were the Mexican Tramway Company, the Mexican Light and Power Company and the Mexican North Western Railway.⁴⁸

Though in most cases successful, Pearson's utilities projects required massive amounts of capital to get off the ground, and this capital could often be hard to come by. This was especially true with the Latin American projects. Local capital was scarce. Funding therefore had to come chiefly via London, and this was where Dunn excelled. By incorporating Pearson's ventures under the, at the time, lax Canadian business laws, he managed to raise vast sums of money for Pearson's investments. Both men became wealthy in the process. To better work his game, and be at the heart of the world's financial markets Pearson encouraged Dunn to move to London full time. This Dunn duly did – establishing himself in offices in Threadneedle Street the City in 1905.⁴⁹

From his new seat in London Dunn engaged in arbitrage, floatation and other financial ventures throughout Europe and the rest of the world. Sometimes in partnership with Pearson, other times not. With his wealth and extensive circle of friends and business contacts he also partook in the London social life. He patronised the high arts, and provided lavish banquets attended by guests such as his old friend Max Aitken, fellow New Brunswicker Andrew Bonar Law, the Asquith family, Lloyd George and Winston Churchill. McDowall describes his business career and rise to international fame between 1906 and 1913 as “meteoritic”. He certainly made a name for himself in British high society, and his network of contacts appears to have been second to none. In 1909 he was appointed Agent-General for the government of Alberta in London. Thus further enhancing his standing and reputation.⁵⁰

Despite setbacks such as the collapse of his Montreal office, J.H. Dunn & Co, in the financial panic of 1907, Dunn did not completely abandon Canadian ventures. When the Lake Superior Corporation, set up to exploit the rich iron reserves near Sault Ste. Marie in Ontario, ran

47 McDowall, 1984: 101-102

48 McDowall, 1984: 101-3, 111

49 McDowall, 1984: 103, 105

50 McDowall, 1984: 100-101, 108-109

into financial difficulties in 1908, he convinced Pearson to join him in refinancing the company. Unfortunately, despite their best efforts and the infusion of millions of dollars, the corporation never got off the ground again. Pearson returned to his ventures in South America and Dunn to London, but the Ontario fiasco left Dunn with his first serious experience with the Canadian metals and mining industry.⁵¹

By the time war broke out in Europe in August 1914 both Dunn and Pearson were in something of a financial dump. The political landscape in South America had gradually grown more and more unstable, culminating in coups and unrest in Mexico from 1910. Running a traditional business became harder, and profits fell like a rock. Dunn even attempted to pressure the British government into intervening, but to no avail. The Foreign Office flatly refused his overtures. The Mexican ventures were never again to bring profits to Pearson and Dunn. At the same time international markets were hit by the 1913 financial slump. One of Dunn's junior partners in London became insolvent, and fresh capital became almost impossible to obtain. James Dunn's business ventures dried up one after another. The declaration of war on August 3rd brought with it a moratorium on financial transactions. That in turn proved both a boon and a challenge for Dunn. The moratorium meant that his creditors could not touch him for the duration of the war, yet at the same time the ban on financial transactions meant that his traditional sources of revenue were denied him. Thus James Dunn came to turn his attention to trading in commodities.⁵²

An ambitious project – a summary

The Norwegian nickel industry went from being a world leader to almost nothing within the space of a few short decades during the late 1800s, yet new technologies and a domestic willingness to invest in new plant seemed to offer the promise of a revival by the early twentieth century.

Sam Eyde and Admiral Jacob Børresen led a group of Norwegian investors who, together with Swedish metallurgist and inventor Victor Hybinette, established a new nickel refinery at the city of Kristiansand in 1910 built around Hybinette's experimental new electrolytic refining process. The demand for nickel grew steadily as new uses continued to be found for the metal, and Kristiansand Nikkelraffineringsverk quickly proved a profitable enterprise. Ambitions among its directors ran high, and plans were made for the refinery to enlarge the plant and secure steady supplies of Canadian nickel ore. Hybinette also gained support among his Norwegian colleagues for his idea of taking on the International Nickel Company – the dominant firm in the North American

51 McDowall, 1984: 109-111

52 McDowall, 1984: 111-112

nickel market – in Canada itself.

A man who shared Hybinette's vision of a new vertically integrated nickel firm to break the virtual American monopoly of INCO, was Frederick Stark Pearson. By 1910 Pearson was a renowned engineer and entrepreneur, and together with the financier James Hamet Dunn he was responsible for setting up companies all across South America. Yet as the Latin American economies experienced a downturn in the years immediately preceding the First World War, the two men began looking north to Canada to set up their next venture. What Pearson and Dunn lacked to put their plans into action was a new method for refining nickel ore, and having tested and developed his electrolytic process at Kristiansand, Hybinette was ready to provide this.

Chapter III

Economic warfare and the blockade of Germany

The British government had been contemplating the possibility of imposing a blockade on Germany's overseas trade in the event of war for years prior to the actual outbreak of hostilities in 1914, yet when the war finally came plans for such a blockade were far from definite. The development of British economic warfare therefore became something of a haphazard affair, but it was nevertheless to have a profound effect upon Norwegian industry and the Norwegian domestic economy as a whole.

This chapter deals with the origins and development of the British blockade of Germany between 1914 and 1918, as well as how Norwegian business and the Norwegian government dealt with it. It aims to present some of the issues London planners had to contend with when attempting to sever German war industries' access to overseas raw materials, and especially how these touched upon Anglo-Norwegian relations during the years of conflict.

The Royal Navy and the rights of neutrals

The blockade had long been a mainstay of British Admiralty policy, and by 1905 military and government circles had clearly singled out Germany as the main prospective enemy in a future conflict. Rapid German growth in the face of British economic sluggishness had thoroughly alarmed contemporary commentators. Thus plans for an economic campaign against it began to take shape.⁵³

It should not come as a surprise that these plans originated in naval circles, where it was first pointed out how Germany's expansive trade network could also be seen as a weakness to be exploited. For centuries, official British policy had rested upon the Royal Navy as the pre-eminent defender of the realm. The "senior service" was expected to bear the brunt of any serious confrontation against Britain or British imperial power, and before 1900 naval concerns around trade on the high seas had centred on the need to protect its own shipping. The British merchant marine was the largest in the world, and Britain the world's single biggest importer of sea-borne goods. Not until British involvement in a European conflict became more probable after the turn of the century did a more offensive streak begin to enter into naval trade policy. German penetration of

⁵³ Offer, 1989: 218, 223-226, 230
Strachan, 2001: 376

overseas markets was not only a strength, but also a weakness if the flow of goods could be cut off.⁵⁴

In 1906 the Trade Division at the Admiralty began gathering statistics on German imports and exports. The German merchant navy was by this time the second largest in the world, at roughly one fifth of the British equivalent. Two million tons of shipping would be at the mercy of the Royal Navy in case of war. The prospects were enticing. How large a proportion of German imports could the British hope to cut off? Could Germany replace them from home production or overland sources? What would the effects of a blockade be on the German government, military and society? The Trade Division reported on its findings in 1908. The conclusions were clear. Imports using rail and road transport would be in no position to replace sea-borne trade. If war broke out, Germany would face slow, but certain strangulation.⁵⁵

The findings of the 1908 Trade Division report did not go unchallenged. A string of similar studies by other departments and offices of the British government as well as within the Royal Navy came out over the years that followed. Some in favour, some against. Yet, from 1906 elements within both admiralty and government were gearing up for an economic campaign against Germany.⁵⁶

All the while the navy planned for economic warfare those same challenges were central issues in the political arena. Attempts to regulate wars at sea had been ongoing since the middle of the 19th century. Britain especially had fared badly when her unilateral policies of seizure and confiscation on the high seas during the Second Boer War of 1899 to 1902 brought her into diplomatic conflict with a number of powerful neutrals – the US and Germany among them.⁵⁷

The experience of the Boer débâcle set the stage for a full scale public debate on the issue of economic warfare. Negotiations on maritime and economic law between the great powers centred on two peace conferences at the Hague and one in London in 1908. The resulting 1909 Declaration of London became the official expression of the maritime rights policy of Asquith's new Liberal government. As Foreign Secretary sir Edward Grey had worked to secure an international treaty which protected commercial interests, while at the same time enshrining sufficient belligerent rights for the Royal Navy not to be “unduly limited and crippled in its actions in time of war”⁵⁸. Attempting to reconcile these apparent contradictions predictably drew ire from both sides. Both Grey and the treaty were roundly criticised in parliament and press for precisely those reasons

54 Offer, 1989: 225-226, 230

55 Offer, 1989: 230-232

Strachan, 2001: 397-400

56 Strachan, 2001: 400-401

57 Coogan, 1981: 36

58 Grey to Dutch ambassador, quoted in Coogan, 1981: 104

which Grey had sought to avoid. Balfour and Bonar Law among others claimed that the treaty was damaging the navy and its war fighting capabilities, while also putting British commerce and food supply at risk. In their view Britain “gained nothing as a neutral and conceded much as a belligerent”⁵⁹. Opposition to the agreement was firm, and a final vote on the government's Naval Prize Bill which was necessary for the implementation of policy was repeatedly postponed. It was withdrawn in 1911, and by August 1914 Britain had still not ratified the final declaration.⁶⁰

Naval guns of August and the lack of grand strategy

British war planning in the years leading up to 1914 is a major study in itself. The Admiralty became involved in an arms race with their German counterpart, as it struggled to maintain naval supremacy. The Royal Navy thus kept on assuming that any major war in which Britain was involved would be fought chiefly at sea, yet with political intransigence and the focus at admiralty on fleet action and commerce protection, planning for economic warfare proceeded haphazardly at best.⁶¹

Perhaps the main reason why this planning work did not entirely stall in the years prior to 1914 was the presence of Maurice Hankey at the Committee of Imperial Defence (CID). The CID had been created by the then PM Arthur Balfour in 1902, to provide a forum for the service heads and responsible ministers and civil servants to discuss military strategy and preparedness. With the lack of a single ministry of defence coordinating planning the committee became an important one, and Hankey – an officer in the Royal Marines, the secretary to the CID from 1910 and formerly of the Naval Intelligence Department – wielded significant influence. Under Hankey's guidance the Committee of Imperial Defence from 1910 produced “the War Book”. This document was a blueprint designed to gather in detail all the separate plans for how the departments and services of the British government would proceed in case of war, and it did much to formalize the steps to be taken in the transition from peace to a war footing. As such one of the main sections of the War Book dealt with economy and finance, and through the related “Trading With the Enemy”-enquiry of 1911-12 Hankey managed to set out plans for many of the steps actually taken to curb German economic activity in August and September 1914. Maurice Hankey personally believed in the primacy of sea-power. He was also one of few to recognise that any continental war was likely to be a long one, and that economic warfare would be decisive to the outcome of such a conflict. That said the War Book, although regularly updated through to the outbreak of war in 1914, was nowhere

59 Coogan, 1981: 133

60 Coogan, 1981: 30, 35, 70-72, 114, 117, 132-135

61 Strachan, 2001: 397

near a comprehensive war plan, and did not give specific primacy to any one strategic course of action.⁶²

When Britain did declare war on Germany on August 4th it was therefore not at all clear what strategy it would adopt in the pursuit of victory. The failure of the pre-war government and services to agree on clearly defined war aims, much less how to achieve them, thus came to colour the first months of the struggle. Sir Edward Grey, himself one of the chief proponents of Anglo-French rapprochement and a “continental” strategy, spoke to the Commons as late as August 3rd where he envisaged a war fought chiefly by economic means. The British Expeditionary Force (BEF) would not head to France for the foreseeable future, while the Navy would carry the burden of fighting. In this he reflected the view of the Liberal cabinet, many of the members of which had grave objections to putting British soldiers on French soil. John Coogan has speculated that this might have been a careful ploy by Grey and his fellow “continentalists”, Asquith among them, to secure British entry into the war. The prospect of a relatively bloodless conflict coupled with German invasion of neutral Belgium helped push the rest of cabinet into war. Once war had been declared it then became impossible not to send the BEF to the continent. It had been created for exactly this purpose, and the groundwork had already been laid through the pre war Anglo-French staff talks. On August 5th a war council in London, headed by Prime Minister Asquith and attended by the service heads, gave the go ahead for the BEF to link up with the French. Whatever the reasons, after August 5th all pre-war expectations of a chiefly naval conflict were moot.⁶³

The decision to send British forces to France on August 5th has been described as the single most important taken by the government in London during the entire conflict. It committed Britain to a land struggle on the continent, and by extension made it clear that victory was expected to come on the battlefields rather than as a result of any economic pressure. The continentalists believed that by dispatching the BEF to help the French they had ensured the defeat of Germany and a rapid end to hostilities. Archibald Murray, the chief of staff to the expeditionary force, predicted that the war would last from three to eight months. His view is representative of that prevailing in military and political circles at the time.⁶⁴

At the same time the rapid developments of early August 1914 sent the navy reeling. A failure to properly coordinate its war plans with the army had resulted in a situation where the navy occupied a decidedly secondary role in a major war. Economic pressure as foreseen by pre-war planners would only be effective in the long term. All this changed, however, with the space of a few months. Following the Battle of the Marne in early September the troops dug in and the

62 Strachan, 2001: 199, 401, 402

63 Strachan, 2001: 198, 374

64 Coogan, 1981: 150-152

stalemate which was to define the western front for the next four years began. With no quick end to hostilities in sight, mounting casualties and a profound need among politicians not to be seen as doing “nothing”, the general view of an economic campaign turned yet again.⁶⁵

Simply seizing German merchantmen or neutral vessels bound for Germany would not suffice to end that country's trade with the outside world. As early as mid-August the new chancellor, David Lloyd-George, informed his cabinet colleagues – erroneously as it later turned out – that huge food shipments were on their way to Germany via Dutch ports. Ending German trade through neutral ports was one of the issues taken up by the War Book, and Lloyd George was backed up by Grey, who proposed a blockade of Germany's North Sea trade, including shipments to the neutral Dutch ports. This first proposal was vetoed by the navy. A traditional close “blockade” would entail the capture or sinking of all shipping entering or exiting enemy ports, something which would be downright suicidal against German coastal defences. A blockading fleet in the North Sea was bound to be decimated by mines, torpedoes and other weapons. This view held good for the rest of the war. In theory, no “blockade” of Germany between ever took place between 1914 and 1918.⁶⁶

The Royal Navy had begun seizing German vessels on the high seas from the moment war was declared, but the net was far from tightly cast. Grey therefore moved to focus on the German overland trade with food imported through the Dutch ports. The doctrine of continuous voyage – that goods bound for neutral port could be treated as contraband if its ultimate destination was the enemy – had been discussed and abandoned over the course of the neutral rights debate in the years prior to the war. Now Grey revived it. Winston Churchill – the new First Lord of the Admiralty – suppressed naval objections to the plan and came out in favour of Grey's proposal. So did Lloyd George and a number of other senior cabinet members, but Prime Minister Asquith still sat on the fence. How could such a move be perceived as “legal”? According to existing treaties goods were only subject to blockade if they were destined for enemy armed forces. Presumably no importer would be stupid enough to write “to the German Army” on crates in a cargo hold? The majority of the cabinet had no wish to be seen as flagrantly flaunting international law so soon after Germany's violation of Belgian neutrality, and memories of the South African débâcle were still strong. The solution was provided by Home Secretary McKenna. Reginald McKenna, while First Lord of the Admiralty, had predicted that international law could and would be bent in times of war as early as 1911.⁶⁷ He now personally made good on the prediction: If Germany had mobilised food supplies

65 Strachan, 2001: 280

66 CAB 24\8: Statement with regard to the blockade, Imperial Conference 1917
Hankey, Lord Maurice; *The Supreme Command: 1914-1918*; London 1961: 352-353
Strachan, 2001: 394-395, 397, 401

67 Offer, 1989: 280

and industry in the cause of war, then it could be argued that all foodstuffs destined for Germany were by definition destined for the German war effort, and as such subject to seizure by the Royal Navy. This definition proved acceptable to Asquith, and on August 20th the fleet was ordered to seize all ships carrying food bound for Dutch ports. The Dutch ambassador to London protested vigorously, but was on the 25th informed by Grey that Britain intended to “capture all foodstuffs consigned to Rotterdam unless accompanied by a definite guarantee from the Dutch government not only that they will be consumed in the country, but that they will not release for Germany equivalent supplies of foodstuffs in Holland at the time.”⁶⁸ In other words: the Netherlands would be starved into accepting the British line. By August 30th the Royal Navy had seized 52 vessels bound for either Dutch or German ports.⁶⁹

The turnaround from the position of early August was complete. From contemplating a secondary and supporting role for the navy, British forces had now begun to unilaterally seize neutral goods and merchantmen on the high seas on the mere suspicion that they were in some way aiding the German war effort. As BEF casualties in France and Belgium mounted over the autumn months, so did public opinion harden. The conflict rapidly became one of “good versus evil” and “civilisation versus barbarism”, rather than about pre-war concepts like the balance of power. In such an impassioned climate it became imperative for the London government to be seen do all in its power to secure victory.⁷⁰

By early September cabinet debate on the extension of the blockade to cover raw materials had come to a head. Grey pushed for the inclusion of petroleum, rubber and strategic metals such as zinc copper and nickel to be included on the list of contraband. By this time legal concerns had taken a decidedly back seat to the casualty lists from France, and a revised contraband list was approved by the cabinet. On September 21st the British government publicly proclaimed the broadest list of contraband it had ever devised. The Royal Navy immediately began to seize tankers and cargo ships bound for European ports.⁷¹

Trough a process beginning on the eve of war in early August and culminating with the proclamation of September 21st, Britain had come to adopt the blockade of Germany. The blockade may have been unofficial, but it was no less real for that. On the contrary, it went far beyond the limits of a traditional naval blockade. Norms of established international law had been thrown overboard. The high seas became a war zone, with any ship liable to search and confiscation by the Royal Navy on the mere suspicion of carrying contraband.

68 Edward Grey, quoted in Coogan, 1981: 162

69 Coogan, 1981: 155-163

70 Coogan, 1981: 248-249

71 Coogan, 1981: 166

The London government was prepared, as evident by its attitude towards the Netherlands in September 1914, to force nominally neutral countries to acquiesce to its demands. Effectively ignoring the declared neutrality and forcing them to aid the entente. And yet, British treatment of the Netherlands in 1914 proved to be something of an exception. After the low-countries, by far the biggest proportion of German trade continued through Scandinavia. The Scandinavian countries however, were not to be the subject of the same immediate pressure.

Little to gain – everything to loose

In reality the only neutral country which had both the economic and military might to challenge the British position was the United States. Although still an isolationistic state by 1914, it was apparent to British government observers that the United States was now one of the great powers. By late September 1914 a majority of politicians in London had come to believe that an economic campaign against Germany might help shorten the war. Yet a conflict with the US could be disastrous. Sir John Simon, the Attorney General, were among those who warned of dire consequences should Britain blatantly violate international law. Again the experiences of the Boer War made for caution. Asquith and sir Edward Grey therefore approached the Americans with a certain amount of care. Both Coogan and Avner Offer have written extensive studies of the Anglo-American wrangling over blockade policy, yet the discussion lies somewhat outside the scope of this essay. Suffice to say that in the face of somewhat weak and uncoordinated American pressure British policy remained the seizure of all vessels suspected of carrying contraband supportive of the German economy. Yet for every step taken by the London government in strengthening the blockade extensive negotiations both within the government and with the US and other neutral authorities in order to avoid incurring damaging reprisals.⁷²

Political, economic and geographic factors all combined to make the Scandinavian issue differ from the Dutch one to British policy-makers in 1914-15. The Netherlands itself was not a large producer of raw materials, but rather a transit port for overseas goods. Nor did it border onto other territories than German controlled ones. Belgium had been almost entirely overrun by German forces during the early stages of the conflict. In short – at war the Netherlands represented no significant risk to Germany, while as a neutral it remained something of a liability to the entente. The treatment of Dutch food imports in the autumn of 1914 showed the importance attached to the issue of economic warfare by the entente authorities. Yet the drastic measures employed in the

⁷² Coogan, 1981: 170-171
Hankey, 1961: 355

Dutch example proved to be something of an exception, and must be seen in the light of the stressed atmosphere of Whitehall in August and September. Scandinavia presented a whole new set of challenges.⁷³

Caught unaware by the sudden outbreak of war, the Norwegian government, led by prime minister Gunnar Knudsen (1913-1920), immediately adopted neutrality in August 1914. Like its Scandinavian neighbours Norway had little to no interest in being drawn into a great power conflict, and government policy was supported by a broad cross-party consensus. The foreign policy challenge facing the Norwegian government therefore became the securing the continuation of the vital overseas trade, while at the same time avoiding antagonizing either of the main warring powers. This was to prove easier said than done.⁷⁴

Denmark, Norway and Sweden were all producers of strategic materials of importance to both the German and Entente war effort. Only Denmark shared a land border with Germany, but Entente ships were unable to penetrate the German-controlled Baltic and were thus also unable to end German exports from Norway and Sweden directly. With the pre-war focus on neutral rights, the agreed – although unratified – Declaration of London, and available sea-lanes controlled by both the warring powers, the Norwegian government were of a mind to carry on sea borne trade in somewhat similar a fashion as before the war. Expecting a relatively short conflict, the seriousness of the British desire for economic blockade took Knudsen by surprise.⁷⁵

British attempts at securing Norwegian concessions were at first muted by the fear that Germany might be tempted to seize a naval base on the Norwegian coast, thus enabling the German navy to project its power into the North Sea. With this in mind Sir Edward Grey therefore decided it would not be in the British interest to alienate Norwegian public and governmental opinion from the entente cause, but rather embolden it to resist any possible German overtures. As months went by without any such overtures materialising however, the British stance hardened considerably.⁷⁶

Casting the net

The proclamation of September 21st had established a comprehensive list of contraband which the British reserved the right to confiscate if found to be bound for – or somehow in aid of – Germany. Yet worries about possible German moves towards Norway and the threat of strong US protests

73 Offer, 1989: 289, 292

74 Berg, 1995: 181-182
Riste, 2004: 91

75 Riste, 2004: 91
Strachan, 2001: 405

76 Riste, 2004: 90

meant that British naval interference with Scandinavian trade was kept at a relatively low level. This situation did not last, however. On November 2nd the British declared the North Sea in its entirety to be an “area of war”. Minefields were laid by both German and British forces, and ships bound to or from Norway were advised by London to abandon any northern route around the British Isles, and rather utilise the English Channel and then be guided across the open sea to Norway by the Royal Navy.⁷⁷

The implications of these moves were clear. Norwegian as well as other neutral vessels crossing the Atlantic to and from Norway would now have to pass through extensive stretches of British home waters and subject themselves to British sailing directions through the mined North Sea. In effect it allowed Britain to control and influence a majority share of Norwegian overseas trade. The power of PM Knudsen's government to protest against the new arrangements was very limited as long as the United States refused to apply pressure on the British government. The Norwegian merchant fleet was one of the largest in the world in 1914 and contributed significantly to national income. Norway was also entirely dependent upon imported cereals, fuel and goods, much of which could not be imported through Germany. The country thus had little prospect of successfully “going it” alone. Knudsen quietly acquiesced to the new arrangements.⁷⁸

On February 4th 1915 the German government responded in kind to the tightening of the blockade by declaring all British waters a war zone. All neutral vessels encountered by German forces within this zone would run the risk of attack by central powers forces. In a series of tit for tat moves the British government then used this as a pretext for further extensions of its belligerent rights. Maurice Hankey of the Committee of Imperial Defence succinctly summed up the position in his 1961 memoirs when he wrote that “...it was Germany's misdeeds at sea that gave us the pretext gradually to free ourselves from the trammels of such instruments as ... the Declaration of London”⁷⁹. From the spring of 1915 therefore, shipping firms seeking to import overseas goods to Norway were forced to provide London with similar guarantees as the Dutch had the year before. Goods must on no account be re-exported to Germany, on pain of the shipping companies being placed on a black list and subjected to seizure and confiscation. Simultaneously, all direct trade with Germany was declared to be in breach of the blockade with goods liable for confiscation, no matter whether the goods in question were on the contraband lists or not.⁸⁰

77 Berg, 1995: 189-190

Hankey, 1961: 357

Riste, 2004: 92-93

78 Riste, 2004: 93

79 Hankey, 1961: 352

80 Berg, 1995: 191

Hankey, 1961: 359

Haug, Karl Erik; *«Falls Norwegen auf die Seite unserer feinde tritt» - Det tysk-norske forhold fra sommeren 1916 til*

All the while the blockade was being tightened it became imperative for the Norwegian government to avoid overt government cooperation in order to preserve whatever could be preserved of the nation's neutrality. Although not in possession of equally effective means of pressure as the British, the German government did both protest and threaten the use of force to retain access to Norwegian markets. London had suggested that Norway set up a public import/export agency to liaise with the British blockade authorities, but this was promptly rejected. The British minister in Christiania, Mansfeldt Cardonnel de Findlay, then responded by demanding the Norwegian government outlaw all exports of home produce to Germany. Knudsen again refused. To mollify the British the Norwegian government did introduce some export restrictions, but cutting off all German trade would be a blatantly unneutral act, provoking a harsh – and possibly armed – response from Berlin. The new laws brought in forbade the sale of Norwegian nickel ore and nickel matte to foreign buyers. However, refined nickel – a product which in Norway was produced solely by KNR, remained untouched. The effect of the Norwegian government's refusal to be drawn into outright participation in the British blockade therefore was to make both German and British governmental actors interact more directly with individual firms. PM Knudsen's desire for non-involvement made for a direct Anglo-German confrontation in the private sphere as the Norwegian markets became a cutthroat, if somewhat less deadly, battleground. British and German agents would deal with Norwegian businessmen, while the Christiania government as far as possible refrained from intervention.⁸¹

One of the main strategic products produced in Norway during the war years was nitre from Sam Eyde's Hydro factories. Pre-war the nitre had been used chiefly in artificial fertilizers, but with little effort it could be turned into a vital ingredient for making explosives. Nitre was not subject to government export restrictions, but as the Hydro factories were partly French owned the Entente had little problems in securing exclusive access to the company's production. It was calculated after the war that upwards of 30% of all nitre used in French munitions factories during the war originated with Hydro. Likewise Norwegian whale oil factories and their valuable glycerine by-product were part-owned by entente companies, and the British government obtained complete control over output in 1914-15.⁸²

The steadily increasing scale of British blockade work prompted the reform of the chaotic London bureaucracy set up to handle it. In January 1915 a meeting of the CID prompted the formation of the a new department to coordinate the different agencies of government in blockade

utgangen av 1917; Hovedoppgave, UNIT; Trondheim, 1994: 39

Riste, 2004: 94

81 Riste, 2004: 94-95

82 Berg, 1995: 194-196

work. The War Trade Department nominally operated under the aegis of the Treasury, but oversaw ad-hoc sections from the admiralty and numerous other ministries. A committee, chaired by home secretary McKenna assisted by Hankey, then oversaw the further organization of the new department between March and May 1915.⁸³

Following the failure of the Entente spring offensives on the western front in May 1915, what came to be known as the “shell scandal” broke in the British press. One of the main reasons suggested for the bloody stalemate in France and Belgium was that the British forces lacked sufficient ammunition to beat the Germans. The home front was perceived as not doing enough to support the soldiers on the front lines. By late May the ensuing scandal had toppled the Liberal government, and a new national coalition under Asquith – who continued as Prime Minister – took over. The shell crisis brought home to the government the importance of munitions, not just to the British forces, but equally to the Germans. It elevated the status of raw materials used in the production of munitions. Two years later, in a 1917 cabinet memo it was termed that “Of the minerals found in the various parts of the British Empire the most important from the point of view of the production of war materials is nickel, a commodity of which Germany stands in particular need.”⁸⁴

From May 1915 and onwards therefore the various intelligence-, black list-, contraband-, export licences- and other subcommittees of the department reported to the Committee on the Restriction of Enemy Supplies, which again reported to the new Chancellor, Reginald McKenna. The War Trade Department (WTD) remained the controlling agency for the North Sea blockade into 1916, when the fall of Prime Minister Asquith prompted yet another reorganization. The WTD was now absorbed into the new Ministry of Blockade with its own responsible Minister of Blockade – Lord Robert Cecil – in cabinet. The more diplomatic and covert nature of the Scandinavian blockade work was also reflected by the nominal transfer of the new ministry from the Treasury to the Foreign Office. Although personnel from departments ranging from the Foreign Office to the Admiralty, Board of Trade and Treasury were all still involved, the interaction between British authorities and Norwegian private and public representatives thus came to be formalised under the aegis of a new government framework.⁸⁵

Under this new framework the British managed to negotiate a number of what came to be known as “sector agreements”, by which individual sectors of Norwegian business undertook to restrict sales to Germany. Fish supplies however, made for a much bigger problem for the Entente

83 Hankey, 1961: 353-354

84 CAB 24/8: “Memorandum on assistance in the war rendered by the Dominions...”; March 13th 1917

85 CAB 24/8: “Statement with regard to the blockade”; Imperial Conference 1917

Hankey, 1961: 353-354, 489

authorities. The Norwegian coastal fishing fleet was substantial – comprising some 20 000 vessels in 1914 – yet no large scale organizational structure existed to coordinate sales. Prospective buyers were therefore forced to negotiate with small companies, or even individual vessels for the purchase of the catch. Supplies of Norwegian fish were important to Germany, which suffered from food shortages. Prices therefore sky-rocketed in 1915 as German merchants began buying up huge quantities. In 1915-16 the British countered by initiating competing purchases. By the summer of 1916 the enormous sum of £10 000 000 had been spent by the London government on fish which was not needed by British consumers. Mountains of British owned herring piled up in Norwegian coastal towns, while the smell of rotting fish drifted through the streets. The costly policy could not continue, and by the autumn of 1916, the British had pressured the Knudsen government into what effectively became the first official Norwegian blockade agreement. Norway undertook to limit the export of fish to Germany to a total of 15% of the annual catch. A second agreement was subsequently forced upon the Christiania government placing strict limitations on copper exports.⁸⁶

Plugging the gaps

All the while the British forced a steady tightening of the Blockade onto Norway, the Norwegian merchant navy was suffering worsening losses from the war at sea. In 1914 and 15 over eighty vessels were lost, with an additional two hundred sunk in 1916. Following the German declaration of unrestricted submarine warfare in January 1917 losses rose to critical levels. In February and March alone 81 Norwegian vessels went down. This amounted to a staggering 20% of total world losses over the period. Shocking to the population and government of a country not even at war. Anti-German sentiment in the press as well as among the general populace – a feature of Norwegian society throughout the war years – reached new heights.⁸⁷

As a result it became a priority for the London government to keep the beleaguered Norwegian merchant fleet plying the dangerous Entente supply routes. It therefore offered to purchase all 3,500 vessels encompassing the mercantile navy, but this was once again rejected out of hand by the Knudsen government. Selling off one of the nation's chief assets was out of the question, for economic reasons as well as out of fear of possible German reprisals. More British pressure followed, and the end result was what came to be known as the “Tonnage-agreement” of June 1917. Under the agreement the Norwegian government accepted that the unarmed Norwegian vessels would be secretly chartered by the British and moved to less dangerous trade routes, while

⁸⁶ Berg, 1995: 198-200, 202, 207

⁸⁷ Berg, 1995: 223-224

Riste, 1965: 238

the North Sea trade would be taken over by armed Entente steamers. The British government thus gained effective control of the Norwegian merchant fleet, thereby limiting all trade between Norway and Germany to that carried on German or other neutral ships. Yet the cost to Norwegian shipping had been high. When the war ended in November 1918, 49% of the merchant navy had been sunk and more than 2000 Norwegian sailors had lost their lives. Scores more had been injured or traumatised for life.⁸⁸

The U-boat war notwithstanding, the winter of 1916-17 also saw a row between the Norwegian and British governments over the the copper export agreement signed earlier in the year. Germany had been importing Norwegian copper and pyrites containing copper since before the the outbreak of the war, and under the British agreement the Norwegian government prohibited the export of such ores to Germany, against a British guarantee of a steady supply of high-quality refined copper of which Norway stood in particular need. The later disagreement arose over the interpretation on the restriction of pyrite exports. Norway had agreed to halt all exports of pyrites containing copper, but continued to export sulphur pyrites. These sulphurous ores also contained copper, but only in such trace amounts – less than 0,5% – as to be uneconomical to extract. Pre-war such ores had not been considered as copper containing, but after the agreement with the Norwegians had been signed the British became aware of the fact that the sulphur was just as much worth to the German war effort as the copper. Consequently the Imperial government demanded that Norway cease all exports of such pyrites. Prime Minister Knudsen and his government refused.⁸⁹

The British government's reaction to what they saw as a breach of agreement is telling as to how far the war had eroded the British belief in neutral rights. Not interested in yet another round of drawn out negotiations, in late December 1916 ambassador de Cardonnel Findlay informed the Norwegian government that the British would take the unprecedented step of not renewing Norwegian coal import licenses. Beginning on Christmas eve the British halted all transfers of coal and fuel to Norway. The winter of 1916/17 was one of the coldest on record, and Prime Minister Knudsen had no choice but to order a full retreat. In February the Norwegian government introduced a prohibition on the export of sulphurous pyrites and the British coal embargo was lifted.⁹⁰

In April 1917, shortly after the resolution of the coal crisis and parallel to the negotiations on the Anglo-Norwegian tonnage agreement, the United States entered the war on the Entente side.

88 Berg, 1995: 254-255

Riste, 1965: 238

89 Berg, 1995: 202-203

90 Berg, 1995: 223

This development made it almost impossible for the Norwegian government to continue to resist the British pressure to outlaw all German trade. Before 1914 Norway had imported most of its required supply of cereals from Russia and Eastern Europe, but the outbreak of war had cut off access to these trade routes. The main source of Norwegian foodstuffs in 1917 was therefore the United States. Now one of the warring powers, the US promptly joined the British in their demand that Norway accede to the blockade. Indeed, regarding some issues the American stance proved even stricter than the British equivalent. Faced with American threats to cease shipments of grain, the Knudsen government was forced to negotiate a Norwegian-American trade agreement. A government delegation headed by the famous explorer Fridtjof Nansen left Christiania for the States, and a final agreement was signed in Washington in April 1918 and limited Norwegian exports to Germany to small quantities of fish and certain non-ferrous metals. Left with no choice, all export of nickel was finally outlawed by the Knudsen government.⁹¹

The strain of war

The steady hardening of the British attitude towards the neutral Scandinavian powers through the war years can partly be explained by the mounting cost of the war to Britain itself. Huge casualty figures notwithstanding, as the financial sacrifices by government and populace made themselves felt, support for a “soft” attitude toward neutrals eroded.

The original British Expeditionary Force was effectively destroyed in the early war battles of 1914 and 1915. With few substantial reserves it took time for British forces to be rebuilt, so that from the spring of 1915 the brunt of the fighting on the western front was borne by French troops. Not before mid-1916 did British forces in France number over a million men – still a relatively minor contribution among the several millions French and German soldiers fighting in the trenches – consequently British losses between 1915 and 16 were, although horrific, minor in comparison to what was to come. Freshly recruited British armies began to reach France in early 1916, and on July 1st the British launched their first major offensive on the western front in almost a year. New numbers also meant fresh casualties, and the results were as terrible as they should have been predictable. On the very first day of the Battle of the Somme the British lost 60 000 men. By the time the battle ended a few months later, entente casualties numbered upwards of half a million soldiers. Scant wonder then that the London authorities were eager to find other, less bloody means of striking at the Germans.⁹²

91 Berg, 1995: 240-241

Riste, 1965: 180

92 Kennedy, Paul Michael; *The Realities Behind Diplomacy – Background Influences on British External Policy 1865-*

If the casualty lists reaching Britain from the continent inspired increasing horror, so too did the Chancellor's balance sheets. In 1913, the last complete peace-time budgetary year, the British exchequer's outlays on the armed forces amounted to £91,3 million. In 1915 those same forces absorbed £716,6 million, and by 1918 military expenditure reached a total of £1955 million – a twentyfold increase on the pre-war years. Inflation totalling 250% over the war years accounts for some of the increase, but the outlays were still enormous. And yet the same gradual progress into total war which characterized the transformation of the armed forces was also valid for the national economy. Lloyd George's two wartime budgets – before he was replaced as chancellor by McKenna in 1915 – offered only relatively minor concessions to the war as a whole. A moratorium on financial transaction was introduced in August 1914, but otherwise trade, import and export continued mostly as before. Some tax-increases were introduced, but the majority of expenditure was left to be covered by borrowing. In Paul Kennedy's words: “the first two war budgets did not contain any dramatic measures because the economy was not evidently under strain”^{93, 94}.

After McKenna replaced Lloyd George as chancellor in the late spring of 1915, the Treasury began to take more drastic action to meet the increasing deficit. The financial cost of the war was by then of such a magnitude that it was unrealistic to cover all, or anything close to all, by taxation, but McKenna set out to bridge the gap. In short order he sharply increased taxes, tariffs and duties – a policy which was continued by Andrew Bonar Law who succeeded McKenna at the Treasury when the Asquith government fell in December 1916. All in all the portion of British GDP accounted for by government spending increased from roughly 10% in the immediate pre-war years to over 50% by 1918. Yet even though government income increased manyfold, the deficit increased even more. Not only concerned with its own war finances, the British government contributed extensively to bankrolling its entente allies. By 1917 the war effort was costing the Treasury a staggering £7 million per day. Although standing at record levels, revenue to the exchequer only managed to cover about a third of this expenditure. The result was a total deficit on the war years of £7186 million. A huge sum by any standard, it grew even bigger when compared to pre-war state finances. Projected revenue – before even considering any government expenditure – in the last peace-time estimates stood at £196 million. In short – as the war progressed, and especially after 1916, the British government came under enormous pressure, both financially and morally, to take a more cynical approach to the conduct of the blockade and the war as a whole.⁹⁵

1980; London, 1985: 146, 185

93 Kennedy, 1981: 146

94 Jenkins, Roy; *The Chancellors*; London, 1999: 174-175

95 Jenkins, 1998: 173-174, 176

Kennedy, 1981: 145

The blockade – a summary

When Britain went to war in 1914 it did so without a clearly formulated set of war plans or strategic aims. Government and service actions in the early days of August and September therefore came to be shaped by a combination of necessity and circumstance, as well as a somewhat ramshackle set of pre-war plans, ideas and debates. Pushed by disparate sources ranging from the secretary of the CID to central members of the cabinet, the distant blockade of Germany was thus adopted in something of a haphazard fashion.

Although the British government was not legally bound by the Declaration of London at the outbreak of the war, it was still a matter of such prominence that it could not be abandoned outright. Balancing the needs for an effective economic campaign against the necessity of avoiding damaging US reprisals made for tight-roping the development of the blockade. Yet it progressed. The attempted strangulation of German trade through Dutch ports early in 1914 grew out of the War Book plans and the call for action after the early battles in Belgium. After the declaration of unrestricted U-boat warfare in February 1915, Britain finally asserted the right to detain any neutral ship or cargo on the mere suspicion that it was in aiding the enemy, no matter its stated destination.⁹⁶

The chief remaining problem to tackle was that of trade in neutral waters. Although feeling forced to threaten the Netherlands with blockade in 1914, the British cabinet was loath to abandon what remained of the moral high ground which had allowed Asquith to carry the majority of his cabinet in declaring war on Germany after its flagrant disregard of Belgian neutrality. Again German extension of submarine warfare, and not least the sinking of *Lusitania* in 1915, allowed the British to tighten the screws.

The need for a more diplomatic solution made the British approach towards Germany's Scandinavian neighbours a two-pronged affair. Firstly the British would negotiate directly with the neutral government through traditional channels, as they did with the Netherlands in 1914. The goal here would be to allow goods through to said countries against government guarantees that they would not be re-exported to the Central Powers. A number of such agreements were signed during 1914 and 1915, but they still left loopholes through which contraband could enter Germany. To alleviate this the British also acted in the civilian market, cornering the market for certain goods or entering into direct agreements with private firms to reduce exports. Agreements with Norwegian firms secured nitre and glycerine – two of the three main Norwegian exports used in the munitions industry – for the Entente. From somewhat austere beginnings the blockade thus tightened considerably through 1915 and 1916, and as it did the bureaucratic machinery required to organize

⁹⁶ Hankey, 1961: 359

and administer it expanded to match. It was this increasingly organized bureaucracy and increased pressure which KNR, BANC and their respective organizers came to contend with as the war progressed.⁹⁷

From 1916 and onwards the German U-boat campaign took a heavy toll on Norwegian shipping. As the strain of the war on the British consciousness as well as the public purse took hold, the Imperial government too grew less and less willing to accommodate neutral concerns. As a result pressure to restrict the Norwegian export trade grew significantly, and the Christiania government was forced to negotiate directly with their counterparts in London. Some export restrictions had been introduced during the first war year, and the list of regulated products grew to encompass a much broader range. In 1917 an agreement was signed which effectively put the majority of Norwegian merchant vessels under British control, thus further limiting Norwegian trade with Germany. Finally following the US entry into the war on the Entente side, the Knudsen government was forced into a treaty with the western allies restricting German exports to a minimum. By the spring of 1918 Norway had been forced into full participation in the blockade of Germany in all but name.

⁹⁷ Hankey, 1961: 358-359

Chapter IV

From Kristiansand to Canada

1910-1915

To the founders of Kristiansand Nikkelraffineringsverk, the establishment of a Canadian nickel venture was a precondition to their investment in the Norwegian nickel industry. Yet the road from Norway to the Ontario nickel fields proved a long and difficult one. In the summer of 1915 the Kristiansand investors entered into a partnership with the British government in order to finally get the venture off the ground.

This chapter details the development of the Kristiansand nickel refinery and their plans for large scale investment in North American nickel. How did the plans for a Norwegian-controlled vertically integrated Canadian nickel firm develop, and how were they affected by the outbreak of war in August 1914? How did the Kristiansand management plans for investment in Ontario square with British aims?

Foreign nickel for Kristiansand

KNR interest in Canadian nickel dates back to even before the founding of the Kristiansand refinery in 1910. Market conditions were promising, the Hybinette process performed admirably and by 1914 the original facility had been expanded fourfold. Seemingly, the only limit to even greater output and profits lay in the availability of nickel ore. Most matte refined at KNR came from Norwegian mines, but these were all comparatively small. Norwegian nickel ores on average also contained a much smaller percentage of nickel than did their Canadian counterparts – roughly 1-2% nickel in Norway to the Canadian 2-5%. Between 1910 and 1914 Kristiansand therefore imported smaller batches of nickel ore from New Caledonia and Greece at irregular intervals in order to keep production at full capacity. Yet these imports were only a stop-gap measure. A secure, long-term source of supply was much the preferred solution, and by 1910 the only viable alternative was Canadian matte.⁹⁸

Before the war the KNR management was negotiating to secure and expand the firm's operations on several fronts. Selling the refined nickel on the open market was likely to bring profits for the foreseeable future, but a major sales agreement with a predictable buyer was much to be preferred. In January 1910, well before the official founding of KNR, Børresen therefore went to

⁹⁸ Sandvik, 2008: 34-35

RONC Appendix: Interview with V. Hybinette, April 4th 1916

Germany in order to negotiate such a contract with the major metal sales agency Beer Sondheimer & Co as well as the industrial firm Königliche Sachsische Blaufarbbewerke. Beer Sondheimer was interested, and in late February a sales agreement was signed providing KNR with a secure outlet for its entire production for the next two and a half years.⁹⁹

Arranging the supply of foreign matte was a more complicated issue. In November 1910 Hybinette and Børresen jointly held talks with the Rothschild family in London, seeking funds for the purchase of Canadian mines. Their goals were on the grand scale. Hybinette wanted nothing less than to take on his former employer – the international nickel trust. Børresen foresaw a future of great industrialisation for Norway, with himself at the helm of a conglomerate of mining and metallurgical firms. Nitre through Hydro, nickel in Kristiansand, copper at Aamdal in Norway and Outokumpu in Finland. He even had plans for a mining venture in the Congo. Nevertheless, the success of KNR remained key to the ambitions of both men. Optimism ran high, and in May 1911 Børresen confided in his diary that “All those projects which I have worked upon through these last couple of years are now growing and flowering around me: This past year has made me a wealthy man.”¹⁰⁰

Further talks with possible foreign investors were carried out by Hybinette, Børresen and – to a lesser degree – Eyde through the rest of 1911 with various success. KNR only held the Hybinette process rights for Norway, and in order to promote his process abroad Hybinette had founded Hybinettes Utenlandske Nikkelpatenter¹⁰¹ (HUN) in 1910. Hybinette himself owned a majority stake of 60%, while the remaining shares were split evenly between Eyde, Børresen, the Norwegian capitalist H. Olsen and KNR in return for financing and marketing the company. Yet the existence of HUN would bring no profits to its shareholders if the new process was not also utilised commercially outside of Norway. Børresen and Eyde therefore attempted to use their contacts gained through Hydro and other European business ventures to get the process adopted in France and Germany. These attempts failed as there was no interest at the time among the various Le Nickel and independent refineries in a new and relatively unknown method. Børresen long had high hopes for a Canadian nickel venture in partnership with Beer Sondheimer, but it was through Eyde and Frederick Stark Pearson that the Hybinette process was sold to North America.¹⁰²

99 BD I: 12/1, 21/1, 17/2, 21/2 - 1910

100 BD I: 29/11 - 1910, 11/5, 5/7 - 1911

101 “Hybinette's Foreign Nickel Patents”

102 Børresens Diary, National Archives (BD II): 29/11 - 1910

Nikkelkommissjonen, 1925: 8

Sandvik, 2008: 39-40

The birth of BANC

As his Latin American ventures collapsed around him Pearson, like Hybinette, began toying with the idea of breaking into the Canadian nickel market. Pearson and Hybinette knew of each other through the work Hybinette had done as chief metallurgist at INCO, but it was Sam Eyde who first introduced Pearson to the merits of the Hybinette process. Eyde had had extensive business dealings with Pearson in the years leading up to the war, both through Hydro and through Eyde's various ventures in America. During negotiations in 1911 on financing the further expansion of Hydro Admiral Børresen in his diary even went so far as to name Pearson as “Eyde's great idol...admired as if some kind of higher being”¹⁰³ The description may be a bit over the top, but that Eyde looked up to Pearson's achievements and business style is beyond doubt.

Pearson wanted to found a new company to extract and refine nickel ore in Canada using the new process. The proposed company, incorporated in Canada and formally created by a consortium led by Pearson himself, would also completely absorb KNR. In exchange for their shares the KNR stockholders would receive shares in the new firm. Pearson's Canadian nickel firm would thus own mines, smelters and refineries in both Canada and Norway, as well as enjoy access to the considerable technical expertise accrued by the Kristiansand establishment. Hybinette gradually caught on to the idea, but Børresen remained sceptical. Although promised a place on the board of directors in Canada by Pearson, the admiral was reluctant to give up his directorship of KNR and his lucrative Norwegian shares in return for a stake in an untried venture. What also rankled with Børresen was Eyde's demand for special treatment and rewards for having facilitated the Pearson-HUN contact in the first place. Børresen, supported by Hybinette and Olsen believed the HUN stakeholders had a gentlemen's agreement that no single shareholder should receive special any special rewards not also offered to the others. Due to Eyde's smaller financial stake in KNR than that held by Hybinette and Børresen himself, he also believed that Eyde undersold the value of the Norwegian company to Pearson in order to secure the agreement. The final straw for the admiral came when – after negotiations with Pearson had progressed significantly – it emerged that Pearson's consortium did not itself own any of the Canadian nickel mines which would form the basis of the new company. Eyde had led Hybinette and Børresen to believe that these properties had already been secured by Pearson, when in fact he did not even hold a preferred option for buying them. This led to an almighty row between the HUN shareholders. Olsen even threatened to take Eyde to court, and in the face of the combined fury of the other three Eyde backed down. Negotiations with Pearson were to continue, but KNR would remain an independent Norwegian

103 BD I: 3/10 - 1911

company.¹⁰⁴

To get the ball rolling again Hybinette then offered to travel to Canada, using his contacts there to negotiate options for buying the required nickel mines. Pearson concurred, and in November 1911 Hybinette again set sail for North America, where he in short order managed to secure a series of undeveloped nickel deposits in Sudbury, Ontario for the new firm. The properties were thereupon bought by Pearson's newly formed consortium: the Pacific Securities Company (PSC). Eyde had wanted to be a member of the consortium himself, but Pearson wanted it limited to Canadian investors – possibly because of KNR's refusal to become a constituent part of the new company, or possibly because he wanted to work solely with investors he had worked with on his earlier projects. In any event Pearson refused Eyde a place.¹⁰⁵

Incorporated in early 1912 the PSC was described in its charter as “an office company incorporated ... for the purposes of the transactions in hand”.¹⁰⁶ It was thus never intended to be a mining firm, but rather a parent- or founding company. Together with Pearson in PSC were James Hamet Dunn and Canadian businessmen Edward Rogers Wood and William Mackenzie, who had also been partners with Pearson and Dunn in some of their Brazilian ventures. Through Børresen Pearson then obtained permission to study Hybinette's process in action – paying KNR 100 000 NOK for the privilege – and two of Pearson's engineers lived and worked at the Kristiansand refinery for two months in 1912. The resulting report strongly endorsed the process for use under Canadian conditions. A preliminary deal between HUN and the Pacific Securities company was agreed in March 1912, and the final agreement transferring the rights to utilize the Hybinette process in North America was signed in December. On July 5th 1913 Pearson and his PSC colleagues finally founded the British America Nickel Corporation, commonly referred to as BANC, with Pearson himself as the new company's first president and Dunn as second in command.¹⁰⁷

With the founding of BANC, Pacific Securities transferred the nickel deposits to that company. In return PSC received the entire holding of BANC shares – or “common stock” – with a nominal value of 20 million Canadian dollars. As part of the patent agreement with HUN shares á

104 BD I: 6/11 – 1911

Main, 1955: 71

McDowall, 1984: 101, 114

Nikkelkommissjonen, 1925: 1

105 McDowall, 1984: 101, 114

Nikkelkommissjonen, 1925: 1

106 Founding charter of PSC; quoted in Nikkelkommissjonen, 1925: 1

107 BD II: 26/9, 12/11, 27/11 – 1911

Colussi: 30-31

Nikkelkommissjonen, 1925: 1

RONC Appendix, Interview with J. E. McAllister, November 23rd 1915: 120

\$100 totalling \$930 000 was then transferred onto the HUN shareholders. Hybinette received 5800 shares and Eyde, Børresen and Olsen 900 each. Additionally Eyde received 800 shares as a bonus for having facilitated the HUN – PSC contact. Eyde had wanted a lot more, but was blocked by the other HUN shareholders. Due to the somewhat bad blood between Eyde, Børresen and Hybinette, as well as Eyde's limited interests in KNR and his failure to secure a place for himself in the Pacific Securities Company consortium, he became somewhat marginalised in the affairs of BANC and KNR over the next few years.¹⁰⁸

Early financial hurdles

The newly founded BANC was owned and run by essentially the same people as PSC, while central members of the KNR directorship held minority stakes. Lastly the BANC founding documents stipulated that the new company was to sign an agreement providing deliveries of nickel matte from Canada to KNR in Kristiansand. This final clause was fulfilled on February 27th 1914 with the signing of a contract guaranteeing KNR a supply of 10% of BANC's total matte production at cost price plus 25%. The refinery in Kristiansand thus seemed to have secured a major source of nickel guaranteeing continued production in Norway for the foreseeable future.¹⁰⁹

By early 1914 BANC therefore had ample nickel deposits and access to a modern refining process. What it lacked was the capital necessary for the erection of plant and initial production. Pearson's consortium – the PSC – was more of a promoting agency than a collection of financiers, and they had hoped to attract substantial investment in the US and Canadian markets. Unfortunately for Pearson these funds never materialised. In an attempt to explain this lack of success Canadian historian O.W. Main points to the influence wielded by the powerful American financier J.P. Morgan in blocking moves to set up a competitor to the International Nickel Company. Morgan held a significant stake in INCO. No matter the reason, when they found the willingness of private investors lacking Pearson and Dunn turned to lobbying for state support. Both the Ontario and Ottawa governments had a chequered history of supporting private industrial enterprise, and with their extensive contacts the BANC management must have held out great hopes of enlisting this. These hopes however came to naught, as both governments rebuffed the advances. The first attempt at getting BANC up and running had thus failed, and in the spring of 1914 Pearson met Eyde in Paris and informed him of the great difficulties encountered in financing British America. Eyde and Hybinette then took it upon themselves to facilitate the infusion of continental capital into the

108 Nikkelkommissjonen, 1925: 3, 12-13

109 Nikkelkommissjonen, 1925: 3-4, 8, 12-13

Canadian company.¹¹⁰

These financing woes are what first paved the way for Norwegian FDI in Ontario. The plan Eyde, Hybinette and Børresen came up with called for BANC to be fully financed by a consortium consisting of KNR, Elkem¹¹¹ and Beer Sondheimer. In June Eyde and Børresen held negotiations with Beer Sondheimer in Kiel, and by early July the KNR directorship was discussing the contours of an agreement. It was decided to press ahead with the plans, and in mid-July two representatives from Elkem went to Canada to satisfy the company as to the quality of the nickel deposits in question. Plans were for these to be joined in America a few weeks later by engineer Grønningsæter from KNR and an expert from Beer Sondheimer.¹¹²

While the Beer Sondheimer and KNR archives have been lost, the Elkem archives are intact and the documents found there includes the proposed European-Canadian agreement. Negotiated under pressure and on short notice, it illustrates the importance attached by the Norwegians to the success of the Canadian project. Under the new Norwegian-German scheme effective control of BANC would pass from Pacific to Kristiansand. BANC would become operational, KNR would receive a portion of the matte produced at a low price, while Beer Sondheimer would act as the consortium sales agent for the refined nickel. Elkem would guarantee the Norwegian funding, and receive financial compensation in the form of BANC stock and a share of the expected profits.¹¹³

BANC had bought its nickel deposits with borrowed money. Elkem and the Kristiansand refinery would buy the Canadian mines at cost, thus relieving BANC of their debt obligations. At the same time Beer Sondheimer would provide one million Canadian dollars in fresh funding, to be matched by an equal amount from KNR. The Kristiansand refinery would raise the required funds through an emission of new KNR shares guaranteed by Elkem. This would provide \$2 000 000 of fresh capital for the construction and initial operation of the mines and smelters in Canada as well as two new refineries – one Canadian – the other effectively an addition to the KNR works at Kristiansand. Further expansion of these works could then be covered by further infusions of capital from KNR, possibly growing to as much as \$5 000 000 by 1916.¹¹⁴

The proposed agreement was provisionally accepted by the parties in July 1914.

Formalisation would have to wait for the return of the European inspectors and their reports on the

110 Main, 1955: 72

Nikkelkommissjonen, 1925: 9

111 Elkem - "det norske aksjeselskap for elektromkemisk industri" - a Norwegian chemical company founded and partly owned by Sam Eyde

112 BD I: 26/6 – 1914

Elk-0002, E 013, folder no. 28: *Promemoria vedr. Expertise*; July 7th 1914

Nikkelkommissjonen, 1925: 9

113 Elk-0002, E 013, folder no. 28: *Plan for financiering av British America Nickel Corporation*; June 30th 1914
Nikkelkommissjonen, 1925: 9

114 Elk-0002, E 013, folder no. 28: *Plan for financiering av British America Nickel Corporation*; June 30th 1914

quality of the Canadian deposits. Yet, with the outbreak of war only weeks later all bets were off. German investment in an Canadian enterprise was out of the question, both from a German and a Canadian point of view. “Trading with the enemy”-laws introduced on both sides of the Atlantic made the completion of the agreement an impossibility, even had the business partners been willing. BANC had thus been deprived not only of necessary financing, but also of its professional sales agency – Beer Sondheimer.¹¹⁵

When Pearson began planning his foray into the Canadian nickel business he planned it as a US-Canadian enterprise. He would utilise both the Hybinette process and the Kristiansand refinery, but as a fully fledged subsidiary – owned and controlled by the Canadian mother company. Unfortunately for Pearson however, he failed to raise the required funding in the US – possibly because of opposition from the powerful INCO and their backers. This paved the way for a greater Norwegian role in shaping the future of the British America Nickel Corporation.

Needing European help in order to in financing BANC, Pearson then enlisted Sam Eyde as his point of contact. Eyde was probably the right man for the job. He had extensive contacts across the European business and financial world, yet he was also a man deeply concerned with personal profits. To get BANC off the ground he built an alliance of Norwegian and German investors. In doing this he drew in companies in which he himself had a financial stake, and on several occasions personally represented two or even three parties at the same negotiating table. Eyde's main motivation appears to have been to get BANC off the drawing board and into operation, yet he also cut corners. He clashed severely with both Børresen and Hybinette, both of whom believed he undersold the problems facing BANC and that he did not always act with Kristiansand or HUN's best interests at heart. Mistrust notwithstanding, the differences were gradually ironed out, and by late July 1914 a plan for the formal financing of the British America Nickel Corporation was in the offing.¹¹⁶

To further underline what they saw as the enormous potential for profits in Canada, Hybinette and Grønningsæter together proposed a budget for the first year of operations. By the outbreak of the Great War KNR had increased its productive capacity to roughly 1200 long tons of refined nickel per annum and was earning good money on its processing of Norwegian, Greek and New Caledonian ores. Out of a world production of around 30000 metric tons Kristiansand's share amounted to 4% of the total. With the expansion of plant in Ontario and Norway that the BANC-plan envisaged this would quadruple to a total of 5200 tons. Hybinette personally believed the costs involved would comparable to those incurred in the erection of KNR's plant in Norway, and thus

115 Sandvik, 2008: 40

116 BD I: 11/10, 24/10, 1/11 – 1911

Elk-0002, E 013, folder no. 28: *Plan for financiering av British America Nickel Corporation*; June 30th 1914

relatively simple to overcome. 750 000 dollars would go to erecting Canadian mining, smelting and refining facilities, while Hybinette foresaw operating costs totalling \$700 000 per annum. With a projected profit in Canada alone of \$1 600 000 this would leave a handy profit to the company and its shareholders of \$900 000 per annum. Even with amortization costs on the loans taken out by Pearson and Pacific combined with a substantial fall in the worldwide price of nickel, British America ought to turn a profit. With an established sales organisation, available ore and funding for necessary plant, the future of BANC appeared rosy indeed to the investors. Hybinette therefore recommended an investment on the order of \$1 000 000. \$750 000 for plant, and the remaining \$250 000 to cover operating costs for the first few months of production, after which proceeds from sales to KNR and Beer Sondheimer would make BANC self sufficient with regards to capital.¹¹⁷

War, Dunn and the British Government

The outbreak of war in August 1914 unwound all the carefully woven plans with a single stroke. It left BANC back were it had started in early 1913, but this time without access to its German connections. Following the breakdown in negotiations, Pearson retreated across the Atlantic to oversee other business dealings in America. It was therefore left to James Dunn to carry out BANC's European fundraising work from his offices in London.¹¹⁸

Having failed in his previous endeavours to secure government funding for British America, Dunn believed that the outbreak of war offered a new opportunity. Fully aware that the imposition of the British blockade against Germany meant that Kristiansand had become the sole major exporter of armaments-grade nickel to the Central Powers, he therefore approached his contacts within the British government in the autumn of 1914 with a proposition that they purchase control of KNR from the Norwegian shareholders. As the department chiefly concerned with coordinating the British blockade of Germany in the early stages of the war, Dunn laid his proposition before the Admiralty, where it was dealt with by Sir Francis Hopwood. Sir Francis was one of the civilian lords of the Admiralty, and at that point responsible for administrating the department's blockade work. He concurred with Dunn that ending Norwegian nickel exports to Germany was an important goal, yet the British government was not itself prepared to become directly involved in the running of the Kristiansand refinery. Dunn therefore modified his proposal and suggested that he himself

117 Elk-0002, E 013, folder no. 28: Hybinette to Eyde, May 28th 1914

RONC Appendix: Interview with V. Hybinette, April 4th 1916

Sandvik, 2008: 38

USGS; *Nickel Statistics*; December 7th 2011

118 FO 382/1472: *Memorandum concerning BANC and KNR...*, by James H. Dunn; July 10th 1917

Nikkelkommissjonen, 1925: 9

should take on this responsibility, if only the British government would lend his Canadian consortium the money to do so. In return Dunn offered to ensure that Kristiansand's contract to deliver its complete output of refined nickel to Germany via Beer Sondheimer would not be honoured. As collateral on the proposed loan Dunn would offer the shares and bonds of KNR to be held by the British.¹¹⁹

Again Sir Francis expressed an interest, but the mammoth task of organising the budding British blockade meant that it was not until early 1915 that serious discussion of the proposed arrangement bore fruit. In late January Dunn, Pearson, Hybinette and Børresen all met in London for meetings with Hopwood at the Admiralty. There Dunn and Pearson secured an option from Hybinette and Børresen to acquire control of KNR for £220 000 on the condition that the British would provide a total loan of £400 000. This would leave £180 000, or roughly \$875 000 to be invested in BANC. Somewhat short of Hybinette's suggested investment of one million, but still thought enough by Dunn to cover the expected cost of erecting required plant. Having secured the preliminary agreement Børresen and Hybinette then returned to Norway while Dunn would attempt to guide the matter through the British bureaucracy.¹²⁰

Once aware of the Norwegian position, Hopwood began exploring the feasibility of the arrangement. Clear on the importance of the issue, Admiral Slade of the Restriction of Enemy Trade Committee¹²¹ described the matter of halting Norwegian supplies of nickel to Germany as one of “extreme urgency” only a few days after Børresen had returned to Kristiansand. At the same time Slade advised that as the loan would result in significant investment in Canada it would only be proper if the Canadian government were to shoulder half the cost, i.e. £200 000. The matter was therefore moved on to the Foreign Office.¹²²

The Foreign Office proved much less sanguine about the prospects of an agreement than had the Admiralty. Although clearly desirable from a blockade point of view, the arrangement would have to navigate several hurdles. First of all the Canadian government did not recognise what it saw as public subsidies to local industry as a war measure. It therefore respectfully refused to shoulder the £200 000 cost and associated risks. The Treasury in London would have to carry the burden alone.¹²³

119 FO 382/300: “Purchase of Norwegian nickel”; January 29th 1915

FO 382/1472: “Memorandum concerning BANC and KNR...”, Dunn to FO; July 10th 1917

120 BD I: 14/2 – 1915

FO 382/300: “Restriction of Enemy Supplies Committee, 40th report”; February 15th 1915

FO 382/1472: “Memorandum concerning BANC and KNR...”, Dunn to FO; July 10th 1917

121 Often referred to as simply the “Restriction Committee”.

122 FO 382/300: “Restriction of Enemy Supplies Committee, 40th report”; February 15th 1915

123 FO 382/300: “Purchase of Norwegian nickel”; January 29th 1915

FO 382/300: Colonial Secretary to Gov.Gen. of Canada; February 27th 1915

FO 382/300: Gov.Gen. of Canada to Colonial Secretary; March 3rd 1915

Secondly the discussions on British involvement in the nickel trade took place parallel, or shortly after the London had attempted to acquire control of the Norwegian whale oil factories producing glycerine for Germany. Although ultimately successful, the British had been severely discomfited when trying to navigate the complicated laws regulating foreign ownership of Norwegian companies. In short the Foreign Office wanted absolute certainty that the proposed acquisition of KNR by Dunn and Pearson's Pacific Securities Company was at all feasible. Upon this point the British Ambassador to Norway, Mansfeldt de Cardonnel Findlay, advised that the purchase itself ought not to involve any impossible hurdles, but that Pearson and Dunn would in so doing probably expose themselves to legal action by Beer Sondheimer for breach of contract. This might involve KNR having to pay damages to the German firm, something which would indirectly lead to the British Government compensating Germany for the effects of the blockade.¹²⁴

Combined these obstacles led the Foreign Office to suggest another course of action. Rather than acquiring the Kristiansand refinery, might it not be easier to simply outbid the Germans, purchasing KNR's production for Britain outright? To this end a diplomatic representative was dispatched to Kristiansand in late February to negotiate a possible deal with the Norwegians. However, this approach was flatly blocked by Børresen, who was not interested in breaking his lucrative contract with Beer Sondheimer without some kind of safety net.¹²⁵

At the same time Børresen increased the pressure on London for a decision. He repeatedly requested confirmation from Findlay that the scheme was still on, so that it could be completed in time for the KNR annual general meeting scheduled for March 20th. If the matter could not be concluded before then it might no longer be possible to acquire control of the refinery at the agreed upon price. £220 000 was more than double the nominal capital value of KNR in 1914, yet with the astronomical rise in nickel prices, beginning with the outbreak of war, so did the share price of KNR on the Christiania exchange soar. What made the situation even more uncomfortable for the British were persistent rumors, forwarded to London by Findlay, to the effect that Beer Sondheimer were making moves in Christiania to acquire the Kristiansand plant for themselves. Børresen did not wish to imperil his relationship with the Canadians nor the British – he personally intervened to halt the re-export of nickel to Germany by other Norwegian firms outside the established contract with Beer Sondheimer – yet neither was he prepared to enter into an agreement with the British which flew in the face of good business sense. As the matter stood, the Foreign Office was not prepared to go ahead with the acquisition until the matter of potential damages to Beer Sondheimer

124 FO 382/300: "Purchase of Norwegian nickel"; January 29th 1915

FO 382/300: Findlay to FO; February 2nd 1915

125 BD I: 22/2 -1915

FO 382/300: A. Law to Admiralty; January 29th 1915

FO 382/300: Findlay to FO; February 20th 1915

had been resolved, and KNR's general meeting came and went without any steps having been taken.¹²⁶

Some time during the spring of 1915 responsibility for the British handling of the KNR nickel proposals passed from the Foreign office to the Board of Trade, where the President of the Board, Walter Runciman, took an interest in the matter. Following a short delay negotiations were therefore restarted in late May or early June, with a view to finally sealing an agreement. By this stage the share price of KNR had risen to such a level that the cost of acquiring the refinery for the government had become prohibitive to the British. Dunn had made one last attempt at securing the KNR shares for the government in April, but this foundered on opposition from the Norwegian stockholders. The London government briefly considered increasing the pressure on KNR through halting shipments of coal and other necessary supplies, but this was abandoned once it was found that Germany was fully capable, if not eager to assume responsibility for supplying the Kristiansand refinery with raw materials itself. Other avenues therefore had to be explored. It was proposed that rather than purchasing the refinery outright, the British government should compensate KNR for halting production for the duration of the war. To sweeten the deal for the Norwegians the British would also provide BANC with a substantial loan, enabling the company finally to start production.¹²⁷

Again the main stumbling point was the question of possible damages falling to Beer Sondheimer. If KNR were to cease refining nickel altogether they would be in clear breach of the contract with the German sales agency, which stipulated a minimum delivery from Kristiansand of 70 tons of nickel per month. Børresen suggested that this risk should be carried by the British government, but was told in no uncertain terms by the Board of Trade agent Alan Anderson that the Treasury would take a very dim view of guaranteeing substantial payments to a German firm for the unforeseeable future. Børresen then argued that KNR could hardly be expected to bear a risk which the British themselves would not. To break the stalemate Dunn – who did not think action by Beer Sondheimer very likely – suggested that the risk could be borne by the British America Nickel Corporation, which would reimburse KNR for any damages paid to the Germans. This suggestion freed the British from liability, but entirely failed to address Børresen's issue. BANC was still not

126 BD I: 12/3, 27/3 – 1915

FO 382/300: Findlay to FO; February 2nd, 21st and 25th 1915
Nikkelkommissjonen, 1925: 7

127 BT 11/10: Findlay to Edward Grey; May 11th 1915

BT 11/10: R.W. Matthew to Eyre Crowe; May 17th 1915

BT 11/10: R.W. Matthew to Francis Hopwood; May 17th 1915

BT 11/10: Handwritten cover of BoT folder titled "FO, Norway – Room 51"

FO 382/300: R.W. Matthew to Parker, re: information to Findlay from Runciman; April 14th 1915

FO 382/300: Instructions for Dunn from BoT; April 14th 1915

operational. Indeed, the funding of British America was the reason why KNR was interested in entering into an agreement in the first place, and piling additional financial liabilities upon the fledgling company could hardly be said to move the firm closer to operational status. Nor was it given that BANC would be in a position to supply the capital, should the damages rise to significant levels. Still the British refused to budge. Børresen's counter-proposal that the British should reimburse KNR, and then in turn seek reimbursement from BANC was also blocked.¹²⁸

By early summer 1915 negotiations had ground almost to a halt, and yet a series of blows were about to fall upon the plans. On May 7th Fred Pearson drowned when RMS Lusitania was sunk by a German U-boat, while at the same time BANC's finances were becoming precarious. When Pacific Securities had acquired Canadian nickel deposits before the war, it had borrowed heavily to pay for them. Some of these loans were now coming due, and Dunn was getting desperate for funds. Attempting to pressure Børresen and Hybinette into acceding to British demands the three almost fell out, yet just as the entire project looked set to collapse the British brought out the big guns.¹²⁹

The 1915 August agreements

Following the shell crisis of early 1915, a new urgency entered into the British handling of the Kristiansand-Canada question. Curbing Norwegian exports to Germany now became a matter of utmost importance, with nickel looming especially. Convinced of the absolute necessity of dealing with the blockade issue, the British authorities called a new series of meetings in London, beginning in early June. James Dunn too, acutely aware of BANC's precarious economic situation, stepped up his efforts to convince the KNR management to deal with the British. The Canadian financier first contacted Sam Eyde, but was turned down. Eyde claimed – possibly correctly, possibly a consequence of the death of Pearson and the falling out between Børresen, Hybinette and himself – to be far too busy to occupy himself with KNR matters. Eyde instead recommended to Dunn that he direct his thrust at Børresen and Hybinette, something which Dunn then duly did. As a result of these renewed efforts both Børresen and Hybinette therefore criss-crossed back and forth across the North Sea on an almost regular basis in the spring and summer of 1915.¹³⁰

During one particularly heated meeting at a hotel in London between the three in June,

128 BT 11/10: Memorandum of meeting between Børresen, Dunn, Anderson and Barnes; July 20th 1915

BT 11/10: Memorandum of meeting between Dunn, Anderson and Barnes; July 21st 1915

129 BT 11/10: Memorandum of meeting between Dunn, Anderson and Barnes; July 21st 1915

Sandvik, 2008: 41

130 BD II: 16/6, 27/8 - 1915

Nikkelkommissjonen, 1925: 9

Sandvik, 2008: 41

Børresen was called to Whitehall for a meeting at the office of the President of the Board of Trade, Walter Runciman. During this meeting Børresen finally succumbed to the pressure, and agreed in principle to limit KNR's dealings with Beer Sondheimer in return for British financial compensation. Over the course of the summer the Board of Trade together with Dunn and Børresen hammered out a series of compromise agreements. KNR would agree to give the British, through their agent Alan G. Anderson, first option to buy any nickel for export not taken by Beer Sondheimer. For their part the British government agreed to take up to 3000 long tons of refined nickel per annum for ten years from BANC. The minimum price was set at £145 per long ton, and deliveries were to begin on September 1st 1916 when it was assumed that BANC would have begun operations. Starting at the cessation of hostilities Anderson would also take 1200 long tons per annum from KNR for three years at the minimum price of £150 per long ton.¹³¹

A second agreement – nominally between Alan Anderson and Dunn, but with Dunn acting as a straw man for Kristiansand – gave Kristiansand extensive financial compensation in return for limiting work at the Hosanger mines in Southern Norway. The Hosanger nickel deposits had been mined in the previous century, but production had ground to a halt as international nickel prices plummeted around the end of the 1800s. By the outbreak of the war KNR held the rights to the old mines, and the rapid rise in the price of nickel meant that production at Hosanger had again become economically viable. Ore from Hosanger also promised to take up some of the underutilised capacity at the refinery in Kristiansand, caused by the halt in ore imports due to the blockade. It therefore made perfect economic sense for KNR to reopen the Hosanger facilities. It was this new source of nickel ore Børresen now gave up for the duration in return for financial compensation from the British, and it was again the issue of potential damages accruing to Beer Sondheimer which caused the somewhat awkward arrangements of having to filter the British funds through Dunn. With KNR bound by pre-war agreements to deliver its entire production of refined nickel to Beer Sondheimer, Børresen was worried that any attempt to limit production might be construed by the Germans as breach of contract. Using James Dunn as a straw man was thus an attempt to reduce the likelihood of a successful case being brought by the German company in the Norwegian courts. In effect, the agreements set the maximum productive capacity of KNR for the duration of the war at 70 tons of refined nickel per month, and held that KNR would make no attempts at increasing this.¹³²

131 BT 11/10: George Barnes to Walter Runciman, note on jacket of BoT folder marked “nickel”; July 23rd 1915
BT 11/10: Agreement between KNR, Hybinette, Børresen, Dunn and Anderson; August 27th 1915

132 Bjørlykke, Harald; *Hosanger Nikkelgruve*; NGU 172; Oslo 1949: 9

BT 11/10: Agreement between Dunn and Anderson (the Hosanger agreement); August 27th 1915

BT 11/10: Unsigned handwritten note on Hosanger agreement; 1915

BT 15/71: Alan Anderson to Leggett, information on Hosanger agreement; November 9th 1917

Other changes, made over the course of the summer to the draft agreements discussed in London in June, were also included to address the Kristiansand company's fear of compensation claims by Beer Sondheimer. The negotiations themselves were therefore carried out in complete secrecy. Børresen's attempts to include a provision that the British government would take some responsibility for possible damages were still blocked by the Treasury, but London agreed to remove clauses which stated that Børresen, Hybinette and their KNR colleagues would lobby the Norwegian government for the introduction on export restrictions on nickel. The British had previously attempted to force Børresen and Hybinette into an agreement by threatening to get the Norwegian government to impose export restrictions on nickel. Yet correspondence between the Foreign Office in London and Ambassador Findlay in Christiania expose these as empty threats. Findlay himself reported back to London that the likelihood of the Knudsen-government agreeing to impose such restrictions was negligible, due to the Norwegians' fear that Germany would construe this as a war measure directed solely against the Central Powers, inviting some kind of retaliation. The British instead contented themselves to binding Hybinette to work exclusively for KNR and BANC for the duration of the conflict, thus preventing him from at any time jumping ship. In August 1915 Dunn and Alan Anderson travelled to Norway for the final negotiations, and the agreements were signed in Christiania on the 27th of that month.¹³³

Parallel to the negotiations with the British government, KNR and Dunn also signed an agreement which made Dunn and his newly established Allied Metals Selling Company (AMS) Kristiansand and BANC's common sales agent for a period of 25 years. The two companies thus established a joint agency in the hope of avoiding competition against each other, while strengthening their position in the international nickel markets. Børresen had resisted the full scale merger of BANC and KNR, but combined the 1914 matte contract and the AMS agreement went a long way in achieving those same goals of vertical integration.¹³⁴

From Kristiansand to Ontario - a summary

The August agreements of 1915 represented the culmination of five years of work by KNR to secure a foothold in the Canadian nickel mining industry. Yet the agreements did not represent a solution to Kristiansand's supply problems as had been envisaged by the refinery's Norwegian and Swedish founders back in 1910. Rather it came about as a consequence of the rapidly changing circumstances brought about by the outbreak of the First World War.

133 BT 11/10: Hosanger agreement; August 27th 1915

FO 382/300: Findlay to FO; April 1st and August 27th 1915

134 Nikkelkommissjonen, 1925: 11

The very first forays by Eyde, Børresen and Hybinette into the world of international nickel centred on securing profits from royalties on the new Hybinette process, which was pioneered on a commercial scale in Kristiansand. Yet the first attempts to get the process adopted internationally foundered on opposition from the international nickel trust and others. Eyde therefore brought in the American investor Fred Pearson and his Canadian consortium with their vision of taking on the near monopoly of the International Nickel Company in the North American market. Coupled with Kristiansand's German sales agency Beer Sondheimer plans were drawn up to establish a new Canadian nickel company, integrating mining, smelting and refining into a single firm.

Plans for the financing of the new company – the British America Nickel Corporation – were nearing completion when the war broke out and made the Canadian-German coupling impossible. Yet at the same time the war opened up new possibilities, as the British government became interested in controlling the Kristiansand firm and its sales of refined nickel to Germany. It was BANC's second in command, James Hamet Dunn, who realised that it was possible to use KNR's interests in Canadian nickel as leverage in order to secure government funding of British America. Negotiations were drawn out, but by the early summer of 1915 the contours of a first agreement between the parties were beginning to emerge. The London government would agree to lend BANC the capital required for the new firm to erect necessary plant and begin commercial operations, provided the Norwegian firm also joined in with a significant sum. In return KNR would limit its attempts at increasing the amount of Norwegian nickel available for export to Germany.

The agreements finally signed on August 27th were of a compromise nature. The British government had succeeded in somewhat limiting nickel exports to Germany, but not in eliminating them completely. BANC succeeded in tying itself to the British government with a sales agreement, guaranteeing the Canadian company a buyer for its projected output, but did not secure the funding necessary to begin operations. KNR for its part acquired a post-war sales contract together with financial compensation for accepting restrictions placed upon the refinery by the British. Kristiansand also retained the right to continue the lucrative trade with Germany, but had to agree to certain restrictions without the desired government guarantee against any damages accruing to Beer Sondheimer. Additionally KNR tied itself closer to BANC via the February 1914 matte contract and the 1915 creation of a joint sales agency for the two firms, altogether increasing Kristiansand's stake in the success of the Canadian enterprise. All these outstanding issues would combine to make the following years a period of some turbulence for all parties concerned.

Chapter V

War, investment and collapse

1915-1926

The Norwegian-Canadian nickel adventure, which began in the years prior to the war and ended in the spectacular collapse of both KNR and BANC in 1924, took a dramatic turn in the late summer of 1915. The August agreements made Kristiansand a part of the British blockade system, yet they could not have been signed without the promise of Imperial support for the fledgling British America Nickel Company. In 1916 the first financing of the Canadian firm was agreed, with the British government taking the lion's share of the burden. Yet 1916 also saw the formation of a BANC voting trust, giving the London authorities effective control of the company.

Repeated delays, faulty calculations and lack of proper oversight all contributed to the subsequent failure of British America to reach operational status, and by mid-1917 the firm was again running short of funds. A fire at the KNR refinery plant provided the Norwegians with a fresh opportunity to lever further British support, but this time the Norwegians had to carry the chief burden themselves. By then locked into supporting to the struggling and stagnant Canadian enterprise, the Norwegians were again forced to provide capital infusions in 1919, 1921 and 23. Yet these proved insufficient to save BANC, and when British America went under it dragged the hapless Norwegians down with it.

Fostering domestic demand

Rather than regarding the 1915 August agreements as an end in themselves, the British saw them as a stepping stone for the ever further tightening of the blockade of Germany. By signing the agreements KNR had voluntarily reduced the level of nickel exports to Beer Sondheimer to a maximum of 70 tons per month, yet to the blockade authorities in London this was only a temporary measure, designed to limit the amount of nickel received by Germany while efforts were made to induce the Norwegian government to introduce a prohibition on exports.¹³⁵

That the British regarded the 70 tons per month limit as temporary was well known to Børresen and Hybinette, and probably also to the rest of the KNR management in Kristiansand. Early drafts of the August agreements had contained a clause whereby Børresen and Hybinette

135 FO 382/300: Findlay to FO; February 20th 1915

FO 382/300: C. H. Grimshaw to A. Ryan; November 17th 1915

FO 382/300: FO to Grimshaw; November 24th 1915

pledged themselves to work for just such a prohibition as sought by the British.¹³⁶ The clause was removed from the final agreements at a very late stage, only because of fears by Børresen and KNR's company lawyer, Fredrik Looft, that it might strengthen any claim by Beer Sondheimer for damages. Yet the lack of a formal clause did not mean that the British did not expect Børresen and Hybinette to aid them in their endeavours in Norway. The August agreements stipulated that British would continue for the duration of the war to pay KNR compensation for nickel not exported, regardless of whether a prohibition was in place or not.¹³⁷

The British thus began setting up a series of schemes designed to further reduce the amount of nickel shipped to Germany. Kristiansand had undertaken not to refine more than 70-tons of nickel a month, and the British government hoped that by establishing a native demand for nickel in Norway, they would be able to induce the Knudsen government to give this domestic demand precedence, thus forcing Beer Sondheimer to satisfy it before exporting. Any increase in Norwegian demand would therefore result in an equivalent decrease in nickel stocks available for export. This, however, proved more difficult than first thought. The British Ministry of Munitions conducted an investigation into the Norwegian domestic steel industry, with a view to fostering a Norwegian nickel steel industry. Unfortunately for London it was found that the costs involved would likely make the price of the product prohibitive to prospective domestic consumers. It was also thought that German buyers would in any case likely outbid any Norwegian firms, even if such firms were provided with British funds. Norwegian companies demanded German products, such as electrical machinery and chemical compounds, which Britain or other Entente powers were unlikely to be able to deliver.¹³⁸

By late 1915 Norwegian whale oil glycerine and Hydro's nitrates had all come under Entente control. With nickel the one of few strategic materials left for trade with Germany, it was the view of de Cardonnel Findlay that the Norwegian government would be unlikely in the extreme to exert any kind of pressure upon Beer Sondheimer to limit their activities as regarded exports. Findlay also deplored the fact that Børresen had informed the Norwegian Minister for Foreign Affairs of the existence of the August agreements, thus making it all but impossible for the Knudsen government to observe its professed neutrality and prohibit nickel exports at the same time.¹³⁹

All in all, Findlay was far from sanguine about the prospects of cutting off Norway as a source of nickel for Germany in 1915 and 1916. In December 1915 admiral Børresen had informed him that he had done all he himself believed could be done to influence the government, and

136 BT 11/10: Early draft of 1915 August agreement

137 FO 382/300: FO to Findlay; December 1st 1915

138 FO 382/300: FO to Findlay; December 30th 1915

139 FO 382/300: Findlay to FO, December 6th 1915

Kennedy, 1981: 150

Findlay wrote to his superiors in the Foreign Office that the only course of action open to London likely to effect the desired prohibition would be to halt Norwegian imports of vital coal and fuel supplies. Findlay himself, however, could not recommend it as proportional to the risks involved. The ambassador feared that if such an embargo were to be implemented there was a clear and present danger of the general mood of the Norwegian populace and media turning against the Entente, thus making blockade work that much more difficult. By December 16th the ambassador was questioning Britain's approach to entire the nickel problem, writing that the "...question as to whether loss to Germany of this supply of nickel would conceivably influence the course of war should be considered by experts."¹⁴⁰ From 1916 therefore, the British came to adopt Findlay's suggested policy of steady pressure, rather than seeking immediate concessions from the Norwegian government.¹⁴¹

Committed to Canada

The August agreements signed between KNR, BANC and the British government in 1915 made no mention of the financing of British America, yet efforts to fund the Canadian venture were integral to the agreements themselves. Both the matte contract between BANC and KNR, and the sales agreement between BANC and Alan Anderson would be meaningless if the Ontario company was unable to begin mining and smelting operations. To Børresen and Hybinette it was probably important that KNR should have a substantial financial stake in the company, both because of the profits they expected from the new enterprise, and because it would make necessary support for the agreements with the British to limit the hugely profitable sales of nickel to Germany much easier to obtain from their co-directors and fellow board members in Kristiansand. They certainly wanted the British government to make a sizeable investment in BANC, as they saw it as a guarantee of the government's commitment to the success of the vulnerable new company. According to a 1917 memorandum written by James Dunn to the Foreign Office, Børresen and Hybinette attached such importance to the British government underwriting the company, that the August agreements would not have been signed without it.¹⁴² Knowing this the British government therefore agreed to invest \$2 000 000 in British America against a security in first class debenture bonds, while the KNR board for its part provisionally agreed to invest \$1 000 000 against ordinary debentures and a sizeable portion of BANC common stock. These arrangements were provisionally concluded in July and August 1915, and thus parallel to the August agreement negotiations. None of the transactions

140 FO 382/300: Findlay to FO, December 16th 1915

141 FO 382/300: Findlay to FO, December 6th 1915

142 FO 382/1472: *Memorandum concerning BANC and KNR...*, Dunn to FO; July 10th 1917

in question were actually effected in 1915, but it is impossible to fully understand the nature of the August agreements without them.¹⁴³

The funding negotiated in the summer of 1915 would have left BANC with the sum of \$3 000 000. This was the sum which Hybinette had estimated during the pre-war Elkem-Beer Sondheimer negotiations as required to make BANC operational. Yet by early 1916 the situation had changed somewhat. Starved of operating capital and confounded in their efforts at securing American funding, Dunn and British America owed eighteen months of rents on the loans taken out to secure the company's Sudbury nickel deposits in 1912, and had also taken on additional debts to cover running expenses. Whether Hybinettes original estimate had been correct or not, by the spring of 1916 James Dunn estimated that another million would be required to make up for this backlog. He therefore approached the British government to find that million. In return for purchasing \$3 000 000 worth of debenture bonds instead of the two promised earlier, Dunn offered \$6 000 000 dollars worth of common stock instead of the zero the government had agreed to accept earlier. This was accepted with the further provisions that KNR stood by its commitment to provide \$1 000 000 of funding, and that a voting trust should be formed of the common stock held by Kristiansand, Pacific Securities (Dunn) and the British government, giving effective control of BANC to the British for a period of fifteen years.¹⁴⁴

When, in early April 1916, Victor Hybinette travelled to London on behalf of KNR to conduct negotiations with the British government regarding some practical details of the August agreements, he was therefore instead confronted by Dunn with the new plan. It is not known whether the proposals were fully developed when Hybinette were made aware of them, or if he himself joined in negotiating some of them. What is apparent however, is that he quickly came to an understanding with Dunn and the British government. On April 6th he telegraphed Børresen in Norway with the proposal that KNR buy BANC debentures for \$1 500 000, up from the \$1 000 000 conditioned by the British.¹⁴⁵ In return, Hybinette reported, Kristiansand would receive a bonus of 100% in common stock. Børresen replied encouragingly, but also stated that it would be impossible to convince the board to back the scheme if Hybinette was not there himself to put the matter before them in person. This Hybinette agreed to do, but before he left London he provided Dunn with a personal guarantee that Kristiansand would uphold its part of the proposed agreement.¹⁴⁶

When he gave his personal guarantee, Hybinette did so without the authorisation of the KNR board. In a reply to a question from the post-war Norwegian parliamentary nickel commission he

143 BT 11/10: Handwritten text on folder titled "Treasury – Approve arrangements for loan to British America Nickel Corporation..."; August 20th 1915

144 BT 15/81: Indenture for debenture bonds transfer to British government; July 24th 1916

145 Nikkelkommissjonen, 1925: 14

146 Nikkelkommissjonen, 1925: 15

claimed that this was necessary because Dunn had threatened to sell the company off to the International Nickel Company if the Norwegians would not cooperate on very short notice. Hybinette provided no explanation as to why Dunn would make such a threat, and there is nothing in British or Norwegian sources corroborating this version of events. Yet by April 1916 BANC was facing crisis. The holders of British America's debts were clamouring for down payment, and it is possible that Dunn felt pressured into using threats to acquire funds quickly. In any case Hybinette found it easy to acquiesce to the proposed terms. He would later write that the voting trust together with the contracted right of KNR to sell nickel to the London government “...was an absolute guarantee against the dreaded competition of those already in the business.”¹⁴⁷

Hybinette returned to Norway on April 18th, and on April 25th a KNR board meeting was held where it was resolved that the Kristiansand refinery would recommend the acquisition of \$1 000 000 BANC debenture stock for the company. Final authorisation for the transaction was given at a general meeting of shareholders on May 1st. KNR shortly afterwards decided to act on Hybinette's suggestion that this be increased to the \$1 500 000 he had agreed with Dunn in London. At about the same time Børresen himself acted, on what appears to have been his own initiative, but later sanctioned by the board, to buy a further \$250 000 debentures for the company. The final tally of KNR holdings of BANC debenture stock acquired in the spring and summer of 1916 thus added up to \$1 750 000. Accompanying the debentures purchased by the Norwegians under the original \$1 500 000 agreement, Kristiansand received the promised 150% bonus BANC in common stock. Dunn himself paid two thirds – or 100% - of this bonus, thus transferring to Kristiansand \$1 500 000 worth of shares. The remaining third was paid KNR by Hybinette himself, who while in London claimed to have received \$5 000 000 worth of voting stock from Dunn. Of the \$250 000 bought by Børresen under a separate agreement, Dunn delivered the complete 150% bonus.¹⁴⁸

\$750 000 of Hybinette's \$5 000 000 common stock portfolio thus went to KNR. Of the remaining \$4 250 000 he gave \$820 000 each to Børresen and Eyde. He also divided equally \$540 000 between the remaining six board members and directors of the Kristiansand refinery. Resulting in \$90 000 of common stock each for Grønningsæter, Olsen, Wisbech, Andersen-Aars, Frimann Dahl and Martens. Aside from increasing their individual wealth, all the members of the board not already personally interested in the success of BANC through Hybinette's patent company (HUN) thus got a financial stake in the Canadian enterprise. Of the \$5 000 000 portfolio, Hybinette himself was left with \$2 070 000¹⁴⁹

Through the acquisition of these shares, those members of the KNR management who did

147 Hybinette to Vogt, Nov 20th 1920; quoted in Colussi, 1988

148 Nikkelkommissjonen, 1925: 18-19, 23

149 Nikkelkommissjonen, 1925: 25

not already own BANC stock through the pre-war sale of Hybinette's nickel patents, received a financial stake in the success of the Canadian venture. That said, by way of the newly formed voting trust the common stock in question gave the owners no real influence upon the future running of the company. Nor did Hybinette reveal the existence of the voting trust plans to the KNR management upon his return to Norway. They were only announced by Hybinette in a board meeting in early June 1916, by which time Kristiansand had already sold most of the debentures and the accompanying common stock to other Norwegian investors. Of the \$1 750 000 worth of debentures purchased in 1916, the Kristiansand refinery itself only kept \$440 000. Yet there could be no question of not accepting the voting trust agreement. The trust was presented to the board as a make-or-break demand by the London government, and the KNR management felt obliged to acquiesce. Indeed, most of the board members were not even reluctant. Hybinette and Børresen both welcomed it, and saw in it a guarantee of the importance attached to the success of BANC by the British. The debenture purchase agreements were accepted by KNR in May, and the voting trust in June. The official agreements were signed in London, and dated July 24th 1916.¹⁵⁰

Fire and finance

Following the May negotiations in Kristiansand, Anton Grønningsæter left Norway for Canada, in order to study the BANC properties there. By July he had been joined by Hybinette, Dunn and the British government representative to BANC – W.A. Carlyle. Grønningsæter, Hybinette and Carlyle were all three metallurgical engineers, and together they toured the facilities in Sudbury and Ontario until December 1916.¹⁵¹

Despite more than a year and a half having passed, nothing much in the way of development had taken place at the British America properties in Ontario since Pearson's demise in May 1915. Test drilling at the Sudbury deposits and other preparatory work had been undertaken at the mines themselves, but no work at all had gone into erecting either smelter or refinery. Nor had the question of acquiring a satisfactory power source for the proposed works been solved. Starting almost from scratch therefore, Dunn and the three engineers concluded in December 1916 that a major shake up of the plans for British America's future development was needed. The location of the planned refinery would be moved, and a number of other alterations, major and minor, were agreed upon. All in all the revised plans and the changing conditions brought about by wartime

150 BT 15/81: Indenture of Treasury-BANC loan agreement for \$3 000 000; July 24th 1916
Nikkelkommissjonen, 1925: 39-41, 42

151 FO 382/1472: *Memorandum concerning BANC and KNR...*, Dunn to FO; July 10th 1917
Nikkelkommissjonen, 1925: 44

meant that the \$3 000 000 though by sufficient by Hybinette in 1914 to finance the company would not by 1917 cover the proposed costs. Dunn and Hybinette therefore set out once again to find the necessary funding.¹⁵²

Among the changes to the plans agreed upon in Canada in December 1916 was a doubling of the initial productive capacity of BANC from 5 000 to 10 000 long tons of nickel ore per annum. Grønningsæter would much later write in his memoires that he and Hybinette opposed this particular change in plans, because it would lead to yet further delays before British America could start operations. Yet Dunn wrote to the British government in the summer of 1917 that the idea of doubling the capacity came from his “Norwegian friends”. In the words of Dunn they “...did not care to go back to [the KNR] shareholders and tell them that the estimates were wrong but that for increasing the capacity they could get enough new money to construct a plant of practically double the capacity...”¹⁵³. Again no records of the discussions between Dunn and the Norwegians have survived, if not present in Dunn's private papers in Canada. It is thus impossible to conclude with any certainty who pressed for the expansion. Compared to the pre-war years, however, Norwegian financial markets were approaching boom conditions by 1917. The war on the continent had led to shortages within the country of various foodstuffs and goods, but profits from the export of goods and services had also increased dramatically. Norwegian capitalists were therefore relatively well off and willing to invest in new projects. Børresen, Hybinette and Eyde must have been well aware of this, and may indeed have held out hopes that a second financing of BANC with Norwegian money following so quickly after the first would succeed if only the company could be portrayed as a great success.¹⁵⁴

In any case, Børresen, Hybinette and Eyde made several demands of Dunn before agreeing to bring the new plan before the KNR general meeting. Any new Kristiansand-backed purchase of debenture stock would again have to be accompanied by bonus common stock. The Norwegians also wanted the British government to give the BANC building works formal status as war industry, thus ensuring access to labour and construction materials. Furthermore, the British would have to guarantee British America in a contract with the Ontario Hydro Electric Commission to supply power to the melting and refining facilities in Canada. Without such a guarantee the Hydro Electric Commission refused to expand the capacity of its power plants, thus depriving BANC of access to cheap power.¹⁵⁵

The new financing was first discussed by the KNR board of directors in meeting on March

152 FO 382/1472: *Memorandum concerning BANC and KNR...*, Dunn to FO; July 10th 1917
Nikkelkommissjonen, 1925: 44, 47

153 FO 382/1472: *Memorandum concerning BANC and KNR...*, Dunn to FO; July 10th 1917

154 Sandvik, 2008: 43

155 FO 382/1472: *Memorandum concerning BANC and KNR...*, Dunn to FO; July 10th 1917

23rd, and Dunn travelled to Norway to conduct further negotiations. Pacific Securities had delivered the bonus common stock accompanying the 1916 debenture purchase, and as a result the PSC's own holdings of common stock were running low. The bonus stock demanded by KNR in 1917 would therefore have to come from the British government. The Board of Trade was agreeable to the plan, seeing it as a way of securing the British 1916 investment in BANC at little cost to the government, yet the Treasury was more hesitant. The entry into the war in April 1917 by the United States seemed to offer the British a fresh opportunity to induce the Norwegian government to introduce the sought after prohibition on nickel exports, and negotiations between London and KNR were drawn out.¹⁵⁶

This all changed on May 3rd, when a major fire broke out at the KNR refinery works outside Kristiansand city. The damage was severe, and made further production impossible until repairs had been effected. KNR was insured so that the fire itself represented no serious financial loss, but it left the company with two options as to how to reconstruct. Not to rebuild at all was out of the question, as KNR would then again be liable for heavy damages to Beer Sondheimer. Rapid and temporary repairs could be effected, so that the refinery would again produce nickel – albeit at a lower capacity – within a month. Beer Sondheimer lobbied the Kristiansand management extensively with a view to getting nickel production restarted quickly, offering both materials for the building works and increased prices for nickel if Børresen could effect the rapid reconstruction of the plant.¹⁵⁷

A second option was to full scale reconstruction, so that KNR would not be able to refine any metal for six or seven months. Full scale repairs would still leave KNR open to possible court action by their German trading partners, but that was a risk Børresen and Hybinette would be willing to take provided the British provided further assistance to BANC and compensated Kristiansand for the loss of revenue.¹⁵⁸

On May 30th a general meeting of Kristiansand shareholders empowered the board to negotiate conditions for a second financing of BANC with the British government. KNR's proposals were conveyed to the London authorities by Børresen in June via mail, and James Dunn returned to Britain in order to put the new proposals to the Ministry of Blockade. The British were quick to grant Kristiansand the requested compensation for any profits lost due to lack of production in

156 FO 382/1472: Findlay to FO; September 15th 1917

157 BD I: 14/6 – 1917

FO 382/906: Excerpt from “The Times”, re: Kristiansand fire; May 8th 1917

FO 382/1472: Letter to KNR from German Royal Department for Industrial Supplies; forwarded to London by Findlay; June 12th 1917

FO 382/1472: Børresen to Anderson; June 14th 1917

T 1/12093: Dunn to BoT; telegram forwarded by Findlay; May 7th 1917

158 FO 382/1472: Leggett to Ryan; July 4th 1917

T 1/12093: Leggett to Carlyle, re: KNR fire; undated telegram

Norway. The Imperial government also agreed to increase its guaranteed takings of BANC nickel from 3 000 to 6 000 long tons per annum necessitated by the proposed doubling of the productive capacity of the Canadian enterprise, although only at market price rather than the previously agreed upon £145 per long ton. More troublesome was the question of the guarantee to the Hydro Electric Commission of Ontario, as it would require legislation in order to be effective. Børresen joined Dunn in England in late July 1917 for the final negotiations.¹⁵⁹

The British representatives from the Board of Trade and the Ministry of Blockade were initially hopeful of effecting the necessary legislation of what appeared a trivial matter. Yet the issue was dropped from the final agreement, signed on July 24th.¹⁶⁰ No records have been found in British government archives discussing the power question after the minutes of an inter-departmental meeting held in prior to Børresen's arrival in England in July. As mentioned above, the meeting noted possible difficulties in issuing such a guarantee, but ended on an upbeat note, suggesting that the difficulties should not in any way be insurmountable. A guaranteed power source had been one of the preconditions for the shareholders' endorsement on May 30th of KNR's negotiations, and the Kristiansand management clearly attached some importance to getting the power question settled in July 1917. As it was a matter regarding Canadian domestic industry, the Foreign Office also hoped that it might be possible to get the Dominion government to take up the financial burden of the guarantee. The matter went as far as Canadian Prime Minister Borden, but once again the Ottawa authorities refused to aid in the endeavour.¹⁶¹ Børresen attempted to sweeten the deal by suggesting that the possible compensation due to KNR for loss of revenue could be substantially reduced if the British would issue the requested guarantee. Yet, the matter must eventually have been dropped, as there is no mention of the power question in the July 24th agreement, signed by Børresen for KNR, Dunn for BANC and Alan Anderson of Anderson, Anderson & co acting for the Board of Trade.¹⁶²

Under the final agreement, the British government agreed to transfer \$2 000 000 of common stock to KNR as a 100% bonus upon Kristiansand purchasing the corresponding amount of debenture stock from British America.¹⁶³ The purchase was completed over the following months, and once again Kristiansand sold the entire holdings on to members of the Norwegian general public. It is evidence of the optimism reigning in the Norwegian capital markets at the time that the debenture subscription was substantially oversold. That is, buyers wanted more shares than were on

159 T 1/12093: H. Fountain to the Secretary to the Treasury; April 26th 1917

160 FO 382/1472: Agreement between KNR, Dunn and Anderson&co; July 24th 1917

161 FO 382/906: Leggett to Ryan; March 19th 1917

T 1/12093: H. Fountain to Under Secretary of State at the Colonial Office; February 22nd 1917

T 1/12093: Robert Borden to Walter Long; March 13th 1917

162 BT 11/10: Memorandum of meeting; folder dated July 8th 1917

Nikkelkommissjonen, 1925: 47-48

163 BT 64/1: Extracts of memo on BANC by Sir Evelyn Ellis; December 10th 1918

offer. All in all debentures were purchased for \$3 788 000 in 1917. Of these, \$3 000 000 were acquired directly from BANC, while the remainder were mostly taken from KNR's remaining holdings of 1916 debenture stock. A small portion was also purchased from Canadian interests. All debentures were accompanied by the aforementioned 100% bonus in common stock. Yet no matter who technically owned the common stock, 14 500 of the total 20 000 shares remained locked into the voting trust, and thus directed by Alan Anderson on behalf of the Board of Trade.¹⁶⁴

In the early autumn of 1917 – shortly after the signing of the final agreements between KNR, BANC and the British – the Norwegian government then moved to commandeer the Kristiansand refinery, imposing a contract for the refining of copper. On September 27th the Norwegian Ministry of Foreign Affairs informed a surprised Ambassador Findlay that nickel production at KNR would cease for the duration of the war. High-quality copper was in high demand in Norway during the last years of the conflict, and the KNR refinery did indeed remain under government contract until the signing of the armistice in November 1918. Only a small amount of nickel was refined in 1918 for domestic consumption. The cessation of Norwegian nickel exports brought about by the May 1917 fire thus came to last for over a year and a half.¹⁶⁵

A downward spiral

Parallel to the second financing of BANC, Børresen, Eyde and Hybinette sold their shares in KNR. Control of the Kristiansand refinery therefore passed to a group of investors led by Captain David Vogt, but although he was no longer a shareholder Børresen remained as chairman of the board of directors. The management of the company was thus not immediately affected.¹⁶⁶

Following the financing in 1917 construction work in Canada finally began. Grønningsæter again travelled to Sudbury in April, staying until June. Upon his return to Norway he was replaced in Canada by Hybinette. KNR thus for the first time had representatives present at BANC on a semi-permanent basis. Hybinette and Carlyle continued to send optimistic reports on the construction programme back to Kristiansand, yet progress remained slow going. At the time of the financing in the late summer of 1917 it was hoped that the works would be completed and ready to start production by the autumn of 1919. The building works hit several snags, however. The failure to solve the power problem made itself felt acutely, and as hydro-electric power remained

164 BT 15/71: Agreement between KNR, BANC and Anderson&co; July 24th 1917

165 BT 15/71: Report by August Andersen on KNR nickel production 1917-1919; May 27th 1919

FO 382/1472: Findlay to FO; September 28th 1917

Sandvik, 2008: 44

166 Nikkelkommissjonen, 1925: 72

Sandvik, 2008: 44

unobtainable the BANC management felt forced to build an expensive steam-driven power plant instead. In 1918 it was also decided that it would be unfeasible to construct the refinery itself on-site in Sudbury as originally planned, and a new site at Point Deschenes outside Ottawa was instead selected. All in all Grønningsæter later surmised that the power problem, together with other issues, had set the works back a further year-and-a-half. By 1919 British America was therefore again running out of money.¹⁶⁷

Representatives of the BANC- and KNR management met in London early in the new year of 1919. There Dunn issued the Kristiansand management with an ultimatum. In Dunn's view there was no realistic prospect of getting either government support or private loans for BANC without help from Kristiansand. If KNR wished BANC to survive it would therefore have to raise a further \$2 000 000. Faced with the choice of finding more money, or losing their investments from 1916 and 1917, Børresen and Vogt again agreed to support the Canadian venture. KNR agreed to take the remaining \$3 500 000 debentures still in BANC's possession against \$2 500 000 in fresh capital. Kristiansand thus acquired debentures at roughly 70% of their nominal value, but this time there was no bonus common stock attached. The Norwegians were also forced to give up the highly prized 1914 matte contract, and instead agreed to take a royalty of one cent per pound of nickel refined by British America. Obtaining a steady and cheap supply of Canadian nickel matte for the Kristiansand refinery had been one of the chief reasons given by the KNR management for supporting BANC in the first place, and the fact that it was now given up must be taken as a sign of how desperate the situation in Canada appeared to the Norwegian investors. Yet Hybinette remained optimistic, reporting back to Kristiansand that with fresh capital now secured, BANC was guaranteed to return significant profits.¹⁶⁸

During the 1919 financing Vogt and the new owners also became aware of the large 1916 common stock issue to Hybinette. These shares Vogt now demanded for KNR in return for supporting the new debenture purchase. Børresen, Hybinette and the other directors – some of whom had left the company – acquiesced, with the exception of Sam Eyde. Eyde reportedly believed himself owed the common stock by Pearson and Dunn for his services to BANC in 1913 and 1914, but after lengthy arguments with Vogt he agreed to hand over 400 of the original 820 shares, on the promise that Kristiansand would relinquish any claims upon the remainder. This was accepted, and although no common stock accompanied the debentures acquired from BANC in 1919, KNR thus nonetheless increased its holdings of shares in British America. Shortly after the completion of the 1919 financing Børresen stepped down as chairman and director, and instead

167 Nikkelkommissjonen, 1925: 73-77

168 Nikkelkommissjonen, 1925:

joined the KNR board of representatives. David Vogt became the new chairman. The only original member of the KNR management left by the summer of 1919 was thus Victor Hybinette.¹⁶⁹

The 1919 financing was intended to, finally, give BANC all the funding needed to complete its plant, cover operating expenses until it reached profitability, and provide a buffer against any unforeseen outlays. Yet by late 1920 David Vogt and his new management team at KNR was in for another cold shower. Once again BANC was out of money, and needed fresh capital. Although not complete, plant in Sudbury and at Point Deschenes had begun small scale operation in January and February 1920 – eight years after the founding of British America – but a string of technical problems and delays, coupled with the varying quality of the ore from the Ontario mines, meant that production remained at a minimum. Of the projected 10 000 long tons of pure nickel to be produced per annum, BANC only managed to refine 930 tons in 1920. In a further blow, the British government then decided to cancel its 6 000 ton purchasing contract with the firm.¹⁷⁰

London disengages

The British government appears to have had an altogether much more sober attitude towards the British America Nickel Corporation, following the 1917 financing, than did the Norwegians. As the war ended in November 1918 the British moved to disengage from their association with KNR, and the August agreements and subsequent 1916 and 1917-modifications were cancelled. By 1919 the Board of Trade was therefore left with the question of how to deal with its commitments to British America.¹⁷¹

These commitments were essentially twofold. First there was the matter of the 1916 loan of \$3 000 000 to BANC, against which the government held the equivalent nominal value in debenture bonds. Then there was the 1917 agreement, which committed the government to purchasing 6 000 long tons of British America nickel per annum for ten years, beginning in 1917. Of these two, the coming of peace had little bearing upon the first. Down payment of the loan in \$500 000 instalments was scheduled to begin on January 1st 1920, and it was thought by the Board of Trade that the chances of the government managing to sell the loan off to a bank or other institution at favourable terms were slim until BANC had proven itself a viable and independent company. The Treasury therefore retained the loan agreement, in the hope of eventually recovering it funds.¹⁷²

When it came to the government guarantee of the 6 000 long ton nickel put, the end of the

169 Nikkelkommissjonen, 1925:

170 Nikkelkommissjonen, 1925:

171 BT 15/71: Handwritten note on termination of KNR agreements, signed Barnes; December 3rd 1918

172 BT 64/1: *British America Nickel Corporation*, BoT memorandum signed E.H.M.; May 10th 1919

war made matters stand somewhat differently. The British government had not entered into the contract on the basis of having any need for the nickel in question. Quite the contrary, Foreign Office documents from as early as November 1915 – when the government was under agreement to take only 3 000 long tons – makes it clear that the arrangements committing the government to purchasing extraordinary amounts of nickel both during and after the war were negotiated purely as a war measure, intended to reduce the amount of nickel available to the German war industry.¹⁷³ The Foreign Office even attempted to negotiate with the French authorities during 1915 for a sharing of the post-war financial burden of purchasing the BANC nickel, on the grounds that it was purely a war measure, rather than a commercial one.¹⁷⁴

Following the armistice the British therefore sought to rid themselves of their nickel commitments to BANC, and by early 1919 the Board of Trade and the Treasury was discussing whether it would be possible to transfer the contract to the British Metal Corporation or some other British sales agency or firm.¹⁷⁵ That this was not done was probably a result of the opposition the Board of Trade perceived the plan would face from KNR and BANC itself. Technically the British government could have cancelled the sales contract unanimously, but this would go against good business ethics. Internal Board of Trade documents from 1919 also shows that there was some uncertainty as to the direction of the government's commercial policy following the end of the war. The untangling of Britain's wartime economic arrangements were just beginning, and it was even uncertainty as to whether the Board of Trade itself would continue to exist or be absorbed into a new Department of Commerce. In any case, getting even further involved in BANC's financial affairs was out of the question, and this was in all likelihood conveyed to James Dunn through his capacity as the president of the firm. The British therefore remained on the sidelines during the 1919 financing of the company.¹⁷⁶

When the government did cancel its contract the following year, it did so because conditions changed quickly. By 1920 awkward questions had begun to be raised in parliament as to British investments in BANC. It therefore became a priority to reduce all future liabilities, and recoup some of the expenses the Treasury had incurred in its dealings with the company. BANC's failure to pay off the first instalment of the 1916 debt due in January 1920 probably contributed materially to this. The parliamentary Select Committee on National Expenditure roundly criticised the government in its dealings with the nickel industry in its seventh report, published in December 1920.¹⁷⁷ With BANC in breach of its financial obligations and the government under public pressure, the nickel

173 FO 382/300: FO to Secretary of BoT; November 2nd 1915

174 FO 382/300: McKenna to Runciman; October 25th 1915

175 BT 64/1: *British America Nickel Corporation*, BoT memorandum signed E.H.M.; May 10th 1919

176 BT 64/1: *British America Nickel Corporation*, BoT memorandum signed P.A.; July 2nd 1919

177 Extracts from the 7th report from the Select Committee of National Expenditure; quoted in Concett, 1928: 196-197

purchasing agreement was therefore unilaterally cancelled by the Board of Trade.¹⁷⁸

That the British were able to do this without incurring any damages came down to their control of BANC through the 1916 voting trust. To further enhance their direct influence in BANC's affairs the government had also sometime after the formation of the voting trust obtained the undated, but signed resignations of all of British America's directors. These were held for the government by Sir Alan Anderson, so that the management could be immediately dismissed if London so desired. Further preprepared documents revoking Dunn's proxy control of the voting trust were also in existence. Having signed the documents upon the request of the Board of Trade, both Børresen and Hybinette, along with the other directors, knew of course that they were in no position to protest the cancellation of the nickel purchase contract. Having lost the contract, British America was therefore forced to look for other takers of its production.¹⁷⁹

Downfall

The loss of the 6 000 ton government sales contract may have been a blow to BANC, but it was not in itself disastrous. Albeit few, the company did manage to secure a couple of contracts with steel producers and other companies in need of nickel. Yet production at British America remained low, and profits non-existent. The original benefit to BANC from the British purchasing contract really lay in the fixed price, which in the August agreements was set at a minimum of £145 per long ton delivered to London. This gave the Canadian firm a buffer against any possible price war launched against it by the dreaded INCO or other nickel firms. During the renegotiation of the agreements in 1917, BANC and KNR gave up the fixed price in return for doubling the amount of nickel to be taken. British America settled instead for using the market rate. The increased “put” to London thus came at the cost of giving up the effective guarantee against competing firms. Sam Eyde also pointed out to the post-war Norwegian parliamentary nickel commission that there was also the danger of the British simply dumping the nickel they were forced to buy on the open market. This was bound to further bring down the price, thus damaging any possible profits to be made for BANC. It is impossible to know what Eyde thought of the contract when it was negotiated in 1917, but with benefit of hindsight he certainly believed it worthless to the Canadian firm. Failing to earn a profit, the British America Nickel Corporation by late 1920 thus again found itself out of money.¹⁸⁰

178 Hansard; Houses of Parliament, London: House of Lords Debate, “Government investments”; August 17th 1921
Colussi, 1988: 107

Sandvik, 2008: 46

179 BT 64/1: *British America Nickel Corporation*, BoT memorandum signed E.H.M.; May 10th 1919

180 Nikkelkommissjonen, 1925

With BANC once more in financial troubles, alarm bells began to chime in Norway. Having continually bankrolled the company, Norwegian shareholders by then held 9,25 of the total 10 million debentures issued, as well as a majority of the common stock. Turning over significant profits during the war, the Kristiansand refinery too was hit by the signing of the armistice. Costs of restarting the nickel production, closed down since 1917, were high. The cancellation of the British government transfers of funds also coincided with the failure of KNR's contract with Beer Sondheimer. The German firm reported to Norway that it considered war conditions still to be in effect in Germany, and simply refused to take the contracted nickel. Having no buyer for its nickel, KNR was forced to halt production. The result was that the company posted an operating loss of 3 300 000 Norwegian kroner in 1920. This the firm could ill afford, having invested all its profits in the now flagging Canadian venture. The sums at stake were huge, and since the debentures and common stock had been sold on to such a wide swathe of Norwegian investors, a failure of either BANC or KNR would adversely affect the entire country. The Norwegian government therefore appointed a representative, which on its behalf should negotiate a solution to British Americas financial troubles with the British government. The appointee was Sam Eyde.¹⁸¹

Eyde left for London in September 1920. The British were not especially keen on relinquishing their claims to what securities they still had in BANC, but by May 1921 a compromise agreement had been reached. In order to save the firm, British America was to be completely restructured and refinanced. The British government agreed to give up the voting trust, and although it was not officially dissolved until 1924, voting power was returned to the Norwegian shareholders in 1921. All debentures would be replaced by a new set of income certificates, while new ones would be issued. Debenture bonds would be replaced by a new set of priority certificates. The holders of these certificates thus gave up the accumulated debts owed them in rents by BANC, while allowing the sale of further certificates to raise money.¹⁸²

The Canadian company had thus once again been saved from collapse, but it still tethered on the brink of failure. Following the immediate post war slump, BANC finally began winning some significant orders for its nickel. Market conditions remained tight, however, and for the first time the International Nickel Company began to feel threatened by its smaller competitor. The result was a new price-war – something BANC was ill prepared for. By 1924 nickel prices had hit rock bottom, and with no prospect of profitability, nor of further funding, the British America Nickel

181 Nikkelkommissjonen, 1925
Sandvik, 2008: 47

182 BT 15/81: Indenture dissolving the 1916 voting trust; November 7th 1924
BT 15/81: H. Mead Taylor to the Secretary to the Treasury; June 9th 1925
Nikkelkommissjonen, 1925
Sandvik, 2008: 47

Corporation finally went under. The assets of the failed firm was sold on auction in 1924, and as the British government, various Canadian investors and banks held priority claims, the Norwegian stockholders and KNR was left with nearly nothing. The Norwegian refinery struggled on after the BANC collapse. Yet left with no huge losses on the Canadian adventure and no reserves to cover them, confidence in the firm evaporated. A victim of unwise investments, Kristiansand Nikkelraffineringsverk A/S was therefore finally forced to close its doors in 1926.¹⁸³

An ignominious end

Kristiansand's struggle to build a successful, vertically integrated nickel firm in Canada stranded for good in 1924. And when BANC went under, KNR went down with it – the Norwegians having tied themselves securely to the mast of a sinking ship. The 1923 parliamentary nickel commission painted a picture of a Kristiansand refinery in serious financial trouble following their unsuccessful investments in Canada. The Norwegian firm was severely criticised for failing to provide proper oversight of their Ontario partners, relying instead on sketchy – sometimes even faulty – reports, rather than observation, and professionally supervised accounts and balance sheets.

There is little reason to doubt the commission's conclusions in this. The Norwegian investors doubtless failed to provide anything but cursory oversight over their investments. Certainly not before it was far to late for them to cut ties without significant losses. Yet it is apparent that the management at Kristiansand did not think of their investments as especially risky, due to their partnership with the British government – seeing London's involvement as a guarantee of the eventual success of the Canadian firm. Unfortunately for the Norwegians, this assertion was proved moot by the development of the war. The \$3 000 000 it had lent the British America Nickel Corporation committed the Imperial government to the venture, but only to a point. The sole aim of the British investment was to cut German access to Norwegian nickel, and the Kristiansand management failed to realise that when this aim was realised in 1918, the London government would disengage from BANC without much hesitation.

¹⁸³ Nikkelkommissjonen, 1925
Sandvik, 2008: 48

Chapter VI

Commerce at war - discussion and conclusions

The Canadian débâcle sparked much controversy in post-war Norway, and yet when the outrage died down many questions were left unanswered. This chapter is a discussion of some of the topics raised in this thesis. Why Canada? How clear cut were the British motives, and how did these develop as the war dragged on?

The British America Nickel Corporation was a war time company. Although conceived well before fighting broke out in August 1914, its development was profoundly affected by the course of the Great War. Yet how did Hybinette, Børresen and their colleagues manage to lever British support for the Canadian firm, and how did the the cessation of Norwegian nickel exports in 1917 – sought by the London authorities since the war began – finally come about?

To Canada!

The British America Nickel Corporation was described by Sandvik as a «war-time company»¹⁸⁴. There is no disputing this. BANC's development was indeed vastly influenced by the course of the Great War. Yet it is equally true that Norwegian investment in the Canadian nickel industry did not originate with the war itself.

When Kristiansand Nikkelraffineringsverk A/S was founded in 1910, it was with a view to securing foreign nickel deposits for the company. Victor Hybinette and his friends Eyde and Børresen also worked to secure a market for the Hybinette process outside of Norway from very early on – cementing their business relationship through the formation of Hybinette's Utenlandske Nikkelpatenter. By the early nineteenth century there were two major known sources of nickel in the world – the French colony of New Caledonia in the Pacific, and the Sudbury region in Ontario, Canada. Other deposits were to be found in Greece and the Russian Urals, yet these were underdeveloped and thought to be inferior to the French and Canadian ores.

Of the two primary areas, Sudbury shone much the brightest for Norwegian investors. New Caledonia was far away, and completely dominated by the French firm Le Nickel. Sudbury too was dominated by a few major producers, of whom the International Nickel Company was by far the largest. Still, in Ontario there were several surveyed, but undeveloped nickel deposits. Additionally, Canada lay much closer to Norway – geographically, but also psychologically. Hybinette, Eyde and

184 Sandvik, 2012: 11

Børresen all had ties to the continent. Victor Hybinette had direct experience with the US-Canadian nickel industry from his time as INCO's chief metallurgist, while Eyde had spent much time in the States on business. Børresen too, had connections in the US through his American wife. All in all, Canadian nickel seemed to offer the best prospects of meeting the joint goals of nickel ore for KNR, and foreign utilisation of the Hybinette's electrolytic refining process.

War and changing circumstances

Although not mentioned in the August agreements themselves, the promise of British financial support for the British America Nickel Corporation was one of the preconditions for the agreements to go through. The 1915 August agreements and the 1916 Anglo-Norwegian financing of the British America Nickel Corporation must therefore be discussed as a whole.

In 1915 and 16 Norwegian investors gave up what they believed to be the potential for huge profits from increasing their share in the German nickel trade, in return for Imperial assistance in setting up the Canadian venture. Eyde, Børresen and Hybinette attempted to achieve the best of both worlds – both continuing trade with Germany while at the same time becoming significant players in the Canadian nickel market. That they by 1916 in part managed to achieve this is testament to the strong hand they were dealt to begin with, but also to the relatively lenient way in which they were treated by the London government.

After the outbreak of war in 1914, the only way in which KNR could invest in a Canadian nickel enterprise would be if it had the blessing – or at the very least the tacit agreement of – the Imperial government in London. The introduction of “trading with the enemy”-prohibition laws in Britain and the Imperial Dominions in conjunction with Kristiansand's association with the German Beer Sondheimer made that a certainty. At the same time the British government was working eagerly to limit Germany and her allies access to war-critical raw materials, and KNR's position as the sole remaining supplier of nickel not controlled by the entente powers made it the object of London's attention.

Seen in such a light, it is perhaps surprising that it took as long as it did for the parties to reach an agreement. A whole year went by from the outbreak of war in August 1914 until the signing of the August agreements in the late summer of 1915. In order to fully explain this delay, it is therefore important to understand how British priorities developed through the early war months. By 1914 the wartime rights of neutrals occupied a prominent position in current thinking on how a modern war would and should be fought. The column inches in British papers devoted to the 1908 London conference negotiations bears witness to the importance attached to the subject of the laws

of mercantile warfare. The subsequent shelving of the government's proposed 1911 Naval Prize Bill was a notable reaction to what at the time was seen as the watering down of British belligerent rights. Yet Avner Offer and John Coogan have persuasively shown that Imperial planning for blockade warfare would have completely stalled during the years immediately prior to 1914, had it not been for the tenacity and conviction of a very few members of the British government, civil service and military staff apparatus.

Although some preparations had been made for blockade, by August 1914 it was therefore accepted wisdom that there were certain limits as to what a belligerent nation could do to enforce its will upon neutrals. This goes a long way towards explaining the careful approach adopted by the British in their intervention in the Norwegian export markets in 1914-16, effectively ruling out their strongest diplomatic weapons and instead relying on the direct purchase of Norwegian stocks. The British stance was summed up by ambassador Findlay when he telegraphed home in 1915, explaining to his government that the only way of securing a Norwegian export ban on strategic raw materials to Germany would be for the British to halt vital supplies of coal and fuel to the Norwegian general populace – a policy then regarded by the ambassador as unacceptable. That the British would impose just such a prohibition on coal exports to Norway in 1917 is evidence of how much the development of the war had changed the Imperial government's opinion of what could be termed “acceptable” belligerent rights.

During late 1914 and early 1915 the British government was thus hopeful of affecting a prohibition on the Norwegian export of refined nickel by diplomatic means. When these attempts foundered upon the Norwegian government's staunch neutrality, London offered to purchase KNR's entire output of nickel. It was first after this too was blocked by admiral Børresen that the British decided to follow up on James Dunn's proposal from early 1915 that the government purchase KNR outright, through his British America Nickel Corporation. In this Dunn found an ally in KNR-director and metallurgist Victor Hybinette, who believed that Imperial interest in the Kristiansand refinery could only further his hopes of making BANC a major player in the international nickel markets. Yet these hopes became moot when share prices in the Norwegian firm rose to a level unacceptable to the British exchequer. It was only after all these attempts at controlling the German-Norwegian nickel trade had proved abortive that the compromise August agreements came to be seriously contemplated.

This British approach to the nickel problem is indicative of their approach towards the issue of how to deal with the Scandinavian hole in the blockade of Germany. If halting the transit of foreign goods through Norway to Germany proved hard to achieve, halting the export of domestic produce was even more so. Nitre-producing Norsk Hydro was already dominated by French

shareholders, but it was only with difficulty that the British managed to acquire control of the glycerine-producing Norwegian whale-oil refineries. Forced by the government of Prime Minister Knudsen to compete directly with the Germans in the Norwegian markets, British agents spent much of 1915 and 1916 purchasing the Norwegian output of fish and other materials at great expense to the Treasury in London.

The August agreements between KNR, BANC and the British government thus came about because the British had run out of short term options. They still hoped to effect the prohibition on export in the long term, but by the summer of 1915 the fallout from the shell crisis, and the desperate search for victories to detract from the bloody carnage on the western front, had made movement on the nickel issue a priority. Although there is no direct evidence to link the two events it is also interesting to note that the new British drive to negotiate the August agreements came shortly after the McKenna-committee delivered its recommendations on enhancing the British blockade effort in May 1915. The importance of the blockade in the minds of British politicians and civil servants alike grew during the spring and summer of 1915, with the result that the Dunn-Børresen-Hybinette alliance managed to lever British government support for the Canadian venture to the tune of \$3 000 000, plus a sales agreement. In return the London authorities got a KNR commitment to limit Norwegian nickel sales to Beer Sondheimer to a maximum of 70 tons per month.

The Norwegian government of prime minister Knudsen did not participate actively in Kristiansand's negotiations with the British, but there is little reason to doubt that they were fully informed of the nature of them. Ambassador Findlay had previously raised the nickel issue with the Norwegian foreign ministry, and reported back to London that Børresen had discussed the issue with foreign minister Ihlen on several occasions.

German representations to Foreign Secretary Ihlen lie outside the scope of this thesis, and have therefore not been looked at. It is possible to speculate however, that Berlin too was relatively pleased with the Norwegian government's policy of non-intervention. The German position vis-a-vis Norway was weaker than that of Britain, as Norway's foreign trade and economy was more exposed to interference or interruption by the United Kingdom than by Germany. The German authorities were well aware of this, and although they got less nickel from KNR per month after the signing of the August agreements than they had done before, they did get more than they might have done had the British government decided to press the issue. Parallel to the early British attempts at securing the Kristiansand output for the entente, the Germans too had made advances towards Børresen and the KNR management with a view to purchase the entire refinery. When these attempts were blocked by Børresen, the Germans appears to have restricted themselves to

securing any amount of nickel at all.

It is thus not surprising that the Christiania government chose a light-touch approach to what was essentially direct foreign government intervention in the domestic economy. For Prime Minister Knudsen and Foreign Secretary Ihlen it was imperative to keep Norway out of the war. In this they were ultimately successful, and although later forced into flagrantly one-sided arrangements by Britain and the United States, it remained a government priority to preserve what was left of the country's neutrality, so as to prevent reprisals from either the entente or the central powers. Ihlen was thus happy to have both the British and the German governments making their own arrangements directly with Norwegian private companies, rather than forcing the Norwegian government to intervene – with the inherent possibility that it might be forced to take sides.

Given that by the summer of 1915, the entente had achieved control over two of the Norwegian strategic materials – nitre and glycerine – most important to the Germans the, it is also probable that the Knudsen government was happy that exports of the valuable nickel were still running. The promise of a steady, if small, supply of refined nickel would have provided Germany with a reason to continue the export of machinery and other goods in high demand by Norwegian industry. British ambassador Mansfeldt de Cardonnel Findlay was certainly frustrated with what he saw as Børresen's wilful undermining of the British attempts at securing a prohibition of nickel exports, when the admiral informed Norwegian foreign minister Nils Ihlen of the existence of the Anglo-KNR agreements in the late summer of 1915. In any case, the agreements between the British and KNR allowed the Norwegian government to deflect some of the pressure from both London and Berlin on the important nickel issue.

Nickel for Britain?

James Dunn would write in 1917 that it was unlikely that any agreement could have been reached on limiting Kristiansand's nickel exports, had not the British government agreed to support BANC, and there is little reason to doubt him on this. Admiral Børresen was certainly very reluctant in 1915 to sell KNR to either the British or the Germans, and was well aware of the huge potential profits to be made on nickel during the war. The price which refined nickel demanded on the open Norwegian market in peace-time had more than quadrupled by the spring of 1915, and although KNR was bound to Beer Sondheimer through a pre-war sales agreement this could probably have been renegotiated, given the huge sums the German government was willing to pay for nickel from other sources. As a retired admiral, Børresen was also well aware of the importance of nickel for the armaments industry, and finally – Børresen, Eyde and Hybinette had all received BANC common

stock following the sale to Pacific Securities of the North-American rights to the Hybinette-process in 1913 – thus giving them a direct financial stake in the success of the new firm.

Admiral Børresen would much later write in his revised diary that KNR was forced by Walter Runciman, then president of the British Board of Trade, and James Dunn into supporting BANC, but there is little to support this claim. Quite to the contrary – the British government from the very beginning showed scant interest in the success of the British America Nickel Corporation, all the while naming Børresen and Hybinette as the government's best allies in restricting Kristiansand's nickel exports. Dunn too added a new dimension when he wrote in 1917 that Hybinette and Børresen requested that the Imperial government take shares in BANC as a means to prove the value of the Canadian investment to their co-directors and shareholders in KNR. The Kristiansand company archives having been largely lost, and lacking access to any papers which may or may not have been left behind by the other directors of the company, it is impossible to say whether or not Børresen and Hybinette were really under pressure from within KNR itself to defend their interest in BANC. In any case it seems apparent that the British government really did invest in BANC upon the request of the Norwegians, and that they did so in order to secure limits on KNR's nickel exports to Germany.

The 1923 Norwegian parliamentary nickel commission took the assertion that the British government needed BANC nickel for its own war production for granted, and used it as a basis for further investigations. Both Sandvik and Colussi too accepted this premise for their own writings on British America and Kristiansand. And yet there is little evidence to support the assertion, and rather more stacked against it.

Government armaments production certainly sky-rocketed when war broke out – especially following the 1915 shell-crisis – and with increased armaments production went an increased demand for nickel. Yet the British authorities appeared remarkably unfazed as to the final destination of Norwegian nickel, as long as it did not go to Germany. British metal trading firms who held pre-war contracts with KNR were ordered by the London authorities to let their nickel cargoes be laid up in storage in Norway for the duration, rather than be brought back to Britain. Likewise the price which the British government was willing to pay KNR per ton of nickel not exported to Germany was equal to what KNR would have been paid for the nickel by Beer Sondheimer under their 1914 pre-war contract, rather than any excess war price. The contracted price paid by the Imperial government for nickel from any source during the war rose only from 0.348 to 0.388 US dollars per pound.¹⁸⁵

That demand for nickel rose as the war progressed is not in question, but available supply

185 Main, 1955: 66

rose too. Total world production of nickel in 1914 was actually slightly less than for 1913. By 1915 it had increased by about 30%, while 1916 saw a further increase to roughly 150% of 1914 production – from 30 000 to about 50 000 tons. From there on the rate of production remained steady at 45 000-50 000 tons per annum until the end of the war.¹⁸⁶ Given the huge amounts of war materiel being produced by the warring powers every single day – by the end of the war, war related production consumed 90% of all nickel produced – these numbers may appear surprisingly low. The direct cause lies in the location of the world's primary nickel deposits – New Caledonia and Sudbury both being under entente control. With the majority of Canadian nickel ore being refined in the United States, numbers on total US nickel exports are revealing. Germany went from being the biggest single biggest importer of American refined nickel in the pre-war years – taking an estimated 57% of INCO nickel production in 1913 – to importing nothing, or nearly nothing in 1915.¹⁸⁷ This left between 7 000 and 8 000 tons of US/Canadian nickel per annum previously imported by Germany available to the entente. Additionally, Canadian mines – which had run at nowhere near peak capacity before the outbreak of hostilities – were able to double their output during the war, rising from 22 000 to 46 000 tons per annum between 1914 and 1918.¹⁸⁸ By the end of the war Ontario ore alone thus made up almost 90% of total world production. Although nickel consumption rose to astronomical levels, nickel production was also drastically stepped up – the end result being that the British government had no particular need for neither Norwegian nickel nor to support a new Canadian producer like BANC. If that was not enough, the Canadian government's 1915 refusal to give BANC status as a war industry – and thus priority in matters relating to transport, materials and labour – and the further Imperial decision not to press the matter should clinch it. Although generally in favour of establishing domestic nickel refining in Canada, the assertion that the British government urgently required BANC nickel for the war effort is highly questionable.

Business ethics and experience

That said, the British showed a better business sense than did their Norwegian counterparts during the 1916 financing of BANC. Although not overly interested in BANC's output, the \$3 000 000 provided by the Imperial government came with strings attached. As part of the agreement with the British America Nickel Corporation the government stipulated that the funds should be used exclusively to cover operating costs and the erection of necessary plant in Canada. The British in

186 USGS; *Nickel Statistics*; December 7th 2011

187 Main, 1955: 65

188 Main, 1955: 65-66

return took BANC 6% debenture bonds, which gave the holder a priority claim to interest payments ahead of other stockholders, as well as security in British America holdings. Finally the British imposed their total control over BANC via the formation of a voting trust.

Børresen, Hybinette and the KNR investors on the other hand took none of the aforementioned precautions – something they were later heavily criticised for by the 1923 parliamentary commission. The \$1 500 000 Norwegian contribution came with no strings attached, and was eventually used to repay old debts rather than bringing the Canadian company closer to operational status. Likewise the funds were secured against debenture stock – as opposed to debenture bonds – which gave no priority claim to interest payments and was not secured on BANC holdings.

There is no indication in the British files examined as part of this thesis as to why the Imperial government pressed for the formation of a voting trust. British military authorities were later involved in considering possible locations for the proposed refinery to be built, and it is possible that the government may have desired a final say in the strategic development of BANC.¹⁸⁹ Yet until further evidence is uncovered, the question remains an open one. In any case Børresen and Hybinette welcomed the imposition of the voting trust, as they saw it as further evidence of the importance attached by the British to the successful development of the new company.

It is important to note that there is no evidence of any British conspiracy against the Norwegian investors when it came to motivations. The British government made no secret about the fact that they were only willing to support the Canadian venture on the condition that the Norwegians reduced their exports of nickel. James Dunn was also aware of it, as he was the originator of proposals which led to the signing of the August agreements and the 1916 financing. In short the Norwegians misunderstood, or chose not to understand, the ramifications of the agreements signed in 1915 and 1916. To protect their investment in Canada the British were committed to the future of BANC, but only up to a point – and the advantages secured by the government under the aforementioned agreements gave the Norwegian investors very little say in deciding when that point was reached. In short – the Norwegians treated British involvement as a guarantee of the eventual success of BANC, yet that same involvement put the Norwegians in a much weaker position relative to the British. A lack of experience with large scale FDI may explain why Børresen and Hybinette put themselves in such a position of relative weakness. It is perhaps more unforgivable that Børresen, Eyde, Hybinette and the rest of the KNR management failed to realise how the further development of the war caused British priorities to shift in 1917 and 1918.

¹⁸⁹ T 1/12093: Undated memorandum on BoT conference on Canadian nickel refining; folder marked January 25th 1917

The 1917 trade-off

When BANC required further funds in 1917, the British were much more reluctant to participate. It is worth noting that by 1917 the British economy was for the first time feeling the real stress of war, having been relatively mildly affected over the first two war years. KNR still refused to reduce the amount of nickel exported beyond the minimum stipulated in their contract with Beer Sondheimer, and barring this there were the possibility of leveraging further government aid. This changed with the May 1917 fire which inflicted heavy damage upon the Kristiansand refinery facilities. The fire provided Børresen and Dunn with the possibility of delaying reconstruction – and thus halting nickel production for a time – against further British support for the Canadian venture.

The 1917 refinancing involved plans for a doubling of BANC's productive capacity, requiring enlarging all planned facilities with yet further expenses and delays. These plans came under heavy post-war criticism from the Norwegian parliamentary nickel commission, as they further complicated the already drawn out work of bringing BANC to operational status. KNR-engineer Grønningsæter wrote post-war that the new plans were imposed on the British America Nickel Corporation by the Canadian and British investors. This is contradicted by the memorandum written by James Dunn to the Board of Trade in conjunction with the 1917 financing, where he claimed that the plans for the enlargement had been suggested by Børresen and Hybinette as the only way of convincing Norwegian investors to support the fledgling Canadian enterprise so soon after the previous financing of the company. In any case the Imperial government eventually accepted to join in the refinancing, but yet again Børresen, Hybinette and Eyde allowed themselves to be sold short. Instead of providing a further loan to BANC the British agreed to transfer common stock with a nominal value of \$2 000 000 to the Norwegians, thus allowing a stock bonus to follow the further sale of debentures in Norway, just like it had the year before. In return the Norwegians agreed to postpone restarting refining at Kristiansand until 1918. For this they were compensated by the British for lost production. Obtaining a British government guarantee of electrical power for the BANC works in Canada had been decided upon as a precondition for any 1917 financing by the KNR board, but when this proved difficult to obtain it was quietly ignored by Børresen and Hybinette.

Equally important, if not more so, the British managed to renegotiate the 1916 sales agreement between themselves and BANC. The original agreement stipulated that the London authorities would take 3 000 long tons of British America nickel per annum against a fixed price of £145 per long ton. The renegotiated agreement increased the amount of nickel to be taken to 6 000, but stipulated that the market price would be followed, rather than a fixed price. Doubling the productive capacity of the British America mines, smelter and refinery necessitated the increased

amount of nickel to be taken, but the abandonment of the fixed price effectively removed much of the protection against competition it was originally meant to include. Without the guarantee of a fixed price BANC was left vulnerable to a price war from its competitors.

The agreement signed by KNR and Alan Anderson in London in the summer of 1917 ensured that no nickel would be refined in Kristiansand before January 1918, and by Autumn 1917 British government pressure on the Knudsen government in Christiania finally began to bear fruit. Following the fire at KNR's Kristiansand plant in May 1917, the Norwegian government had commandeered the company's stocks of nickel in order to preserve them for domestic consumption. At some point during the autumn of 1917 the government then proceeded to commandeer the entire refinery, giving it the task of refining copper ore for the domestic market. Pure copper being a by-product of electrolytic nickel refining process used at Kristiansand, the refinery had little trouble transferring to this kind of production. KNR remained under government contract to refine copper from domestic ore until the end of the war.

There are many unanswered questions surrounding the events at KNR in the summer and autumn of 1917. Neither the exact date of, nor the reasoning behind the government decision to commandeer the Kristiansand plant is known. The subject is only briefly discussed in the British correspondence, and as very little of KNR's company archives have survived any attempt at explanation will remain speculation. Yet there is little reason to believe he opposed the imposition of the government copper-contract. The confiscation of the remaining nickel stocks following the fire in the late spring of 1917 was suggested to the government by Børresen himself. Additionally, the 1917 agreement between KNR and the British, halting production of nickel at Kristiansand until 1918, stipulated that Børresen and Hybinette would seek to extend the period of inaction at the refinery should the possibility arise. The 1915 August agreements and the 1917 agreement also ensured that KNR would not suffer any financial loss from lack of production. Indeed, the British government continued to transfer compensation funds to the refinery until at least November 1918, and possibly into 1919 as well. It is not known whether repairs at the refinery had reached such a stage as to allow the resumption of production before January 1918, but a contract to refine copper for the Norwegian government could only bring additional income to the company. The government commandeering of the facility also gave KNR the cover against legal action by Beer Sondheimer it had lacked in 1915. From the KNR point of view, the events of late 1917 at the refinery could only be seen as positive. Given his role in facilitating the government takeover of the KNR nickel stocks in May 1917, it is thus probable that Børresen not only acquiesced in the government takeover, but also suggested it. It is therefore no wonder that nickel, although important to the Germans, does not appear to have featured significantly in the negotiations between the Norwegian government and

the entente in Washington in winter and spring of 1917/18. Although the America agreement signed by Knudsen's government in 1918 ended Norwegian nickel exports to Germany on paper, exports had ended in practice almost a year earlier. The fire in May 1917 thus resulted in a chain of events which finally allowed the British government to achieve their goal of ending Norwegian nickel exports and left the Kristiansand refinery with a tidy profit.

Boom, BANCruptcy and a Great War

The creation of a vertically integrated nickel refining giant – built upon the joint pillars of Canadian ore and Hybinette's electrolytic refining process, and capable of competing successfully with the international nickel trust – was the goal envisaged by Jacob Urban Rasmus Børresen and Victor Noah Hybinette, and to a lesser degree Samuel Eyde, from even before the founding of Kristiansand Nikkelraffineringsverk A/S in 1910. The story of KNR's decade-and-a-half long existence is thus one of massive ambition, great successes and ultimate failure. Yet it is also the story of how a small country on the continental periphery became a bloodless, but no less dramatic, battleground in the great power struggle that was the First World War.

The outbreak of war in August 1914 put an end to the original plan of building a Canadian nickel firm with joint Norwegian and German capital, but at the same time it opened the previously closed doors to government support. The chaotic nature of pre-war planning (or the lack thereof) and public debate meant that the Imperial authorities in London were faced with severe constraints when it came to establishing an efficient blockade of the Central Powers. Yet the bloody stalemate in France and Flanders meant that plugging the holes in such a blockade were all the more important, both politically and militarily. Faced with intransigence from the staunchly neutral Scandinavian governments, to the British direct intervention in the Norwegian markets offered the best prospects for achieving immediate results. This gave the Canadian and Norwegian nickel investors all the ammunition they needed to lever British government support for the new Ontario nickel enterprise. The result was the restriction and investment agreements of 1915 and 1916 – the Imperial government invested heavily in the British America Nickel Corporation, against a Norwegian promise to restrict exports of refined nickel to their German partners.

Having used up most of their bargaining chips in the previous round of negotiations, Børresen, Hybinette and the remainder of the KNR management were left in a much more difficult position when BANC required yet another round of financing in 1917. The British government was induced to provide some support for a new fundraising drive in Norway, but in the process the Norwegian management together with Dunn negotiated away some of the primary benefits accrued

for BANC in 1915 – perhaps most importantly the protection against a price war with the competing nickel trust.

Ironically, a devastating fire at the KNR facilities in Kristiansand in May 1917, provided Børresen and Hybinette with further possibilities for negotiation with the British. By the spring of 1917 there was little left of the constraints felt amongst British politicians and civil servants during the first war years when it came to increasing the effectiveness of the blockade. The entry of the United States into the war provided additional pressure on the Norwegian government to prohibit further exports of goods to Germany, and with hindsight it is possible to say that from April 1917 there was little doubt that Norway would at some point have to comply with the entente demands. Yet the promise of an immediate halt in all nickel exports to Germany was too tempting for the British government to ignore, and against a promise of cessation of all production KNR gained yet further British transfers of capital to the Norwegian refinery. When the final Norwegian blockade agreement with the entente was signed in the spring of 1918 therefore, the nickel blockade had already been effective for over a year.

The immediate cause of BANC's catastrophic failure and bankruptcy in the mid-1920s was its inability to survive the price war launched against it by the International Nickel Corporation. Yet that inability stemmed directly from the company's development during the war years. It is conceivable that KNR would have made large profits by selling increased amounts of nickel to Germany during the early war years, but it is equally obvious that by 1916 the Imperial government was not willing to tolerate a major Norwegian trade leak to Germany without a fight. The imposition of a British coal embargo over the 1916 copper disagreements is evidence of this. It is thus unlikely that KNR would have been allowed to continue their German trade unhindered, had they not come to some sort of arrangement with the British. That the Norwegians managed to lever not only financial compensation for a low rate of production, but also substantial British funding and a sales guarantee for BANC in the process is probably testament to both the negotiating skills of Eyde, Hybinette, Børresen and Dunn, and the extensive network of contacts and the high regard in which both Børresen and Dunn were held in British high society.

The 1915 and 1916 agreements between the British, BANC and KNR also show the lengths to which the London government was willing to go to accommodate neutral interests during the early war years. By 1917 the British stance had hardened substantially, and the Norwegian government found it gradually more difficult to resist entente demands to impose restrictions on the export trade to Germany. As such, the relationship between the Kristiansand refinery and the British grew less and less important to the London authorities. Børresen and Hybinette did however manage to wrestle some further concessions from the British government, albeit at a very high cost

to BANC. Admiral Børresen and his colleagues proved adroit at negotiating beneficial agreements for Kristiansand, but much less so when it came to protecting the investment in Canada, unintentionally trading away the protective clauses of the 1916 agreements, while also failing to provide proper oversight of the funds already invested. The Norwegians were operating without a safety net, something which would cost them dearly when the British America Nickel Corporation collapsed in 1924.

Abbreviations

ADM	Admiralty Papers, UK National Archives
AMS	Allied Metal Selling Company
BANC	British America Nickel Corporation
BD I	Diaries of Jacob Urban Rasmus Børresen, Transcript of originals in family archives
BD II	Diaries of Jacob Urban Rasmus Børresen, Norwegian National Archives
BEF	the British Expeditionary Force
BoT	Board of Trade
BT	Board of Trade Papers, UK National Archives
CAB	Cabinet Papers, UK National Archives
CID	Committee of Imperial Defence
Elk	Elkem Historical Archives
FDI	Foreign Direct Investment
FO	Foreign Office/Foreign Office Papers, UK National Archives
HUN	Hybinettes Utenlandske Nikkelpatenter A/S (Hybinette's Foreign Nickel Patents ltd.)
INCO	International Nickel Company
KNR	Kristiansand Nikkelraffineringsverk (Kristiansand Nickel Refinery)
MoB	Ministry of Blockade
NGO	Norges Geologiske Undersøkelse (Norwegian Geological Survey)
RESC	Restriction of Enemy Supplies Committee
RONC	Royal Ontario Nickel Commission
SBL	Svenskt Biografiskt Lexikon (the Swedish Biographical Encyclopedia)
T	Treasury papers, UK National Archives
USGS	United States Geological Survey
WTD	War Trade Department

Bibliography

- Aitken, Max (see Beaverbrook)
- Andersen, Ketil Gjølme and others; *Hydros historie 1905-2005*; Oslo, 2005
- Beaverbrook, Lord; *Courage: The Story of Sir James Dunn*; Fredericton, 1961
- Berg, Roald; *Norsk utenrikspolitikks historie 1905-1920*, 2nd volume: *Norge på egen hånd*; Oslo 1995
- Bjørlykke, Harald; *Hosanger Nikkelgruve*; NGU 172; Oslo 1949
- Board of Trade, various papers; National Archives, London
- Børresen, Jacob and Kristiansen, Tom; *Levende Breve fra de Dødes Rige: Admiral U.J.R. Børresens dagbokopptegnelser 1896-1910*; Bergen 2005
- Børresen, Urban Jacob Rasmus; *A New Tactical System*; The Journal of the Royal United Service Institution; volume 47, 1903
- Børresen, Urban Jacob Rasmus; Diaries; Family archives and Riksarkivet, Oslo
- Børresen, Urban Jacob Rasmus; i *Storm og i Solgangsvær: Erindringer*; Drammen, 1936
- Cabinet, various papers, National Archives, London
- Colussi, James; *The Rise and Fall of the British America Nickel Corporation 1913-1924*; MA thesis at the Laurentian University; Sudbury, 1988
- Consett, Montagu William Warcop Peter; *The Triumph of Unarmed Forces: An account of the transactions by which Germany during the Great War was able to obtain supplies prior to her collapse under the pressure of economic forces*; London, 1928 (Written by rear adm, naval attaché in Scandinavia 1912-1919)
- Coogan, John W.; *The End of Neutrality: The United States, Britain and Maritime Rights 1899-1915*; Ithaca, 1981
- Elkem, various papers; Elkem's historical archive, Norwegian Industrial Workers' Museum
- Furre, Berge; *Norsk Historie 1905-1990*; Oslo, 1992
- Grimnes, Ole Kristian; *Sam Eyde: Den grenseløse gründer*; Oslo, 2001
- Hankey, Lord Maurice; *The Supreme Command: 1914-1918*; London 1961
- Hansard; Houses of Parliament, London
- Haug, Karl Erik; «*Falls Norwegen auf die seite unserer feinde tritt*» - *Det tysk-norske forhold fra sommeren 1916 til utgangen av 1917*; Hovedoppgave, UNIT; Trondheim, 1994
- Howard, Michael; *War in European History*; Oxford, 1976
- Howard-White, Frank Buller; *Nickel: An Historical Review*; London, 1963

- Hybinette, Victor Noah; *Experiences in the Nickel Industry*; Unfinished and unpublished memoirs, Family archives
- Jenkins, Roy; *The Chancellors*; London, 1999
- Jones, Geoffrey (editor); *The Multinational Traders*; London 1998
- Keilhau, Wilhelm; *Norge og Verdenskrigen*; Oslo, 1927
- Kennedy, Paul Michael; *The Realities Behind Diplomacy – Background Influences on British External Policy 1865-1980*; London, 1985
- Kissinger, Henry; *Diplomacy*; New York, 1994
- *London Gazette*, issue 27930; London, 1906
- Main, O.W.; *The Canadian Nickel Industry: A study in market control and public policy*; Toronto, 1955
- McDowall, Duncan; *Steel at the Sault: Francis H. Clergue, Sir James Dunn, and the Algoma Steel Corporation 1901-1956*; Toronto, 1984
- Nelles, H.V.; *The Politics of Development: Forests, Mines & Hydro-Electric Power in Ontario, 1849-1941*; Hamden, 1974
- Offer, Avner, *The First World War: An Agrarian Interpretation*; Oxford, 1989
- *Om den av Nikkelkommissjonen avgitte betenkning om A/S Kristiansand Nikkelraffineringsverk*; Stortingsmelding 38 – 1925, Oslo (Norwegian parliamentary inquiry into the affairs of KNR)
- *Report of the Royal Ontario Nickel Commission*; Toronto 1917
- Reynolds, David; *Britannia Overruled – British Policy and World Power in the 20th Century*; London, 1995
- Riste, Olav; *Norway's Foreign Relations: A History*; Oslo, 2005
- Riste, Olav; *The neutral ally: Norway's relations with belligerent power in the first world war*; Oslo 1965
- Salmon, Patrick; *Scandinavia and the great powers 1890-1940*; Cambridge, 1997
- Sandvik, Pål Thonstad; *Multinationals, Subsidiaries and National Business Systems*; London, 2012
- Sandvik, Pål Thonstad; *The making of a subsidiary, Falconbridge nikkilverk, 1910-1929-2004*; PhD thesis at NTNU; Trondheim, 2008
- Sandvik, Pål Thonstad; *Falconbridge nikkilverk 1910-1929-2004 : et internasjonalt selskap i Norge*; Kristiansand, 2004
- Storli, Espen; *Out of Norway Falls Aluminium: The Norwegian Aluminium Industry in the*

- International Economy, 1908-1940*; PhD thesis at NTNU; Trondheim, 2010
- Strachan, Hew; *The First World War: To Arms*; Oxford, 2001
 - Strachan, Hew; *Financing the First World War*; Oxford, 2004
 - *Svenskt Biografiskt Lexikon*; Stockholm, 1973
 - Treasury, various papers; National Archives, London
 - Trevelyan, George Macaulay; *Grey of Fallodon*; London, 1937
 - United States Geological Survey; *Historical Statistics for Mineral and Material Commodities in the United States, Nickel Statistics*,
<<http://minerals.usgs.gov/ds/2005/140/ds140-nicke.pdf>>; published December 7th 2011