

Canadian
Forces
College

Collège
des
Forces
Canadiennes



SCIENCE MEETS SOVEREIGNTY – UNCLOS AND THE CANADIAN ARCTIC

LCdr Nicole Robichaud

JCSP 44

Exercise Solo Flight

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2018.

PCEMI 44

Exercice Solo Flight

Avertissement

Les opinions exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2018.

CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES
JCSP 44 – PCEMI 44
2017 – 2018

EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

**SCIENCE MEETS SOVEREIGNTY –
UNCLOS AND THE CANADIAN ARCTIC**

LCdr Nicole Robichaud

“This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.”

Word Count: 4600

“La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.”

Compte de mots: 4600

SCIENCE MEETS SOVEREIGNTY – UNCLOS AND THE CANADIAN ARCTIC

Introduction

The Arctic has been and still is a highly contested issue. Who owns it? With “90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids . . . undiscovered in the Arctic,¹ who has the rights to the wealth of resources that remain inaccessible in the Arctic? With all the different definitions and trains of thought about sovereignty, one can easily get confused. Throw in a similar term “sovereign rights”, misperception and complexity is added to an already difficult subject. From the early 1950’s, the United Nations (UN) with the development of United Nations Convention of the Law of the Sea (UNCLOS) has attempted to define and delineate territorial and international waters. Guidelines with respect to sovereignty, sovereign rights, boundaries of seas, continental and the extended continental shelf, including the Arctic were ascertained. However, even with the legalities of UNCLOS in place, non-Arctic states continue to attempt to make claims to the highly contested extended continental shelf in the Arctic where a large cache of natural resources remains untapped, or exude their presence in order to capitalize on the wealth the Arctic has to offer.

Technological advancements over the last several decades have allowed states to explore and exploit the oceans and its resources. Just as technology has advanced, UNCLOS has evolved to include scientific research to assist states, including Canada in defining their extended continental shelf claims. While the legalities of UNCLOS protects Canada’s sovereign rights to

¹ Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo: Wilfred Laurier University Press, 2011) 148.

the Arctic, scientific research and advancements will confirm ownership that Canada and the other Arctic states have over the extended continental shelf in the Arctic Ocean, nullifying the claims that non-Arctic states have submitted or potentially may submit.

To demonstrate that UNCLOS and science work together to support Canada's claim to the extended continental shelf in the Arctic Ocean, this short paper will examine philosophies on sovereignty, the meaning of sovereign rights and where sovereign rights can be exercised pertaining to Canada, as well as the development of UNCLOS and the science being conducted to support and disprove claims to the extended continental shelf in the Arctic.

Sovereignty and Sovereign Rights

According to Encyclopaedia Britannica, the term sovereignty is “the ultimate overseer, or authority, in the decision-making process of the state and in the maintenance of order,”² essentially the state governing itself without any outside interferences or influences. Biersteker and Weber extend the definition to include “the current notion of state sovereignty contains four aspects consisting of territory, population, authority and recognition.”³ According to Krasner, a Professor of international relations, the term sovereignty “has been used in different ways, and in part it reveals the failure to recognize the norms and rules of any international institutional system.”⁴ Other international relations (IR) theorists claim that the “source of growing tension

² Encyclopaedia Britannica, “Sovereignty,” last accessed 01 May 2018, <https://www.britannica.com/topic/sovereignty>.

³ Thomas Biersteker and Cynthia Weber, *State Sovereignty as Social Construct* (Cambridge: Cambridge University Press, 1996), 46.

⁴ Stephen Krasner, *Sovereignty: Organized Hypocrisy* (Princeton: Princeton University Press, 1999) 3.

has been between traditional conceptions of state sovereignty based on the effective control of territory and popular sovereignty.”⁵

Applying the international relations realism and constructivism theories to the conceptions of sovereignty further complicates the issue. Constructivists view sovereignty as “a social institution in the sense that a state can be sovereign only when it is seen by people and other states as a corporate actor with rights and obligations over territory and citizens (and they act accordingly).”⁶ Bartelson, a Professor of International Relations states that constructivists believe that “sovereignty is undergoing profound change and is greatly facilitated by a nominalist view of concepts . . . concepts are nothing but general names that we use to constitute different classes of objects as distinct from each other.”⁷ The requirement for distinct labels is further supported by German political scientist Alexander Wendt who states “a fundamental principle of constructivist social theory is that people act toward objects, including other actors, on the basis of the meanings that the objects have for them.”⁸ As analysts study sovereignty, some have claimed that factors such as globalization and lack of effective state control weaken sovereignty, thereby supporting constructivism and the possibility for an evolving definition as the times change.

Contrasting the social meaning attached to objects with constructivism, realism theories tend to be more materialistic and power based in international relations. According to international relations theorist Martin Wight, “realism lays less stress on the condition of

⁵ Trudy Jacobsen, Charles Sampford, and Ramesh Thakur, *Re-envisioning Sovereignty: The End of Westphalia?* (Burlington: Ashgate Publishing Company, 2008) 1.

⁶ Ian Hurd, “Constructivism,” last modified 18 January 2008, http://faculty.wcas.northwestern.edu/~ihu355/Home_files/17-Smit-Snidal-c17.pdf.

⁷ Jens Bartelson, “The Concept of Sovereignty Revisited,” *The European Journal of International Law* 17, no. 2 (2006): 465, <http://ejil.org/pdfs/17/2/83.pdf>.

⁸ Alexander Wendt, “Anarchy is What States Make Of It: The Social Construction of Power Politics,” *International Organization* 46, (1992): 396-397.

international anarchy (the absence of a world sovereignty) and the sanctity, or at least, priority of the many (sovereigns).”⁹ To a realist, “conceptual change is much more like a thematic variation of an underlying core meaning that remains basically the same across time and space.”¹⁰

Sovereignty is an enduring feature of political life supported by the idea of “international relations as a lawless state of nature. . . . Power is the dominant force . . . There can be no justice, no society and very little law in a political environment in which power is anterior.”¹¹

Although the term has numerous variations depending on which discipline of international relations one supports, Krasner identifies four ways sovereignty is commonly used:

Domestic sovereignty, referring to the organization of public authority within a state and to the level of effective control exercised by those holding authority; interdependence sovereignty, referring to the ability of public authorities to control trans-border movements; international legal sovereignty, referring to the mutual recognition of states or other entities; and Westphalian sovereignty, referring to the exclusion of external actors from domestic authority configurations.¹²

The Westphalian model can be utilized to assist in defining sovereignty in the Canadian Arctic since it is based on two principles of “territoriality and the exclusion of external actors from domestic authority structures and . . . is violated when external actors influence or determine domestic authority structures”¹³

The discussion about Arctic sovereignty has been long and complex. From the first expeditions in the 1800’s to the early 1900’s when Senator Poirier advocated for the boundaries

⁹ Trudy Jacobsen, Charles Sampford, . . . *Re-envisioning Sovereignty*: . . . 56.

¹⁰ Jens Bartelson, “The Concept of Sovereignty . . . ” 465.

¹¹ Trudy Jacobsen, Charles Sampford, . . . *Re-envisioning Sovereignty*: . . . 57.

¹² Stephen Krasner, *Sovereignty: Organized Hypocrisy* . . . 9.

¹³ *Ibid*, 20.

of Canada's Arctic claim to extend to the North Pole, to during the Cold War when "Arctic security became associated with defence against the Soviet Union . . . and Arctic sovereignty was associated with diplomatic disputes with the United States . . . over the region."¹⁴ The 1800s and early 1900's saw Westphalian sovereignty in the Arctic challenged as "before Canada's sovereignty could be asserted, Canada needed to know what it was asserting sovereignty over"¹⁵ and until relatively recently due the vastness of the Canadian Arctic, the ability for Canada to exude control over the region was nearly impossible. By the 1930's, dispute over the land territory and islands in the Arctic had for the most part abated and Canada's sovereignty has not been challenged, with the exception of Hans Island. A small island in the Kennedy Channel between Denmark and Canada, however, the so-called dispute between the two countries is far from a dispute and the barren island is a place where the two countries' navies have placed various country markers and left gifts to demonstrate pride and exude their respective country's sovereignty.

With sovereignty over the Arctic land territory somewhat defined, governance over the water and seabed are delineated differently. Put in lament terms, sovereignty is essentially the state governing itself without any outside interferences or influences, however "having sovereign rights over a particular body of water does not correspond to having sovereignty over that same area."¹⁶ Sovereignty of the state in inland waters is the same as to which it exercises over land, however interest in internal waters and "the continental shelf can be traced back to the nineteenth century, when coastal states began to claim rights to mine the seabed beyond their three-mile

¹⁴ Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo: Wilfred Laurier University Press, 2011) 19.

¹⁵ Catherine Danita Burke, *International Disputes and Cultural Ideas in the Canadian Arctic: Arctic Sovereignty in the National Consciousness* (Odense, Denmark: University of Southern Denmark, 2018) 43.

¹⁶ Haroun Alfarsi, "Sea Dispute: Sovereignty vs. Sovereign Rights," *Profolus*, last modified 28 January 2018, <https://www.profolus.com/topics/sovereignty-vs-sovereign-rights-difference/>.

territorial seas.”¹⁷ Technology to exploit the resources in the continental shelf was starting to be used as early as the Second World War. As coastal states were unilaterally attempting to settle their states’ rights to the seabed beyond the territorial sea, the UN convened the First Conference on the Law of the Sea in 1958. “The conference adopted four legal instruments, including the Convention on the Continental Shelf, which was adopted on April 29, 1958, and entered force on June 10, 1964.”¹⁸ Article 1 of the Convention, for the first time defined the continental shelf by the two-hundred-metre isobar and proximity to similar coastal areas. Article 2 stated “the coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.”¹⁹ Unlike the different and confusing conceptions of sovereignty over state’s territory, “sovereign rights is a term used in UNCLOS to pertain to the entitlements of privileges of a state to a defined area of sea,”²⁰ seabed and continental and extended continental shelf.

United Nations Convention on the Law of the Sea

In the development of UNCLOS how it is known today, the UN convened three conferences. As previously mentioned, the First Conference on the Law of the Sea was convened in 1958 where four conventions were adopted including the *Convention on the Continental Shelf*. Previous to this convention, one of the only pieces of legislation in place (the term legislation used very loosely) was the 1945 Truman Proclamation. In 1945, American President Harry

¹⁷ Suzette Suarez, *The Outer Limits of the Continental Shelf: Legal Aspects of Their Establishment* (Berlin: Springer-Verlag, 2008) 22.

¹⁸ Elizabeth Riddell-Dixon, *Breaking the Ice: Canada, Sovereignty, and the Arctic Extended Continental Shelf* (Toronto: University of Toronto, 2017) 43.

¹⁹ United Nations. Convention on the Continental Shelf. Last modified 29 April 1958. <https://treaties.un.org/doc/Publication/UNTS/Volume%20499/volume-499-I-7302-English.pdf>.

²⁰ Haroun Alfarsi, “Sea Dispute: Sovereignty vs. Sovereign Rights,” . . .

Truman declared “the natural resources of the subsoil and sea bed of the continental shelf beneath the high seas but contiguous to the coasts of the United States . . . [were to be] subject to its jurisdiction and control.”²¹ The Truman Proclamation highlighted the interest of the state in projecting their sovereign rights in order to protect their continental shelf and associated natural resources. Although the *Convention on the Continental Shelf* (CCS) was not popular amongst the signatories to it, it was “important because it established coastal state rights over the continental shelf, and set precedents that were reflected in legal documents.”²² CCS became effective in 1964 and Canada, which has the “world’s second largest continental shelf (after the USSR), comprising approximately two million square miles or almost 40 percent of its land territory, became a party to the CCS in 1970.”²³ The second conference, was held in 1960, but failed to reach any legally binding agreements.

In 1973, the UN Third Conference of the Law of the Sea was convened with a mandate to negotiate a more comprehensive treaty on the law of the sea with more participants than the previous conferences. “Close to ninety states participated at the first two conferences, 158 were represented at the third.”²⁴ Due to the hard-hitting objectives and the number of participants, the conference lasted until 1982 with the first major breakthrough occurring in 1976 with the establishment of “coastal state jurisdiction over the continental shelf . . . when consensus was reached on the concept of a 200-mile exclusive economic zone.”²⁵ According to Article 57 of UNCLOS, “the exclusive economic zone shall not extend beyond 200 nautical miles from the

²¹ Harry S. Truman, "Proclamation 2667—Policy of the United States With Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf," September 28, 1945. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. <http://www.presidency.ucsb.edu/ws/?pid=12332>.

²² Elizabeth Riddell-Dixon, “The Seven-Decade Quest to Maximize Canada’s Continental Shelf” *International Journal* 69, no. 3 (2014): 423.

²³ *Ibid*, 428.

²⁴ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 47.

²⁵ Elizabeth Riddell-Dixon, “The Seven-Decade Quest . . . 430.

baselines from which the breadth of the territorial sea is measured.”²⁶ Just as Article 2 of the 1958 *Convention on the Continental Shelf* authorized the coastal State to exercise sovereign rights for the purpose of exploring it and exploiting its natural resources over the continental shelf,²⁷ Article 56 of UNCLOS extended the coastal state’s sovereign rights to within the exclusive economic zone (EEZ) to explore, exploit, conserve and manage the natural resources whether living or non-living in the water column and seabed.²⁸

Along with defining the EEZ, the third UN Conference of the Law of the Sea also delineated the continental shelf, but not without much discussion between participants. States that were either landlocked or had a small continental shelf (narrow margins) opposed the extension of the continental shelf and favoured an international seabed called *The Area* so that they could “derive revenues from mineral exploitation”²⁹ while large margined coastal countries, like Canada whose extended continental shelf is estimated to span over 1.75 million square kilometres in the Atlantic and Arctic Oceans,³⁰ had interests in extending their continental shelf as far as possible to gain economically from the vast accumulations of natural resources. Since Canada had vested interests in the extension, and decision making at the conference was done by consensus, the Canadian delegation consisted of a geologist with “extensive experience and expertise pertaining to the continental shelf and its natural resources.”³¹ Experts succeeded in convincing the delegation on a definition of the continental shelf that reflected the interests of the large coastal states like Canada. According to UNCLOS, Article 76

²⁶ United Nations, Oceans and Law of the Sea, United Nations Convention on the Law of the Sea of 10 December 1982, last modified 10 December 1982. http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm.

²⁷ United Nations. Convention on the Continental Shelf.

²⁸ United Nations, UNCLOS 1982.

²⁹ Elizabeth Riddell-Dixon, “The Seven-Decade Quest . . . 431.

³⁰ Elizabeth Riddell-Dixon, “Canada and Arctic Politics: The Continental Shelf Extension,” *Ocean Development and International Law* 39, (2008): 347.

³¹ Elizabeth Riddell-Dixon, “The Seven-Decade Quest . . . 431.

The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.³²

When such prolongations extend beyond 200 nautical miles, they belong to the coastal state up to a distance of 350 nautical miles from the baselines or 100 nautical miles from the 2,500 metre isobath.³³

After nearly a decade of long and complex negotiations, the convention concluded on 10 December 1982 with “the resulting convention consisting of 436 articles (320 in the main text and 116 in its nine annexes).”³⁴ It replaced the four treaties from the 1958 UN First Convention on the Law of the Sea, including the *Convention on the Continental Shelf* and came into force 16 November 1994. By 2004, four of the five Arctic states became party to UNCLOS, with United States the only Arctic state not to sign. As of April 2018, 168 states have ratified UNCLOS.³⁵

Commission on the Limits of the Continental Shelf

The Commission on the Limits of the Continental Shelf (CLCS) was developed in 1997 as a result of UNCLOS, specifically article 76, with the purpose of “facilitating the implementation of UNCLOS in respect of the establishment of the outer limits of the continental

³² United Nations, UNCLOS 1982.

³³ *Ibid.*

³⁴ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 51.

³⁵ United Nations, Oceans and Law of the Sea. Chronological Lists of Ratifications of, Accessions and Successions to the Convention and the Related Agreements, last modified 03 April 2018. https://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm.

shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.”³⁶ Along with providing scientific and technical advice to coastal States, CLCS is to “consider the data and material submitted by coastal States concerning the outer limits of the continental shelf in areas where those limits extend beyond 200 nautical miles, and make recommendations in accordance with article 76.”³⁷ States that ratified or acceded to UNCLOS prior to 1999, had until 2009 to make their submissions, while states that became party to UNCLOS after 1999, had ten years from the time of ratification or accession to submit a claim to CLCS.

With the responsibility for defining the continental shelf relying on the state, the state “must conduct scientific research to determine if its continental shelf extends beyond two hundred nautical miles and, if so, the limits of its outer edge.”³⁸ Although responsible to define the continental shelf, states are provided with both scientific and technical guidelines as well as criteria and constraints to consider when compiling a submission by means of Annex II of UNCLOS and CLCS. The submission process requires “a knowledge of the regional geological framework coupled with the measurement, analysis, and interpretation of three parameters: the shape of the seabed, the depth of water, and the thickness of the underlying sedimentary material.”³⁹ Mapping the extended continental shelf involves “using bathymetry and seismic reflection profiling as the principal sources of data”⁴⁰ to ensure that all criteria of Article 76 are met. The Test of Appurtenance “is prescribed by the CLCS as a means of determining whether

³⁶ United Nations, Oceans and Law of the Sea, Commission on the Limits of the Continental Shelf (CLCS) Purpose, Functions and Sessions, last modified 2012. http://www.un.org/depts/los/clcs_new/commission_purpose.htm#Purpose.

³⁷ *Ibid.*

³⁸ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 56.

³⁹ Ron Macnab, “The Case for Transparency in the Delimitation of the Outer Continental Shelf in Accordance with UNCLOS Article 76,” *Ocean Development and International Law* 35, no. 1 (2004): 3.

⁴⁰ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 69.

or not an area of seafloor is a 'natural prolongation' of a Coastal State.”⁴¹ Determining the foot of the continental slope, “the point of maximum change in the gradient at its base,”⁴² is the first step of the Test of Appurtenance. Bathymetry measures “water depths and maps the morphology (shape) of the ocean floor which is essential in determining the foot of the continental shelf and the 2,500 metre isobath.”⁴³ To measure sediment thickness, also necessary for the Test of Appurtenance, seismic techniques are used to penetrate the layers of the ocean bed. By using either a “depth or distance enabling formula to determine the foot of the continental slope,”⁴⁴ the coastal State can determine whether its continental shelf extends beyond 200 nautical miles. Along with all of the calculations, the bathymetric and geomorphological evidence, the state must also provide all necessary geophysical and geological data to CLCS for analysis.⁴⁵ With the advancement of technology, the science behind determining the extended continental shelf will progress quicker and be more accurate.

Even with the scientific and technical information provided by CLCS, defining the extended continental shelf is not without its problems. With the criteria and research methodologies outlined in Annex II to article 76, what was intended to be a standardized process amongst qualifying states required clarification. “Although the Test of Appurtenance appears straightforward, there are some situations where an unresolved bilateral boundary might complicate its application.”⁴⁶ Article 76 “requires a series of technical procedures that are substantially more intricate than the determination of other types of maritime limit and which

⁴¹ Dave Monahan, Robert Van de Poll, and Sam Cockburn, “Applying the Test of Appurtenance Globally: A New Inventory of Wide Margin States From Public Domain Data,” *International Hydrographic Review* 6, no. 1 (August 2005): 79.

⁴² United Nations, Oceans and Law of the Sea, CLCS, Article 76(4)(b).

⁴³ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 69.

⁴⁴ *Ibid* 56.

⁴⁵ *Ibid* 57.

⁴⁶ Dave Monahan, . . . “Applying the Test . . . 82.

represent a significant departure from common boundary-making practices.”⁴⁷ The submission process is long, expensive and complex and could easily be rejected or require more proof when CLCS examines the claim. States such as Russia and Norway were quick in submitting claims in the Arctic, perhaps in hopes of being one of the first Arctic states to capitalize in on the untapped natural resources although “a state’s continental shelf either meets the UNCLOS criteria for an extended continental shelf or it does not.”⁴⁸ UNCLOS with its specific scientific criteria makes it virtually impossible for non-Arctic states to submit claims for the extended continental shelf in the Arctic. The relationship between the state and CLCS is co-operative in nature, not competitive, so although the submissions may be returned to the state several times for clarification, in due time states will be able to rightfully and legally access their extended continental shelf. The sovereign rights that the coastal State exercises over the continental shelf are “exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities without the express consent of the coastal State.”⁴⁹

Arctic Activity

Professor of Geopolitics Klaus Dodds claims that critical drivers over the governance of the Arctic Ocean are “the role of science and technology in generating knowledge about the region, and the function of international law and the position of domestic and international audiences.”⁵⁰ Of the five Arctic States, Norway, Denmark, Russia, United States and Canada,

⁴⁷ Ron Macnab, “The Case for Transparency . . . 2.

⁴⁸ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 63.

⁴⁹ United Nations, Oceans and Law of the Sea, CLCS, Article 77(2).

⁵⁰ Klaus Dodds, A Polar Mediterranean? Accessibility, Resources, and Sovereignty in the Arctic Ocean,

four of them have ratified UNCLOS, United States being the only state not to ratify. Norway signed UNCLOS “on the day it was opened for signature and ratified it on 24 June 1994. It entered into force 24 July 1994,”⁵¹ making Norway the first Arctic state to sign into UNCLOS. On 27 November 2006, Norway submitted a claim to the CLCS in accordance with Article 76(8) of UNCLOS with “information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured for three separate areas in the North East Atlantic and the Arctic: . . . the Western Nansen Basin in the Arctic Ocean.”⁵² The submission only dealt with the outer limits of the continental shelf in the areas with the prospects of submitting another claim. The Western Nansen Basin area incorporates part of the Eurasian Basin of the Arctic Ocean and after reviewing the information submitted by Norway, the CLCS recommended, “that the FOS [foot of continental slope] points should form the basis for the establishment of the outer edge of the continental margin in the Western Nansen Basin area.”⁵³ The recommendations of Norway’s submission were adopted by the CLCS 27 March 2009. According to the Government of Norway, the extended continental shelf submission for the High North covers areas measuring some 253, 000 square kilometres and while preparing its submission, Norway cooperated closely with its Arctic neighbours, maintaining an open dialogue and exchanged data concerning areas of mutual interest.⁵⁴ With the approval of Norway’s extended continental shelf submission, Norway can commence

⁵¹ United Nations. Continental Shelf Submission of Norway. http://www.un.org/depts/los/clcs_new/submissions_files/nor30_09/nor2009_executivesummary.pdf. 4.

⁵² Oceans and Law of the Sea, Commission on the Limit of the Continental Shelf (CLCS). http://www.un.org/depts/los/clcs_new/submissions_files/submission_nor.htm.

⁵³ Oceans and Law of the Sea, Commission on the Limit of the Continental Shelf (CLCS). http://www.un.org/depts/los/clcs_new/submissions_files/nor06/nor_rec_summ.pdf. 12.

⁵⁴ Government of Norway, “Continental Shelf – Questions and Answers,” last modified 04 November 2009. <https://www.regjeringen.no/en/topics/foreign-affairs/international-law/continental-shelf--questions-and-answers/id448309/>.

exploration and extraction activities, although these activities are unlikely to happen for some time.

Russia was the second Arctic state to ratify UNCLOS, signing 12 March 1997, but on 20 December 1997, became the first ever state to submit a claim to the CLCS. Russia's initial submission to CLCS contained four bodies of water including the Arctic Ocean. After much deliberation and consultation, CLCS made the recommendation "that the Russian Federation make a revised submission in respect of its extended continental shelf"⁵⁵ with regards to the Central Arctic Ocean due to insufficient information pertaining to the claim. Russia did make another Arctic submission on submitted it to CLCS on 03 August 2015. In Russia's revised submission, it asserted that both the Mendeleev-Alpha Ridge and Lomonosov Ridge are of "continental origin and belong to submarine elevations that are natural components of the continental margin under paragraph 6 of Article 76 of the Convention, which are not subject to distance limit of 350 nautical miles from the baselines."⁵⁶ While collecting the information for the 2015 revision, Russia conducted research in the vicinity of the North Pole. While submerged at the depth under the North Pole, Russia planted a flag on the sea bottom, creating an international reaction. Some thought that Russia was trying to exude its sovereignty by claiming the North Pole when in actuality; it was a symbolic gesture that had no legal ramifications for any Arctic state. Through the 2015 revision, "Russia is claiming 1.2 million square kilometers of

⁵⁵ Oceans and Law of the Sea, Submissions, Through the Secretary-General of the United Nations on the Limits of the Continental Shelf, last modified 11 April 2018. https://www.un.org/depts/los/clcs_new/commission_submissions.htm.

⁵⁶ Government of Russia, *Partial Revised Submission of the Russian Federation to the Commission of the Limits of the Continental Shelf in Respect of the Russian Federation in the Arctic Ocean: Executive Summary* (Moscow: Government of Russia, 2015) 6. http://www.un.org/depts/los/clcs_new/submissions_files/rus01_rev15/2015_08_03_Exec_Summary_English.pdf.

Arctic sea shelf more than 350 nautical miles from the shore”⁵⁷ and has yet to be settled by CLCS.

On 7 December 2003, Canada became the third Arctic state to enter into force to UNCLOS and on 6 December 2013 filed a submission regarding its continental shelf in the Atlantic Ocean and preliminary information concerning the continental shelf in the Arctic Ocean to the CLCS. As part of Canada’s Extended Continental Shelf Program, scientists are studying the Canadian continental shelf “to identify characteristics of the shelf under the Atlantic and Arctic Oceans and prepare Canada’s submission to the Commission on the Limits of the Continental Shelf.”⁵⁸ Although Canada has yet to provide a submission to the CLCS regarding the Arctic, Canada’s Arctic Extended Continental Shelf Program has collected an invaluable amount of information ahead of the submission, injected millions of dollars into Arctic research and fostered astounding collaboration between Canadian scientists and their Danish, American, Russian, German, and Swedish colleagues.⁵⁹ Canada plans to submit its Arctic extended continental shelf claim in 2018.

Denmark ratified UNCLOS on 16 November 2004 and entered into force one month later. Denmark partnered with Greenland submitted a joint claim on 15 December 2014 pertaining to the extended continental shelf north of Greenland known as Alpha-Mendeleev Ridge. The Alpha-Mendeleev Ridge was determined to be “morphologically continuous with the land mass of Greenland, and thereby constitute integral parts of the Northern Continental Margin

⁵⁷ Vladimir Isachenkov, “Russia to UN: We are claiming 463,000 Square Miles of the Arctic,” *Business Insider*, 4 August 2015. <http://www.businessinsider.com/russia-to-un-we-are-claiming-463000-square-miles-of-the-arctic-2015-8>.

⁵⁸ Government of Canada, Canada’s Extended Continental Shelf Program, last modified 21 December 2016. http://science.gc.ca/eic/site/063.nsf/eng/h_98773CA7.html.

⁵⁹ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 209.

of Greenland,”⁶⁰ but concluded that the submission did not provide “for their classification as submarine elevations that are natural components of the Northern Continental Margin of Greenland.”⁶¹ The extended continental shelf submission for north of Greenland covers an area of 895, 541 square kilometres.

Although the United States has not ratified UNCLOS, since 2001, United States has been gathering and analyzing data to determine the outer limits of its extended continental shelf. In 2007, “the effort became more of a serious national endeavour with the establishment of multiagency task force and dedicated funding to undertake this work.”⁶² “Initial estimates indicate the US extended continental shelf is at least one million square kilometers . . . from the East Coast to the Arctic Ocean.”⁶³ The US Extended Continental Shelf program is collecting data by the criteria detailed in UNCLOS and collaborating with other Arctic states such as Canada to both save money and to collect data since both countries have a mutual interest in defining the Arctic continental shelf.

Although it was previously alluded to that UNCLOS with its specific scientific criteria makes it virtually impossible for non-Arctic states to submit claims for the extended continental shelf in the Arctic, China is expertly interjecting itself into the Arctic realm. In 2003, “China established an arctic research station, the Arctic Yellow River Station, on Svalbard, and despite not being an Arctic nation spends more money on Arctic research than the U.S.”⁶⁴ As a non-

⁶⁰ Government of Denmark, *Partial Submission of the Government of the Kingdom of Denmark Together With the Government of Greenland to the Commission on the Limits of the Continental Shelf: The Northern Continental Shelf of Greenland: Executive Summary* (Copenhagen: Geological Survey of Denmark and Greenland, 2014) 14. http://www.un.org/depts/los/clcs_new/submissions_files/dnk76_14/dnk2014_es.pdf.

⁶¹ *Ibid.*

⁶² David A. Balton, “The U.S. Extended Continental Shelf Project,” *Sea Technology* 50, no. 1 (January 2009): 23.

⁶³ *Ibid.*

⁶⁴ Joseph V. Micallef, “Polar Politics: The Competition to Control the Arctic Heats Up,” last modified 06 December 2016. https://www.huffingtonpost.com/joseph-v-micallef/polar-politics-the-compet_b_11920192.html.

Arctic state, China continues to pursue larger roles in the Arctic geopolitical situation. Since 2013, China has been one of thirteen non-Arctic state Observers to the Arctic Council, where as an Observer, China may make relevant contributions to the Council, propose projects through an Arctic State or a Permanent Participant and provide financial contributions.⁶⁵ In August 2012, the Chinese ice breaker, Xue Long, operated by the Polar Research Institute of China, successfully traversed the Northwest Passage.⁶⁶ China has also demonstrated interest in venture capitalism by investing in Greenland. In 2013, “Chinese steelmakers proposed a \$2.35 billion iron ore-mining project. . . . The revenues would exceed Greenland’s current GDP and it would also see the arrival of up to 5,000 Chinese workers, boosting Greenland’s population by about eight percent.”⁶⁷

Especially since the inception of UNCLOS and the end of the Cold War, Arctic states have banded together in an attempt to expedite the delineation of the extended continental shelf, forging bilateral and multilateral relations in an effort to reduce costs, learn from one another and settle overlapping claims. In between 2006 and 2009, “Canadian and Danish scientists conducted seven joint surveys in which they collected and analysed data pertaining to the area north of Greenland and Ellesmere Island.”⁶⁸ The cooperation amongst Arctic states was featured most prominently in 2008, with the formation of the Ilulissat Declaration. In order to manage a changing Arctic environment, Canada, Denmark, Norway, United States and the Russian Federation met in Ilulissat, Greenland to formalize a peaceful cooperation. The five nations agreed to “take steps in accordance with international law both nationally and in cooperation among the five states and other interested parties to ensure the protection and preservation of the

⁶⁵ Arctic Council, “Observers,” last modified 17 January 2018. <https://www.arctic-council.org/index.php/en/about-us/arctic-council/observers>.

⁶⁶ Joseph V. Micallef, “Polar Politics . . .”

⁶⁷ *Ibid.*

⁶⁸ Elizabeth Riddell-Dixon, *Breaking the Ice*. . . 37.

fragile marine environment of the Arctic Ocean.”⁶⁹ Furthermore, the five nations also remain committed to using the law of the sea in the settlement of any possible overlapping claims.

Arctic states continue to share information, participate in combined surveying expeditions and share assets, which cuts down on expenses, increases the validity in the science, and improves Arctic state relations.

Conclusion

Sovereignty pertains to land territory and although there are several trains of thought regarding the definition, Westphalian sovereignty where the principle of international law that each nation-state has exclusive sovereignty over its own territory best describes sovereignty in the Arctic. With the end of the Cold War, sovereignty over Canada’s territory has become less of an issue, but sovereign rights of the Arctic waterways and seabed has come to the forefront. In an age where natural resources are diminishing, states are looking to protect their nations future by securing rights to natural resources. Fortunately for the Arctic States, the Arctic remains virtually pristine with billions and trillions of barrels of untouched oil and natural gas.

With the advancement of technology, the rules and regulations pertaining to the waterways and seabed also had to evolve in order to not only keep up with the changing times, but also to protect states’ sovereign rights. One of the most significant advances to the protection of sovereign rights is the inclusion of science and scientific research into UNCLOS. Scientific criteria combined with a facilitation board, the CLCS, determine the rightful owners to the extended continental shelf. A state’s continental shelf either meets the UNCLOS criteria for an

⁶⁹ Arctic Ocean Conference. *Ilulissat Declaration*. 29 May 2008. <https://cil.nus.edu.sg/wp-content/uploads/formidable/18/2008-Ilulissat-Declaration.pdf>.

extended continental shelf or it does not which prevents the larger, more powerful states such as China, from projecting their power and making claims to the extended continental shelf. All Arctic states with the exception of the United States have put submission forward to the CLCS to delineate their extended continental shelf, and although it presently takes time for the CLCS to provide their decision, the advancement of science and technology, sharing of information and an increase in bilateral and multilateral relations will improve the process. With science and cooperation amongst the Arctic States, such as the Ilulissat Declaration, Canada and the other Arctic States' sovereign rights are protected. However with the increased involvement of non-Arctic states in the Arctic, possibly there may be a requirement to shift from the protection of sovereign rights to the protection of state sovereignty.

BIBLIOGRAPHY

- Alfarsi, Haroun. "Sea Dispute: Sovereignty vs. Sovereign Rights." *Profolus*. Last modified 28 January 2018. <https://www.profolus.com/topics/sovereignty-vs-sovereign-rights-difference/>.
- Arctic Council. "Observers." Last modified 17 January 2018. <https://www.arctic-council.org/index.php/en/about-us/arctic-council/observers>.
- Arctic Ocean Conference. *Ilulissat Declaration*. 29 May 2008. <https://cil.nus.edu.sg/wp-content/uploads/formidable/18/2008-Ilulissat-Declaration.pdf>.
- Balton, David A. "The U.S. Extended Continental Shelf Project." *Sea Technology* 50, no. 1 (January 2009): 23.
- Bartelson, Jens. "The Concept of Sovereignty Revisted." *The European Journal of International Law* 17, no. 2 (2006): 463-474. <http://ejil.org/pdfs/17/2/83.pdf>.
- Battarbee, Keith and John Erik Fossum (eds). *The Arctic Contested*. Brussels: Die Deutsche Nationalbibliothek, 2014.
- Biersteker, Thomas and Cynthia Weber. *State Sovereignty as Social Construct*. Cambridge: Cambridge University Press, 1996.
- Bonner, Patrick J. "Neo-Isolationists Scuttle: UNCLOS." *SAIS Review* XXXIII, no. 2 (Summer-Fall 2013): 135-146.
- Burke, Danita Catherine. *International Disputes and Cultural Ideas in the Canadian Arctic: Arctic Sovereignty in the National Consciousness*. Odense, Denmark: University of Southern Denmark, 2018.
- Canada. Fisheries and Oceans Canada. *Sovereignty and UNCLOS: Defining Canada's Extended Continental Shelf*. Last modified 17 January 2018. <http://www.dfo-mpo.gc.ca/science/hydrography-hydrographie/UNCLOS/index-eng.html>.
- Canada. Government of Canada. Canada's Extended Continental Shelf Program. Last modified 21 December 2016. http://science.gc.ca/eic/site/063.nsf/eng/h_98773CA7.html.
- Carlson, Jon D., Christopher Hubach, Joseph Long, Kellen Minter and Shane Young. "Scramble for the Arctic: Layered Sovereignty, UNCLOS, and Competing Maritime Territorial Claims." *SAIS Review* XXXIII, no. 2 (Summer-Fall 2013): 21-43).
- Coates, Ken S., P. Whitney Lackenbauer, William Morrison, and Greg Poelzer. *Arctic Front: Defending Canada in the Far North*. Toronto: Thomas Allen Publishers, 2008.
- Crees, Tristan, Chris Kaminski and James Ferguson. "UNCLOS Under-Ice Survey: A Historic AUV Deployment in the High Arctic." *Sea Technology* (December 2010): 39-44. <https://www.sea-technology.com>.

- Dodds, Klaus. "A Polar Mediterranean? Accessibility, Resources and Sovereignty in the Arctic Ocean." *Global Policy* 1, no. 3 (October 2010): 303-311.
- Encyclopaedia Britannica. "Sovereignty." Last accessed 01 May 2018. <https://www.britannica.com/topic/sovereignty>.
- Gleditsch, Nils Petter. "Environmental Change, Security, and Conflict." In *Leashing the Dogs of War: Conflict Management in a Divided World*, edited by Chester A. Crocker, Fen Osler Hampson, and Pamela Aall, 177-195. Washington, D.C.: United States Institute of Peace Press, 2007.
- Griffiths, Franklyn, Rob Huebert, and P. Whitney Lackenbauer. *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship*. Waterloo: Wilfred Laurier University Press, 2011.
- Government of Denmark. *Partial Submission of the Government of the Kingdom of Denmark Together With the Government of Greenland to the Commission on the Limits of the Continental Shelf: The Northern Continental Shelf of Greenland: Executive Summary*. Copenhagen: Geological Survey of Denmark and Greenland, 2014. http://www.un.org/depts/los/clcs_new/submissions_files/dnk76_14/dnk2014_es.pdf.
- Government of Norway. "Continental Shelf – Questions and Answers." Last modified 04 November 2009. <https://www.regjeringen.no/en/topics/foreign-affairs/international-law/continental-shelf--questions-and-answers/id448309/>.
- Government of Russia. *Partial Revised Submission of the Russian Federation to the Commission of the Limits of the Continental Shelf in Respect of the Russian Federation in the Arctic Ocean: Executive Summary*. Moscow: Government of Russia, 2015. http://www.un.org/depts/los/clcs_new/submissions_files/rus01_rev15/2015_08_03_Exec_Summary_English.pdf.
- Hurd Ian. "Constructivism." Last modified 18 January 2008. http://faculty.wcas.northwestern.edu/~ihu355/Home_files/17-Smit-Snidal-c17.pdf.
- Isachenkov, Vladimir. "Russia to UN: We are claiming 463,000 Square Miles of the Arctic," *Business Insider*, 4 August 2015. <http://www.businessinsider.com/russia-to-un-we-are-claiming-463000-square-miles-of-the-arctic-2015-8>.
- Jacobsen, Trudy, Charles Sampford, and Ramesh Thakur. *Re-envisioning Sovereignty: The End of Westphalia?* Burlington: Ashgate Publishing Company, 2008.
- Korger, Nick. "Going Boldly Where No Country Has Gone Before: UNCLOS and the Russian Federation's Claim to the Arctic Circle." *Wisconsin International Law Journal* 34, no. 3 (2017): 731-754.
- Krasner, Stephen D. *Sovereignty: Organized Hypocrisy*. Princeton: Princeton University Press, 1999.

- Krasner, Stephen D. "Sharing Sovereignty: New Institutions for Collapsed and Failing States." In *Leashing the Dogs of War: Conflict Management in a Divided World*, edited by Chester A. Crocker, Fen Osler Hampson, and Pamela Aall, 653-678. Washington, D.C.: United States Institute of Peace Press, 2007.
- Lackenbauer, P. Whitney, Adam Lajeunesse, James Manicom, and Frederic Lasserre. *China's Arctic Ambitions and What They Mean for Canada*. Calgary: University of Calgary Press, 2018.
- Macnab, Ron. "The Case for Transparency in the Delimitation of the Outer Continental Shelf in Accordance with UNCLOS Article 76." *Ocean Development and International Law* 35, no. 1 (2004): 1-17.
- McRae, Donald. "Arctic Sovereignty? What is at Stake?" *Behind the Headlines* 64, no. 1 (January 2007).
- Micallef, Joseph V. "Polar Politics: The Competition to Control the Arctic Heats Up." Last modified 06 December 2016. https://www.huffingtonpost.com/joseph-v-micallef/polar-politics-the-compet_b_11920192.html.
- Monahan, Dave, Robert Van de Poll, and Sam Cockburn. "Applying the Test of Appurtenance Globally: A New Inventory of Wide Margin States From Public Domain Data." *International Hydrographic Review* 6, no. 1 (August 2005): 77-84.
- Mostov, Julie. *Soft Borders: Rethinking Sovereignty and Democracy*. New York: Palgrave Macmillan Ltd, 2008.
- Riddell-Dixon, Elizabeth. *Canada and the International Seabed: Domestic Determinants and External Constraints*. Montreal: McGill-Queen's University Press, 1989.
- Riddell-Dixon, Elizabeth. "Canada and Arctic Politics: The Continental Shelf Extension." *Ocean Development and International Law* 39, (2008): 343-359.
- Riddell-Dixon, Elizabeth. "The Seven-Decade Quest to Maximize Canada's Continental Shelf." *International Journal* 69, no. 3 (2014): 422-443.
- Riddell-Dixon, Elizabeth. *Breaking the Ice: Canada, Sovereignty, and the Arctic Extended Continental Shelf*. Toronto: University of Toronto, 2017.
- Romaniuk, Scott Nicholas. *Global Arctic: Sovereignty and the Future of the North*. Berkshire: Berkshire Academic Press Limited, 2013.
- Suarez, Suzette V. *The Outer Limits of the Continental Shelf: Legal Aspects of Their Establishment*. Berlin: Springer-Verlag, 2008.

- Truman, Harry S. "Proclamation 2667—Policy of the United States With Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf," September 28, 1945. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. <http://www.presidency.ucsb.edu/ws/?pid=12332>.
- United Nations. Convention on the Continental Shelf. Last modified 29 April 1958. <https://treaties.un.org/doc/Publication/UNTS/Volume%20499/volume-499-I-7302-English.pdf>.
- United Nations. Oceans and Law of the Sea. United Nations Convention on the Law of the Sea of 10 December 1982. Last modified 10 December 1982. http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm.
- United Nations. Oceans and Law of the Sea. Commission on the Limits of the Continental Shelf (CLCS) Purpose, Functions and Sessions. Last modified 2012. http://www.un.org/depts/los/clcs_new/commission_purpose.htm#Purpose.
- United Nations. Oceans and Law of the Sea. Chronological Lists of Ratifications of, Accessions and Successions to the Convention and the Related Agreements. Last modified 03 April 2018. https://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm.
- United Nations. Oceans and Law of the Sea. Submissions, Through the Secretary-General of the United Nations on the Limits of the Continental Shelf. Last modified 11 April 2018. https://www.un.org/depts/los/clcs_new/commission_submissions.htm.
- United Nations. Continental Shelf Submission of Norway. http://www.un.org/depts/los/clcs_new/submissions_files/nor30_09/nor2009_executivesummary.pdf.
- Wendt, Alexander. "Anarchy is What States Make Of It: The Social Construction of Power Politics." *International Organization* 46, (1992): 391–425.