Chapter 9

Freedom of the Seas in the Arctic Region

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This chapter begins with the basics: geography, legal regime, and navigation of the Arctic Ocean. It next seeks to explain what is meant by "freedom of the seas." The third section, providing U.S. and Canadian views, examines the importance of freedom of the seas and discusses the threats posed by China, Iran and Russia to those freedoms notwithstanding their commitments to the rules in the 1982 UN Convention on the Law of the Sea (UNCLOS).[1] The chapter concludes with some views on a future Arctic Ocean in 2040.

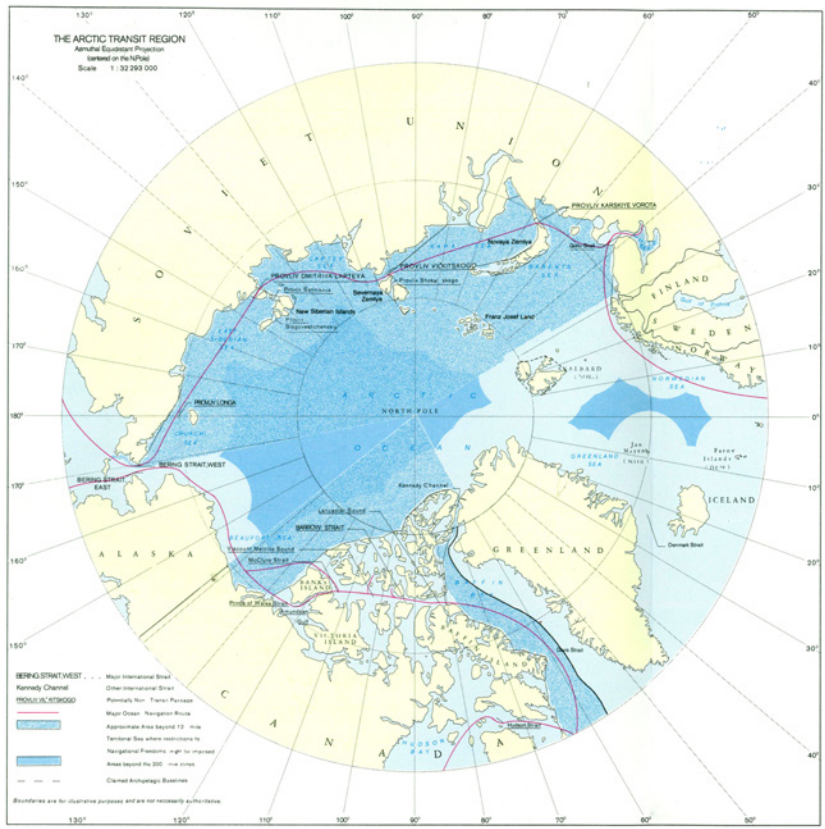
Four appendices on 1) the legal regime of the Arctic Ocean, 2) straits used for international navigation in the Arctic Ocean, 3) maritime boundaries in the Arctic Ocean, and 4) extended continental shelves in the Arctic Ocean are provided at the end and provide further details.

Geography of the Arctic Region

In contrast to Antarctica, the Arctic Region includes the five states surrounding the Arctic Ocean—Canada, Denmark (Greenland), Norway, Russia and the United States—and the straits used for international navigation to and from the Arctic Ocean—Bering Strait, Northwest Passage, Northeast Passage/Northern Sea Route, and the Nares, Davis, Fram and Denmark Straits (for details see appendix 2). Another three states have land territory north of the Arctic Circle (66º33'39" N)—Iceland, northern Sweden, and northern Finland.

More specifically, the land territory of circumpolar states north of the Arctic Circle includes northern Alaska, northern mainland Canada abutting the Bering Sea (the Northwest Territories), the Canadian Arctic islands (which Canada calls the Canadian "arctic archipelago"[2]), Greenland (Denmark), Iceland, Svalbard/Spitzbergen (Norway), northern Norway, northern Sweden, northern Finland, and the Rus-

Map 1. The Arctic Transit Region



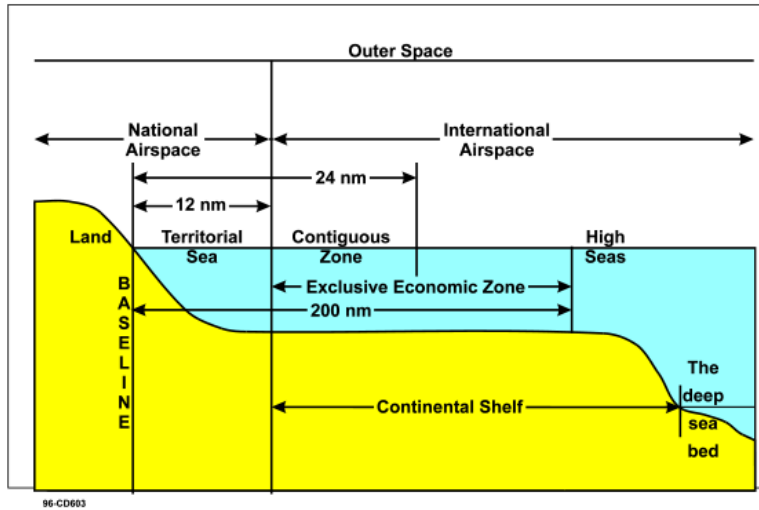
Source: Lewis M. Alexander, *Navigational Restrictions within the New LOS Context* (Roach ed.), BrillNijhoff, 2017, p. 167.

sian territory of Franz Josef Land, Novaya Zemlya, North Land, Anjou Islands, Wrangel Island[3] and northern Siberia.

Legal Regime of the Arctic Ocean[4]

The Arctic Ocean comprises both national and international waters and seabed. Arctic Ocean national waters of the littoral states include the internal waters, territorial sea no more than 12 nautical miles wide,

Table 1. Legal Boundaries of the Oceans and Airspace



and exclusive economic zone (EEZ) measured no more than 200 nautical miles from the baselines determined in accordance with the UNCLOS by the littoral states.[5] International waters in the Arctic Ocean include all water seaward of the EEZ of the littoral states.[6] The continental shelf of the Arctic Ocean littoral states comprises the seabed and subsoil of the submarine areas beyond their territorial sea that extend throughout the natural prolongation of their land territories 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 does not extend up to that distance.[7] The seabed and subsoil beneath the Arctic Ocean seaward of the outer limits of the continental shelf (i.e., beyond the limits of national jurisdiction in the Arctic Ocean) constitute the Area managed by the International Seabed Authority.[8]

Navigation of the Arctic Ocean

There are different rules for navigation of the various maritime zones, including those of the Arctic Ocean, as follows:

- Because *internal waters* are under the sovereignty of the coastal state, foreign vessels and aircraft have no right to navigate internal waters without the authority of the coastal state.[9]
- While the *territorial sea* is under the sovereignty of the coastal state, foreign vessels have the right of innocent passage to traverse those waters, and concomitant duties. That right does not extend to aircraft that have no right of innocent passage through the airspace over the territorial sea.[10]
- In contrast, in the *exclusive economic zone* the coastal state does not have sovereignty; rather, it enjoys sovereign rights and jurisdiction over the EEZ. Foreign ships and aircraft enjoy, *inter alia*, the freedoms of navigation and overflight.[11]
- In the *high seas*, all states enjoy, as described in the next section, *inter alia*, the freedoms of navigation and overflight.[12]

There is a separate navigation regime for *straits used for international navigation* between one part of the high seas or an EEZ and another part of the high seas or EEZ;[13] this is the right of transit passage.[14] The right of transit passage is defined as "the freedom of navigation and overflight solely for the purpose of continuous and expeditious transit of the strait." The Convention sets out the duties of ships and aircraft during transit passage, those laws and regulations states bordering straits may adopt relating to transit passage, and the duties of states bordering straits.[15] The right of innocent passage also applies to navigation in the waters of the strait that is not the exercise of transit passage.[16] Several of the straits used for international navigation in the Arctic Ocean are described in appendix 2.

Freedom of the Seas

UNCLOS Article 87 defines "freedom of the high seas" as including *inter alia* for both coastal and land-locked states:

(a) freedom of navigation;

(b) freedom of overflight;

(c) freedom to lay submarine cables and pipelines, subject to Part VI [on the continental shelf];

(d) freedom to construct artificial islands and other installations permitted under international law, subject to Part VI [on the continental shelf];

(e) freedom of fishing, subject to conditions laid down in section 2 of Part VII on the high seas; and

(f) freedom of scientific research, subject to Parts V [on the exclusive economic zone] and XIII [on marine scientific research].

As set out in article 58(1), in the exclusive economic zone (EEZ), all states enjoy, subject to the provisions of the UNCLOS, some of the freedoms listed in article 87, i.e., navigation and overflight, the laying of submarine cables and pipelines, and other internationally lawful uses of the sea related to these freedoms, such as those associated with the operation of ships, aircraft and submarine cables and pipelines, and compatible with the other UNCLOS provisions. In addition, paragraph 2 provides that articles 88-115[17] and other pertinent rules of international law apply in the EEZ in so far as they are not incompatible with Part V on the EEZ.

In both the EEZ and the high seas, articles 87(2) and 58(3) provide that states shall exercise these rights and perform their duties with due regard for the rights and duties of other states.

Similar provisions appear in the article 2 of 1958 Geneva Convention on the High Seas to which the United States is among the 63 parties.[18] It is expressly declarative of customary international law.

Article 86 provides that these freedoms do not apply in the territorial sea or internal waters of a state, or in the archipelagic waters of an archipelagic state.

The U.S. Department of Defense defines "freedom of the seas" as follows:

> Freedom of the seas ... includes more than the mere freedom of commercial vessels to transit through international waterways. ... [T]he Department uses "freedom of the seas" to mean all of the rights, freedoms, and lawful uses of the sea and airspace, including for military ships and aircraft, recognized under international law.[19]

Jonathan Odom suggests that the optimum phrase describing the freedom of the seas could be "freedom of the seas which includes all of the rights, freedoms and uses of the sea and airspace under international law, as reflected in the UN Convention on the Law of the Sea."[20]

Importance of Freedom of the Seas

The importance of freedom of the seas was recognized in the Atlantic Charter of August 14, 1941, signed by U.S. President Franklin D. Roosevelt and British Prime Minister Winston Churchill on the eve of World War II. One of their common principles was "a peace should enable all men to traverse the high seas and oceans without hindrance."[21]

The national security of all maritime states, including the United States, depends on a stable legal regime assuring freedom of navigation on, and overflight of, international waters. That regime, as set out in the 1982 UNCLOS – signed by 117 states when the Convention opened for signature on December 10, 1982, and ratified by 167 states and the EU as of March 9, 2020[22] – reflects a careful balance of coastal and maritime state interests. The UNCLOS was negotiated in part to halt the creeping jurisdictional claims of coastal states, or the ocean enclosure movement. While that effort appears to have met with some success, it is clear that many states continue to purport to restrict navigational freedoms by a wide variety of means that are neither consistent with the UNCLOS nor with customary international law binding on all states.[23] The stability of that regime, including in the Arctic Ocean, is undermined by claims to exercise jurisdiction, or to interfere with navigational rights and freedoms, which are inconsistent with the terms of the UNCLOS.

United States Views on the Law of the Sea Convention

United States policy accepts, and the United States acts in accordance with, the provisions of the UNCLOS, as functionally amended by the 1994 Agreement relating to the Implementation of Part XI of the LOS Convention. While the United States is not now a party to the Convention, it supports its approval by the U.S. Senate. Notwithstanding multiple efforts to gain Senate approval, a minority of U.S. Senators persists in blocking its approval.[24]

As stated in the 2015 Department of Defense *Asia-Pacific Maritime Security Strategy*:

> Freedom of the seas is... essential to ensure access in the event of a crisis. Conflicts and disasters can threaten US interests and those of our regional allies and partners. The Department of Defense is therefore committed to ensuring free and open maritime access to protect the stable economic order that has served all Asia-Pacific nations so well for so long, and to maintain the ability of US forces to respond as needed.[25]

The 2017 U.S. National Security Strategy similarly states:

> ENSURE COMMON DOMAINS REMAIN FREE: The United States will provide leadership and technology to shape and govern common domains—space, cyberspace, air, and maritime—within the framework of international law. The United States supports the peaceful resolution of disputes under international law but will use all of its instruments of power to defend US interests and to ensure common domains remain free.[26]

A Canadian View

Todd Bonnar, a senior Canadian Naval Officer with the Combined Joint Operations from the Sea Center of Excellence in Norfolk, Virginia, has addressed the strains on maritime freedom and repercussions for the Arctic posed by China, Iran and Russia, as they seek to "accumulate/consolidate power and re-define international maritime norms," in particular the UNCLOS. He points out China's "attempts to rationalize and assert control of 80 to 90 percent of the South China Sea," Iran's claims to control the Strait of Hormuz, and Russia's control of the Kerch Straits seeking to "rewrite the rules in the Sea of Azov" and potentially do the same in the Black Sea, the Baltic Sea and the Sea of Okhotsk. To counter these threats, he focuses on the need for a robust Maritime Situational Awareness. He correctly observes and then warns:

> The world's oceans and seas comprise a single interconnected body of water. Seagoing nations must stand on the principle that maritime freedom is likewise indivisible. If the maritime community in general relinquishes its inherent freedoms in the global commons in one body of water for the sake of placating a predatory coastal

> state such as China, the global maritime community stands the risk some other strong coastal state will mount similar challenges in some other strategic waterway.[27]

These observations are equally pertinent in the Arctic Ocean as elsewhere.

Chinese and Russian Hypocrisy

Both China and Russia have blue water navies that benefit from the rules codified in the UNCLOS. They have regularly committed to abide by those rules by joining in annual calls by the UN General Assembly for States Parties to conform their maritime claims to the UNCLOS,[28] in the 1989 U.S.-USSR Joint Statement on the Rules of International Law governing Innocent Passage,[29] and in the 2016 China-Russia joint statement on the promotion of international law.[30] In 2018, China claimed to be a "near-Arctic state," intending to participate actively and in law-abiding manner in Arctic affairs.[31] Yet their actual behavior in the South China Sea, specifically raised by the Canadian view and deemed disconcerting, is inconsistent with those promised commitments. China's hypocrisy could not be more evident.

A Future Arctic Ocean

The Arctic Ocean may be ice-free during the summers in 2040 as some have predicted. If so, that will increase the need for freedom of navigation in both the national and international waters of the Arctic Ocean. By then, it is possible that the U.S.-Canadian dispute over the location of their maritime boundary in the Beaufort Sea and northward (described in appendix 3) will be resolved. In addition, it is possible that all the claims lodged under the UNCLOS regarding extended continental shelves of the Arctic littoral States (described in appendix 4) will be settled. In this way the ownership questions, and the extent of their sovereignty, over the seabed and subsoil in the area of the Arctic Ocean, and therefore the boundaries of the Area in the central Arctic Ocean, would be resolved.

The situation of the Northwest Passage, by contrast, will likely be unchanged. Canada will continue to claim the waters of the Northwest

Passage as internal waters and seek to restrict navigational rights there over the objections of the United States and other maritime states that the Northwest Passage includes straits used for international navigation (for details see appendix 2).

Russia, on the other hand, will continue to encourage use of the Northern Sea Route and may well continue to bring its legal regime into compliance with the international law of the sea (for details, including U.S. views, see appendix 2).

Finally, it is possible that the United States will have acceded to the UNCLOS by 2040, particularly if the President of the United States actively encourages the Senate to act favorably. Being party to the UNCLOS would strengthen U.S. reliance on the Convention in its disputes with other states, such as China, that reject the U.S. references to the Convention because it is not a party. As a party, the United States would enhance its influence in the Arctic Council and international organizations where the Convention is central to its work.

Appendix 1: Legal Regime Governing the Arctic Ocean

The Arctic Ocean and its littoral states are governed by the UN Convention on the Law of the Sea (UNCLOS) and other sources mentioned below. The circumpolar states – Canada, Denmark (Greenland), Norway and Russia – are parties to the Convention. While the United States is not a party, the United States accepts the traditional uses provisions of the Convention as customary international law binding on the United States. The other states with land territory north of the Arctic Circle are also parties to the UNCLOS.

Like all coastal states, the Arctic littoral states are each entitled to have a 12-mile territorial sea, a 24-mile contiguous zone, a 200-mile exclusive economic zone in the Arctic Ocean. Each state has claimed these maritime zones.

Arctic submerged lands consist of the continental shelf and the deep seabed of the Arctic Ocean. The continental shelf is the natural prolongation of the land mass, out to 200 miles automatically—and beyond where it meets the criteria of article 76 of the UNCLOS. The littoral states each have continental shelves as a matter of right.[32] The deep

seabed is the sea floor beyond the continental shelf of coastal states, known as the Area.[33] There are likely to be one or more portions of the Area beneath the Central Arctic Ocean, but identification of the scope of these areas awaits determination and delimitation of the extended continental shelves of the littoral states (see appendix 4).

There are four pockets of high seas in Arctic waters: the high seas of the Central Arctic Ocean, the Donut Hole in the central Bering Sea, the Banana Hole in the Norwegian Sea, and the Loophole in the Barents Sea.[34]

Sources of Law for the Arctic Ocean

There are many sources of international law that are applicable to the Arctic Ocean, and, more importantly, available to enhance the security, environmental protection and safety of navigation of the Arctic Ocean.[35] As a result, the United States does not believe it is necessary to develop a comprehensive new legal regime for the Arctic, nor is there a danger of armed conflict in the Arctic, as some have suggested.[36]

The five circumpolar nations share this view. Meeting in Ilulissat, Greenland, May 27–29, 2008, they gathered at the political level, and adopted a declaration that read in part:

> By virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean the five coastal states are in a unique position to address these possibilities and challenges. In this regard, we recall that an extensive international legal framework applies to the Arctic Ocean as discussed between our representatives at the meeting in Oslo on 15 and 16 October 2007 at the level of senior officials.[37] Notably, the law of the sea provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea. We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims.
>
> This framework provides a solid foundation for responsible management by the five coastal States and other users of this Ocean through national implementation and application of relevant pro-

> visions. We therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean. We will keep abreast of the developments in the Arctic Ocean and continue to implement appropriate measures.

The extensive legal framework already applicable to the Arctic Ocean includes:

- the law of the sea, as reflected in the UNCLOS, which as described above allows the coastal states to claim territorial seas, EEZs, shelf out to 200 miles,[38] shelf beyond 200 miles where it meets the Article 76 criteria.[39] In addition, the Convention provides passage rights and duties for foreign flag vessels,[40] high seas freedoms,[41] the regime for marine scientific research;[42]
- several agreements adopted under the auspices of the Arctic Council, including the 2011 Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic,[43] the 2013 Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic,[44] the 2017 Agreement on Enhancing Arctic Marine Scientific Research Cooperation,[45] and the 2018 agreement on Arctic Fisheries;[46]
- various IMO agreements on safety of navigation and prevention of marine pollution clearly apply to the Arctic Ocean (e.g., SOLAS, MARPOL and its annexes on vessel source pollution as amended through the Polar Code), the London Convention/Protocol on ocean dumping; and
- various air-related agreements that indirectly protect the Arctic, such as the 1979 Convention on Long-Range Transboundary Air Pollution, the 1987 Montreal Protocol on the Ozone Layer, the 1992 Framework Convention on Climate Change, the 1998 Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the 2001 Convention on Persistent Organic Pollutants.

Soft Law

There is so-called "soft law" applicable to activities in the Arctic Ocean, including IMO guidelines and Arctic Council guidelines.

Applicable IMO guidelines include the IMO Guidelines for Ships Operating in Arctic Ice-Covered Waters (2002), IMO Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities (2006), IMO Guidelines on Voyage Planning for Passenger Ships Operating in Remote Areas (2007) and the Arctic Council Guidelines on Arctic offshore oil and gas activities (2009).

Arctic Council Guidelines on off-shore oil/gas activities recommend voluntary standards, technical and environmental best practices, and regulatory controls for Arctic offshore oil and gas operators. The Guidelines were designed to be consistent with U.S. offshore regulations. The U.S. Department of the Interior/Merchant Marine Service posts the Guidelines on its webpage, apparently applies them, and recommends their use to new operators in the Arctic. Greenland apparently requires that they be read by potential permit holders; Russia has said they suggest that leaseholders read them. Another Arctic Council working group (the Arctic Monitoring and Assessment Program (AMAP)) released in 2007 an Assessment of Oil and Gas Activities in the Arctic.

Appendix 2: Straits Used for International Navigation of the Arctic Ocean

There are seven straits used for international navigation through the Arctic Ocean: the Bering Strait, the Northeast Passage, the Northwest Passage, and the Nares, Davis, Fram and Denmark Straits. The first three listed are examined in detail next.

Bering Strait

The Bering Strait is one of many straits used for international navigation through the territorial sea between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone. Transit through such straits are subject to the legal regime of transit passage.[47] Under international law, the ships and aircraft of all states, including warships and military aircraft, enjoy the right of unimpeded transit passage through such straits.[48]

The Bering Strait is approximately 51 miles wide, between Cape Dezhnev, Chukotka Autonomous Okrug, Russia, the easternmost point (169°43' W) of the Asian continent and Cape Prince of Wales, Alaska, USA, the westernmost point (168°05' W) of the North American continent, with latitude of about 65°40' north, slightly south of the polar circle. Its average depth is 98-160 feet.[49] Located in the middle of the strait are the Diomede Islands: Big Diomede is on the Russian side, and Little Diomede is on the U.S. side, of the International Date Line and maritime boundary.[50] The two islands are about 2.4 miles apart.[51] Accordingly, ships will normally pass to the east of Little Diomede and west of Big Diomede. The eastern strait between Little Diomede and Cape Prince of Wales, and the western strait between Big Diomede and Cape Dezhnev, are each about 22.5 miles wide.[52]

The 2009 Arctic Marine Shipping Assessment noted that:

> There are currently no established vessel routing measures in the Bering Strait region. A Traffic Separation Scheme (TSS) may need to be established in the region as vessel traffic increases. There is currently no active Vessel Traffic Service (VTS) or other traffic management system in place in the waters of the Bering Strait. Shipboard Automated Identification System (AIS) capability is currently limited.[53]

The Russian Federation and the United States, as the states bordering the Bering Strait, have a common interest in the safety of navigation through the Bering Strait. SOLAS regulation V/10, paragraph 5, requires that:

> Where two or more Governments have a common interest in a particular area, they should formulate joint proposals for the delineation and use of a routeing system therein on the basis of an agreement between them. Upon receipt of such proposal and before proceeding with consideration of it for adoption, the [International Maritime] Organization [IMO] shall ensure details of the proposal are disseminated to the Governments which have a common interest in the area, including countries in the vicinity of the proposed ships' routing system.[54]

As the eastern and western passages are each less than 24 miles wide, the regime of transit passage applies in those straits (and their

approaches). Consequently, article 41(5) of the UNCLOS also requires that:

> In respect of a strait where sea lanes or traffic separation schemes through the waters of two or more States bordering the strait are being proposed, the States concerned shall cooperate in formulating proposals in consultation with the competent international organization.[55]

Russian and U.S. proposals have been approved by the IMO for the establishment of routing measures in the Bering Sea and Bering Strait:

- Five ATBAs in the region of the Aleutian Islands.[56]
- Two-way routes, six precautionary areas and ATBAs in the Bering Sea and Bering Strait, effective December 1, 2018, and
- Deep-water routes, recommended routes and precautionary area in the vicinity of Kattegat, effective July 1, 2020.[57]

All of these measures apply to ships 400 gross tonnage and above and are recommendatory.

Northeast Passage

The Northeast Passage is situated in the Arctic Ocean between the Barents Sea and the Chukchi Sea, north of Russia and includes the Dmitry, Laptev and Sannikov Straits.[58] Russia calls the portion of the passage in Russian waters the Northern Sea Route (NSR).

In 1998 Russia adopted the Federal Act on the international maritime waters, territorial sea and contiguous zone of the Russian Federation.[59] Article 14 of this act, entitled Navigation along the waterways of the Northern Sea Route, provides:

> Navigation on the waterways of the Northern Sea Route, the historical national unified transport line of communication of the Russian Federation in the Arctic, including the Vilkitsky, Shokalshy, Dmitry Laptev and Sannikov straits, shall be carried out in accordance with this Federal Act, other federal laws and the international treaties to which the Russian Federation is a party and the regulations on navigation on the watercourses of the Northern Sea

> Route approved by the Government of the Russian Federation and published in *Notices to Mariners*.

The relevant international treaties to which Russia is a party are, of course, the UNCLOS, and the various IMO Conventions and Codes, including the mandatory Polar Code.

In 2012 President Putin signed the 2012 Federal Law amending three earlier laws while providing the legal basis for the 2013 Rules of Navigation of the Water Area of the Northern Sea Route.[60] In 2017 Russia revised its extensive regulatory system for navigation of the Northern Sea Route.[61]

On May 29, 2015, the United States delivered a diplomatic note to the Russian Federation regarding its revised Northern Sea Route (NSR) regulatory scheme. The note presents U.S. objections to aspects of the scheme that are inconsistent with international law, including: requirements to obtain Russia's permission to enter and transit the exclusive economic zone and territorial sea; persistent characterization of international straits that form part of the NSR as internal waters; and the lack of any express exemption for sovereign immune vessels. The note also encourages Russia to submit relevant aspects of the scheme to the IMO for consideration and adoption. The text of the diplomatic note to the Russian Federation follows:

> The Government of the United States of America notes the Government of the Russian Federation has adopted legislation and regulations for the purpose of regulating maritime traffic through the area described as the Northern Sea Route. The United States notes its support for the navigational safety and environmental protection objectives of this Northern Sea Route scheme and commends the Russian Federation interest in promoting the safety of navigation and protection of the marine environment in the Arctic. As conditions in the Arctic continue to change and the volume of shipping traffic increases, Arctic coastal States need to consider ways to best protect and preserve this sensitive region.
>
> The United States advises, however, of its concern that the Northern Sea Route scheme is inconsistent with important law of the sea principles related to navigation rights and freedoms and recommends that the Russian Federation submit its Northern Sea

Route scheme to the International Maritime Organization (IMO) for adoption.

As a preliminary matter, to the extent that the Northern Sea Route scheme continues the view of the Russian Federation that certain straits used for international navigation in the Northern Sea Route are internal waters of the Russian Federation, the United States renews its previous objections to that characterization. Also, the United States notes that the legislation characterizes the Northern Sea Route as a historically established national transport communication route. The United States does not consider such a term or concept to be established under international law.

The United States also requests clarification from the Russian Federation about the scope of the Northern Sea Route. The eastern limit of the Route is described as the parallel to Cape Dezhnev and the Bering Strait; the United States seeks clarification whether the Route extends into and through the Bering Strait. Also, the new laws and regulations appear to limit the northern extent of the Route to the outer limits of what the Russian Federation claims as its exclusive economic zone. The United States requests confirmation that the Route does not extend beyond these northern limits into areas of high seas.

Among our concerns about the Northern Sea Route scheme, it purports to require Russian Federation permission for foreign-flagged vessels to enter and transit areas that are within Russia's claimed exclusive economic zone and territorial sea and only on prior notification to Russia through an application for a transit permit and certification of adequate insurance. In the view of the United States, this is not consistent with freedom of navigation within the exclusive economic zone, the right of innocent passage in the territorial sea, and the right of transit passage through straits used for international navigation.

The United States understands that the Northern Sea Route scheme is based on Article 234 of the Law of the Sea Convention (the Convention). While Article 234 allows coastal States to adopt and enforce certain laws and regulations in ice-covered areas within the limits of their exclusive economic zones, these laws and regulations must be for the prevention, reduction and control of marine pollution from vessels, must be non-discriminatory, and must have due regard to navigation. A unilateral, coastal State requirement for prior notification and permission to transit these areas does not meet the condition set forth in Article 234 of having due regard to navigation. The United States does not consider that

Article 234 justifies a coastal State requirement for prior notification or permission to exercise navigation rights and freedoms.

Moreover, the United States questions the scope of the Northern Sea Route area and whether that entire area is ice-covered for most of the year, particularly in the western portion of the Route, in order for Article 234 to serve as the international legal basis for the Northern Sea Route scheme. As conditions in the Arctic continue to change, the use of Article 234 as the basis for the scheme may grow progressively even more untenable.

Additionally, the Northern Sea Route scheme does not seem to provide an express exemption for sovereign immune vessels. As the Russian Federation is aware, Article 236 of the Convention provides that the provisions of the Convention regarding the protection and preservation of the marine environment (including Article 234) do not apply to any warship, naval auxiliary, other vessels or aircraft owned or operated by a State and used, for the time being, only on government non-commercial service. The United States requests that the Russian Federation confirm that the Northern Sea Route scheme shall not apply to sovereign immune vessels.

The Northern Sea Route scheme contains provisions for the use of Russian icebreakers and ice pilots. It is unclear whether those provisions are mandatory or if there is discretion on the part of the flag State regarding the use of these services. The United States requests that the Russian Federation clarify these provisions on Russian icebreakers and ice pilots. If the provisions are mandatory rather than optional, the United States does not believe that Article 234 provides authority for a coastal State to establish such requirements. Additionally, it does not seem that the Northern Sea Route scheme allows for the use of a foreign-flagged icebreaker. If this is so, then the provision would appear to be inconsistent with the non-discrimination aspects of Article 234. Also, the charges that are levied for icebreakers and ice pilots may not be supportable under Article 234 and, in any event, cause concern about their relation to the cost of services actually provided. Moreover, the provisions in the scheme to use routes prescribed by the Northern Sea Route Administration, use icebreakers and ice pilots, and abide by other related measures, particularly in straits used for international navigation, are measures that must be approved and adopted by the IMO.[62]

In 2017 Russia implemented the Polar Code by amending the Russian Navigation Rules in the waters of the NSR to require that a copy

of the Polar Code Certificate to be carried on board a vessel to which the Polar Code applies and intends to navigate the NSR.[63]

Like Canada, Russia has adopted an extensive system of straight baselines along its Arctic coast (and elsewhere), which has attracted international objections.[64]

Northwest Passage

The United States and Canada have a long-standing dispute over the legal status of the waters of the Northwest Passage between Davis Strait/Baffin Bay and the Beaufort Sea. The United States considers the passage a strait (or series of straits) used for international navigation subject to the high seas and transit passage regimes under existing international law. Canada considers these waters to be Canadian and that special coastal state controls can be applied to the passage, including requirements for prior authorization of the transit of all non-Canadian vessels and for compliance by such vessels with detailed Canadian regulations.[65]

The ICJ has ruled that the volume of traffic passing through a strait is not a determinative factor whether it is "used for international navigation."[66] Nevertheless, at least 236 full transits of the Northwest Passage are documented to have occurred during the decades between 1906 and 2015.[67]

Canada has argued, since 1973, that the waters of the Canadian Arctic Archipelago are historic internal waters of Canada. Some scholars disagree.[68] Canada also argues that the straight baselines enclosing the outer points of the islands both illustrate the geographical extent of its claim, and make the waters enclosed by the straight baseline's internal waters.

Agreement on Arctic Cooperation

On January 11, 1988, an Agreement on Arctic Cooperation was signed in Ottawa by Secretary of State George P. Shultz and Canadian Secretary of State for External Affairs Joe Clark. This agreement sets forth the terms for cooperation by the United States and Canadian Governments in coordinating research in the Arctic marine environment during icebreaker voyages and in facilitating safe, effective icebreaker navigation off their Arctic coasts. The agreement, which does

not affect the rights of passage by other warships or by commercial vessels, applies only to U.S. Coast Guard icebreakers conducting marine scientific research in those waters.

Nares Strait

Nares Strait is between Baffin Bay and the Lincoln Sea. The littoral states are Canada and Greenland. Its least width is 22 miles, its depth exceeds 1,000 feet and is 76 miles long.

Davis Strait

Davis Strait is between the Labrador Sea and Baffin Bay. The littoral states are Canada and Greenland. Its least width is 172 miles, its depth exceeds 1,000 feet and is 300 miles long.

Fram Strait

Fram Strait is between the Arctic Ocean and the Greenland Sea. The littoral states are eastern Greenland and Norway (Svalbard). It is about 800 miles wide, about 1.5 miles deep, and about 240 miles long between 77° and 81° N.

Denmark Strait

The Denmark Strait is between the Atlantic Ocean and the Greenland Sea. The littoral states are Greenland and Iceland. Its least width is 182 miles, its depth exceeds 1,000 feet and is 150 miles long.[69]

Appendix 3: Maritime Boundaries in the Arctic Ocean

Not all maritime boundaries in the Arctic Ocean have been agreed. There are five maritime boundary situations in the Arctic Ocean where adjacent/opposite states have overlapping maritime claims: U.S.-Russia, U.S.-Canada, Canada-Denmark,[70] Denmark-Norway,[71] and Norway-Russia.[72]

The United States-Russia maritime boundary—running from the Bering Sea north to the Arctic—has been negotiated. The 1990 United States-USSR (now Russia) treaty is being applied provisionally pending ratification by the Russian Duma.[73] The U.S. Senate gave its advice

and consent in 1991.[74] The treaty provides that the maritime boundary extends north along the 168°58'37" meridian through the Bering Strait and Chukchi Sea into the Arctic Ocean "as far as is permitted under international law."[75] The 2001 and 2015 Russian submissions to the Commission on the Limits of the Continental Shelf respected this boundary. Russia does not claim extended continental shelf on the U.S. (east) side of this line.[76]

The United States and Canada disagree on the location of the maritime boundary in the Beaufort Sea and northward. Canada considers that the maritime boundary follows the 141st meridian, which forms the land boundary between Alaska and the Northwest Territories. The United States rejects that the 1825 Anglo-Russian[77] and 1867 Russo-American[78] treaties establishing the land boundary also established the maritime boundary and considers that the boundary should be based on the "equidistance" methodology.[79] While equidistance favors the United States in the territorial sea, equidistance favors Canada in the EEZ.[80]

Nevertheless, as described elsewhere, Canadian and U.S. scientists cooperated during the 2007–2016 summers in gathering seismic and bathymetric data related to establishment of the outer limits of their continental shelves in the Arctic, Bering Sea, Gulf of Alaska and Atlantic.[81]

On July 23, 2008, the U.S. Geologic Survey announced the first publicly available petroleum resources estimate of the entire area north of the Arctic Circle. The survey estimated the areas north of the Arctic Circle have 90 billion barrels of undiscovered, technically recoverable oil; 1,670 trillion cubic feet of technically recoverable natural gas; and 44 billion barrels of technically recoverable natural gas liquids in 25 geologically defined areas thought to have potential for petroleum.[82]

Appendix 4: Extended Continental Shelf Claims in the Arctic Ocean

Four of the five circumpolar Arctic nations (Russia, Norway, Denmark and Canada) have submitted claims to extended continental shelf (i.e., beyond 200 miles from the baseline) in the Arctic Ocean to the Commission on the Limits of the Continental Shelf, as required by

article 76(8) of the UNCLOS. The United States (with Canada's assistance) has collected bathymetric and depth of sediment data in preparation for making its submission.

Russia made the first submission in 2001, which the Commission responded to in 2002 by indicating the need for additional data.[83] In 2015 Russia submitted a partial revised submission in respect of the Arctic Ocean.[84]

In 2006, Norway made a submission in respect of the North East Atlantic and the Arctic and the CLCS recommendations were adopted in 2009. Norway made a submission in respect of Bouvetøya and Dronning Maud Land in 2009 and the Commission adopted its recommendations in 2019.[85]

Denmark made its submission in the area north of the Faroe Islands in 2009 and the Commission adopted its recommendations in 2014. Denmark made its submission in respect of Faroe-Rockall Plateau Region in 2010 and the Northern Continental Shelf of Greenland in 2012.[86]

Canada made its submission in respect of the Arctic Ocean in May 2019.[87]

CLCS recommendations on the Russian Arctic, Danish Faroe-Rockall Plateau Region and Northern Continental Shelf of Greenland, and Canadian Arctic Ocean submissions are pending.

The United States collected Arctic data for its submission between 2003 and 2012 and is preparing its submission.[88]

Notes

1. The text of the UN Convention on the Law of the Sea may be found at https://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf.

2. While this area is an archipelago in the geographic sense, it does not meet the definition of an archipelagic state in Part IV of the UNCLOS because Canada is not an island nation and therefore Canada is not entitled to draw archipelagic straight baselines enclosing these features.

3. On the status of Wrangel and other Arctic Islands, *see* E. Wilcox, ed., *Digest of United States Practice in International Law 2009*, (Washington: International Law Institute, 2011), p. 463 [hereinafter *(year) Digest*] and https://2009-2017.state.gov/p/eur/rls/fs/128740.htm.

4. Appendix 1. *See further* Donald R. Rothwell, *Arctic Ocean Shipping: Navigation, Security and Sovereignty in the North American Arctic*, Brill Research Perspectives Issue 1.3 (Leiden/Boston: Brill, 2018).

5. UNCLOS, articles 3 and 57.

6. UNCLOS, article 86. All five Arctic Ocean littoral states claim an EEZ consistent with the 200-mile limit.

7. UNCLOS, article 76(1).

8. UNCLOS, articles 1(1–2), 137(2).

9. UNCLOS, article 2(1–2).

10. UNLOS, articles 2(2) & 17–20. The rights and duties of the coastal state are set out in articles 24–26.

11. UNCLOS, articles 56 & 58. The duties of coastal states and other states in the EEZ are set out in articles 56(2) and 58(3).

12. UNCLOS, article 87.

13. This definition, set out in UNLOS article 37, follows the ruling of the International Court of Justice in the Corfu Channel Case that the decisive criterion is "its geographic situation as connecting two parts of the high seas and the fact of being used for international navigation." *Corfu Channel Case*, [1949] ICJ Rep. 4, 28 (April 9), https://www.icj-cij.org/files/case-related/1/001-19490409- JUD-01-00-EN.pdf. The Court emphasized that test is not to be found in the volume of traffic passing through the Strait or in its greater or lesser importance for international navigation. The Court noted that the Corfu Channel strait is useful, but not a necessary, route for international maritime traffic. *Id*.

14. It is incorrect to describe such straits as "international straits" because the legal status of the waters in such straits is unaffected by the right of transit passage. UNCLOS, article 35.

15. UNCLOS, articles 39, 42 & 44.

16. UNCLOS, article 38(2–3). A similar legal situation exists in archipelagic states. UNCLOS, Part IV. However, there are no archipelagic states bordering the Arctic Ocean.

17. Article 88-115 comprise Section 1, General Provisions, of Part VII on the High Seas.

18. The text of the 1958 Geneva Convention on the High Seas may be found at https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXI-2&chapter=21.

19. U.S. Department of Defense, *The Asia-Pacific Maritime Security Strategy: Achieving US National Security Objectives in a Changing Environment* (2015), p. 2, www.defense.gov/Portals/1/Documents/pubs/NDAA_A-P_Maritime_Security_Strategy-08142015-1300-FINALFORMAT.PDF.

20. Jonathan Odom, "Navigating Between Treaties and Tweets: How to Ensure Discourse about Maritime Freedom Is Meaningful," *Ocean Development and International Law* 49, 1 (2018), pp. 1, 23.

21. The text of the Atlantic Charter may be accessed at http://avalon.law.yale.edu/wwii/atlantic.asp.

22. https://www.un.org/Depts/los/reference_files/UNCLOS%20Status%20table_ENG.pdf.

23. See John Negroponte, "Who Will Protect the Oceans?" *State Department Bulletin*, Oct. 1986, pp. 41–43; Robert W. Smith, "Global Maritime Claims," *Ocean Development and International Law* 20 (1989), p. 83; and J. Ashley Roach, "Today's Customary International Law of the Sea", *Ocean Development and International Law* 45 (2014), pp. 239–259.

24. For details see U.S. State Department Office of Ocean and Polar Affairs, "Law of the Sea Convention," https://www.state.gov/law-of-the-sea-convention/.

25. *Asia-Pacific Maritime Security Strategy*, op. cit., p. 2. This theme appeared in Joint Chiefs of Staff, *The National Military Strategy of the United States of America 2011: Redefining Americas Military Leadership*, Feb. 2011, pp. 3 & 9, quoted on pp. 4–5 of the 3rd edition of J. Ashley Roach and Robert W. Smith, *Excessive Maritime Claims* (Leiden: Martinus Nijhoff, 2012).

26. *National Security Strategy of the United States of America*, December 2017, p. 41, https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf.

27. Captain Todd Bonnar, MSC, CD, "Opinion: Maritime Freedom & the Global Commons," *MarineLink*, March 18, 2020, https://www.marinelink.com/news/opinion-maritime-freedom-global-commons-476727.

28. UNGA annual resolution on oceans and the law of the sea, most recently A/RES/74/19, December 10, 2019, para. 4:

> *Calls upon* States to harmonize their national legislation with the provisions of the Convention and, where applicable, relevant agreements and instruments, to ensure the consistent application of those provisions and to ensure also that any declarations or statements that they have made or make when signing, ratifying or acceding to the Convention do not purport to exclude or to modify the legal effect of the provisions of the Convention in their application to the State concerned and to withdraw any such declarations or statements[.]

29. Joint Statement by the United States and Soviet Union, with Uniform Interpretation of Rules of International Law Governing Innocent Passage, September 23, 1989, UN, *Law of the Sea Bulletin*, p. 14 at pp. 12–13 (Dec. 1989), https://www.un.org/Depts/los/doalos_publications/LOSBulletins/bulletinpdf/bulE14.pdf.

30. *The Declaration of the People's Republic of China and the Russian Federation on the Promotion of International Law*, signed by both foreign ministers in Beijing June 25, 2016, para. 9, available at http://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/t1386141.shtml, which:

> emphasize[d] the important role of the 1982 United Nations Convention on the Law of the Sea in maintaining the rule of law relating to activities in the Oceans. It is of utmost importance that the provisions of this universal treaty are applied consistently, in such a manner that does not impair rights and legitimate interests of States Parties and does not compromise the integrity of the legal regime established by the Convention.

31. China State Council Information Office, "China's Arctic Policy," January 26, 2018, http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm.

32. UNCLOS, article 77(3).

33. UNCLOS, article 1(1).

34. See Figure 2.2 in Erik Molenaar, "The Arctic, the Arctic Council, and the Law of the Sea," in Robert C. Beckman et al., eds., *Governance of Arctic Shipping: Balancing Rights and Interests of Arctic States and User States* (Leiden/Boston: Brill Nijhoff, 2017), p. 28.

35. *Accord*, Hans Correll, *Reflections on the Possibilities and Limitations of a Binding Legal Regime for the Arctic*, address to Arctic Frontiers Tromsø: Balancing human use and ecosystem protection, Jan. 22, 2007, Tromsø, Norway, copy on file with author; Currie, *Sovereignty and Conflict in the Arctic Due to Climate Change: Climate Change and the Legal Status of the Arctic Ocean*, Aug. 5, 2007, http://www.globelaw.com/LawSea/arctic%20claims%20and%20climate%20change.pdf; Donald Rothwell and Stuart Kaye, "Law of the sea and the polar regions," *Marine Policy* 18 (1994), pp. 41–58; and Donald Rothwell, *Arctic Ocean Shipping: Navigation, Security and Sovereignty in the North American Arctic*, Brill Research Perspectives, issue 1.3, 2017 (Leiden/Boston: Brill, 2018).

36. Borgeron, "Arctic Meltdown: The Economic and Security Implications of Global Warming," *Foreign Affairs*, March/April 2008, https://www.foreignaffairs.com/articles/arctic-antarctic/2008-03-02/arctic-meltdown. On October 9, 2008, the European Parliament adopted a resolution on Arctic Governance, paragraph 15 of which calls for negotiation of an international treaty for the protection of the Arctic, http://www.arcticparl.org/_res/site/file/news%20items/EP%20resol_%20on%20Arctic%20Governance%209%20Oct%2008%20EN.pdf. Russia disagreed: "media assessments of possible aggression in the Arctic, even a third world war, are seen as extremely alarmist and provocative." Statement of Ambassador Anton Vasilyev *quoted* in "Russia says media reports on possible Arctic conflict 'alarmist'," Russian News and Information Agency, *RIA Novosti*, copy on file with author.

37. The Norwegian Foreign Ministry issued the following press release describing this meeting:

> At the invitation of the Norwegian Government, representatives of the five coastal States of the Arctic Ocean—Canada, Denmark, Norway, the Russian Federation and the United States of America—met at the level of senior officials on 15 and 16 October 2007 in Oslo, Norway, to hold informal discussions.
>
> The participants noted recent scientific data indicating that the Arctic Ocean stands at the threshold of significant changes, in particular the impact of melting ice on vulnerable ecosystems, livelihoods of local inhabitants, and potential exploitation of natural resources.
>
> In this regard, they recalled the applicability of an extensive international legal framework to the Arctic Ocean, including notably the law of the sea. They discussed in particular application and

> national implementation of the law of the sea in relation to protection of the marine environment, freedom of navigation, marine scientific research and the establishment of the outer limits of their respective continental shelves. They discussed cooperative efforts on these and other topics. They also emphasized the commitment of their States to continue cooperation among themselves and with other interested States, including on scientific research.

Text of the news release is available at https://www.regjeringen.no/en/aktuelt/The-Arctic-Ocean--meeting-in-Oslo-/id486239/.

38. UNCLOS, article 57.

39. UNCLOS, article 76.

40. UNCLOS, articles 17–26 (territorial sea), Part III, Straits Used for International Navigation.

41. UNCLOS, articles 58 & 87.

42. UNCLOS, articles 245–257.

43. Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, signed at Nuuk May 12, 2011, entered into force January 19, 2013, TIAS 13-119, *International Legal Materials* 50 (2011), p. 1119, https://www.state.gov/13-119.

44. Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, with appendices, May 15, 2013, TIAS 16-325, entered into force March 25, 2016, https://www.state.gov/16-325.

45. Agreement on Enhancing International Arctic Scientific Cooperation, with appendices, May 11, 2017, TIAS 18-523, entered into force May 23, 2018, https://www.state.gov/18-523/.

46. Agreement to Prevent Unregulated Commercial Fishing on the High Seas of the Central Arctic Ocean, signed October 1, 2018, not yet in force, https://eur-lex.europa.eu/resource.html?uri=cellar:24702f31-6e24-11e8-9483-01aa75ed71a1.0017.02/DOC_2&format=PDF.

47. UNCLOS, article 37.

48. Bernard Oxman, "Transit of Straits and Archipelagic Waters by Military Aircraft," *Singapore Y.B. Int'l L.*, vol. 4, (2000), p. 377.

49. http://en.wikipedia.org/wiki/Bering_Strait.

50. Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary, June 1, 1990.

51. http://en.wikipedia.org/wiki/Diomede_Islands.

52. Google Earth measurements. See further Rothwell, "Canada and the United States," in Beckman et al., eds, *Governance of Arctic Shipping*, pp. 217, 221–23, 240–43, 244.

53. Arctic Council, *Arctic Marine Shipping Assessment* (Tromsø, 2009), p. 109, https://oaarchive.arctic-council.org/bitstream/handle/11374/54/AMSA_2009_Report_2nd_print.pdf?sequence=1&isAllowed=y.

54. Guidance on obtaining IMO approval for routing measures is contained in the IMO's publication *Ships' Routeing*, first adopted in 1973 and subsequently amended over the years. The publication defines various types of routing measures: A "recommended route" is a route of undefined width, for the convenience of ships in transit, which is often marked by centerline buoys. A "recommended track" is a route which has been specially examined to ensure so far as possible that it is free of dangers and along which vessels are advised to navigate. A "traffic separation scheme" is a routing measure aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes. *See Federal Register*, vol. 75, p. 68569, Nov. 8, 2010.

55. International law permits a mandatory ship reporting scheme to be imposed in only two circumstances: unilaterally as a condition of port entry, and pursuant to IMO approval in accordance with SOLAS regulation V/11, the General Provisions on Ships' Routeing, IMO resolutions A.826(19), MSC.43(64) as amended by resolutions MSC.111(73) and MSC.189(79), and MSC circular 1060 and Add.1, May 26, 2006, Guidance Note on the Preparation of Proposals on Ships' Routeing Systems and Ship Reporting Systems, the latter *available at* http://www.imo.org/OurWork/Safety/Navigation/Pages/ShipsRouteing.aspx.

56. MSC 95/22, *Report of the Maritime Safety Committee on its 95th Meeting*, p. 50 paras. 11.2–11.3 for dissemination by means of SN.1/Circ.331.

57. MSC 99/22, *Report of the Maritime Safety Committee on its 99th Meeting*, paras. 12.3.3 and 12.3.4.

58. See William E. Butler, *Northeast Arctic Passage* (Alphen aan den Rijn: Sijthoff & Noordhoff, 1978). Some of the diplomatic correspondence quoted below appears in *United States Responses to Excessive National Maritime Claims*, Limits of the Seas No. 112, (1992), pp. 71–73, https://www.state.gov/wp-content/uploads/2019/12/LIS-112.pdf.

59. 'Federal Act on the internal maritime waters, territorial sea and contiguous zone of the Russian Federation,' adopted by the State Duma on July 16, 1998 and approved by the Federation Council on July 17, 1998, https://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1998_Act_TS.pdf. The Act closely follows the relevant provisions of the

Law of the Sea Convention, including the provisions on baselines contained in article 4 of the Act.

60. http://www.nsra.ru/en/ofitsialnaya_informatsiya/pravila_plavaniya/f120.html; Jan Solski, "Russia," in Beckman et al., eds, *Governance of Arctic Shipping*, pp. 173, 180–82, 184–216. See further Erik Franckx, "The "New" Arctic Passages and the "Old" Law of the Sea," in *Jurisdiction over Ships: Post-UNCLOS Developments in the Law of the Sea*, ed. Henrik Ringbom (Leiden | Boston: Brill Nijhoff, 2015), pp. 194–216.

61. These include the Regulations for Navigation on the Seaways of the Northern Sea Route, 1990; Regulations for Icebreaker-Assisted Pilotage of Vessels on the Northern Sea Route, 1996; Requirements for Design, Equipment, and Supply of Vessels Navigating the Northern Sea Route; and Guide to Navigation through the Northern Sea Route, 1996. The compatibility of these Russian unilateral actions with international law has been the subject of international attention. *See passim* R. Douglas Brubaker, *The Russian Arctic Straits* (The Hague: Nijhoff, 2005); Erik Franckx, "The Legal Regime of Navigation in the Russian Arctic," *Journal of Transnational Law and Policy* 18, 2 (2010), p. 327, and summarized in The Ship and Ocean Foundation, *The Northern Sea Route: The Shortest sea route linking East Asia and Europe*, (Tokyo, 2001), pp. 85–86, https://www.spf.org/_opri_media/publication/arctic/pdf/200103_arctic.pdf.

62. *2015 Digest*, pp. 526–527, https://2009-2017.state.gov/s/l/2015/index.htm. In remarks on May 6, 2019 in Rovaniemi Finland prior to the Arctic Council Ministerial Meeting the next day, Secretary of State Pompeo stated "Moscow already illegally demands other nations request permission to pass, requires Russian maritime pilots to be aboard foreign ships, and threatens to use military force to sink any that fail to comply with their demands." https://www.state.gov/secretary/remarks/2019/05/291512.htm. It should be noted that, by virtue of Article 236, Article 234 does not apply to warships, naval auxiliaries, or other vessels and aircraft owned or operated by a State and used, for the time being, only on government non-commercial service. However, each State is required to ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such vessel and aircraft, that such vessels and aircraft act in a manner consistent, in so far as reasonable and practicable, with the Convention.

63. Amendments to the Rules of navigation in the water area of the Northern Sea Route approved by the order of the Ministry of Transport of the Russian Federation dated January 17, 2013, No. 7, para. 3, Annex to Order of Ministry of Transport of January 9, 2017, No. 5, http://www.nsra.ru/en/ofitsialnaya_informatsiya/pravila_plavaniya/f122.html.

64. Michael Reisman and Gayle Westerman, *Straight Baselines in International Maritime Boundary Delimitation* (New York: St. Martin's Press, 1992), pp. 150–51.

65. See Rothwell, "Canada and the United States," in Beckman et al., eds., *Governance of Arctic Shipping* (Leiden/Boston: Brill, 2017), pp. 217, 234, 237 (noting the effect of Canada's straight baselines enclosing its Arctic archipelago); Ted L. McDorman, *Salt Water Neighbors: International Ocean Law Relations between the United States and Canada* (Oxford: OUP, 2009), pp. 225–54; Donat Pharand, "The Arctic Waters and the Northwest Passage: A Final Revisit," *Ocean Development and International Law* 38 (2007), p. 3; Donald R. Rothwell, *"The Canadian-U.S. Northwest Passage: A Reassessment*," *Cornell International Law Journal* 26 (1993), p. 331; Donat Pharand, "Canada's Sovereignty over the North West Passage," *Michigan Journal of International Law* 10, no. 2 (1989), p. 653; idem, *Canada's Arctic Waters in International Law* (Cambridge: CUP, 1988); and idem and Legault, *The Northwest Passage: Arctic Straits* (Dordrecht: Martinus Nijhoff, 1984). The Canadian claim is also discussed in Pullen, "What Price Canadian Sovereignty?," US Naval Inst. Proc. 66 (Sept. 1987) wherein Captain Pullen, Canadian Navy (retired), establishes that the Northwest Passage is the sea route that links the Atlantic and Pacific Oceans north of America, and lists the 36 transits of the Passage from 1906 to 1987. The EC agrees the Northwest Passage is a strait used for international navigation. *The European Union and the Arctic Region*, COM (2008) 763, Nov. 20, 2008, p. 8, cited favourably in P.W. Lackenbauer, "Polar Race or Polar Sage?: Canada and the Circumpolar World in Arctic Security in an Age of Climate Change," in J. Kraska, ed., *Arctic Security in an Age of Climate Change* (New York: CUP, 2011), pp. 218, 240. The United Kingdom has stated that it does not recognize Canadian sovereignty over all of the waters of the Canadian arctic archipelago. *Brit. Y.B. Int'l L. 1987*, vol. 58 (1988), p. 586. Some of the material quoted below appears in Limits in the Seas No. 112, pp. 73–74.

66. *Corfu Channel Case (United Kingdom v. Albania)*, Judgment (Merits), [1949] ICJ Rep. 1, 28 (April 9).

67. Lawson Brigham, "The Changing Maritime Arctic and New Marine Operations," in Beckman et al., eds, *Governance of Arctic Shipping*, Table 1.1.B, at p. 8.

68. Pharand, *The Arctic Waters and the Northwest Passage: A Final Revisit*, 38 ODIL 13 (2007); Pharand, *Canada's Arctic Waters in International Law*, p. 125; Satei, "The Legal Status of the Northwest Passage: Canada's Jurisdiction or International Law in Light of Recent Developments in Arctic Shipping Regulation?", in Lawrence Hildebrand, Lawson Brigham, Tafsir M. Johansson, eds., *Sustainable Shipping in a Changing Arctic* [WMU Studies in Maritime Affairs, vol. 7] (Springer, 2018), p. 247.

69. Rothwell, *Arctic Ocean Shipping*, p. 31; Alexander, *Navigational Restrictions within the New LOS Context: Geographical Implications for the United States* (1986), reformatted and edited by Roach (Brill | Nijhoff, 2017), pp. 86, 88.

70. Agreement between the Government of the Kingdom of Denmark and the Government of Canada relating to the Delimitation of the Continental Shelf between Greenland and Canada, Dec. 17, 1973. The continental shelf in the vicinity of Hans Island and in the Arctic Ocean remain to be delimited.

71. The Denmark-Norway maritime boundaries have been agreed: Agreement between the Government of the Kingdom of Denmark and the Government of the Kingdom of Norway concerning the delimitation of the continental shelf in the area between the Faroe Islands and Norway and the boundary between the fishery zone near the Faroe Islands and the Norwegian economic zone, June 15, 1979; Agreement between the Kingdom of Denmark and the Kingdom of Norway concerning the delimitation of the continental shelf in the area between Jan Mayen and Greenland and concerning the boundary between the fishery zones in the area, December 18, 1995; Additional Protocol to the Agreement of December 18, 1995 between the Kingdom of Norway and the Kingdom of Denmark concerning the Delimitation of the Continental Shelf in the Area between Jan Mayen and Greenland and concerning the boundary between Fishery Zones in the Area, November 11, 1997; Agreement between the Government of the Kingdom of Norway on the one hand, and the Government of the Kingdom of Denmark together with the Home Rule Government of Greenland on the other hand, concerning the delimitation of the continental shelf and the fisheries zone in the area between Greenland and Svalbard, Feb. 20, 2006.

72. The Norway-Russia maritime boundaries have been agreed: Agreement between the Royal Norwegian Government and the Government of the Union of Soviet Socialist Republics concerning the sea frontier between Norway and the USSR in the Varangerfjørd, Feb. 15, 1957; Agreement on Maritime Delimitation of Coastal Area in Mouth of the Varangerfjørd, July 11, 2007, and Treaty Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean, Sept. 15, 2010.

73. Agreement between the U.S. and the USSR to abide by the terms of the maritime boundary agreement of June 1, 1990, pending its entry into force, effected by an exchange of notes at Washington June 1, 1990. See further 2009 Digest, pp. 463–64, https://2009-2017.state.gov/s/l/2009/index.htm.

74. Sen. Ex. Rep. 102-13; resolution of advice and consent approved 86–6, Sept. 16, 1991, Cong. Rec. pp. S13036–S13040, S13009.

75. Sen. Tr. Doc. 101-22, Sept. 26, 1990; *ILM* 29 (1990), p. 941; *International Maritime Boundaries*, vol. I, pp. 447–460. *See* McNeill, "America's Maritime Boundary with the Soviet Union," *Naval War Coll. Rev.*, Summer 1991, pp.

46–57, reprinted in John N. Moore and Robert F. Turner, eds, *Readings on International Law from the Naval War College Review 1978–1994* [*International Law Studies 1995*, vol. 68], pp. 219–230, https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=3805&context=nwc-review.

76. See https://www.un.org//Depts/los/clcs_new/submissions_files/submission_rus.htm; Victor Prescott and Clive Schofield, *The Maritime Political Boundaries of the World* (2nd ed.) (Leiden: Martinus Nijhoff, 2005), p. 527 (hereinafter Prescott and Schofield).

77. Convention between Great Britain and Russia concerning the Limits of the Respective Possessions on the North-West Coast of America and the Navigation of the Pacific Ocean, Feb. 16(28), 1825, (article III provides "The line of demarcation between the Possessions of the High Contracting Parties, upon the Coast of the Continent ... the line of demarcation shall follow the summit of the mountains situated parallel to the Coast, as far as the point of intersection of the 141st degree of West longitude (of the same Meridian); and, finally, from the said point of intersection, the said Meridian Line of the 141st degree, *in its prolongation as far as the Frozen Ocean*, shall form the limit between the Russian and British Possessions on the Continent of America to the North-West" (emphasis added). The authentic French text reads "... *dáns son prolongement jusqu'à la Mer Glaciale*").

78. Article I of the US-Russia Convention ceding Alaska, March 30, 1867 (quoting article III of the 1825 treaty).

79. *Cumulative Digest 1981–1988*, vol. II, pp. 1889–1890, https://2009-2017.state.gov/s/l/c11271.htm; Prescott and Schofield, pp. 527–28; and *2005 Digest*, pp. 705–7, https://2009-2017.state.gov/s/l/c11271.htm.

80. For an illustration, *see* McDorman, *Salt Water Neighbors*, p. 185.

81. See https://www.state.gov/e/oes/ocns/opa/ecs/missions/index.htm; "Unexplored Arctic Region to be Mapped," USGS, Press Release, Sept. 2, 2008, https://archive.usgs.gov/archive/sites/www.usgs.gov/newsroom/article.asp-ID=2013.html. See also E. Riddell-Dixon, *Canada's Arctic Continental Shelf Extension: Debunking Myths*, *Policy Options* (Sept. 2008), pp. 39–42, copy on file with author.

82. See https://archive.usgs.gov/archive/sites/www.usgs.gov/newsroom/article.asp-ID=1980.html.

83. https://www.un.org/Depts/los/clcs_new/submissions_files/submission_rus.htm.

84. https://www.un.org/Depts/los/clcs_new/submissions_files/submission_rus_rev1.htm.

85. https://www.un.org/Depts/los/clcs_new/submissions_files/submission_nor.htm.

86. https://www.un.org/Depts/los/clcs_new/submissions_files/submission_dnk_76_2014.htm.

87. https://www.un.org/Depts/los/clcs_new/submissions_files/submission_can1_84_2019.html.

88. See https://www.state.gov/about-the-u-s-extended-continental-shelf-project/.