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Freedom of overflight: a study of coastal State jurisdiction in international airspace

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1 Introduction

1.1 CONTEXT OF RESEARCH

The concept of 'creeping jurisdiction', or the assertion by coastal States of 'sovereignty and/or jurisdiction in adjacent waters beyond the rights they strictly enjoy under the law of the sea',¹ is not a new phenomenon. On the contrary, as Rothwell describes, 'a common thread throughout world affairs over the past 100 years has been a gradual encroachment by coastal states over their adjacent maritime domain'.² There are many instances over this period where the practice of coastal States of extending their jurisdiction has subsequently been codified in international law: the expansion of the territorial sea from 3 nautical miles (nm) to 12nm,³ the drawing of straight baselines,⁴ the extension of exclusive economic jurisdiction over maritime resources through the continental shelf⁵ and the exclusive economic zone (EEZ),⁶ and the formal recognition of the concept of archipelagic States.⁷ Many of these changes have resulted in large maritime areas falling under State sovereignty while others, such as the EEZ and the continental shelf, do not expand sovereignty but involve the extension of coastal State jurisdiction and sovereignty rights.⁸ On this basis, Gavouneli describes the United Nations Convention on the Law of the Sea (UNCLOS)⁹ as:

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- 1 Natalie Klein, *Maritime Security and the Law of the Sea* (OUP 2011) 3. The term 'creeping jurisdiction' in this context has been traced back to the US Navy in the 1960s (Erik Franckx, 'The 200-Mile Limit: Between Creeping Jurisdiction and Creeping Common Heritage – Some Law of the Sea Considerations from Professor Louis Sohn's Former LL.M. Student' (2007) 39 *Geo Wash Int'l L Rev* 467, 476-77).
 - 2 Donald R Rothwell, 'Maritime Security in the Twenty-First Century: Contemporary and Anticipated Challenges for Australia and New Zealand' in Natalie Klein, Joanna Mossop and Donald R Rothwell (eds), *Maritime Security: International Law and Policy Perspectives from Australia and New Zealand* (Routledge 2010) 248.
 - 3 See Section 2.2.3.1.
 - 4 See Section 2.2.3.1.
 - 5 See Section 2.7.4.
 - 6 See Section 2.7.3.
 - 7 See Section 5.4.
 - 8 As discussed in, Nico Schrijver, *Sovereignty over Natural Resources: Balancing Rights and Duties* (CUP 2009) 203-14; JA Knauss, 'Creeping Jurisdiction and Customary International Law' (1985) 15(2) *Ocean Dev Int'l L* 209, 210. See also, specifically in relation to the EEZ and the continental shelf, Barbara Kwiatkowska, 'Creeping Jurisdiction beyond 200 Miles in the Light of the 1982 Law of the Sea Convention and State Practice' (1991) 22 *Ocean Dev & Int'l L* 153.
 - 9 United Nations Convention on the Law of the Sea (Montego Bay, 10 Dec. 1982) 1833 U.N.T.S. 3, 21 I.L.M. 1261 (1982), *entered into force* 16 Nov. 1994 ('UNCLOS').

‘...the culmination of the tug-of-war between the sovereignty of the coastal State, which atavistically purports to expand its power further and further away from land; and the freedom of the high seas, a principle partly created as a reflexion of the impossibility to subdue the vast expanse of water for long centuries in human history’.¹⁰

The tendency of coastal States to assert growing claims over maritime areas adjacent to their territory is well-acknowledged,¹¹ including by the International Civil Aviation Organization (ICAO),¹² the United Nations (UN) agency responsible for managing the ‘administration and governance of the Convention on International Civil Aviation’¹³ (Chicago Convention).¹⁴ Despite this broad acknowledgement, a comprehensive, contemporary examination of the impact of assertions of coastal State jurisdiction beyond that which is explicitly granted under international law, on overflight rights, specifically, was elusive. It is this set of circumstances that led to the research that forms the foundation of this study.

The initial impetus to question the application of the law in respect to coastal State rights *vis-à-vis* the right of overflight was the realisation of a

10 Maria Gavouneli, *Functional Jurisdiction in the Law of the Sea* (Brill Nijhoff 2007) 1.

11 See further, for example, Stuart Kaye, ‘Maritime Security in the Post-9/11 World: A New Creeping Jurisdiction in the Law of the Sea?’ in Clive H Schofield, Seokwoo Lee and Moon-Sang Kwon (eds), *The Limits of Maritime Jurisdiction* (Martinus Nijhoff Publishers 2013) 347; AMJ Heijmans, ‘Artificial Islands and the Law of Nations’ (1974) 21(2) *Netherlands International Law Review* 139, 148; Jon M Van Dyke, ‘Military Exclusion and Warning Zones on the High Seas’ (1991) *Marine Policy* 147, 155; Alex G Oude Elferink, ‘Artificial Islands, Installations and Structures’ (Max Planck Encyclopedia 2013) 8; Ivan L Head, ‘ADIZ, International Law, and Contiguous Airspace’ (1964) 3 *Alta L Rev* 182, 196.

12 ICAO WP/5-1, *Secretariat Study on Agenda Item 5: Consideration of the Report of the Rapporteur on ‘United Nations Convention on the Law of the Sea – Implications, if any, for the Application of the Chicago Convention, its Annexes and other International Air Law Instruments’*, Presented at the Legal Committee 26th Session, Montreal (4 February 1987), reproduced in (1987) 3 *Int’l Org & L Sea: Documentary* YB 243, 245.

Note: this study is written using UK English but the terms and quotations that are used, including articles of treaties and names of organisations, reflect the diversity of spelling and phraseology in the English language. No further signposting will be included where the language of a quotation differs from UK English.

13 ICAO, ‘About ICAO’, available at <www.icao.int/about-icao/Pages/default.aspx> accessed 12 February 2020.

14 Chicago Convention on International Civil Aviation (Chicago, 7 Dec. 1944) 15 *U.N.T.S.* 295, 61 *Stat.* 1180, *T.I.A.S.* No. 1591, entered into force 4 April 1947, as amended by 1175 *U.N.T.S.* 297, entered into force Oct. 1998 (‘Chicago Convention’).

number of current events reflected in the media¹⁵ that involved disputes between States over the use of international airspace, that is, airspace outside a State's national airspace.¹⁶ These examples demonstrated, at one end of the spectrum, disapproval by coastal States over the way in which the aircraft of another State operated in international airspace off the first State's coast, such as in the case of northern European States with respect to Russian fighter jets in the Baltic.¹⁷ At the other end of the scale, the items reported on the coastal State prohibiting the aircraft of another State from operating in international airspace off the first State's coast, such as was reported in relation to China and the overflight of military aircraft of the United States (US) in the South China Sea.¹⁸ These reports stimulated an interest in the international law framework that applies to overflight rights in international airspace. At the very basic level, the aircraft of all States enjoy freedom of overflight in international airspace, but what rights this entails in practice for the operation of aircraft, is not clear. Furthermore, these examples all involved military aircraft, which raised the question of whether freedom of overflight applies differently depending on whether the aircraft is a State aircraft, on the one hand, or a civil aircraft, on the other.¹⁹ These questions are necessarily tied to the consideration of legitimate restrictions on the right of overflight, whether from other States exercising their freedoms in the maritime area or the coastal State, in the exercise

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- 15 Richard Milne, 'Scandinavians Warn Russia after Air Near-Miss' (Financial Times, 15 December 2014), available at <www.ft.com/content/95751ff2-837e-11e4-8a84-00144feabdc0> accessed 12 June 2015; 'Report on Occurrences over the High Seas Involving Military Aircraft in 2014' (EASA, 14 April 2015); 'China and Japan Trade Barbs after Close Encounter over South China Sea' (The Guardian, 25 May 2014), available at <www.theguardian.com/world/2014/may/25/china-japan-jets-south-china-sea> accessed 28 June 2015; 'South China Sea: China's Navy Told US Spy Plane Flying over Islands to Leave 'Eight Times'', CNN Reports' (Australian Broadcasting Corporation, 22 May 2015), available at <www.abc.net.au/news/2015-05-22/us-spy-plane-in-south-china-sea-warned-to-leave-by-china/6488690?nw=0> accessed 28 June 2015; 'US Fighter Planes Intercept Russian Combat Jets off Alaska, Sweden Protests 'Violation'' (Deutsche Welle, 20 September 2014), available at <www.dw.com/en/us-fighter-planes-intercept-russian-combat-jets-off-alaska-sweden-protests-violation/a-17936231> accessed 2 May 2015.
 - 16 See Section 2.2.2.1 for a discussion of what constitutes national airspace in accordance with the Chicago Convention, and what subsequently constitutes international airspace. See also, Section 2.2.1 (n 83) for discussion of territory that does not fit into one of these categories.
 - 17 This issue will not be addressed further in the context of this research because it did not involve claims that the coastal States were permitted to prohibit or restrict the operation of the aircraft.
 - 18 The name 'South China Sea' will be used throughout this study as the term most commonly used for this maritime area in English.
 - 19 See Section 2.4 for a detailed discussion on the distinction between civil aircraft and State aircraft, and the implication of this for the application of international civil aviation law. Throughout this study, the term 'aircraft' will be used to refer to both State and civil aircraft in those situations where the distinction is not relevant. See also, Section 1.3.1 for a discussion of the importance of the distinction to this study.

of its specific rights and jurisdiction as provided under international law. Such concepts are not static and, as will be evident, the development of customary international law plays a significant role in shaping the answers to these questions.

1.2 SCOPE OF THE STUDY

1.2.1 Central research question

The central research question of this study is: What jurisdiction does a coastal State have over the operation of the aircraft registered in other States in international airspace adjacent to its coast?

Freedom of overflight, like the freedom of the high seas in general, is a fluid concept. Whilst being a foundational principle of the law of the sea, it is broad and difficult to define. O'Connell, discussing the difficulty of defining the legal characterisation of the high seas as a concept itself, argues that, in the vagueness of the freedoms it is the practice of States that gives meaning to them: '[a]t any particular moment the concept of the high seas will embody a balance achieved by State practice between the freedom of the seas and national jurisdiction'.²⁰ As he explains, it is determining this balance at a given time that allows for an understanding of the scope of each. In this sense, this proposition is not an answer to what the scope of the freedom is, or consequently, what the rights of the coastal State are, but rather a methodology for confronting the question.²¹ It is this approach that has been taken to this research. Freedom of overflight is in large part uncontroversial: an international network of civil aircraft makes use of the ocean space every day, as do State aircraft engaged in transport and military exercises and, considering the volume of traffic, disputes are relatively few. The events in the media, referred to above, though, and subsequent research on freedom of overflight and the exercise of coastal State jurisdiction in international airspace, revealed three key aspects of coastal State jurisdiction in international airspace where this balance with freedom of overflight is currently unclear.

First, China's opposition to US aircraft flying in international airspace in the South China Sea over its artificial islands, a matter that is ongoing but which gained prominence in 2015, instigated research into whether safety zones over artificial islands, installations and structures – termed 'maritime constructions' in the context of this research – could be legitimately imposed in the airspace above the construction in addition to on

20 DP O'Connell, *The International Law of the Sea – Vol II* (OUP 1982) 796.

21 *ibid.*

the surface of the sea around them.²² UNCLOS expressly provides that a coastal State, in its EEZ and on its continental shelf, has the right to establish safety zones around its maritime constructions,²³ but is silent on whether they can extend to the airspace above the constructions. The facts of this case are used as a basis from which to examine the law in this area from a hypothetical perspective: China did not attempt to restrict overflight on the basis of safety zones. The artificial islands at the centre of the overflight dispute between China and the US are a useful starting point from which to analyse the law on safety zones because their legal status was addressed in the 2016 decision, *In the Matter of the South China Sea Arbitration (Philippines v. China)* ('*South China Sea Arbitration*').²⁴ The decision provided clarity on whether human modification of a maritime feature could change the status of that feature, and thus, the nature of the rights associated with it. As will be further discussed in Section 1.3.2, this helps to inform when safety zones apply around maritime constructions. The examination of the legitimacy of extending these safety zones to the airspace follows on from this.

Secondly, the Gulf States' ban on Qatari-registered aircraft from international airspace within their flight information regions (FIRs),²⁵ introduced in 2017, led to the question of what in international civil aviation law, if anything, prohibits a State from discriminating against the aircraft of another State in this airspace. As will be addressed in Chapter 2,²⁶ freedom of overflight is understood to provide all States with the right to use international airspace, consistently with international law, and therefore as prohibiting any State from precluding the aircraft of another State from operating in the airspace. It is presumably on this basis that flights through the portions of international airspace were quickly reinstated in the case of the Gulf States' ban.²⁷ International civil aviation law, on the other hand, despite providing the legal basis governing the coastal State's responsibility in international airspace within an FIR, provides no express non-discrimination principle in relation to this responsibility in terms of its application to international airspace.

Thirdly, the adoption by China of its air defence identification zone (ADIZ) in 2013 resulted in opposition from other States based on a number of features of the ADIZ, despite similar procedures for ADIZs imposed by other States.²⁸ ADIZs have no foundation in codified international law and serve as an example of the possible dynamic nature of freedom of overflight, on the basis they were to be deemed legitimate. If ADIZs are

22 This study does not consider overflight over the number of natural islands in the South China Sea beyond the general discussion on the law applying to overflight in national airspace.

23 UNCLOS, Article 60(4).

24 P.C.A. Case No 2013-19, 12 July 2016.

25 See Section 4.2.1.1 for the definition of FIR.

26 See specifically, Sections 2.7.1 and 2.7.3.2.

27 See Section 4.2.2.2.

28 See Section 4.3.1.

accepted as customary international law, they represent a significant shift in the international community's acceptance of coastal State jurisdiction in international airspace. The legality of ADIZ has been debated for decades and this study does not aim to revisit and examine each ground of justification. Instead, the purpose here is to consider the legality of ADIZ in light of the most prominent justifications that represent potentially significant diversions in the understanding of States of freedom of overflight moving forward.

This study approaches its central research question from the perspective of these three matters, as the areas in the law that have been identified as involving ambiguity in respect to the balance between coastal State jurisdiction and freedom of overflight. The study also, briefly, considers coastal State jurisdiction in international straits and archipelagic sea lanes as maritime areas which, whilst constituting national airspace, involve aspects of regulation more akin to international airspace. As mentioned at the beginning of this chapter, coastal States have demonstrated a tendency to assert jurisdiction over increasingly greater maritime areas adjacent to their coasts. The three cases of expanding coastal State jurisdiction identified above, which form the basis of this study, each demonstrate how this 'creeping jurisdiction' encroaches upon the rights of other States and specifically, in these cases, on freedom of overflight.

On a final, terminological note, jurisdiction in this study is used in the context of both prescriptive jurisdiction, or the capacity of the State to make law, and enforcement jurisdiction, the capacity of the State to ensure compliance with the law.²⁹ The terms 'jurisfaction' and 'jurisaction', coined by Cheng, are commonly used in air and space law.³⁰ The term 'jurisaction' is broader than the concept of enforcement jurisdiction though and refers to the ability of the State 'to exercise the functions of a State' as a whole; it encompasses the 'State's power in international law to set up machinery to make, implement and enforce, and physically to make, implement and enforce its laws, judicial pronouncements and other legally binding decisions'.³¹ This study will use the more widely employed terms 'prescriptive' and 'enforcement' jurisdiction.

1.2.2 Aims and objectives of the study

Fragmentation of the law in this area has led to consideration of matters impacting overflight in international airspace from the perspective of international civil aviation law or the law of the sea, but rarely through a combined lens. With a focus on these two areas of law, and with consider-

29 Malcolm Shaw, *International Law* (6th edn, CUP 2008) 645-46.

30 Bin Cheng, 'Crimes on Board Aircraft' (1959) 12 *Current Legal Problems* 177, 177-202.

31 Bin Cheng, 'International Responsibility and Liability for Launch Activities' (1995) 20(6) *A&SL* 297, 301. See also, Bin Cheng, 'The Extra-Territorial Application of International Law' (1965) 18 *Current Legal Problems* 132, 136.

ation to their place in public international law more broadly, the objective of this study is to present a comprehensive analysis of the legality of contemporary attempts by coastal States to exercise jurisdiction in international airspace adjacent to their coasts over aircraft registered in other States in cases where the legal basis for the exercise of that jurisdiction is ambiguous. In doing so, the study aims to determine the contemporary understanding of what freedom of overflight entails by establishing the legitimate limitations to it. As set out in the International Law Commission's (ILC) 2006 report on the fragmentation of international law,

[a]ny technical rule that purports to 'develop' the freedom of the high seas is also a limitation of that freedom to the extent that it lays down specific conditions and institutional modalities that must be met in its exercise'.³²

Through its examination of specific instances of coastal State limitations to overflight, it is hoped that this study will also be able to serve as a basis from which to examine the actions of other States engaged in similar practices in future in an attempt to provide greater legal certainty regarding the right of overflight and of coastal State actions in respect to overflight, in international airspace.

The extension of coastal State jurisdiction is often underpinned by political motives. Where a group of States – in this case, coastal States – have an incentive to act in a concerted manner for their own benefit, and to the disadvantage of other States – States whose rights and freedoms are consequently curtailed – the actions must be closely scrutinised under international law. This study will consider whether the exercise of coastal State jurisdiction it examines is consistent with international law and, in instances where this is not found to be the case, whether the law seems likely to develop to support the specific extensions of coastal State jurisdiction.

Although this study is approached from the perspective of overflight, its relevance extends beyond aircraft. In particular, the legal issues discussed in the context of Chapter 3 are not restricted to maritime areas but also have consequences for the development of the legal framework governing activities in outer space: the US recently proposed the establishment of safety zones around areas of space activity as part of its Artemis programme, which restricts the ability of other space actors to operate in the vicinity

32 'Report of the Study Group on Fragmentation of International Law: Difficulties arising from the Diversification and Expansion of International Law', finalised by Martti Koskenniemi (ILC 58th Session, 13 April 2006) 22.

of the activity.³³ This situation raises similar questions on conflicting rights to those that arise in relation to safety zones around maritime constructions. Chapter 3 is also relevant to the development of space activities in respect to the launch of rockets from mobile maritime platforms, that is, from maritime constructions. These platforms have the advantage of being able to be positioned in equatorial areas which enables more efficient access to the geostationary orbit,³⁴ and they also minimise the risk to third parties on the ground associated with land launches.³⁵ The first orbital-class rocket was launched from an ocean platform in 1999.³⁶ China recently launched its first rocket from a maritime platform³⁷ and SpaceX has announced plans to move away from land-based launches in favour of launches from maritime platforms.³⁸ In this sense, the analysis in this study is more far-reaching than the specific instances that it addresses.

1.3 STRUCTURE OF THE ANALYSIS

1.3.1 Part I

The first part of this study consists of one chapter – Chapter 2 – which serves as a preliminary chapter: it provides the legal framework for the analysis that forms the remainder of the study. The two key treaties that are

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- 33 Leonard David, 'NASA Proposes New Rules for Moon-Focused Space Rules' (Scientific American, 21 May 2020), available at <www.scientificamerican.com/article/nasa-proposes-new-rules-for-moon-focused-space-race/> accessed 3 June 2020; Joey Roulette, 'Trump Administration Drafting 'Artemis Accords' Pact for Moon Mining' (Reuters, 5 May 2020), available at <www.reuters.com/article/us-space-exploration-moon-mining-exclusi/exclusive-trump-administration-drafting-artemis-accords-pact-for-moon-mining-sources-idUSKBN22H2SB> accessed 3 June 2020.
 - 34 This is the ideal orbit for communication and meteorological satellites because it enables them to maintain their position relative to the Earth's surface (NASA Science, 'Basics of Spaceflight: Planetary Orbits', available at <solarsystem.nasa.gov/basics/chapter5-1/> accessed 3 June 2020).
 - 35 See, respectively, Louis de Gouyon Matignon, 'Sea Launch and Launching States' (Space Legal Issues, 19 June 2019), available at <www.spacelegalissues.com/sea-launch-and-launching-states/> accessed 23 June 2020; Dave Mosher, 'Elon Musk: 'SpaceX is Building Floating, Superheavy-Class Spaceports' for its Starship rocket to reach the moon, Mars, and Fly Passengers around Earth' (Business Insider, 17 June 2020), available at <www.businessinsider.nl/elon-musk-spacex-starship-ocean-spaceports-offshore-engineer-job-posting-2020-6?international=true&r=US> accessed 23 June 2020.
 - 36 Jeff Foust, 'Sea Launch 'Frozen' after Ships Moved to Russia' (Space News, 24 April 2020), available at <spacenews.com/sea-launch-frozen-after-ships-moved-to-russia/> accessed 3 June 2020; de Gouyon Matignon (n 35).
 - 37 Rui C Barbosa, 'China Conducts First Sea Launch Mission with Long March 11 Launch of Seven Satellites' (NASASpaceflight.com, 5 June 2019), available at <www.nasaspaceflight.com/2019/06/china-first-sea-launch-long-march-11-seven-satellites/> accessed 3 June 2020.
 - 38 Mosher (n 35).

involved in the study³⁹ are the Chicago Convention and UNCLOS. Chapter 2 describes the concept of the right of overflight which, in the context of international civil aviation law, refers to the privilege granted to a State for its aircraft to operate across the territory of the State making the grant, without landing, on a scheduled air service or non-scheduled flight.⁴⁰ Over international airspace, in contrast, the right of overflight has its basis in the customary international law principle of freedom of overflight, as codified under Article 87(1)(b) UNCLOS, and all States, coastal or landlocked enjoy this freedom. The freedom also applies in the EEZ.⁴¹

Chapter 2 is divided into two main parts. The first establishes the regime for overflight over sovereign territory. This is further divided into two key parts, as dictated by the legal framework that applies to them: civil aircraft, which fall within the scope of the Chicago Convention and its annexes, and State aircraft, which fall outside its scope. The distinction between these two groups of aircraft is not unambiguous, but the Chicago Convention provides that aircraft used in police, military and customs are considered to be State aircraft.⁴² The chapter will address the right of overflight in respect to, in turn, civil aircraft and State aircraft.⁴³

The second part of Chapter 2 sets out the various maritime areas that are recognised under UNCLOS with implications for overflight. It establishes the legal foundation and fundamental rights associated with these areas, as a basis for the chapters to follow. In doing so, this part also introduces the interaction between international civil aviation law and UNCLOS, which sits at the heart of the study. Whilst freedom of overflight exists in international airspace, it does not mean that overflight is unregulated. In contrast, the regulation of overflight is necessary to ensure the safety of the aircraft to which the regulation applies, the safety and security of other users of the maritime area, including other aircraft, and to ensure the coastal State is able to exercise its rights in the area.⁴⁴ Freedom of overflight applies to both State and civil aircraft and so this part does not distinguish between the

39 See, Appendix to Chapter 1: List with basic data on the principal treaties, for a list of the core treaties applied in this study and principal information about them as relevant to this research.

40 Scheduled services and non-scheduled flights are discussed in Section 2.3.3.

41 UNCLOS, Article 58(1). See Sections 2.7.1 and 2.7.3.2 for further discussion on the legal basis of freedom overflight and, in the latter section, for the implications of the EEZ for the application of international civil aviation law.

42 See Section 2.4.2.

43 This research does not address non-State actors, which fall outside the legal framework of the Chicago Convention and UNCLOS.

44 See, for instance, Thomas Gammeltoft-Hansen and Tanja Aalberts, 'Search and Rescue as a Geopolitics of International Law' in Thomas Gammeltoft-Hansen and Tanja Aalberts (eds), *The Changing Practices of International Law* (CUP 2018) 190: '...despite its name, the *Mare Liberum* is hardly a space devoid of regulation. The law of the sea imposes a complex set of norms on the maritime environment, charting out a web of intersecting rights and obligations for both states and private actors'.

two. At the same time however, State aircraft are, in general,⁴⁵ not subject to the rules in the annexes to the Chicago Convention that apply over the high seas that are discussed in this part, given that they fall outside the scope of the Convention. Leaving aside the applicable international law, the distinction between State and civil aircraft is relevant to this study because, as indicated above,⁴⁶ the instances of coastal State interference with overflight in international airspace predominantly involve State aircraft being targeted. There are a couple of main reasons for this, taking into account both the intention of the coastal State and of the State of registration of the aircraft operating in the international airspace. As to the former, attempts to extend coastal State jurisdiction to regulate overflight tend to be for the purpose of, at least explicitly, protecting national security and State aircraft, specifically military aircraft, pose the greatest threat in this respect. This is particularly relevant to the second part of Chapter 4, addressing ADIZs.

States also assert jurisdiction beyond their national airspace to support territorial claims. The legitimacy of these territorial claims will not be explored in this study but it is mentioned here to demonstrate the complex and often political undercurrent of the coastal State actions that will be addressed. This is not to disregard other coastal State intentions, which will be addressed throughout the study. Importantly for Chapter 3, a State may attempt to impose restrictions or prohibitions on overflight, particularly at lower altitudes, in order to protect the safety of its maritime constructions. As will be seen in Chapter 4, a coastal State responsible for international airspace within its FIR will also make decisions affecting the movement of aircraft registered in other States to ensure the safety and efficiency of operations in that airspace.

1.3.2 Part II

The second part of the study comprises three chapters – Chapters 3 to 5 – which form the central analysis.

Chapter 3 considers the question of whether safety zones may be established in the airspace over maritime constructions in the EEZ and on the continental shelf. Safety zones are well accepted in the law of the sea as mechanisms for the protection of maritime constructions. This chapter begins by establishing the legal framework under UNCLOS applying to safety zones in a State's EEZ or on its continental shelf, including the definitions and uses of the maritime constructions to which they are relevant. Safety zones are strictly regulated under UNCLOS, including the limitation of their breadth to no more than 500 metres from the construction, unless otherwise permitted. There is no express provision allowing the State to establish them in the airspace. In establishing the maritime constructions to

45 See Section 2.4.3 for details of this qualification, and also Section 4.3.5, specifically in respect to interception of civil aircraft.

46 See Section 1.1.

which safety zones apply, the chapter addresses the *South China Sea Arbitration*. In this case, the Arbitral Tribunal established in accordance with Annex VII UNCLOS and serviced by the Permanent Court of Arbitration (PCA), henceforth referred to in respect to this case as ‘the Tribunal’, confirmed the legal status of the relevant artificial islands constructed using natural maritime features, hence clarifying the constructions to which the question of safety zones is relevant.

The chapter then proceeds to interpret the provisions of UNCLOS applying to safety zones in light of their drafting history and in consideration of both State practice and academic opinion, to ascertain the scope of the provisions. The chapter addresses whether the extension of safety zones to the airspace above maritime constructions may be justified using existing provisions regarding air traffic management (ATM) under international civil aviation law and whether, this not being the case, coastal State jurisdiction in the airspace could amount to an unjustified interference with freedom of overflight. Regardless of its consistency with existing international law, the right to do so may develop as customary international law. In this case, the extension of safety zones to the airspace above maritime constructions may exist in parallel with the safety zone provisions under UNCLOS or may reflect the States’ interpretation of the UNCLOS provisions; each of these circumstances is explored. There has been considerable discussion in the past on the jurisdiction over airspace above artificial islands facilitating aircraft operations. Without revisiting this analysis in detail, this chapter briefly examines its consistency with the analysis in the previous sections of the chapter.

Finally, this chapter addresses the extension of coastal jurisdiction over international airspace on the basis of human modification in the context of land fortification and reclamation. In doing so, it considers the distinction in the law between human modification amounting to a maritime construction – with its corresponding safety zone – and human modification amounting to an extension of a State’s coastline and therefore, possibly, of the State’s national airspace. Whilst maritime constructions do not generate maritime zones, state practice indicates that land reclamation leads to a change in the delimitation of the territorial sea and thus, may have implications for the delimitation of national and international airspace. These questions are particularly relevant given rising sea levels. This section is briefly discussed as it does not form part of the central analysis but rather, complements it by demonstrating that human modification does have the capacity to shift airspace boundaries.

Chapter 4 examines, in two parts, FIRs and ADIZs. In particular, it considers whether a State is, under international civil aviation law, prohibited from discriminating in the provision of air traffic services (ATS) in international airspace and, secondly, whether ADIZs are consistent with international law. The *first* part of the chapter, addressing FIRs, establishes the legal framework governing the provision of ATS in international airspace, which is the purpose for which airspace is divided into FIRs. In doing so,

it defines the legal characteristics of an FIR and the scope of responsibility of the coastal State within its boundaries. The chapter then sets out the relevant facts of the case involving the Gulf States' prohibition of Qatari-registered aircraft in their FIRs, as a foundation for the examination of a possible implied principle of non-discrimination in the provision of ATS in international airspace, which the chapter subsequently turns to examine. In the absence of an express principle of non-discrimination in Annex 11, as the foundation for FIR responsibility, it takes a step back to consider its context within international civil aviation law more broadly, in particular considering the application and purpose of the principle of non-discrimination under the Chicago Convention to aspects of air navigation in national airspace. This first part of the chapter ultimately questions whether, on the basis of the explicit application of the principle in the regulation of air navigation aspects in national airspace, it can be argued that the principle is implied in the rules governing FIR responsibility in international airspace.

The *second* part of Chapter 4, addressing the legality of ADIZs, consists of three main elements. The first introduces ADIZs, providing a brief overview of their development and of the most common procedures associated with them. The second examines a number of legal bases that are used to justify ADIZs. These bases have been chosen both for their prominence in ADIZ discourse and their potentially significant impact on the balance between coastal State jurisdiction and freedom of overflight beyond ADIZs in the case that they were to be accepted as a legitimate legal basis for ADIZs. This part of the chapter also considers whether the right to establish ADIZ may have developed into customary international law. Up until this point, the chapter considers the legality of ADIZs in terms of whether States are able to rely on a legal basis under international law for their exercise of prescriptive jurisdiction in establishing the zones. The chapter here undergoes a shift, examining whether, in light of *The Case of S.S. Lotus (France v. Turkey)* ('*Lotus Case*'),⁴⁷ the question is rather whether States are prohibited under international law from establishing ADIZs. The enforcement of ADIZ procedures within international airspace is dealt with separately on the basis of extra-territorial *enforcement* jurisdiction unequivocally requiring a permissive rule in international law.

Chapter 5 complements the previous chapters in addressing, in turn, transit passage through international straits and archipelagic sea lanes passage. The application of both of these passage regimes under UNCLOS results in conflicting views between, on the one hand, the coastal States to whose national airspace the passage applies and, on the other, the airspace users passing through the lanes. This chapter will examine the inconsistent application of the regimes, both on the basis of reservations by States to the provisions under UNCLOS or as a result of ambiguity in the law, in the case of archipelagic sea lanes passage.

47 (1927) P.C.I.J. Series A, no. 10.

Chapter 6 reflects on the previous chapters of the study in light of the central research question and brings the different elements of the study together to provide the resulting conclusions and recommendations.

1.4 METHODOLOGY

This study involves classic doctrinal research. It is the result of normative analysis of the Chicago Convention and its annexes, and UNCLOS, together with public international law more broadly as the body of law within which these conventions function. It takes a positivist and, to a certain extent, formalist, approach to international law.

The interaction between UNCLOS and the Chicago Convention is unusual in that it results naturally on the basis of the two bodies of law governing the same physical space – maritime airspace – but there was little cross-input from the perspective of air law in the process of the codification of UNCLOS. Whilst ICAO was present at the Third UN Conference on the Law of the Sea between 1973 and 1982, at which UNCLOS was adopted, it did not contribute to the process:

‘during the more than nine years of deliberations at the Third United Nations Conference on the Law of the Sea, ICAO has not formulated or addressed to the Conference any specific policy with respect to international civil aviation to be taken into account in the drafting of a new convention’.⁴⁸

At first this seems curious considering the importance of maritime areas to international civil aviation. Beyond the principle of freedom of overflight though, UNCLOS provides very few explicit provisions related to aviation. It is perhaps on this basis that the ICAO representatives were removed from the negotiations, in that the direct subject matter was largely outside the scope of their competence.⁴⁹ As will be seen in Chapter 3, at least one State representative involved in the law of the sea conferences likewise, and for the same reason, demonstrated a reluctance to engage in negotiations for provisions governing aviation.⁵⁰ Together, the two conventions govern the same physical space but there are many aspects of governance that have developed, and continued to develop, externally to the conventions, whether through the annexes to the Chicago Convention, or State practice interpreting the conventions or otherwise contributing to the law governing

48 ICAO *Secretariat Study on Agenda Item 5* (n 12) 244.

49 As will be addressed in Chapter 5, provisions regarding overflight in the archipelagic sea lanes regime are designed primarily for State aircraft, which are outside the scope of the Chicago Convention and so, even in this case where aviation is directly affected, it is not within the scope of ICAO’s competence.

50 See Section 3.3.1.

international airspace. In any case, it is with this in mind that these conventions are considered.

In terms of the approach to treaty interpretation taken in this study, it follows the customary international rules⁵¹ set out in Articles 31 and 32 of the Vienna Convention on the Law of Treaties⁵² which the ILC clarifies, 'must be read together as they constitute an integrated framework for the interpretation of treaties'.⁵³ Article 31, which provides the 'general rule of interpretation' requires a treaty to be '...interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose'.⁵⁴ Article 32 allows for the consideration of 'supplementary means of interpretation', in the case that the meaning resulting from the interpretation under Article 31 is 'ambiguous or obscure' or 'manifestly absurd or unreasonable'.⁵⁵ These supplementary means, as indicated under Article 32, frequently involve recourse to the drafting materials of the treaty, commonly referred to as the *travaux préparatoires*. The purpose of Article 32 is restricted to circumstances where clarification of the meaning of the terms is required beyond the application of the rules under Article 31; it is well accepted that 'there is no occasion to have regard to preparatory work if the text of a convention is sufficiently clear'.⁵⁶

There are three broad approaches generally recognised to treaty interpretation: textual or objective, purposive or teleological, and subjective or intention-based.⁵⁷ Article 31 itself prioritises a literal interpretation, with 'the ordinary meaning to be given to the terms of the treaty' as the starting point for interpretation.⁵⁸ The International Court of Justice (ICJ), as the primary judicial body of the UN, has also made clear through its judgments

51 *Arbitral Award of 31 July 1989 (Guinea-Bissau v. Senegal)*, Judgment, I.C.J. Rep. 1991 (Nov. 12), p. 53, p. 70 para. 48; G.A. Res. 202, U.N. GAOR, 73rd Sess., Supp. No. 49, vol. 1, at 1118, U.N. Doc. A/73/202 (vol. 1) (2018) 1119; Panos Merkouris, 'Introduction: Interpretation is a Science, is an Art, is a Science' in Malgosia Fitzmaurice, Olufemi Elias and Panos Merkouris (eds), *Treaty Interpretation and the Vienna Convention on the Law of Treaties: 30 Years On* (Martinus Nijhoff Publishers 2010) 5.

52 Vienna Convention on the Law of Treaties (Vienna, 23 May 1969) 1155 U.N.T.S. 331, entered into force 27 Jan. 1980 ('Vienna Convention on the Law of Treaties').

53 YILC (2013) Vol. II, Part 2, 18.

54 Vienna Convention on the Law of Treaties, Article 31(1).

55 *ibid* Article 32(a) and (b).

56 *The Case of S.S. Lotus (France v. Turkey)* (1927) P.C.I.J. Series A, no. 10, p.16.

57 YILC (1966) Vol. II, 218. See also, GG Fitzmaurice, 'The Law and Procedure of the International Court of Justice: Treaty Interpretation and Certain Other Treaty Points' (1951) 28 Brit YB Int'l L 1, 1; Irina Buga, *Modification of Treaties by Subsequent Practice* (OUP 2018) 80-81.

58 Jean-Marc Sorel and Valérie Boré Eveno, 'Article 31 Convention of 1969' in Olivier Corten and Pierre Klein (eds), *The Vienna Conventions on the Law of Treaties: A Commentary (Vol I)* (OUP 2011) 829.

that treaty interpretation is based on the primacy of the text of the treaty.⁵⁹ In practice, the methods of interpretation are not distinct though: the literal and teleological approaches are means of establishing the intention of the drafters at the time of the treaty's conclusion⁶⁰ and, as set out in Article 31(1), the ordinary meaning of the terms of a treaty are to be considered in light of the object and purpose of the treaty, necessarily requiring reliance on the teleological approach in undertaking a textual approach. The general rule of interpretation is not a checklist,⁶¹ but is rather formed of a number of aspects to be taken into account, as determined by the circumstances, resulting in an holistic – or integrated – approach to the interpretation of the terms, reiterating the statement of the ILC, above.⁶² In this sense, Article 31 has been described as 'a true example of compromise': '[t]he objective is to find an interpretation that is simultaneously obvious (the ordinary meaning of the terms), logical (an *acte clair*), and effective (a useful effect)'.⁶³ The pursuit of these objectives through an integrated application of Article 31 is echoed by Gardiner, who emphasises the danger of focusing too much on a particular method of interpretation at the expense of applying the rules as set out in the Vienna Convention on the Law of Treaties.⁶⁴

This study favours an holistic approach to treaty interpretation in that it gives primacy to the ordinary meaning of the terms of the treaty to the extent that they are taken as the starting point for interpretation but, consistent with the rules of interpretation under Article 31, and Article 32 where necessary, it determines the meaning of the text in consideration of its place within the treaty more broadly, as well as in consideration of the other sources relevant to its interpretation, as applicable, including through the use of systemic integration.⁶⁵

59 Oliver Dörr, 'Article 31 General Rule of Interpretation' in Oliver Dörr and Kirsten Schmalenbach (eds), *Vienna Convention on the Law of Treaties: A Commentary* (2nd edn, Springer 2018) 580, with reference to, *Territorial Dispute (Libyan Jamahiriya/Chad)*, Judgment, I.C.J. Rep. 1994 (Feb. 3), p. 6, p. 22 para. 41; and, *Legality of the Use of Force (Serbia and Montenegro v. Belgium)*, Judgment, I.C.J. Rep. 2004 (Dec. 15), p. 279, p. 318 para. 100; See also, Buga (n 57) 80: '...the textual or objective method, which emphasizes the literal meaning of the text, rooted in Article 31(1) VCLT, ... is favoured by the ICJ'; Sorel and Boré Eveno (n 58) 829: 'In conformity with its line of conduct privileging textual interpretation, the ICJ has accorded minimal space for the intention of the parties'.

60 Richard Gardiner, *Treaty Interpretation* (2nd edn, OUP 2015) 9.

61 *ibid* 157 and 10, respectively.

62 In other words, Article 31(1) consists of 'three separate principles... for a single combined operation taking account of all named elements simultaneously' (Dörr, 'Article 31 General Rule of Interpretation' (n 59) 580).

63 Sorel and Boré Eveno (n 58) 808.

64 Gardiner (n 60) 9.

65 For the definition of systemic integration and for a more detailed description of how it relates to this study, see 2.2.2.1.

1.5 APPENDIX TO CHAPTER 1

List with basic data on the principal treaties

United Nations Convention on the Law of the Sea (Montego Bay, 10 Dec. 1982) 1833 U.N.T.S. 3, 21 I.L.M. 1261 (1982), *entered into force* 16 Nov. 1994 ('UNCLOS')

Number of parties: 167 States and the European Union

Provisions reflecting customary international law that are central to this research: the 12nm breadth of the territorial sea under Article 3 and freedom of overflight under Articles 87(1)(b) and 58(1)

Vienna Convention on the Law of Treaties (Vienna, 23 May 1969) 1155 U.N.T.S. 331, *entered into force* 27 Jan. 1980 ('Vienna Convention on the Law of Treaties')

Number of parties: 116 States

Provisions reflecting customary international law that are central to this research: the principle of *pacta sunt servanda* under Article 26, the general rule of interpretation under Article 31 and supplementary means of interpretation under Article 32

Charter of the United Nations (San Francisco, 26 Jun. 1945) 1 U.N.T.S. 16, *entered into force* 24 Oct. 1945 ('UN Charter')

Number of parties: 193 States

Provisions reflecting customary international law that are central to this research: the prohibition on the use of force under Article 2(4) and the right of self-defence under Article 51

Chicago Convention on International Civil Aviation (Chicago, 7 Dec. 1944) 15 U.N.T.S. 295, 61 Stat. 1180, T.I.A.S. No. 1591, *entered into force* 4 April 1947, *as amended by* 1175 U.N.T.S. 297, *entered into force* Oct. 1998 ('Chicago Convention')

Number of parties: 193 States

Provisions reflecting customary international law that are central to this research: Article 1 recognising a State's sovereignty over the airspace above its territory and, linked to this, Article 2 recognising that the territory of a State includes the land areas and territorial waters under its sovereignty

International Air Services Transit Agreement (Chicago, 7 Dec. 1944) 84 U.N.T.S. 389, *entered into force* 30 Jan. 1945 ('Transit Agreement')

Number of parties: 133 States

Provisions reflecting customary international law that are central to this research: None

Convention relating to the Regulation of Aerial Navigation (Paris, 13 Oct. 1919) 11 L.N.T.S. 173, *entered into force* 31 May 1920 ('Paris Convention')

Number of parties: 33 States at the time of the signing of the Chicago Convention

NB: This convention was superseded by the Chicago Convention