



اللجنة القانونية – الدورة الأربعون

(مونتريال، ٢٦ إلى ٣٠/١٠/٢٠٢٦)

البند رقم ٢ من جدول الأعمال: النظر في برنامج العمل العام للجنة القانونية

الجوانب القانونية الدولية لعمليات الطائرات غير المأهولة (بدون طيار)

واستيعابها في الطيران المدني

(مقدمة من الأمانة العامة)

١- الخلفية العامة

١-١ بناءً على اقتراح من الدورة الأربعين للجمعية العمومية (مونتريال، ٩/٢٤ إلى ١٠/٤/٢٠١٩) بإنشاء فريق تابع للأمانة العامة يكون بمثابة واجهة للتفاعل بين العمل القانوني والعمل الفني للمنظمة فيما يخص الطائرات بدون طيار، أنشئت مجموعة الدراسة التابعة للأمانة العامة والمعنية بالمسائل القانونية المتصلة بالطائرات غير المأهولة (SSG-LIPA) في فبراير ٢٠٢٠. وقررت مجموعة الدراسة في اجتماعها الأول الذي انعقد في ١٠/٨/٢٠٢١ إنشاء مجموعتين فرعيتين، هما "المجموعة الفرعية المختصة بالامتثال لاتفاقية شيكاغو" (SSG-LIPA-CCSG) و"المجموعة الفرعية المختصة بالمسؤولية القانونية والأمن" (SSG-LIPA-LSSG). وفي الاجتماع الرابع لمجموعة الدراسة، الذي عُقد يومي ٣ و٤/٦/٢٠٢٥، تم تشكيل مجموعة فرعية ثالثة، وهي المجموعة الفرعية المختصة بالمصطلحات (SSG-LIPA-TSG).

٢- أنشطة المجموعة الفرعية المختصة بالامتثال لاتفاقية شيكاغو منذ الدورة التاسعة والثلاثين للجنة القانونية

١-٢ عقدت المجموعة الفرعية المختصة بالامتثال لاتفاقية شيكاغو (CCSG)، وقررت العمل المنشأتان في إطارها، ثمانية اجتماعات على الإنترنت خلال عام ٢٠٢٥ وسبعة اجتماعات خلال عام ٢٠٢٦.

٢-٢ تناولت المجموعة الفرعية مسألة انطباق أحكام اتفاقية شيكاغو على الطائرات غير المأهولة (بدون طيار)، لا سيما فيما يتعلق بالعمليات في المجال الجوي الدولي ("أعالي البحار"). ونظراً لتزايد نشاط الطائرات غير المأهولة خارج إطار نُظُم الطائرات الموجهة عن بُعد (RPAS) المنصوص عليه في الجزء الرابع من الملحق السادس، والمخاوف المتعلقة بالسلامة المرتبطة بذلك، اقترحت المجموعة بعض السبل القانونية التي أوصت الأمانة العامة بدراستها لوضع تدابير مؤقتة محتملة لمعالجة الشواغل الملحة سواء القانونية أو تلك المتعلقة بالسلامة، الناشئة عن عمليات الطائرات غير المأهولة فوق أعالي البحار. وقد أيدت مجموعة الدراسة المعنية بالمسائل القانونية المتصلة بالطائرات غير المأهولة (SSG-LIPA) هذه التوصيات واعتمدتها خلال اجتماعها الرابع الذي عُقد يومي ٣ و٤/٦/٢٠٢٥، وأحالتها إلى إدارة الملاحة الجوية بالإيكاو. كما ناقشت الدورة الثانية والأربعون للجمعية العمومية (مونتريال، من ٩/٢٣ إلى ١٠/٣/٢٠٢٥) مسألة أعالي البحار وأقرت بضرورة إيجاد حل عاجل لها، وأحاطت علماً بالعمل الجاري الذي تقوم به مجموعة الدراسة في هذا الصدد.

٣-٢ ومنذ انعقاد الاجتماع الرابع لمجموعة الدراسة (SSG-LIPA/4)، قامت المجموعة الفرعية المختصة بالامتثال لاتفاقية شيكاغو بتحليل الاتفاقية لتحديد المسائل القانونية الناشئة عن تطبيق أحكامها وتفسيرها و/أو تنفيذها فيما يتعلق بعمليات الطائرات غير المأهولة، واستطلاع الوسائل المقبولة قانوناً لتحقيق الغرض المقصود من المتطلبات الواردة في أحكامها، حسب الاقتضاء. وتتضمن هذه الورقة، في مرفقها، نتائج التحليل الذي أجرته مجموعة الدراسة لبعض المواد المختارة من اتفاقية شيكاغو، والتي أقرتها المجموعة بأكملها خلال اجتماعها الخامس (SSG-LIPA/5) في ٢٦/٥/٢٠٢٦. ويُعد المرفق وثيقةً متجددةً سيتم تحديثها مع استمرار عمل مجموعة الدراسة في إثراء تحليلها لاتفاقية شيكاغو.

٤-٢ ومتابعةً للتوصيات الموجهة إلى الأمانة العامة والتي وافقت عليها مجموعة الدراسة في اجتماعها الرابع بشأن عمليات الطائرات غير المأهولة فوق أعالي البحار، قدم الاجتماع الخامس لمجموعة الدراسة أيضاً إلى الأمانة العامة مزيداً من التوجيهات والتوضيحات، للنظر فيها، وذلك فيما يتعلق بالرخصة القانونية التي تمنحها الدول لعمليات الطائرات غير المأهولة فوق أعالي البحار خارج إطار نُظم الطائرات الموجهة عن بُعد بموجب أحكام الجزء الرابع من الملحق السادس، بما يتوافق مع المواد ٣١ و ٣٣ و ٣٩ من اتفاقية شيكاغو.

٣- أنشطة المجموعة الفرعية المختصة بالمسؤولية القانونية والأمن منذ الدورة التاسعة والثلاثين للجنة القانونية

١-٣ عقدت المجموعة الفرعية المختصة بالمسؤولية القانونية والأمن (LSSG)، وفرق العمل الثلاث المنشأة في إطارها، خمسة اجتماعات على الإنترنت خلال عام ٢٠٢٥ وخمسة اجتماعات خلال عام ٢٠٢٦.

٢-٣ وقد أتمت المجموعة الفرعية تقييماً منهجياً للمعاهدات الدولية الرئيسية المتعلقة بأمن الطيران (AVSEC) لتقييم مدى انطباقها على الطائرات غير المأهولة، وذلك باستخدام نموذج موحد لتقييم المعاهدات أعدته المجموعة الفرعية. وقد اعتمدت مجموعة الدراسة في اجتماعها الرابع نتائج التقييم.

٣-٣ وعقب انعقاد الاجتماع الرابع لمجموعة الدراسة، استكملت المجموعة الفرعية المختصة بالمسؤولية القانونية والأمن عملها المتعلق بمعاهدات أمن الطيران، إذ شرعت في تحديد الثغرات القانونية المحتملة في معاهدات أمن الطيران الحالية فيما يتعلق بالطائرات بدون طيار، ودراسة التدابير اللازمة لمعالجة تلك الثغرات. واستناداً إلى ترتيب أولويات معاهدات أمن الطيران الذي حددته المجموعة الفرعية، بدأت المجموعة تحليل الثغرات بدراسة "الاتفاقية بشأن الجرائم وبعض الأفعال الأخرى التي تُرتكب على متن الطائرات"، المبرمة في طوكيو في ١٤/٩/١٩٦٣، بما في ذلك صيغتها المعدلة بموجب "بروتوكول تعديل الاتفاقية بشأن الجرائم وبعض الأفعال الأخرى التي تُرتكب على متن الطائرات"، المبرم في مونتريال في ٤/٤/٢٠١٤. وقد أقرت مجموعة الدراسة في اجتماعها الخامس التحليل الذي أجرته المجموعة الفرعية لاتفاقية طوكيو لعام ١٩٦٣ وبروتوكول مونتريال لعام ٢٠١٤، ولا يزال تحليل الفجوات الذي تجريه المجموعة الفرعية فيما يتعلق بمعاهدات الأمن الجوي الأخرى جارياً.

٤- أنشطة المجموعة الفرعية المختصة بالمصطلحات منذ الدورة التاسعة والثلاثين للجنة القانونية

١-٤ أقرت مجموعة الدراسة في اجتماعها الرابع بضرورة مراجعة المصطلحات والتعاريف الواردة في المعاهدات، لا سيما فيما يتعلق بالطائرات غير المأهولة، لضمان الاتساق والتوافق في المصطلحات المستخدمة في وثائق الإيكاو، ولذلك أنشأت المجموعة الفرعية المختصة بالمصطلحات (TSG) لتحديد وتحليل المصطلحات والتعاريف الرئيسية في المعاهدات المتعلقة بالطائرات غير المأهولة، وذلك في محاولة لتحقيق التناسق والاتساق بين كافة الأنظمة القانونية والتنظيمية في الإيكاو.

٤-٢ وبدايةً، تقوم المجموعة الفرعية المختصة بالمصطلحات بمراجعة اتفاقية شيكاغو بحثاً عن المصطلحات التي تتطلب تقييماً، مع التركيز على المصطلحات الأساسية والمصطلحات ذات التأثير البالغ. وتضطلع المجموعة الفرعية بعملها بالتنسيق مع إدارة الملاحاة الجوية والهيئات الفنية بالإيكافو لتجنب ازدواجية الجهود وضمان الاتساق.

٥- الإجراء المعروض على اللجنة

٥-١ تُدعى اللجنة القانونية إلى النظر في المعلومات المقدمة في ورقة العمل هذه والإدلاء بأي تعليقات تراها مناسبة.

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APPENDIX**ANALYSIS OF SELECTED ARTICLES OF CHICAGO CONVENTION
IN RELATION TO PILOTLESS AIRCRAFT****FOREWORD**

This table was produced by the ICAO Secretariat Study Group on Legal Issues Related to Pilotless Aircraft (SSG-LIPA) and provides the Study Group's legal analysis of the articles of the *Convention on International Civil Aviation* (Chicago, 1944 – “the Chicago Convention”) in relation to “pilotless aircraft”, as referred to in Article 8 of the Convention (*i.e.*, any aircraft operated without a pilot *on board*, including remotely piloted aircraft (RPA) and fully autonomous systems). It must be understood that the Chicago Convention applies to all aircraft engaged in international air navigation, including all pilotless aircraft. However, the SSG-LIPA determined that many of the Convention's provisions do not give rise to issues of application, interpretation, or implementation vis-à-vis pilotless aircraft, and therefore do not require any specific legal analysis; such provisions are not included in the table. The table provides the SSG-LIPA's analysis of the articles of the Convention that do give rise to issues of application, interpretation, or implementation, as indicated. It is a living document that will be amended or updated as the Study Group's on-going work further informs its analysis of the Chicago Convention.

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Art.	Text	Interpretation	Implementation	Application	Analysis
8	<i>Pilotless aircraft</i> No aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a contracting State without special authorization by that State and in accordance with the terms of such authorization. Each contracting State undertakes to insure that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so controlled as to obviate danger to civil aircraft.	✓			As used in Article 8, the phrase “without a pilot” is understood to mean “without pilot <i>on board</i> the aircraft.”¹ The term “pilotless aircraft” thus relates to an aircraft without pilot on board the aircraft without regard to whether any other crew members are on board. With this said, no explicit definition of “pilotless aircraft” exists in the Chicago Convention. Using the term “unmanned aircraft”, Annex 7 (Standard 2.2) states that “an aircraft which is intended to be operated with no pilot on board shall be further classified as unmanned.” Although consistent with the drafters’ intent as reflected in historical materials, the prevailing decades-old definition of pilotless aircraft carries important legal implications for the future integration into controlled airspace of Remotely Piloted Aircraft, a category of pilotless aircraft which are piloted from remote pilot stations. The second sentence of Article 8 requires that each contracting State, including, for example, the overflown State, the State of the air navigation service provider, the State of the operator of the pilotless aircraft, and the State of Registry of the pilotless aircraft, must ensure that the flight of an aircraft without a pilot in regions open to civil aircraft “shall be so controlled as to obviate danger to civil aircraft”. The meaning of “the flight of such aircraft ... shall be controlled as to obviate the danger to civil aircraft” is not so obvious. The RPAS Manual characterizes this obligation as similar to the “due regard” obligation applicable to State aircraft, but giving “due regard” cannot amount to “control”. How the flight of the pilotless

¹ The text of Article 8 mirrors almost exactly the wording of Article 15 (2) of the Convention Relating to the Regulation of Aerial Navigation (1919 Paris Convention) as amended by the Protocol of 15 June 1929. Remotely controlled and uncontrolled (autonomous) aircraft were already in existence at the time of the First World War, being operated by both civil and military entities, and the Protocol relating to amendments to Articles 3,5,7,15,34,37,40,41 and 42 and to the final clauses of the Convention Relating to the Regulation of Air Navigation of October 13, 1919, done at Paris, June 15, 1929, notably modified Article 15, in pertinent part, as follows: “No aircraft of a contracting State capable of being flown without a pilot shall, except by special authorization, fly without a pilot over the territory of another contracting State.” See Appendix to LC/36-WP/2-4 “Study of Legal Issues relating to Remotely Piloted Aircraft”, presented by the Secretariat to the 36th session of the Legal Committee, footnote 1. See also RPAS Manual. 1.2.4; and C-WP/2546 (27/11/57), Attachment B, para.5.1, which specified that “Article 8 applies to an aircraft which has no pilot on board, if it a) is an aircraft which is capable [of] being flown only without a pilot or b) is one which can be flown both with or without a pilot”.

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Art.	Text	Interpretation	Implementation	Application	Analysis
					aircraft may and is to be controlled requires further consultation with the ANB and relevant Panels, etc., and further careful legal consideration. The categorization of pilotless aircraft remains inconsistent among technical materials. The Eleventh Air Navigation Conference (ANConf/11, Montréal, 22 September to 3 October 2003) endorsed the global air traffic management (ATM) operational concept which contains the following text: “an unmanned aerial vehicle is a pilotless aircraft, in the sense of Article 8 of the Convention on International Civil Aviation, which is flown without a pilot in-command on-board and is either remotely and fully controlled from another place (ground, another aircraft, space) or programmed and fully autonomous.” This understanding of unmanned aerial vehicles (UAVs) was endorsed by the 35th Session of the ICAO Assembly in 2004. Annex 7 (Standard 2.3) states that “Unmanned aircraft shall include unmanned free balloons and remotely piloted aircraft.” Additionally, the sub-categories “Remotely Piloted Aircraft” (RPA), and “Remotely Piloted Aircraft System (RPAS) have been created too, without complete categorization of other pilotless aircraft.
31	<i>Certificates of airworthiness</i> Every aircraft engaged in international navigation shall be provided with a certificate of airworthiness issued or rendered valid by the State in which it is registered.		√		Article 31 requires that every aircraft engaged in international navigation, including pilotless aircraft and operations over the high seas, be provided with a certificate of airworthiness issued or rendered valid by the State of registry. The provision does not provide for any exception and applies to all aircraft, including pilotless aircraft. Article 31 does not explicitly refer to any ICAO Annex or Standards and Recommended Practices (SARPs); it merely establishes the requirement for a certificate of airworthiness. However, Annex 8 spells out the minimum international requirements to be applied by

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Art.	Text	Interpretation	Implementation	Application	Analysis
					competent national authorities when issuing such certificates. The challenge lies in determining the criteria or parameters that States should apply when issuing certificates of airworthiness in the absence of applicable Annex 8 Standards. Annex 6, Part IV, and the associated amendments to Annex 8 (which have been adopted and have a November 2026 applicability date) will address remotely piloted aircraft systems (RPAS) and provide conditions and limitations consistent with Article 31 but they will not cover other categories of pilotless aircraft. Consequently, even after these amendments become applicable regulatory gaps will remain with respect to pilotless aircraft other than RPAS engaged in international navigation, including operations over the high seas. A “Special Certificate of Airworthiness” may be issued to indicate that an aircraft does not meet the Standards of Annex 8.² Such a certificate is presumptively not valid for “international flight” (which is understood to mean a flight that overflies the territory of another State), because it does not comply with Annex 8. However, the validity of such a certificate is less clear for other types of international (air) navigation, such as operations conducted exclusively over the high seas, where the overflight approval of another State is not required. Noting the adoption and pending applicability of Annex 6, Part IV, and the associated amendments to Annex 8, the continuing absence of Annex 8 Standards for the issuance of a Certificate of Airworthiness for pilotless aircraft other than RPAS represents a clear gap in the

² A note to para 3.2.2 in Annex 8 provides: Some Contracting States facilitate the issuance of a “Special Certificate of Airworthiness” or similar to denote that an aircraft does not meet the Standards of Annex 8. While not valid for the purpose of international flight, such a document provides conditions and limitations that may be required by other Contracting States for the purpose of granting approvals to fly within or through their jurisdiction.

Art.	Text	Interpretation	Implementation	Application	Analysis
					implementation of Article 31 with respect to such pilotless aircraft. Link Between Articles 31, 33, and 39. Once the requirements of Article 31 are met through the issuance of a valid certificate of airworthiness, Article 33 becomes relevant, as it governs the mutual recognition of such certificates among Contracting States. The key issue, therefore, is how and under what conditions States would recognize certificates of airworthiness issued in the absence of ICAO Standards by other States, such as, for example, “Special Certificates of Airworthiness” or any equivalent certificates. Indeed, the plain wording of the Convention indicates that Article 31 can be satisfied by a State issuing a certificate, even though it is not accorded recognition under Article 33.
33	<i>Recognition of certificates and licenses</i> Certificates of airworthiness and certificates of competency and licenses issued or rendered valid by the contracting State in which the aircraft is registered, shall be recognized as valid by the other contracting States, provided that the requirements under which such certificates or licenses were issued or rendered valid are equal to or above the minimum standards which may be established from time to time pursuant to this Convention.	√	√	√	Article 33 obligates Contracting States to recognize certificates of airworthiness issued or rendered valid by other States, provided that the requirements under which such certificates were issued or rendered valid meet the minimum ICAO Standards. However, Article 33 does not preclude States from recognizing the validity of certificates issued under requirements that do not yet meet, or for which there are not yet, international Standards. Mandatory mutual recognition under Article 33 is contingent upon the existence of such Standards. Where internationally established Standards are not yet available—such as for pilotless aircraft outside the RPAS framework—States’ obligations under Article 33 cannot yet apply, although Article 31 still requires aircraft engaged in international navigation be issued a certificate of airworthiness by the State of registry. For operations limited to a single State’s territory or to operations over the high seas

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Art.	Text	Interpretation	Implementation	Application	Analysis
					involving only one State, mutual recognition under Article 33 may not be relevant, since no other State's territory is flown over in the operation.
39	<i>Endorsement of certificates and licenses</i> (a) Any aircraft or part thereof with respect to which there exists an international standard of airworthiness or performance, and which failed in any respect to satisfy that standard at the time of its certification, shall have endorsed on or attached to its airworthiness certificate a complete enumeration of the details in respect of which it so failed. (b) Any person holding a license who does not satisfy in full the conditions laid down in the international standard relating to the class of license or certificate which he holds shall have endorsed on or attached to his license a complete enumeration of the particulars in which he does not satisfy such conditions.		√		Article 39(a) requires the endorsement of certificates of airworthiness when an aircraft, or any part thereof, fails to meet an existing international standard. The provision contains no exceptions and, therefore, applies to all aircraft, including pilotless aircraft. The interpretation of “standard of airworthiness” is directly linked to Annex 8, which defines the airworthiness requirements applicable to aircraft. In contrast, the term “standard of performance” relates to the operating limitations to be determined and scheduled in the aircraft flight manual (Annex 8, para. 2.2) and is closely connected to the operating rules contained in Annex 6. Though the obligation under Article 39(a) facially extends to all aircraft, its practical application to pilotless aircraft thus depends on the existence of international standards of airworthiness or performance. At present, no such SARPs applicable to pilotless aircraft exist. The aforementioned amendments to Annex 8 (which have been adopted and have a November 2026 applicability date) will establish conditions and limitations for the issuance of certificates of airworthiness for remotely piloted aircraft systems (RPAS) consistent with Article 31; however, its provisions will not extend to other categories of pilotless aircraft. Accordingly, for pilotless aircraft other than RPAS, the absence of such internationally established standards of airworthiness or performance renders the endorsement mechanism under Article 39(a) largely inoperative until such standards are developed and adopted.

Art.	Text	Interpretation	Implementation	Application	Analysis
41	<i>Recognition of existing standards of airworthiness</i> The provisions of this Chapter shall not apply to aircraft and aircraft equipment of types of which the prototype is submitted to the appropriate national authorities for certification prior to a date three years after the date of adoption of an international standard of airworthiness for such equipment.		√	√	Article 41 complements Articles 31 and 33. It preserves the continued validity of airworthiness certificates issued under earlier national regulations prior to the adoption of an international standard by allowing for a 3-year transitional period. Once ICAO adopts international standard of airworthiness for pilotless aircraft (beyond RPAS), these earlier issued airworthiness certificates, if any, may fall within the Article 41 regime, recognized as valid during a transitional period while States adjust to new international standards. Article 41 would not guarantee indefinite recognition of such earlier issued airworthiness certificates. States would eventually have to ensure compliance with ICAO standards once those standards for pilotless aircraft come into effect.
32	<i>Licenses of personnel</i> (a) The pilot of every aircraft and the other members of the operating crew of every aircraft engaged in international navigation³ shall be provided with certificates of competency and licenses issued or rendered valid by the State in which the aircraft is registered. (b) Each contracting State reserves the right to refuse to recognize, for the purpose of flight above its own territory, certificates of competency and licenses granted to any of its nationals by another contracting State.	√	√	√	A “remote pilot” is not considered to be a “pilot” for the purposes of Article 32 (a). The longstanding and prevailing interpretation of the Chicago Convention is that remotely piloted aircraft are “pilotless aircraft” under Article 8 of the Chicago Convention ⁴ because they are flown without a pilot in-command on-board the aircraft—i.e., without a “pilot” within the meaning of Article 32. A “remote pilot” is therefore not considered to be a “pilot” for purposes of the Article 32 and, more specifically, the Article 32 a) mandates, that pilot certificates and licenses shall be issued or rendered valid by the State of registry ⁵ . The use of the term “remote pilot” is confusing, given

³ “International air navigation” is not defined by the Chicago Convention.

⁴ “No aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a contracting State without special authorization by that State and in accordance with the terms of such authorization. Each contracting State undertakes to ensure that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so controlled as to obviate danger to civil aircraft.”

⁵ When the Council adopted in 2018 Amendment 175 to Annex 1—Personnel Licensing containing new provisions on remote pilot licensing, the Council decided that the remote pilot license shall normally be issued by the licensing authority of the State of the operator, rather than the State of registry. From technical perspective, the initial proposal for issuance of the remote pilot license was with the State where the Remote Pilot Station (RPS) is located because this would enable control over personnel qualifications. However, in the course of States’ consultations, several States raised concerns about the complexity this would introduce, especially for international flights involving multiple RPSs, leading to different states overseeing the remote pilot license. In response, the approach shifted to assigning responsibility to the State of the Operator, which is considered to have the greatest interest or nexus with the overall operation, thereby being better positioned to effectively oversee all operational elements.

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Art.	Text	Interpretation	Implementation	Application	Analysis
					that a “remote pilot” is not considered as a “pilot” for the purposes of Article 32 (a). The Annex 1 designation of the State of the operator as the remote pilot licensing authority may be problematic in practice since other provisions of the Chicago Convention, such as Article 12, Article 20 and Article 83bis, link safety oversight and enforcement to the State of registry. Although the designation of the State of the operator as the remote pilot licensing authority did not <i>per se</i> violate the Chicago Convention, additional work is required to assess the legal impacts and risks of this designation, especially <i>vis-à-vis</i> the Articles the Convention instilling safety oversight and enforcement in the State of registry. It is observed that Article 32 a) also requires the licenses of “the other members of the operating crew” to be issued by the State of registry. Annex 1 notably lists “remote pilot” among the “flight crew” (Annex 1, Standard 1.2, Note 2) and the Foreword to Annex 1 states: “the expression ‘flight crew member’ has the same meaning as the expressions ‘member of the operating crew of an aircraft’ and ‘operating personnel’ used in the Convention[.]” The inclusion of “remote pilot” among “flight crew” in Annex 1, Standard 1.2, Note 2, and the description of “flight crew” in the Foreword to Annex 1, when read together with Article 32 a), are in conflict with both the analysis and general understanding that a remote pilot is not a pilot for purposes of Article 32 and Annex 1, Standard 1.2.1.3, whereby the remote pilot license is issued by the State of the Operator.
33	<i>Recognition of certificates and licenses</i> Certificates of airworthiness and certificates of competency and licenses issued or rendered valid by the contracting State in which the aircraft is registered, shall be recognized as valid by the other contracting States, provided that the requirements under	√	√	√	Article 33, in terms of personal licenses, should be read as logically following from Article 32(a). Article 32 (a) governs the licenses of pilots and the other members of the operating crew issued or rendered valid by the State of registry. Accordingly, the mutual recognition mechanism under Article 33 appears limited to those licenses. If a remote pilot is not considered

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	which such certificates or licenses were issued or rendered valid are equal to or above the minimum standards which may be established from time to time pursuant to this Convention.				to be a “pilot” for the purposes of Article 32 (a), then Article 33 may not apply to remote pilot licenses, on the basis that such licenses fall outside Article 32(a). Furthermore, given that the plain wording of Article 33 refers to licenses issued or rendered valid by the State of registry, as in the case of RPAS under Annex 1 where remote pilot licenses are issued by the licensing authority of the State of Operator, then the mutual recognition mechanism under Article 33 may not apply. If Article 33 does not apply, the legal implication would presumably be that remote pilot licenses lack an explicit legal basis under Chicago Convention for mutual recognition. Specifically, it raises the question of whether mutual recognition for remote pilot licenses is legally required or not. Additional work is therefore necessary to assess whether supplementary legal mechanisms are needed to support the mutual recognition of remote pilot licenses. The RPAS Manual (Doc 10019, First Edition) explicitly confirms that licenses of remote pilots may not be subject to Article 33 since remote pilot licenses are not encompassed by Article 32.
39	<i>Endorsement of certificates and licenses</i> (a) Any aircraft or part thereof with respect to which there exists an international standard of airworthiness or performance, and which failed in any respect to satisfy that standard at the time of its certification, shall have endorsed on or attached to its airworthiness certificate a complete enumeration of the details in respect of which it so failed. (b) Any person holding a license who does not satisfy in full the conditions laid down in the international standard relating to the class of license or certificate which he	√	√	√	Like Article 33, Article 39 should be read as logically following from Article 32 a), even though Article 39 does not attach any restrictive phrasing “<i>issued or rendered valid by the contracting State in which the aircraft is registered</i>” as used in Article 33 in relation to pilot licenses. In other words, whether Article 39 applies to remote pilot licenses will depend on how Article 32 and Article 33 are interpreted. Consequently, Article 39 is a secondary issue that cannot be fully resolved until the scope and meaning of Articles 32 and 33 are clarified.

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	holds shall have endorsed on or attached to his license a complete enumeration of the particulars in which he does not satisfy such conditions.				
17	<i>Nationality of Aircraft</i> Aircraft have the nationality of the State in which they are registered.				See analysis for Art. 20.
18	<i>Dual registration</i> An aircraft cannot be validly registered in more than one State, but its registration may be changed from one State to another.				See analysis for Art. 20.
19	<i>National laws governing registration</i> The registration or transfer of registration of aircraft in any contracting State shall be made in accordance with its laws and regulations.				See analysis for Art. 20.
20	<i>Display of marks</i> Every aircraft engaged in international air navigation shall bear its appropriate nationality and registration marks.		√		Articles 17, 18, 19 and 20 apply to pilotless aircraft, and are especially relevant when such aircraft are engaged in international air navigation with the operation of these aircraft being subject to the condition that they shall bear its appropriate nationality and registration marks. To satisfy the condition set forth in Article 20, a pilotless aircraft engaged in international air navigation must be registered in a contracting State, thereby obtaining the nationality of the State in which it is registered. While a pilotless aircraft, being an aircraft, has the nationality of the State in which it is registered (Article 17), the Contracting State may also provide in its national law that an aircraft shall be not eligible for registration in that State, in which case that State would not assume the responsibilities of the State of registry under the Convention with respect to such aircraft. If a pilotless aircraft is registerable in a given State, but in fact is not so registered, that would indicate a violation of the particular

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					national law concerned, but not, by itself, of the Chicago Convention. On the other hand, if a pilotless aircraft, being an aircraft, not bearing its appropriate nationality and registration marks were to engage in international air navigation, that would constitute non-compliance with Article 20 of the Convention. The fact that a remote pilot is licensed by the State of the operator, which is not aligned with the State in which that aircraft is registered could conceivably raise concerns about the remote pilot's authority to operate the aircraft. In certain jurisdictions, a pilot's authority to operate an aircraft is contingent on both the State in which the aircraft was registered and the State in which the pilot's license was issued. In most cases, a remote pilot is automatically authorized to operate a particular aircraft registered in the State that issued their license. However, such authorization does not extend automatically to an aircraft registered in a different State. While the display of nationality and registration marks is mandatory for pilotless aircraft engaged in international air navigation, uncertainties persist regarding the manner in which these marks should be displayed, particularly on very small pilotless aircraft. The term "display" raises questions as to whether the marks must be visible from a certain distance or, whether their mere presence on the aircraft satisfies the requirement. Marking requirements are primarily governed by Annex 7, the considerations for visibility and identifiability should be factored in Annex 7 into the development of any SARPs pertaining to the nationality and registration marks of pilotless aircraft, particularly small pilotless aircraft engaged in international air navigation.

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					In respect of RPA, Annex 7 has already adopted specific Standards pertaining to aircraft nationality and registration marks to accommodate the unique sizes and designs of RPA. If aircraft do not possess the parts mentioned in Annex 7, 4.3.1 and 4.3.2, or the parts are not of sufficient size to accommodate the marks described in 5.1.1, 5.2.1 or 5.2.2, the State of registry shall determine the location and measurement of nationality or common marks and registration marks, taking account of the need for the aircraft to be readily identified.
21	<i>Report of registrations</i> Each contracting State undertakes to supply to any other contracting State or to the International Civil Aviation Organization, on demand, information concerning the registration and ownership of any particular aircraft registered in that State. In addition, each contracting State shall furnish reports to the International Civil Aviation Organization, under such regulations as the latter may prescribe, giving such pertinent data as can be made available concerning the ownership and control of aircraft registered in that State and habitually engaged in international air navigation. The data thus obtained by the International Civil Aviation Organization shall be made available by it on request to the other contracting States.	√	√		Article 21 does not contain a definition of the concept of ownership of aircraft. Consistent with Article 19, it is for each State at its own discretion to develop rules and regulations with respect to registration and consequently how it defines the concept of ownership for the purposes of registration. As with manned aircraft, the concept of ownership for pilotless aircraft may vary across contracting States, including the requirement of registration of pilotless aircraft (Arts. 17-20 apply to pilotless aircraft). These differences may result in an inaccurate reflection of aircraft ownership in the registers and can cause delays in the transfer of the registration of an aircraft from one State to another. Providing more detailed information in the certificate of registration regarding the basis on which a (pilotless) aircraft is registered in a contracting State, together with standardized information in the certificate of deregistration where applicable will facilitate the transfer of (pilotless) aircraft from one State to another as well as foster transparency and consistency in the exchange of (pilotless) aircraft ownership data between States pursuant to Article 21. Noting that minors can be involved in the operation of pilotless aircraft in certain jurisdictions, exchanges of registration and ownership data involving minors may be subject to certain restrictions or protections.

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3 bis	<i>Prohibition on use of weapons against civil aircraft in flight</i> (a) The contracting States recognize that every State must refrain from resorting to the use of weapons against civil aircraft in flight and that, in case of interception, the lives of persons on board and the safety of aircraft must not be endangered. This provision shall not be interpreted as modifying in any way the rights and obligations of States set forth in the Charter of the United Nations. (b) The contracting States recognize that every State, in the exercise of its sovereignty, is entitled to require the landing at some designated airport of a civil aircraft flying above its territory without authority or if there are reasonable grounds to conclude that it is being used for any purpose inconsistent with the aims of this Convention; it may also give such aircraft any other instructions to put an end to such violations. For this purpose, the contracting States may resort to any appropriate means consistent with relevant rules of international law, including the relevant provisions of this Convention, specifically paragraph (a) of this Article. Each contracting State agrees to publish its regulations in force regarding the interception of civil aircraft.		√		Though the primary intention of Article 3bis is the protection of human life on board aircraft, it also extends to the protection of the safety of the aircraft itself even when no persons are on board. Also, regardless of whether the aircraft is pilotless or otherwise has humans on board, the use of weapons against civil aircraft is problematic due to the threat it may pose to other aircraft and to person or property on the ground. So, although the absence of human life on board may influence how States apply Article 3bis in practice, it does not affect its applicability.

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	(c) Every civil aircraft shall comply with an order given in conformity with paragraph (b) of this Article. To this end each contracting State shall establish all necessary provisions in its national laws or regulations to make such compliance mandatory for any civil aircraft registered in that State or operated by an operator who has his principal place of business or permanent residence in that State. Each contracting State shall make any violation of such applicable laws or regulations punishable by severe penalties and shall submit the case to its competent authorities in accordance with its laws or regulations. (d) Each contracting State shall take appropriate measures to prohibit the deliberate use of any civil aircraft registered in that State or operated by an operator who has his principal place of business or permanent residence in that State for any purpose inconsistent with the aims of this Convention. This provision shall not affect paragraph (a) or derogate from paragraphs (b) and (c) of this Article.				Regarding the interception of civil pilotless aircraft, the existing interception procedures may present practical implementation challenges. Pursuant to Article 3bis b) and c), contracting States are entitled, in certain circumstances, to require civil aircraft flying above their territory without authority to land at designated aerodromes. Therefore, pilotless aircraft must be able to comply with instructions of the overflown State, whether through visual or electronic means, and be able to divert and land as instructed (<i>see</i> RPAS Manual, para. 1.3.2; <i>see also</i> LC/36-WP/2-4, wherein it was stated that “like any other aircraft, RPA must comply with orders to land and other instructions issued by the overflown State pursuant to Article 3 bis”). Annex 6, Part IV, Appendix 2, paragraph 2.1.30, requires that RPA follow the same interception procedures and visual signals as applied to manned aircraft as per Annex 2, however, not all RPA are certified with built-in capabilities to respond to such instructions. So, compliance with interception procedures would pose significant challenges for RPA or other types of pilotless aircraft with more limited operational and technological capabilities. In addition, the relevance of Article 3bis to alternative measures to interception, such as so-called counter-drone technologies, may warrant consideration. The Annex 2 interception procedures may therefore need to be amended to facilitate the effective implementation of Article 3bis regarding pilotless aircraft.⁶

⁶ Proposal for Amendment to Annex 2: A Proposal for Amendment (PfA) to Annex 2, PANS-ATM and related documents has been considered. It would specifically address RPAS interception scenarios. These include, among others, interception during a lost C2 link state, the potential impact of Detect and Avoid systems, and the limited ability of some RPA to comply with visual signals. The PfA also recognizes that, unlike manned aircraft, the remote pilot at the Remote Pilot Station (RPS) may remain contactable even in a lost C2 link scenario, which offers an alternative means for the intercepting aircraft to obtain necessary information. This is reflected in a Note proposed under item 3.4.1 of Annex 2, Chapter 3, which reads: "Some aircraft, such as RPA, may not be equipped to interpret or transmit visual signals, and therefore may not be able to comply with, or respond to, instructions conveyed by visual signals." The provisions from the Annex 2 PfA are expected to become applicable concurrently with the Annex 6, Part IV Standards.

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					Finally, as to Article 3bis (d), the State of registry may face practical challenges in implementing the framework established therein, considering that the State of registry would have difficulty in conducting safety oversight over the remote pilot, including the operation of any pilotless aircraft. Moreover, the State of registry may face challenges in taking appropriate measures to prohibit any use of such aircraft that is inconsistent with the Convention.
12	Rules of the Air Each contracting State undertakes to adopt measures to insure that every aircraft flying over or maneuvering within its territory and that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and maneuver of aircraft there in force. Each contracting State undertakes to keep its own regulations in these respects uniform, to the greatest possible extent, with those established from time to time under this Convention. Over the high seas, the rules in force shall be those established under this Convention. Each contracting State undertakes to insure the prosecution of all persons violating the regulations applicable.		√		Article 12 forms the basis for international harmonization and interoperability, which is essential for pilotless aircraft operations to be conducted safely, just as it is for manned operations (See RPAS Manual: 1.3.5). Furthermore, Annex 2 constitutes rules relating to the flight and maneuver of aircraft within the meaning of Article 12 of the Convention. Over the high seas these rules apply without exception⁷. In accordance with Standards 2.3, 2.4 of Annex 2, the pilot-in-command (PIC) is responsible for the operation of the aircraft in compliance with the rules of the air. This also extends to the PIC having final authority as to the disposition of the aircraft while in command, the same is true for a remote pilot. However, as analyzed above in terms of Article 32 a), the designation of the State of the operator as the remote pilot licensing authority may be problematic for the implementation of Article 12, because Article 12 links the responsibility for safety oversight and enforcement of the rules of the air to the State of registry, which may have very limited oversight over the licensed remote pilot or PIC who is entrusted as per Annex 2 with the responsibility for operation of the aircraft in compliance with the rules of the air.

⁷ See: SSG-LIPA Recommendation to the Secretariat, Report of SSG-LIPA/4

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					It is also noted that Article 12 Task Force (A12 TF) has been studying the scope of Article 12, i.e. whether “the rules and regulations relating to the flight and maneuver of aircraft” as referred to in Article 12 extend beyond the rules of the air specified in Annex 2, and if so, to what extent and for what purpose. There is general agreement among the A12TF that the “rules and regulations relating to the flight and manoeuvre of aircraft” for the purposes of Article 12, are exclusively the rules specified in Annex 2 to the Convention, unless and until the Council designates certain other Annex provisions to be such.
16	<i>Search of aircraft</i> The appropriate authorities of each of the contracting States shall have the right, without unreasonable delay, to search aircraft of the other contracting States on landing or departure, and to inspect the certificates and other documents prescribed by this Convention.		√		In accordance with Annex 6, Part IV, the operator shall ensure all those involved in the RPAS operation know that they must comply with the laws, regulations and procedures of those States in which the RPA is being operated and the RPS are located (<i>see</i> Annex 6, Part IV Standard 3.1.1). If an operator is non-compliant inside the territory of a foreign State, that State shall immediately notify the operator, and if the issue warrants it, the State of the operator. Where the State of the operator and the State of registry are different, a separate notification must also be made to the State of the registry if the issue falls within the responsibilities of that State and warrants a notification (<i>see</i> Annex 6, Part IV Standard 3.2.1). The standards in Annex 6, Part IV, cover RPAs, but Article 16 applies to all pilotless aircraft. In the case of a non-Annex 6, Part IV, pilotless aircraft that is the subject of a search, some practical implementation questions arise if the State of registry cannot be identified since aircraft are considered to be the jurisdiction of the State of registry and search without appropriate authorization might therefore impose legal risks. Furthermore, the fact that there is no pilot on board a pilotless aircraft who can interact with inspectors raises additional implementation questions, since even if other personnel, such as cabin crew, are on board, they

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					would not be licensed to fulfil the functions traditionally carried out by the pilot of a manned aircraft.
29	<i>Documents carried in aircraft</i> Every aircraft of a contracting State, engaged in international navigation, shall carry the following documents in conformity with the conditions prescribed in this Convention: (a) Its certificate of registration; (b) Its certificate of airworthiness; (c) The appropriate licenses for each member of the crew; (d) Its journey log book; (e) If it is equipped with radio apparatus, the aircraft radio station license; (f) If it carries passengers, a list of their names and places of embarkation and destination; (g) If it carries cargo, a manifest and detailed declarations of the cargo.	√	√		While Article 29 clearly applies to pilotless aircraft, its practical implementation raises several operational and technical considerations that were not originally contemplated when the provision was drafted. Carrying the required documents onboard an aircraft in a verifiable electronic format would be legally sufficient and the lawful equivalent of paper documents for purposes of Article 29. The “conditions” referred to in Article 29 would relate back to other provisions governing the issuance of Article 29 documents, which may prescribe specific requirements. The term “carry” may arguably imply that the compliance necessitates immediate and direct access to the electronic documents themselves, rather than relying on any intermediary. This would require some kind of technical interface or system on the aircraft (or connected to it) that allows authorities to directly access and verify required documents electronically. Consequentially, it would also necessitate that States maintain compatible systems to access and verify these documents, which could pose practical challenges for global interoperability, especially among States with differing technological capacities. ICAO Standards have evolved to accommodate electronic documents, including electronic personnel licenses⁸ and other certificates⁹. When electronic documents are used, the issuing State authority must ensure real-time validation capability, offline verification capability as well

⁸ Annex 1, Standard 5.1.1: A personnel licence issued by a Contracting State in accordance with the relevant provisions of this Annex shall conform to one of the following specifications in this chapter: a) licences issued on first quality paper or other suitable material, including plastic cards; or b) electronic personnel licences on self-contained mobile electronic visual display devices.

⁹ Annex 6, Part IV 6.25 *Documents carried on board the RPA Note 1.*— *The documents listed above may be accessed electronically through information on board the RPA, such as a QR code.*

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					as the security and authenticity of the documents.¹⁰ A related “trust framework” project is currently underway within ANB to address technical challenges and to support secure electronic verification. Regarding remote pilot licenses, there are two main issues requiring further clarification: -whether remote pilots should formally be treated as “crew” members under Article 29 c), even though a remote pilot is not considered part of the crew for the purpose of Article 32(b), -how documentation requirements, such as the carrying of remote pilots’ licenses, apply when multiple remote pilots operate the aircraft during a single flight.
30	<i>Aircraft radio equipment</i> (a) Aircraft of each contracting State may, in or over the territory of other contracting States, carry radio transmitting apparatus only if a license to install and operate such apparatus has been issued by the appropriate authorities of the State in which the aircraft is registered. The use of radio transmitting apparatus in the territory of the contracting State whose territory is flown over shall be in accordance with the regulations prescribed by that State. (b) Radio transmitting apparatus may be used only by members of the flight crew who are provided with a special license for the purpose, issued by the appropriate authorities of the State in which the aircraft is registered.		√	√	The following issues have been identified in respect of Article 30: Considering that the terms “radio transmitting apparatus” or “aircraft radio equipment”, as used in the text and title of Article 30, involve the use of radio waves for communication, whether Article 30 also applies to data links (C2 links) or remote pilot control systems has been characterized as an applicability question requiring technical clarification and further analysis. Moreover, the term “aircraft” does not necessarily encompass the entire system of pilotless aircraft, of which the aircraft itself constitutes only one component. In cases involving pilotless aircraft where aircraft radio equipment may be installed and used at one or more remote pilot stations located within various States, Article 30(a) would not cover this situation. It is arguable that the use of radio transmitting apparatus within territory of that State shall be in accordance with the regulations prescribed by that State, as consistent with the second sentence of Article 30 a).

¹⁰ Annex 1, 5.3.5 Online and offline verification.

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					Regarding paragraph a) of Article 30, this provision regulates only the license of the radio transmitting apparatus and its use in accordance with the regulations of the overflown State when such apparatus is carried on an aircraft in or over the territory of that State. In the case of a (pilotless) aircraft flying over the high seas or operating solely within the airspace over the high seas, Article 30 appears irrelevant and inapplicable. While prior authorizations from other States under Article 8 are not necessary for the operations of pilotless aircraft over the high seas, these aircraft shall observe the “rules of air” established by the Convention in accordance with Article 12 as embodied in Annexes, such as Annex 2. These “rules of air” may include provisions regulating the licensing and use of radio apparatus and radio station. Paragraph b) of Article 30 provides that radio transmitting apparatus may be used only by members of the flight crew who hold a special license. For pilotless aircraft there are some potential legal gaps. First, the licensing of remote pilots who are not on board the aircraft to use radio transmitting apparatus may not be covered by Article 30; and secondly, though there is no flight crew onboard a pilotless aircraft, other onboard personnel such as cabin crew may need to communicate via radio transmission apparatus, for example with the remote pilot, and the licensing of cabin crew to use radio transmitting apparatus may likewise not be covered by Article 30(b). That said, Standard 9.1.3 of Annex 6, Part IV provides that “[a]t all times during an RPAS operation, the remote flight crew <u>shall include at least one member who holds a valid licence issued by, or rendered valid by, the State of the Registry authorizing operation of the type of communication equipment to be used.</u>” The term “remote flight crew” (i.e., Annex 1 list a “remote pilot” among the “flight crew” (Annex 1, 1.2, Note 2)) may not be encompassed by the

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					term “flight crew” as referred-to in Article 30(b) or by the term “operating crew” in Article 32(a), and the inconsistent and contradictory usage of these terms in technical standards would create ambiguities that require alignment with the Chicago Convention.
34	<i>Journey log books</i> There shall be maintained in respect of every aircraft engaged in international navigation a journey log book in which shall be entered particulars of the aircraft, its crew and of each journey, in such form as may be prescribed from time to time pursuant to this Convention.		√	√	According to Article 34, a journey logbook must be maintained for every (pilotless) aircraft engaged in international air navigation and shall include particulars of the aircraft, its crew and of each journey. There are two main issues concerning pilotless aircraft: Firstly, as described in our analysis of Article 32, terminology is inconsistently used (<i>e.g.</i>, the remote pilot is not considered to be a pilot for Article 32; Annex 1 lists under “flight crew” the “remote pilot”, and Annex 6, Part IV, references “remote flight crew members” and “other remote crew members”), so the term “crew” in Article 34 raises questions in the context of pilotless aircraft with respect to which pilotless aircraft crew member’s particulars shall be entered. Secondly, there are practical implementation questions regarding how to record required particulars such as aircraft crew for pilotless aircraft, especially considering that the remote pilot of a pilotless aircraft may change during the flight and each remote pilot could be in a different State, as well as how such information should be carried on board, as required by Article 29 d) of the Convention. Furthermore, Article 29 d) requires the carriage of journey logbooks on board the aircraft. As detailed in our analysis of Article 29, verifiable electronic format of a journey logbook would be legally sufficient and the lawful equivalent of a paper journey logbook which is immediately and directly accessible.

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36	<i>Photographic apparatus</i> Each contracting State may prohibit or regulate the use of photographic apparatus in aircraft over its territory.		√		While Article 36 appears relatively clear in both its scope and interpretation, practical challenges arise in its contemporary application. In particular, the widespread use of pilotless aircraft including drones for aerial photography, especially in tourism and recreational contexts—has complicated enforcement and regulatory oversight. The provision is closely linked to Article 8 and reflects security considerations characteristic of the early twentieth century, notwithstanding the subsequent proliferation of satellite imaging technologies. Historically, certain domestic legal frameworks prohibited the carriage or use of downward-facing photographic equipment on aircraft; although many such measures have since been repealed, comparable restrictions continue to be implemented in practice by some States. Pursuant to Article 36, States retain the sovereign prerogative to prohibit or regulate aerial photography within their territory. However, the Convention does not establish a general or overarching international prohibition; rather, the matter is left to the discretion of individual States in accordance with their national laws and policies.
5	<i>Right of non-scheduled flight</i> Each contracting State agrees that all aircraft of the other contracting States, being aircraft not engaged in scheduled international air services shall have the right, subject to the observance of the terms of this Convention, to make flights into or in transit non-stop across its territory and to make stops for non-traffic purposes without the necessity of obtaining prior permission, and subject to the right of the State flown over to require landing. Each contracting State nevertheless			√	Article 8 effectively renders Articles 5 and 6 inapplicable to pilotless aircraft (<i>lex specialis</i>). As a result, pilotless aircraft flying over or into the territory of another State currently require special authorization from that State. It has been suggested that future common commercial operations of pilotless aircraft may create pressure to “bridge” such pilotless aircraft out of the special authorization category. In practical terms, this would allow them to benefit from the same traffic rights as manned aircraft

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	reserves the right, for reasons of safety of flight, to require aircraft desiring to proceed over regions which are inaccessible or without adequate air navigation facilities to follow prescribed routes, or to obtain special permission for such flights. Such aircraft, if engaged in the carriage of passengers, cargo, or mail for remuneration or hire on other than scheduled international air services, shall also, subject to the provisions of Article 7, have the privilege of taking on or discharging passengers, cargo, mail, subject to the right of any State where such embarkation or discharge takes place to impose such regulations, conditions or limitations at it may consider desirable.				under Article 5 and <i>International Air Services Transit Agreement</i>. In this regard, ATRP/18 concluded that it is premature to address traffic rights and economic regulation for unmanned aircraft operations, whether scheduled or non-scheduled. The view was that more operational experience is needed before drawing firm conclusions. Although a proposal to amend the template air services agreement was discussed, no agreement was reached.¹¹ For present purposes, a pragmatic approach is recommended. Pending any future revision of the Chicago Convention and further work by the air transport bodies (which have already indicated that it is premature to address traffic rights questions), Article 8 effectively overrides Articles 5 and 6 for pilotless aircraft. In practice, a special authorization under Article 8 could potentially be granted subject to conditions that mirror or incorporate elements of Article 5, such as transit rights. However, this remains a temporary and somewhat crude solution. A more sophisticated economic regulatory framework will likely be needed in the future.
6	<i>Scheduled air services</i> No scheduled international air service may be operated over or into the territory of a contracting State, except with the special permission or other authorization of that State, and in accordance with the terms of such permission or authorization.				

¹¹ ATRP/18 conclusion : (a) took note of the update concerning recent developments since ATRP/17, as provided by WG2, and concerning the need for guidance on the economic regulation of international operations of UAS;(b) acknowledged the comments made pertaining to the possible review of the TASA to include the economic regulation of international UAS, which requires further reflection and more operational experience; and(c) would continue to monitor the progress of the UAS industry, and through the dedicated platform for ATRP members and observers, report readiness regarding UAS operations, promote sharing of best practices, and continue discussions concerning economic regulatory practices of UAS operations.

7	<i>Cabotage</i> Each contracting State shall have the right to refuse permission to the aircraft of other contracting States to take on in its territory passengers, mail and cargo carried for remuneration or hire and destined for another point within its territory. Each contracting State undertakes not to enter into any arrangements which specifically grant any such privilege on an exclusive basis, to any other State or an airline of any other State, and not to obtain any such exclusive privilege from any other State.		√	As regards the implications of cabotage for pilotless aircraft, particularly small pilotless aircraft (registered in a State or not) that may be transported across international borders and then operated within another State, two key issues are noted: -Whether a small pilotless aircraft carried by a person across an international border and then flown in another State constitutes “international air navigation”,¹² -Whether operations conducted by such an aircraft within that State (e.g., takeoff/landing or parcel delivery, could amount to cabotage. If the aircraft is registered in the State where it operates, it would, subject to national requirements, be treated as a domestic aircraft. In that case, it would not qualify as “cabotage” under Article 7. Since cabotage traditionally concerns the carriage of passengers, cargo, or mail within a State by a foreign aircraft, a small pilotless aircraft operating domestically and not carrying anything would likewise not raise cabotage concerns; whereas if it carries a parcel, the issue becomes more complex. A more practical scenario involves “wet lease” type arrangements: an RPAS registered in State A is leased to an operator in State B and operated commercially in State B under an operator certificate issued by State B. Arguably such arrangement would not qualify “cabotage”. It was observed with recognition that larger commercial pilotless aircraft conducting cross-border operations could clearly trigger traditional cabotage issues, and that these questions remain legally complex and unresolved, potentially requiring significant further study. The ATRP has previously discussed pilotless aircraft-related cabotage but did not reach meaningful conclusions, further coordination shall be maintained with the ATRP.
10	<i>Landing at customs airport</i> Except in a case where, under the terms of this Convention or a special authorization, aircraft are permitted to cross the territory of a contracting State without landing, every		√	Article 10 interacts with Article 8 in the context of pilotless aircraft operations, as special authorization under both Articles is required for a pilotless aircraft to cross the territory of a State without landing. In practice, Article 10 functions pragmatically: States typically require aircraft

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Art.	Text	Interpretation	Implementation	Application	Analysis
	aircraft which enters the territory of a contracting State shall, if the regulations of that State so require, land at an airport designated by that State for the purpose of customs and other examination. On departure from the territory of a contracting State, such aircraft shall depart from a similarly designated customs airport. Particulars of all designated customs airports shall be published by the State and transmitted to the International Civil Aviation Organization established under Part II of this Convention for communication to all other contracting States.				entering their territory to use designated customs airports to ensure access to customs, immigration, quarantine, border control, and rescue/firefighting services.
83 <i>bis</i>	<i>Transfer of certain functions and duties¹³</i> (a) Notwithstanding the provisions of Articles 12, 30, 31 and 32(a), when an aircraft registered in a contracting State is operated pursuant to an agreement for the lease, charter or interchange of the aircraft or any similar arrangement by an operator who has his principal place of business or, if he has no such place of business, his permanent residence in another contracting State, the State of registry may, by agreement with such other State, transfer to it all or part of its functions and duties as State of registry in respect of that aircraft under Articles 12, 30, 31, and 32(a). The State of registry shall be relieved of responsibility in respect of the functions and duties transferred. (b) The transfer shall not have effect in respect of other contracting States before either the agreement between States in which it is embodied has been registered with the		√		The Chicago Convention assigns the State of registry aviation safety responsibilities through several Articles, namely Article 12 (rules of the air), Article 30 (radio licensing), Article 31 (certificates of airworthiness) and Article 32(a) (personnel licensing). These responsibilities vest in the State of registry unless it transfers all or part of its functions and/or duties under one or more of these Articles to another State in accordance with Article 83 <i>bis</i>. In light of ICAO's interpretation of Articles 8 and 32, a remote pilot is not considered to be a "pilot" for purposes of Article 32(a); thus, Article 32 a) which requires that the pilot licenses be issued or rendered valid by the State of registry does not apply in the case of remote pilot licenses. Annex 1 (Standard 1.2.1.3)¹⁴ accordingly assigns licensing authority for remote pilots to the State of the operator of the RPAS. It is observed that the Article 83 <i>bis</i> could have served as an appropriate mechanism to

¹² If a small pilotless aircraft that is registered in State A is carried by a person across an international border to be operated in State B and State B requires the aircraft to be registered in order to be lawfully operated in that State, registration in State B would prima facie violate Article 18 unless the aircraft is deregistered in State A.

¹³ The Protocol Relating to an Amendment to the Convention on International Civil Aviation (Article 83 *bis*) was adopted in 1980, and in force since 1997. Currently (as of April 2026), it has 182 parties.

¹⁴ Annex 1, standard 1.2.1.3: The remote pilot licence shall have been issued by the Licensing Authority of the State of the Operator of the RPAS or by any other Contracting State and rendered valid by the Licensing Authority of the State of the Operator of the RPAS.

Art.	Text	Interpretation	Implementation	Application	Analysis
	Council and made public pursuant to Article 83 or the existence and scope of the agreement have been directly communicated to the authorities of the other contracting State or States concerned by a State party to the agreement. (c) The provisions of paragraphs (a) and (b) above shall also be applicable to cases covered by Article 77.				“operationalize” the Annex 1 licensing framework in a legally coherent way, as well as to bridge the gaps that were not fully anticipated when previous technical decisions were made relative to the adoption of Standards designating the State of the operator as the remote pilot license issuing authority (Annex 1). However, the fact that Article 32(a) as currently interpreted by ICAO does not apply to remote pilot licenses undermines the utility of the Article 83 bis mechanism in this context, since the State of registry cannot transfer responsibilities which under Article 32(a) it does not possess — i.e., the responsibility for remote pilot licensing. Article 83 <i>bis</i> establishes an exhaustive list of responsibilities that can be transferred from the State of registry to the State of the operator in respect of an aircraft. Where a State of registry has established that its functions and duties may be adequately discharged by the State of the operator, the State of registry may transfer some or all of them through an Article 83<i>bis</i> agreement.¹⁵ With respect to RPA, other responsibilities assigned to the State of registry under the Convention (such as Article 30 which explicitly assigns the responsibilities of licensing flight crew operating the radio transmitting apparatus to the State of Registry), do not automatically transfer to the State of the operator simply because Article 32(a) and Annex 1 provide for the State of the Operator to issue remote pilot licenses. Article 83 <i>bis</i> is the only available mechanism to effect a transfer of responsibilities of the State of Registry specified therein. ICAO Doc 10059 (para.5.3.3 a)) specifies that “the personnel licensing responsibilities set out in Chapters 1, 2, 3 and 6 of Annex 1 cannot be split between the State of Registry and the State

¹⁵ See para. 3.2.2, Doc 10059, Manual on the implementation of Article 83 bis of the Convention on International Civil Aviation, First Edition, 2017.

Appendix

Art.	Text	Interpretation	Implementation	Application	Analysis
					of the Operator/[State of the principal location of a general aviation operator or] PLG. [These specified responsibilities] form a package of responsibilities covering the licenses for pilots and other crew members for which one of those two States must be responsible as a whole.” For practical and safety reasons, it may be worth considering whether the foregoing guidance developed generally in respect of manned aircraft should apply equally to pilotless aircraft to avoid a division of these responsibilities among the State of registry and the State of the operator.

— END —