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PROCEEDINGS OF CIVIL AVIATION LEGAL ADVISERS FORUM

SINGAPORE | 16 - 17 MAY 2019

Organised by

International Civil Aviation Organization

Hosted by

Civil Aviation Authority of Singapore

Co-published by International Civil Aviation Organization and Civil Aviation Authority of Singapore

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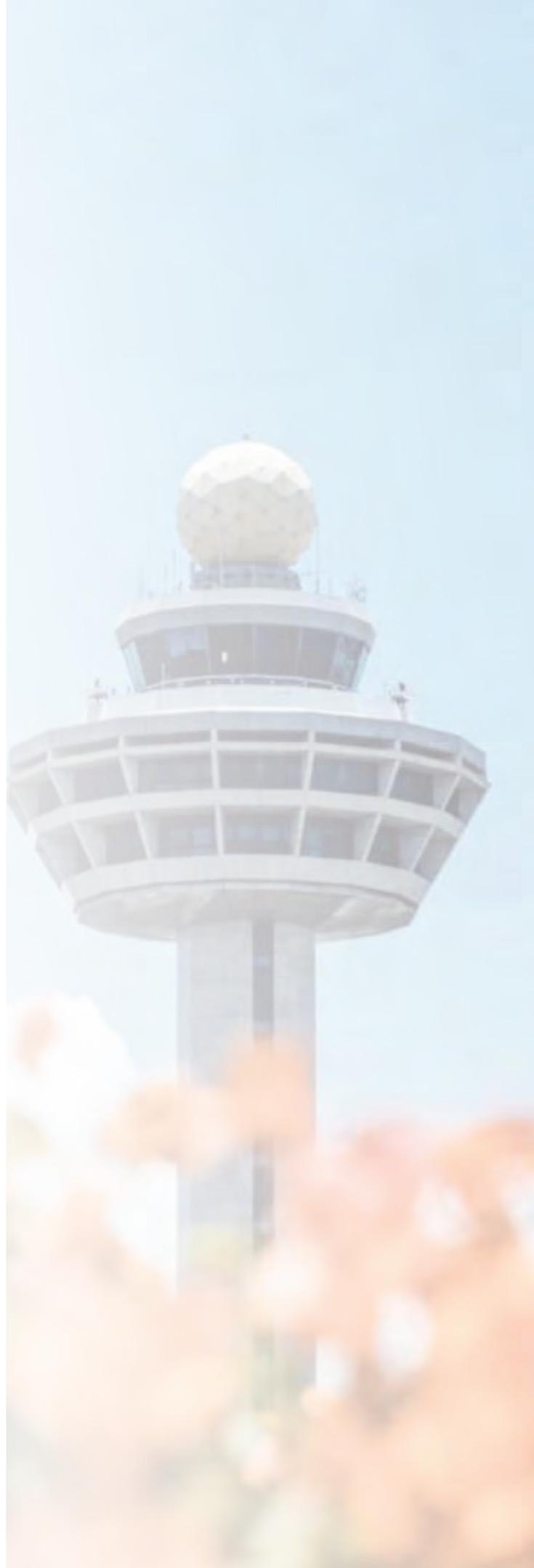
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/// FOREWORD

The inaugural ICAO Civil Aviation Legal Advisers Forum 2019 brought together over 80 legal advisors (including chief legal counsels) of the civil aviation administrations from some 40 States and one regional organisation to discuss issues of interest that give rise to and impact the development of air law, and the ways in which civil aviation legal advisors can contribute to meet the demands and challenges facing their organisations and the international aviation community at large. The Forum provided an excellent platform for an open dialogue on air law developments to support the aviation industry of the future.

Organised into five sessions, the Forum featured 20 speakers, moderators and panellists who shared on topics covering the evolution of air law treaties, air law responses to emerging challenges and new technologies, the role of civil aviation legal advisors in the aviation eco-system, and strategies to respond to new and emerging opportunities and challenges as well as threats to the safe and efficient development of international civil aviation.

We are pleased to present to you the Proceedings of the Forum. It includes the transcripts of the presentations and panel discussions, as well as snapshots of the event. We would like to thank all the delegates, speakers, moderators and panellists who took time to attend the Forum. We hope that the information captured in this publication will provide useful insights that could be adapted for each region and for the global aviation industry today.



DELEGATES

S/N	Country	Name	Organization
1	Australia	Dr Jonathan Aleck Executive Manager, Legal & Regulatory Affairs	Civil Aviation Safety Authority
2	Armenia	Ms Nelly Harutyunyan Head of Department (Legal)	Civil Aviation Committee
3	Bahamas	Alexander Ferguson Legal Counsel/Board Secretary	Bahamas Civil Aviation Authority
4	Belgium	Ioana Cristoiu Legal Advisor	Belgian Civil Aviation Authority
5	Botswana	Otsetswe Keletso Koboyankwe Corporate Secretary and General Legal Counsel	Civil Aviation Authority of Botswana
6	Botswana	Basimane Bogopa Legal Practitioner and Board Member	Civil Aviation Authority of Botswana
7	Bulgaria	Ms Mariya Kantareva Senior Expert	Directorate General Civil Aviation Administration
8	Canada	John Thachet Legal Counsel, Legal Services	Transport Canada
9	China	Ms Cui Wang Deputy Director, Division of Legal Affairs of Department of Policy, Law and Regulation	Civil Aviation Administration of China
10	China	Guo Rengang Deputy Director General	Civil Aviation Administration of China

11	Fiji	Ms Torika Colati Legal Enforcement Manager	Civil Aviation Authority of Fiji
12	Fiji	Jan Sherani Senior Legal Officer	Office of the Attorney-General
13	Finland	Dr Matti Tupamaki Deputy Director General of Civil Aviation	Finnish Transport and Communications Agency
14	Finland	Ms Susanna Metsalampi Head of Department, Legal Affairs	Finnish Transport and Communications Agency
15	Gambia	Ms Ellen S Manga Legal Services Manager	Gambia Civil Aviation Authority
16	Gambia	Ms Fatou Jallow Human Resource Manager	Gambia Civil Aviation Authority
17	Ghana	Ms Edzenunye Agbevey Manager, Legal Services	Ghana Civil Aviation Authority Transport Canada
18	Ghana	Mrs Joyce Anakwa Thompson Director, Legal and International Relations	Ghana Civil Aviation Authority
19	Guatemala	José Herrera Najarro Jefe Departamento Juridico	Direccion General de Aeronautica Civil de Guatemala
20	Israel	Ms Renana Shahar Chief Legal Counsel	Israeli Civil Aviation Authority
21	Indonesia	Achmad Fauzan Legal Drafter	Directorate General of Civil Aviation
22	Indonesia	Ms Cindy Mayrianti Deputy Director for Maritime Boundary, Air and Space Law	Ministry of Foreign Affairs

23	Japan	Toshiyuki Onuma Director	Japan Civil Aviation Bureau
24	Japan	Hajime Yoshimura Senior Legal Officer	Ministry of Land, Infrastructure, Transport and Tourism of Japan
25	Kenya	Daniel Moss Legal Assistant	Kenya Airports Authority
26	Kenya	Ms Joy Igandu Legal Officer	Kenya Airports Authority
27	Kenya	Polycarp Kuchio Tindi Chief Legal Officer	Kenya Civil Aviation Authority
28	Kenya	George Kashindi Partner	Munyao Muthama and Kashindi Advocates
29	Kuwait	Khalifah Jasim Director, Legal	Directorate General of Civil Aviation
30	Kuwait	Bader Al Mubarak Senior Legal Officer	Directorate General of Civil Aviation
31	Lao PDR	Dexa Fongosa Chief of Air Services Agreement Section	Department of Civil Aviation
32	Lao PDR	Manoun Souvanhnakoumman Chief of Aviation Legal Section	Department of Civil Aviation
33	Lao PDR	Soukkhongthong Voraphet Acting Director of Air Transport Division	Department of Civil Aviation
34	Namibia	Christoph Seimelo Legal Counsel	Namibia Civil Aviation Authority

35	• Namibia	Ms Felicity Goagoseb Acting Chief Legislative Drafter	Ministry of Justice
36	• Namibia	Ms Loide Anbelina Shaparara Senior Legal Officer	Office of the Attorney-General
37	• Nepal	Bimal Khanal Legal Officer	Civil Aviation Authority of Nepal
38	• Nepal	Dwarika Prasad Bhattarai Head of Deputy Manager Legal	Civil Aviation Authority of Nepal
39	• Nepal	Gopal Chandra Thapa Deputy Director	Civil Aviation Authority of Nepal
40	• The Netherlands	Ms Annemarie Schuite Legal Officer	Dutch Safety Board
41	• Nigeria	Ado Mohammad Lawan Assistant Legal Adviser	Federal Ministry of Transportation
42	• Nigeria	Ahmadu, Diemkwap Ilitrus Assistant General Manager, Legal Services	Nigerian Civil Aviation Authority
43	• Nigeria	Emmanuel Dubem Chukwuma Legal Adviser/Head Compliance and Enforcement	Nigerian Civil Aviation Authority
44	• Nigeria	Sulaiman Shehu Liman Legal Adviser	Federal Ministry of Transportation
45	• North Macedonia	Ms Veti Atanasoska Head of Division	Civil Aviation Agency of the former Yugoslav Republic of Macedonia
46	• Oman	Mohammed Mansoor Ali Al-Ruqaishi Legal Officer	Public Authority for Civil Aviation

47	Papua New Guinea	Ms Amanda Flora Nambau General Counsel/Board Secretary	Civil Aviation Safety Authority of Papua New Guinea
48	Papua New Guinea	Ms Rosemary Aopoi Legal Assistant	Air Niugini Limited
49	Philippines	Ms Angelica Rose Dimalanta Attorney III	Civil Aviation Authority of the Philippines
50	Poland	Julian Jakub Rotter Director, International Affairs Department	Civil Aviation Authority of Poland
51	Qatar	Salah AlShebani Director of Legal Department	Qatar Civil Aviation Authority
52	Qatar	Nawaf AlAmari Legal Researcher	Qatar Civil Aviation Authority
53	Russian Federation	Alexander Batalov Alternate Representative of the Russian Federation to ICAO	Representation of the Russian Federation to ICAO
54	Saudi Arabia	Abdullah Saeed AlAsiri Manager of International Organization Affairs & Acting Director of ICAO Affairs	General Authority of Civil Aviation
55	Saudi Arabia	Mohammad Hassan Izmirli Manager of Bilateral and International Agreements	General Authority of Civil Aviation
56	Seychelles	Ryan Laporte Legal Officer	Seychelles Civil Aviation Authority
57	Singapore	Ms Danielle Yeow Deputy Director General, International Affairs Division	Attorney-General's Chambers
58	Singapore	Ms Daphne Hong Director General, International Affairs Division	Attorney-General's Chambers

59	Singapore	David Low Deputy Senior State Counsel	Attorney-General's Chambers
60	Singapore	Derek Loh Senior State Counsel	Attorney-General's Chambers
61	Singapore	Ms Joyce Low Senior State Counsel	Attorney-General's Chambers
62	Singapore	Ms Kristi How State Counsel	Attorney-General's Chambers
63	Singapore	Ms Low Siew Ling Senior State Counsel	Attorney-General's Chambers
64	Singapore	Ms Dawn Voon Senior Legal Counsel	Civil Aviation Authority of Singapore
65	Singapore	Ms Han Hsien Fei Senior Legal Counsel	Civil Aviation Authority of Singapore
66	Singapore	Jason Too Manager (Europe)	Civil Aviation Authority of Singapore
67	Singapore	Liu Sern Yang Deputy Director (Legal)	Civil Aviation Authority of Singapore
68	Singapore	Ms Tan Siew Huay Director (Legal)	Civil Aviation Authority of Singapore
69	Singapore	Ms Zarinah Marican Deputy Director (Legal)	Civil Aviation Authority of Singapore
70	South Africa	Ms Babalwa Ndandani Acting Executive: Legal and Aviation Compliance	South African Civil Aviation Authority

71	• South Africa	Ms Itumeleng Mogashoa Senior Legal Advisor	South African Civil Aviation Authority
72	• South Africa	Ms Thandeka Mdebuka Executive Legal & Compliance	Air Traffic and Navigation Services South Africa
73	• Turkmenistan	Toyly Berdiyev Head of the Legal Department	Ministry of Industry and Communications
74	• Ukraine	Ms Valeriia Dremliuha Chief Specialist (Legal Department)	State Aviation Administration of Ukraine
75	• Ukraine	Viktor Avdieiev Head (Legal Department)	State Aviation Administration of Ukraine
76	• United Arab Emirates	Ms Nadia Al Maazmi Director, Legal Affairs	General Civil Aviation Authority
77	• United Kingdom	Ms Kate Staples General Counsel and Secretary	Civil Aviation Authority
78	• United States of America	Ellis Mishulovich Senior Counsel for International Law	Transportation Security Administration
79	• United States of America	Jeffrey Klang Assistant Chief Counsel, International Affairs and Legal Policy	Federal Aviation Administration
80	• Vietnam	Hoang Trung Kien Director, Legal Affairs	Civil Aviation Authority of Vietnam

International/Regional Organisations

S/N	Name	Organization
81	Andrew Opolot Legal Officer	International Civil Aviation Organization
82	Dr Jiefang Huang Director, Legal Affairs and External Relations Bureau	International Civil Aviation Organization
83	James Low Legal Officer	International Civil Aviation Organization
84	Ms Lingbo Wang Intern	International Civil Aviation Organization
85	Samuel Jennings Legal Consultant	Pacific Aviation Safety Office

/// SPEAKERS & MODERATORS



Mr Edmund CHENG

**Chairman,
Civil Aviation Authority of Singapore**

Mr Edmund Cheng, Chairman of Civil Aviation Authority of Singapore (CAAS), is concurrently the Deputy Chairman and Deputy Managing Director of Wing Tai Holdings Limited. He is also the Chairman of the Singapore Art Museum and Mapletree Investments. His previous roles include Chairman of SATS Ltd, Singapore Tourism Board and National Arts Council. Mr Cheng also served on the boards of the former Construction Industry Development Board, the Urban Redevelopment Authority and Singapore Airlines Ltd.



Mr Lucien WONG

**Attorney-General,
Attorney-General's Chambers, Singapore**

Mr Lucien Wong SC, is the 9th Attorney-General of Singapore. Mr Wong has more than 40 years of experience in legal practice, specialising in banking, corporate and financial services work. He was a member of several law review committees that reviewed amendments to Singapore Company and Securities Law. He was appointed Deputy Attorney-General and Senior Counsel on 19 December 2016 and assumed office as the Attorney-General of the Republic of Singapore on 14 January 2017. Mr Wong graduated with a Bachelor of Laws (Honours) degree from the University of Singapore in 1978 and was admitted to the Singapore Bar in 1979.



Dr Jiefang HUANG

**Director,
Legal Affairs and External Relation,
International Civil Aviation Organization**

Dr Jiefang Huang is Director of the Legal Affairs and External Relations Bureau, ICAO. He joined ICAO's Secretariat in 1996, and is a member of the United Nations Counter-Terrorism Implementation Task Force. He currently teaches air law in the Civil Aviation University of China, McGill University and Leiden University, and is the author of "Aviation Safety through the Rule of Law: ICAO's Mechanisms and Practices" (Kluwer, 2009). Dr Huang graduated from Wuhan University, China and obtained an LL.M. from the Institute of Air and Space Law, McGill University, Canada and a Ph.D. from the International Institute of Air and Space Law, Leiden University, the Netherlands.



Ms TAN Siew Huay

**Chairperson of the ICAO
Legal Committee and Director (Legal),
Civil Aviation Authority of Singapore**

Ms Tan Siew Huay is Director (Legal), Civil Aviation Authority of Singapore (CAAS). In this position, she heads the CAAS Legal Division which, among other things, provides advice and legal support to CAAS on matters and issues that arise from CAAS' regulatory and other functions and sees to the insurances of CAAS. She has represented Singapore at ICAO including General Assembly Sessions and the ICAO-sponsored Diplomatic Conferences of 1999, 2009 and 2014. She was the President and Chairperson of the Commission of the Whole of the Diplomatic Conference which concluded the Montreal Protocol of 2014. Ms Tan has also held offices in various other ICAO legal working groups. She is the current Chairperson of the ICAO Legal Committee.



Dr Matti TUPAMAKI

Deputy Director General of Civil Aviation, Finnish Transport and Communications Agency

Dr Matti Tupamaki is Deputy Director General of Civil Aviation, Finland. Prior to his current appointment, he was the Alternate Representative of Sweden on the Council of ICAO from 2001 to 2004 and Air Transport Director in the Civil Aviation Authority, Finland from 2004 to 2010. He has been a member of several ICAO legal working and study groups, participated in the preparatory work for several air law Conventions and has been the State representative in the Legal Committee meetings and ICAO Conferences since the 1990s. Dr Tupamaki graduated from the University of Helsinki, Finland and obtained an LL.M. from the University of London, United Kingdom and a LL.D. from the University of Helsinki.



Ms Kate STAPLES

General Counsel and Secretary, Civil Aviation Authority, United Kingdom

Ms Kate Staples joined the Civil Aviation Authority (CAA), the UK's specialist aviation regulator, in September 2010. She is based at the London Office, on Kingsway, in Holborn. Her responsibilities include leading the in-house legal and enforcement teams, internal audit team and ensuring that the CAA properly identifies and addresses legal risks. Ms Staples is also a trustee of the UK's Air Travel Trust and of the CAA's pension scheme. Prior to joining the CAA, Ms Staples was a legal adviser at the Department for Transport, advising on aviation law and (for a short time) railways infrastructure law. She started her career in private practice.



**Mrs Joyce Anakwa
THOMPSON**

**Director,
Legal and International Relations,
Ghana Civil Aviation Authority**

Mrs Joyce Anakwa Thompson is a lawyer called to the Bar in Ghana with over thirty-four years of experience working in various facets of the law. She commenced her legal career in the Ministry of Justice and Office of the Attorney General, and after nine years in the bank (Barclays Bank of Ghana Limited) both as legal counsel and in corporate finance, she moved to the Ghana Civil Aviation Authority. Mrs Thompson has held the position of Director, Legal and International Relations (on occasion with the inclusion of Corporate Communications) for more than twenty years. She is a Hubert Humphrey Scholar of the American University Washington College of Law and holds an MBA from the University of Leicester. Mrs Thompson is a qualified arbitrator and mediator, as well as being a Certified Public Private Partnership Specialist.



**Barr. Ahmadu Ilitrus
DIEMKWAP**

**Assistant General Manager,
Legal Services, Nigerian Civil
Aviation Authority**

Barrister Ahmadu Ilitrus is an Assistant General Manager Legal Services in the Nigerian Civil Aviation Authority. He represents Nigeria at ICAO Legal Committee meetings, and is a member representing Nigeria on the ICAO CESAIR (Committee of Experts of the Supervisory Authority of the International Aircraft Registry). Mr Ilitrus was appointed a member of the NCAA Standing Regulations Committee in 2003 and has been re-appointed as such by successive managements, a responsibility he still performs. He graduated with a bachelor of law degree from the University of Jos in 1997.



**Ms Susanna
METSALAMPI**

**Second Vice-Chairperson
of the ICAO Legal Committee
Head of Department,
Legal Affairs, Finnish Transport
and Communications Agency**

Ms Susanna Metsalampi, LL.M., Helsinki University, has been working with the Finnish Civil Aviation Authority since 1992 in various positions. For the last 7 years, she has been heading the department responsible for Rulemaking issues in the CAA. Currently, she is Second Vice-Chairperson of the ICAO Legal Committee and also chairing ICAO's Article 21 Task Force. Since 2015, Ms Metsalampi has been the Chair of the ECAC Legal Task Force. She represents Finland in the European Air Safety Agency as member of the Member State Advisory Body and as the Alternate Member for Finland in the Management Board of European Union Aviation Safety Agency. Ms Metsälampi also represents Finland in the Network of Economic Regulators, functioning under the Government Policy Committee of the Organisation for Economic Co-operation and Development.



Mr GUO Rengang

**Deputy Director General,
Policy, Law and Regulation
Civil Aviation Administration
of China**

Mr Guo Rengang is the Deputy Director-General of the Department of Policy, Law and Regulation of the Civil Aviation Administration of China (CAAC). He has previously served as the Director of the Department of Policy, Law and Regulation of the Dongbei Regional Administration, and the Director of the Department of Policy, Law and Regulation of the CAAC. Mr Guo had presided over the revision of the "Civil Aviation Law of China", and was responsible for completing the reform of China's civil aviation industry regulatory model. He established a civil aviation industry credit management system and passenger blacklist management system and presided over the construction of an independent general aviation regulation system, as well as the civil aviation diversified dispute resolution mechanism.



Mr Bader ALMUBARAK

**Fourth Vice-Chairperson of
the ICAO Legal Committee and
Senior Legal Officer, Planning and
Projects Affairs, Kuwait Directorate
General of Civil Aviation**

Mr Bader Almubarak is the Senior Legal Officer, Planning and Projects Affairs, Kuwait Directorate General of Civil Aviation. He is the Fourth Vice Chairman of the ICAO legal committee. Mr Almubarak was involved in the preparation of the manual of the set of legislations and regulations for civil aviation in the State of Kuwait in 2008. He has participated in several Diplomatic Conferences and ICAO Legal Committee meetings, and also had professional experience as Head of Legal Advice and Research section in the legal department and legal researcher in the air transport department. He has a Graduate certificate from the Faculty of Law, Kuwait University.



Ms Danielle YEOW

**Deputy Director-General,
International Affairs Division
Attorney-General's Chambers,
Singapore**

Ms Danielle Yeow leads the International Affairs Division team on trade and investment, and international security issues. Ms Yeow represented Singapore in several Free Trade Agreement (FTA) negotiations, including as lead counsel in the TPP and CPTPP FTAs. She recently delivered Singapore's oral statement in a Third Party intervention in a WTO panel hearing (DS512). Ms Yeow serves on the Council of the Singapore branch of the International Law Association and Singapore's Genetic Modification Advisory Committee. She was Deputy Chief Executive of the Intellectual Property Office of Singapore. She was Chair of the General Assembly of Parties of the Singapore Treaty on the Law of Trademarks (2009-2010) and a WIPO expert on mission. Her previous roles include that of District Judge and law clerk to the Chief Justice of Singapore.



Ms Amanda Flora Nambau

**General Counsel/Board Secretary,
Civil Aviation Safety Authority
of Papua New Guinea**

Ms Amanda Flora Nambau is a legal advisor providing strategic corporation and regulatory advice to the Board and Management of Civil Aviation Safety Authority Papua New Guinea. Her duties include providing oversight of the development and updating of safety regulations, oversight of enforcement actions, as well as managing organisational disputes between industry, stakeholders and the regulator. Her professional qualification includes contract management, negotiation and regulatory compliance. Ms Nambau started her law practice in the private sector in 2007. She received her Bachelor of Law from the University of Papua New Guinea.



Ms Annemarie SCHUITE

**Legal Officer,
Dutch Safety Board**

Ms Annemarie Schuite is a senior legal advisor at the Dutch Safety Board, a Dutch investigation authority for accidents and incidents in aviation, maritime, railway, industry, construction, healthcare and defence. She is the official representative for international conferences on judicial matters concerning accident investigation and was part of the safety investigation of MH17 in 2014-2015. Prior to her current appointment, she was the Legal Officer for the Dutch Healthcare Inspectorate from 2004-2010. Ms Schuite is a guest lecturer at the International Institute of Air and Space Law (Leiden University) and at the Dutch Military Academy. She has an Advanced Master in Air and Space Law from the University of Leiden.



Mr John THACHET

**Legal Counsel,
Transport Canada**

Mr John Thachet is Legal Counsel with Transport Canada specialising in all aspects of aviation law. Since 2008, he provided legal and policy advice to the most senior officials of the department on a wide variety of issues which resulted in major policy changes and introduction of new legislation. He has represented Canada at several ICAO meetings including the Legal Committee meetings, participated and chaired study groups formed by the Legal Committee. Currently, he is on a secondment from Transport Canada to the Legal Affairs and External Relations Bureau of ICAO until the end of 2019. Mr Thachet holds an LL.M. degree in Air and Space Law from the Institute of Air and Space Law, McGill University.



Mr Alexander FERGUSON

**Legal Counsel/
Board Secretary, Bahamas
Civil Aviation Authority**

Mr Alexander Ferguson joined the Bahamas Civil Aviation Authority (BCAA) in January 2018 as its first Legal Counsel. Mr Ferguson is responsible for organising, managing and developing the BCAA's Legal Department, and reports directly to the Director General of the BCAA on a wide array of legal, technical and policy matters. Prior to joining the BCAA, Mr Ferguson had a long career in private practice in commercial law and civil litigation before specialising in several areas of aviation law. He also represented The Bahamas national airline for many years. He has previously been actively involved other aviation related businesses and endeavours. Prior to qualifying as a lawyer, Mr Ferguson was a professional pilot and flew aircraft for charter operators and the national flag carrier Bahamasair.



Mr Andrew OPOLOT

**Legal Officer,
Legal Affairs and External
Relations Bureau
International Civil Aviation
Organization**

Mr Andrew Opolot currently handles various portfolios on the general work programme of ICAO in the legal field including conflicts of interest in civil aviation, environmental protection and climate change, aviation security including cybersecurity, global air law training, as well as governance and rules of procedure of the organisation. He joined the Legal Affairs and External Relations Bureau of ICAO in 2011. Prior to joining ICAO, he worked for over 10 years as chief legal adviser to the national civil aviation administrations of Botswana and Uganda. Mr Opolot is an instructor for the International Air Law Course under ICAO's TRAINAIR PLUS Programme.



Mr Jeffrey KLANG

**Assistant Chief Counsel,
International Affairs and
Legal Policy, Federal Aviation
Administration, United States**

Mr Jeffrey Klang serves as the Federal Aviation Administration (FAA)'s Assistant Chief Counsel for International Affairs and Legal Policy. In this capacity, he provides the FAA Administrator and the Senior Executive staff with legal advice on all international aviation matters. Mr Klang is a member of ICAO's Cross Border Transferability (XBT) Task Force, and he continues to serve as the U.S. Representative to ICAO's Cape Town Commission of Experts, serving the last six years as the Chairman of that Commission. Mr Klang received his Juris Doctorate from the American University, Washington College of Law and a Master of Arts in Law and International Affairs from the American University, School of International Service. Mr Klang also served as an aviator for six years with the United States Air Force and has a pilot's license.



Dr Jonathan ALECK

**Executive Manager,
Legal and Regulatory Affairs Division,
Civil Aviation Safety Authority,
Australia**

Dr Jonathan Aleck is head of legal, international and regulatory affairs at the Civil Aviation Safety Authority (CASA), Australia. During his tenure at CASA, he has held a number of senior executive management positions in the legal, operational and policy fields. From September 1998 to August 2003, Dr Aleck served as Australia’s representative on the Council of ICAO. Over the past 25 years, Dr Aleck has written and spoken publicly on various aspects of regulatory theory and practice in the modern aviation-related environment. He chaired ICAO’s Safety Information Protection Task Force and Safety Information Protection Implementation Group. He has represented Australia at a number of international aviation meetings and conferences, including, most recently, the 39th ICAO Assembly and the 37th Session of the Legal Committee.



Ms Ellen MANGA

**Third Vice-Chairperson
of the Legal Committee and
Legal Services Manager,
Gambia Civil Aviation Authority**

Ms Ellen Manga is the Legal Services Manager and Head of the legal unit at the Gambia Civil Aviation Authority. She is the Third Vice-Chairperson of the Legal Committee, ICAO. Ms Manga is a member of Gambia’s delegation in the Working Group for the Review of the ICAO Rules for the Settlement of Differences (WG-RRSD) and member of the Legal Working Group of the African Civil Aviation Commission (AFCAC). She is the designated focal person for the Gambia on the Implementation of the Yamoussoukro Decision (YD) towards the establishment of a Single Air Transport Market. Prior to her current appointment, Ms Manga worked as a Public Prosecutor and State Counsel for the Attorney General’s Chambers and Ministry of Justice.

OPENING AND WELCOME ADDRESSES

MR EDMUND CHENG

CHAIRMAN, CIVIL AVIATION AUTHORITY OF SINGAPORE

MR LUCIEN WONG

ATTORNEY-GENERAL OF SINGAPORE

DR JIEFANG HUANG

DIRECTOR, LEGAL AFFAIRS AND EXTERNAL RELATIONS BUREAU,
INTERNATIONAL CIVIL AVIATION ORGANIZATION

KEYNOTE ADDRESS

MS TAN SIEW HUAY

CHAIRPERSON OF THE ICAO LEGAL COMMITTEE AND DIRECTOR (LEGAL),
CIVIL AVIATION AUTHORITY OF SINGAPORE

/// OPENING ADDRESS



MR EDMUND CHENG

CHAIRMAN,
CIVIL AVIATION AUTHORITY
OF SINGAPORE

“Advances in engineering and technology aside, it is also the framework of international air law treaties, governing very important matters such as air transport, air navigation services, as well as aviation safety and security, which has enabled the development of international civil aviation.”

The Honourable Mr Lucien Wong, Attorney-General of Singapore,

Dr Jiefang Huang, Director, ICAO Legal Affairs and External Relations Bureau,

Distinguished guests, ladies and gentlemen:

It is my pleasure to welcome all of you to the ICAO Civil Aviation Legal Advisers Forum. CAAS is very honoured to host this inaugural ICAO Forum. To all our friends and aviation colleagues from abroad, welcome to Singapore.

Many of us enjoy the modern conveniences of international air travel. Criss-crossing the globe by air in a matter of hours, is something most of us do without much thought today. Advances in engineering and technology aside, it is also the framework of international air law treaties, governing very important matters such as air transport, air navigation services, as well as aviation safety and security, which has enabled the development of international civil aviation.

Singapore and ICAO

Singapore joined ICAO as a contracting State on 20 May 1966. This was about a year after our independence in 1965. Since then, Singapore has been actively supporting ICAO in its endeavours to advance international civil aviation.

Singapore has been privileged to serve on the ICAO Council, the Air Navigation Commission, the Legal Committee as well as panels, sub-committees and working groups. Through these platforms, Singapore contributes to the development of international standards in various aspects of aviation, ranging from aviation safety and security, air traffic management to aviation environmental protection. We are committed to contributing our expertise and resources to ICAO.

The Singapore Aviation Academy

Another example of Singapore's support of ICAO is right here, at our present location. Singapore has invested in human capital development for aviation as early as in the 1950s. Today, the Singapore Aviation Academy (or SAA), is an internationally recognised centre of learning for civil aviation. SAA was conferred the prestigious 34th ICAO Edward Warner Award in 2000 and was the first in the world to be recognised as an ICAO Regional Training Centre of Excellence in 2014. SAA offers over 140 different courses a year ranging from operational and specialised to management and leadership programmes. It also brings leaders and professionals together through its regional and international aviation forums, conferences and workshops.



Just last month, in April, we concluded our biennial 7th World Civil Aviation Chief Executives Forum. That Forum, now renamed “The Changi Dialogue”, will be back in 2021. It aims to bring aviation leaders together for a global dialogue on the latest challenges and opportunities in international aviation. In addition, we hope to foster a spirit of collaboration and friendship amongst civil aviation leaders.

The Need for a Close Knit Global Aviation Community

The need for a close knit global community cannot be overstated in today’s world. I am pleased to join you in celebrating 100 years of progressive treaty making in international civil aviation, beginning with the adoption in 1919 of the Paris Convention.

This year, we also celebrate the 75th anniversary of the Chicago Convention and the 20th year of the Montreal Convention 1999, both very important aviation treaties. I would like to congratulate the ICAO legal community that you are all part of, for the great contributions made to the international aviation community. May this Forum herald another 100 great years in international civil aviation.

On behalf of the organisers and participants, I would like to express our sincere appreciation to the speakers for coming to this Forum to share their wealth of knowledge and expertise. I would also like to thank all the participants for

your support and interest in this Forum. I am confident that we all can look forward to a robust exchange of perspectives and sharing of experiences through the interactions, discussions and presentations during the next one and a half days.

Finally, I wish you a successful Forum and to our overseas friends, an enjoyable stay in Singapore.

Thank you.

WELCOME ADDRESS



THE HONOURABLE MR LUCIEN WONG

ATTORNEY-GENERAL
OF SINGAPORE

Distinguished guests, ladies and gentlemen:

It is a pleasure for me to welcome all of you to the Civil Aviation Legal Advisers Forum, organised by the International Civil Aviation Organization. Singapore is privileged to be the host of this inaugural Forum.

This event seeks to bring together key practitioners in the field of aviation law, such as the chief legal counsels of civil aviation authorities, in order to promote greater collaboration, and exchange of knowledge and experiences, and collectively address current and emerging challenges confronting international civil aviation. The Singapore Government and the Civil Aviation Authority of Singapore fully support this important initiative.

2019 is also a special year for international aviation as it marks 100 years since the conclusion of the Convention Relating to the Regulation of Aerial Navigation also known as the Paris Convention, a watershed in the development of modern international aviation law, as well as 75 years since the conclusion of the Chicago Convention.

The Paris Convention, which was signed in October 1919, is an important starting point as the first multilateral international legal instrument relating to air navigation. The Paris Convention dealt with technical, operational and organisational aspects of civil aviation and also foresaw the creation of the International Commission for Air Navigation, under the direction of the League of Nations. Although

the Paris Convention is no longer in force, its pioneering contributions to the formation of some of the basic concepts of air law continue to be relevant even to this day.

Over time, States recognised the need to develop a new convention partly to address the needs of international aviation post-World War II. Representatives of 54 States met in Chicago from 1 November to 7 December 1944, and by the last day, 52 States had signed on to the new Convention on International Civil Aviation, commonly referred to as the Chicago Convention.

The significance of the Chicago Convention to the development of the international aviation regime is well known to the people in this room. It is a testament to the foresight of the drafters that the Chicago Convention, and the organisation which it created, the International Civil Aviation Organization, remains deeply relevant to international aviation 75 years on. As of today, ICAO can boast of almost universal membership, with Dominica becoming the 193rd Member State of ICAO as recently as 13 April 2019. Since 1944, States have continued to develop new treaties, regulations, standards and procedures within the Chicago Convention and ICAO framework aimed at addressing issues that affect international civil aviation, including aviation safety, aviation security and counter-terrorism, aviation facilitation, environmental protection and economic development.



Within this framework of norms and principles, the work of the civil aviation legal adviser is of vital importance to the smooth functioning of the international aviation regime. Legal advisers play an indispensable role to States, civil aviation authorities and regulators by interpreting and providing guidance on domestic law, international law including the fundamental principles of the Chicago Convention and its Annexes, as well as the many ICAO documents and policies that are relevant to the day to day operations of civil aviation authorities.

Additionally, aviation is inherently cross-border in nature. The safety and efficiency of air traffic operations inevitably require cooperation across borders, between States, air navigation service providers, civil aviation authorities and regulators. It is therefore all the more important that legal advisers exchange views and learn from each other so as to preserve and promote the rule-based international aviation regime that the parties to the Chicago Convention envisaged 75 years ago. The challenges which legal advisers face are often not unique. In the face of technological advancements in fields like artificial intelligence and pilotless aircraft or drones, it is imperative that legal advisers keep up to date on topical issues, and come together to share solutions which can be implemented in a coherent and cohesive manner, for the benefit of the entire international community.

This Forum provides an excellent opportunity for the free flow of ideas, and the building of networks which will foster greater collaboration beyond the next two days here in

“Aviation is inherently cross-border in nature. The safety and efficiency of air traffic operations inevitably requires cooperation across borders, between States, air navigation service providers, civil aviation authorities and regulators. It is therefore all the more important that legal advisers exchange views and learn from each other so as to preserve and promote the rule-based international aviation regime that the parties to the Chicago Convention envisaged 75 years ago.”

Singapore. The Forum will cover a wide variety of issues, from taking stock of the development of key international air law conventions, to discussions on how the law should respond to the cutting-edge issues facing the international aviation community today, such as climate change, cyber threats and artificial intelligence, and pilotless and remotely-piloted aircraft systems. I urge you to take this opportunity to participate actively and exchange views on these issues, and share the strategies and solutions that you have adopted in your home jurisdictions to meet these challenges.

Finally, I also hope that you will be able to find some time to explore and enjoy the many sights of Singapore, especially for those of you who are here in our country for the first time. As you depart, you may also wish to take the opportunity to be one of the first people in the world to visit Jewel Changi Airport. This is a newly opened attraction at Changi Airport and is home to the world’s tallest indoor waterfall.

Once again, a very warm welcome to Singapore. I wish you all a fruitful time, and I look forward to this Forum being the first of many to come.

Thank you.

/// OPENING REMARKS



DR JIEFANG HUANG

LEGAL AFFAIRS AND
EXTERNAL RELATIONS BUREAU,
INTERNATIONAL CIVIL AVIATION ORGANIZATION

Good morning to all,

I wish to thank the Chairman of the Civil Aviation Authority of Singapore and the Attorney General for their respective opening and welcome addresses. I am honored to share the company of such highly distinguished personalities for the opening session of this Forum. It is also my great pleasure to extend a very warm welcome today to all legal advisers coming from various States who have joined us for this inaugural Civil Aviation Legal Advisers Forum. To the best of my knowledge, such an event is unprecedented in ICAO's history, or at least within the last twenty-three years that I have been working there.

In particular, I wish to thank the Civil Aviation Authority of Singapore as well as the Singapore Aviation Academy for graciously hosting this event. Over the years, the Government of Singapore has been a strong supporter of ICAO in many of its programmes and activities. In this context, I wish particularly to highlight the recently renewed fellowship and scholarship programmes offered through ICAO by the Government of Singapore which enable young aviation professionals and participants coming from developing countries to study at the Singapore Aviation Academy.

While we are here at the Singapore Aviation Academy, I will be remiss in my speech if I fail to highlight the fact that this prestigious institution was the proud recipient of the Edward Warner award in the year 2000. The Edward Warner award, given by the ICAO Assembly on behalf of its Member States,

is recognised throughout the world as the greatest single honour within the international civil aviation community.

Although I am sure that many of you are acquainted with the work of the ICAO Legal Committee as I recognise many familiar faces in the audience, please permit me to briefly touch upon the legal work that takes place at the international level. As you are no doubt aware, the Legal Committee, which was established at the very first Session of the ICAO Assembly in 1947, is composed of legal experts designated as Representatives of and by the Contracting States. Participation in the Committee is therefore open to all ICAO Member States and I wish to take this opportunity to encourage each participant here to ensure that your State is represented at the next Session of the Legal Committee.

I also wish to highlight the fact that the Chairperson elected at the 37th Session to steer the affairs of the Committee for the next two Sessions is none other than Ms Siew Huay Tan from Singapore. Ms Tan is the first woman to be elected to that position. In fact, Ms Tan is also joined in the Bureau by two other women, namely Ms Suzanna Metsälampi from Finland as well as Ms Ellen Manga from The Gambia who are respectively second and third vice-chairpersons. It is also the first time that the Bureau of the Legal Committee is composed by a majority of women.

For several decades, the main task of the Committee was to consider and elaborate draft international air law instruments. Twenty-four such instruments have been adopted under the auspices of ICAO since the Organization

was established. Nonetheless, the role, function and the methods of work of the Legal Committee have evolved in recent years. Nowadays, the Legal Committee devotes a significant portion of its time and efforts to the consideration of new, emerging and topical issues of relevance to international air law, such as those issues highlighted by the Attorney General in his speech. To this end, it is instructive to note that the last Session of the Committee, which was held in September 2018, added a number of new items to the Committee's Work Programme.

Presently, the work on many of such issues is undertaken between Sessions by Sub-Groups, Working Groups and Task Forces established by the Committee. Once again, I encourage participants to be actively involved in such activities whenever the opportunity arises. It is only through your active participation that we can ensure that the legal work at the international level remains innovative and relevant in addressing new and emerging issues.

Once an international air law treaty is adopted, its implementation occurs through application and interpretation at the domestic level. The implementation of air law treaties can often be challenging for some States due to a number of reasons. Sometimes, the level of complexity associated with domestic implementation threatens to jeopardize the entire treaty ratification process. I am also well aware that some States encounter numerous challenges with regard to the implementation of the over 12,000 Standards and Recommended Practices (SARPs) adopted by the ICAO Council.

Notwithstanding the foregoing, there is often very little or no exchange between civil aviation legal advisors with regard to treaty implementation. I strongly believe that there is an urgent need to establish an ongoing dialogue on how the interpretation and application of ICAO air law treaties has evolved and continues to evolve at the domestic level. This Forum will create opportunities for continued exchange and cross-fertilisation of ideas and experiences among civil aviation legal advisors from our various Member States thereby building capacity to overcome the potential difficulties encountered in the implementation of air law treaties and SARPs. This is one of the primary objectives of this Forum.

As legal advisers, many of us joined our respective civil aviation organisations without having first obtained any specialised training in international air law. Although many of us have had to quickly learn on the job, we still continue to encounter enormous challenges in finding appropriate legal resources relevant to the conduct of our daily work in this highly specialised field of law. Another major objective of this Forum is therefore to facilitate the consideration of issues of mutual interest to the international aviation community in the legal field and also to promote closer interaction and collaboration between air law professionals, particularly those serving organisations that regulate civil aviation.

In recognition of the undoubted importance for ICAO and its Member States of the specialised teaching of air law as well as the desirability of fostering knowledge of this important

subject, the ICAO Assembly has over the years continually adopted Resolutions to promote the teaching of air law. In this context, I wish to inform you that in 2017 the ICAO Global Aviation Training Office, in collaboration with the Legal Affairs and External Relations Bureau of ICAO, developed a specialised course on international air law. The course has since been successfully delivered on multiple occasions in almost all ICAO regions. I strongly encourage participants here who have not had the chance to attend the course to do so at the earliest opportunity.

Please be assured that this Forum is neither intended to replace the Legal Committee nor the Legal Commission of the Assembly. Our primary aim is to provide a platform for discussion and exchange among civil aviation legal advisors in a more informal context. I urge participants to use this opportunity to build professional and personal relationships with your colleagues from other countries. I also wish to take this opportunity to say that I am looking forward to welcome all participants in this Legal Forum to the forthcoming 40th Session of the ICAO Assembly which will meet in Montréal from 24 September to 4 October of this year.

While I am talking about the upcoming Assembly, I wish to take this opportunity to inform you that on 24 and 25 September, the Legal Affairs and External Relations Bureau will be conducting a Treaty Event under the theme "A Century of International Air Law Treaties". This first-time Event will be launched with a view to promote the ratification of multilateral air law treaties by providing special facilities for representatives of Member States, in the margins of the Assembly Session, to deposit instruments of ratification or accession to international air law treaties for which ICAO acts as Depositary.

In closing, I hope that by the end of this Forum we would have identified tools and mechanisms to facilitate continued collaboration and support among civil aviation legal advisers. I would like to wish all participants a productive and very interesting Forum. I look forward to the discussions and exchanges that will take place during the Forum and thereafter.

Thank you.

"This Forum will create opportunities for continued exchange and cross-fertilisation of ideas and experiences among civil aviation legal advisors from our various Member States thereby building capacity to overcome the potential difficulties encountered in the implementation of air law treaties and SARPs."

/// KEYNOTE ADDRESS



MS TAN SIEW HUAY

CHAIRPERSON OF THE ICAO LEGAL COMMITTEE
AND DIRECTOR (LEGAL),
CIVIL AVIATION AUTHORITY OF SINGAPORE

Distinguished guests, ladies and gentlemen, good morning.

There is a saying attributed to Confucius which goes, “有朋自远方来，不亦乐乎？”， meaning – it is always a pleasure to welcome friends from afar. This morning, it gives me great pleasure to warmly welcome especially everyone who have come from all over the world to Singapore.

Singapore and the CAAS are truly honoured to host this inaugural Civil Aviation Legal Advisers Forum (CALAF). We are deeply grateful to Dr Aliu, President of the Council of ICAO and Dr Liu Fang, Secretary-General of ICAO as well as Dr Jiefang Huang, Director of the ICAO Legal Affairs and External Relations Bureau for this privilege and honour. As you can gather from the programme, we will, in this Forum, look at the past, consider the present, as well as contemplate and plan for the future, in our role as civil aviation legal advisers.

The Past

In looking back 100 years to the Paris Agreement of 1919 (i.e. the precursor of the Chicago Convention), we see that international air law has developed in response to major events and developments which affected the aviation industry, oftentimes profoundly. Some examples of these events are the wondrous birth and growth of flight, followed by the fearsome use of aircraft in the two world wars, the

devastating effects of major aircraft accidents, shocking hijackings, horrendous terrorist attacks, and also the privatisation of airlines as well as airports and air navigation services. .

Other significant events include the growth of aircraft leasing, and, with the rise of electronic communications and documentation, the “demise” of the paper air ticket. Further, who can forget the earth shaking 9/11 terrorist attacks? As well as the frightening SARS and swine flu pandemics among many others.

Some of the air law treaties which were developed, in direct response to these and other events, include the Montreal Convention of 1999, the Beijing Convention and Beijing Protocol of 2010, the General Risks Convention and Unlawful Interference Risks Compensation Convention, both of 2009, and the Montreal Protocol of 2014, just to name a few.

It is undoubted that many legal advisers have contributed to the making of these treaties. Those involved included legal officers/counselors in the ICAO Legal Bureau and in the civil aviation authorities and equivalents (for example the Attorney General’s Chambers, Justice Departments and State Departments). Some took leading roles but everyone contributed.

We owe a debt of gratitude to all of them for constructing a multifaceted legal infrastructure covering fundamental and important aspects of aviation (safety, security, liability, risk management, etc). These have all contributed to the orderly and peaceful growth and development of international civil aviation. However, we are not here, as an international aviation legal community, to rest on our laurels. In this Forum, we will ask ourselves: Have the air law responses been adequate and effective, and if yes, how can we ensure that they continue to be?

The Present

We operate in an environment that is rapidly changing. For example, the passenger numbers attributed to civil aviation are expected to double within the next 2 decades to more than 8 billion passengers. Further, technology, in particular Artificial Intelligence, can also dramatically change the way our aviation industry operates – from the way in which aircraft are flown to how we manage aerodrome safety, strengthen airport security, protect the environment and so on. Unmanned aircraft systems are very quickly becoming a part and parcel of our environment. One day, perhaps much sooner than we think, we may be reminiscing about the good old days of *piloted* aircraft.

These changes are disruptive. The issues they bring have increased in complexity. In the face of these changes, we need to ask ourselves - what needs to remain constant and enduring? What are the values, skills and attributes legal advisers need to effectively serve and contribute to the aviation community at large?

First, however, I ask all of us to consider the present situation (and reality) of legal advisers of Civil Aviation Authorities (“CAAs”) and their equivalents. Not all CAAs have in house legal advisers. Some CAAs rely exclusively on their fellow government agencies which provide legal advice and services to the entire government such as a Justice Ministry or an Attorney-General’s Chambers. Amongst those CAAs with in-house legal advisers, the range in their staff strength is from just one legal adviser to a department of 210 legal advisers. Now, this number of 210 sounds like a lot, until you learn that it is actually 210 legal advisers out of a total organisation staff strength of 42,000.

One reason for this wide variation is, of course, the sheer difference in size and range of civil aviation activities of our different States and of our respective CAAs. Some CAAs are just regulators. Others are, in addition to being regulators, aerodrome operators and air navigation service providers (ANSPs) as well. Some are also accident investigation authorities.

A legal adviser in a CAA, who is just a regulator, has to handle legislation, provide regulatory advisory support as well as be

responsible for enforcement work. Further, safety regulation is not exactly the same as security regulation, although there are similarities. Then, there is economic regulation, which is somewhat different. Some CAAs are also responsible for competition as well as personal data protection related regulation. In the case of a CAA which is also a service provider (like an aerodrome operator or an ANS provider), the legal adviser would also have many other contractual and operational legal matters to deal with – for example, procurement, land-related matters, asset acquisition and maintenance contracts, claims and dispute resolution matters.

The areas of law range from contract, tort, land/property, intellectual property, competition law, administrative law, public law, criminal law, international law, international air law to dispute resolution law, among others. We need to have some knowledge about other international organisations, such as the World Trade Organization, United Nations, and other international law areas such as the United Nations Convention on the Law of the Sea. When you consider the sheer scope and range of a CAA, as well as the legal support/ services CAAs require, it is not difficult to see why having only 1 or 2 legal advisers inevitably means that the legal adviser(s) concerned will be simply swamped with work.

Despite the challenges, many of us stay on in our organisations – notwithstanding the tremendous workload and sometimes immense pressures. Why is this the case? Well, I would offer a number of reasons. Most of us would say that aviation is ever changing and therefore tremendously interesting. Also, it may also be said that the cause of regulating to ensure aviation safety and security fulfils our public service idealism. For me personally, aviation is also simply “addictive”! Once bitten by the “aviation bug”, it is hard to get out of aviation!

So, this is the situation of the civil aviation legal adviser. Not a scientific assessment but just an assessment from the view of a 21-year civil aviation legal adviser practitioner.

“As an international aviation legal community of public servants, we will be called time and again to meet the challenges, whether new, emerging or sudden. Each time we are called together, we will come with our own country’s and/or regional perspectives and priorities. But each and every time, we will need to find common grounds and coalesce around legal (and non-legal) policies and critical principles to always promote safety and security, furtherance of sustainable air travel, protection of the environment.”



The Future

Where do we go from here? What do we contemplate, as we plan for the future? Here are some of my thoughts for your consideration. They are emerging thoughts, to perhaps develop further in the spirit and course of this Forum.

A Sense of History

For a start, I believe that we need to be imbued with a strong sense of history. As I mentioned earlier, when we look at our aviation legal history, we see that legal advisors before us have contributed in no small measure to the development of aviation. We have inherited the multilateral legal framework including the establishment of ICAO at the international level; and our legislative and regulatory framework, at the national level, that enables our aviation industry to grow and develop – both internationally and nationally.

We see that the growth of aviation has contributed to the betterment of human society. Collectively, we can look back at these achievements, at the legal contribution of those who have come before us, with a sense of pride. They have done a great job and have laid the foundations. It is now for us to be responsible for ushering in the next century of good treaty development and making.

To help us develop a strong historical perspective, I would like to suggest that we consider inviting some of our predecessors to join us at future editions of this Forum. We can invite previous chairs of diplomatic conferences,

veterans among us, who can share insights on the treaties which we will not find in the official records or in the treaty texts. I can name a few – Roderick van Dam, Gilles Lauzon, Michael Jennison, Kate Staples, and Terry Olsen. Some are no longer in government but they are still around and remain enthused about our international legal work.

A Sense of International Public Service

As an international aviation legal community of public servants, we will be called time and again to meet the challenges, whether new, emerging or sudden. Each time we are called together, we will come with our own national and/or regional perspectives and priorities. But each and every time, we will need to find common grounds and coalesce around legal (and non-legal) policies and critical principles to always promote safety and security, furtherance of sustainable air travel and protection of the environment.

We should not simply look for the lowest common denominator to codify into treaties but always strive for the best solutions for the betterment of all peoples in this, our global village. This will include advancing the movement towards “No Country Left Behind”.

A Communitarian and Global Outlook; A Solution-oriented Approach

Our world is getting more and more complex. Cross-border issues are increasingly cropping up – enforcement issues, competition and congestion issues, etc and we need to come together to address these issues and find solutions.

"Our role as legal advisors is not only in relation to the broader global issues. We deal with daily operational issues at the national and local levels. To be competent in these multi-faceted areas, we need to be fully immersed in our organisations – with the entire breadth and depth of operational issues. It is only with a deep understanding of the technical and operational issues that our non-legal colleagues deal with that we can truly be their partners and collaborators to address challenges and find the legal solutions they need."

I have heard (though not often) from representatives at previous treaty negotiations that national laws (such as our national Constitutions) prevent agreement on certain options. I propose that we need, in addition to national perspectives, to have a strong communitarian and global outlook, of being a member of the larger global village. By its very nature, aviation transcends national and regional boundaries. And, by its very nature, getting together to develop treaties (not for treaty-making sake) and finding international solutions we can agree to, requires that we consider our national policies and laws against the international needs with an "open mind". A robust defence of our national interests is important, but a robust consideration of international interests is also just as important. A determination to find solutions and to use innovative approaches is important as well.

A Robust and Facilitative Negotiation Practice with Negotiation Principles

To complement our global/communitarian outlook and solution-oriented approach, we need to develop a robust and facilitative negotiation practice. Shall we consider developing principles to guide us in our negotiations and deliberations? Would getting together those who have led the way to share their insights, as I mentioned earlier, also assist us?

A Competency Framework

Our role as legal advisors is not only in relation to the broader global issues. We deal with daily operational issues at the national and local levels. To be competent in these multi-faceted areas, we need to be fully immersed in our organisations – with the entire breadth and depth of operational issues. It is only with a deep understanding of the technical and operational issues that our non-legal colleagues deal with that we can truly be their partners and collaborators to address challenges and find the legal solutions they need.

As legal advisers, we must therefore be very competent. We need to know and develop the relevant legal knowledge and skills. We need to understand aviation in as many of the technical areas as possible, whether in safety, security, climate change and so on.

Shall we develop a competency framework for civil aviation legal advisers that will assist us to develop a corp of great international civil aviation legal advisers? A corp to not only serve the international community, but also each and every of our own countries, well?

Further, can we reach out to our aviation institutions of learning, to research and provide us with support for this endeavour?

I hope the thoughts I have shared are of some use for consideration.

The Next 1.5 Days

Let us use the time over the next 1.5 days to share and exchange earnestly on the emerging issues, to reflect on and to renew our commitment to the inherent nobility of our work for the betterment of society at large and to enthuse ourselves - because we are, after all, so very fortunate to be professionally engaged in this very important work. Let us also use this precious time to simply get to know each other better.

Once again, welcome to Singapore. May we all have a fruitful and enjoyable time here.

SESSION 1

FROM PARIS TO MONTRÉAL: A CENTURY OF TREATY MAKING IN AIR LAW

2019 marks 100 years of progressive treaty making in international civil aviation beginning with the adoption in 1919 of the Paris Convention (Convention relating to the regulation of aerial navigation). In 2019, the Chicago Convention on International Civil Aviation turns 75 and the Montréal Convention 1999 on air carrier liability turns 20. The session covered the recollections and perspectives on the key moments in the evolution of various air law treaties. The challenges in the ratification and implementation of air law instruments and solutions that have worked to address these challenges were also highlighted.

MODERATOR:

DR MATTI TUPAMAKI

DEPUTY DIRECTOR GENERAL OF CIVIL AVIATION,
FINNISH TRANSPORT AND COMMUNICATIONS AGENCY

THE DEVELOPMENT OF INTERNATIONAL AIR LAW UNDER THE AUSPICES OF ICAO

DR JIEFANG HUANG

DIRECTOR, LEGAL AFFAIRS AND EXTERNAL RELATIONS BUREAU,
INTERNATIONAL CIVIL AVIATION ORGANIZATION

STATES' EXPERIENCES IN THE PREPARATION AND NEGOTIATION OF AN INTERNATIONAL TREATY

MS KATE STAPLES

GENERAL COUNSEL AND SECRETARY,
CIVIL AVIATION AUTHORITY, UNITED KINGDOM

THE ROAD TO UNIVERSAL ACCEPTANCE AND IMPLEMENTATION OF AIR LAW TREATIES

MRS JOYCE ANAKWA THOMPSON

DIRECTOR, LEGAL AFFAIRS AND INTERNATIONAL RELATIONS,
GHANA CIVIL AVIATION AUTHORITY

THE DEVELOPMENT OF INTERNATIONAL AIR LAW UNDER THE AUSPICES OF ICAO

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As mentioned by Mr Lucien Wong and Mr Edmund Chen, 2019 marks several anniversaries for international civil aviation. This year, marks the 100th anniversary of the adoption of the 1919 Paris Convention on Aerial Navigation. This Convention was adopted just after World War I and it established the former International Commission for Air Navigation (ICAN), the predecessor of ICAO.

This year also marks the 75th anniversary of the adoption of the Convention on International Civil Aviation, the Chicago Convention. In fact, the title of this first session is "From Paris to Montréal: A century of treaty making in air law". I must say that maybe another title for it could have been "From Paris to Montréal through Chicago". As we all know, the Chicago Convention is considered as the Magna Carta of international civil aviation and it continues to govern international air navigation and serves as ICAO's constitution until now.

As pointed out by the Attorney General in his remarks, the Chicago Convention has now been ratified by 193 States. The universal acceptance of the Chicago Convention certainly demonstrates the importance of, and the commitment of States towards achieving a high degree of uniformity in, international civil aviation

The Chicago Convention is a remarkable instrument which has stood the test of time. It has only been substantively amended twice, leading to the introduction of two new articles. The first substantive amendment was the introduction of Article 83 *bis* which enables the transfer of certain functions from the State of registry to the State of the operator of aircraft. It was introduced to ensure safety while at the same time facilitating the leasing and interchange of aircraft between States. The second substantive amendment was made in the aftermath of the KAL007 incident, and it resulted in the introduction of Article 3 *bis* which prohibits the use of weapons against civil aircraft in flight. Both amendments have been widely ratified and remain important in ensuring the continued safety and security of international air transport.

These anniversaries coincide with the 40th Session of ICAO Assembly which will be held in September and October this



2019 marks several anniversaries for international civil aviation

year. Together, they underline the fact that 2019 is indeed an important year for the civil aviation community.

Even though the Paris Convention of 1919 is no longer in force, we often forget that most of the basic principles enshrined in the Chicago Convention were already embodied in the Paris Convention. For example, Article 1 of the Paris Convention recognized the fundamental principle that States have complete and exclusive sovereignty over the air space above their territory. The Chicago Convention reinforced the existence of this principle by incorporating a similar provision into its Article 1.

Another remarkable contribution of the Paris Convention is the introduction of an amendment in 1929 with respect to "aircraft capable of being flown without a pilot". The wording of this amendment is almost exactly the same as that found in Article 8 of the Chicago Convention on pilotless aircraft. This attests to the great foresight of the drafters in preparing this amendment to the Paris Convention in 1929.

I spoke earlier today about the work of the Legal Committee and its contribution to the adoption of international air law instruments. Nevertheless, I believe that it is also important to recognize the outstanding contribution to the development of international air law of its predecessor, the *Comité International Technique d'Experts Juridiques Aériens*, more widely known under its abbreviated name CITEJA.

CITEJA was created in 1926 and held sixteen sessions before its dissolution in 1947. During the period of its existence, CITEJA drew up draft conventions such as the Warsaw Convention of 1929 on air carrier liability and several others which are listed on the slide.¹

It is interesting to note that CITEJA was an independent international body which adopted its own budget – funded by contributions from Member States. CITEJA was also responsible for appointing and determining the conditions of employment of the staff of its Secretariat. Moreover, CITEJA was in charge of adopting its work programme and convened, when it deemed necessary, plenary sessions or meetings of its various sections. Also, State representatives to CITEJA were usually chosen from among the most renowned academics.

What is interesting to note is that the Chicago Conference in 1944 did not envisage the dissolution of CITEJA. On the contrary, the Conference adopted a resolution requesting the various governments represented to take into consideration the possibility of holding again, as soon as possible, sessions of CITEJA which had been interrupted due to the outbreak of the Second World War. Accordingly, CITEJA did resume its work in 1946 by holding sessions in Paris and Cairo but was eventually dissolved in 1947 as it was thought preferable to entrust the work to a new international body created within ICAO.



Comité International Technique d'Experts Juridiques Aériens (CITEJA)

Pursuant to the foregoing, the ICAO Assembly at its First Session adopted a resolution establishing the Legal Committee in place of CITEJA. The Assembly also adopted a procedure for the approval of draft conventions. Thus, the Legal Committee enjoys a unique status among the other permanent bodies of ICAO as it is the only body that was neither created by the Chicago Convention nor by a decision of the Council. Also, participation in the Legal Committee is open to all ICAO Member States.

According to its Constitution, which was adopted in 1953 at the 7th Session of the Assembly, the main duties and functions of the Legal Committee are to make recommendations on matters relating to public international air law and to study problems relating to private air law affecting international civil aviation. The Legal Committee is also the sole body in ICAO which is entrusted with the responsibility of preparing drafts of international air law conventions.

The 37th Session of the Legal Committee was held last September. In seventy-two years of its existence, the contribution it has made to the development and unification of international air law is unparalleled. Under its auspices, twenty-four international air law instruments have been prepared in various fields such as aircraft finance, air carrier liability and aviation security. Although amendments to the Chicago Convention are typically considered by the Assembly, the Legal Committee was heavily involved in the drafting of Article 83 *bis* of the Chicago Convention. Both private and public international air law instruments have been developed under the auspices of the Legal Committee.



ICAO Legal Committee

¹ The Warsaw Convention of 1929 on aircraft liability; the Rome Convention of 1933 on damages caused by aircraft to third parties on the surface as well as its additional Brussels Protocol of 1938; the Rome Convention of 1933 on precautionary attachment of aircraft and the Brussels Convention of 1938 relating to assistance and salvage of aircraft or aircraft at sea.

With regard to private international law instruments, the Geneva Convention of 1948 on recognition of rights in aircraft, the Rome Convention of 1952 on damage to third parties, the Montreal Convention of 1999 on air carrier liability as well as the Cape Town instruments of 2001 on aircraft financing are some of the best known and widely accepted examples.

MONTREAL CONVENTION OF 1999	Liability of the carrier for death and injury of passengers, destruction or damage to cargo, for checked baggage, as well as for delay in the carriage of passengers, baggage and cargo
ROME CONVENTION 1952 AND GENERAL RISKS CONVENTION 2009	Liability of the carrier for damage caused on the ground
UNLAWFUL INTERFERENCE COMPENSATION CONVENTION 2009	Liability for damage to third parties caused by an aircraft in flight on an international flight, as a result of an act of unlawful interference
GENEVA CONVENTION 1948	International recognition of rights in aircraft
CAPE TOWN CONVENTION AND AIRCRAFT PROTOCOL 2001	Framework to facilitate cross-border and asset-based financing of aircraft

Private International Air Law Instruments

With regard to public international air law instruments, you may certainly be familiar with the Tokyo Convention of 1963 on offences committed on board aircraft, the Hague Convention of 1970 on hijacking and the Montreal Convention of 1971 which deals with acts of sabotage to aircraft. These old aviation security instruments belong now to the most widely ratified codifications of international law.

TOKYO CONVENTION 1963 AND MONTREAL PROTOCOL 2014	<ul style="list-style-type: none"> • Offences and other acts committed on board aircraft, including unruly behaviour • Extension of legal recognition to and certain protections to in-flight security officers
THE HAGUE CONVENTION 1970	<ul style="list-style-type: none"> • Suppression of hijacking
MONTREAL CONVENTION 1971 AND THE VIA PROTOCOL 1988	<ul style="list-style-type: none"> • Other unlawful acts against the safety of civil aviation, and for the suppression of unlawful acts of violence at airports
BEIJING CONVENTION AND PROTOCOL 2010	<ul style="list-style-type: none"> • Suppression of the act of using civil aircraft as a weapon of destruction, and the act of using biological, chemical or nuclear material against civil aviation • Criminal liability of directors and organizers of an offence, as well as the liability of those who knowingly assist an offender to evade investigation, prosecution or punishment
MEX CONVENTION 1991	<ul style="list-style-type: none"> • Marking of plastic explosives for purposes of detection

Public International Air Law Instruments

More recently, in order to modernize the previous aviation security instruments adopted in the 1960s and the 1970s, the Beijing Convention and the Beijing Protocol of 2010 as well as the Montréal Protocol of 2014 were adopted. As I was closely involved for many years in the preparation of the Beijing Convention and Beijing Protocol, it is gratifying to note that these two treaties entered into force in 2018. Equally gratifying, is the fact that presently, only three additional ratifications are required in order for the Montréal Protocol of 2014 to enter into force. In this connection, I wish to commend the excellent work of Ms Siew Huay Tan who was the Chairperson of the Diplomatic Conference which adopted the Montréal Protocol of 2014.



ICAO's Law Making Activities

Also, I wish to point out that ICAO air law instruments have made a unique and pioneering contribution to the development of international law. For instance, the Hague Convention of 1970 was the first treaty to introduce a mandatory obligation for States to either submit alleged offenders to their authorities for prosecution or to extradite them. This type of provision has subsequently been used in other treaties adopted within the United Nations system. Also, the Montreal Convention of 1999 provides for an innovative built-in periodic review mechanism. It functions as a method of preventing the erosion of liability limits due to inflationary conditions with the passage of time. This feature of the Montreal Convention, at the time of its adoption, was quite unique and innovative.

As I mentioned in my opening remarks, an inaugural Treaty Event will be held in the margins of the next Assembly. For this purpose, the Event will focus on the promotion of the Montreal Convention of 1999, the Beijing Convention and Beijing Protocol of 2010, the Montréal Protocol of 2014, as well as the 2016 Protocols amending Articles 50(a) and 56 of the Chicago Convention. Of course, States would also be welcome to deposit instruments of ratification or accession to any other air law instrument for which ICAO acts as Depositary. Therefore, I wish to invite your State to participate in the Treaty Event and to use these special facilities to deposit instruments of ratification to air law treaties.

Also, as I mentioned in my earlier remarks, in order to foster the knowledge of international air law, ICAO has developed an international air law course. I strongly encourage all of you to attend one of the upcoming deliveries.



Regulation of New and Emerging Modes of Aerial Transportation

As you all know, the future regulation of new and emerging modes of aerial transportation will certainly raise numerous challenges for the international air law community in the years ahead. I am confident that ICAO and in particular the Legal Committee will remain at the forefront of these new developments. Therefore, it is my wish that this Forum will identify the needs of States in the legal field and how ICAO can continue to play an important role in order to assist States in the development of new air law instruments, guidance material such as model legislation or any other tool that may be deemed useful and necessary.

In closing, allow me to quote the words of Dr. Assad Kotaite, the former President of the Council of ICAO, as follows: "respect and honour the results of the hard work that your predecessors have done to build the bodies of air law with which you work. But at the same time, be open to change – not change for the sake of change, but change that finds a better way."

Thank you.

STATES' EXPERIENCES IN THE PREPARATION AND NEGOTIATION OF AN INTERNATIONAL TREATY

MS KATE STAPLES

GENERAL COUNSEL AND SECRETARY,
CIVIL AVIATION AUTHORITY, UNITED KINGDOM

The modernisation of the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface ("the Rome Convention 1952") was used as the basis for the following presentation. There appeared to have been two drivers for the work to overhaul the Rome Convention 1952. First, there had been a limited number of ratifications of the Convention and there had also been a small number of denunciations of it. Second, the attacks in New York and Washington DC in September 2001 had caused significant disturbances in the aviation insurance markets, prompting concern that an international legal response was required to secure appropriate compensation to victims and an appropriate cap on the liabilities of airlines. In the run up to the Legal Committee in Spring 2004, the ICAO Legal Bureau had prepared a revised draft text of the Rome Convention 1952. At that Committee meeting, however, it was concluded that the draft text was not mature enough for discussion at a Diplomatic Conference. Instead, a Special Group was established to consider the issues raised by the 2001 attacks and the terms of the Rome Convention 1952. Membership of the group numbered some 25 or so specialists drawn from across ICAO's Contracting States.

In the period between 2004 and 2008 the special group met on some 5 or 6 occasions, at venues in various States. Progress was made incrementally. The first key step was to identify the policy problems to be addressed and to postpone discussion of potential legal responses until the policy issues were clear. These early policy discussions highlighted the fact that damage resulting from acts of unlawful interference should be treated differently from damage arising out of ordinary aviation accidents. Separating these two matters ultimately led to the preparation of two free-standing draft texts.

Key policy questions to be tackled included:

- a the sources from which compensation funds could be drawn,
- b the extent to which airlines should contribute to any compensation payments,
- c the scope for any mutualised solutions to manage risk more effectively, and
- d the types of damage that should be subject to compensation.

As discussions continued, agreements reached were captured in writing, with a note of 'grey areas' maintained to identify those areas where further discussion was required.

As a consequence of continued discussions, the list of grey areas reduced with each successive special group meeting. Consensus was also aided by the range of perspectives that members of the group paid attention to, and by extensive research into solutions adopted in other industries. Moreover, the energy and commitment of individual group members was critical in making progress. It was not enough to have a State view to share, group members took responsibility for listening to others' views with great care, helped with practical arrangements for each meeting and assiduously maintained harmonious working relationships.

In 2008, the Special Group concluded that the two draft legal texts they had prepared were ready for submission to the ICAO Legal Committee. At the meeting of that Committee it was concluded that both texts were mature enough for submission to a Diplomatic Convention, which would take place in 2009. An innovation introduced in the 2008 Legal Committee meeting enabled good drafting progress to be made. Using the basic word processing tools available in

word and a projector, it proved possible to display proposed drafting changes in real time, making it much easier for all drafting committee contributors to see the impact of their proposals, making decisions more efficient and effective.

In the Spring of 2009, a Diplomatic Convention was held. Although much work was completed during its two weeks duration, not least the article by article scrutiny of two legal texts, the Conventions adopted at that time have not been widely supported. The key reason for this is that States did and do not see the need for such reforms. By 2009, it was clear that it had not proved necessary to take international action to ensure that victims of the 2001 attacks were compensated and that it had not been necessary to cap airlines' liabilities. Moreover, in the case of 'general risks' it was not necessary to secure consistency between States on their treatment of liability for aircraft accidents.

Ms Staples emphasised the enjoyment and personal benefits she had gained from participating in the work and recommended it to those attending the CALAF.

THE ROAD TO UNIVERSAL ACCEPTANCE AND IMPLEMENTATION OF AIR LAW TREATIES

MRS JOYCE ANAKWA THOMPSON

DIRECTOR LEGAL AND INTERNATIONAL RELATIONS,
GHANA CIVIL AVIATION AUTHORITY

It is an honour to be called upon to speak to such an august audience of lawyers, on a subject which is fraught with both successes and various challenges in the job function of Civil Aviation lawyers. As the topic indicates, my role is to discuss the different modes of implementation of international air law treaties and to encourage as well as challenge, as necessary, us all to adhere to the obligations of States in ratifying, acceding to or consenting to the various treaties.

Following the detailed discourse by Dr Jiefang Huang and Ms Kate Staples, on the "Development of international air law under the auspices of ICAO" and "States' experiences in the preparation and negotiation of an international treaty", my discussion will be restricted to the major treaties requiring ratification or implementation by States, Ghana's example, and challenges faced by legal advisors.

The Chicago Convention and Vienna Convention

As indicated earlier, our discussion has already been enriched by Dr Huang's presentation. Therefore, we do not require an in-depth discussion of the Chicago Convention and the Vienna Convention, save to indicate the primary objective of the Chicago Convention which is the development of civil aviation in a safe and orderly manner.

Article 1 – Sovereignty: The sovereignty of States relative to its airspace, is indicative therefore of the role of Member States in ensuring the coming-into force of International Agreements, agreed to during Diplomatic Conferences (see Ms Staples' presentation) through their subsequent implementation and application for operation within the airspace and territory of the State. International safety regulation depends on individual Member states for implementation and enforcement.

Vienna Convention on the Law of Treaties

Article 2(1)(a) - Purpose: "a treaty is defined as an international agreement concluded between States in written form and governed by international law whether embodied in a single instrument or in two or more related instruments and whatever its particular designation."

Obligations of States

What then are the responsibilities of Member States with respect to international Air Law Treaties? The full

implementation of air law treaties. With States becoming parties through:

- Signature of international treaties
- Ratification;
- Accession;
- Adherence; or
- Approval and
- Domestication in local statutes.

Recent Air Law Treaties and Their Status

The Assembly of the International Civil Aviation Organization (ICAO), at its 39th Session held in Montréal from 27 September to 6 October 2016, adopted Resolutions A39-5, A39-7, A39-9, A39-10, A39-11 (Appendix C), A39-15 (Appendix A) and A39-18 (Appendix B) promoting the ratification of international air law instruments by States. Further details are as follows:

1. A39-5 – Ratification of the Protocol amending Article 50 (a) of the Convention on International Civil Aviation: (Montréal, 6 October 2016) – Increase of Council to 40 members
2. A39-7 – Ratification of the Protocol amending Article 56 of the Convention on International Civil Aviation: (Montréal, 6 October 2016) – Increase of Air Navigation Commission to 21 Members

3. A39-9 – Promotion of the Montréal Convention of 1999: (Convention for the Unification of Certain Rules for International Carriage by Air Montréal, 28 May 1999) - Passenger Rights
4. A39-10 – Promotion of the Beijing Convention and the Beijing Protocol 2010: Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing, 10 September 2010) and the Protocol Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft (Beijing, 2010) – Security
5. A39-11 - Consolidated Statement of continuing ICAO Policies in the legal field, Appendix C (Ratification of ICAO International Instruments), the Assembly urged all States which so far have not done so to ratify the following international air law instruments:
 - Convention for the Unification of Certain Rules for International Carriage by Air (Montréal, 28 May 1999)
 - Convention on International Interests in Mobile Equipment (Cape Town, 16 November 2001) – Aircraft Financing
 - Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Aircraft Equipment (Cape Town, 16 November 2001) Aircraft Financing
 - Convention on Compensation for Damage Caused by Aircraft to Third Parties (Montréal, Canada, 2 May 2009) – General Risks
 - Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing, 10th September 2010) and the Protocol Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft (Beijing, 2010)
 - Protocol to Amend the Convention on Offences and Certain Other Acts Committed on Board Aircraft (Montréal, 4 April 2014) – Security
6. A39-15 – Consolidated statement of continuing ICAO policies in the air transport field, Appendix A (Economic regulation of international air transport), the Assembly urged all States that in their regulatory functions, they should have due regard to the policies and guidance material developed by ICAO on the economic regulation of international air transport, such as those contained in Doc 9587, Policy and Guidance Material on Economic Regulation of International Air Transport.
7. A39-18 – Consolidated statement on continuing ICAO policies related to aviation security, Appendix B (International legal instruments, enactment of national legislation and conclusion of appropriate agreements for the suppression of acts of unlawful interference with civil aviation), the Assembly urged all States which have not yet done so to become parties to:
 - Convention on Offences and Certain Other Acts Committed on Board Aircraft (Tokyo, 1963)
 - Convention for the Suppression of Unlawful Seizure of Aircraft (The Hague, 1970)
 - Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation (Montréal, 1971)
 - The 1988 Supplementary Protocol to the Montréal Convention, to the Convention on the Marking of Plastic Explosives for the Purpose of Detection (Montréal, 1991)
 - Convention for the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing, 2010)
 - Protocol Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft (Beijing, 2010)
 - Protocol to Amend the Convention on Offences and Certain Other Acts Committed on Board Aircraft (Montréal, 2014)

In the following table, we shall have a pictorial indication of the status of implementation of recent Air Law Treaties (as at about mid May 2019).

Obligations of States

- Status of States with Respect to Implementation

CONVENTION	IN FORCE?	NO. OF STATES RATIFIED/ACCESSIONS	NO. OF STATES REQUIRED
ART. 50(A)	NO	39	128
ART. 56	NO	39	128
MC 99	YES (04/11/03)	136	-
MONTREAL 2009 (GENERAL RISK)	NO	12	35
MONTREAL 2009 (UNLAWFUL INTERFERENCE)	NO	9	35
BEIJING CONVENTION 2010	YES (01/07/18)	28	-
BEIJING PROTOCOL 2010	YES (01/10/18)	31	22
CAPE TOWN CONVENTION 2001	YES (01/03/06)	79	-
CAPE TOWN PROTOCOL 2001	YES (01/03/06)	76	-
MONTREAL PROTOCOL 2014	NO	19	22

Modes of Domestication - The Ghanaian Example

Ghana follows the dualist approach. Article 75 of the Ghana Constitution provides as follows:

“A treaty, agreement or convention executed by or under the Authority of the President shall be subject to ratification by

(a) Act of Parliament; or

(b) A resolution of Parliament supported by the votes of more than one-half of all the members of Parliament.”

1. Ghana has recently ratified/acceded to 36 international air law treaties. The Parliament of Ghana ratified 9 air law treaties in late 2015 which were added as schedules to the Ghana Civil Aviation Act, but instruments were deposited in 2018. The nightmare of any civil aviation legal counsel was occasioned by the lengthy delays in getting the Instruments of Ratification and Accession forwarded to the respective depositary. This was sorted out through various discussions with the respective government departments., the Ministry of Justice, and the Foreign Ministry.
2. The Security Conventions have been domesticated in Ghana's Criminal and Other Offences Act eg. acts against aircraft endangering life and property, Hijacking, etc.
3. Reservations to treaties – These are made by States when signing, ratifying, accepting, approving or acceding to a treaty, by refusing to accept or be bound by a certain provision of the treaty. These are however to be distinguished from declarations or mere political statements.
4. Entry into Force of treaties – Treaties usually specify a date for entry into force, or in the case of multilateral treaties, entry into force is upon ratification by a fixed number of states
5. MONTREAL CONVENTION 1999 – This Convention was adapted and made applicable to domestic flights in Ghana.
6. CAPE TOWN CONVENTION and CAPE TOWN PROTOCOL 2001

Following stakeholder consultations, it was noted that these Treaties raised issues of application of domestic law. This enabled Ghana to come up with the requisite choices as follows:

- ARTICLE 39(1) – Categories of non-consensual rights prioritization in accordance with domestic law (unpaid charges to the Ghana Civil Aviation Authority (GCAA) etc, taxes owed to Government, liens of workers for payments, etc.)

- ARTICLE 53 – The High Court was acknowledged as the Court of competent jurisdiction in respect of issues of enforcement/interpretation/ aviation knowledge.
- ARTICLE 54(2) – The remedies under the Convention which can be exercised without the leave of court.
- ARTICLE XI – Ghana opted for Alternative A and waiting period of 30 days.
- ARTICLE XII – Shall be applied by Ghana (cooperation of courts with foreign courts and foreign insolvency administrators in carrying out the provisions of Article XI).
- ARTICLE XIII – Shall be applied (IDERA).
- ARTICLE 60(1) – The Convention is applicable to pre-existing rights subject to GCAA's priority charge.
- OECD FUNDING (DISCOUNT) Member States who ratified the Convention and Protocol were assured of discounts from foreign financial institutions.

Challenges Faced by States in Implementation of Air Law Treaties

Numerous challenges faced by States result in either the delay in the implementation of international air law treaties, or the lack of implementation in its totality. The major challenges include the following:

1. Understanding the treaty
2. Implementation of the process of domestication
3. Requisite consultation with the Executive and Legislative branch
4. Education – cross consultation with Attorney-General's Department and Ministry of Foreign Affairs and Regional Integration – resulting in delay of deposit of instruments
5. Coordination with other government agencies
6. Broad stakeholder consultation (airlines/passengers/ etc)
7. Lack of a buy-in by governmental agencies

Role of the Civil Aviation Legal Counsel

What then is the role of Legal Counsel in surmounting all these challenges and obstacles? In Ghana, the Civil Aviation Act clearly stipulates one of the functions of the Civil Aviation Authority as “Carrying out any Treaty or Agreement in the field of Civil Aviation to which Ghana is a party”.

It is the duty of Legal Counsel to disseminate information with respect to Treaties approved by the Assembly, and the coming into force of provisions of adopted air law treaties. The process is initiated through interactions with technical personnel, inter-government agency, stakeholders and public consultations. The lead government agencies ought to be identified, especially the supervising government department, the Ministry of Justice and the Foreign Ministry. Where appropriate, Cabinet approval must be sought before initiating the parliamentary process.

It is further the duty of Legal Counsel to determine declarations and notifications to be made with respect to specific Treaties and the required implementing legislation prior to submission to Parliament. The role of the Attorney General, as Legal Advisor, is crucial in this process, as such the attorneys must be consulted right from the onset. The role of Legal Counsel continues following the parliamentary process, right through to the lodgement of the Instruments of Ratification, Accession or Approval, and finally the Entry into force of the Treaty.

The Way Forward for Universal Acceptance

Let me conclude this discussion by putting forth a few teasers with respect to the way forward as follows:

- Can we task ICAO to provide model legislation with respect to the various treaties as a guide for States?
- Guidelines by ICAO for national legislation;
- Collaborative support among Civil Aviation Legal Advisors
- Attendance at ICAO diplomatic conferences by Civil Aviation Legal counsels/Attorney General lawyers/ Legislature
- Additional Regional ICAO Legal seminars
- Participation by Legal Counsel in Legal Task Forces meetings; Working Groups; Panel discussions; Legal Committee Meetings as well as Legal Commission of the Assembly.

SESSION 2

AIR LAW AND THE AVIATION INDUSTRY OF THE FUTURE

The civil aviation industry must respond and adapt to new and emerging opportunities and challenges including increases in global air transport demand and capacity, changes in technology as well as new and evolving threats to air safety. In recent times, climate change, unmanned aircraft systems and commercial aerospace transportation, cyber threats and artificial intelligence have raised major challenges. The session highlighted some of the emerging issues/challenges, identified and evaluated the air law responses to them.

• MODERATOR

BARR. AHMADU ILITRUS DIEMKWAP

ASSISTANT GENERAL MANAGER LEGAL SERVICES, NIGERIAN CIVIL AVIATION AUTHORITY

• DRONES (UA): SUITABILITY, APPLICABILITY, EFFECTIVENESS OF RULEMAKING

MS SUSANNA METSALAMPI

SECOND VICE-CHAIRPERSON OF THE ICAO LEGAL COMMITTEE AND HEAD OF DEPARTMENT, LEGAL AFFAIRS, FINNISH TRANSPORT AND COMMUNICATIONS AGENCY

• CREDIT ADMINISTRATION OF THE CIVIL AVIATION ADMINISTRATION OF CHINA

MR GUO RENGANG

DEPUTY DIRECTOR-GENERAL, DEPARTMENT OF POLICY, LAW AND REGULATION, CIVIL AVIATION ADMINISTRATION OF CHINA

• AIR LAW AND AVIATION INDUSTRY OF THE FUTURE: PERSONAL DATA PROTECTION AND CLIMATE CHANGE

MR BADER AL-MUBARAK

FOURTH VICE-CHAIRPERSON OF THE ICAO LEGAL COMMITTEE AND SENIOR LEGAL OFFICER, PLANNING AND PROJECTS AFFAIRS, KUWAIT DIRECTORATE GENERAL OF CIVIL AVIATION

• INTERNATIONAL CYBER NORMS AND CYBERSECURITY DISCUSSIONS

MS DANIELLE YEOW

DEPUTY DIRECTOR-GENERAL, INTERNATIONAL AFFAIRS DIVISION, ATTORNEY-GENERAL'S CHAMBERS, SINGAPORE

DRONES (UA): SUITABILITY, APPLICABILITY, EFFECTIVENESS OF RULEMAKING

MS SUSANNA METSALAMPI

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The Chicago Convention recognises unmanned aircraft as one type of aircraft covered by the Convention. Yet, ICAO standards and recommended practices were, until recently, developed for the purposes of the manned aviation, and they are most often not well suited to address operations with unmanned aircraft.

The ICAO Legal Committee has addressed the issue of the applicability of International Air Law Instruments to unmanned aviation, and found that they do not seem to preclude unmanned aircraft from their scope. Consequently, with a rapidly rising number of drones operated for an increasing number of purposes, we have in place a legal regime that has not been developed with drones in mind.

Simultaneous Rulemaking on Several Levels

Since the number of drones has started to grow, the development of national and international rules suitable for drones has begun. ICAO has been very active in this work, using the RPAS-panel as the expert forum in this work. In addition, intensive work is carried out in the JARUS, or Joint Authorities for Rulemaking on Unmanned Systems.



At the same time, ICAO Contracting States have developed national rules to in order to regulate the activities locally – it has not been possible to wait for an international framework. Yet, States have been able to benefit from the ongoing international work.

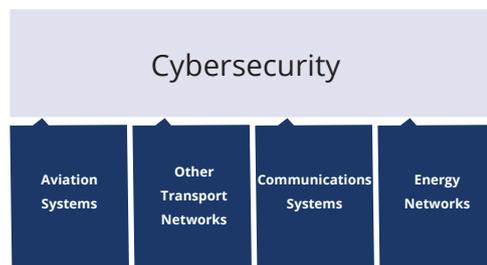
In the European Union, last year, a basic Regulation was adopted for the purposes of all States of the European Union. More detailed rules covering drone operations are expected to be published before summer.

The new rules define technical and operational requirements for the drones. The proposal also addresses the pilots' qualifications. Furthermore, drone operators will have to register themselves, except when they operate drones lighter than 250g.

Challenges in the Area of Drones

Challenges and questions when regulating drones, are, among other things:

- How to reach out to a totally new group of operators, who have little or no knowledge of the existing rules to be applied when operating in the same airspace?
- How to address operations and equipment that are under such a rapid technological development?
- How to create simple but efficient and “easily applicable” rules?
- What impact will this new approach have on regulating the traditional manned aviation? What are the lessons learned?



Cybersecurity

Challenges and vulnerabilities related to cybersecurity and cyber safety are side products of the digital era. This is an issue that is not limited to aviation activities, but to all activities in our society. Consequently, also from the legal perspective, aviation can be addressed in the same manner as other sectors.

Simultaneous Rulemaking on Several Levels

Many States have in place special legislation for exceptional circumstances. For example, electricity can be cut off in large areas due to an accident or an environmental or natural catastrophe. Electricity can be cut off also due to a cyberattack. Regardless of the reason behind the power cut, the Government may have in place special arrangements to secure basic conditions for living in the affected areas.



States are also developing special legislation relating to deficiencies in or attacks against digital systems (cybersafety and security). States have put in place special cyber authorities or agencies. For example, in Finland, The National Cyber Security Center develops and monitors the operational reliability and security of communications networks and services, and provides situational awareness of cyber security.

The so-called NIS Directive (security of network and information systems), adopted in 2016 is the first piece of EU-wide legislation on cybersecurity. It provides legal measures to boost the overall level of cybersecurity in the EU.

The NIS Directive provides for national and EU wide networks for cooperation in order to promote swift and effective operational cooperation on specific cybersecurity incidents and sharing information about risks, a culture of security across sectors which are vital for the economy and society and rely heavily on Information and Communications Technology, such as energy, transport, water, banking, financial market infrastructures, healthcare and digital infrastructure.

Cybersecurity Rules

Challenges and questions when regulating cybersecurity are, among other things, the following:

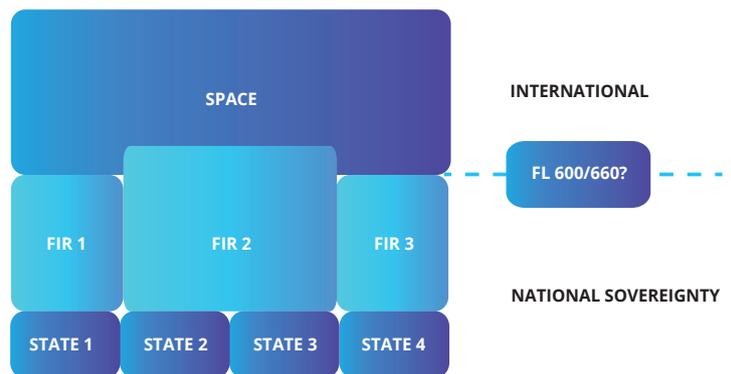
- Where cyber issues are looked at, we cannot limit ourselves to looking only at the aviation industry and aviation system, as the aviation system is connected with other systems.
- Where security issues are contemplated, confidentiality of information is often crucial. How do we work together for global solutions and, and yet retain confidentiality?
- Will we manage to incorporate cyber solutions in the current safety and security management system?

Commercial Air Transport, Commercial Airspace Transport

So far, when we have been looking at aviation and space activities, these have seemed like separated areas. With the emergence of new technological developments, the differences between these two areas are becoming less significant. Space operations are being developed in several States that, so far, have their own approach to regulating the activities. In some States, experimental flights need to comply with aviation law, whereas in many States these activities are regulated separately aviation law. According to the Finnish Act on Space Activities, a space object flying in the airspace of Finland is subject to applicable provisions on civil aviation. The Act also makes reference to the Aviation Act when addressing activities that endanger flight safety.

ICAO has been working with the United Nations office for Outer Space Affairs, to find common ground and solutions for the future.

As industry is making technological progress, when will it ask for States to have further common rules for these activities?



Commercial Aerospace Transportation

Yet, with regard to space, many questions still remain unanswered. For example, where does space begin? Is the ceiling of the Upper Traffic Area FL 600 or FL 660? The responsibility for the airspace is divided according to the geographical limits of states. A flight information region (FIR) is a specified region of airspace in which a flight information service and an alerting service (ALRS) are provided. Space is considered as an international area.

What implications does this have from the point of view of responsibility and liability? What kind of regime shall we have for a spaceship carrying tourists in the space? Shall we extend our existing aviation legislation regime so that it will also cover the space parts of the journey? Or do we have a separate regime for spaceflights, although they are using the same airspace as ordinary aircraft, for departure and landing purposes?

This is yet another area that we will be working on in the future.

Artificial Intelligence (AI) can be used for many purposes in the aviation industry:

Artificial Intelligence (AI) can be used for many purposes in the aviation industry:

- In the aircraft, AI can be used to assess data issued from several sensors, monitors and systems of the aircraft, and help identify erroneous data being issued due to a malfunction in the system.
- For the operation of aircraft, AI can be used for modelling airline route choices, predicting trajectories, optimizing the use of fuel, etc.
- In air traffic management, AI can be used for improving the automation of ATM systems, and transforming voice communications into text.
- AI can also be used for enhancing passenger experience, for example in ticketing systems, passenger identification, luggage tracking.
- Both operators and authorities can use AI in their "routine services". Chatbots are appearing on websites..

Most importantly, AI can be for processing large amount of data, identifying trends, identifying differences, producing analysis, that is in the core of our safety and security work.

Legal Approach to AI

We have moved a long way from the first flights of the Wright brothers. Aircraft and related aviation systems have become more and more sophisticated. First, we were talking of automation, then digitalisation, and now we are moving to the use of AI and the Internet of Things.

AI also includes machine learning, as one of its core elements. AI uses data to train algorithms and give computer systems the ability to learn, to progressively improve performance on a specific task.

We need, however, to remember that AI, although mimicking human problem solving and behavior, is limited by the original algorithms it is designed with. Real "outside-the-box" thinking is something that is very difficult to program.

From the legal perspective, using systems that "think for themselves", is a new challenge, particularly from the point of view of responsibility and liability. Shall responsibility lie with the party that defines the outcome the AI is expected to produce? Or shall responsibility lie with the designer of the algorithms? Or with the one defining the data that is used as source?

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Credit Administration of CAAC

Civil aviation in China is developing rapidly while the number of civil aviation inspectors in China is growing slowly. Passenger turnover increased from 392 million in 2014 to 610 million in 2018, but the number of inspectors only increased from 2130 in 2014 to 2460 in 2018. Therefore, a new supervision model is required.

Defects in the Traditional Supervision Model

- Restrict market vitality
- Over-extensive regulation
- Lack of social impact
- Insufficient collaborative supervision across sectors

New Type of Supervision Model

- Comprehensive supervision
- Coordinated supervision
- Categorised supervision
- Accurate supervision
- All-segments supervision
- Moderated supervision
- Whole-process supervision

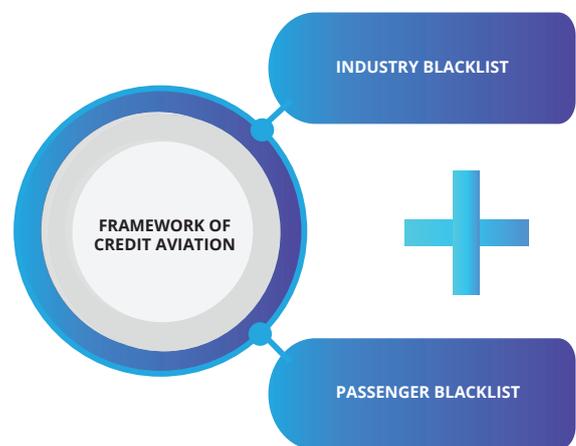
Using Credit as the Core for New Supervision Model

- Supervision process
- Supervision methodology
- Supervision mechanism
- Supervision body
- Connection of the whole process
- Use of Big Data
- Joint penalty
- Participation of the whole society

Examples of Use of Credit in China

- Personal credit reporting: Bank loans to buy houses and cars
- Sesame credit score: Visa, property rental, car rental, marriage
- Credit score for bicycle-rental: Accumulated benefits and no deposit required

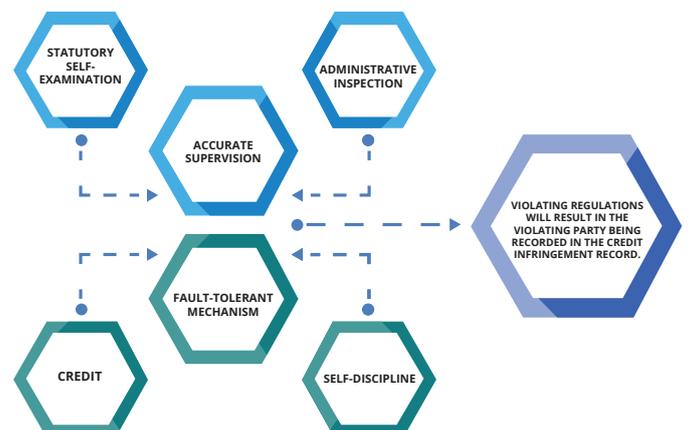
Framework of Credit System for Civil Aviation in China



From 1 Jan 2018, when the credit system was established for civil aviation in China, until 4 Aug 2019, 15 persons and 2 organisations have been blacklisted in the industry blacklist.

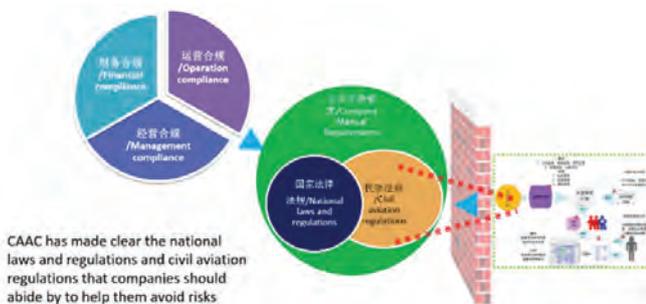
Application of Credit System in Industry Supervision

To apply the industry blacklist in the supervision of the aviation industry in China, CAAC has revised and adjusted its supervision of the industry, as shown below.



Statutory Self-examination

To assist organisations in adopting the new credit system, CAAC has created and published a list of laws and regulations that organisations should abide by. Organisations can thus conduct internal examinations and strengthen internal regulations using the list, to comply with CAAC regulations.



Proposed Restrictions on Flying and Promoting the Establishment of a Social Credit System

It is proposed that individuals who have severely lost their credits to be appropriately restricted from flying on civil aviation aircraft within a certain period of time. This will also promote the establishment of a social credit system.

Scope:

- Applicable to all passengers in China
- Civil aviation field: 9 types of actions endangering civil aviation safety or order shall be punished by the police.
- Other fields: those who disrupt the order in the fields of finance and taxation are blacklisted.

Restrictions:

- Not allowed to buy air tickets for one year.

Lifting of restrictions:

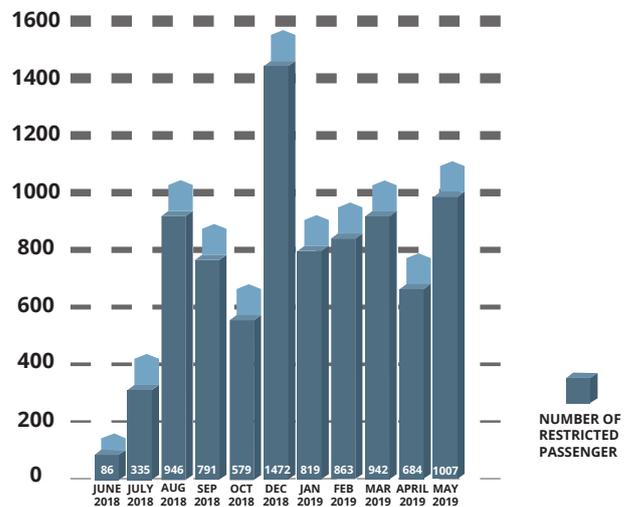
- Civil aviation field: lifted automatically after one year.
- Other fields: lifted automatically after one year or after legal obligations have been fulfilled within one year.

Nine types of actions which endanger civil aviation safety or order:

1. Those who fabricate or intentionally disseminate false terror information concerning civil aviation security.
2. Those who use forged, altered or fraudulently use other people's identity documents or document of carriage.
3. Those who block, occupy or impact the check-in counter, security access or boarding gate (access)..

4. Those who carry or consign dangerous goods, contraband goods and controlled articles stipulated in national laws and regulations; or deliberately conceal articles which are prohibited or restricted by civil aviation regulations in carry or check-in baggage.
5. Those who forcibly occupy or intercept aircraft, forcibly enter or impact aircraft cockpits, runways and aprons.
6. Those who obstruct or incite others to obstruct aircrew, security inspection, check-in and other civil aviation personnel from performing their duties and committing or threatening to commit physical attacks.
7. Those who occupy seats or luggage racks, fighting, provoking trouble, deliberately damaging, stealing, unlawfully opening aircraft or aviation facilities and equipment, etc., disturbing cabin order.
8. Those who use open flames, smoke or use electronic equipment illegally in aircraft and refusing to listen to dissuasion.
9. Those who steal other people's belongings on board an aircraft.

Implementation Status



Perfecting the Industry Blacklist

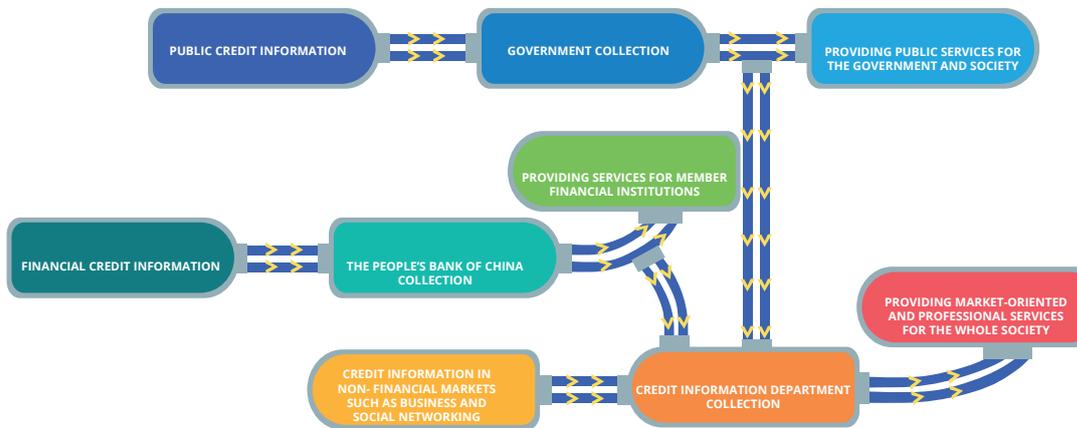
1. Optimizing information acquisition procedure
2. Expanding the scope of actions which constitute severe loss of credit

3. Perfecting the definition of actions which constitute a general breach of credit
4. Clearly defining the conditions for regaining of credit
5. Increasing the penalties for severe breach of credit

Perfecting the Passenger Blacklist

1. Defining the scope of control
2. Publicising the specifications
3. Strict implementation

Collection of Information



Restraint Mechanism which consists of both heteronomy and self discipline (i.e. use of both strict restrictions by the credit system and guidance by a culture of integrity).

Upgrades to the Information System for Supervision and Enforcement in the Civil Aviation Industry

1. Improving data transmission
2. Improving information analysis
3. Implementing connections

AIR LAW AND AVIATION INDUSTRY OF THE FUTURE: PERSONAL DATA PROTECTION AND CLIMATE CHANGE

MR. BADER AL-MUBARAK

FOURTH VICE-CHAIRPERSON OF THE ICAO LEGAL COMMITTEE AND SENIOR LEGAL OFFICER,
PLANNING AND PROJECTS AFFAIRS,
KUWAIT DIRECTORATE GENERAL OF CIVIL AVIATION

I want to thank the International Civil Aviation Organization (ICAO) and the Civil Aviation Authority of Singapore (CAAS) for organizing and supporting the forum. Thanks also to Ms Tan Siew Huay Chairperson of the ICAO Legal Committee and my colleagues for the sincere efforts to ensure the success of this event.

Firstly, I would like to pay my respects to those who lost their lives in the tragic Ethiopian Airlines' accident and express my heartfelt condolences to their families and loved ones. These tragedies remind us how safety and security are critical for the civil aviation community and the reason they are the number one priority. That is why we need to work together as civil aviation community and make commonly understood and implemented rules and regulation of civil aviation to ensure that such a calamity may never befall us again.

The civil aviation industry must respond and adapt to new and emerging opportunities and challenges, including increases in global air transport demand and capacity, changes in technology as well as new and evolving threats to air safety. In recent times, climate change, unmanned aircraft systems, and commercial aerospace transportation, cyber threats, and artificial intelligence have raised significant challenges.

It is truly a pleasure to be here today in session II of the Civil Aviation Legal Advisers Forum to focus on two new emerging issues: **Personal Data Protection** and **Climate Change**.

The aviation industry, much like any other industry, generates a vast amount of just about every type data – from engineering and scientific data to flight data and weather data, through to consumer data, passenger data, security data and special categories of personal data such as medical records, and so on.

The generation of data gives rise to many questions as the following:

- Where is that data collected?
- How is that data treated by the holder of that data?
- Where is that data stored?
- Whether or not that data needs to be stored securely?

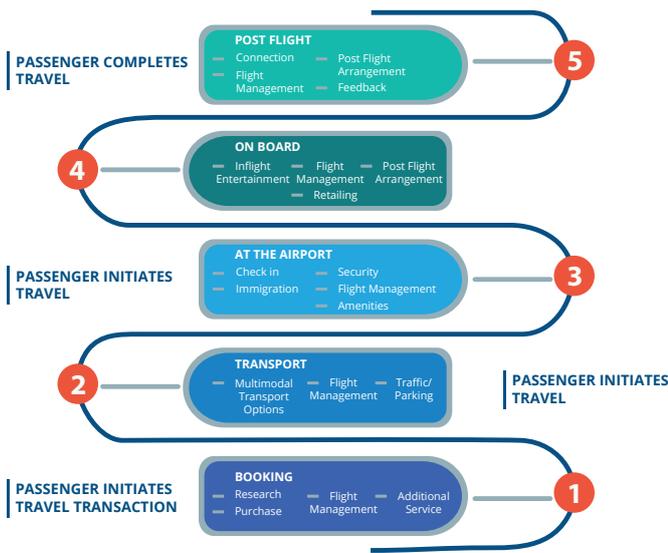
Here, we look at some examples where, and at which point, personal data is collected in the civil aviation industry. We also look at how that personal data might be collected, whether automatically or submitted by the individual and what potential uses of that personal data are.

Personal data is collected for security, crime prevention, and/or marketing purposes.

In the case of personal data collected for security purposes, the consent of the individual is not required, as the data collection is required to prevent the crime. If the personal data is collected for commercial or marketing purposes, the consent of the individual is required. In both cases, the personal data is collected and held under the relevant legislation.

Personal data is collected throughout the entire passenger experience starting with the booking of an airline ticket, to the potential purchasing of duty-free products at the airport and onboard the aircraft, for examples:

- During the check in at the airport, the passengers will drop their bags at the airline's bag drop counter. They will be asked to provide their data: names, passport details, addresses, flight details, and so on.
- As they pass through customs and immigration points, more personal data will be submitted to the custom and immigration authorities.



How to keep personal data secured?

Personnel data is collected and protected under several international regulations such as:

- EU Passenger Name Record (PNR)
- EU General Data Protection Regulation (GDPR)

On 14 April 2016, the European Parliament approved the terms of the EU Passenger Name Record (PNR) directive, obliged airlines flying into the EU to share with the EU destination country their passengers' data to assist the authorities' fighting terrorism and serious crimes. The directive requires member states of the EU to set up Passenger Information Units (PIUs) to manage the personal data collected by airlines. The PIUs are responsible for transferring the personal data to the relevant national authority as well as liaising with other PIU to improve European cooperation in tackling terrorism and trafficking.

Where the personal data is collected for commercial or marketing purposes, the sharing of that personal data within the EU is now subject to strengthened laws on data processing and sharing. The EU General Data Protection Regulation (GDPR) 2016/679 was transposed into the national laws of member states of EU on 25 May 2018. The (GDPR) strengthens the right of the data subject in many different areas of data protection, including, but not limited to, the requirement that the consent of the data subject will have to be given to the company through unambiguous and clear affirmative action.

The GDPR applies to any entity that controls and processes personal data of any individual in the EU. This would apply to a wide range of business from loyalty card to airlines. The legislation does not, however, apply to authorities which process personal data for purposes of public security such as customs authorities; this type of processing is subject to other legislative requirements.

The EU general data protection regulation has sparked a global legislative movement that aims to vouchsafe individuals' privacy and curb data vulnerability. In this regard, in the Middle East region especially, the Gulf Cooperation Council (GCC), consisting of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates, did not regional law that addresses data protection, but each country has addressed these concerns at the national level.

What policies and legislation have been used to personal data protection issues?

The following laws and regulation are the material legislation in GCC states on personal data protection:

Qatar

- Qatar was the first GCC country to enact a law specific to data protection in the wake of the GDBR adoption in Europe. This law was issued at the end of **2016**. It concerns personal data protection and established individuals' rights to have their personal data protected.
- The oversight and administration processes connected to the implementation of the new rule falls under the responsibility of the Minister of Transport and Communication, which established a new supervisory unit for this purpose.

Kuwait

- The state of Kuwait does not currently have any specific personal data protection law that determines how and when personal data may be collected, stored, transferred, used, and processed. Privacy of communication is vouchsafed through its respective constitution and two laws: Law No. **20/2014** regarding the electronic transaction and Law No. **63/2015** cybersecurity crimes in recent years.

Saudi Arabia

- The Kingdom of Saudi Arabia legislation is based on Islamic Sharia law. It does not have any specific regulation addressing the protection of personal data. Its constitution broadly protects individuals' privacy, stating that property, capital, and labor are an essential constituent of the economic and social structure of the kingdom and thus constitute private rights.

United Arab Emirates

- The UAE does not have specific data protection regulation, although the constitution guarantees the freedom of communication by post, telegraph, or means, and its secrecy is guaranteed by the constitution. An electronic transaction and commerce law and on cybercrimes are also in place.

Oman

Oman has both an electronic transaction law issued in 2008, and a cybercrime law, published in 2011. Oman has plans for a data protection law, but it is at a draft stage.

Bahrain

- The Personal Data Protection Law (**PDPL**) No. 30 /2018 was issued on 12 July 2018 in the Kingdom of Bahrain and will come into force on 1 August 2019.
- The requirement of the new law bears striking similarities to the EU GDR.

How is air law evolving in response, and what will the future air law look like with regard to personal data issues?

The Aviation Industry in the EU will implement the proposed draft EU e-privacy regulation (published in January 2017 by the European Commission). It is intended to replace the current privacy and electronic communications directive 2002\58\EC on privacy and electronic communication.

The scope of the e-privacy regulation is that it will supplement the GDR to address in detail electronic communications and the tracking of internet users more broadly.

The aim is to enhance security and confidentiality of all electronic communications and technologies that process personal and non-personal data.

The e-privacy regulation will not just affect airlines located in the EU, but also any airline that deals with data originating in the EU.

What are the major challenges commercial Aviation sectors will face in implementing personal data protection Legislation?

The first challenge is the insufficient awareness of the stakeholders in the applicable legislation and the rights of the data subjects.

The next challenge for the aviation industry will be the proposed implementation of the draft EU e-privacy regulation. However, it is still uncertain when this legislation will be agreed.

The second part of this session will be about **climate change**.

Environmental protection is one of the ICAO's strategic objectives. ICAO has been working in this area since the late 1960s, first focusing on the establishment of the international policies and standards related to aircraft noise, but gradually expanding to other subject areas such as local air quality and

subsequently, climate change.

The aviation community is committed to delivering carbon – neutral growth from 2020, and cutting emissions 50% by 2050 compared to 2005. Achieving this will not be easy. However, they have a credible four pillars strategy to do so. The first three pillars are new technology, improved operation, and better use of infrastructures. The fourth pillar is that only government can deliver carbon reduction, through **ICAO global market-based measure**.

In October 2016, the International Civil Aviation Organization (ICAO) agreed on a Resolution for a **global market-based measure** to address CO₂ emissions from international aviation as of 2021. The agreed resolution sets out the objective and key elements of the global scheme, as well as a roadmap for the completion of the work on implementing modalities.



The Carbon Offsetting and Reduction Scheme for International Aviation, or CORSIA, aims to stabilize CO₂ emission at 2020 levels by requiring airlines to offset the growth of their emissions after 2020.

Airlines will be required to

- Monitor emissions on all international routes,
- Offset emissions from routes included in the scheme by purchasing eligible emission units generated by projects that reduce emissions in other sectors, for example, renewable energy.

During the period 2021-2035, and based on expected participation, the scheme is estimated to offset around 80% of the emission above 2020 levels. This is because participation in the first phases is voluntary for States, and there are exemptions for those with low aviation activity. All EU countries will join the scheme from the start.

As of July 2019, 81 Member States, representing 76.63% of international aviation activity, intended to participate in CORSIA from its outset voluntarily. Qatar, Saudi Arabia, and UAE are the only the Middle East Region (MENA) governments among these.

Work is ongoing at ICAO to develop the necessary implementation rules and tools to make the scheme operational. Effective and concrete implementation and operationalization of CORSIA will ultimately depend on national measures to be developed and enforced at the domestic level.

What policies and legislation have been used to address climate change issues?

The following laws are examples of Legislation and policies established to address climate change issues in Kuwait, Oman, Finland, and Sweden:

- **Act 34\2010 on aviation emissions trading in Finland**

The act aims to promote the reduction of carbon dioxide emissions in the aviation sector cost- effectively and economically. The act stipulates that aircraft operators should monitor their emission and submits a report to the transport safety authority regularly during the emission- trading period.

- **Act No.720\2017 on climate in Sweden**

This law contains provisions on the government's climate policy work. It provides that the government will pursue a climate policy that aims focus on reducing emissions of carbon dioxide and other greenhouse gases to maintain and create features in the environment to combat climate change and its adverse effects.

- **Law No.21\1995 on Kuwait Environment Public Authority (KEPA)**

This is the main environment law in the state of Kuwait. It established the Kuwait environment public authority and mandated it with jurisdiction and the powers to regulate practices that pollute the environment. KEPA can promote the optimal use of oil resources, demand consumption reductions, and energy saving technology in project design.

- **Royal decree No.8\2011 on oil and gas law in Oman**

The law regulates all oil and gas related activities happening on Oman soil. Article 39(11) stipulates that concession owners must reduce the emission of greenhouse gases in the concession area, using the technology and appropriate means to protect the environment.

How is air law evolving in response, and what will the future air law look like in the climate change issues?

The European Aviation Safety Agency (EASA) proposes today that newly designed aeroplane types meet a CO2 standard from the 1st of January 2020, and that aeroplane types

already in – production meets a separate CO2 standard starting from the 1 January 2023.

The objective of this opinion published on 7 November 2017 by EASA is to incentivise the incorporation of the latest fuel efficiency technology into aeroplane designs and to address the predicted increase in CO2 emissions. The opinion submitted to the European Commission also includes a new Particulate Matter emissions standard for aircraft engines from the 1 January 2020.

These new aviation environmental standards will contribute to improved local air quality and overall climate change objectives of the Paris Agreement.

EASA is committed to a cleaner and quieter aviation sector through a variety of measures, including product (aircraft, engine) environmental standards while supporting improved operational practices, sustainable aviation fuels, market-based measures, and voluntary industry initiatives.

The State of Kuwait is voluntarily seeking to introduce renewable energy resources in its development plans to ensure a sustainable supply of energy for future generations and as part of its contribution to limiting the emissions of greenhouse gases into the atmosphere, as well as joining in the efforts of the international community to protect the climate system for present and future generation. In this context, the state of Kuwait acceded to the Paris agreement on climate change by law No.6\2018.

INTERNATIONAL CYBER NORMS AND CYBERSECURITY DISCUSSIONS

MS DANIELLE YEOW

DEPUTY DIRECTOR-GENERAL, INTERNATIONAL AFFAIRS DIVISION,
ATTORNEY- GENERAL'S CHAMBERS, SINGAPORE

Current Discussions

Examples of Cyber Attacks

- Nov 2018 – alleged disruption of GPS signals during recent NATO exercises (affected civilian air traffic navigation)
- 2017 – Wannacry attack – crippled hospitals across the UK
- 2017 – NotPetya attack on critical infrastructure providers – shutdown of airport, global shipping disrupted
- 2017 – BadRabbit attack – compromised systems at Odessa International Airport
- 2015 – cyber attack on Ukraine's power grid
- 2012 and 2016 – cyber attack on Saudi Arabian aviation authority and Ministry of Transportation
- 2016 large – scale cyberattack on ICAO

Current Discussions – United Nations

Two tracks

6th UNGGE (UN Group of Government Experts on Developments in the Field of Information and Telecommunications in the context of International Security)

- 1st UNGGE established in 2004, 6th UNGGE to meet in late 2019
- examines existing and potential threats in cyber sphere and possible cooperative measures to address them
- limited membership
- consensus based reports
- to report back to UNGA in 2021

OEWG (Open- Ended Working Group)

- open to all UN members
- industry consultations
- to be convened for the 1st time in 4Q2019 and to report back to UNGA in 2020

Norms, Rules and Principles for the Responsible Behaviour of States

11 voluntary, non-binding norms

- limiting norms and positive good practices
- eg. not conduct or knowingly support ICT activity that intentionally damages critical infrastructure or otherwise impairs use and operation of critical infrastructure to provide services to the public
- eg. consider how best to cooperate to exchange information, to assist each other, and to prosecute terrorist and criminal uses of ICTs and implement other cooperative measures to address such threats
- eg. encourage responsible reporting of ICT vulnerabilities and share associated information on available remedies to such vulnerabilities to limit and possibly eliminate potential threats to ICTs and ICT dependent infrastructure

Applicability of International Law

Affirmed that international law applies to the use of ICTs. Non-exhaustive views :

- States have jurisdiction over the ICT infrastructure within their territory
- in use of ICTs, States must observe State sovereignty, sovereign equality, the settlement of disputes by peaceful means and non-intervention in the internal affairs of other States. Existing obligations under international law are applicable to State use of ICTs.

Current Discussions – United Nations

2016-2017 UNGGE

- no consensus report
- no consensus on how principles of international law apply
- some progress on CBMs and capacity building

UNGGE	OEWG
<p>OP3 – “...study ... possible cooperative measures to address existing and potential threats in the sphere of information security, including norms, rules and principles of responsible behaviour of States, confidence-building measures and capacity-building, as well as how international law applies to the use of information and communications technologies by States..”</p>	<p>OP5: “...further develop the rules, norms and principles of responsible behaviour of States ... and the ways for their implementation; if necessary, to introduce changes to them or elaborate additional rules of behaviour; to study the possibility of establishing regular institutional dialogue with broad participation under the auspices of the United Nations; and to ... study, ... existing and potential threats in the sphere of information security and possible cooperative measures to address them and how international law applies to the use of information and communications technologies by States, as well as confidence-building measures and capacity-building...”</p>

Current Discussions – Other Platforms

ASEAN

- ASEAN Leaders Statement on Cybersecurity Cooperation (April 2018) – affirming need for rules based international order in cyberspace
- 3rd ASEAN Ministerial Conference on Cybersecurity (Sept 2018)
- agree to subscribe in principle to the UNGGE 11 voluntary, non-binding norms
- focus on regional capacity building in implementing these norms

OSCE

- 16 voluntary cyber/ICT security CBMs (3 clusters)
 - posturing
 - communication
 - preparedness

EU

- EU Cyber Diplomacy Toolbox
- develop Framework for Joint EU Diplomatic response to malicious cyber activities

G7

- Declaration on Responsible Behaviour in Cyberspace 2017

Shanghai Cooperation Forum

- Meeting of SCO National Security Council Secretaries (2018)

African Union

- Convention on Cyber Security and Personal Data Protection (2014)

Financial Sector

- CPMI-IOSCO Principles for Financial Market Infrastructure
- G7 Fundamental Elements of Cybersecurity for the Financial Sector
- G20 Finance Ministers and Central Bank Governors meeting, March 2017 Communique

Multistakeholder

- Global Commission on Stability in Cyberspace
- Paris Call for Trust and Security in Cyberspace (Nov 2018)

IMO

- ISM Code incorporated maritime cyber risk management (June 2017)
- require shipowners and managers to incorporate cyber risk management into ship safety

Bilateral initiatives

Private Sector initiatives

- Cybersecurity Tech Accord (April 2018)
- Microsoft proposals

Observations - International Aviation

- coherence, non-duplication of discussions at UN forum
- rules based multilateral international order in cyberspace grounded on UNGGE norms
- inclusive discussions - ensure coherence, avoid fragmentation and divisiveness
- intersect between norms, technology and policy
- pragmatic approach - non-binding norms, recommendations, guidelines, best practices
- robust CMBs- confidence and trust building
- capacity building
- multi-stakeholder approach - private sector, academia and NGOs engagement
- highly connected and mutually reliant industry
- convergence of IT and operational technology
- formerly closed operational technology environment
- subject to digital transformation
- tension between robust multi-layered security and open platforms for collaboration and seamlessness
- different stakeholders – different proprietary systems, separate global connectivity, interdependence

Preventive Aspects

- need to protect critical infrastructure (including airports)
- complexity: transboundary nature of cyber activities
 - e.g. regulation of overseas service providers
 - obligation to regulate service-providers based in their jurisdiction?
 - setting global standards applicable for all operators?
 - harmonised, inter-operable technical standards to be adopted by service providers?
 - extraterritorial reach of legislation aimed at cyber security?
 - technology neutral approach in interpretation and implementation international conventions eg definition of hijacking?
- multi-stakeholder approach

- sharing of cyber threat indicators, identification and information
- sharing of mitigation strategies
- sharing of best practices

Post-incident Aspects

- cyber attack detection and incident response
- Issues
 - assessment / categorisation of the “cyber attack” (Art 2 UN Charter)
 - attribution (state responsibility)
 - responses eg relevance of self -defence (Art 51 UN Charter)

SESSION 3

THE ROLE OF A CIVIL AVIATION LEGAL ADVISER: SUPPORTING THEIR ORGANISATION

Implementation of treaties and SARPs including rule making and enforcement are some of the tasks that civil aviation legal advisers grapple with. Legal advisers are also called upon to advise urgently on issues that arise from unanticipated developments and occurrences. They perform an important role in supporting their organisations to achieve the organisational mission and objectives. The session covered how legal issues in diverse areas, such as the development and updating of safety regulations, accident investigation, aviation security, USOAP-CMA / USAP audits, managing organisational conflicts of interest, protection of safety information and enforcement involving cross-border evidence gathering and issues, were dealt with by civil aviation legal advisers.

- **MODERATOR**
MS AMANDA FLORA NAMBAU
GENERAL COUNSEL/BOARD SECRETARY, CIVIL AVIATION SAFETY AUTHORITY OF PAPUA NEW GUINEA
- **RECONSTRUCTING A STATE'S SAFETY REGULATIONS – THE EXPERIENCE OF THE UNITED KINGDOM IN LIGHT OF BREXIT**
MS KATE STAPLES
GENERAL COUNSEL AND SECRETARY, CIVIL AVIATION AUTHORITY UNITED KINGDOM
- **CONDUCTING AN INDEPENDENT INTERNATIONAL ACCIDENT INVESTIGATION AND PROTECTING INFORMATION - THE AFTERMATH OF MH17**
MS ANNEMARIE SCHUITE
LEGAL OFFICER, DUTCH SAFETY BOARD
- **THREATS FROM THE GROUND – STOPPING LASER, DRONE AND CYBERATTACKS**
MR JOHN THACHET
LEGAL COUNSEL TRANSPORT CANADA
- **BEING AUDITED - HOW A LEGAL DEPARTMENT CONTRIBUTES TO RULE MAKING AND ENFORCEMENT**
MR ALEXANDER FERGUSON
LEGAL COUNSEL/BOARD SECRETARY, BAHAMAS CIVIL AVIATION AUTHORITY
- **AVIATION SAFETY VESUS MEDICAL CONFIDENTIALITY - LESSONS FROM GERMANWINGS**
MS ANNEMARIE SCHUITE
LEGAL OFFICER, DUTCH SAFETY BOARD

RECONSTRUCTING A STATE'S SAFETY REGULATIONS – THE EXPERIENCE OF THE UNITED KINGDOM IN LIGHT OF BREXIT

MS KATE STAPLES

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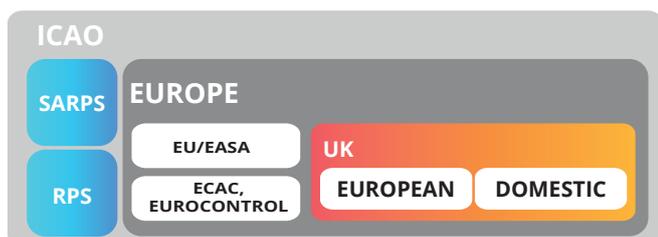
In this session, Ms Kate Staples covered three aspects of the UK's departure from the EU:

1. A reminder of the existing legal framework that continues to apply until the date of departure;
2. An explanation of the means by which the UK is readying itself for departure;
3. A consideration of what the outcome might be.

Ms Staples emphasised that before embarking on an extensive programme of work the UK CAA had considered in detail what it wished to achieve. The UK CAA had concluded that it was committed to retaining, maintaining and enhancing existing aviation safety standards and to maximising continuity of service for consumers and continuity of approvals for businesses.

Ms Staples explained the existing legal framework in the UK. The Chicago Convention 1944 provided the legal foundation, on which the UK had built its own domestic legislation in successive Civil Aviation Acts and Air Navigation Orders. On accession to the EEC in 1972, those domestic provisions had been supplemented by the European Communities Act 1972, pursuant to which secondary legislation could be made to give effect to European aviation provisions. In addition, provision had been made in primary legislation for the UK's membership of other European bodies, such as Eurocontrol, which were not part of the European Union.

Old system



New system



Turning to preparation for the UK's departure, Ms Staples explained that the UK had prepared for the worst, by ensuring that there is an applicable and workable legal framework that will apply on and from exit day even if no departure agreement is reached. That framework had been created using the provisions set out in the European Union Withdrawal Act 2018. That Act enabled secondary legislation to be made to incorporate European law into domestic law and to make modest changes in doing so. The sort of modest changes envisaged would, for example, correct references in EU law to the European Commission by inserting (in an aviation context) the CAA. As at the date of the CALAF, 15 statutory instruments had been completed, which ensured that the UK's aviation framework is ready for the UK's departure from the EU.

Turning to potential outcomes, Ms Staples outlined the current thinking about what the next parliamentary stages might be, noting that it was difficult to see how they would operate in practice. Ms Staples also noted that the current date for the UK's departure from the EU was 31 October 2019 and that it was unclear on what terms the UK would leave on that date.

Ms Staples concluded by quoting Geoffrey Cox QC, the UK's Attorney General. He had said in relation to the UK's departure from the EU:

"I just feel we have under-estimated its complexity. We are unpicking 45 years of in-depth integration. This needs to be done with very, very great care."

CONDUCTING AN INDEPENDENT INTERNATIONAL ACCIDENT INVESTIGATION AND PROTECTING INFORMATION - THE AFTERMATH OF MH17

MS ANNEMARIE SCHUITE

LEGAL OFFICER, DUTCH SAFETY BOARD

MH17 Investigation

Conducting an Independent Investigation under Exceptional Circumstances

On July 17 2014, flight MH17, on its way from Amsterdam to Kuala Lumpur, crashed in the Ukraine. As it would turn out, it was hit by a surface to air missile, killing 298 people on board. Passengers from 10 different countries, a crash site in a conflict zone, difficult (geo) political circumstances and a criminal investigation that was immediately started. All exceptional circumstances.

Following the international standards on aircraft accident investigation in ICAO Annex 13, it is the State of Occurrence that has to initiate a safety investigation into an aircraft accident. The National Bureau of Air Accidents Investigation of Ukraine (NBAAI) instituted an investigation into the crash, in which the Dutch Safety Board (DSB) was asked to participate. In addition to the Ukrainian investigation into the causes of the crash, the Dutch Safety Board decided on 18 July 2014 to launch its own investigation into the decision-making related to flight routes over conflict areas and the availability of passenger information following the crash.

On 23 July 2014, Ukraine delegated the execution of the investigation into the causes of the crash to the Netherlands. This was not an obvious choice, because the Netherlands was not the State of Registry, nor the State of Manufacture, State of the Operator, or State of Design. However, the Netherlands was considered an interested State because of the large number of Dutch citizens on board. Out of the 298 occupants, 196 of the deceased had the Dutch nationality.

As the accident investigation authority of the Netherlands, the Dutch Safety Board was effectively put in charge of the investigation.

Staff Involved in the Investigation

The Dutch Safety Board is a multi-model organisation, dealing not only with accidents and incidents investigations in aviation but for example also maritime, rail, roads, construction,

industry, healthcare and defense. The permanent staff consists of around 70 people, the aviation sector consists of seven investigators. The investigation into MH17 took around 13 months to finalize. In those months, the majority of the 70 permanent co-workers were involved in the investigation. Additionally, the Dutch Safety Board hired 30 to 50 external people to help out in all kinds of areas related to the MH17 investigation or to take on other daily tasks or non-related investigations, making it possible for permanent employees to dedicate themselves to the MH17 investigation.

Legal Framework

The main legal basis for the MH17 investigation is Article 26 of the Chicago Convention, which dictates that a member State in which an aircraft accident occurs has the obligation to start an inquiry into the circumstances of the accident. This inquiry needs to be conducted in accordance with the ICAO recommended procedure. This procedure can be found in Annex 13 to the Chicago Convention as it contains the Standards and Recommended Practices for accident investigation. On top of that, the Dutch Safety Board needs to comply with the rules of the Kingdom Act Dutch Safety Board.

Delegation of an aircraft accident investigation is possible on the basis of Standard 5.1 of the Annex 13. Hereto an agreement was signed between the Bureau of Air Accidents Investigation of Ukraine and the Dutch Safety Board. Additionally, a memorandum of understanding was signed by the Ministers of Foreign Affairs of the Ukraine and the Netherlands. On top of that, a Resolution was adopted by the United Nations Security Council, supporting an independent investigation into the crash and calling upon all Member States to provide any requested assistance to civil and criminal investigations.

Confidentiality of Investigation Information

The Kingdom Act Dutch Safety Board contains restrictive rules to keep accident investigation information confidential. Only the final investigation report is made public. The report, nor any underlying information can be used as evidence in judicial proceedings. An important exception to these rules

applies in case of a criminal investigation into hostage taking, murder, manslaughter or terrorism. In such a case, the flight data recorder and cockpit voice recorder, can be seized by the public prosecutor and used in the criminal investigation. During the investigation, the Dutch Safety Board provided the Dutch Public Prosecution Service with the data files from the flight data recorder and some of the data from the cockpit voice recorder. The Dutch Safety Board was very cautious with providing the recordings in order to guarantee the cockpit crew's privacy. In the presence of the Dutch Safety Board and the Public Prosecution Service, specialised staff listened to the sound recordings on the Dutch Safety Board's premises, with the objective of determining what information could be essential to the criminal investigation. The entire 30-minute recording was found not to be relevant in that respect, with the exception of the final milliseconds, the moment when the aeroplane was hit. After consultation with the Dutch Public Prosecution Service it was decided, for the abovementioned reasons, to hand over only the recording of this short period of time. The data carriers themselves were not handed over. These remained in the hands of the Dutch Safety Board.

Independence of the Investigation

The Dutch Safety Board is a fully independent investigation authority, not residing under any ministry. For the investigation into the facts of the crash an international team was set up, in compliance with the ICAO Annex 13 standards, consisting of a DSB investigator in charge and accredited representatives and advisers of Ukraine, Malaysia, Australia, the Russian Federation, the United Kingdom and the United States. This international team had three meetings throughout the investigation to share investigation results and discuss the progress.

Recovery of the Wreckage and Reconstruction

Usually when an aircraft crashes, the investigators go on site, to investigate the wreckage, collect all relevant material, necessary to reveal the cause and underlying causes of the crash. This could not be done with MH17. In the first few weeks, the number one priority was to recover the bodies of the passengers and their personal belongings. This was already a very difficult and dangerous matter because of the ongoing conflict in the area. It took another several months before investigators of the Dutch Safety Board were allowed to visit the crash site and start collecting the wreckage parts.

The recovery of the wreckage parts didn't start until 16 November. Our investigators had only six days to collect whatever was important and possible, as after those six days the situation was declared unsafe again. It meant that investigators could not recover everything, like in normal situations, but had to deal with the fact that less than a

third of the whole aircraft was recovered. Nevertheless, the investigators made sure they collected the most important parts. Using the photographs taken directly after the crash the investigators had already been able to gain an impression of what they would find in the wreckage area and at which location. Prior to the recovery mission, a list was compiled with the pieces of wreckage that would have priority during the recovery.

The material that was recovered was transported by train from Torez to Kharkov after being tagged. And then, from Kharkov to the Netherlands, it was transported by trucks, the first one arriving in the Netherlands on 9 December.

The wreckage parts were photographed in front of a green screen, so it could be used for all kinds of computer models. Finally, parts of the wreckage were also used to establish a reconstruction of the front part of the aircraft. Only in rare cases, aeroplanes are reconstructed following a crash or accident. Such a process is labour-intensive and time-consuming. Nevertheless, the Dutch Safety Board decided to reconstruct the part of the aeroplane that was the most relevant for the crash. The objective of the reconstruction was to further verify the conclusions drawn in the investigation report about the cause of the crash and show at a glance what the consequences were for the aeroplane.



Findings

The main conclusion of the investigation was that the aircraft was downed by the detonation of a model 9N31 4M warhead, fitted to a 9M38-series missile that was fired from a Buk surface-to-air missile system. As to flying over conflict zones, none of the parties involved adequately identified the risks to civil aviation brought about by the armed conflict in the eastern part of Ukraine.

Recommendations

All States should address their airspace management to establish better risk assessment of the zones that their airlines are flying over. ICAO was recommended to establish new standards and guidance material on flying over conflict zones which was partly followed up by publishing in ICAO Document 10084 – *Risk Assessment Manual for Civil Aircraft Operations Over or Near Conflict Zones*.

The aviation branch was recommended to improve risk assessments when establishing flying routes, and to be more

transparent towards passengers about the routes and any possible conflict zone on that route.

Informing the Next-of-kin

The Dutch Safety Board has no special department taking care of families involved. Occasionally, the Dutch Safety Board has contact with families of deceased persons involved in accidents. Next-of-kin are informed about the findings the day before the publishing of a final report. That's usually a couple of persons, and in this case, the DSB had to liaise with families of 298 passengers. With a lot of help from the Dutch Victim Association and the family officers of the police who were assigned to the families, the DSB made sure that families were regularly informed and, most importantly, ahead of media. The families were given the possibility to visit the wreckage and later on, the reconstruction. There was a secure and secluded website for families where the DSB could post any important information. The DSB also installed a call centre after publication of the final report, where families could ask any question they might have about the final report.



Publication

The final reports of the three different aspects were published in several languages. On top of that, there were summaries in different languages, including Ukrainian and Russian, and several animated videos.

As the world was very much interested in this investigation, the publication of the report needed a separate organisational team. Around 235 journalists from around the world attended the press conference. The results of this investigation under these exceptional circumstances were front page news around the world.

THREATS FROM THE GROUND – STOPPING LASER, DRONE AND CYBERATTACKS

MR JOHN THACHET

LEGAL COUNSEL, TRANSPORT CANADA

Pointing/ Shining Laser at Aircraft

This is a dangerous practice as it can cause momentary blindness in pilots attempting to land or take-off, as well as potentially causing permanent damage to the pilots' eyes. The detrimental effects of laser exposure to the eye that range from glare or flash blindness to permanent retinal injuries (Can J Ophthalmol – Vol 50, No 6, December 2015).

It impacts the pilot's ability to safely monitor flight instruments and maintain control of the aircraft during critical stages of flight, such as take off and landings. This can have severe impact on the safe operation of an aircraft, endangering the safety of the flight, crew and passengers.

LASER ATTACKS IN CANADA			
2015	2016	2017	2018
590	527	379	211

The highest number of laser attacks occur in the provinces of Ontario, Quebec and British Columbia containing the metropolitan areas of Toronto, Montreal and Vancouver as shown below:

PROVINCE	2015	2016	2017	2018
ONTARIO	235	166	139	64
QUEBEC	214	192	128	47
BRITISH COLUMBIA	82	115	43	23

Laser attacks pose a serious risk to aviation safety in Canada and around the world. In ICAO State Letters AS8/5-14/83 (4 December 2014) and AS8/5-18/17 (13 February 2018), it is stated that: "States were encouraged to enforce applicable laws when laser attacks are perpetrated. Furthermore, States were urged to consider including legal provisions to address the issue of laser attacks against civil aircraft, and to penalize perpetrators in accordance with the applicable legislation".

Stakeholder Concerns

A coalition representing 9,000 airline pilots in Canada appealed in June 2014 to the Ministers of Transport and Justice highlighting the seriousness of the issue and requesting:

1. enactment of legislation to make the act of pointing a laser at an aircraft in flight a criminal offence;
2. limit possession of handheld laser pointers to those of 5 milliwatts power or less; and
3. mount a campaign to warn the public of using laser in an unlawful manner.

Canadian Strategy – "Laser Attack Strategy" – June 2018

1. Prohibiting hand-held Lasers

Transport Canada (TC) issued an Interim Order on 28 June 2018 as a deterrent to reduce the number of laser attacks. The Interim Order prohibits Canadians from possessing hand-held lasers over 1 milliwatt in all public places.

- Within 10 KM radius of any certified airport or heliport*; and
- Municipal boundaries of Montreal, Toronto and Vancouver.

Exemptions are provided for legitimate reason. The Interim Order is valid for one year until June 2018.

*The 10-km radius was developed by Transport Canada subject matter experts by calculating the visual effects a laser attack can have upon a pilot operating an aircraft during a critical phase of the flight (such as take-off or upon final approach to landing). The closer the laser attack takes place to an airport and the stronger the output of the laser the more severe the potential consequences.

2. Other Legislative Mechanism – Canadian Aviation Regulations

- Projection of Directed Bright Light Source at an Aircraft

601.20 Subject to section 601.21, no person shall project or cause to be projected a directed bright light source into navigable airspace in such a manner as to create a hazard to aviation safety or cause damage to an aircraft or injury to persons onboard the aircraft.

Requirement for Notification

601.21 (1) Any person planning to project or cause to be projected a directed bright light source into navigable airspace shall, before the projection,

- (a) submit a written request to the Minister for an authorization to project the directed bright light source into navigable airspace; and
- (b) obtain a written authorization from the Minister to do so.

(2) On receipt of the request for authorization, the Minister shall issue a written authorization if the projection is not likely to create a hazard to aviation safety or to cause damage to an aircraft or injury to persons on board the aircraft.

(3) The Minister may specify in the authorization any conditions necessary to ensure that the projection is not likely to create a hazard to aviation safety or to cause damage to an aircraft or injury to persons on board the aircraft.

- Strengthening Enforcement

Ten police forces across Canada are delegated authority by the Minister of Transport to issue Interim Order related fines. These include municipal and regional forces in Montreal, Toronto and Vancouver, as well as the Royal Canadian Mounted Police. Transport Canada continues to work with law enforcement agencies across Canada to ensure that they are ready and equipped to issue fines. Fines are up to \$5,000 for individual and \$25,000 for a corporation.

3. Increasing Education and Awareness

Transport Canada launched communication products to promote awareness of laser attacks, including:

- Not A Bright Idea (website)
- Facebook and Twitter (social media campaigns)
- New Interactive (map)

- Weather Network (website)

- Lets Talk Lasers (online forum)

TC also consulted stakeholders continue to express interest in increasing awareness and established a successful partnership with the Canadian Crime Stoppers Association to raise awareness and increase deterrence.

Cyber Security

Examples of Legal Issues to be Considered

What would be the legal framework for an outside agency or a third State to provide air navigation services within your airspace or operating an air navigation facility in your State if the existing air navigation facility is shut down following a cyber attack?

Would your legislation permit such provision of services?

Would it be possible at all if the air navigation service provider is a “legislated monopoly”?

Would an outsourcing arrangement be a solution?

How can we equip our legal services to be ready to contribute solutions?

Drones

Examples of Legal Issues to be Considered

Most states have developed or are in the process of developing national laws for the operation of drones within their airspace.

However, international operation of drones are not too far away.

How would your legal services address these issues?

- Cross border operation – licenses and permits.
- Cabotage – can a drone be operated wholly within a foreign jurisdiction?
- Foreign ownership requirements for domestic operations.
- Commercial operation of drones included in bilateral air negotiations?
- Regulatory oversight and enforcement – drone registered in one state; operated in another state and physical control is located in a third state.

BEING AUDITED - HOW A LEGAL DEPARTMENT CONTRIBUTES TO RULE MAKING AND ENFORCEMENT

MR ALEXANDER FERGUSON

LEGAL COUNSEL/BOARD SECRETARY,
BAHAMAS CIVIL AVIATION AUTHORITY

Background of the Bahamas Civil Aviation Authority

The Bahamas Civil Aviation Authority (BCAA) was established as a Statutory Authority in July 2016. About October 2017 after the administrative transition from the government-run Department of Civil Aviation, the appointment of the first Director General and other mandated personnel, the BCAA became the civil aviation regulator of The Bahamas. 2016-2017 also saw the establishment of The Bahamas Airports Authority which control and operate the 28 government owned airports in The Bahamas, a separate Air Navigation Service Provider (BANSO), and an independent Aircraft Accident and Investigation entity. Not long after the BCAA took the reins, The Bahamas underwent a comprehensive ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) from October to November 2017.

My Role as Legal Counsel

I joined the BCAA on 15 January 2018, as its first legal counsel, with responsibility for organizing, managing and developing the BCAA's legal department. In April 2018, just a few months after I joined the BCAA, ICAO published the USOAP CMA Report. With little prior knowledge of or experience with the USOAP, it was obvious from the Report that I would need to quickly become familiar with the workings of the USOAP in order to assist the BCAA in regard to the findings in the Protocol Questions (PQs) where legal concerns were reported.

In turn, this led to a timely review of the material PQs. The relevant primary legislation and operating regulations were reviewed, and a plan of action was developed to assist teams in developing a Corrective Action Plan (CAP) to address those findings. The USOAP identified a few findings in regard to our rule making and enforcement processes and activities, which legal counsel was required to review. Recommendations

were made to the Director-General for amendments and effective improvements to the BCAA's existing rule making functions and enforcement activities. The introduction to the USOAP and working on the CAP has indeed been a baptism by fire, and remains an important and consuming endeavor for legal counsel to this day.

Rule Making (Rewriting the rule book)

The BCAA's existing rule making process and procedures are described in an advisory bulletin, and are, in my considered opinion, too complex, as it sets unrealistic targets and requires simplification.

The BCAA presently relies upon a "team model" for its internal safety oversight decision making in the context of rulemaking. The tasks of drafting the proposed rule, responding to public comments, and defending the rationale for the final rule are delegated to a Technical Review Committee (TRC), composed of technical representatives from the BCAA's oversight departments, with the support of BCAA's legal counsel and on occasion, lawyers from the office of the Attorney General. The process implies that the TRC and legal counsel should meet regularly to discuss regulatory options, address newly arising issues, respond to ICAO State letters and draft material amendments to its Annexes.

The existing rule making process has, in my view, yet to be truly tried and tested, as the BCAA was handed a new civil aviation legislation and a suite of operation regulations just shortly before it was established, which it has relied upon hardly untouched ever since. Thus, separating the rulemaking process from all other BCAA activities has been challenging, since staff have many responsibilities, only some of which have to do with drafting rules. Accordingly, scheduling the TRC to meet and carry out the rule making process has always been difficult and is not sustainable.

Legal Counsel's Plan for the Rule Making Process

The Legal Counsel is a critical participant in the BCAA's internal rulemaking process, since nearly every rule of any consequence is subject to judicial review. He has an important function to play in advising the BCAA Director General and the TRC team on the aspects of a proposed rule that might be challenged in court.

It is the role of the BCAA's legal counsel to limit exposure to its rules being set aside by Judges for procedural irregularities, erroneous interpretations, or irrational application. Scheduling and ensuring attendance at the TRC, preparing the minutes of meetings and documenting rulemaking and regulatory analysis are certainly something legal counsel will need to oversee, if the process is to be effective, transparent and sustain challenge.

Prominent Roles of Legal Counsel in the BCAA's Rulemaking

- Interpreter
 - Legal Counsel performs the role of statutory interpreter, and frequently provides opinions on statutory and regulatory interpretation that may arise during the rulemaking process, and on other matters that might not be immediately apparent to others in the TRC.
- Proceduralist
 - The Bahamian Constitution and the Courts demand that the regulator pay attention to its procedures and must therefore turn "tight procedural corners" when exercising its regulatory powers over public and private sector entities. Due to the nature of their training, lawyers are usually considered institutional experts on procedure as we are always sensitive to and cautious about process.
 - We are also considered the experts in interpreting procedural directives, so we are therefore usually heavily involved in the drafting of legislation and regulations that establish the formal procedures that govern the BCAA's processes and industry participants.
 - The Legal Counsel has recommended to the Director General that the legal department lead these rulemaking initiatives, and preside at public hearings conducted in connection with rulemaking initiatives.
- The Legal Counsel's proceduralist role may also arise at any time after the publishing of a notice of proposed rulemaking, so it makes sense that legal counsel be involved throughout the process.
- The Legal Counsel plays a key role in monitoring the BCAA's everyday regulatory activities for procedural correctness.
- Scrutiniser
 - As the BCAA's operating regulations are subject to careful scrutiny by operators and lawyers for the affected parties, the Legal Counsel must take great care during the drafting process to achieve clarity in the wording of rules.
 - The Legal Counsel provides critical input in drafting the text of the rules, preambles, and even supporting documents.
 - The Legal Counsel is usually assigned the task of writing many portions of the rulemaking documents, and this is usually greatly appreciated by most technical staff.
- Trusted Confidante
 - The Legal Counsel consistently provides legal and policy advice to the Director General in regard to rule making.
 - In this role, legal Counsel is available for consultation on the whole universe of issues that the Director General may encounter ranging from narrow questions of statutory/regulatory interpretation to high level interactions on business matters ranging far beyond strictly legal matters.

Other Current Rule Making Initiatives

- Aircraft Registry
- Cape Town Convention and Protocol Accession
- Monetization of Bahamas Airspace

Enforcement (A work in progress)

The USOAP findings have suggested that the BCAA should beef up its penalties for noncompliance with its regulations. I only wish that the auditors have been given a tour of our prison before making this finding. At present, these are limited to a maximum prison sentence and/or a fine that can be imposed through summary proceedings in the Magistrates Court. Civil penalties issued by the BCAA are also available as

an alternative to criminal proceedings.

The Legal Counsel provides enforcement support as follows:

- Reviews existing enforcement legislation and regulations and their effectiveness
- Considers the feasibility and effectiveness of summary proceedings / civil penalties against public and private sector stakeholders
- Decides which provisions an inspector should invoke for enforcement action to be taken to ensure proper interpretation is being applied
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- Decides which provisions an inspector should invoke for enforcement action to be taken to ensure proper interpretation is being applied
- Considers the evidence of non-compliance that has been obtained and advises whether it supports non-compliance. Advises on other evidence that will/may be required to prove non-compliance
- Advises inspectors on the standard of proof i.e. criminal/civil
- Proposes alternative charges/offences based upon existing evidence
- Proposes alternatives to prosecution i.e. civil penalties, licensing /certificate action etc
- Liaises with police prosecutors on the filing of charges and evidence gathering and witness selection for court.
- Prepares for Administrative Reviews and Appeals
- Prepares for possible legal challenges through the Courts

Enforcement – Aerodromes and ANSPs

Legal Challenges in regard to Aerodromes (AGA) / ANSP (ANS)

Whilst the 28 government airports are regulated by BCAA (AGA), the infrastructure is owned managed and controlled by the Airport Authority. Aerodrome Certification and compliance with Annex 14 is a challenge to enforce due to lack of financial resources.

ANSP is regulated by BCAA but the BANSD infrastructure is owned and controlled by the government. Further there is separation of functions but not true separation of responsibility. There are also cultural shifts in the way things done, and the need for political will.

The Legal Counsel is assisting the AGA and ANS departments (and their consultants) with redrafting of AGA/ANS Regulations to provide BCAA with more regulatory “teeth” and enhanced enforcement profiles and activities against these entities. The reality of summary proceedings / civil penalties against government controlled aerodromes and the ANSP is questionable from an enforcement perspective. The Legal Counsel encourages the AGA and ANS teams to regulate to the best of their abilities and to always document their findings and communications with these entities for further action. The Legal Counsel advises the Director General on alternative enforcement initiatives to encourage compliance by aerodrome operators and ANS providers.

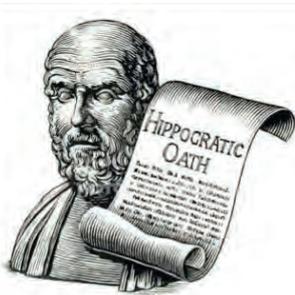
Civil aviation rule making and enforcement initiatives are presently important aspects of the role of legal counsel. The success of both require collaboration with many other personnel within the BCAA, as well as other agencies and stakeholders. There will, of course, always be limitations, as the extent of cooperation, financial support and the will of the political directorate will often be the determining factors that shape the role and effectiveness of legal counsel in supporting the BCAA, especially in the context of rulemaking and enforcement activities.

AVIATION SAFETY VERSUS MEDICAL CONFIDENTIALITY - LESSONS FROM GERMANWINGS

Disclosure of medical information for the purpose of accident prevention and accident investigation.

MS ANNEMARIE SCHUITE

LEGAL OFFICER, DUTCH SAFETY BOARD



ἂ δ' ἂν ἐνθεραπείῃ ἴδω ἢ ἀκούσω, ἢ καὶ ἄνευ θεραπείης κατὰ βίον ἀνθρώπων, ἂ μὴ χρή ποτε ἐκλαλεῖσθαι ἔξω, σιγήσομαι, ἄρρητα ἠγεύμενος εἶναι τὰ τοιαῦτα.

And whatsoever I shall see or hear in the course of my profession, as well as outside my profession in my

intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets

Recent aircraft accident investigations, most notably the investigation into the 2015 crash of Germanwings flight 9525, suggest that some accidents might have been prevented, had the relevant authority or the airline been informed of the pilot's medical condition. In the Germanwings case, the co-pilot's mental health issues led him to deliberately crash the aircraft. Prior to the crash, the pilot had been seen by several psychiatrists and private physicians and questions were raised why none of them informed the civil aviation authority or his employer. Organisations like ICAO, European Union Safety Agency (EASA), Aerospace Medical Association (AsMA), and national aviation authorities have been taking initiatives to improve regulations and guidelines and establish new policies to prevent something similar from happening again. However, these initiatives have not yet addressed the difficulties for medical professionals to balance medical confidentiality versus aviation safety. Moreover, these initiatives primarily focus on the mental health of pilots while medical confidentiality can also be a bottleneck in case of physical health problems of pilots that could possibly cause danger to passengers.

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or his employer. Organisations like ICAO, European Union Safety Agency (EASA), Aerospace Medical Association (AsMA), and national aviation authorities have been taking initiatives to improve regulations and guidelines and establish new policies to prevent something similar from happening again. However, these initiatives have not yet addressed the difficulties for medical professionals to balance medical confidentiality versus aviation safety. Moreover, these initiatives primarily focus on the mental health of pilots while medical confidentiality can also be a bottleneck in case of physical health problems of pilots that could possibly cause danger to passengers.

In Finland, a small aircraft with a pilot and two passengers crashed on the runway of Tuulikki-Vampula Aerodrome on 24 September 2016. The pilot was not feeling very well and tried to return shortly after take-off. The aircraft crashed on the lane and ended in a dig. It appeared that the pilot had suffered a heart attack. The Finnish investigating authority discovered that this pilot had suffered from multi-vessel coronary heart disease and sleep apnea. Within the five years prior to the accident, he had three heart attacks. His physicians were aware of his flying hobby but in Finland there is no legal obligation of notification to the authorities. The pilot's physicians had the opportunity, legally speaking, to report these health issues to the aviation authorities, but did not, they only advised the pilot to check with his aviation medical examiner.

In general, it appears that medical professionals interpret medical confidentiality very strictly and they lack the tools to make a proper assessment of whether they should breach this obligation in the interest of public safety.

Medical confidentiality obligations also seem to form a difficulty in some countries for the disclosure of medical information in the investigation of an aviation accident. To make adequate recommendations to improve flight safety,

it is essential that the real cause of an accident is discovered and to investigate if a medical condition has contributed to the occurrence of the accident. However, in some countries, including the Netherlands, the investigating body does not have access to the medical file of pilots, unless the pilot gives his permission. After a fatal crash, this permission cannot be obtained and the file remains closed.

The Principle of Medical Confidentiality

The principle of medical confidentiality dates back to 400 BC, to the Hippocratic Oath. It is a fundamental principle that is strictly maintained by medical professionals. The rationale is that patients should feel free to share all the information necessary to provide a correct diagnosis and get appropriate help, and to be assured that this information is handled in a confidential manner. Patients should not hide symptoms or refrain from seeking medical assistance for fear of retribution, stigmatisation or discrimination. However, situations can occur where confidentiality is at odds with public interest, for example when third parties may be exposed to a risk of death or serious harm by withholding medical information.

Accepted exceptions to medical confidentiality can be divided into three main categories. Medical confidentiality can be breached when the person involved has given his consent. This certainly applies to most of the situations where a pilot undergoes a medical examination to obtain his medical certificate. Usually an application form contains a provision where the applicant has to sign to give consent for the disclosure of his medical information to others involved in the certification process. Therefore, within the licensing process, medical confidentiality doesn't seem to pose an obstacle. One has to consent with the disclosure of medical information, otherwise the medical certificate will not be obtained.

Another possible exception to medical confidentiality is the legal obligation. For example, there are laws that oblige medical professionals to report certain dangerous epidemic diseases they might discover on a patient.

The third exception is the legal authorisation. This entails the legal possibility for a medical professional to disclose medical information, though not as a strict obligation. It is up to the professional to assess the situation and to decide whether or not the circumstances justify the disclosure.

Besides the three well known basic exceptions on medical confidentiality, there is a fourth one, which is applied in the Netherlands, which will be explained later on. It's called the conflict of duties principle.

As it appears difficult for medical professionals to determine whether there are compelling reasons to breach medical confidentiality, my research focused on how to strike a good, legal, balance between the public interest in flight safety and the individual interest of medical confidentiality. And, is there, or should there be, a difference between provisions for disclosing medical information when reporting an unfit pilot as compared to disclosing medical information of a pilot involved in an aircraft accident.

Comparative Analysis of Legal Frameworks in Canada, the Netherlands and United States

In my research, I selected three countries that have different legal frameworks for the use of medical information for reporting unfit pilots, or the use of medical information for accident investigation. These countries are the United States, Canada and the Netherlands.

United States – Reporting of Unfit Pilots (Without Consent)

Federal Law

In the United States there is a federal law, the HIPAA Privacy Rule, that contains provisions for permitted disclosure of health information to avert a serious and imminent threat to health or safety of the public.

State Law

Throughout the 50 states, diverse reporting obligations or permitted reporting provisions exist. 29 States have a so-called duty to warn. The majority of these state laws on a duty to warn relate to mental health care providers and the mental status of the individual. However, some States, such as Oregon or Rhode Island, have broader provisions, allowing disclosure without consent of all types of health information by health care providers, in case of a threat of danger to others or society. What makes it complex is the variety of criteria in each of the States. As to the seriousness of the threat, provisions speak about a serious threat or a significant threat, or a specific and immediate threat. As to the type of threat, some States have provisions for the risk of clear and substantial danger, others speak of the risk of imminent serious physical harm, or serious physical violence. Some States only have a duty to warn if the threat is against a specific person while other States speak of a threat to reasonably identifiable victims.

All these differences cause the situation that a health care professional can be held liable for breaching medical confidentiality in one State, and be held liable for not reporting a threat in another State even if circumstances are exactly the same.

Canada – Reporting of Unfit Pilots (Without Consent)

In Canada, every physician or optometrist who comes across a license holder, or has a suspicion that his patient is a license holder, and whom might pose a threat to aviation safety, has the obligation to report this to the Regional Aviation Medical Officer.

Similar to this reporting obligation are the provisions in Sweden where all medical practitioners/psychologists/police/courts shall notify the Swedish Transport Agency if the license holder does not fulfill the requirements or if he is unsuitable. Norway has a similar approach, where physicians, psychologists or optometrists have an obligation to report a license holder who does not meet the health requirements (if the holder cannot be encouraged to hand in his license).

The Netherlands - Reporting of Unfit Pilots (Without Consent)

In the Netherlands, there is no legal obligation or legal permission to report unfit pilots, outside of the medical certification procedure. However, there is a national policy, developed by professionals and jurisprudence called “conflict of duties” which allows for disclosure of medical information under very strict conditions:

Criteria “conflict of duties”

- Everything has been done to get permission to disclose the information.
- Non-disclosure might cause serious damage for another person or the patient himself.
- The medical professional finds himself in a moral conflict by maintaining the obligation to remain silent.
- There is no other way than breaching the confidentiality to solve the problem.
- It must be almost certain that the damage can be prevented or limited by breaching the confidentiality.
- The confidentiality is breached as little as possible. Only directly relevant information may be provided (subsidiarity and proportionality requirements).

Findings on Reporting Unfit Pilots – Disclosing Medical Information Without Consent

The legal framework for reporting unfit pilots outside of the licensing process, vary considerably in the above-mentioned countries: from strict reporting obligations for all (para) medical professionals, selective permitted disclosure of information, to strict disclosing restrictions and liability for breaching medical confidentiality.

Findings on Access to Health Information for Accident Investigation (Without Consent)

Unrestricted Access

United States: The investigation authority of the United States, the National Transportation Safety Board (NTSB) has access to all relevant health information. The NTSB is considered to be a “public health authority” as described in the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule and therefore authorised by law to collect, receive and use all personal health information, without consent of the person involved, for the purpose of preventing or controlling disease, injury and death. However, in practice the NTSB usually issues a subpoena to obtain health information.

Finland: The Finnish accident investigation authority has a very clear provision in its own act allowing to obtain all relevant medical information.

Limited Access

Canada: The Transportation Safety Board of Canada (TSB) has no provisions in its regulations therefore only has access to health information if it issues a statutory summon or request the competent judicial authority to issue a warrant.

No Access

The Netherlands: The investigation authority, the Dutch Safety Board (DSB) also lacks provisions to have access to medical files without consent of the person involved.

Germany: As seen in the Germanwings investigation, involved German physicians did not provide insight in the medical history of the pilot, referring to their medical confidentiality obligations.

Accident Investigation - Annex 13

There are two standards in Annex 13 that might relate to the availability of medical information for accident investigation, Standard 5.4 and Standard 5.6.

St. 5.4

The accident investigation authority shall have independence in the conduct of the investigation and have unrestricted authority over its conduct, consistent with the provisions of this Annex. The investigation shall normally include:

a) the gathering, recording and analysis of all relevant information on that accident or incident [...]

St. 5.6

The investigator-in-charge shall have unhampered access to the wreckage and all relevant material, including flight recorders and ATS records, and shall have unrestricted control over [...]

In my opinion, these standards are also covering the accessibility of health information. This is supported by the guidance material in ICAO's Manual of Aircraft Accident and Incident Investigation and ICAO's Manual of Civil Aviation Medicine. Therefore, the lack of provisions for accident investigation authorities to get access to medical files of pilots involved in a crash might be interpreted as non-compliant with ICAO Standards.

Overall Findings

There is a big difference in the legal frameworks. In addition, there is a different approach on disclosure of medical information for reporting unfit pilots or for the accident investigation.

The United States have a much more complex legal framework in view of reporting unfit pilots. Some States have obligations for medical professionals to report, whereas other States have a more permissive reporting provision. On the other hand, the NTSB has unrestricted access to all relevant medical information for accident investigation purposes.

Whereas Canada has a very broad reporting obligation for medical professionals, seemingly overruling confidentiality of pilots' medical information, the obtaining of such medical information for the purpose of accident or incident investigation requires a more elaborate procedure, including the issuance of a warrant or summons.

As for accident and incident investigation, it is mainly up to the States to try to adapt the principle of medical confidentiality to changing perspectives on how to improve aviation safety. Finally, I have come to the conclusion that limited access to medical information for accident investigation may be non-compliant with ICAO's aviation standards.

If confidentiality rules restrict investigation authorities to get access to medical information, a difference with respect to Annex 13, Standard 5.4 and 5.6 should be filled with ICAO.

Aerospace Medical Association - International Reporting Obligation

In June 2017, AsMa wrote a letter to the Secretary General of ICAO, Dr Fang Liu, "supporting an international policy for mandatory reporting of aircrew and aviation-related personnel who have medical or psychiatric conditions that would be hazardous to safety aviation duties." However, this statement was not supported by every member of AsMa. In fact, there are several psychiatrists who fear that implementing a reporting obligation might lead to pilots going underground with their health problems instead of seeking the necessary help, which could even lead to more endangerment. Therefore, a thorough evaluation on the effectiveness and possible adverse effects of a mandatory reporting obligation is advisable.

Instruments to Assess Possible Disclosure of Medical Information

The differences found in the research are helpful in establishing tools to help balance flight safety versus medical confidentiality. Derived of the study, to decide on whether or not to disclose medical information on a pilot the following criteria can be used:

- It is not possible to ask or get consent of the patient.
- The medical professional will find himself in a moral conflict if he doesn't breach his medical confidentiality obligation.
- Remaining silent will cause (more) serious damage.
- Breaching medical confidentiality will likely prevent this damage.
- Medical confidentiality will be breached as little as possible.
- The medical professional sees no other possible solution to resolve the problem.

Supporting Safeguards

For these suggestions to be implemented in an effective way, the following supporting safeguards can be introduced in law or policies:

- Any reporting permission or obligation should be

defined by law.

- It needs to be clear what professions have a reporting obligation or permission. This should not be restricted to mental health professionals only.
- It needs to be clear whom to report to: family, friends, authorities, potential victims, etcetera. Medical professionals might prefer disclosing to a fellow medical professional.
- Define clearly what type of circumstances justifies a disclosure: e.g. "threat to a person" or "in the public interest".
- Define the seriousness of the danger or threat. Guidelines should be established on how to assess this seriousness.
- Define the victim: should there be a threat towards an identifiable, reasonably identifiable or clearly identified victim?
- The reporting should be without legal risk to the health care professional, if he has acted in good faith.
- Except in case of gross negligence or criminal offences, the disclosure of information should be without (legal) consequences for the pilot involved.
- Provisions on protection and disclosure of personal health information need to be equal, whether the health care professional works for a governmental health organisation or private organisation.
- Appoint a dedicated Privacy Commissioner or alike, whom health care professionals can turn to if they need advice on whether to disclose medical information or not.
- Put privacy policies in place, stating what information is collected, for what purpose, who is authorized to have access and under what circumstances the information might be disclosed without consent. Make sure that access to individuals' medical information is only on a strict need-to-know" basis.

As for accident and incident investigation, it is mainly up to the States to try to adapt the principle of medical confidentiality to changing perspectives on how to improve aviation safety. If confidentiality rules restrict investigation authorities to get access to medical information, a difference should be filled with ICAO.

In certain circumstances, the medical professional could endanger himself by asking permission.

If confidentiality rules restrict investigation authorities to get access to medical information, a difference should be filled with ICAO.

ICAO Survey

In close collaboration with the Head of the Aviation Medical Affairs Division of ICAO, a survey has been established to request information from all 192 Member States about their legal frameworks on medical confidentiality and the disclosure of specific and limited medical confidential information related to reporting unfit pilots or in the course of accident investigations, issued with State Letter 2018-83, 17 August 2018. A first feedback on the collected information was presented at the AsMa Annual Scientific Meeting in May 2019. The ultimate goal is to use the collected information to develop guidance material on sharing medical confidential information in the interest of aviation safety and, if deemed appropriate, to improve related Annex provisions.

SESSION 3 (CONTINUED)

THE ROLE OF A CIVIL AVIATION LEGAL ADVISER: DEMANDS, CHALLENGES AND CONTRIBUTIONS

This session was designed to enable participants to share their experiences in managing the challenges of their role as legal advisers and to contribute not only to their organisation but also to their regions and to the international aviation community.

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THE ROLE OF A CIVIL AVIATION LEGAL ADVISER: DEMANDS, CHALLENGES AND CONTRIBUTIONS

SUMMARY

B737 Max Accidents

Discussions in this session were largely focused on the recent B737-8 Max aircraft accidents which had attracted widespread media coverage and raised issues of special interest to civil aviation regulators around the world.

Participants observed a moment of silence in memory of the victims of Lion Flight 610 and Ethiopian Airlines Flight 302 air crashes on 29 October 2018 and 10 March 2019 respectively, in which 346 people in all lost their lives.

Mr. Jeffrey Klang (Assistant General Counsel, Federal Aviation Administration, United States) invited participants to consider whether the regulatory actions taken in their State, including the grounding of B737 Max aircraft series, were reasonable and lawful under Article 33 of Chicago Convention (dealing with mutual recognition of certificates and licenses). The actions in question had been taken before the accident investigations were completed and the final reports issued. The B737 Max aircraft had been grounded by regulators without identifying a particular deficiency. Some States had also banned departures, arrivals and overflights involving this type of aircraft.



In responding, some participants highlighted the need to take urgent action following two recent accidents attributed to similar causes relating to flight controllability which occurred within one year. While noting concerns about possible legal challenges, it was felt that the best course of action was to take regulatory action for the right reasons. The challenge for legal advisers is to identify a solution to doing something that is in the interest of safety in a legally acceptable manner. It should be permissible, even before an investigation is complete, for a civil aviation administration to ground an aircraft when there is reasonable determination that the safe operation of that aircraft cannot be guaranteed. Another participant noted that their State had taken action to ground the 737 Max aircraft after the State of Design had done so.

On the issue of complying with the Chicago Convention, one participant observed that in their State, international treaties take precedence over national law only if such application is not contrary to public order and interests of the State. In that regard, the circumstances of these crashes could be considered to constitute the existence of significant safety hazards obliging the regulator to take action to suspend the use of relevant facilities and equipment under both international law and the national law. Reference was made by another participant to principles developed under customary international law that provide a basis for relieving a State from their international obligations in a situation of extreme necessity or distress. A constitutional court decision in one State was cited which held that the right to life prevails over other rights and therefore certain laws or international obligations could be struck down as unconstitutional that did not meet this standard.

It was also acknowledged that the actions taken by regulators around the world in the aftermath of the second accident had played a part in raising the level of response by the aircraft manufacturer and the State of Design. The significant public interest and curiosity that had been aroused about the safety of flying this particular aircraft type was also identified as a notable factor to be taken into account.

It was understood that the issue of considering the proper regulatory response to the B737 Max accidents was continuing and would be the subject of future discussions particularly after the outcomes / results of investigations are known. This case was considered to be a good example to illustrate that one of the challenges for a civil aviation legal adviser, when he or she advises the authorities in their State is to highlight the legal consequences and the risks of taking (or not taking) a particular decision.

ICAO Safety and Security Audits

Ms Ellen Manga (Legal Services Manager, Gambia Civil Aviation Authority) highlighted the challenging experience of joining the civil aviation administration as its sole legal resource person and without prior aviation expertise and the importance of networking with other professionals in other States or regions to meet that challenge. She also highlighted the challenges of explaining certain national legislative drafting norms and practices to auditors without legal expertise and suggested the need for ICAO to look into providing adequate expertise for safety and security audits so that legal issues could be properly and fully addressed.



SESSION 4

CROSS-BORDER EXCHANGES AND COLLABORATION: OPPORTUNITIES AND MEANS

Each region discussed opportunities, means and tools, and presented proposals to facilitate interactions among civil aviation legal advisers to exchange information, keep abreast of relevant developments around the world, and collaborate to support their work and their organisations.

MODERATOR

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CROSS-BORDER EXCHANGES AND COLLABORATION: OPPORTUNITIES AND MEANS

SUMMARY

Highlights from Each Region:

Asia Pacific

Unmanned Aircraft or Drones

The legal issues pertaining to unmanned aircraft or drones was identified as the first area to monitor. It was acknowledged that the future is in drones, and that more could be done in the APAC region to facilitate sharing sessions amongst Civil Aviation Legal Advisers in the areas of regulation, enforcement, licensing and penalties to allow for better harmonisation at the regional level, to manage unmanned aircraft or drones. In particular, the legal framework pertaining to drones with regard to operations, air worthiness and the transport of passengers/goods were also raised.

Protection of Safety Related Information

The protection of safety related information from inappropriate use was the next area highlighted. The tension between the need to protection safety information, versus the competing requirements of other laws pertaining to the administration of justice was raised. It was acknowledged that protection of safety information was essential to ensure its continued availability, since its use for other purposes (e.g. apportioning liability; litigation) may actually inhibit the future availability of such information. The utility of the Standards and Recommended Practices reflected in Amendment 1 to Annex 19 to the Chicago Convention (applicable from 7 November 2019) was acknowledged.

Platforms for Sharing in the APAC Region

It was suggested to have more informal sharing sessions, where the unique characteristics of the APAC region, amongst other things, could be discussed. One example which was raised earlier was that drone operations would be able to transport passengers and goods over the challenging terrain (i.e. mountains) of some states in the APAC region.

Middle East

Platforms for Sharing of Information amongst States in the Region

More sharing of information amongst States in the region was advocated. In particular, the sharing of information and experiences with regard to the topic of implementing security and safety standards within the region. Further, the establishment of platforms (including the possible setting up of a legal committee for States within the MID region) to enable such sharing to take place, was also raised.

Europe and North Atlantic

Collaboration amongst Agencies

The need for collaboration with other relevant agencies (e.g. governmental, enforcement agencies) was highlighted, particularly in the light of new technologies such as drones.

Management of Information

The rapid dissemination of information (and possibly misinformation) via social media was brought up. It was observed that this could lead to undue pressure being exerted on Civil Aviation Authorities to be seen to act quickly, with the Boeing 737 Max case being raised as an illustrative example.

Management of Resources

The issue of the adequacy of internal resources within Civil Aviation Authorities was highlighted. It was noted that in the event this was an issue, then outsourcing could be an option. However, it was further observed that outsourcing a governmental function to a private sector entity, could cause difficulties in terms of perception and public expectations.

Eastern and Southern Africa/ Western and Central Africa

Bureaucracy and Enforcement

Bureaucracy was raised as a potential issue, with regard to promulgating laws required for airlines to operate locally. Further, any apparent contradiction of international standards with the constitutions of member states in the region, could also create obstacles to successful enforcement of these standards. The difficulties of enforcement with regard to drones was raised, including the challenges faced in dealing with potential breaches of privacy, as well as identification of the actual drone owners, etc. Other issues included the possibility of undue political influence on enforcement actions, as well as the present lack of a structured training programme for civil aviation legal advisors.

North America, Central America and Caribbean/ South America

Maintaining and Harmonisation of International Aviation Standards

Issues raised were the challenges in maintaining international aviation standards (in particular aviation security), in the face of the projected impending increase in aviation traffic, as well as budgetary constraints within Civil Aviation Authorities. The cross-border transferability of aircraft registrations and airworthiness requirements was discussed. In particular, the need for international harmonisation of the relevant standards for these areas was emphasised. The possibility of potential conflicts of interest in the oversight of aircraft services was also raised. In particular, a conflict situation could arise when such oversight activities were within the purview of a single civil aviation authority.

PLAN OF ACTIONS - NEXT STEPS FROM SINGAPORE AND BEYOND



MODERATOR

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PLAN OF ACTIONS – NEXT STEPS FROM SINGAPORE AND BEYOND

SUMMARY

The Forum recognised the contribution that civil aviation legal advisers make in supporting their States and organisations to implement air law treaties and to formulate and update national laws and regulations to give effect to national policies and regulatory requirements. The 1.5-day Forum covered wide-ranging topics such as the recent developments and emerging issues impacting the implementation and development of future air law; threats to aviation safety and security (including those involving drones, lasers and cyber-attacks); the conduct of independent accident and incident investigations and protecting safety information as illustrated in the Malaysia Airlines flight MH17 and Germanwings cases; regulatory actions taken in response to the Boeing 737 Max accidents and subsequent groundings; and the United Kingdom's experience in reconstructing national air safety regulations in anticipation of Brexit.

The Forum also highlighted the progress in the development of air law treaties over the past century starting with the adoption in 1919 of the Paris Convention on Aerial Navigation. Since the formation of ICAO, 24 international air law instruments have been adopted covering various fields such as aviation security, air carrier liability and aircraft finance. The Forum acknowledged the preeminent role ICAO has played as the leading international and diplomatic forum for the development of air law, enabling its Member States to find legal solutions to new and emerging challenges and to take advantage of opportunities for the development of civil aviation. The participants took the opportunity to reflect on key moments, impacts and experiences in the negotiation, adoption, ratification and implementation of air law treaties and challenges for the implementation of more than 12,000 SARPs.

In considering their plan of action, the participants welcomed the CALAF as a new platform for informed discussion and constructive exchange among Member States and sharing of knowledge and experiences, including regulatory best practices in a less formal context. They proposed actions which included:

1. Convening the CALAF regularly to enable civil aviation legal advisers to share experiences, including on regulatory best practices, and to continuously update and enhance their air law and regulatory development and implementation knowledge and skills;
2. Encouraging all civil aviation administrations to include in-house legal advisers as integral to their strength, efficiency and capability for timely development and updating of national laws and regulations and the effective implementation of air law instruments and SARPs;
3. Establishing a database of civil aviation legal advisers and providing digital resources for sharing relevant legal and related information among Member States; and
4. Developing a competency framework/profile to assist civil aviation administrations in the recruitment and training of civil aviation legal advisers so as to strengthen and enhance their competency and capacity for supporting their Organisations' and States' regulatory and other functions, especially in the areas of aviation safety and security oversight and the implementation of air law treaty obligations.

/// GALLERY





