Ruwantissa Abeyratne

Strategic Issues in Air Transport

Legal, Economic and Technical Aspects



Strategic Issues in Air Transport

Ruwantissa Abeyratne

Strategic Issues in Air Transport

Legal, Economic and Technical Aspects



Dr. Ruwantissa Abeyratne International Civil Aviation Organization (ICAO) 999 University Street Montreal H3C 5H7, Quebec Canada tabeyratne@icao.int

ISBN 978-3-642-21959-7 e-ISBN 978-3-642-21960-3 DOI 10.1007/978-3-642-21960-3 Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2011939308

© Springer-Verlag Berlin Heidelberg 2012

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer. Violations are liable to prosecution under the German Copyright Law.

The use of general descriptive names, registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

Currently, and arguably throughout the twenty-first century, along with new issues that might emerge in air transport, there are four strategic issues that will continue to apply to air transport: safety; security; environmental protection; and sustainable development.

Of these, safety, security and environmental protection were heavily discussed at the 37th Session of the Assembly convened by the International Civil Aviation Organization (ICAO) in Montreal from 28 September to 8 October 2011. The Assembly was attended by a record 1,588 participants from 176 Member States and 40 international organizations involved in civil aviation, achieved important advancements in aviation safety and aviation security assuring even greater safety performance in the already safest and most secure mode of mass transport in the world.

Reaffirming ICAO's its leadership role, the meeting adopted a comprehensive resolution to reduce the impact of aviation emissions on climate change. The agreement provides a roadmap for action through 2050 for the 190 Member States of the Organization. Solidifying its global influence, the Organization signed numerous international agreements, including cooperation agreements with regional civil aviation organizations and bodies from all regions of the world.

The Assembly endorsed a proactive safety strategy based on the sharing of critical safety information among governments and industry stakeholders. It also endorsed ICAO's plan to establish a multi-disciplinary approach to address the critical issue of runway safety. This will bring together representatives from airlines, airports, air navigation service providers and regulatory authorities. Following a successful diplomatic Conference in Beijing in August 2010, the Assembly built on this achievement by recognizing the need to strengthen aviation security worldwide. In a Declaration, unanimously adopted by participants, international commitment was reaffirmed to enhance aviation security collaboratively and proactively through screening technologies to detect prohibited articles, strengthening international standards, improving security information-sharing and providing capacity-building assistance to States in need. The Assembly also put its full support behind a comprehensive, new ICAO aviation security strategy.

vi Preface

The Resolution adopted by the Assembly on climate change makes ICAO the first United Nations Agency to lead a sector in the establishment of a globally harmonized agreement for addressing its CO_2 emissions. The resolution was adopted with some States expressing reservations and calling upon the ICAO Council to continue its work on specific aspects of the agreement. This remarkable accomplishment came only 2 months before negotiations are again undertaken by these very same States at the 16th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) meeting scheduled for December in Mexico.

Against this backdrop, this book addresses these four issues and the various complex areas that they present.

Montreal

Ruwantissa Abeyratne

Contents

1	Strategic Issues and Regulation
	1.1 Prelude to the Assembly
	1.1.1 Safety
	1.1.2 Security
	1.1.3 Environmental Protection
	1.1.4 Law 4
	1.2 The Assembly 5
	1.2.1 Safety 5
	1.2.2 Security
	1.2.3 Environmental Protection
	1.2.4 Law
	References
2	Safety Issues
	2.1 Safety Management Systems
	2.1.1 Responsibility of States
	2.1.2 Provision of Air Navigation Services
	2.1.3 Provision of Meteorological Information
	2.1.4 Provision of Air Traffic Services
	2.1.5 The Safety Roadmap
	2.1.6 Economic Liberalization and Safety
	2.1.7 Regulatory Aspects of Economic Liberalization
	and Safety49
	2.2 The Use of Airspace 64
	2.2.1 Distinction Between Civil and Military Aviation 68
	2.2.2 The Use of Civil Aircraft for Military Purposes
	2.2.3 Some Recent Developments
	2.2.4 ICAO Initiatives
	2.3 Aviation Medicine
	2.3.1 The Aerotoxic Syndrome

viii Contents

		2.3.2 A Novel Approach to Liability	
		2.3.3 Medical Issues of Technical Crew Members	88
		2.3.4 Liability Issues	93
	2.4	Meteorological Issues	. 98
		2.4.1 ICAO's Work on Mitigating the Effects of Volcanic Ash	
		on Aviation	100
		2.4.2 Some Liability Issues	106
		2.4.3 State Liability	110
		2.4.4 Air Carrier Liability to Passengers	115
	2.5	Unmanned Aircraft Systems	118
		2.5.1 The UAS and Civil Aviation Issues	123
		2.5.2 Operations over the High Seas	129
		2.5.3 Air Traffic Services	132
		2.5.4 UAS as State Aircraft	132
	2.6	Regional Safety in Air Transport	139
		2.6.1 The Role of ICAO	141
		2.6.2 The Regional Safety Oversight Manual	142
		2.6.3 The ICAO AFI Comprehensive Implementation	
		Programme (ACIP)	144
		2.6.4 Safety Oversight in Africa	145
		2.6.5 Safety Oversight in Central America (ACSA)	147
		2.6.6 Safety Oversight in the Caribbean	147
		2.6.7 Safety Oversight in South Asia	151
		2.6.8 Safety Oversight in Europe	151
	2.7	Safety Oversight Audits	154
		2.7.1 Blacklisting of Airlines	155
		2.7.2 Policy Aspects of Blacklisting	156
		2.7.3 Regulatory Oversight	160
	Ref	Perences	162
3	Sec	eurity Issues	165
	3.1	Cyber Terrorism	165
		3.1.1 International Efforts	171
		3.1.2 National Efforts	175
	3.2	Attacks on the Integrity of Travel Documents	177
		3.2.1 Complicity	180
		3.2.2 Condonation	181
		3.2.3 Knowledge	184
		3.2.4 Security of the Passport	189
	3.3	Full Body Scanners and Emergent Issues	197
		3.3.1 The Right of Privacy of the Passenger	199
		3.3.2 Security of the State	205
		3.3.3 Flight NW 253	209
		3.3.4 The AVSEC Panel	212

Contents ix

	3.4 Suppressing the Financing of Terrorism	225
	3.4.1 Acts of International Terrorism	229
	3.4.2 Money Laundering	236
	3.5 Civil Unrest and Aviation	239
	3.5.1 Keeping Airports Open	241
	3.5.2 Airport and Aviation Security	243
	References	276
4	Environmental Issues	279
	4.1 The Reality of Climate Change	279
	4.2 Aspirations and Goals	283
	4.3 Trading and Market Based Measures	285
	4.4 Emissions Trading	294
	4.5 The Carbon Market	298
	4.6 Consequences of Carbon Trading	302
	4.7 The Emissions Trading Scheme of the European Union	
	4.8 EU ETS and the Trading Mechanism	
	4.9 Calculating Emissions	
	References	318
5	Sustainable Development of Air Transport	319
	5.1 The Nature of Air Transport	319
	5.2 Market Access	320
	5.2.1 The Anomaly	324
	5.2.2 The Solution?	325
	5.2.3 Economic Considerations	329
	5.2.4 Some Basic Misconceptions	331
	5.2.5 Legal Considerations	333
	5.3 Open Skies	338
	5.3.1 The Issues Involved	342
	5.3.2 Effect of Open Skies Competition	346
	5.3.3 Commercial Considerations	350
	5.4 Slot Allocation	355
	5.4.1 Slot Allocation in Europe	360
	5.5 Corporate Foresight	368
	5.5.1 Airport Responsibility	370
	5.5.2 Elements of Corporate Foresight Planning	375
	5.6 The Use of Alternative Fuels as an Economic Measure	382
	5.6.1 The Use of Fossil Fuel and Its Effects	383
	5.6.2 The Availability of Sustainable Alternative Fuels and Costs	
	Involved	385
	5.6.3 The Rio Conference of 2009	389
	References	393

X	Contents
---	----------

	Conclusion References	
Ap	pendix	401
Ind	lex	413

Table of Cases

C.718, 114

Α Air India v. Wiggins [1980] 1WLR 815 t 819; 77 ILR 276 at 27, 304 Ashcroft v. Igbal, 129 S.Ct. 1937, 85 R Barrett v. Enfield LBC [2001] 2.A.C. 550, 113, 114 Barry v. Arnaud [1839] 10 Ad. & E. 646, 113 Bell Atlantic Corp. v. Twombly [2007] 550 U.S. 544, 85 Brantley v. Vaughn, 835F. Supp. 258., 376 British Caledonian Airways Ltd. v. Bond [1981] 665 F.3d.1153 (D.C. Cir. 1981), 159 Brooke Group Ltd. v. Brown and Williamson Tobacco Corp. [1993] 509 U.S. 209, 351 Brownlie v. Campbell [1880] 5 App. Cas. 925 (per Lord Blackburn), 95 Buergenthal [1969] at p. 121, 28 \mathbf{C} Campbell v. Tormey [1969] 1 All E.R. 961, cited in Smith & Hogan, Criminal Law, op.cit. at 432, 263, 264 Caparo Industries Plc v. Dickman [1990] 2 AC 605, 86, 97, 113 Centros Ltd. v. Erhvervs-og Selskabsstyrelsen [1999] Case no. C-212/97, ECR, 1-1459, 327Charzow Factory [1928] Case PCIJ Series A No. 17, 33 Christy v. Leachinsky [1947] 1 All E.R. 567 supra, note 315, at 572-573, 264, 265 Commission v. French Republic [1974] Case 167/73, ECR 359 at 370, 349, 368 Conly v. Gibson [1957] 355 U.S. 41, 85 Corfu Channel Case [1949] I.C.J.R.1, 22, p. 4, 33, 185 Cox v. Dubois, 16F.Supp. 2d 861, 376 Curran v. Northern Ireland Co-ownership Housing Association Ltd. [1987] A.

Curtis v. Chemical Cleaning and Dyeing Company [1951] 1. K.B. 805 (C.A), 95

Cutler v. Wandsworth Stadium Ltd. [1949] AC 398, 113

xii Table of Cases

D

Daves v. Hawaiian Dredging Co. [2009] (Justice Souter quoted) 114 F. Supp. 643 at 645, 85

Department of Water and Power of City of Los Angeles v. Anderson 95F.2d 577, 376 DOJ v. Reporters Comm. for Freedom of the Press [1988] 489 U.S. 749 AT 763, 203

E

El Al Isreal Airlines Limited v. Tseng [1999] Westlaw 7724, 84 Entick v. Carrington [1765] 19 St. Tr. 1029 at p. 1081, 112 Esso Petroleum Co. Ltd. v. Mardon [1976] Q.B. 801, 95

G

Goris v. Scott [1875] L.R. 9 ex. 125, 113

Gould Estate v. Stoddart Publishing Company [1996] O.J. No. 3288 (Gen. Div), 204 Gronau v. Schlamp Investments Ltd., [1974] 52 D.L.R. (3d) 631 (Man.Q.B.), 95 Groves v. Lord Winborne [1898] 2.Q.B.402, 113

Η

Hamdan v. Rumsfeld [2006] 126S.Ct.2749, 263

Hartford Fiore Insurance Company v.California [1993] 113 S. Ct. 2891 per Souter J., 306

Hedley Byrne & Co. Ltd. v. Heller & Partners [1964] A.C. 465, 95

Herman v. Trans World Airlines [1972] 330 N.Y.S.D. 2nd 829 (Sup.Ct. 1972), 253
Hoffman-La Roche & Co. A.G. v. Commission [1979] Case 85/76, ECR. 461, 350, 369
Holmes v. Bangladesh Biman Corporation [1989] AC 1112 at 1126; 87 ILR 365 at 369, 304

Hood v. Dealers Transport Co., 459F.Supp. 684, 376

I

In Re. Chorzow Factory (Jurisdiction) [1927] PCIJ, Ser. A, no. 9 at 21, 138
 International Transport Workers' Federation and Finnish Seamens' Union v.
 Viking Line ABP and OU Viking Line Easti [2007] Case C-438/05, ECR 1-10779, 327

Island of Palmas Case [1928] 11 U.N.R. I.A.A. at 829, 184

J

Jane's Case, Supra, note 11, at 92, 181 Johnson v. Cenac Towing Inc., [2006] 468 F. Supp, 2d. 815, 96 Johnson v. State of California [1968] 447 P. 2d. 352, 114

K

Konop v Hawaiian Airlines [1986] 302 F 3d 868, 176

L

Laker Airways v. Sabena [1984] 731 F.2d 909, 305 Laughlin v. Rose [1958] 200 Va. 127, 104S.E. 2d 782, 376 Table of Cases xiii

Laura M.B. Janes (USA) v. United Mexican States [1925] 4 R Intl Arb Awards 82, 181, 206

Libyan Arab Jamahiriya v. United Kingdom [1988] regarding the PANAM 103 accident at Lockerbie, Scotland in 1988, 224

Libyan Arab Jamahiriya v. United States of America [1988] regarding the PANAM 103 accident at Lockerbie, Scotland in 1988, 201, 224

Link v. Schiable [1961] 27 D.L.R. (2d) 461 (B.C.C.A), 95

M

Mannington Mills v. Congoleum Corporation [1979] 595 F.2d 1287; 66 ILR, 487, 305

Matsushita Electric Industrial Co. Ltd., et al. v. Zenith Radio Corp. et al. [1986] 475 U.S. 574, 351

McCorpen v. Cental Gulf Steamship Corporation [1968] 396 F2d 547, 95

McGrath v. MacLean [1979] 95 D.L.R. (3d) 144, 95

Mercy Docks and Harbour Board Trustees v. Gibbs [1866] L.R.1. H.L, 114

Murray v. Ministry of Defence [1988] 2 All E.R. 521, 265

N

Nicaragua v. The United States [1986] ICJ Reports 1986, 14. Also, 76 ILR 349, 185

0

O'Rourke v. Campden LBC [1998] A.C. 158, 113 Olmsted v. United States [1928] 277 U.S. 438, 478, 203 Olsen v. Poirier [1978] 91 D.L.R. (3d) 123 (Ont. H.C.J), 95

P

Pan Am Case, Infra, note 130, 186

Peabody Donation Fund v. Sir Lindsay Parkinson and Co. Ltd. [1985] A.C. 210, 114

Pfug v. Egyptair [1992] 961F. 2d. 26 (2nd Cir.), 253

Phelps v. Hillingdon LBC [2001] 2 A.C. 619 at 652, 114

Phillips v. Britannia Hygenic Laundry Co. Ltd. [1923] 2 K. B. 832, 113

Pickering v. James [1873] L.R. 8 C.P. 489, 113

R

R. v. Mafart and Prieur [1985] New Zealand High Court, Auckland Registry, Per Davison CJ reported in 74 ILR 241, 193

R. v. McLaughlin [1980] 2 SCR 331 at 339, 168

Rahman v. Queen [1985] 81 Cr App Rep 349 at 353, 263

Rainbow Warrior Case [1985] 81 AJIL, 1987 at 325. Als in 74 ILR at 241, 185, 193

Roe v. Wade [1973] 410 U.S. 113, 202

Rookes v. Bernard [1964] (H.L. 1964) 1 All Eng. Rep. 367, 88

Rowley v. Isley [1951] 3 D.L.R. 766 (Ct.), 95

Rowning v. Goodchild [1772] 2 W. Black 906, 113

xiv Table of Cases

S

Schenk v. US [1919] 249 US 47, 168

Schinotti v. Bumstead [1796] 6. T.R. 646, 113

Spicer v. Holt [1976] 3 All E. R. 71 at 79, 265

Sterling v. Turner [1672] I. Ventris 200, 113

Stovin v. Wise [1996] A.C. 923, 113

Sutherland Shire Council v. Heyman [1985] C.L.R. 424 at 464, 86, 97, 114

Т

Terry v. Ohio, 392 [1968] U.S.1, argued 12 Dec. 1967, decided 10 June 1968, 264 Tetra Pak Rausing SA. v. Commission [1990] Case T–51/89, II ECR 309, 4C.M.L. R. 334 para 31, 350, 369

The Island of Palmas Case [1928] 11 U.N.R. I.A.A. at 829, 184

The Mayagna (Sumo) Indigenous Community of Awas Tingini v. Nicaragua, Inter American Court of Human rights, Judgment of 31 August 2001 (Ser. C) No. 79, para 163, 33

The Spanish Zone of Morocco Case, 2 RIAA at p. 615, 33

Timberlane Lumber Company v. Bank of America [1976] 549 F.2d 597; 66 ILR, 270, 305

Turner v. Eastwest Airlines Limited [2009] Case No. CV-09-HGD-2193-s in the District Court of Northern District of Alabama, 46 N. W. 677, 95

Turner v. Eastwest Airlines Limited [2009] NSW DDT 10, 83

Turner v. Eastwest Airlines, Infra, note 164, 78

IJ

US v. Eustaquio [1999] 198 R.3d 1068 (8th Cir.1999), 199 US v. Favela [2001] 247 F.3d.838, 199

US. v. Aluminium Company of America [1945] 148 F.2d 416, 305

US. v. Smith [1998] 155 F 3d 1051, at 1055, 176

V

Victoria Vaughn Holsted and Valerie Vaughn, Petitioners, vs. Southwest Airlines Co., Case No. BS120400, 82

W

Wallentin-Hermann v. Alitalia [2006] Case C-344/04 ECR ZLW 58.Jg. 2/2009 224-231 at 224, 115-117

White v. Edwards Chevrolet Co. [1947] 186 Va. 669, 43S.E. 2d 870, 376 Whitehouse v. Jordan [1981] 1 All E.R. 267, 96

X

X (Minors) v. Bedfordshire CC [1995] 2 A.C. 633 at 730, 112