

Appendices

- I. Freedoms of Air**
- II. Blue Sky: Canada's New International Air Policy**
- III. Open Skies Partners of the United States**
- IV. Open Skies Agreement between Canada and the United States**
- V. Canada Open Skies Agreements**
- VI. Canada's Liberal Bilaterals (Open Capacity)**
- VII. Bilateral Agreements with Limited Price Control**
- VIII. Canada's Restrictive Bilaterals**
- IX. Formulation of Competitive Equilibrium Outcomes under Air Bilateral Liberalization**
- X. The United States Current Model Open Skies Agreement Text**

Appendix I

FREEDOMS OF THE AIR

First Freedom of the Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State or States to fly across its territory without landing (also known as a ***First Freedom Right***).

Second Freedom of the Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State or States to land in its territory for non-traffic purposes (also known as a ***Second Freedom Right***).

Third Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to put down, in the territory of the first State, traffic coming from the home State of the carrier (also known as a ***Third Freedom Right***).

Fourth Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to take on, in the territory of the first State, traffic destined for the home State of the carrier (also known as a ***Fourth Freedom Right***).

Fifth Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to put down and to take on, in the territory of the first State, traffic coming from or destined to a third State (also known as a ***Fifth Freedom Right***).

ICAO characterizes all "freedoms" beyond the Fifth as "so-called" because only the first five "freedoms" have been officially recognized as such by international treaty.

Sixth Freedom of The Air - the right or privilege, in respect of scheduled international air services, of transporting, via the home State of the carrier, traffic moving between two other States (also known as a ***Sixth Freedom Right***). The so-called Sixth Freedom of the Air, unlike the first five freedoms, is not incorporated as such into any widely recognized air service agreements such as the "Five Freedoms Agreement".

Seventh Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State, of transporting traffic between the territory of the granting State and any third State with no requirement to include on such operation any point in the territory of the recipient State, i.e the service need not connect to or be an extension of any service to/from the home State of the carrier.

Eighth Freedom of The Air - the right or privilege, in respect of scheduled international air services, of transporting cabotage traffic between two points in the territory of the granting State on a service which originates or terminates in the home country of the foreign carrier or (in connection with the so-called Seventh Freedom of the Air) outside the

territory of the granting State (also known as a ***Eighth Freedom Right*** or "consecutive cabotage").

Ninth Freedom of The Air - the right or privilege of transporting cabotage traffic of the granting State on a service performed entirely within the territory of the granting State (also known as a ***Ninth Freedom Right*** or "***stand alone***" cabotage).

Source: *Manual on the Regulation of International Air Transport* (Doc 9626, Part 4)

Appendix II

Blue Sky: Canada's New International Air Policy

The following policy will apply to Canada's approach to bilateral air transportation negotiations for scheduled passenger and all-cargo services.^[1]

Policy Objectives and Principles

Canada's new international air policy approach will be **guided by the following objectives and principles:**

Objectives

- Provide a framework that encourages competition and the development of new and expanded international air services to benefit travellers, shippers, and the tourism and business sectors.
- Provide opportunities for Canadian airlines to grow and compete successfully in a more liberalized global environment.
- Enable airports to market themselves in a manner that is unhindered by bilateral constraints to the greatest extent possible.
- Support and facilitate Canada's international trade objectives.
- Support a safe, secure, efficient, economically healthy and viable Canadian air transportation industry.

Principles

- Recognize that air transportation is a direct contributor to a dynamic economy and is a leading trade and tourism facilitator.
- Market forces should determine the price, quality, frequency and range of air services options.
- Canadian carriers should have the opportunity to compete in international markets on a reasonably level playing field.
- Air liberalization initiatives will continue to be guided by safety and security considerations.

In addition, Transport Canada recognizes that many of the expected benefits of air transport liberalization efforts are dependent on the efficient flow of passenger and cargo traffic within airports. Consequently, Transport Canada will continue to collaborate with other Canadian government departments, airport authorities, airlines and, where

applicable, Canada's bilateral partners to develop and promote measures that facilitate the **efficient, safe and secure** flow of international passenger and cargo traffic.

Policy Approach for Air Transportation Negotiations

Canada will **proactively pursue** opportunities to negotiate more liberalized agreements for international scheduled air transportation that will provide maximum opportunity for passenger and all-cargo services to be added according to market forces.

As a primary objective, Canada will seek to negotiate reciprocal "Open Skies"-type agreements, similar to the one negotiated with the U.S. in November 2005, where it is deemed to be in Canada's overall interest.

In essence, an "Open Skies"-type agreement would cover the following elements for scheduled passenger and all-cargo services:

- Open bilateral markets/access (third and fourth freedom rights);
- No limit on the number of airlines permitted to operate;
- No limits on the permitted frequency of service or aircraft type;
- Market-based tariff/pricing regime for bilateral and third-country services;
- Open and flexible regime for the operation of code-sharing services;
- Unrestricted services to and from third-countries (fifth and sixth freedom rights); and
- Rights for stand-alone all-cargo operations (seventh freedom rights).

Under no circumstances will the policy approach include cabotage rights – the right for a foreign airline to carry domestic traffic between points in Canada.

In determining its **negotiating priorities**, the Government will consult both airlines and airports and will take the following elements into consideration (in no particular order):

- Canadian airline and airport priorities and interests;
- Likelihood and extent of new Canadian and foreign carrier services, giving preference where early startup of air services is planned;
- Size and maturity of the air transportation markets and potential for future growth;
- Foreign government requests;
- Canada's international trade objectives;

- Safety and security issues;
- Foreign relations; and
- Bilateral irritants and disputes.

The Government will also consult more broadly prior to undertaking major air liberalization initiatives.

Recognizing that there may be situations where other countries will not be interested in negotiating an Open Skies-type arrangement with Canada, a scaled-down exchange of rights will be considered that will seek further liberalization without compromising Canada's ability to secure an Open Skies-type agreement in the future. **In all such cases, however, Canada will seek to secure as much flexibility for all-cargo services as possible.**

In other limited situations, the Government may determine that it would not be in Canada's best interests to negotiate an Open Skies-type agreement. Considerations that could influence Canada's approach to bilateral air negotiations include:

- the ability of Canadian airlines to operate services is severely limited by discriminatory airport access and/or facilitation issues;
- the "doing business" environment (e.g., transfer of funds, provisions on double taxation) presents major obstacles to Canadian airlines' commercial operations;
- the foreign carrier(s) appears not to be behaving in accordance with rational business principles or is protected from normal market disciplines, resulting in a markedly unbalanced playing field vis-à-vis Canadian airlines; and
- the foreign carrier(s) would be reasonably expected to offer a level of service to such an extent that competition in some markets/routes would be significantly reduced or effectively eliminated – resulting in a net loss for Canada.

However, in these cases, if a particular market is determined to be a negotiating priority Canada would consider negotiating an arrangement that would permit incremental liberalization and possibly provide scope for future introduction and/or expansion of air services.

Appendix III

Open Skies Partners of the United States

Partner	Application	Date Concluded	All-cargo 7ths	MALIAT Membership
1.Netherlands	In Force	10/14/92	--	--
2.Belgium	Provisional	34702	--	--
3.Finland	In Force	3/24/95	--	--
4.Denmark	In Force	4/26/95	--	--
5.Norway	In Force	4/26/95	--	--
6.Sweden	In Force	4/26/95	--	--
7.Luxembourg	In Force	34856	Yes	--
8.Austria	In Force	6/14/95	--	--
9.Iceland	In Force	6/14/95	Yes	--
10.Switzerland	In Force	6/15/95	--	--
11.Czech Republic	In Force	34923	Yes	--
12.Germany	Provisional	2/29/96	Yes	--
13.Jordan	In Force	35349	--	--
14.Singapore	In Force	1/22/97	Yes	Yes
15.Taiwan	In Force	2/28/97	--	--
16.Costa Rica	In Force	35647	--	--
17.El Salvador	In Force	35647	Yes	--
18.Guatemala	In Force	35647	Yes	--
19.Honduras	Provisional	35647	Yes	--
20. Nicaragua	In Force	35647	Chart Only	--
21. Panama	In Force	35647	Yes	--
22. New Zealand	In Force	5/29/97	Yes	Yes
23. Brunei	In Force	6/20/97	Yes	Yes
24. Malaysia	In Force	6/21/97	Yes	--

25. Aruba	In Force	9/18/97	Yes	--
26. Chile	In Force	10/28/97	Yes	Yes
27. Uzbekistan	In Force	2/27/98	Yes	--
28. Korea	In Force	4/23/98	--	--
29. Peru	In Force	36074	Yes	--
30. Netherland Antilles	In Force	7/14/98	Yes	--
31. *Romania	In Force	7/15/98	--	--
32. *Italy	C&R	36110	--	--
33. U.A.E.	In Force	4/13/99	Yes	--
34. Pakistan	In Force	4/29/99	Yes	--
35. Bahrain	In Force	5/24/99	Yes	--
36. Tanzania	Provisional	36230	Yes	--
37. *Portugal	In Force	12/22/99	Yes	--
38. *Slovak Republic	In Force	36708	Yes	--
39. Namibia	C&R	36618	--	--
40. Burkina Faso	In Force	36771	Yes	--
41. Ghana	In Force	3/16/00	Yes	--
42. Turkey	In Force	3/22/00	--	--
43. Gambia	In Force	36561	Yes	--
44. Nigeria	Provisional	8/26/00	Yes	--
45. Morocco	In Force	36656	Yes	--
46. Rwanda	N/A	36840	Yes	--
47. *Malta	In Force	36870	Yes	--
48. Benin	N/A	11/28/00	Yes	--
49. Senegal	C&R	12/15/00	Yes	--
50. *Poland	In Force	5/31/01	Yes	--
51. Oman	C&R	9/16/01	Yes	--
52. Qatar	Provisional	36960	Yes	--
53. *France	In Force	10/19/01	Yes	--

54. Sri Lanka	In Force	36902	--	--	
55. Uganda	C&R	37352	Yes	--	
56. Cape Verde	In Force	6/21/02	Yes	--	
57. Samoa	In Force	37353	Yes	Yes	
58. Jamaica	C&R	10/30/02	--	--	
59. Tonga	In Force	9/19/03	Yes	Yes	
60. Albania	In Force	9/24/03	Yes	--	
61. Madagascar	Provisional	38263	Yes	--	
62. Gabon	In Force	5/26/04	Yes	--	
63. Indonesia	C&R	7/26/04	Yes	--	
64. Uruguay	Provisional	10/20/04	Yes	--	
65. India	In Force	1/15/05	Yes	--	
66. Paraguay	In Force	38388	Yes	--	
67. Maldives	In Force	38477	Yes	--	
68. Ethiopia	Provisional	5/17/05	Yes	--	
69. Thailand	In Force	9/19/05	Yes	--	
70. Mali	In Force	10/17/05	Yes	--	
71. Canada	In Force	39419	Yes	--	
72. Bosnia and Herzegovina	In Force	11/22/05	Yes	--	
73. Cameroon	In Force	2/16/06	Yes	--	
74. Chad	Provisional	5/31/06	Yes	--	
75. Cook Islands	In Force	2/28/06	Yes	Yes	
76. Kuwait	In Force	5/27/07	Yes	--	
77. Liberia	In Force	2/15/07	Yes	--	
78. *Bulgaria	Provisional	3/30/08	4/30/07	Yes	--
79. *Cyprus	Provisional	3/30/08	4/30/07	Yes	--
80. *Estonia	Provisional	4/30/07	Yes	--	

	3/30/08			
81. *Greece	Provisional 3/30/08	4/30/07	Yes	--
82. *Hungary	Provisional 3/30/08	4/30/07	Yes	--
83. *Ireland	Provisional 3/30/08	4/30/07	Yes	--
84. *Latvia	Provisional 3/30/08	4/30/07	Yes	--
85. *Lithuania	Provisional 3/30/08	4/30/07	Yes	--
86. *Slovenia	Provisional 3/30/08	4/30/07	Yes	--
87. *Spain	Provisional 3/30/08	4/30/07	Yes	--
88. *United Kingdom	Provisional 3/30/08	4/30/07	Yes	--
89. Georgia	N/A	6/21/07	Yes	--
90. Australia	C&R	2/14/08	Yes	--
91. Croatia	N/A	3/13/08	Yes	--
92. Kenya	In Force	6/18/08	Yes	--

Appendix IV

Open Skies Agreement between Canada and the United States

1. Date of Agreement

Legal Title: Air Transport Agreement between the Government of Canada and the Government of the United States of America

March 12, 2007 Agreement signed and in force

Legal Title: Preclearance Agreement

January 18, 2001 Signed

May 2, 2003 In force

2. Other Instruments

June 30, 1995 NAX0047- Canadian government confirmation of grandfathered cargo coterminal right (UPS)

May 25 & June 12, 2000 Exchange of notes on designation

June 12, 2000 Exchange of notes amending Article 10 (Third country carrier code-sharing)

3. Characterization of Bilateral Agreement

The Canada - USA Agreement is an open skies type agreement. Any number of airlines may be designated for service pursuant to the Agreement.

4. Routes and Associated Rights

--Scheduled Services

- With effect from March 12, 2007, United States and Canadian air carriers are permitted to operate transborder scheduled services between any point or points in Canada and any point or points in the United States.
- In addition to/ in conjunction with the exercise of traffic rights granted in the agreement, carriers may serve points in third countries with fifth freedom rights.
- All cargo services may be operated between any point in either territory and any point outside that territory (7th freedom).
- The carriage of own stopover traffic(passengers) between points in the territory of the other Party is permitted.
- Code sharing with carriers of either Party and carriers of third countries is permitted, subject to normal regulatory requirements.

--Charter Services

- Charter services are included in the Air Transport Agreement. Pursuant to Annex III charters are subject to the charter rules/regulations of the country of origin of the charter flight. Charter flights may be one way, round trip or circle trip; may include stopovers at a point(s) within or outside the territories of either Party, and may include transportation beyond to third countries.
- Large aircraft All-cargo charters by carriers of one Party are permitted to serve any point in the territory of the other Party and any point(s) outside that territory (7th freedom).

--Stopover Provisions

- Under the Agreement designated airlines of Canada and the United States may operate scheduled or charter flights between any point or points in the United States and any point or points in Canada and may provide stopovers at points in either territory.
- In the case of charters there is no requirement for the aircraft to remain with the charter group at the point of stopover or for the same aircraft to be used for the entire journey. There is no limitation on the number of points at which such stopovers may be made.
- For example: a United States airline may transport passengers from the United States to a first point of arrival in Canada, return to that Canadian point at a later date and transport the same group to another point in Canada for another stopover, provided that the entire transportation of the group is under a single contract with that airline for transportation which originates in, or is finally destined for a point in the United States.

Appendix V

Canada Open Skies Agreements

Partner	Application	Date Concluded	All-cargo 7ths	Cargo Only
Barbados	Still to be Ratified	03/04/2008		
New Zealand	Still to be Ratified	09/07/2007	Yes	
Iceland	Provisional	7/18/2007	Yes	
Ireland	Provisional	4/30/2007	Yes	
United States	In Force	03/12/2007	Yes	
United Kingdom	Provisional	4/21/2006	Yes	

Appendix VI

Canada's Liberal Bilaterals with Open Capacity

Aruba

Date Of Agreement	January 24, 2001	Agreement signed	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada Westjet
	Tariffs	Double Disapproval	
	Capacity	Open Capacity	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Chile

Date of Agreement	December 4, 2003	Provisionally in force	
	September 27, 2005	Entry into force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada Lan Airlines
	Tariffs		Double disapproval
	Capacity		Open Capacity
Route Information	Access to British Columbia/YVR	Yes	Any point or points in Canada

Cuba

Date of Agreement	February 12, 1998	Provisionally in force	
	November 27, 2000	Definitively in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Air Transat
			Cubana
	Tariffs		Double disapproval
Capacity		Free Determination	
Route Information	Access to British Columbia/YVR	No	

Italy

Date of Agreement	May 16, 2002	Agreement signed ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Air Transat
			Skyservice
			Zoom Airlines Inc
			Alitalia and Air Italy SpA
Tariffs		Double disapproval	
Capacity		Free determination	
Confidential Item(s)	Routes and associated rights		
Route Information (operated in 2007)	Access to British Columbia/YVR	No access until 2007	

Portugal

Date of Agreement	June 8, 2006	Provisionally in force	
Characterization of Bilateral Agreement	Designation	Multiple	TAP Air Portugal
			Air Transat
	Tariffs		Air Canada
			Skyservice
Capacity	Free determination		
Route Information (operated in 2007)	Access to British Columbia/YVR	No	

Spain

Date of Agreement	September 15, 1988	Provisionally in force	
	August 15, 1991	Definitively in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Air Transat
			Lberia
			SPANAIR
			Air Comet S.A
	Tariffs		Double disapproval
	Capacity		Free determination
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	<p>Access is limited to the following routes</p> <ul style="list-style-type: none"> • Canada-London-Palma De Mallorca • Canada²-Frankfurt-Palma De Mallorca • Canada²-Frankfurt-Madrid • Canada-Frankfurt - Barcelona • Canada¹-Frankfurt-Madrid

¹ Service from Vancouver was operated on a codeshare basis with Lufthansa.

Finland

Date of Agreement	February 21, 1992	In force	
Characterization of Bilateral Agreement	Designation	Multiple	Finnair
			Air Canada
	Tariffs	Double disapproval Free determination on third and fourth freedom services, pre-determination on fifth freedom services. Codeshare: no limitation on capacity	
Capacity			
Route Information	Access to British Columbia/YVR	No	

Appendix VII

Bilateral Agreements with Limited Price Control

Algeria

Date of Agreement	July 05 ,2006	Applied provisionally	
Characterization of Bilateral Agreement	Designation	Multiple	Air Algeria
			Air Canada Code-sharing
	Tariffs	Double disapproval	
	Capacity	Predetermination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Austria

Date of Agreement	September 1,1993	Entered into force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Transat
			Austrian Airlines(OS)
			Air Canada
	Tariffs	Double disapproval	
Capacity	Predetermination		
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Belgium

Date of Agreement	May 13,1986		
Characterization of Bilateral Agreement	Designation	Multiple	Air C City :
	Tariffs	Double disapproval	
	Capacity	Pre-determination Unlimited capacity entitled code-share services.5th free Code-share services.	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Croatia

Date of Agreement	December 1,2006	Applied provisio	
Characterization of Bilateral Agreement	Designation	Multiple	Air C Skys
	Tariffs	Double disappro	
	Capacity	Pre-determinatio	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

France

Date of Agreement	June 15,1976	Provisionally in force	
Characterization of Bilateral Agreement	January 8,1977	Definitively in force	
	Designation	Multiple	Air Canada
			Air Transat
			Air France
	Tariffs	Double disapproval	
Capacity	Pre-determination		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Greece

Date of Agreement	August 20,1984	Provisionally in force	
Characterization of Bilateral Agreement	June 24,1987	Definitely in force	
	Designation	Dual	Air Canada
			Air Transat
			Olympic Airways
	Tariffs	Double disapproval	
Capacity	Pre-determination		
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Guyana

Date of Agreement	May 30,2005	In force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			TravelSpan GT inc
			E-Jet Inc
	Tariffs	Double disapproval	
Capacity	Pre-determination		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Jordan

Date of Agreement	June 6,2007	Provisionally in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Royal Jordanian
	Tariffs	Double disapproval	
Capacity	Pre-determination		
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Kuwait

Date of Agreement	May 8,2007	Provisionally in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Kuwait Airways Corporation
			Jazeera Airways Company
	Tariffs	Dual disapproval	
Capacity	Pre-determination		
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Lebanon

Date of Agreement	August 26,2002	Entry into force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Middle East Airlines
	Tariffs	Double disapproval	
Capacity	Pre-determination		
Route Information (Operated in 2004)	Access to British Columbia/YVR	N/A	

Germany

Date of agreement	March 26,1973	Provisionally in force	
	February 18,1975	Definitively in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Air Transat
			Lufthansa
			Condor Flugdienst GmbH
			LTU Lufftransport Unternehmen GmbH
	Tariffs	Double disapproval	
	Capacity	Free determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Poland

Date of Agreement	April 5,2001	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	LOT Polish
			Air Transat
			Air Canada
	Tariffs	Dual disapproval	
Capacity	Pre-determination		
Confidential Item(s)	Routes and associated rights		
Route Information(Operated in 2004)	Access to British Columbia/YVR	Yes.	<p>Access is limited to the following routes</p> <ul style="list-style-type: none"> • Canada³-Frankfurt-Warsaw • Canada³-Frankfurt-Gdansk • Canada³-Frankfurt-Warsaw • Canada³-Frankfurt-Poznan • Canada²-Frankfurt-Katowice

² Service from Vancouver was operated on a codeshare basis with Lufthansa.

Serbia

Date of Agreement	December 7, 2006	Provisionally in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Skyservice
	Tariffs	Double disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

United Arab Emirates

Date of Agreement	May 28, 1999	Provisionally into force	
	Aug 22-Oct 3 2002	Entry into force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Etihad Airways
			Emirates Airlines
	Tariffs	Double disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Vietnam

Date of Agreement	June 24,2003	Provisional application	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
	Tariffs	Double disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Appendix VIII

Restrictive Bilateral Agreements

Antigua

Date of Agreement	August 19, 1949	
Characterization of Bilateral Agreement	Designation	Air Canada
	Tariffs	Single disapproval
	Capacity	No unilateral action
Route Information(Operated in 2004)	Access to British Columbia/YVR	No

Argentina

Date of Agreement	May 8, 1979	Applied provisionally
	February 6, 1987	Entered into force
Characterization of Bilateral Agreement	Designation	Single Air Canada
		Aerolineas Argentinas
	Tariffs	Single disapproval
	Capacity	Pre-determination
Confidential Item(s)	Routes and associated rights	
Route Information(Operated in 2004)	Access to British Columbia/YVR	No

Australia

Date of Agreement	July 5,1988	In Force
Characterization of Bilateral Agreement	Designation Multiple	Air Canada
		Qantas and Harmony Airways
		Code-sharing service
	Tariffs	Single disapproval
Capacity		Pre-determination
		3000 seats/wk without restrictions as to frequency or aircraft type. No Capacity limits on code-share service
Route Information(Operated in 2004)	Access to British Columbia/YVR	Yes

Bahamas

Date of Agreement	May 15,1986	Provisionally in force
	July 26 ,1990	Definitively in force
Characterization of Bilateral Agreement	Designation	Multiple Air Canada
		Varig-Vaicao
		Varing Logistica and TAM Linhas Aereas S.A
	Tariffs	Single disapproval
Capacity		Pre-determination
Route Information(Operated in 2004)	Access to British Columbia/YVR	No

Brazil

Date Of Agreement	May 15,1986	Provincially in force	
	July 26,1990	Definitively in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Varig-Vaicao
			Varing Logistica
			TAM Linhas Aereas S.A
	Tariffs	Single Disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Bulgaria

Date of Agreement	April 12,1991	Ad referendum		
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada	
			Balkan Bulgarian Airlines	
		Tariffs	Single disapproval	
		Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights			
Route Information (Operated in 2004)	Access to British Columbia/YVR	No		

China

Date of Agreement	September 9,2005	In force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Cargojet
			Harmony Airways
			Air China
			Shanghai Airlines
			China Eastern
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Costa Rica

Date of Agreement	November 22,1996	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			LACSA
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

The Czech Republic

Date of Agreement	March 13,1996	Signed and in Force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Czech Airlines
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Denmark

Date of Agreement	February 17,1989	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			SAS
	Tariffs	Single disapproval	
	Capacity	Pre-determination for own-equipment	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Egypt

Date of Agreement	April 3,1987	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Egyptair and Egyptair Cargo
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Dominican Republic

Date of Agreement	June 18,1986	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
	Tariffs	Zonal disapproval	
	Capacity	No unilateral action	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 1999)	Access to British Columbia/YVR	No	

El Salvador

Date of Agreement	November 22,1996	Ad referendum
Characterization of Bilateral Agreement	Designation	Multiple Air Canada
	Tariffs	Single disapproval
	Capacity	Pre-determination
Confidential Item(s)	Routes and associated rights	
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes

Fiji

Date of Agreement	April 30,1974	In force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Pacific
			Air Canada
			Harmony Airways(code-sharing service)
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Guatemala

Date of Agreement	November 22,1996	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Haiti

Date of Agreement	October 12,1978		
Characterization of Bilateral Agreement	Designation	Single	Air Canada
	Tariffs	Single disapproval	
	Capacity	Pre-determination and no unilateral action	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Hong Kong

Date of agreement	June 24,1998	In force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada Cathay Pacific
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Hungary

Date of Agreement	June 10,1999	Entry into Force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada MaleV Hungarian Airlines
			Tariffs
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

India

Date of agreement	August 31,1982	In force	
Characterization of Bilateral Agreement	Designation	Single by route	Air Canada
			Air India
			Jet Airways
			(Jet Airways doesn't hold a licence to operate air service in Canada
	Tariffs		Single disapproval
	Capacity		Pre-determination
		Canada and India On Route 1-2100 seats/ week On Route 2-2 frequencies/ week	
		The total number of one-way fifth freedom passengers carried into and/ or out of the territory of the other Contracting party for services operated on Route 1 of either Section in any calendar year shall not exceed 85,000 passengers or 50% of seats operated calculated annually, which is greater, but in any case shall not exceed 110,000 passenger s per annum.	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Indonesia

Date of agreement	December 5,1995	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Garuda
	Tariffs	Single Disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Ivory Coast

Date of Agreement	September 3, 1987	Ratified by Ivory Coast 04 April 1990	
Characterization of Bilateral Agreement	Designation	Single by route	Air Canada
			Ivoire Aero Services (IAS)
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Jamaica

Date of Agreement	October 18, 1985		
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Sunwing Airlines Inc
			Westjet
			Skyservice and Air Jamaica
	Tariffs	Zonal disapproval	
Capacity	No unilateral action		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Japan

Date of Agreement	January 12,1955		
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Japan Airlines
			All Nippon
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Mexico

Date of Agreement	February 21,1964	Entry into force	
Characterization of Bilateral Agreement	Designation	With limitations by city pair	
		Canada	Air Canada
			Air Transat
			Skyservice
			Sunwing
		Westjet	
		Zoom	
		HMY Airways	
	Mexico	Aerovias Mexicana	
	Tariffs	Single disapproval	
	Capacity	Free determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Morocco

Date of Agreement	February 14,1975	Provisionally into force	
	May 7,1986	Definitively in force	
Characterization of Bilateral Agreement	Designation	Single by route	Air Canada
			Royal Air Maroc
	Tariffs	Single disapproval	
	Capacity	Free determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Netherlands

Date of Agreement	February 1,1990	Entry into force	
Characterization of Bilateral Agreement	Designation	Multiple with limitations	Air Canada
			Air Transat
			KLM
	Tariffs	Single disapproval	
	Capacity	Open capacity	
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Nicaragua

Date of Agreement	November 22,1996	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Norway

Date of Agreement	February 17,1989	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			SAS
	Tariffs	Single disapproval	
Capacity	Pre-determination for own-equipment		
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	N/A	

Malaysia

Date of agreement	January 18,1996		
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada Malaysia Airlines
	Tariffs	Single Disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Pakistan

Date of Agreement	January 15,1996	Definitively in force	
	May 23,1996	Confidential Memorandum of Understanding	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada Pakistan International Airlines
	Tariffs	Single disapproval	
	Capacity	Pre-determination for own-equipment	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Panama

Date of Agreement	May 7,1968	Ad referendum
Characterization of Bilateral Agreement	Designation	Single Air Canada
	Tariffs	Single disapproval
	Capacity	No unilateral action
Route Information (Operated in 2004)	Access to British Columbia/YVR	N/A

Peru

Date of Agreement	February 18,1955	Entry into force
Characterization of Bilateral Agreement	Designation	Single by route
		Air Canada Lan Peru
	Tariffs	Single disapproval
Capacity	Free determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No

Philippines

Date of agreement	May 30,1997		
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada Philippine Airlines
	Tariffs	Single disapproval	
	Capacity	Pre-determination: 4 flights/week for own aircraft	
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Romania

Date of Agreement	November 9,1984	Entry into force	
Characterization of Bilateral Agreement	Designation	Single	Air Canada
			TAROM S.A
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
<p>One flight/ day for direct services operated by Air Canada between Canada and Bucharest of which two flights/ week may be operated with own-aircraft.</p> <p>One flight/ day for services operated by TAROM between Romania and Montreal of which two flights/ week may be operated with own aircraft</p>			
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

Russian Federation

Date of Agreement	March 9,2001	Entry into force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Skyservice
			Aeroflot
			Transaero
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Saint Lucia

Date of Agreement	January 6,1984		
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			BWI
			A
	Tariffs	Single disapproval	
	Capacity	No unilateral action	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Saudi Arabia

Date of Agreement	November 14, 1990	Provisionally in force	
	June 9, 1991	Definitively in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Singapore

Date of Agreement	December 14, 2007	Provisionally in force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			Singapore Airlines
			Jett8 Airlines Cargo Private Limited
			Singapore Airlines Cargo (Private) Limited
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

South Korea

Date of agreement	September 20,1989	In force	
Characterization of Bilateral Agreement	Designation	Dual	Air Canada
			Korean Airlines
			Asiana Airlines
	Tariffs	Single disapproval	
Capacity	Pre-determination		
Confidential Item(s)	Routes and associated rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	Yes	

ST. Christopher and Nevis

Date of Agreement	October 18,1985		
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			BWIA
	Tariffs	Single disapproval	
	Capacity	No unilateral action	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Sweden

Date of Agreement	February 17,1989	Ad referendum
Characterization of Bilateral Agreement	Designation	Multiple Air Canada SAS
	Tariffs	Single disapproval
	Capacity	Pre-determination for own equipment
	Confidential Item(s)	Routes and associated rights
Route Information (Operated in 2004)	Access to British Columbia/YVR	N/A

Thailand

Date of agreement	June 30,1989	In force	
Characterization of Bilateral Agreement	Designation	Single by route	Air Canada
		Dual for code share	Thai Airways
	Tariffs	Single disapproval	
	Capacity	Pre-determination Three flights/ week using B747 or equivalent aircraft	
Route Information (Operated in 2004)	Access to British Columbia/YVR	N/A	

Trinidad and Tobago

Date of Agreement	July 20,1988	Ad referendum	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada BWIA
	Tariffs	Double disapproval on Cargo Zonal disapproval	
	Capacity	No unilateral action	
Confidential Item(s)	Routes and associate rights		
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Ukraine

Date of Agreement	April 28, 1999	Entry into force	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada Ukrainian- Mediterranean Airlines AeroSvit
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Venezuela

Date of Agreement	June 26, 1990	Provisional application	
Characterization of Bilateral Agreement	Designation	Multiple	Air Canada
			VIASA
			Aerpostal
Avensa			
	Tariffs	Single disapproval	
	Capacity	Pre-determination	
Route Information (Operated in 2004)	Access to British Columbia/YVR	No	

Appendix IX

Formulation of Competitive Equilibrium Outcomes under Air Bilateral Liberalization

Our model computes the competitive equilibrium outcomes (airfares, passenger volumes, and flight frequencies) for each carrier-route combinations for serving major airport pairs between Canada and Asian countries.

Take the YVR-PEK market as an example. In addition to the direct services, passengers may choose three alternative indirect routes with intermediate stops (such as NRT, SEA and ICN). Therefore, there are 8 carrier-route combinations for the market. We consider these carrier-route combinations as differentiated products.

To analyze the competition between airlines who provide differentiated services, we construct a competition model similar to those used by Dixit (1979) and Singh and Vives (1984). In particular, the inverse demand function of airline i is specified as

$$(1) \quad \eta_i = a_i - bq_i - k \sum_{j \neq i}^J q_j \quad i = 1..J$$

Where η_i is the generalized price of airline i . Reflecting the fact that an airline's price is more sensitive to its own output change compared to its competitor's, it is natural to require that

$$(2) \quad b > k$$

Such a demand specification corresponds to a representative consumer maximizing a quadratic and strictly concave utility function of the followings:

$$(3) \quad U(q_1, \dots, q_J) = \sum_{i=1}^J a_i q_i - \frac{1}{2} b \sum_{i=1}^J q_i^2 - k \sum_{i=1}^J \sum_{j \neq i}^J q_i q_j - \sum_{i=1}^J \eta_i q_i$$

Such a specification is more restrictive than a fully flexible model in that it assumes the slopes of the all airlines' demand functions are the same. This restriction is imposed due to our data limitation, which prevents us to calibrate too many parameters. Still, such a specification is more general than the models utilized in most previous liberalization studies in that it considered product differentiation and firm specific characteristics explicitly. The generalized price η_i is the sum of actual ticket price paid p_i , plus the schedule delay cost γ/f_i incurred by consumers. Parameter γ is proportional to consumer's value of time, while f_i is a carrier's flight frequency. Similar specification has been used by Richard (2002). For ease of notational expression, we provide closed form solution in the following section for the case duopoly airlines, i.e. the number of airlines $J = 2$. The more general case with $J > 2$ can be solved similarly. Note when $J = 2$, we have

$$(4) \quad \begin{cases} p_1 = a_1 - \frac{\gamma}{f_1} - bq_1 - kq_2 \\ p_2 = a_2 - \frac{\gamma}{f_2} - kq_1 - bq_2 \end{cases}$$

which can also be rewritten as:

$$(5) \quad \begin{cases} q_1 = \frac{1}{b^2 - k^2} \left[(a_1 - \frac{\gamma}{f_1})b - (a_2 - \frac{\gamma}{f_2})k - p_1b + p_2k \right] \\ q_2 = \frac{1}{b^2 - k^2} \left[(a_2 - \frac{\gamma}{f_2})b - (a_1 - \frac{\gamma}{f_1})k - p_2b + p_1k \right] \end{cases}$$

Note market output Q (number of passengers) is the sum of each airline's traffic volume q_i , thus that $Q = q_1 + q_2$. Market price P is calculated as the weighed average of each airline's price, thus that $P = (p_1q_1 + p_2q_2)/Q$. When both firms experience an identical price change $dp_1 = dp_2 = dp$, or an equivalent market price change of $dP = dp$, by equation (5) the total

change in market output can be obtained as $dQ = dq_1 + dq_2 = -\frac{2}{b+k} dp$, and therefore we have

$$(6) \quad \varepsilon_P = \frac{dQ}{dP} \cdot \frac{P}{Q} = -\frac{2}{b+k} \cdot \frac{P}{Q}$$

Similarly, when the flight frequency of airline 1 and airline 2 both increase by df , the total frequency increase is $2 \times df$, thus that

$$(7) \quad dQ = dq_1 + dq_2 = \left(\frac{\partial q_1}{\partial f_1} + \frac{\partial q_1}{\partial f_2}\right)df + \left(\frac{\partial q_2}{\partial f_1} + \frac{\partial q_2}{\partial f_2}\right)df = \frac{dQ}{df}(2 \cdot df)$$

With equation (5), it can be further derived that

$$(8) \quad \frac{\partial q_1}{\partial f_1} = \frac{\gamma b f_1^{-2}}{(b^2 - k^2)}, \quad \frac{\partial q_1}{\partial f_2} = -\frac{\gamma k f_2^{-2}}{(b^2 - k^2)},$$

$$\frac{\partial q_2}{\partial f_2} = \frac{\gamma b f_2^{-2}}{(b^2 - k^2)}, \quad \frac{\partial q_2}{\partial f_1} = -\frac{\gamma k f_1^{-2}}{(b^2 - k^2)}$$

With equations (7) and (8), it can be derived that

$$(9) \quad \varepsilon_f = \frac{dQ}{df} \cdot \frac{f}{Q} = \frac{\gamma(f_1^{-2} + f_2^{-2})}{2(b+k)} \cdot \frac{f_1 + f_2}{Q}$$

The model is calibrated with historical data under the following assumptions concerning the market price elasticity ε_P and flight frequency elasticity ε_f .

$$(10) \quad \varepsilon_P = -1.5$$

$$(11) \quad \varepsilon_f = 0.3$$

These elasticity values are adopted from previous empirical studies as reviewed in Section 4.2 of the report.

To calibrate the model, we also need to solve for b and k . Parameter k measures the degree of differentiation among the services provided by the firms. Let $k = t \cdot b_1$ ($0 < t < 1$), then if $t = 0$ the firms' services are not substitutes at all, while $t = 1$ indicates that the airlines produce perfectly homogenous services. In our model, we assume that $t = 0.8$, i.e., the airlines provide close substitutes to each other.

The following data was collected to conduct the model calibration:

- Historical traffic volume data for each airline in all the routes we studied up to year 2006.
- Historical flight frequency data for each airline in all the routes we studied up to year 2006.
- Average fare data for each carrier in all the routes we studied during 2008. These fares are used for constructing pre-liberalization fares.
- Average load factors for each airline in each route.
- Historical financial data for all carriers up to year 2006.

Note with historical fare and traffic volume data, variables a_i , b , k , γ can be calculated by solving equations (4), (6), (7), (8) and (11) jointly. Such a parameter set is used to solve for the market equilibrium when the limits on flight frequency and capacity are removed. Note airline i maximizes its profit

$$(12) \quad \pi_i = \underset{q_i}{\text{Max}}(p_i q_i - w_i q_i - v_i f_i)$$

In addition, we have

$$(13) \quad f_i = \frac{q_i}{Z_i L_i} = \frac{q_i}{S_i}$$

where usable seat per aircraft S_i can be calculated with an airline's average load factor L_i and average aircraft size Z_i . After liberalization, an airline sets its quantity to maximize profits. The First Order Conditions (FOCs) are

$$(14) \quad \frac{\partial \pi_i}{\partial q_i} = a_i - kq_j - w_1 - \frac{v_i}{S_i} - 2bq_i = 0$$

Equilibrium results after liberalization can be obtained by solving all airlines' FOCs jointly.

To solve the equilibrium results, we also need to calibrate the marginal cost for all routes. Assuming a constant marginal cost, we set $w_1 = \$48$ (per passenger) for Air Canada, taking the average for all 6 markets we considered. Other airlines' per passenger costs are adjusted with the competitiveness ratio per the study by Oum and Yu (1996)³.

We used Expedia to collect the lowest online air fares. Given the fact that all airlines use revenue management system to increase their revenue, the average yields should be higher than the lowest possible fares we collected. Therefore, we upscale all the fares by 15%, which is used as an airline's average yield.

As liberalization generally increases competition, airlines' load factors are likely to fall⁴ in the liberalized markets. We reviewed the market performance in the Seoul - San Francisco and Seoul - Los Angeles markets under the US-Korea Open Skies, and noted that the average load factor in these two liberalized markets is 79%. Assuming similar market outcomes would happen, we set the expected load factor in all the liberalized markets at 80%. The only exception is the Shanghai-Vancouver route, where China Eastern has persistently had considerably lower load factors than its competitors. Consequently, we set China Eastern's post-liberalization load factor at 75% to reflect its arguably poor management.

With the record high oil price forcing airlines to change their operation and marketing practices, it is important to examine the likely market outcomes if fuel price remains high in the long run. It should be noted that some of the likely long term changes airlines may adapt, such as switching to new type of aircraft and reconfiguring their network structure, are beyond the scope of our current model. Nevertheless, we conduct additional simulations to examine the effects of fuel price increase with following assumptions:

³ Since virtually no one has studied the cost competitiveness of the Chinese airlines, the cost ratio for Thai Airways is used as a proxy.

⁴ It is noted that with the high fuel price, airlines are forced to increase their load factors by cutting capacity in their efforts to save on fuel costs.

- (1) Airlines' per flight cost increased by 30%. Per passenger cost, which accounts for a relatively smaller percentage of the total cost, remain constant since they are not directly fuel related. If fuel costs accounted for about 30% of an airline's total cost in 2006, our simulation represents roughly the effects of doubling fuel price of its year 2006 level.
- (2) Airlines continue to use the same aircraft types. The equilibrium load factors of each airline however are increased by 5%.
- (3) All frequency and capacity limitation are removed. However, there are no new entrants in the routes.

Clearly there are two countervailing factors in effect: high fuel price brings strong incentive for airlines to increase price and reduce frequency, while liberalization gives airlines incentive to compete more aggressively. Our simulation results reflect the net effects of these two driving forces.

1/10/2008

Appendix X

AIR TRANSPORT AGREEMENT

BETWEEN

THE GOVERNMENT OF

THE UNITED STATES OF AMERICA

AND

THE GOVERNMENT OF

[country]

The Government of the United States of America and the Government of [country] (hereinafter, "the Parties");

Desiring to promote an international aviation system based on competition among airlines in the marketplace with minimum government interference and regulation;

Desiring to make it possible for airlines to offer the traveling and shipping public a variety of service options, and wishing to encourage individual airlines to develop and implement innovative and competitive prices;

Desiring to facilitate the expansion of international air transport opportunities;

Desiring to ensure the highest degree of safety and security in international air transport and reaffirming their grave concern about acts or threats against the security of aircraft, which jeopardize the safety of persons or property, adversely affect the operation of air transportation, and undermine public confidence in the safety of civil aviation; and

Being Parties to the Convention on International Civil Aviation, done at Chicago December 7, 1944;

Have agreed as follows:

Article 1

Definitions

For the purposes of this Agreement, unless otherwise stated, the term:

1. "Aeronautical authorities" means, in the case of the United States, the Department of Transportation and in the case of [country], the [appropriate entity], and any person or agency authorized to perform functions exercised by the Department of Transportation or said [appropriate entity];
2. "Agreement" means this Agreement and any amendments thereto;
3. "Air transportation" means the public carriage by aircraft of passengers, baggage, cargo, and mail, separately or in combination, scheduled or charter, for remuneration or hire;
4. "Airline of a Party" means an airline that is licensed by and has its principal place of business in the territory of that Party;
5. "Convention" means the Convention on International Civil Aviation, done at Chicago December 7, 1944, and includes:
 - a. any amendment that has entered into force under Article 94(a) of the Convention and has been ratified by both Parties, and
 - b. any Annex or any amendment thereto adopted under Article 90 of the Convention, insofar as such Annex or amendment is at any given time effective for both Parties;
6. "Full cost" means the cost of providing service plus a reasonable charge for administrative overhead;

7. "International air transportation" means air transportation that passes through the airspace over the territory of more than one State;
8. "Price" means any fare, rate, or charge for the carriage of passengers, baggage, or cargo (excluding mail) in air transportation, including surface transportation in connection with international air transportation, charged by airlines, including their agents, and the conditions governing the availability of such fare, rate, or charge;
9. "Stop for non-traffic purposes" means a landing for any purpose other than taking on or discharging passengers, baggage, cargo, or mail in air transportation;
10. "Territory" means the land areas, internal waters, and territorial sea under the sovereignty of a Party; and
11. "User charge" means a charge imposed on airlines for the provision of airport, airport environmental, air navigation, or aviation security facilities or services including related services and facilities.

Article 2

Grant of Rights

1. Each Party grants to the other Party the following rights for the conduct of international air transportation by the airlines of the other Party:
 - (a) the right to fly across its territory without landing;
 - (b) the right to make stops in its territory for non-traffic purposes;
 - (c) the right to perform international air transportation between points on the following routes:
 - (i) for airlines of the United States, from points behind the United States via the United States and intermediate points to any point

or points in [country] and beyond; [and for all-cargo service, between [country] and any point or points;]

(ii) for airlines of [country], from points behind [country] via [country] and intermediate points to any point or points in the United States and beyond; [and for all-cargo service, between the United States and any point or points;] and

(d) the rights otherwise specified in this Agreement.

2. Each airline of a Party may, on any or all flights and at its option:

- a. operate flights in either or both directions;
- b. combine different flight numbers within one aircraft operation;
- c. serve behind, intermediate, and beyond points and points in the territories of the Parties in any combination and in any order;
- d. omit stops at any point or points;
- e. transfer traffic from any of its aircraft to any of its other aircraft at any point;
- f. serve points behind any point in its territory with or without change of aircraft or flight number and hold out and advertise such services to the public as through services;
- g. make stopovers at any points whether within or outside the territory of either Party;
- h. carry transit traffic through the other Party's territory; and
- i. combine traffic on the same aircraft regardless of where such traffic originates;

without directional or geographic limitation and without loss of any right to carry traffic otherwise permissible under this Agreement, provided that, [with the

exception of all-cargo services,] the transportation is part of a service that serves a point in the homeland of the airline.

3. On any segment or segments of the routes above, any airline of a Party may perform international air transportation without any limitation as to change, at any point on the route, in type or number of aircraft operated, provided that, [with the exception of all-cargo services,] in the outbound direction, the transportation beyond such point is a continuation of the transportation from the homeland of the airline and, in the inbound direction, the transportation to the homeland of the airline is a continuation of the transportation from beyond such point.

4. Nothing in this Article shall be deemed to confer on the airline or airlines of one Party the rights to take on board, in the territory of the other Party, passengers, baggage, cargo, or mail carried for compensation and destined for another point in the territory of that other Party.

5. Any airline of a Party performing charter international air transportation originating in the territory of either Party, whether on a one-way or round-trip basis, shall have the option of complying with the charter laws, regulations, and rules either of its homeland or of the other Party. If a Party applies different rules, regulations, terms, conditions, or limitations to one or more of its airlines, or to airlines of different countries, each airline of the other Party shall be subject to the least restrictive of such criteria. Nothing in this paragraph shall limit the rights of a Party to require airlines of both Parties to adhere to requirements relating to the protection of passenger funds and passenger cancellation and refund rights. Except with respect to the consumer protection rules referred to in this paragraph, neither Party shall require an airline of the other Party, in respect of the carriage of traffic from the territory of that other Party or of a third country on a one-way or round-trip basis, to submit more than a notice that it is complying with the applicable laws, regulations, and rules referred to in this paragraph or of a waiver of these laws, regulations, or rules granted by the applicable aeronautical authorities.

Article 3

Authorization

Each Party, on receipt of applications from an airline of the other Party, in the form and manner prescribed for operating authorizations and technical permissions, shall grant appropriate authorizations and permissions with minimum procedural delay, provided:

a. substantial ownership and effective control of that airline are vested in the other Party, nationals of that Party, or both;

b. the airline is qualified to meet the conditions prescribed under the laws and regulations normally applied to the operation of international air transportation by the Party considering the application or applications; and

c. the other Party is maintaining and administering the provisions set forth in Article 6 (Safety) and Article 7 (Aviation Security).

Article 4

Revocation of Authorization

1. Either Party may revoke, suspend, limit, or impose conditions on the operating authorizations or technical permissions of an airline where:

a. that airline is not an airline of the other Party under Article 1(4);

b. substantial ownership and effective control of that airline are not vested in the other Party, the other Party's nationals, or both; or

c. that airline has failed to comply with the laws and regulations referred to in Article 5 (Application of Laws) of this Agreement.

2. Unless immediate action is essential to prevent further noncompliance with subparagraph 1c of this Article, the rights established by this Article shall be exercised only after consultation with the other Party.

3. This Article does not limit the rights of either Party to withhold, revoke, suspend, limit, or impose conditions on the operating authorization or technical

permission of an airline or airlines of the other Party in accordance with the provisions of Article 6 (Safety) or Article 7 (Aviation Security).

Article 5

Application of Laws

1. The laws and regulations of a Party relating to the admission to or departure from its territory of aircraft engaged in international air navigation, or to the operation and navigation of such aircraft while within its territory, shall be complied with by such aircraft upon entering, when departing from, or while within the territory of the first Party.
2. While entering, within, or leaving the territory of one Party, its laws and regulations relating to the admission to or departure from its territory of passengers, crew or cargo on aircraft (including regulations relating to entry, clearance, aviation security, immigration, passports, customs and quarantine or, in the case of mail, postal regulations) shall be complied with by, or on behalf of, such passengers, crew or cargo of the other Party's airlines.

Article 6

Safety

1. Each Party shall recognize as valid, for the purpose of operating the air transportation provided for in this Agreement, certificates of airworthiness, certificates of competency, and licenses issued or validated by the other Party and still in force, provided that the requirements for such certificates or licenses at least equal the minimum standards that may be established pursuant to the Convention. Each Party may, however, refuse to recognize as valid for the purpose of flight above its own territory, certificates of competency and licenses granted to or validated for its own nationals by the other Party.
2. Either Party may request consultations concerning the safety standards maintained by the other Party relating to aeronautical facilities, aircrews, aircraft,

and operation of airlines of that other Party. If, following such consultations, one Party finds that the other Party does not effectively maintain and administer safety standards and requirements in these areas that at least equal the minimum standards that may be established pursuant to the Convention, the other Party shall be notified of such findings and the steps considered necessary to conform with these minimum standards, and the other Party shall take appropriate corrective action. Each Party reserves the right to withhold, revoke, suspend, limit, or impose conditions on the operating authorization or technical permission of an airline or airlines of the other Party in the event the other Party does not take such appropriate corrective action within a reasonable time and to take immediate action, prior to consultations, as to such airline or airlines if the other Party is not maintaining and administering the aforementioned standards and immediate action is essential to prevent further noncompliance.

Article 7

Aviation Security

1. The Parties affirm that their obligation to each other to protect the security of civil aviation against acts of unlawful interference forms an integral part of this Agreement. Without limiting the generality of their rights and obligations under international law, the Parties shall in particular act in conformity with the provisions of the Convention on Offenses and Certain Other Acts Committed on Board Aircraft, done at Tokyo September 14, 1963, the Convention for the Suppression of Unlawful Seizure of Aircraft, done at The Hague December 16, 1970, the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation, done at Montreal September 23, 1971, and the Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, Supplementary to the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation, done at Montreal February 24, 1988.

2. The Parties shall provide upon request all necessary assistance to each other to prevent acts of unlawful seizure of civil aircraft and other unlawful acts against the safety of such aircraft, of their passengers and crew, and of airports and air navigation facilities, and to address any other threat to the security of civil air navigation.

3. The Parties shall, in their mutual relations, act in conformity with the aviation security standards and appropriate recommended practices established by the International Civil Aviation Organization and designated as Annexes to the Convention; they shall require that operators of aircraft of their registry, operators of aircraft that have their principal place of business or permanent residence in their territory, and the operators of airports in their territory act in conformity with such aviation security provisions.

4. Each Party agrees to observe the security provisions required by the other Party for entry into, for departure from, and while within the territory of that other Party and to take adequate measures to protect aircraft and to inspect passengers, crew, and their baggage and carry-on items, as well as cargo and aircraft stores, prior to and during boarding or loading. Each Party shall also give positive consideration to any request from the other Party for special security measures to meet a particular threat.

5. When an incident or threat of an incident of unlawful seizure of aircraft or other unlawful acts against the safety of passengers, crew, aircraft, airports or air navigation facilities occurs, the Parties shall assist each other by facilitating communications and other appropriate measures intended to terminate rapidly and safely such incident or threat.

6. When a Party has reasonable grounds to believe that the other Party has departed from the aviation security provisions of this Article, the aeronautical authorities of that Party may request immediate consultations with the aeronautical authorities of the other Party. Failure to reach a satisfactory agreement within 15 days from the date of such request shall constitute grounds to withhold, revoke, suspend, limit, or impose conditions on the operating authorization and technical permissions of an airline or airlines of that Party. When required by an emergency, a Party may take interim action prior to the expiry of 15 days.

Article 8

Commercial Opportunities

1. The airlines of each Party shall have the right to establish offices in the territory of the other Party for the promotion and sale of air transportation.
2. The airlines of each Party shall be entitled, in accordance with the laws and regulations of the other Party relating to entry, residence, and employment, to bring in and maintain in the territory of the other Party managerial, sales, technical, operational, and other specialist staff required for the provision of air transportation.
3. Each airline shall have the right to perform its own ground-handling in the territory of the other Party ("self-handling") or, at the airline's option, select among competing agents for such services in whole or in part. The rights shall be subject only to physical constraints resulting from considerations of airport safety. Where such considerations preclude self-handling, ground services shall be available on an equal basis to all airlines; charges shall be based on the costs of services provided; and such services shall be comparable to the kind and quality of services as if self-handling were possible.
4. An airline of a Party may engage in the sale of air transportation in the territory of the other Party directly and, at the airline's discretion, through its agents, except as may be specifically provided by the charter regulations of the country in which the charter originates that relate to the protection of passenger funds, and passenger cancellation and refund rights. Each airline shall have the right to sell such transportation, and any person shall be free to purchase such transportation, in the currency of that territory or in freely convertible currencies.
5. Each airline shall have the right to convert and remit to its country and, except where inconsistent with generally applicable law or regulation, any other country or countries of its choice, on demand, local revenues in excess of sums locally disbursed. Conversion and remittance shall be permitted promptly without restrictions or taxation in respect thereof at the rate of exchange applicable to current transactions and remittance on the date the carrier makes the initial application for remittance.
6. The airlines of each Party shall be permitted to pay for local expenses, including purchases of fuel, in the territory of the other Party in local currency. At their discretion, the airlines of each Party may pay for such expenses in the

territory of the other Party in freely convertible currencies according to local currency regulation.

7. In operating or holding out the authorized services under this Agreement, any airline of one Party may enter into cooperative marketing arrangements such as blocked-space, code-sharing, or leasing arrangements, with

- a) an airline or airlines of either Party;
- b) an airline or airlines of a third country; [and
- c) a surface transportation provider of any country;]

provided that all participants in such arrangements (i) hold the appropriate authority and (ii) meet the requirements normally applied to such arrangements.

8. Airlines and indirect providers of cargo transportation of both Parties shall be permitted, without restriction, to employ in connection with international air transportation any surface transportation for cargo to or from any points in the territories of the Parties or in third countries, including to and from all airports with customs facilities and to transport cargo in bond under applicable laws and regulations. Such cargo, whether moving by surface or by air, shall have access to airport customs processing and facilities. Airlines may elect to perform their own surface transportation or to provide it through arrangements with other surface carriers, including surface transportation operated by other airlines and indirect providers of cargo air transportation. Such intermodal cargo services may be offered at a single, through price for the air and surface transportation combined, provided that shippers are not misled as to the facts concerning such transportation.

Article 9

Customs Duties and Charges

1. On arriving in the territory of one Party, aircraft operated in international air transportation by the airlines of the other Party, their regular equipment, ground equipment, fuel, lubricants, consumable technical supplies, spare parts (including engines), aircraft stores (including but not limited to such items of food, beverages

and liquor, tobacco, and other products destined for sale to or use by passengers in limited quantities during flight), and other items intended for or used solely in connection with the operation or servicing of aircraft engaged in international air transportation shall be exempt, on the basis of reciprocity, from all import restrictions, property taxes and capital levies, customs duties, excise taxes, and similar fees and charges that are (a) imposed by the national authorities, and (b) not based on the cost of services provided, provided that such equipment and supplies remain on board the aircraft.

2. There shall also be exempt, on the basis of reciprocity, from the taxes, levies, duties, fees, and charges referred to in paragraph 1 of this Article, with the exception of charges based on the cost of the service provided:

a. aircraft stores introduced into or supplied in the territory of a Party and taken on board, within reasonable limits, for use on outbound aircraft of an airline of the other Party engaged in international air transportation, even when these stores are to be used on a part of the journey performed over the territory of the Party in which they are taken on board;

b. ground equipment and spare parts (including engines) introduced into the territory of a Party for the servicing, maintenance, or repair of aircraft of an airline of the other Party used in international air transportation;

c. fuel, lubricants, and consumable technical supplies introduced into or supplied in the territory of a Party for use in an aircraft of an airline of the other Party engaged in international air transportation, even when these supplies are to be used on a part of the journey performed over the territory of the Party in which they are taken on board; and

d. promotional and advertising materials introduced into or supplied in the territory of one Party and taken on board, within reasonable limits, for use on outbound aircraft of an airline of the other Party engaged in international air transportation, even when these materials are to be used on a part of the journey performed over the territory of the Party in which they are taken on board.

3. Equipment and supplies referred to in paragraphs 1 and 2 of this Article may be required to be kept under the supervision or control of the appropriate authorities.

4. The exemptions provided by this Article shall also be available where the airlines of one Party have contracted with another airline, which similarly enjoys such exemptions from the other Party, for the loan or transfer in the territory of the other Party of the items specified in paragraphs 1 and 2 of this Article.

Article 10

User Charges

1. User charges that may be imposed by the competent charging authorities or bodies of each Party on the airlines of the other Party shall be just, reasonable, not unjustly discriminatory, and equitably apportioned among categories of users. In any event, any such user charges shall be assessed on the airlines of the other Party on terms not less favorable than the most favorable terms available to any other airline at the time the charges are assessed.

2. User charges imposed on the airlines of the other Party may reflect, but shall not exceed, the full cost to the competent charging authorities or bodies of providing the appropriate airport, airport environmental, air navigation, and aviation security facilities and services at the airport or within the airport system. Such charges may include a reasonable return on assets, after depreciation. Facilities and services for which charges are made shall be provided on an efficient and economic basis.

3. Each Party shall encourage consultations between the competent charging authorities or bodies in its territory and the airlines using the services and facilities, and shall encourage the competent charging authorities or bodies and the airlines to exchange such information as may be necessary to permit an accurate review of the reasonableness of the charges in accordance with the principles of paragraphs 1 and 2 of this Article. Each Party shall encourage the competent charging authorities to provide users with reasonable notice of any proposal for changes in user charges to enable users to express their views before changes are made.

4. Neither Party shall be held, in dispute resolution procedures pursuant to Article 14, to be in breach of a provision of this Article, unless (a) it fails to undertake a review of the charge or practice that is the subject of complaint by the other Party within a reasonable amount of time; or (b) following such a review it

fails to take all steps within its power to remedy any charge or practice that is inconsistent with this Article.

Article 11

Fair Competition

1. Each Party shall allow a fair and equal opportunity for the airlines of both Parties to compete in providing the international air transportation governed by this Agreement.
2. Each Party shall allow each airline to determine the frequency and capacity of the international air transportation it offers based upon commercial considerations in the marketplace. Consistent with this right, neither Party shall unilaterally limit the volume of traffic, frequency, or regularity of service, or the aircraft type or types operated by the airlines of the other Party, except as may be required for customs, technical, operational, or environmental reasons under uniform conditions consistent with Article 15 of the Convention.
3. Neither Party shall impose on the other Party's airlines a first-refusal requirement, uplift ratio, no-objection fee, or any other requirement with respect to capacity, frequency, or traffic that would be inconsistent with the purposes of this Agreement.
4. Neither Party shall require the filing of schedules, programs for charter flights, or operational plans by airlines of the other Party for approval, except as may be required on a non-discriminatory basis to enforce the uniform conditions foreseen by paragraph 2 of this Article or as may be specifically authorized in this Agreement. If a Party requires filings for information purposes, it shall minimize the administrative burdens of filing requirements and procedures on air transportation intermediaries and on airlines of the other Party.

Article 12

Pricing

1. Each Party shall allow prices for air transportation to be established by airlines of both Parties based upon commercial considerations in the marketplace.
2. Prices for international air transportation between the territories of the Parties shall not be required to be filed. Notwithstanding the foregoing, the airlines of the Parties shall provide immediate access, on request, to information on historical, existing, and proposed prices to the aeronautical authorities of the Parties in a manner and format acceptable to those aeronautical authorities.

Article 13

Consultations

Either Party may, at any time, request consultations relating to this Agreement. Such consultations shall begin at the earliest possible date, but not later than 60 days from the date the other Party receives the request unless otherwise agreed.

Article 14

Settlement of Disputes

1. Any dispute arising under this Agreement, except those that may arise under Article 12 (Pricing), that is not resolved within 30 days of the date established for consultations pursuant to a request for consultations under Article 13 may be referred, by agreement of the Parties, for decision to some person or body. If the Parties do not so agree, either Party may give written notice to the other Party through diplomatic channels that it is requesting that the dispute be submitted to arbitration.
2. Arbitration shall be by a tribunal of three arbitrators to be constituted as follows:
 - a. Within 30 days after the receipt of a request for arbitration, each Party shall name one arbitrator. Within 60 days after these two arbitrators have been

named, they shall by agreement appoint a third arbitrator, who shall act as President of the arbitral tribunal;

b. If either Party fails to name an arbitrator, or if the third arbitrator is not appointed, in accordance with subparagraph a of this paragraph, either Party may request the President of the Council of the International Civil Aviation Organization to appoint the necessary arbitrator or arbitrators within 30 days. If the President of the Council is of the same nationality as one of the Parties, the most senior Vice President who is not disqualified on that ground shall make the appointment.

3. The arbitral tribunal shall be entitled to decide the extent of its jurisdiction under this Agreement and, except as otherwise agreed, shall establish its own procedural rules. The tribunal, once formed, may at the request of either Party recommend interim relief measures pending its final determination. If either of the Parties requests it or the tribunal deems it appropriate, a conference to determine the precise issues to be arbitrated and the specific procedures to be followed shall be held not later than 15 days after the tribunal is fully constituted.

4. Except as otherwise agreed or as directed by the tribunal, the statement of claim shall be submitted within 45 days of the time the tribunal is fully constituted, and the statement of defense shall be submitted 60 days thereafter. Any reply by the claimant shall be submitted within 30 days of the submission of the statement of defense. Any reply by the respondent shall be submitted within 30 days thereafter. If either Party requests it or the tribunal deems it appropriate, the tribunal shall hold a hearing within 45 days after the last pleading is due.

5. The tribunal shall attempt to render a written decision within 30 days after completion of the hearing or, if no hearing is held, after the last pleading is submitted. The decision of the majority of the tribunal shall prevail.

6. The Parties may submit requests for interpretation of the decision within 15 days after it is rendered and any interpretation given shall be issued within 15 days of such request.

7. Each Party shall, to the degree consistent with its national law, give full effect to any decision or award of the arbitral tribunal.

8. The expenses of the arbitral tribunal, including the fees and expenses of the arbitrators, shall be shared equally by the Parties. Any expenses incurred by the President of the Council of the International Civil Aviation Organization in connection with the procedures of paragraph 2b of this Article shall be considered to be part of the expenses of the arbitral tribunal.

Article 15

Termination

Either Party may, at any time, give notice in writing to the other Party of its decision to terminate this Agreement. Such notice shall be sent simultaneously to the International Civil Aviation Organization. This Agreement shall terminate at midnight (at the place of receipt of the notice to the other Party) at the end of the International Air Transport Association (IATA) traffic season in effect one year following the date of written notification of termination, unless the notice is withdrawn by agreement of the Parties before the end of this period.

Article 16

Registration with ICAO

This Agreement and all amendments thereto shall be registered with the International Civil Aviation Organization.

Article 17

Entry into Force

This Agreement shall enter into force on the date of signature.

Upon entry into force, this Agreement shall supersede [specify].

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE at _____, this _____ day of _____, 20__, in two originals, in the English and _____ languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:

FOR THE GOVERNMENT
OF [country]: