

Robert T. Novick

+1 202 663 6140 (t)
+1 202 663 6363 (f)
robert.novick@wilmerhale.com

April 27, 2017

**DOC Inv. Nos. A-122-859, C-122-860,
ITC Inv. Nos. 701-TA-__ and 731-TA-__
Total Pages: 1,039
Investigations**

PUBLIC VERSION

Proprietary Information Deleted From Pages
2, 3, 5, 14-15, 17, 27, 39, 41, 43-44, 52, 54-
55, 57-62, 68, 70-72, 74-75, 78, 116-119,
121, 129, 133-134, 136, and in Exhibits 1,
42, 66, 93, 96, 101-102, 105, 152

BY ELECTRONIC FILING

The Honorable Wilbur L. Ross, Jr.
Secretary of Commerce
U.S. Department of Commerce
Attention: Enforcement and Compliance
APO/Dockets Unit, Room 18022
14th Street and Constitution Avenue, N.W.
Washington, DC 20230

BY HAND DELIVERY

The Honorable Lisa R. Barton
Secretary
U.S. International Trade Commission
500 E Street, S.W.
Room 112A
Washington, DC 20436

**Re: Petitions For The Imposition Of Antidumping And Countervailing Duties
On 100- To 150-Seat Large Civil Aircraft From Canada**

Dear Secretary Ross and Secretary Barton:

On behalf of The Boeing Company (“Boeing” or “Petitioner”), we respectfully submit to the U.S. Department of Commerce (the “Department”) and the U.S. International Trade Commission (the “Commission”) petitions for the imposition of antidumping and countervailing duties on U.S. imports of 100- to 150-seat large civil aircraft (“LCAs”) from Canada (the “Petitions”) pursuant to Sections 701 and 731 of the Tariff Act of 1930, 19 U.S.C. §§ 1671 and

The Honorable Wilbur L. Ross, Jr.
The Honorable Lisa R. Barton
April 27, 2017
Page 2

1673. Boeing is a U.S. producer of 100- to 150-seat LCAs, and thus, is an interested party within the meaning of 19 U.S.C. § 1677(9)(C).

Part One of the Petitions contains an overview of the allegations, along with associated exhibits. Part Two contains general information about the product and industry and the allegations of material injury, along with associated exhibits. Part Three contains the countervailing duty allegations and associated exhibits. Part Four contains the antidumping duty allegations and associated exhibits. There are proprietary and public versions of the petitions.

Pursuant to Department regulations, codified at 19 C.F.R. §§ 351.202(d) and 351.304, and the Commission's regulations, codified at 19 C.F.R. § 201.6(b), we request business proprietary treatment for the bracketed information in the narratives and exhibits of the Petitions as detailed below. Disclosure of this information, which is not otherwise publicly available, would cause substantial harm to the competitive position of the Petitioner.

The information in the Petitions for which Petitioner requests proprietary treatment, and the location of the same, is as follows:

- (1) Business or trade secrets concerning the nature of a product or production process: **Page 43; Exhibit 152**
- (2) Production costs (but not the identity of the production components unless a particular component is a trade secret): **Pages 74, 121; Exhibits 42, 105, 152**
- (3) Distribution costs (but not channels of distribution): **Exhibit 1**
- (4) Terms of sale: **Page 15, 117; Exhibits 1, 66, 101**
- (5) Prices of individual sales, likely sales, or other offers: **Pages 3, 15, 17, 27, 41, 52, 61, 68, 70, 75; Exhibits 1, 101, 102**

The Honorable Wilbur L. Ross, Jr.
The Honorable Lisa R. Barton
April 27, 2017
Page 3

- (6) Names of particular customers, distributors, or suppliers (including information about future campaigns): **Pages 70-71; Exhibits 1, 66, 101**
- (7) Exact amount of the dumping margin on individual sales: **Exhibit 42**
- (8) Commercially sensitive financial, revenue, or profit information: **Pages 14, 57-59, 61, 75; Exhibit 105**
- (9) Names and titles of particular persons or other confidential sources from whom business proprietary information was obtained: **Pages 3, 15, 39, 52, 70, 116, 118-119, 129, 133-134, 136; Exhibits 1, 101, 102, 152**
- (10) Any other specific business information the release of which to the public would cause substantial harm to the competitive position of Petitioner: **Pages 2, 5, 39, 43-44, 54-55, 59-60, 62, 70-72, 78; Exhibits 1, 66, 93, 96, 101, 102**

Pursuant to section 351.304(b)(1) of the Department's regulations, Petitioner agrees in principle to permit disclosure of business proprietary information contained in the petitions under an appropriately drawn administrative protective order ("APO"). Petitioner respectfully reserves the right, however, to comment on all APO applications prior to disclosure.

The requisite certification that substantially identical information is not available to the public is set forth as an attachment to this letter, in accordance with the Commission's rules, codified at 19 C.F.R. § 201.6(b). Also attached are the requisite company and counsel certifications regarding the completeness and accuracy of the information contained in the petitions.

A public version of the petitions is being filed simultaneously with this submission pursuant to the Department's regulations, codified at 19 C.F.R. § 351.304(c)(1), and the Commission's rules, codified at 19 C.F.R. § 201.8(d).

The Honorable Wilbur L. Ross, Jr.
The Honorable Lisa R. Barton
April 27, 2017
Page 4

Pursuant to section 351.202(c) of the Department's regulations, we certify that the petitions and all required copies were filed today with both the Department and the Commission. The petitions are being filed electronically on the Department's ACCESS filing system. An original and eight paper copies of the business proprietary version and an original and two paper copies of the public version of the narrative portions of each volume, along with CDs containing the associated business proprietary and public version exhibits, are being filed manually at the Commission.

Respectfully submitted,



Robert T. Novick
Patrick J. McLain
Jeffrey I. Kessler
Stephanie E. Hartmann
William Desmond

Counsel to The Boeing Company

LEGAL REPRESENTATIVE CERTIFICATION

I, **Patrick J. McLain**, with **Wilmer Cutler Pickering Hale and Dorr LLP**, counsel to **The Boeing Company.**, certify that I have read the attached submission of **Petition for the Imposition of Antidumping and Countervailing Duties on 100- to 150-Seat Large Civil Aircraft from Canada filed on April 27, 2017**, pursuant to the antidumping and countervailing duty investigations of **100- to 150-Seat Large Civil Aircraft from Canada (Case Nos. A-122-859 and C-122-860)**. In my capacity as an adviser, counsel, preparer or reviewer of this submission, I certify that the information contained in this submission is accurate and complete to the best of my knowledge. I am aware that U.S. law (including, but not limited to, 18 U.S.C. 1001) imposes criminal sanctions on individuals who knowingly and willfully make material false statements to the U.S. Government. In addition, I am aware that, even if this submission may be withdrawn from the record of the AD/CVD proceeding, the Department may preserve this submission, including a business proprietary submission, for purposes of determining the accuracy of this certification. I certify that I am filing a copy of this signed certification with this submission to the U.S. Department of Commerce and that I will retain the original for a five-year period commencing with the filing of this document. The original will be available for inspection by U.S. Department of Commerce officials.

Signature:



Date:

4-26-17

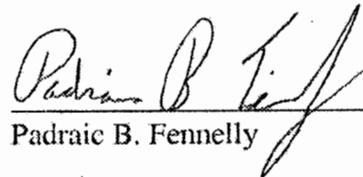


The Boeing Company
3180 Lane Avenue, Box
Auburn, WA 98001-1100

COMPANY CERTIFICATION

I, Padraic B. Fennelly, currently employed by The Boeing Company, certify that I prepared or otherwise supervised the preparation of the attached submission, "100- to 150-Seat Large Civil Aircraft from Canada; Petitions for the Imposition of Antidumping and Countervailing Duties," dated April 27, 2017, pursuant to the antidumping and countervailing duty investigations of *100- to 150-Seat Large Civil Aircraft from Canada* (A-122-859; C-122-860). I certify that the public information and any business proprietary information of The Boeing Company contained in this submission is accurate and complete to the best of my knowledge. I am aware that the information contained in this submission may be subject to verification or corroboration (as appropriate) by the U.S. Department of Commerce. I am also aware that U.S. law (including, but not limited to, 18 U.S.C. 1001) imposes criminal sanctions on individuals who knowingly and willfully make material false statements to the U.S. Government. In addition, I am aware that, even if this submission may be withdrawn from the record of the AD/CVD proceeding, the U.S. Department of Commerce may preserve this submission, including a business proprietary submission, for purposes of determining the accuracy of this certification. I certify that a copy of this signed certification will be filed with this submission to the U.S. Department of Commerce.

Signature:


Padraic B. Fennelly

Date:

4/26/17

**DOC Inv. Nos. A-122-859, C-122-860
ITC Inv. Nos. 701-TA-___ and 731-TA-___
Total pages: 1,039
Investigations**

PUBLIC VERSION

**Proprietary Information Deleted From
Pages 2, 3, 5, 14-15, 17, 27, 39, 41, 43-44,
52, 54-55, 57-62, 68, 70-72, 74-75, 78, 116-
119, 121, 129, 133-134, 136, and in Exhibits
1, 42, 66, 93, 96, 101-102, 105, 152**

**BEFORE THE
UNITED STATES DEPARTMENT OF COMMERCE AND THE
UNITED STATES INTERNATIONAL TRADE COMMISSION**

**IN THE MATTER OF
100- TO 150-SEAT LARGE CIVIL AIRCRAFT FROM CANADA**

**PETITIONS FOR THE IMPOSITION OF
ANTIDUMPING AND COUNTERVAILING DUTIES**

**PETITIONER:
THE BOEING COMPANY**

**Robert T. Novick
Patrick J. McLain
Jeffrey I. Kessler
Stephanie E. Hartmann
William Desmond
WILMER CUTLER PICKERING
HALE and DORR LLP
1875 Pennsylvania Avenue, NW
Washington, DC 20006
(202) 663-6000**

April 27, 2017

TABLE OF CONTENTS

PART ONE: INTRODUCTION AND OVERVIEW	1
I. SUBSIDIZATION: BOMBARDIER’S C SERIES PROGRAM WOULD NOT EXIST WITHOUT GOVERNMENT SUBSIDIES	7
II. DUMPING: BOMBARDIER IS AGGRESSIVELY DUMPING C SERIES AIRCRAFT IN THE U.S. MARKET.....	14
III. THREAT OF MATERIAL INJURY: BOMBARDIER’S SUBSIDIZED AND DUMPED SALES IN THE U.S. MARKET THREATEN THE DOMESTIC INDUSTRY WITH IMMINENT MATERIAL INJURY	16
PART TWO: GENERAL INFORMATION AND THREAT OF MATERIAL INJURY	26
I. GENERAL INFORMATION.....	26
A. The Petitioner, Domestic Industry, and Degree of Industry Support for the Petition.....	26
B. The Subject Merchandise’s Country of Origin and Producer	27
C. Importers of Subject Merchandise.....	27
D. Negligibility	28
II. PRODUCT AND INDUSTRY INFORMATION.....	29
A. Overview of Aircraft Producers and Their Products	29
B. Proposed Scope of Investigation	31
C. U.S. Tariff Classification	34
D. Physical Characteristics, Specifications, and Uses.....	34
E. The Domestic Like Product and Industry	36
1. Description of the subject merchandise.....	38
2. The domestic like product includes only Boeing’s 737-700 and 737 MAX 7	38
3. Boeing is the only member of the domestic industry	44
F. Pricing Products and Related Information-Collection Issues	45
III. CONDITIONS OF COMPETITION.....	46
A. Supply Conditions	46
B. Demand Conditions	49
C. Substitutability	51
IV. THE SUBJECT IMPORTS THREATEN THE DOMESTIC INDUSTRY WITH MATERIAL INJURY	52
A. <i>Vulnerability</i> : The Domestic Industry Is Vulnerable to Material Injury	59

B. <i>Nature of Subsidies: The Subsidies Are of the Type Described in Articles 3 and 6.1 of the WTO Subsidies Agreement, and They Enable C Series Aircraft to Exist</i>	62
C. <i>Capacity: Bombardier’s Current Production Capacity Enables It to Imminently and Substantially Increase Exports of Subject Merchandise to the United States, and It Has Plans to Ramp Up Capacity Even Further</i>	65
D. <i>Market Penetration: The C Series’ U.S. Market Presence Is Likely to Increase Substantially</i>	67
1. With the Delta sale, the C Series has already penetrated the U.S. market to a significant degree	68
2. The C Series program is export oriented, with a focus on the U.S. market	72
E. <i>Adverse Price Effects: Subsidized and Dumped C Series Pricing Is Having Adverse Effects on Domestic Prices and Is Likely to Increase Demand for Further Imports</i>	73
F. <i>Negative Effects on Product Development and Production: Dumped and Subsidized C Series Sales Are Hindering Boeing’s Ability to Develop and Market the 737 MAX 7</i>	77
G. Lost Sales and Lost Revenues	78
V. CONCLUSION.....	78

PART THREE: COUNTERVAILING DUTY ALLEGATION 79

I. INTRODUCTION	79
II. PERIOD OF INVESTIGATION	79
III. ESTIMATION OF SUBSIDY BENEFITS	80
IV. SUBSIDY PROGRAMS	80
A. Equity Infusions.....	80
1. USD 1 billion “investment” in the C Series program by the province of Québec	80
2. USD 1.5 billion “investment” in the Bombardier Rail Division by the CDPQ.....	89
B. Launch Aid	93
1. CDN 350 million in Canadian federal launch aid for the C Series	93
2. CDN 117 million in Québec launch aid for the C Series	96
3. GBP 113.37 million in UK launch aid for the C Series.....	97
C. Additional Subsidies.....	101
1. Export Development Canada export financing.....	101
2. USD 1 billion in customer financing by Québec.....	103

3. Technology Partnerships Canada program.....	104
4. Technology Demonstration Program.....	106
5. Provision of production facilities and land at Mirabel	107
6. Tax credits provided by the city of Mirabel	108
7. Canada’s provision of CDN 20 million for R&D.....	110
8. CDPQ Line of Credit.....	111
9. <i>Emploi-Québec</i>	112
V. CONCLUSION.....	113
PART FOUR: DUMPING ALLEGATION	114
I. INTRODUCTION	114
II. EXPORT PRICE	115
A. The Sale of 75 CS100 Aircraft to Delta.....	116
B. Adjustments to Export Price.....	117
C. Ex-Factory U.S. Price	119
III. NORMAL VALUE	119
A. Bombardier’s Home Market Is Viable	120
B. The Sale of 45 CS300 Aircraft to Air Canada.....	120
C. Adjustment for Differences in Physical Characteristics	120
D. Additional Elements of Home Market Price	121
E. Ex-Factory Home Market Price.....	122
F. Bombardier’s Home Market Prices Are Below the Cost of Production.....	122
1. The production process for Aircraft	122
2. Recurring production costs	123
3. Non-recurring expenses	124
4. Selling, general, and administrative (“SG&A”) and financing costs	125
5. Comparison of cost of production to home market price	125
G. Constructed Value	126
1. Cost of production for Aircraft sold to Delta.....	126
2. Profit	126
IV. LESS THAN NORMAL VALUE COMPARISON.....	126
V. CONCLUSION.....	127
APPENDIX—TABLE OF EXHIBITS	129

**ANTIDUMPING AND COUNTERVAILING DUTY PETITION REGARDING
100- TO 150-SEAT LARGE CIVIL AIRCRAFT FROM CANADA**

PART ONE: INTRODUCTION AND OVERVIEW

Propelled by massive, supply-creating and illegal government subsidies, Bombardier Inc. (“Bombardier”) has embarked on an aggressive campaign to dump its C Series aircraft in the United States. Evidently taking a page out of the Airbus strategy book, Bombardier has blatantly and intentionally demonstrated its goal of muscling its way into the U.S. aviation market by offering its heavily subsidized planes at cut-rate pricing, to the serious detriment of American workers and The Boeing Company (“Boeing”), the only member of the domestic industry. Indeed, Boeing is already suffering from these market-distorting and unfair trading practices, as the C Series captures U.S. market share and depresses domestic prices. Just as Airbus years ago stole domestic market share and helped drive U.S. competitors Lockheed and McDonnell Douglas out of the commercial airplane market by selling its subsidized aircraft at below-market prices, Bombardier has targeted Boeing and the U.S. market by offering the subsidized C Series at prices well below the airplanes’ cost. And as a result, Boeing now faces a severe threat of material injury as recent orders for Bombardier’s planes mature into deliveries. Accordingly, pursuant to Sections 701 and 731 of the Tariff Act of 1930 (“the Act”),¹ Boeing petitions the International Trade Administration of the U.S. Department of Commerce (the “Department”) and the U.S. International Trade Commission (the “Commission”) to initiate antidumping and countervailing duty investigations of 100- to 150-seat large civil aircraft (the “Aircraft”) from Canada, and thereafter to impose antidumping and countervailing duty orders.

Given the unique conditions of competition in this industry, action must be taken now. Specifically, Aircraft programs require intensive long-term planning, including years of research

¹ 19 U.S.C. §§ 1671 and 1673.

and development (“R&D”) costing billions of dollars, before production can even begin. Thus, airplane manufacturers must for years shoulder huge, up-front risk and expenditures, without any guarantee of future commercial success. To fund and maintain these efforts, producers depend on advance orders from Aircraft customers, even though deliveries are almost always years away. These advance orders typically entail substantial advance payments before delivery, which help fund production expenditures and recoup large R&D outlays. Advance orders provide additional significant value because they validate an Aircraft production program in the marketplace, which in turn increases the likelihood of future orders (a phenomenon known as commercial momentum). Aircraft pricing, which is set at the time of order, thus is critical not only to achieving a particular sales transaction, but also critically affects future sales, because the industry has a relatively small number of buyers, all of them sophisticated, and information regarding sales prices travels quickly. As a result, other customers demand pricing on par with that known to have been given to their competitors for the relatively few orders available in any given year. In short, a subsidized, below-cost price for one customer can establish a low price anchor that depresses prices for all Aircraft in the U.S. market.

These conditions of competition are crucial to understanding the threat of material injury now facing the domestic industry. Boeing is in the process of developing its first new product offering in this market space since 1993, the Boeing 737 MAX 7. The program is still in the development phase, with deliveries scheduled to begin in 2019, [

] . Meanwhile, Bombardier, armed with billions in subsidies from Canada, Québec, and the United Kingdom, is aggressively selling its C Series aircraft in the U.S. Aircraft market at absurdly low prices—*USD 19.6 million for*

*airplanes that cost USD 33.2 million to produce.*² Bombardier's first attempted sale in the U.S. market to United Airlines ("United") at cut-rate prices forced Boeing to [

J. In a subsequent sales campaign involving Delta Air Lines ("Delta"), Bombardier reinforced the new, low pricing expectations in the U.S. market, selling 75 C Series Aircraft at the USD 19.6 million price point (with options for 50 more). Indeed, Bombardier sold to Delta at such low prices that it was forced to record an approximately USD 500 million onerous contract provision³—essentially, an admission that the costs of producing the Aircraft will “exceed the economic benefits expected to be received under it.”⁴ Delta's 75 orders, which were placed in April 2016, are firm (*i.e.*, contractually binding on both Delta and Bombardier), and deliveries are scheduled to begin by the spring of 2018.

Through the Delta sale, Bombardier has already captured a significant increase in subject import volumes and market share gains, at the expense of the domestic industry. But with the Delta sale's validation of its product and the resulting commercial momentum, Bombardier is only just beginning its penetration of the U.S. market. Bombardier is rapidly increasing production capacity from seven Aircraft per year in 2016 to between 90 and 120 Aircraft per year in 2020, and expects to maintain this “ramped-up” rate of 120 Aircraft per year.⁵ Already, Spirit Airlines CEO Bob Fornaro has stated that his airline is considering a C Series purchase,

² See Affidavit of [], attached as Exhibit 1; see also Delta Air Lines, Inc., Form 10-Q—Q1 2016, at 13, attached as Exhibit 2; Delta Air Lines, Inc., Form 10-Q—Q2 2016, at 12-13, attached as Exhibit 3.

³ Bombardier Inc., First Quarterly Report—Q1 2016, at 68, attached as Exhibit 4. The onerous contract provision covered losses related to Delta's orders for 75 CS100s, Air Canada's orders for 45 CS300s, and Air Baltic Corporations' orders for 7 CS300 aircrafts. *Id.*

⁴ See PricewaterhouseCoopers, IFRS Manual of Accounting, paras. 21.161, 21.168-21.169.

⁵ See *Bombardier C Series: record orders in 2016 as both variants finally enter service*, CAPA Centre for Aviation (Dec. 8, 2016), attached as Exhibit 5; Bjorn Fehrm & Scott Hamilton, *Interview: C Series program update with Bombardier's program chief Dewar*, Leeham News & Comment (Nov. 24, 2014), attached as Exhibit 6; Jon Hemmerdinger, *Bombardier affirms 2017 C Series delivery goal despite slow start*, FlightGlobal (Feb. 15, 2017), attached as Exhibit 7. The seven deliveries in 2016 included five CS100s to Swiss Airlines and two CS300s to Air Baltic. *Id.*

with the expectation that a competition featuring Bombardier will lead to “aggressive” price concessions.⁶ JetBlue has also reportedly been in discussions with Bombardier.⁷ Bombardier needs orders from these and other U.S. customers to shore up and expand the C Series order book, and these additional orders could occur at any time with little warning.

Bombardier’s strategy of using massive market-distorting government subsidies, while offering Aircraft at cut-rate prices in the U.S. market, has given the C Series program what Bombardier’s CEO has described as “tremendous momentum.”⁸ In a 2016 earnings call with investors, he stated that the C Series has “transitioned into the production ramp up and revenue generation phase of the program.”⁹ In addition to recent C Series orders, Bombardier’s CEO cited the “Quebec equity investment in the C Series program”—a USD 1 billion bailout, which is just one of several government subsidy lifelines given to Bombardier and the C Series program—as a “significant milestone” that “gives us the financial flexibility needed to unlock the full potential of the {C Series} aircraft.”¹⁰ Bombardier’s strategy of combining below-cost pricing with government subsidies thus is already harming Boeing and its employees, and is already paying off for Bombardier.

The antidumping and countervailing duty statutes are designed to address precisely this situation. The Act requires the imposition of antidumping and/or countervailing duties in cases in which an industry is “threatened with material injury by reason of imports (*or sales for importation*) of the subject merchandise.”¹¹ Delta’s C Series order is just such a sale for

⁶ Ted Reed, *Spirit CEO Hails Aircraft Maker Competition, Will Look at Bombardier CS-100*, TheStreet (Oct. 25, 2016), attached as Exhibit 8; Ben Mutzabaugh, *Spirit wants to shake its reputation for late flights*, USA Today (June 22, 2016), attached as Exhibit 9.

⁷ Frederic Tomesco & Mary Schlangenstien, *JetBlue and Bombardier are talking about the C Series again, sources intimate*, Montreal Gazette (May 4, 2016), attached as Exhibit 10.

⁸ Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016), attached as Exhibit 11.

⁹ *Id.*

¹⁰ *Id.*

¹¹ 19 U.S.C. § 1677(7)(F)(i) (emphasis added).

importation. Similarly, the Act provides that duties shall be imposed not only in cases involving past sales for importation, but also for merchandise *likely to be sold for importation*—for example, the additional C Series sales that Bombardier is likely to make in the U.S. market to fill spare capacity, strengthen its order book, and maintain commercial momentum.¹²

Congress added the phrase “sold (or likely to be sold) for importation” to the Act’s countervailing duty provisions in 1984, harmonizing them with the antidumping laws and making clear that both reach cases just like this one.¹³ As the House Report explains:

The amendment is particularly important in cases involving large capital equipment, where loss of a single sale can cause immediate economic harm and where it may be impossible to offer meaningful relief if the investigation is not initiated until after importation takes place. In cases where injury or threat of injury from a subsidy may occur prior to actual importation, the investigation should not await such importation.¹⁴

This is exactly the case here: the loss of a single sale caused Boeing immediate economic harm. Given Bombardier’s contractual obligation to fulfill Delta’s large firm order, significant subject imports—and a significant increase in subject imports’ market share at the expense of the domestic like product—are virtually certain. And the terms of this order are already fixed at prices that are absurdly low. Bombardier’s subsidized dumping at Delta established a new, low price ceiling that will depress Boeing prices, revenues, and profits even further and []

¹² 19 U.S.C. § 1671(a)(1) (“{If} the administering authority determines that the government of a country or any public entity within the territory of a country is providing, directly or indirectly, a countervailable subsidy with respect to the manufacture, production, or export of a class or kind of merchandise imported, or sold (or *likely to be sold*) for importation, into the United States”) (emphasis added); *id.* § 1673(1) (“{If} the administering authority determines that a class or kind of foreign merchandise is being, or is *likely to be, sold* in the United States at less than its fair value . . .”) (emphasis added).

¹³ H.R. Rep. No. 98-725, 98th Cong., 2nd Sess., at 11 (1984), reprinted in 1984 U.S.C.C.A.N. 4910, 5137 (“Antidumping law has, since its inception, applied not only to imports but to sales or likely sales. However, there has been uncertainty as to the application of countervailing duty law to such situations because of the limiting language which refers solely to imports.”).

¹⁴ *Id.*

As is shown below, Bombardier is poised to make further inroads into the U.S. market, having both the capacity and the expressed intent to do so. And with Airbus we have direct evidence of the crippling harm a new entrant can do to a domestic industry when freed from commercial considerations and backed by the economic resources of nations. Indeed, the World Trade Organization (“WTO”) recently reaffirmed what industry observers have known all along: that Airbus—Boeing’s sole competitor for Aircraft sales since the mid-1990s—not only achieved its current market position on the back of continuing government subsidies, but *would not even exist absent those subsidies*.¹⁵ But that harm is already done. The European Union will soon be held to account for decades of flouting its international trade obligations, but no trade remedy will suffice to redress the irreparable injury suffered by the U.S. industry from the creation of this subsidized competitor. Airbus is here to stay, and the American jobs lost to that government-subsidized competitor are lost for good. The same must not be allowed to happen here.

Indeed, this case presents a glaring instance of a market distorted by foreign government subsidies and dumping, which according to the President’s 2017 Trade Agenda, lowers U.S. living standards and is not “in the interest of the United States or a healthy global economy.”¹⁶ The United States has accordingly committed to “act aggressively as needed to discourage this

¹⁵ Compliance Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/RW, circulated Sept. 22, 2016, para. 6.1481 (“Given what we know about the complexities of LCA production and the dynamics and history of competition in the LCA industry, we find it difficult to believe that any non-subsidized Airbus entity coming into existence after the end of 2006 could have developed a full range of the same or comparable LCA within such a short space of time. Indeed, the European Union has at no stage in this proceeding argued that, in the absence of the challenged LA/MSF {i.e., Launch Aid/Member State Financing} subsidies, Airbus would have come into existence at any moment after 2006 and developed a full range of LCA by 1 December 2011 (or any time thereafter).”), attached as Exhibit 12; *id.*, para. 7.1(d)(xii) (“{T}he *direct* and *indirect* effects of the aggregated pre-A350XWB LA/MSF subsidies continue to be a ‘genuine and substantial’ cause of the current market presence of the A320, A330 and A380 families of Airbus LCA . . .”).

¹⁶ Office of the U.S. Trade Representative, 2017 Trade Policy Agenda and 2016 Annual Report of the President of the United States on the Trade Agreements Program at 4 (Mar. 2017), attached as Exhibit 13.

type of behavior—and encourage true market competition.”¹⁷ Such aggressive action is needed here.

Boeing thus respectfully requests that the Department and the Commission initiate investigations now, in order to arrest Bombardier’s illegal and unfair trading practices and impose antidumping and countervailing duty orders before it is too late for the domestic industry and its thousands of workers. As the House Report noted, this is the only way to provide meaningful relief in a case such as this, “involving large capital equipment where loss of a single sale can cause immediate economic harm.”¹⁸

* * *

The remainder of Part One provides an overview of Bombardier’s subsidization and dumping, and the resulting threat of material injury to the domestic industry. These topics are then explored in greater detail in Parts Two, Three, and Four of the petition.

I. SUBSIDIZATION: BOMBARDIER’S C SERIES PROGRAM WOULD NOT EXIST WITHOUT GOVERNMENT SUBSIDIES

Bombardier has a long history of relying on government subsidies to compete in the marketplace, which the WTO has condemned on multiple occasions.¹⁹ However, current subsidies for the C Series program dwarf all those Bombardier has previously received. An initial commitment of hundreds of millions of dollars in launch aid from the Canadian, Québec, and UK governments in 2005²⁰ enabled Bombardier to develop the C Series, overcome a weak

¹⁷ *Id.*

¹⁸ H.R. Rep. No. 98-725, 98th Cong., 2nd Sess., at 11 (1984), reprinted in 1984 U.S.C.C.A.N. 4910, 5137.

¹⁹ See generally Panel and Appellate Body Reports, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R and WT/DS70/AB/R, adopted Aug. 20 1999; Panel and Appellate Body Reports, *Canada – Measures Affecting the Export of Civilian Aircraft, Recourse by Brazil to Article 21.5 of the DSU*, WT/DS70/RW and WT/DS70/AB/RW, adopted Aug. 4, 2000; *Canada – Export Credits and Loan Guarantees for Regional Aircraft*, WT/DS222/R, adopted Feb. 19, 2002.

²⁰ The governments of Canada, Québec, and the United Kingdom, as well as Bombardier itself, use other terms to describe launch aid, such as repayable contributions, *contribution financière remboursable par redevances*, launch investment, and repayable investments, but these euphemisms do not disguise the true nature of these subsidies.

initial response from customers, and formally launch the program in 2008. Then, in the autumn of 2015, with the program on the brink of collapse due to cost overruns and poor sales, Bombardier obtained commitments by the Government of Québec to provide an additional **USD 2.5 billion** bailout in the form of equity infusions. These massive subsidies rescued the program and gave Bombardier the resources it needed to aggressively target the U.S. market, where it is depressing prices and severely damaging the domestic industry. Boeing estimates that, as of the end of calendar year 2016, Bombardier has received subsidies worth at least 79.41% *ad valorem*.²¹

Bombardier conceived of the C Series program in the mid-2000s as a way to catapult itself into the ranks of large civil aircraft (“LCA”) manufacturers after many years producing regional jets with fewer than 100 seats. The C Series program targets the market for 100- to 150-seat LCA, which are capable of trans-continental flights (*e.g.*, Portland, Oregon, to Charlotte, North Carolina) that are beyond the range of even the largest regional jets.²²

Bombardier initially estimated that development costs for the C Series would total USD 2.1 billion—a figure that later ballooned to USD 5.4 billion.²³ Unable to fund the program on its own, Bombardier sought and obtained commitments for launch aid subsidies from the governments of Canada (CDN 350 million, equivalent to USD 269.5 million), Québec (CDN 117 million, equivalent to USD 128.6 million), and the UK (GBP 113.37 million, equivalent to USD

²¹ See Subsidies Calculation Workbook, attached as Exhibit 14.

²² Kristine Owram, *How Bombardier's C Series dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15.

²³ See Press Release, Bombardier, “Bombardier Announces Location of Final Assembly Site and Work Packages for the C Series” (May 13, 2005), attached as Exhibit 16; Kristine Owram, *How Bombardier's C Series dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15.

173.5 million).^{24,25} Like past Canadian launch aid to Bombardier and the notorious European launch aid to Airbus, the C Series subsidies took the form of below market, success-dependent loans, meaning that if the C Series program failed, Bombardier would have no obligation to repay the money. In other words, the launch aid relieved Bombardier of a huge portion of the development risks of the C Series program and transferred it to the subsidizing governments and their taxpayers.²⁶ These risk-free loans greatly distort the market by, among other things, incentivizing Bombardier to launch an airplane program that would not be commercially feasible absent government subsidies. Armed with these subsidies, Bombardier began offering the C Series to customers in 2005,²⁷ and after temporarily suspending the program due to poor sales,²⁸ formally committed to develop and eventually deliver the aircraft by launching the program in 2008.²⁹

The Canadian federal government, the European Commission, and Bombardier itself all admit that without this initial aid the C Series program would not be commercially viable. For example, an official Canadian government evaluation concluded that federal government funding played a key role in saving the C Series program:

²⁴ Cf. Press Release, Bombardier, “Bombardier Announces Location of Final Assembly Site and Work Packages for the C Series” (May 13, 2005), attached as Exhibit 16. The UK’s initial commitment to Bombardier for the C Series was valued higher, at USD 340 million in “launch investment and financial assistance.” See *id.*

²⁵ U.S. dollar calculations based on exchange rates of 0.77 USD per CDN and 1.53 USD per GBP. See Subsidies Calculation Workbook, attached as Exhibit 14.

²⁶ Cf. Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/R, adopted June 1, 2011, para. 7.1898 (“... LA/MSF will have a significant impact on the NPV of any given aircraft project, irrespective of the specific parameters used to model costs and income streams. In all cases, the Dorman simulation shows that LA/MSF will increase potential profits and limit potential losses. By limiting potential losses, LA/MSF transfers risk from Airbus to the governments supplying LA/MSF, thereby rendering it more likely, in any given case, that an LCA programme will be undertaken.”), attached as Exhibit 17.

²⁷ Press Release, Bombardier, “Bombardier Aerospace Granted Authority to Offer C Series Aircraft to Customers” (Mar. 15, 2005), attached as Exhibit 18.

²⁸ Press Release, Bombardier, “Bombardier Announces C Series Decision” (Jan. 31, 2006) (“Bombardier announced today that present market conditions do not justify the launch of the C Series program at this time. . . . ‘We will now concurrently continue to explore the C Series’ potential as well as pursue opportunities in the regional aircraft market. Our commitment to the upper end of the regional aircraft market and the lower end of the mainline market remains strong and we expect to fully exploit opportunities in these two markets in the future”), attached as Exhibit 19.

²⁹ Press Release, Bombardier, “Bombardier Launches C Series Aircraft Program” (July 13, 2008), attached as Exhibit 20.

Had government funding not been available the timing of development of the CSeries aircraft would have been delayed and design compromises would have had to be made to reduce costs. According to {Bombardier}, this would have reduced the number of jobs, impacted the ability of Bombardier to deliver a technically competitive product and limited Bombardier's ability to meet the market window for the aircraft. This would have jeopardized the viability of the development of the aircraft.³⁰

This finding (which only takes into account a portion of the launch aid conferred by the governments of Canada, Québec and the UK) shows that both Canada and Bombardier recognized that, without government aid, the C Series could never compete in the market.

Likewise, the European Commission, in its review of the UK subsidies to Bombardier under EU State Aid rules, reached the same conclusion:

Bombardier considered different options and scenarios for carrying out the project, including possible alternative ways of financing and locating it. However, it is clear from the documents produced that Bombardier, without public funding of this project would have had to abandon it.³¹

Despite its size, this initial round of subsidies ultimately proved insufficient to keep the C Series program afloat. Bombardier burned through the USD 3.2 billion capital-expenditure budget for developing the C Series that it set in 2008 and, after incurring massive cost overruns, was forced to revise its budget to USD 5.4 billion in 2015.³² Although Bombardier claimed to have won 243 orders for C Series Aircraft, that amount was well short of its program target of 300 orders before entry into service. And the quality of those orders was weak: at least 108 of

³⁰ Innovation, Science and Economic Development Canada, Audit and Evaluation Branch, "Evaluation of the Bombardier CSeries Program," at 13 (Sept. 2013), attached as Exhibit 21.

³¹ European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, at para. 170 (June 17, 2009), attached as Exhibit 22; *see also id.* at paras. 135, 143, 174.

³² *See* Q3 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Oct. 29, 2015), question from Kevin Chiang, Analyst, CIBC ("the \$3.2 billion, if I recall, that's almost equal to the original CapEx budget for the program"), attached as Exhibit 23; Kristine Owrarn, *How Bombardier's CSeries dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15.

the orders were (and continue to be) at risk of delay or cancellation.³³ Customer confidence in the program was waning, and Bombardier failed to obtain any orders for more than a year, from September 2014 to October 2015.³⁴

Moreover, by October 2015, the C Series program and Bombardier itself were both on the brink of collapse. The company's CEO has admitted that Bombardier "was on the brink of bankruptcy in 2015" and "in a very precarious situation. We needed liquidity."³⁵ Québec's former Minister of the Economy, Jacques Daoust, described the situation as follows:

Bombardier had three choices. It could have abandoned the product. It could have sold it lock, stock, and barrel to another company. Or it finds partners who will ensure it stays in Québec. That is what we decided³⁶

Attempts to sell the program on a commercial basis proved unsuccessful. Bombardier approached an unnamed Chinese company but was unable to convince it to invest.³⁷ Bombardier then offered Airbus a stake in the program "for a song,"³⁸ but Airbus terminated negotiations in early October 2015, evidently concluding that the investment was not worth making, even at fire sale prices.³⁹ As one industry analyst stated:

{T}he approach of Airbus is the clearest (though tacit) affirmation yet from BBD of the dire position of the program, and this revelation likely reflects the fresh perspective brought by CEO Alain Bellemare having now had time to fully assess C Series. That negotiations with Airbus fell flat suggests to us it was a "Hail

³³ Kristine Ogram, *How Bombardier's C Series dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15. Indeed, the Russian aircraft lessor Ilyushin Finance recently scaled back its order for C Series Aircraft, renewing broader concerns about the C Series order book. See The Canadian Press, *Bombardier reports US\$490 million net loss; C Series order reduced*, CTV Toronto News (Aug. 5, 2016), attached as Exhibit 24.

³⁴ Kristine Ogram, *How Bombardier's C Series dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15.

³⁵ Bertrand Marotte, *Bombardier was on 'brink of bankruptcy,' CEO says*, Globe and Mail (Nov. 12, 2016), attached as Exhibit 25.

³⁶ Martin Patriquin, *The inside story behind the bungled Bombardier C Series*, Maclean's (Feb. 8, 2016), attached as Exhibit 26.

³⁷ See Jim Lee, *C Series reaches critical milestones but future of the programme far from assured as Québec Government forced to invest*, Flying in Ireland (Nov. 14, 2015), attached as Exhibit 27.

³⁸ Kristine Ogram, *Airbus sales chief says Bombardier offered C Series stake for a 'song'*, Financial Post (May 31, 2016), attached as Exhibit 28.

³⁹ See Allison Lampert et al., *Airbus, Bombardier end talks over C Series jet investment*, Reuters (Oct. 6, 2015), attached as Exhibit 29.

Mary” and we would expect a similar outcome from any approach to Boeing⁴⁰

Having failed to secure commercial financing for the C Series program, and facing the prospect of abandoning the project, Bombardier turned once more to government subsidies. In October-November 2015, two Québec state-owned and state-controlled enterprises came to the rescue by committing to infuse a total of USD 2.5 billion into the company.

First, *Investissement Québec*, a funding arm of the government of Québec, gave Bombardier USD 1 billion in exchange for a 49.5% stake in a new joint venture that Bombardier established to hold the assets, liabilities, and obligations of the C Series program. According to Bombardier, the USD 1 billion was to be used entirely for purposes of the program’s cash flow.⁴¹ The investment surprised industry observers, as Bombardier announced it on the same day the company announced dismal third-quarter financial results, which included losses of nearly USD 5 billion. As one observer noted:

Left unsaid . . . was how the company was able to secure the money from a government in the depths of austerity measures mere months after saying it wouldn’t need financial assistance for an airplane project that is 2 1/2 years late, US\$2.2 billion over budget and sorely lacking in commercial orders. Even more gobsmacking to analysts and observers: that Bombardier was able to secure the funding without relinquishing its corporate governance structure, despite having lost nearly 90 per cent of its value since June 2008.⁴²

The *Investissement Québec* subsidy was closely followed by an additional subsidy from the *Caisse de dépôt et placement du Québec* (“CDPQ”), a pension fund controlled by Québec, in the form of a USD 1.5 billion infusion in exchange for a 30% stake in a newly created holding

⁴⁰ Robert Spingarn et al., *Credit Suisse, Bombardier Inc (SVS): Comment* (Oct. 7, 2015), attached as Exhibit 30.

⁴¹ See Press Release, Bombardier, “Bombardier announces the signing of a definitive agreement with the Government of Québec for a \$1 billion US investment in the C Series Aircraft Limited Partnership” (June 23, 2016), attached as Exhibit 31.

⁴² Martin Patriquin, *The inside story behind the bungled Bombardier C Series*, *Maclean’s* (Feb. 8, 2016), attached as Exhibit 26.

company, Bombardier Transportation (Investment) UK Ltd., which holds rail-related Bombardier assets.⁴³

Bombardier has admitted that these twin financial subsidies secured the company's liquidity position.⁴⁴ It was also one of two key and closely related events that reversed the C Series' downward spiral in the market. The other key event was Bombardier's decision to adopt a new sales strategy predicated on dumping Aircraft at levels far below the cost of production. The subsidy-fueled reversal of Bombardier's commercial trajectory has not stopped the flow of aid to Bombardier, however. In February 2017, the federal government of Canada committed to provide Bombardier with an additional CDN 372.5 million (equivalent to USD 284 million) in "repayable investments," including CDN 127.2 million (equivalent to USD 97 million) directed to the C Series program.⁴⁵ The Canadian government has proclaimed that this aid will "strengthen the long-term competitiveness of Bombardier and help to build the aircraft of the future."⁴⁶ Bombardier's government sponsors are willing to do whatever it takes, for as long as it takes, to ensure that the C Series succeeds, regardless of the harm inflicted on the U.S. industry and its workers.

⁴³ CDPQ was established on July 15, 1965 by an Act of Québec's National Assembly. Québec appoints all of the members of CDPQ's board of directors, including the chair—except that the president and CEO are appointed by the board of directors itself. See Act Respecting the *Caisse de dépôt et placement du Québec* (official English translation, updated to Dec. 1, 2016), Arts. 5 and 5.1, attached as Exhibit 32. CDPQ has a dual mission to "contribut{e} to Québec's economic development" while also achieving optimal return on capital within the framework of depositors' investment policies. *Id.*, Art. 4.1.

⁴⁴ See, e.g., Bombardier, 2015 Investor Day Presentation, at 14 (Nov. 24, 2015), attached as Exhibit 33.

⁴⁵ Innovation, Science and Economic Development Canada, "Government of Canada and Bombardier announce significant investment to strengthen leadership in aerospace" (Feb. 7, 2017), attached as Exhibit 34; Office of the U.S. Trade Representative, 2017 National Trade Estimate Report on Foreign Trade Barriers, at 68-69 (Mar. 2017), attached as Exhibit 35. This most recent federal aid is not included in the countervailing duties calculations in this petition and the accompanying exhibits.

⁴⁶ Innovation, Science and Economic Development Canada, "Government of Canada and Bombardier announce significant investment to strengthen leadership in aerospace" (Feb. 7, 2017), attached as Exhibit 34.

II. DUMPING: BOMBARDIER IS AGGRESSIVELY DUMPING C SERIES AIRCRAFT IN THE U.S. MARKET

In 2015, armed with the fresh infusion of USD 2.5 billion in new subsidies discussed above, Bombardier discarded the company's prior strategy of positioning the C Series as a premium product.⁴⁷ Instead, Bombardier adopted a strategy of slashing prices (without altering the product itself) to make inroads with major U.S. airlines, even if it meant selling far below cost.

This strategy played out first in a sales campaign at United, with Bombardier's C Series competing head-to-head with the Boeing 737-700 (a domestic like product). Boeing entered the competition with a competitive, but commercially reasonable, price offering. Bombardier, however, priced the C Series at a discount far below both the market and its own costs, forcing Boeing to revise its pricing to beat Bombardier's rock-bottom prices. Boeing won the campaign for 65 737-700s, which United later converted to orders for larger Boeing models with deferred delivery dates.⁴⁸ Had the 737-700 orders remained in place, the discounted pricing that Boeing was forced to offer would have cost the domestic industry a [

J]. Nonetheless,

this forced price concession will reverberate in future sales campaigns, as Boeing faces customer demands to match pricing to this new, low anchoring point. Moreover, the C Series remains a

⁴⁷ See Tim Hopher & Victoria Bryan, *Bombardier faces discount headache as C Series sales take off*, Reuters (June 4, 2016), attached as Exhibit 36; *Bombardier C Series at EIS*, Air Insight (July 7, 2016) ("The new {Bombardier} management understands the market they are selling into. They know about the pricing issue. They know that a new aircraft has to 'buy its way in'. This is a long game with a sales cycle that typically goes for 20 years. . . . Matching Airbus and Boeing on pricing immediately causes financial pressure Bombardier has not handled before. But it sells aircraft."), attached as Exhibit 37; Peggy Hollinger, *Bombardier does a hard sell on its new passenger jet*, Financial Times (June 7, 2016) (quoting Bombardier's CEO as stating that, "{w}e are going to do the deal we have to do to keep winning business and making it a success"), attached as Exhibit 38.

⁴⁸ Mark Nensel, *United Airlines converts 737-700s order to -800; -MAX versions*, Air Transport World (Nov. 15, 2016), attached as Exhibit 39.

threat to future sales of the 737-700 and MAX-7 at United. Even after United initially selected the Boeing product, a Bombardier executive stated:

“We continue to talk with United,” Bombardier Commercial Aircraft VP-commercial operations Ross Mitchell {said} . . . “I don’t think that {the 737-700} order precludes us doing something there. Certainly, we still believe the CSeries is the right airplane for a number of airlines . . . We don’t think that order necessarily changes the situation for us. We still believe strongly that the CSeries will be successful in the North American market with the major carriers.”

...

Bombardier Commercial Aircraft president Fred Cromer “has indicated that on pricing we’ll make sure we do what it takes to be competitive,” Mitchell said. “I can’t comment on how low we’ll go, but I think we’ll be competitive in the marketplace . . . We will capture a North American mainline carrier, no doubt.”⁴⁹

Bombardier would soon make good on this prediction by lowering its prices even further.

Having lost out for the time being at United, Bombardier was determined to win the next U.S.

sales campaign with Delta at all costs. During that campaign, [

]. Given Delta’s price target, Boeing [

]. However,

Bombardier came in even lower than [], offering Delta pricing of *USD 19.6*

million per aircraft—significantly below both its cost of production (USD 33.2 million per

*aircraft)*⁵⁰ *and the below-cost prices it had just charged in its home market to Air Canada*

*(USD 30 million per aircraft).*⁵¹ Boeing could not compete with—and Delta could not pass

⁴⁹ Aaron Karp, *Bombardier still hopeful for United Airlines CSeries order*, Air Transport World (Feb. 16, 2016), attached as Exhibit 40.

⁵⁰ Affidavit of [], attached as Exhibit 1; see also Delta Air Lines, Inc., Form 10-Q—Q1 2016, at 13, attached as Exhibit 2; Delta Air Lines, Inc., Form 10-Q—Q2 2016, at 12-13, attached as Exhibit 3.

⁵¹ Robert Fife et al., *Bombardier gets lifeline as Air Canada places order for C Series jets*, Globe and Mail (Feb. 17, 2016) (“Industry sources said they believe Air Canada will pay just \$30-million (U.S.) each for the planes, a discount of almost 60 per cent from the list price . . .”), attached as Exhibit 41.

up—this astoundingly low price for new-build aircraft, so the airline placed 75 firm orders for C Series Aircraft, with options for 50 more. As a result, the prices in this campaign yield an estimated dumping margin of at least 80.50% *ad valorem*.⁵²

There is no doubt that subsidies enabled Bombardier to dump Aircraft in the Delta sale. Québec Premier Philippe Couillard said that the Delta sale “happened thanks to the {CDN} \$1.3 billion {i.e., USD 1 billion} investment his government offered Bombardier last fall.”⁵³ He added, “{d}on’t think that Boeing and Airbus are very happy today. . . . It’s Québec that has won.”⁵⁴ Delta’s CEO also confirmed that government subsidies allowed Delta to buy these new, untested aircraft, stating: “We are thrilled that the Québec government is an investor. It gave us a lot of confidence to be able to make the decision {W}e see that the government supports the business.”⁵⁵

Indeed, not only do Canada, Québec, and the UK “support” Bombardier and the C Series program, but they sustain it, bail it out, and enable it to buy market share and credibility in the U.S. market at commercially unreasonable, cut-rate prices, damaging Boeing and threatening the domestic industry with material injury.

III. THREAT OF MATERIAL INJURY: BOMBARDIER’S SUBSIDIZED AND DUMPED SALES IN THE U.S. MARKET THREATEN THE DOMESTIC INDUSTRY WITH IMMINENT MATERIAL INJURY

Supply-creating subsidies of the kind provided to Bombardier create unfair competition for U.S. industry, destroy good manufacturing jobs for American workers, and harm the U.S. economy. This creates a likelihood of imminent, irreparable injury. U.S. Aircraft demand is concentrated in a handful of customers. These customers insist on the lowest prices available in

⁵² Dumping Calculation Workbook, attached as Exhibit 42.

⁵³ Paul Chiasson, *Québec’s investment made deal happen between Bombardier and Delta: Couillard*, Montreal Gazette (Apr. 28, 2016), attached as Exhibit 43.

⁵⁴ *Id.*

⁵⁵ *Id.*

the market, and they tend to purchase Aircraft enjoying commercial momentum and shun Aircraft that are not. Indeed, after purchasing a new Aircraft type, customers are far more likely to place follow-on orders for the same Aircraft than to order another producer's competing product. Therefore, it is crucial for Bombardier to quickly secure major U.S. customers to establish itself as an incumbent carrier and reap the benefit of follow-on sales for decades. To this end, Bombardier tried to capture United—[

]—and has already captured Delta with below-cost pricing. It now has set its sights on selling its subsidized and dumped Aircraft to other U.S. purchasers, and within a short time, Bombardier can capture the few additional sales that would establish the C Series as the dominant Aircraft in the relevant U.S. market for years to come. If action is not taken now, it will soon be too late to obtain a meaningful remedy for unfair competition from subsidized and dumped C Series Aircraft. Antidumping and countervailing duties should be imposed to address this threat of material injury.

To appreciate why Bombardier's unfair trade practices threaten the domestic industry, it is important to understand key conditions of competition specific to the Aircraft industry:

- *Highly capital-intensive:* Aircraft are low-volume/high-value products requiring billions of dollars in capital to develop and produce. Cost overruns and weak commercial results can rapidly weaken a producer's condition, threatening its ability to remain in business. To weather these risks, unsubsidized Aircraft producers must rely on profits generated by current production, as well as the cash flows that begin at the time of order, even though deliveries occur years later.
- *High degree of customer concentration:* There are only a few potential Aircraft customers worldwide, and annual deliveries can be as low as several dozen per year.⁵⁶ With sales concentrated in a few transactions with only a few customers, even a single sale can have significant, immediate, and lasting impact on the domestic industry as a whole.
- *Lag time between orders and deliveries:* Aircraft producers aim to operate with an order backlog that would take several years to fulfill while producing at high rates

⁵⁶ See Ascend Database & Ascend Backlog Database, attached as Exhibit 44.

that minimize unit costs. Accordingly, there is almost always a considerable lag time between the placement of a firm order and the fulfillment of that order through deliveries.

- *Orders are critical both to the particular transaction and to the manufacturer's viability:* Key purchase terms (product type, volume, price, payments, delivery dates, etc.) are all set at the time of order and formalized in contractually binding obligations at that time. Among other terms, the order contract ordinarily provides for an initial deposit and pre-delivery payments of a portion of the Aircraft price. These payments are a critical source of cash flow for an unsubsidized producer to fund production, particularly during the early years of an Aircraft program, when the costs are highest because the learning curve is steepest.⁵⁷ A lost order therefore has an immediate adverse impact on a producer's financial position, even if the aircraft are not to be delivered for several years.⁵⁸ This condition is exacerbated by the fact that each airline customer tends to place orders only occasionally, in part because sales campaigns are time-consuming and costly for both producers and customers. Thus, when orders occur, they tend to be large, relative to the size of the customer's fleet.
- *Commercial momentum:* Aircraft sales are subject to both positive and negative feedback cycles, sometimes referred to as "commercial momentum." Sales tend to lead to more sales, and loss of sales to more losses. This is due to a number of factors. First, airlines generally seek to order Aircraft that are favored by other airlines, particularly large, well-respected ones. In part, this is driven by a mentality of imitating competitors, but there are also real economic advantages to ordering the Aircraft that are popular in a market. Such Aircraft tend to have higher residual values, are easier to finance, are more likely to offer superior lifetime support costs, and are less likely to have their production terminated

⁵⁷ See, e.g., Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016) (quoting Bombardier's CFO as stating: "we relaunched the C series {with} marquee orders that re-energized the program filling delivery slots in the steep part of the production learning curve. . . . These orders created significant value for Bombardier by filling the skyline at a critical time and they generated the sales momentum that we are now experiencing."), attached as Exhibit 11.

⁵⁸ See generally Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/R, adopted June 1, 2011, para. 7.1726 ("The long-term viability of an LCA producer depends on continued innovation and periodic launches of new aircraft as technological advances and market conditions allow. Thus, there is a need for both Boeing and Airbus to secure a continuous stream of orders and deliveries to be able to generate the necessary economies of scale and learning curve cost reductions to remain competitive in the long term. In addition, orders are crucial for a newly launched LCA model to be successful, due to the substantial economies of scale in production as well as the steep learning curve cost reductions generated thereby."), attached as Exhibit 17; *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, U.S. First Written Submission (Nov. 15, 2006), para. 115 ("Since the initial development investment is essentially a sunk cost and is incurred well before revenues are received, the size of these non-recurring costs is a key element affecting an aircraft program's risk and expected profitability. If a program is successful, the up-front investment is eventually recovered with margins earned on each aircraft delivery. Given the typical magnitude of program non-recurring costs, however, hundreds of sales are usually required before a program reaches its break-even point. If a program fails to reach break-even sales, the remainder of the non-recurring costs must instead be written off as a loss."), attached as Exhibit 45.

prematurely.⁵⁹ A customer is therefore more likely to buy Aircraft that have already been ordered by established, well-respected airlines and manufactured by a producer with sound finances, rather than Aircraft without pre-existing sales to established carriers and made by a financially unstable producer who is more likely to discontinue production. Second, momentum affects the rate at which a producer moves down the learning curve and lowers its marginal cost of production. An Aircraft producer with weak commercial momentum will find it difficult to lower its marginal costs because it has a relatively small backlog of orders over which to reap the benefits of learning by doing. The producer will thereby be constrained in its ability to offer competitive pricing, increasing the likelihood that the sales slump continues. Third, weak momentum also limits a producer's ability to realize economies of scale in the form of volume discounts on input purchases that would otherwise lower marginal costs and improve pricing flexibility. Ultimately, the downward spiral can become irreversible, leading to both the premature end of an Aircraft program and significant losses as low order volume drives higher per-unit costs and an inability to cover the large non-recurring costs incurred at the program's start.

- *Price transmission effects:* Customers demand Aircraft prices commensurate with the pricing obtained by their competitors. For example, if a major U.S. airline recently purchased Aircraft at extremely low prices, other U.S. airlines will demand similar pricing so they can compete on passenger fares. This is facilitated by the facts that Aircraft purchasers are sophisticated players in the market and Aircraft sales campaigns are often well publicized, so customers are ordinarily able to obtain past pricing information about the Aircraft they are seeking.

These conditions of competition make the domestic industry highly vulnerable to unfair trade practices. The effects of even a single lost sale can be devastating, due to the capital-intensive nature of the industry as well as customer concentration. The harm begins when orders are placed, by depriving the unsubsidized producer of early revenue streams, including advance payments made when signing a purchase order and periodic advance payments prior to delivery. This initial harm has a cascading effect, because it causes the producer to shoulder the

⁵⁹ See, e.g., Thomas L. Boeder & Gary J. Dorman, *The Boeing/McDonnell Douglas merger: the economics, antitrust law and politics of the aerospace industry*, Antitrust Bulletin, at 138-39 (2000) ("When purchasing a new airplane today, most buyers want to be confident that their supplier will still be in business in {two decades}. This is true even if a particular airline has a policy of removing older airplanes from its own fleet, because the residual values of those airplanes when sold will depend upon continuing manufacturer support. If airlines have serious doubts about a potential supplier's long-run viability in the business, they will be reluctant to purchase airplanes, even at steeply discounted prices. Over time, even a perceived weakness can become a self-fulfilling reality as a manufacturer with sluggish sales cuts back on product development, thereby creating further doubts about its viability and further reducing its sales."), attached as Exhibit 46.

development costs for a longer period of time, thus increasing the costs of that development and depressing returns. Moreover, current lost sales result in future lost sales due to lost commercial momentum, and the loss of sales results in a reduction in revenue needed to keep current airplane programs affordable and to fund research and development of future derivatives and new programs. Even a successful sales campaign can harm the unsubsidized winner—not only because the subsidized and dumped products have provoked a low price that causes an immediate depression in revenues—but also because of the price transmission effects that set a new, low price ceiling for future sales campaigns. This latter harm is one that infects even a successful campaign, like the United sale, in which the orders are later converted to aircraft models that serve a different market. This reduction in price also exacerbates the time span in which a producer has to carry initial development costs, further reducing the profitability of the particular airplane program, which in turn reduces the revenue available to fund future research and development.

Furthermore, because of the long development and manufacturing cycles for an airplane program, the industry relies heavily on market forecasting to plan its research and production requirements. Decisions on things such as engineering and factory labor are made years in advance based on detailed market analysis and projections. But this forecasting assumes rational market conditions. These conditions break down when unfair trade practices infect the market. Where, as here, an Aircraft producer introduces supply—*i.e.*, a new Aircraft program—into the market that would not exist without government subsidies, and then dumps that supply at below-cost prices, the market no longer behaves in a rational way, and other Aircraft producers are forced to adjust their planning in response to the irrational market conditions. This can have a significant impact on the domestic labor market, resulting in unanticipated layoffs or hiring

freezes, as the producer attempts to correct for unforeseen losses that would not have occurred but for the irrational and distorted market conditions resulting from the unfair trade practices of the dumping producer and its government sponsors.

The history of Airbus provides a cautionary tale in how competition with a subsidized producer will undermine the domestic industry. From its inception in the late 1960s, Airbus has been a creature of European government subsidies, which have provided critical support for all of its LCA programs. Just as Bombardier is doing now, Airbus entered the LCA business in a single market segment and offered extremely generous terms to a U.S. customer to validate its product to customers outside its own, politically-influenced home market. Like Bombardier, Airbus received billions in subsidies that enabled it to survive development cost overruns and supply the market with low-priced planes that would not otherwise exist. Like Bombardier, Airbus shifted the enormous risk of LCA program failure from itself to the subsidizing governments, allowing it to price its planes below market and operate free from commercial considerations. Airbus is now a giant of the LCA industry, with a full product line stretching from Aircraft in the 100- to 150-seat market to the A380 superjumbo offering more than 500 seats. Meanwhile, the only two U.S. LCA producers other than Boeing—Lockheed and McDonnell Douglas—were forced to exit the industry in 1983 and 1997, respectively.

For more than a decade, the United States has been fighting EU subsidies to Airbus at the WTO. In proving its case to the WTO, the United States cited a 1995 economic study that found that the subsidized launch of Airbus LCA caused Boeing to lose USD 100 billion in profits, and McDonnell Douglas to suffer a two-thirds reduction of its profits before exiting the industry

altogether.⁶⁰ Ruling in favor of the United States, the WTO panel found that neither Airbus nor any of the planes it has ever sold would exist without subsidies, that McDonnell Douglas may well have survived in Airbus's absence, and thus unsurprisingly that the subsidies caused significant harm to the U.S. LCA industry.⁶¹ A WTO compliance panel recently confirmed that this market-distorting subsidization and harm continue.⁶² Although the United States continues to seek the European Union's compliance with the WTO rulings, the damage has already been done: Airbus remains firmly entrenched in the marketplace, and its subsidies have caused severe and irreversible damage to the U.S. LCA industry and its American workers.

We cannot allow the past to be prologue. Left unchecked, Bombardier is using subsidies and dumped prices to dominate the 100- to 150-seat market—a feat the company boasts of having already achieved⁶³—and will soon broaden its reach to other customers and markets, just as Airbus did. The United campaign and Delta sale appear to be the first phase of this plan. Indeed, in terms of strategic significance, the Delta deal resembles Airbus's seminal deal with Eastern Airlines in 1977, which validated Airbus as a competitor to Boeing, secured its place in the U.S. market, and precipitated additional orders from other U.S. customers, ultimately contributing to the demise of two of the three domestic LCA producers.⁶⁴ In fact, due to the Delta sale alone, the C Series' share of U.S. consumption is set to rise from its current level of

⁶⁰ See *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, U.S. Second Written Submission (June 28, 2007), para. 586 (citing Damien Neven & Paul Seabright, *European Industrial Policy: The Airbus Case* at 2-3 (1995)), attached as Exhibit 47.

⁶¹ See Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/R, adopted June 1, 2011, para. 7.1984 (“In a second plausible scenario, Airbus would not have entered the market, but there would nevertheless have been two players, which on the basis of the evidence before us, would most likely have been Boeing and McDonnell Douglas . . .”), attached as Exhibit 17.

⁶² Compliance Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/RW, circulated Sept. 22, 2016, para. 7.1(d)(xii) (“{T}he direct and indirect effects of the aggregated pre-A350XWB LA/MSF subsidies continue to be a ‘genuine and substantial’ cause of the current market presence of the A320, A330 and A380 families of Airbus LCA . . .”), attached as Exhibit 12.

⁶³ Yan Lapointe, Manager, Investor Relations, Bombardier, “Investor Presentation,” at 27 (Nov. 2015), attached as Exhibit 48.

⁶⁴ See Vinay Bhaskara, *Delta Confirms Large Bombardier C Series Order*, *Airways Magazine* (Apr. 28, 2016) (“Hopefully for Bombardier, Delta can be for the C Series what Eastern Air Lines was for Airbus and the A300 back in the 1970s.”), attached as Exhibit 49.

zero to 61%, on average, over the 2018 to 2021 period.⁶⁵ These gains will come directly at the domestic industry's expense, with the domestic like product's market share shrinking from its historic average of 70% to 24% over the same time period.⁶⁶

More broadly, the Delta sale established the C Series' acceptance in the marketplace—a move that enables Bombardier to further penetrate the U.S. market with its subsidized and below-cost pricing. Bombardier is rapidly increasing production capacity and has a strong interest in adding other U.S. airlines to shore up and expand its weak order book. Already, Spirit Airlines CEO Bob Fornaro has stated that his airline is considering a C Series purchase and anticipating the “aggressive” concessions that will come in a competition involving Bombardier's Aircraft.⁶⁷ JetBlue has also reportedly been in discussions with Bombardier.⁶⁸

Bombardier's longer-term aspirations compound the threat. In April 2016, Bombardier's CEO, Alain Bellemare, stated that he “would welcome the participation of the federal government to add financial flexibility to what we're going in terms of the CSeries”⁶⁹ Subsequently, in February 2017, the federal government of Canada committed to provide Bombardier with an additional funding tranche of CDN 372.5 million (equivalent to USD 284 million), including CDN 126.7 (equivalent to USD 97 million) in additional launch aid directed to the C Series program.

⁶⁵ 100- to 150-Seat Large Civil Aircraft in the U.S. Market, Actual and Projected Deliveries and Market Share (2007-2021), with underlying Ascend Database, & Ascend Backlog Database, attached as Exhibit 44. Boeing references average market shares over multi-year periods because these are more reliable indicators of industry trends than market share levels in individual years, which can fluctuate significantly because of the low and sporadic delivery volumes in this industry.

⁶⁶ *Id.*

⁶⁷ Ted Reed, *Spirit CEO Hails Aircraft Maker Competition, Will Look at Bombardier CS-100*, *TheStreet* (Oct. 26, 2016), attached as Exhibit 8; Ben Mutzabaugh, *Spirit wants to shake its reputation for late flights*, *USA Today* (June 22, 2016), attached as Exhibit 9.

⁶⁸ Frederic Tomesco & Mary Schlangenstein, *JetBlue and Bombardier are talking about the CSeries again, sources intimate*, *Montreal Gazette* (May 4, 2016), attached as Exhibit 10.

⁶⁹ *Does Bombardier still need Ottawa's help?*, *CBC Radio* (Apr. 30, 2016), attached as Exhibit 50.

In sum, it is clear that Bombardier now threatens the domestic industry just as Airbus has done. The U.S. Government—along with the Government of Brazil⁷⁰—has already expressed concern at the WTO about Canada’s subsidies for the C Series, but so far to no avail.⁷¹ Indeed, just as Airbus capitalized on initial successes with the A300/A310 to target other LCA markets, Bombardier also has long-term plans to build on any success in the Aircraft market by targeting other LCA product markets. In particular, Bombardier has discussed the possibility of at some point producing a larger C Series variant, the CS500, which would compete directly with Boeing’s best-selling aircraft, the 737-800 and 737 MAX 8.⁷² The launch of the CS500 would inject Bombardier into another LCA product market, in keeping with the Airbus expansion playbook where market after market is filled with unfairly traded airplanes that would not even exist without subsidies.

The full impact of Bombardier’s unfair trading practices on the domestic industry will extend into the future, when Boeing Aircraft sold at suppressed prices are delivered and the associated revenue and cost items recognized in Boeing’s financial statements. Bombardier has already established, through the United and Delta sales, a new, low price anchor in the U.S. market that will further harm the domestic industry and further erode its market position, unless antidumping and countervailing duties are imposed.

⁷⁰ In December 2016, Brazil announced that it would initiate WTO dispute settlement proceedings with Canada over subsidies to the C Series. In addition to the subsidies from the Government of Quebec, Brazil cited “indications that Canada’s federal government {intended} to make another significant capital injection in the company to ensure the viability of the new C Series and its placement in the market at artificially reduced prices,” as, indeed, it ultimately did. Brad Haynes, *Brazil to challenge Canada at WTO over Bombardier funding*, Reuters (Dec. 19, 2016), attached as Exhibit 51.

⁷¹ See Committee on Subsidies and Countervailing Measures, Replies from Canada to Follow-up Questions Posed by the United States Regarding the New and Full Notification of Canada, G/SCM/Q2/CAN/64, at 2 (Apr. 27, 2015), attached as Exhibit 52; see also Office of the U.S. Trade Representative, 2016 National Trade Estimate Report, at 73 (Mar. 2016) (“The United States will continue to monitor carefully any government financing and support of the C Series aircraft.”), attached as Exhibit 53.

⁷² See Stephen Trimble, *Bombardier denies near-term plan for CS500*, FlightGlobal (May 11, 2016), attached as Exhibit 54.

Competition is vital for a healthy economy, but only if that competition occurs on a level playing field. As noted above, the President's Trade Agenda makes clear that subsidies and dumping are unfair trade practices that "lower living standards for *all* Americans by distorting U.S. and global markets and preventing resources from being allocated in the most efficient manner."⁷³ The United States has accordingly committed not to tolerate harmful unfair trade practices, and instead to "act aggressively as needed to discourage this type of behavior—and encourage true market competition."⁷⁴ Aggressive action is needed here. Dumped and subsidized imports of C Series aircraft are distorting competition, taking good manufacturing jobs from American workers, and harming the U.S. economy. With Bombardier's sights trained on additional U.S. airline customers, the time is fast approaching when it will be too late to obtain a meaningful remedy for Bombardier's market-distorting and unfair trade practices. Accordingly, Boeing respectfully requests that the Department and the Commission impose antidumping and countervailing duty orders on imports of the subject merchandise.

⁷³ Office of the U.S. Trade Representative, 2017 Trade Policy Agenda and 2016 Annual Report of the President of the United States on the Trade Agreements Program, at 4 (Mar. 2017), attached as Exhibit 13.

⁷⁴ *Id.*

PART TWO: GENERAL INFORMATION AND THREAT OF MATERIAL INJURY

I. GENERAL INFORMATION

A. The Petitioner, Domestic Industry, and Degree of Industry Support for the Petition

Boeing is headquartered in Chicago, Illinois, and produces Aircraft at final assembly facilities in Renton, Washington.⁷⁵ In addition to producing LCA, Boeing is one of the largest defense companies in the United States, the single largest U.S. exporter, and an employer of approximately 130,000 U.S.-based employees in 9 states.⁷⁶ Founded 100 years ago by William E. Boeing in Seattle, Boeing is today the only remaining U.S. producer of LCA, and it sources most LCA parts from U.S. suppliers.⁷⁷ (Lockheed was forced to exit the commercial aircraft market in the 1980s,⁷⁸ and McDonnell Douglas was forced to merge with Boeing in 1997,⁷⁹ in part because of heavily subsidized competition from Airbus.) Boeing's Aircraft production operations thus constitute the entire domestic industry (as discussed in Part VI below). Boeing by itself therefore satisfies the Act's requirement that a petition be filed by or on behalf of the domestic industry.

Boeing has not filed for relief under Section 337 of the Act,⁸⁰ Sections 201 or 301 of the Trade Act of 1974,⁸¹ or Section 232 of the Trade Expansion Act of 1962,⁸² with respect to the Aircraft.

⁷⁵ Boeing Form 10-K For the Fiscal Year Ended December 31, 2015, at 6, attached as Exhibit 55; Boeing, "Renton Production Facility," available at <http://www.boeing.com/company/about-bca/renton-production-facility.page>, attached as Exhibit 56.

⁷⁶ *I.e.*, Alabama, Arizona, California, Missouri, Oklahoma, Pennsylvania, South Carolina, Texas, and Washington. See Boeing in Brief, available at <http://www.boeing.com/company/general-info/index.page#/employment-data>, attached as Exhibit 57.

⁷⁷ See generally Parija Kavilanz, *Dreamliner: Where in the world its parts come from*, CNN (Jan. 18, 2013), attached as Exhibit 58.

⁷⁸ Lockheed Martin, "L-1011: Luxury Among the Clouds," available at <http://www.lockheedmartin.com/us/100years/stories/l-1011.html>, attached as Exhibit 59.

⁷⁹ Boeing, "Boeing Completes McDonnell Douglas Merger," available at <http://boeing.mediaroom.com/1997-07-31-Boeing-Completes-McDonnell-Douglas-Merger>, attached as Exhibit 60.

⁸⁰ 19 U.S.C. §§ 1337, 1671a.

⁸¹ 19 U.S.C. §§ 2251, 2411.

⁸² 19 U.S.C. § 1862.

B. The Subject Merchandise's Country of Origin and Producer

Canada will be the country of origin of the subject Aircraft imports. Bombardier has not yet exported any Aircraft from Canada to the United States, but Bombardier has undertaken aggressive marketing and sales efforts in the United States, and those efforts are already having a direct harmful impact on the domestic industry. As discussed above, Bombardier's campaign to sell the C Series to United at subsidized below-market prices, while ultimately unsuccessful, [

J. And Bombardier's below-market pricing in its successful Delta campaign established a new, low price anchor that will harm the domestic industry for years to come. C Series deliveries flowing from that sale (and, thus, imports into the United States) are contractually obligated to begin in 2018.

Bombardier is currently the only producer and exporter of the subject merchandise. Its contact information is provided in **Exhibit 61**.⁸³ While Québec has taken a 49.5% interest in a newly-created limited partnership with Bombardier that holds the C Series program's assets, liabilities, and obligations, Bombardier has stated that the C Series program will be a subsidiary of Bombardier and that the program's financial results will continue to be consolidated with Bombardier's financial results.⁸⁴

C. Importers of Subject Merchandise

Delta has purchased 75 C Series aircraft and is scheduled to begin taking delivery in 2018, as noted above.⁸⁵ Delivery will likely occur in Canada, after which Delta or one of its

⁸³ Bombardier, "Contacts: Aerospace in USA," attached as Exhibit 61.

⁸⁴ Press Release, Bombardier, "Bombardier Announces Financial Results for the Third Quarter Ended September 30, 2015; Government of Québec Partners with Bombardier for \$1 billion in C Series as Certification Nears" (Oct. 29, 2015), attached as Exhibit 62. For ease of reference, Boeing refers to the entity that produces the subject merchandise as Bombardier, without prejudice to any legal claims or arguments that may arise in connection with changes to corporate structures related to the C Series program.

⁸⁵ Press Release, Bombardier, "Delta Air Lines and Bombardier Sign Largest C Series order for up to 125 Aircraft" (Apr. 28, 2016), attached as Exhibit 63.

affiliates will import the subject merchandise into the United States.⁸⁶ Contact information for Delta is provided in Part I of **Exhibit 66**.⁸⁷

D. Negligibility

The Act provides that imports are not negligible if “there is a potential that” subject imports “will imminently account for more than 3% of the volume of all such merchandise imported into the United States”⁸⁸ Here, there is far more than a potential that subject imports will imminently satisfy this threshold, because Bombardier is contractually obligated to deliver at least 75 C Series aircraft to Delta, and deliveries are scheduled to begin in 2018. Firm orders to a major airline, in good financial health, are almost certain to become deliveries, and thus significant subject imports are highly likely to occur.

The table below shows that, based on delivery projections, C Series imports will imminently reach levels far greater than what is required by the 3% negligibility threshold: 100% of all imports in 2018, and well above 50% in each subsequent year through 2021.

PROJECTED IMPORT VOLUMES INTO U.S. MARKET (2017-2021)⁸⁹

	2017E	2018E	2019E	2020E	2021E	TOTAL (17-21)
Import Volume						
Subject Imports	0	16	25	18	16	75
Non-subject Imports	0	0	7	11	0	0
TOTAL IMPORTS	0	16	32	29	16	93

⁸⁶ Although Republic Airways also placed an order for 40 CS300s, it is unclear that these orders will ever be delivered in light of Republic Airways’ poor financial condition. See *Republic Airways CSeries Order Removed from Production Schedule: Bombardier*, Airways News (May 20, 2016), attached as Exhibit 64. In October 2016, Republic and Bombardier reached a settlement providing for the deferral of all C Series deliveries to the airline. Karen Walker, *Republic SEC filing confirms CSeries deferrals*, Air Transport World (Oct. 27, 2016), attached as Exhibit 65. The revised delivery dates are not publicly available. To the extent that Republic or another U.S. airline takes delivery of these orders, the result will be further material injury to the domestic industry.

⁸⁷ See Customer and Lost Sales and Lost Revenues Information, attached as Exhibit 66, Part I.

⁸⁸ 19 U.S.C. § 1677(24)(A)(iv).

⁸⁹ See Ascend Data & Ascend Backlog Data, attached as Exhibit 44. Boeing notes that Airbus has opened a final assembly facility in Mobile, AL, which may be used in the future to produce Aircraft in the United States. See Airbus website, Airbus in the U.S.—Alabama, available at <http://www.airbus.com/company/americas/us/alabama/> (last accessed June 15, 2016), attached as Exhibit 68. Until Airbus does so, however, it should not be treated as a domestic Aircraft producer. Accordingly, Boeing has treated scheduled Airbus deliveries of Aircraft to U.S. customers as scheduled deliveries of non-subject imports, including the A319neo deliveries referenced in the table above.

Share of Imports						
Subject Imports	0%	100%	78%	62%	100%	81%
Non-subject Imports	0%	0%	22%	38%	0%	19%

II. PRODUCT AND INDUSTRY INFORMATION

A. Overview of Aircraft Producers and Their Products

Worldwide, three producers currently produce Aircraft,⁹⁰ offering the following models:⁹¹

Producer	Headquarters	Models	Typical 2-class passenger seating
Boeing	United States	737-700	126
		737 MAX 7	138
Bombardier	Canada	CS100	108
		CS300	130
Airbus	EU	A319ceo	124
		A319neo	140

Boeing launched the 737-700 in 1993. It entered service in 1997⁹² and remains in production. The 737 MAX 7 was launched in 2011 as an updated version of the 737-700,

⁹⁰ As discussed below, Aircraft have a standard 100- to 150-seat two-class seating capacity and a minimum 2,900 nautical mile range, as those terms are defined in the scope language. Regional jets, such as those produced by Embraer of Brazil, do not have a minimum 2,900 nautical mile range, and therefore do not qualify as Aircraft. Compare Bombardier, "C Series," available at <http://commercialaircraft.bombardier.com/content/dam/Websites/bca/literature/cseries/Bombardier-Commercial-Aircraft-CSeries-Brochure-en.pdf> ("Both the CS100 and the CS300 possess a range of over 3,000 nautical miles, meaning they can easily connect far-flung points."), attached as Exhibit 68, with Embraer website, "Specifications E190", available at <http://www.embraercommercialaviation.com/Pages/Ejets-190.aspx> (last accessed Aug. 30, 2016) ("The Advanced Range (AR) version of the E190 can carry a full load of passengers up to 2,400 nm (4,537 km)."), attached as Exhibit 69; Embraer website, "Specifications E195", available at <http://www.embraercommercialaviation.com/Pages/Ejets-195.aspx> (last accessed Aug. 30, 2016) ("The Advanced Range (AR) version of the E195 can carry a full load of passengers up to 2,300 nm (4,260 km)."), attached as Exhibit 70; Embraer website, "Specifications E190-E2" & "Specifications E195-E2" (showing that the maximum ranges of the E190-E2 and E195-E2 are 2,850 and 2,450 nautical miles, respectively), attached as Exhibit 71. The greater range capability of Aircraft is commercially significant, since it enables airlines to operate Aircraft on routes between the U.S. East and West coasts that are beyond the range of regional jets.

⁹¹ In addition, United Aircraft Corporation ("UAC") of Russia is currently developing the Irkut MC-21 family of single-aisle LCA, with first flight scheduled for 2017. See Maxim Pyadushkin, *UAC Rolls Out MC-21, Delays First Flight*, Aviation Week (June 8, 2016), attached as Exhibit 72. The smallest MC-21 model, the MC-21-200, is marketed as having a two-class seating capacity of 132 seats. Historically, Soviet and Russian LCA have not been competitive in Western markets, and while that may change with the MC-21-200, the aircraft is not currently a significant competitor in the U.S. Aircraft market.

⁹² Boeing website, 737 Commercial Transport: Historical Snapshot, available at <http://www.boeing.com/history/products/737-classic.page> (last accessed Apr. 12, 2017), attached as Exhibit 73.

featuring advanced engines and other enhancements.⁹³ In July 2016, Boeing announced that the 737 MAX 7's design would be modified to increase its typical passenger capacity from 126 (the same as the 737-700) to 138 seats. The 737 MAX 7 is scheduled to enter service in 2019.

Airbus launched the A319ceo (then known simply as the A319) in 1993.⁹⁴ It is scheduled to remain in production through 2018. Airbus launched the A319neo in 2010,⁹⁵ and it is scheduled to enter service in 2018. Like the 737 MAX 7, the A319neo is a re-engined version of its predecessor (“neo” stands for “new engine option,” while “ceo” stands for “current engine option”).

Compared to Boeing and Airbus, Bombardier is a recent entrant to the Aircraft industry. Primarily a producer of regional aircraft—including a regional jet it inherited when it purchased Canadair from the Canadian Government in 1986⁹⁶—Bombardier announced in 2004 that it was developing Aircraft that would have a metallic fuselage and wings.⁹⁷ In 2005, it obtained commitments for launch aid subsidies from the governments of Canada, Québec, and the UK⁹⁸ and received approval from its board of directors to offer the C Series to customers.⁹⁹ This initial effort stalled for lack of sales, and the program was temporarily suspended in January 2006.¹⁰⁰ Bombardier formally launched the C Series in 2008, promising to begin deliveries in 2013 of an

⁹³ See *Countdown to Launch: The Boeing 737 MAX Timeline*, Airways News (Jan. 27, 2016), attached as Exhibit 74.

⁹⁴ Airbus website, “History—The Narrative—Expansion, 1991-1992,” available at <http://www.airbus.com/company/history/the-narrative/expansion-1991-1992/> (last accessed Apr. 12, 2017), attached as Exhibit 75.

⁹⁵ *Id.*, “History—The Narrative—Preparing the Future, 2009-2010,” available at <http://www.airbus.com/company/history/the-narrative/preparing-the-future-2009-2010/> (last accessed Apr. 24, 2017), attached as Exhibit 75.

⁹⁶ See BAA Training, “Bombardier conquering the skies: a fleeting glimpse into the past” (July 25, 2016), available at <https://www.baatraining.com/bombardier-conquering-the-skies-a-fleeting-glimpse-into-the-past/#> (last accessed Apr. 12, 2017), attached as Exhibit 76.

⁹⁷ Press Release, Bombardier, “Bombardier announces new commercial aircraft family name at Farnborough Airshow 2004” (July 19, 2004), attached as Exhibit 77.

⁹⁸ *Cf.* Press Release, Bombardier, “Bombardier Announces Location of Final Assembly Site and Work Packages for the C Series” (May 13, 2005), attached as Exhibit 16. The UK’s initial commitment to Bombardier for the C Series was valued higher, at USD 340 million in “launch investment and financial assistance.” *See id.*

⁹⁹ Press Release, Bombardier, “Bombardier Aerospace Granted Authority to Offer C Series Aircraft to Customers” (Mar. 15, 2005), attached as Exhibit 18.

¹⁰⁰ *See* Press Release, Bombardier, “Bombardier Announces C Series Decision” (Jan. 31, 2006), attached as Exhibit 19.

Aircraft with a more technologically ambitious design—advanced engines, composite wings, and an aluminum-lithium alloy fuselage.¹⁰¹ After years of development program delays and over USD 2 billion in cost overruns, Bombardier delivered its first C Series aircraft in June 2016 to an international customer.¹⁰² As explained below in Section IV.B, this delivery would never have happened but for subsidies to Bombardier.

B. Proposed Scope of Investigation

The proposed scope of investigation is as follows:

The merchandise covered by this petition is aircraft that have a standard 100- to 150-seat two-class seating capacity and a minimum 2,900 nautical mile range, as these terms are defined below.

“Standard 100- to 150-seat two-class seating capacity” refers to the capacity to seat 100 to 150 passengers on commercial airline routes, when the aircraft contain 8 passenger seats configured for a 36-inch pitch, and the remaining passenger seats are configured for a 32-inch pitch (regardless of actual seating configuration). For example, aircraft with a “standard 100- to 150-seat two-class seating capacity” can be configured with fewer than 100 seats (*e.g.*, a CS100 with an all business class configuration). “Pitch” refers to the distance between a point on one seat and the same point on the seat in front of it.

Having a “minimum 2,900 nautical mile range” means:

- (i) able to transport between 100 and 150 passengers and their luggage on routes equal to or longer than 2,900 nautical miles; or
- (ii) covered by a U.S. Federal Aviation Administration (“FAA”) type certificate or supplemental type certificate that also covers other aircraft with a minimum 2,900 nautical mile range.

The scope includes all aircraft covered by the description above, regardless of whether they enter the United States fully or partially

¹⁰¹ See Press Release, Bombardier, “Bombardier Launches C Series Aircraft Program” (July 13, 2008), attached as Exhibit 20.

¹⁰² See Ross Marowitz, *Bombardier clears milestone as Swiss Air Lines becomes 1st to accept C Series—Company says federal financial assistance still needed*, CBC News (June 29, 2016), attached as Exhibit 78.

assembled, and regardless of whether, at the time of entry into the United States, they are approved for use by the FAA.

The merchandise covered by this investigation is currently classifiable under Harmonized Tariff Schedule of the United States (“HTSUS”) subheading 8802.40.00.40. Although this HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of the investigation is dispositive.

Bombardier’s CS100 and CS300 are in-scope. Bombardier may make other aircraft in the future that are also in-scope.

In some scenarios, aircraft configured with fewer than 100 seats could be in-scope. For example, if an aircraft contains zero seats at the time of importation, but has “the *capacity* to seat 100 to 150 passengers on commercial airline routes”¹⁰³ and has a “minimum 2,900 nautical mile range,” then it is in-scope. Similarly, if an aircraft with an all business class seating configuration at the time of importation seats fewer than 100 passengers, but the aircraft has “the *capacity* to seat 100 to 150 passengers on commercial airline routes”¹⁰⁴ and has a “minimum 2,900 nautical mile range,” then it is in-scope. Indeed, the text of the scope language explicitly addresses this type of scenario (“For example, aircraft with a ‘standard 100- to 150-seat two-class seating capacity’ can be configured with fewer than 100 seats (*e.g.*, a CS100 with an all business class configuration).”). Aircraft manufacturers generally indicate seating capacity in marketing materials, but marketing materials could potentially be manipulated to circumvent antidumping and countervailing duty orders. Thus, marketing materials indicating a 100- to 150-seat two-class seating capacity are sufficient to establish that an aircraft is in-scope (assuming that it also has a “minimum 2,900 nautical mile range”); however, marketing materials indicating

¹⁰³ Emphasis added.

¹⁰⁴ Emphasis added.

a two-class seating capacity outside the 100- to 150-seat range would not be sufficient to establish that an aircraft is out-of-scope.

The phrase “minimum 2,900 nautical mile range” covers aircraft that are mechanically capable of transporting between 100 and 150 passengers and their luggage on routes equal to or longer than 2,900 nautical miles, as well as derivatives of such aircraft that have been modified to have shorter range. It also covers aircraft that are covered by an FAA type certificate or supplemental type certificate that also covers other aircraft with a minimum 2,900 nautical mile range. Thus, if an aircraft manufacturer obtains an FAA type certificate or supplemental type certificate for an aircraft that is mechanically capable of transporting between 100 and 150 passengers and their luggage on routes equal to or longer than 2,900 nautical miles, and the aircraft manufacturer produces other aircraft that are eligible for the same FAA type certificate or supplemental type certificate but are *not* mechanically capable of transporting between 100 and 150 passengers and their luggage on routes equal to or longer than 2,900 nautical miles, all of these aircraft would have a “minimum 2,900 nautical mile range” for purposes of the scope.

All aircraft marketed or designed as capable of transporting between 100 and 150 passengers and their luggage on routes equal to or longer than 2,900 nautical miles have a “minimum 2,900 nautical mile range.” If there is a discrepancy between the way aircraft are marketed or designed and the actual mechanical capabilities of the aircraft, this likely indicates that the mechanical capabilities were manipulated to circumvent the antidumping and countervailing duty orders.

C. U.S. Tariff Classification

The Aircraft enter the United States under HTSUS number 8802.40.00.40: “Airplanes and other aircraft, of an unladen weight exceeding 15,000 kg—New:—Other:—Passenger.”¹⁰⁵

D. Physical Characteristics, Specifications, and Uses

The Aircraft constitute the smallest category of LCA, with a standard two-class seating capacity of 100 to 150 seats.¹⁰⁶ In contrast, larger single-aisle LCA have standard two-class seating capacities between 150 and approximately 200 seats, while standard two-class seating capacities for twin-aisle LCA range from 230 seats to more than 500 seats.

The Aircraft are extremely complex machines. They consist of millions of individual parts, which must be integrated into a whole aircraft system that will operate safely, reliably, and economically. The main elements of the Aircraft are the following:

¹⁰⁵ Exhibit 79 contains the relevant excerpt from the HTSUS.

¹⁰⁶ See, e.g., Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016) (quoting Bombardier’s CEO as stating: “And airlines are recognizing the value of the CS100 and CS300 as being the best aircraft in the 100-seat to 150-seat class . . .”), attached as Exhibit 11; Q1 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Apr. 28, 2016) (quoting Bombardier’s CEO as stating: “I feel that we have best aircraft family between 100-seat to 150 seat class. The Delta order is a strong endorsement of the fact that this aircraft is really trading significant value for our customers. . . . I think that the market is clearly showing that there is an interest, there is a market for 100-seat to 150-seat class aircraft. We have the only new aircraft in this market . . .”), attached as Exhibit 80; Ross Mitchell, Vice President of Commercial Operations, Bombardier, “Thirty Months Out—The OEM Perspective on Production Rates, Supplier Relations and the Competitive Landscape,” at 154 (Mar. 9, 2016) (“C Series: Large 100- to 150-Seat Single Aisle Market / Large Market Segment Neglected by Airlines Due to Unavailable Technology/Aircraft”), attached as Exhibit 81; Q4 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Feb. 17, 2016) (quoting Bombardier’s CEO as stating: “It {i.e., the C Series} is the best aircraft in the 100 to 150 seat class segment.”), attached as Exhibit 82; Bombardier, 2015 Investor Day Presentation, at 60 (Nov. 24, 2015) (“C Series: Large 100-150 seat narrowbody market / Large market segment neglected by airlines due to available technology/aircraft”), attached as Exhibit 33; Yan Lapointe, Manager, Investor Relations, Bombardier, “Investor Presentation,” at 24 (Nov. 2015) (“Significant opportunities exist in {sic} the 100-to 149-seat segment”), attached as Exhibit 48; *id.* at 25 (showing graphically that the CS100 and CS300 compete against the 737 MAX 7 and the A319 neo, but not larger variants of the 737 and A320); Fred Cromer, President, Bombardier, Presentation at the Deutsche Bank Aircraft Finance & Leasing Conference: “Bombardier Commercial Aircraft,” at 7 (Sept. 9, 2015) (“100-150 Seat Market Demand”), attached as Exhibit 83; Q3 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Oct. 29, 2015) (quoting Bombardier’s CEO as stating: “I think I saw a significant opportunity for the C series in the 100 to 150 seat class segment and I think this is being confirmed right now in our discussion with potential customers. There is tremendous interest for an aircraft that is actually performing because we are the only new aircraft in that class and the customers are seeing a significant need for an aircraft that would bring lower trip cost for equal seat mile cost between a 100 to 150 seat class.”), attached as Exhibit 23; Event Brief of Q2 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (July 30, 2015) (“With market of 7,000 aircraft over next 20 years in 100-150 seat segment, confident that C Series will capture significant portion of this market.”), attached as Exhibit 84; Q2 2015 Bombardier Inc. Earnings Call (July 30, 2015) (quoting Bombardier’s CEO as stating: “With a market of 7,000 aircraft over the next 20 years in the 100 to 150 seat segment, we are confident that the C Series will capture a significant portion of this market.”), attached as Exhibit 85.

- The *airframe* provides the Aircraft's essential structure. It is composed of the fuselage (the pressurized tube that forms the longitudinal axis of the Aircraft, running from nose to tail); the wings (which include large fixed sections as well as smaller moveable surfaces); and the tail (which includes the empennage, or aft-most section of the fuselage, as well as the vertical fin and horizontal stabilizers). Depending on the model, large airframe structures are constructed primarily from aluminum, aluminum-lithium alloys, or carbon fiber reinforced plastic ("CFRP") composite material.
- Two turbofan *engines*, typically installed underneath the wings,¹⁰⁷ propel the Aircraft during taxi, takeoff, and flight, and may also power other Aircraft systems in flight.
- A wide variety of Aircraft *systems* enable the Aircraft's operations. These include flight controls; communications; navigation; weather; collision-avoidance; Aircraft health monitoring; fuel; in-flight entertainment; and the environmental control system that regulates cabin air supply, temperature, and pressurization.
- The Aircraft *interior* provides the interior architecture and accommodations for passengers and crew. This includes the interior architectural surfaces (e.g., ceilings, sidewalls, stowage), passenger seats, lavatories, galleys, and crew rests. Underneath the Aircraft interior is the cargo hold, which carries passenger baggage and other cargo.

The Aircraft have the following technical characteristics:

- A standard two-class 100- to 150-seat seating capacity;
- A minimum 2,900 nautical mile range;
- A two-person flight crew to pilot the Aircraft; and
- A cabin crew of at least three flight attendants when operated at standard two-class seating capacity, which is a lower minimum flight crew requirement compared to all other LCA.¹⁰⁸

The Aircraft are used to transport passengers, their baggage, and, at times, other cargo.

They are used on short to medium-range routes, including trans-continental service between the

¹⁰⁷ Some older, out-of-production Aircraft, such as the Boeing 717, have engines mounted on the tail.

¹⁰⁸ Aircraft with passenger seating capacity in excess of 150 seats are required to have a cabin crew consisting of at least four flight attendants. See 14 C.F.R. § 121.391(a)(4) ("For airplanes having a seating capacity of more than 100 passengers—two flight attendants *plus one additional flight attendant* for each unit (or part of a unit) of 50 passenger seats above a seating capacity of 100 passengers.") (emphasis added).

U.S. East and West Coasts. The Aircraft are capable of servicing routes that are longer and denser (*i.e.*, subject to higher passenger traffic levels) than those served by regional jets, and routes where there is insufficient demand to adequately fill larger single-aisle LCA. They are not, however, used on long-haul routes (*e.g.*, between Asia and the U.S. West Coast), which are served by modern twin-aisle LCA.

E. The Domestic Like Product and Industry

The domestic like product consists of all U.S.-origin products, currently produced or marketed, that satisfy the criteria in the proposed scope description. Only two such Aircraft models currently exist: the Boeing 737-700 and its successor, the 737 MAX 7, which Boeing actively markets and is scheduled to enter into service in 2019. These are LCA designed to accommodate 126 and 138 passengers, respectively, in a standard two-class cabin configuration.¹⁰⁹ Carrying full passenger loads, the maximum ranges of the 737-700 and 737 MAX 7 are 3,365 and 3,850 nautical miles, respectively.¹¹⁰

This identification of the domestic like product is consistent with prior findings by the Government of Canada, the European Commission, as well as Bombardier's own description of the relevant market.¹¹¹ In particular, a memorandum from the Canadian Deputy Minister of Innovation, Science, and Economic Development to the Minister of Innovation, Science, and Economic Development discussed Canadian subsidies for Bombardier, including potential future federal subsidies.¹¹² The memorandum stated: "The C Series is an all new clean sheet design that compete in the transcontinental-range 100- to 150-seat segment of the global aerospace

¹⁰⁹ The Airbus A319 would also be included in the domestic like product if Airbus were to produce it at its facility in Alabama; currently, the A319 is only produced in Europe.

¹¹⁰ Older domestic 100- to 150-seat LCA, such as the Boeing 737-600 and 717, are no longer in production, though some remain in commercial service.

¹¹¹ See *supra* notes 104, 107; European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, at paras. 248, 253 (June 17, 2009), attached as Exhibit 22.

¹¹² Canadian Government Document, attached as Exhibit 88.

market.”¹¹³ This description of the market in which the C Series competes perfectly matches the description of the domestic like product in this petition. In addition, in a 2009 state-aid determination regarding UK subsidies to Bombardier for the C Series, the European Commission found: “Bombardier with its single-aisle C Series family of 110 and 130 seat-aircraft targets the market for commercial aircraft in the 100-149 seating range capacity.”¹¹⁴ The European Commission also found that the subject merchandise competes head to head with the Boeing 737-600 and 737-700¹¹⁵—and presumably the European Commission would have included the 737 MAX 7 as well, if it had existed at that time. Indeed, Bombardier itself frequently identifies the Boeing 737 MAX 7 and the 737-700 as the only U.S.-produced LCA that compete with the C Series, as discussed further below in Section II.E.2.

By the same token, aircraft with a standard two-class seating capacity greater than 150 seats are *not* included in the domestic like product. Such airplanes serve a different market than the subject merchandise.¹¹⁶ As discussed above, Bombardier has considered developing an additional C Series aircraft—the CS500—which would have a significantly larger seating capacity that would enable it to compete with the Boeing 737 MAX 8 (which is larger than the 737 MAX 7, with a capacity of 162 seats in a standard two-class cabin configuration) as well as the Airbus A320neo (which competes with the 737 MAX 8, and which has a capacity of 150 seats in a standard two-class cabin configuration).¹¹⁷ However, Bombardier has yet to launch the

¹¹³ *Id.* at frame 18.

¹¹⁴ European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, at paras. 248, 253 (June 17, 2009), attached as Exhibit 22.

¹¹⁵ *Id.*

¹¹⁶ *See supra* note 104.

¹¹⁷ *See, e.g.,* Scott Hamilton, *David Versus Two Goliaths: Bombardier Takes On Airbus And Boeing*, *Forbes* (June 29, 2016) (describing the CS500 as “a direct competitor to the larger A320neo and 737-8), attached as Exhibit 89; Airbus, “A320,” available at <http://www.airbus.com/aircraftfamilies/passengeraircraft/a320family/a320/> (last accessed Apr. 12, 2017), attached as Exhibit 90.

CS500,¹¹⁸ and in any event the CS500 would not fall within the scope of the subject merchandise due to its standard two-class cabin configuration of more than 150 seats. Just as the CS500 is not included among the subject merchandise, neither are Boeing LCA with a standard two-class seating capacity greater than 150 seats included in the domestic like product.

1. Description of the subject merchandise

The starting point for the Commission's like product analysis is the scope definition set out in this petition and used by the Department to define the subject merchandise. The only Canadian products that meet this definition are Bombardier's C Series aircraft, the CS100 and CS300. Bombardier regional jet aircraft such as the CRJ100, -200, -700, -900, and -1000 do not qualify as subject merchandise, because (i) they all have a seating capacity under 100 passengers in a standard two-class cabin configuration, and (ii) they are designed to serve routes of less than 2,900 nautical miles.¹¹⁹ They also have a narrower fuselage diameter, making them a less attractive product.¹²⁰ Bombardier's Global Express 5000 and 6000 business jets also do not qualify as subject merchandise, because they have a seating capacity of only 13 passengers.

2. The domestic like product includes only Boeing's 737-700 and 737 MAX 7

“‘{D}omestic like product’ means a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation.”¹²¹ The

¹¹⁸ See Stephen Trimble, *Bombardier denies near-term plan for CS500*, FlightGlobal (May 11, 2016), attached as Exhibit 54.

¹¹⁹ See Airbus, “A320,” available at <http://www.airbus.com/aircraftfamilies/passengeraircraft/a320family/a320/> (last accessed Apr. 12, 2017), attached as Exhibit 90.

¹²⁰ The C Series aircraft have a maximum fuselage diameter of 3.7 meters, while the CRJ Series aircraft have a maximum fuselage diameter of 2.7 meters. See Bombardier, “C Series,” available at <http://commercialaircraft.bombardier.com/content/dam/Websites/bca/literature/cseries/Bombardier-Commercial-Aircraft-CSeries-Brochure-en.pdf> (last accessed Apr. 12, 2017), attached as Exhibit 68; Bombardier, “CRJ Series,” at 35, available at <http://commercialaircraft.bombardier.com/content/dam/Websites/bca/literature/crj/Bombardier-Commercial-Aircraft-CRJ-Series-Brochure-en.pdf> (last accessed Apr. 12, 2017), attached as Exhibit 91; Bombardier, “CRJ200,” available at https://www2.bombardier.com/Used_Aircraft/pdf/CRJ200_EN.pdf (last accessed Apr. 12, 2017), attached as Exhibit 92.

¹²¹ 19 U.S.C. § 1677(10).

Commission's "domestic like product" determination is a factual issue that the Commission resolves by weighing six factors relating to the products in question: (i) physical characteristics and uses; (ii) interchangeability, (iii) common manufacturing facilities, production processes, and production employees; (iv) channels of distribution; (v) customer and producer perception; and, where appropriate, (vi) price.¹²² The Commission looks for clear dividing lines among possible like products and disregards minor variations. No single factor is dispositive, and the Commission is permitted to consider other relevant factors.¹²³

In this case, the six "like product" factors confirm that the Boeing 737-700 and 737 MAX 7—and no other domestic product that is currently being produced or marketed—constitute the domestic like product.

a) The subject merchandise and the Boeing 737-700 and 737 MAX 7 have similar physical characteristics and uses

The Boeing 737-700 and 737 MAX 7 and the subject merchandise all share a tube-and-wing design with two engines installed under the wings. Moreover, the Boeing 737-700 and 737 MAX 7 are approximately the same size as each other and as the Bombardier CS100 and CS300. In fact, [], Boeing's sales and marketing teams developed a series of diagrams for possible use in sales campaigns—not for purposes of litigation—which demonstrate [

] ¹²⁴ In addition, the CS300 and the 737 MAX 7 are very close in terms of other specifications that are relevant to airline customers, such as cargo capacity

¹²² *Cleo v. United States*, 501 F.3d 1291, 1295 (Fed. Cir. 2007).

¹²³ *Id.* at 1384 & n.5.

¹²⁴ Boeing Internal Presentation No. 1, at 30-33 [], attached as Exhibit 493.

(1,116 cubic feet for the CS300, versus 956 cubic feet for the 737 MAX 7). All of these conclusions are valid with respect to the Boeing 737-700 as well.¹²⁵

Given these physical similarities, the subject merchandise and the Boeing 737-700 and 737 MAX 7 have equivalent uses: to transport roughly the same number of passengers and the same volume of luggage for approximately the same distances. Indeed, the ranges of the Boeing 737-700 and the 737 MAX 7 (*i.e.*, 3,365 nautical miles and 3,850 nautical miles, respectively) are both similar to each other and to those of the CS100 and CS300 (which have ranges of 3,100 nautical miles and 3,300 nautical miles, respectively).¹²⁶ Thus, the 737-700 and 737 MAX 7 can each serve virtually all of the same routes as the other, and each can serve the same routes that the CS100 and CS300 serve.

b) The subject merchandise and the Boeing 737-700 and 737 MAX 7 are all interchangeable with each other

The 737 MAX 7 is designed as a more fuel-efficient version of the 737-700, with minimal design changes other than those required to accommodate more advanced engines and two additional rows of seats. Accordingly, the two models fill a very similar role in airline fleets: serving virtually the same short- and medium-range missions where passenger loads will be too great to be carried by regional jets and too small to be operated efficiently by larger LCA. The two models are therefore interchangeable.

And as noted above, a range of key performance characteristics for the CS300 and the Boeing 737-700 and 737 MAX 7 are approximately the same—*i.e.*, physical size, passenger capacity, and cargo capacity. Furthermore, the ranges of the Boeing 737-700 and 737 MAX 7

¹²⁵ In particular, the Boeing 737-700 has a standard two-class seating capacity of 126 passengers (versus 126 for the 737 MAX 7); an overall length of 110' 4" (versus 116' 9" for the 737 MAX 7); a wingspan of 117' 5" (versus 117' 10" for the 737 MAX 7); and a cargo capacity of 966 cubic feet (versus 956 cubic feet for the 737 MAX 7).

¹²⁶ Bombardier, Bombardier CS100 fact sheet, attached as Exhibit 86; Bombardier, Bombardier CS300 fact sheet, attached as Exhibit 87.

are similar to each other and to those of the CS100 and CS300. Thus, the Boeing 737-700 and 737 MAX 7 each can serve virtually the same routes, and can serve the same routes as the subject merchandise. All of these Aircraft offer airlines the ability to carry passengers on missions that could not be served efficiently by regional jets or larger LCA and are therefore interchangeable.

c) The Boeing 737-700 and 737 MAX 7 have similar production processes

Final assembly of all 737 LCA occurs at Boeing's production facility in Renton, Washington.¹²⁷ When it enters production, the 737 MAX 7 will be produced in the same Renton production facility, on much of the same equipment, and according to a process very similar to that used to produce the 737-700.

d) The subject merchandise and the Boeing 737-700 and 737 MAX 7 have similar channels of distribution

Bombardier markets and sells the CS100 and CS300 directly to airlines and lessors, as Boeing does with the 737-700 and 737 MAX 7.

e) Customers and producers perceive the subject merchandise and the Boeing 737-700 and 737 MAX 7 to be like products

Given their similar size, capacity, range and other performance traits, airlines consider the C Series and the Boeing 737-700 and 737 MAX 7 to be like products. For example, in the United sales campaign (discussed above), United considered buying CS100 Aircraft at Bombardier's dumped and subsidized prices, but it chose to purchase Boeing 737-700s instead []. Bombardier likewise understands that the Boeing 737-700 and 737 MAX 7 are the only U.S. models that compete with the C Series. For example:

¹²⁷ This includes larger 737 models that fall outside the 100- to 150-seat market—i.e., the 737-800, 737-900ER, 737 MAX 8, 737 MAX 200, and 737 MAX 9.

- A Bombardier slide from an investor presentation compares the CS100 and CS300 with competing aircraft. The only U.S.-produced aircraft listed is the Boeing 737 MAX 7.¹²⁸ (The 737-700 is presumably omitted because it will be replaced by the 737 MAX 7 by 2019.)
- Another Bombardier slide from the same investor presentation identifies the 100- to 150-seat aircraft market as being split between the CS100, the CS300, the Boeing 737 MAX 7, and other aircraft that are not produced in the United States (*i.e.*, the Airbus A319neo and the Embraer E-190-E2 and E-195-E2).¹²⁹ (Similarly, the 737-700 is presumably omitted because it will be replaced by the 737 MAX 7 by 2019.)
- A Bombardier slide from a different 2015 investor presentation describes the supposedly “under-served” 100- to 150-seat market. The LCA that compete in this market are identified as the CS100, CS300, the Boeing 737 MAX 7, and several aircraft not produced in the United States (*i.e.*, the Airbus A319 and the Embraer E-190-E2 and E-195-E2).¹³⁰ (Again, the 737-700 is presumably omitted because it will be replaced by the 737 MAX 7 by 2019.)

Moreover, a Bombardier sales executive has observed that the C919 large civil aircraft being developed by COMAC of China, which has standard two-class seating capacity of 156 passengers, does not compete head to head with the C Series and is instead a complementary product for fleet planning purposes.¹³¹ Thus, Bombardier has targeted the market for aircraft with 100 to 150 seats, and the only U.S. aircraft in that market are the Boeing 737-700 and 737 MAX 7.¹³²

This definition of the domestic like product is also confirmed by industry observers. For example, an article in *Forbes* stated that “the CS300 directly challenges . . . Boeing’s 737-700/7,” *i.e.* the Boeing 737-700 and the 737 MAX 7.¹³³ In addition, the article noted that “{t}he

¹²⁸ Bombardier, 2015 Investor Day Presentation, at 56 (Nov. 24, 2015), attached as Exhibit 33.

¹²⁹ *Id.* at 60.

¹³⁰ Yan Lapointe, Manager, Investor Relations, Bombardier, “Investor Presentation,” at 25 (Nov. 2015), attached as Exhibit 48.

¹³¹ See Fan Yang & Siva Govindasamy, *Bombardier could extend COMAC accord to building jets in China JV: executive*, Reuters (Nov. 12, 2014), attached Exhibit 94.

¹³² See also *supra* note 104.

¹³³ Scott Hamilton, *David Versus Two Goliaths: Bombardier Takes On Airbus And Boeing*, *Forbes* (June 29, 2016), attached as Exhibit 89.

CS300 doesn't compete with the A320/321 and 737-8/9."¹³⁴ Another example is an article in *Leeham News*, a trade publication, headlined, "Assessing the 100-149 Seat Sector."¹³⁵ Such statements acknowledging the existence of a 100- to 150-seat market both reflect and influence customer and producer perceptions.

Finally, Boeing's own internal market analyses, which were not prepared for purposes of this proceeding or any other litigation, confirm that the 737-700 and 737 MAX 7 are the only aircraft in its product line that compete against Bombardier's C Series aircraft. [

].¹³⁷ Accordingly, the domestic like product is limited to the Boeing 737-700 and 737 MAX 7.

f) The Boeing 737-700 and 737 MAX 7 are the only U.S. LCA capable of competing on price with the C Series

The Boeing 737-700 and MAX 7 are the only LCA currently produced in the U.S. that are capable of competing on price with the C Series to meet demand for 100- to 150-seat Aircraft—and even then, Boeing is prevented from actually competing due to Bombardier's unfair trading practices. By contrast, Boeing's other LCA, from the 737-800 and 737 MAX 8 to the 747-8I and 777-9, have far too many seats to meet demand at a price that would be acceptable to customers in the 100- to 150-seat market.

For example, a customer wishing to regularly carry 125 customers in a standard two-class seating configuration will seek to minimize the number of unfilled seats on such missions.

¹³⁴ *Id.*

¹³⁵ *Assessing the 100-149 Seat Sector*, *Leeham News* (Oct. 12, 2014), attached as Exhibit 95.

¹³⁶ *Boeing Internal Presentation No. 2*, at 5 [], attached as Exhibit 96.

¹³⁷ *Id.* at 6.

Because they have appropriate seating capacities, Boeing's 737-700 and 737 MAX 7 can be priced—under fair conditions of competition—at levels that are attractive for the customer and competitive against other 100- to 150-seat Aircraft. In contrast, other Boeing LCA, such as the 737 MAX 8 or 737 MAX 9, are significantly larger, forcing the customer to bear higher operating costs without any passenger revenue benefit. [

] from the perspective of the manufacturer. Thus, Boeing LCA other than the 737-700 and 737 MAX 7 do not compete with the subject merchandise.

3. Boeing is the only member of the domestic industry

The statute defines the term “industry” as “the producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”¹³⁸ The Department typically determines whether there is sufficient industry support with reference to production over the most recently completed calendar year.

As discussed above, the domestic like product only includes the Boeing 737-700 and 737 MAX 7. For many years, Boeing has accounted for 100% of the domestic industry's production of Aircraft,¹³⁹ and Boeing's status as the sole U.S. Aircraft producer is projected to last until

¹³⁸ 19 U.S.C. § 1677(4)(A).

¹³⁹ See 100- to 150-Seat Large Civil Aircraft in the U.S. & Global Markets, Actual & Projected Deliveries & Market Share (2007-2021), with underlying Ascend Database, & Ascend Backlog Database, attached as Exhibit 44.

2019.¹⁴⁰ Boeing is therefore the only member of the domestic Aircraft industry, and Boeing's operations related to the 737-700 and 737 MAX 7 (and no other products) constitute the entire domestic industry.

F. Pricing Products and Related Information-Collection Issues

Boeing requests that the Commission collect pricing information as follows:

- To ensure that pricing data is analyzed in accord with normal industry practices, pricing should be collected on a model-specific basis (*e.g.*, for the Boeing 737-700 and 737 MAX 7, and the Bombardier CS100 and CS300);
- To ensure that the Commission is able to distinguish among prices set years ago, very recent pricing, and likely pricing in the imminent future, model-specific pricing data should be collected in several forms: average order prices; average delivery prices; average prices for deliveries scheduled in the future; customer-specific order, delivery, and scheduled delivery prices for U.S. sales; initial and final price bids in individual U.S. sales campaigns; and any other offers for sale to U.S. customers;
- To ensure that the Commission obtains price data from a time period long enough to allow for a meaningful assessment of price trends in this industry—where compared to most other industries, orders are placed infrequently and long before delivery, for very high-value, long-lived products—average price data should be collected over a period starting in 2007 (the year before the C Series was formally launched) and ending in 2021 (when Aircraft delivery prices in the U.S. market will still reflect the very low pricing conditions Bombardier set in 2016); and
- To ensure that the Commission is best able to account for factors affecting price comparisons, it should collect pricing information net of all discounts as well as the value of ancillary items (such as entry-into-service and training support, and residual value guarantees), and the net present value calculations performed by U.S. customers at the time they evaluated producers' offers.

¹⁴⁰ While most of its aircraft production has long occurred in Europe, Airbus in July 2015 commenced production of its A320 Family single-aisle aircraft at a final assembly facility in Mobile, Alabama. See Airbus website, "Airbus in the U.S.—Alabama," available at <http://www.airbus.com/company/americas/us/alabama/> (last accessed June 15, 2016), attached as Exhibit 67. Airbus did not produce any completed aircraft at its Mobile facility in 2015, however. See *id.* ("This facility commenced aircraft assembly in July 2015, and delivered its first completed aircraft—an A321—in April 2016 to U.S. customer JetBlue."). Moreover, only two of Airbus' current A320 Family models can be classified as Aircraft (*i.e.*, the A319ceo and A319neo), and as of December 31, 2016, neither of these models had been fully produced (*i.e.*, "delivered") by Airbus' Mobile facility. Looking forward from the opening of the Mobile facility, projected delivery data indicate that Airbus will not produce an A319ceo or A319neo for a U.S. customer until 2019. See 100- to 150-Seat Large Civil Aircraft in the U.S. & Global Markets, Actual and Projected Deliveries and Market Share (2007-2021), with underlying Ascend Database, & Ascend Backlog Database, attached as Exhibit 44.

III. CONDITIONS OF COMPETITION

Aircraft are complex, high-technology capital assets with per-unit prices in the tens of millions of dollars and generally have useful lives of about twenty-five years.¹⁴¹ Customer purchases are infrequent and low-volume (as compared, for instance, to a basic materials or agricultural industry), but the values are high, with individual purchases regularly running into the billions of dollars. Competition in this industry is also characterized by a number of other distinctive conditions, as discussed below.

A. Supply Conditions

Basic supply economics. Aircraft development and production is risky and extremely capital intensive, with high fixed costs. Designing and producing competitive Aircraft requires enormous up-front costs, including billions of dollars in development costs, years before a new product is delivered to a customer; continuous R&D expenditures to improve existing products and prepare technologies for application on future products; and massive capital expenditures to stand up and sustain production operations. An unsubsidized producer's ability to make these expenditures depends on cash flows from Aircraft sales, which must also provide an adequate return for investors. Lost sales and lost revenues, which include loss of immediate advance payments due at signing of a purchase agreement, periodic advance payments, and final payments, can significantly burden day-to-day production operations and hamper the new product development necessary to sustain future growth and profitability. The industry's high fixed costs also make it crucial to maximize production rates and thereby decrease unit costs.

Given the costs and risks of Aircraft development, producers operating under market constraints are only able to offer a limited number of Aircraft choices at any particular time.

¹⁴¹ Dick Forsberg, Avolon, "Aircraft Retirement and Storage Trends: Economic Life Analysis Reprised and Expanded" (Mar. 2015) at 1, attached as Exhibit 97.

Accordingly, producers must predict the needs of the market years in advance, and must produce Aircraft that efficiently meet the projected needs of multiple customers, which have a variety of preferences. To maximize returns on investment, producers often develop derivative models of Aircraft that incorporate a limited number of new, high-impact technologies (such as new engines) into an existing Aircraft design. All the while, producers constantly weigh the likely returns from derivative products against investing in an all-new Aircraft program, attempting to predict whether demand will be sufficient to provide an adequate return in light of competition from existing Aircraft, projected future demand, and the historical commercial performance of older models.

Competition for orders. Producers work hard to win Aircraft orders. To sustain existing production systems and to plan for (and fund) future development, Aircraft producers aim to operate with an order backlog that would take several years to fulfill. Orders almost always precede deliveries by several years. There is thus a significant lag time between orders and deliveries. However, the key purchase terms—including product type, volume, price, pre-delivery payments, and delivery dates—are set at the time of order and formalized in contractually binding obligations. Pursuant to the order contract, it is standard for producers to receive an initial deposit at the time of firm order, followed by significant pre-delivery payments made in installments prior to delivery (when the balance of the purchase price is due). For an unsubsidized producer, such pre-delivery payments are a critical source of cash flow to fund production operations, particularly during the early years of an Aircraft production program, when costs are highest because the learning curve and cash outlays are steepest.¹⁴² The rate of

¹⁴² See, e.g., Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016) (quoting Bombardier's CFO as stating: "we relaunched the C series {with} marquee orders that re-energized the program filling delivery slots in the steep part of the production learning curve. . . . These orders created significant value for Bombardier by filling the skyline at a critical time and they generated the sales momentum that we are now experiencing."), attached as Exhibit 11.

decline in costs on the learning curve is directly related to the production rate of the aircraft, making it essential to maximize such rates.¹⁴³ A lost order therefore has an immediate, detrimental financial impact on a producer. This is particularly true given that there are only a limited number of available sales in any given year as each customer tends to place orders only occasionally, in part because sales campaigns are time-consuming and costly for both producers and customers.¹⁴⁴ Thus, when orders occur, they tend to be large (relative to the size of the customer's fleet). Under these circumstances, a lost sale is truly lost—not simply replaced with another sale—resulting in reduced revenue and higher costs in both the short- and long-term. Orders placed by large, financially sound customers are highly likely to result in deliveries as planned, while orders by struggling customers present a higher risk of cancellation or deferral.

Deliveries. Aircraft purchases usually require an initial payment at the time of firm order, followed by pre-delivery payments at contracted intervals, and final payment at delivery.¹⁴⁵ Accordingly, a lost sale, or lost revenue from a sale made at depressed prices, has injurious effects far beyond the initial impacts on cash flows (through lost pre-delivery payments) and a product's market position (through lost commercial momentum as the lost sale

¹⁴³ See generally Learning & Experience Curves in Manufacturing, available at http://www.strategosinc.com/articles/strategy/learning_curves.htm (last accessed Apr. 12, 2017), attached as Exhibit 98.

¹⁴⁴ See generally Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/R, adopted June 1, 2011, para. 7.1726 (“The long-term viability of an LCA producer depends on continued innovation and periodic launches of new aircraft as technological advances and market conditions allow. Thus, there is a need for both Boeing and Airbus to secure a continuous stream of orders and deliveries to be able to generate the necessary economies of scale and learning curve cost reductions to remain competitive in the long term. In addition, orders are crucial for a newly launched LCA model to be successful, due to the substantial economies of scale in production as well as the steep learning curve cost reductions generated thereby.”), attached as Exhibit 17; *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, U.S. First Written Submission (Nov. 15, 2006), para. 115 (“Since the initial development investment is essentially a sunk cost and is incurred well before revenues are received, the size of these non-recurring costs is a key element affecting an aircraft program’s risk and expected profitability. If a program is successful, the up-front investment is eventually recovered with margins earned on each aircraft delivery. Given the typical magnitude of program non-recurring costs, however, hundreds of sales are usually required before a program reaches its break-even point. If a program fails to reach break-even sales, the remainder of the non-recurring costs must instead be written off as a loss.”), attached as Exhibit 45.

¹⁴⁵ As an accounting matter, producers generally recognize sales revenues, including pre-delivery payments, and associated financial results when Aircraft are delivered.

adversely affects the attractiveness and expected pricing of a product, as perceived by other customers). The lost sale will also result in loss of the revenue that would have been received at the time of delivery and in lower projected future revenue, which in turn adversely affect budgets for much needed operational spending, including outlays for production improvements, R&D, and new development programs. Accordingly, every lost sale or sale made at depressed prices causes both immediate harm and negative financial impacts that reverberate for years to come.

B. Demand Conditions

Demand drivers. U.S. demand for Aircraft generally tracks U.S. demand for passenger air travel, which in turn roughly correlates with U.S. GDP (subject, of course, to destabilizing events such as terrorism, war, disease, etc.). U.S. passenger demand for travel on routes served by Aircraft is highly sensitive to price, which drives Aircraft customers to aggressively seek aircraft pricing that will enable them to compete effectively on price for passenger fares.

Customer characteristics. Customers for the Aircraft consist of airlines and leasing companies. They are sophisticated purchasers, well aware of the characteristics and market position of the producers' Aircraft, as well as market pricing conditions.

Customer purchase decisions. Customer purchase decisions are typically made at the conclusion of a sales campaign lasting several months and featuring multiple bids from each participating producer. Because Aircraft have comparable performance characteristics, price is a critical factor in customer purchase decisions. Therefore, where a subsidized producer offers pricing well below its cost of production, an unsubsidized producer is unlikely to be able to compete; indeed, a prospective customer may not even invite an offer for the unsubsidized producer's Aircraft.

Price transmission. Customers demand Aircraft prices commensurate with the pricing obtained by their competitors. For example, if a major U.S. airline recently purchased Aircraft at

extremely low prices, other U.S. airlines will demand similar pricing so they can compete on passenger fares. Such demands can be made in a formal sales campaign involving multiple producers. They can also be made by a customer to its long-time Aircraft supplier in connection with potential incremental orders for an incumbent product, with the understanding that failure to provide such concessions will result in bidding being opened up to other producers. Price transmission effects are facilitated by the fact that Aircraft customers are sophisticated players, the industry is relatively small, and the results of Aircraft sales campaigns are often well publicized. Thus, customers are normally able to obtain past pricing information about Aircraft that they want to purchase.

Commercial momentum. Aircraft sales are subject to both positive and negative feedback cycles, sometimes referred to as “commercial momentum,” whereby sales tend to lead to more sales and loss of sales to more losses. This is due to a number of factors. First, airlines generally seek to order Aircraft that are favored by other airlines, particularly large, well-respected ones. In part, this is driven by a mentality of imitating competitors, but there are also real economic advantages to ordering the Aircraft that are popular in the market. Such Aircraft tend to have higher residual values, are easier to finance, are more likely to offer superior lifetime support costs, and are less likely to have their production terminated prematurely.¹⁴⁶ The latter is important because, among other benefits, it assures the customer of the ability to order additional units at a later time. A customer is therefore more likely to buy an Aircraft that

¹⁴⁶ See, e.g., Thomas L. Boeder & Gary J. Dorman, *The Boeing/McDonnell Douglas merger: the economics, antitrust law and politics of the aerospace industry*, Antitrust Bulletin, at 138–39 (2000) (“When purchasing a new airplane today, most buyers want to be confident that their supplier will still be in business in {two decades}. This is true even if a particular airline has a policy of removing older airplanes from its own fleet, because the residual values of those airplanes when sold will depend upon continuing manufacturer support. If airlines have serious doubts about a potential supplier’s long-run viability in the business, they will be reluctant to purchase airplanes, even at steeply discounted prices. Over time, even a perceived weakness can become a self-fulfilling reality as a manufacturer with sluggish sales cuts back on product development, thereby creating further doubts about its viability and further reducing its sales.”), attached as Exhibit 46.

is made by a producer with sound finances and that has been ordered by large, well-respected airlines, as compared to an Aircraft made by a potentially insolvent producer and purchased only by struggling airlines. Second, momentum affects the rate at which a producer moves down the learning curve and lowers its marginal cost of production. An Aircraft producer with weak commercial momentum will find it difficult to lower its marginal costs because it has a relatively small backlog of orders over which to reap the benefits of learning by doing. The producer will thereby be constrained in its ability to offer competitive pricing, increasing the likelihood that the sales slump continues. Third, weak momentum also limits a producer's ability to realize economies of scale in the form of volume discounts on input purchases that would otherwise lower marginal costs and improve pricing flexibility. Ultimately, the downward spiral can become irreversible, leading to both the premature end of an Aircraft program and significant losses as low order volume drives higher per-unit costs and fails to cover the large non-recurring costs incurred at the program's start. For these reasons, a producer with a low-quality order book has an incentive to aggressively pursue new orders from prominent customers, both to guard against cancellation of existing orders and to gain commercial momentum for yet more sales.¹⁴⁷

C. Substitutability

The C Series is substitutable, and competes on price, with the domestic like product, as discussed above at Section II.E.

¹⁴⁷ See, e.g., Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016) (quoting Bombardier's CEO as stating that "Fred and the BCA leadership team have created tremendous momentum with 127 firm orders and 80 options in the first half of 2016"), attached as Exhibit 11; Douglas Royce, *Major Delta Order Boosts Struggling C-Series Program*, Forecast International (Apr. 29, 2016) ("Delta's embrace of the CS100 gives the aircraft the stamp of approval from a major player in the American market, the most important single market in the regional jet industry, and will help Bombardier sell the C-Series to other carriers. Delta was in a position to drive a hard bargain. Bombardier valued the order at approximately \$5.6 billion based on the list price of the CS100, but the price Delta paid is undoubtedly much lower than that."), attached as Exhibit 99; Aaron Karp, *Winners and losers from Delta's C-series order*, ATWOnline (May 3, 2016) ("There's no question this is an industry-accepting order' for the C-Series, {Bombardier Senior Vice President Colin} Bole said. Yes, Air Canada committed to the C-Series in February, but a major US airline has always been the big prize for Bombardier."), attached as Exhibit 100.

IV. THE SUBJECT IMPORTS THREATEN THE DOMESTIC INDUSTRY WITH MATERIAL INJURY

Bombardier's dumped Aircraft and subsidized pricing in the U.S. market set a new, low price anchor that is already threatening to depress the domestic industry's revenues and operating margins. In the United campaign, Bombardier's actions [

].¹⁴⁸ Subsequently, in the Delta sales campaign, Bombardier acted aggressively to assure itself a crucial victory in the U.S. market by undercutting any possible Boeing competition with a price for 75 C Series Aircraft (with options for 50 more) of **USD 19.6 million per aircraft**—far less than either its cost of production (USD 33.2 million per aircraft) or the below-cost pricing that it had recently charged in its home market to Air Canada (USD 30 million per aircraft). Bombardier boasts that the Delta sale and the most recent subsidies it has received give it “good momentum” to “transition{} into the production ramp up and revenue generation phase of the {C Series} program,”¹⁴⁹ and confirms that Bombardier has both the capacity and the intent to continue to harm the domestic industry by increasing its U.S. Aircraft market share. In other words, Bombardier's “good momentum” is possible only because of its strategy of taking sales with subsidized and dumped pricing to the detriment of the domestic industry. Further, to have any chance whatsoever of achieving long-term program viability, Bombardier must greatly increase its sales and deliveries to the all-important U.S. market.

Even when Bombardier sales campaigns fail, they directly harm the domestic industry by depressing market pricing. Without the imposition of antidumping and countervailing duty orders, Bombardier's unfair trading practices will continue unabated, increasing its penetration of the U.S. market at Boeing's expense and further depressing the domestic industry's prices and

¹⁴⁸ Affidavit of [], attached as Exhibit 101. See also Affidavit of [], attached as Exhibit 102.

¹⁴⁹ Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016), attached as Exhibit 11.

profitability. Accordingly, Bombardier's subsidized and dumped imports threaten to cause material injury to the domestic industry.

In threat cases, the Commission considers whether the domestic industry is vulnerable to material injury, and the vulnerability need not be caused by subject imports.¹⁵⁰ The Act also directs the Commission to consider "relevant economic factors" in its threat analysis, including:¹⁵¹

- *Nature of Subsidies*: "nature of {any countervailing} subsidy {at issue} (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,"
- *Capacity*: "any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,"
- *Market Penetration*: "a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,"
- *Adverse Price Effects*: "whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports," and
- *Negative Effects on Product Development and Production*: "the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product."

Considering these factors "as a whole," the Commission must determine "whether further dumped or subsidized imports are imminent and whether material injury by reason of imports

¹⁵⁰ See *Consolidated Fibers, Inc. v. United States*, 32 CIT 820, 829 (2008) (recognizing that "industry vulnerability may be caused by factors other than subject imports"); *Tin- & Chromium-Coated Steel Sheet from Japan*, Inv. No. 731-TA-860, USITC Pub. No. 4325, at *21 n.203 (May 2012) (stating that "the existence of other economic factors that may be causing difficulties for a U.S. industry does not preclude a finding that an industry would experience material injury from subject imports").

¹⁵¹ See 19 U.S.C. § 1677(7)(F)(i)(I), *et seq.*

would occur unless an order is issued”¹⁵² As the Commission and the Court of International Trade have recognized, “{a}n affirmative threat determination must be based upon ‘positive evidence tending to show an intention to increase the levels of importation.’”¹⁵³

Here, the evidence demonstrates much more than “an intention to increase the levels of importation.” Sales of the subject merchandise have already occurred, and both significantly increased subject imports and material injury *will occur* in the absence of U.S. antidumping and countervailing duty orders:

- *Vulnerability*: The domestic industry is vulnerable to material injury because it requires high cash flow levels to sustain production operations and new product development, because demand is concentrated in a few U.S. customers making large but infrequent purchases, and because competition from subsidized Bombardier Aircraft [].
- *Nature of Subsidies*: By their nature, the massive subsidies at issue in this proceeding enable the C Series program to exist, where under commercial conditions it would already have failed more than once. The subsidies have also enabled Bombardier to price aircraft far below commercial prices, resulting in a new, low price anchor in the domestic market. And the subsidies have done more than provide a financial crutch, they have signaled to domestic purchasers that it is safe to risk purchasing a new, untested product, given the C Series’ strong government backing.
- *Capacity*: Bombardier has already established the capacity to produce the subject merchandise needed to fulfill the Delta order, and Bombardier is engaged in a production ramp-up that will enable it to make further inroads into the U.S. market.¹⁵⁴
- *Market Penetration*: Subsidized and dumped C Series orders have already locked in a significant, imminent increase in subject import volumes, as well as market share gains at the expense of the domestic industry. Commercial momentum and the credibility that comes with strong government backing will enable further market penetration.

¹⁵² See 19 U.S.C. § 1677(7)(F)(ii).

¹⁵³ *Large Newspaper Printing Presses from Germany and Japan*, Nos. 731-TA-736-737, USITC Pub. 2988 at 78 n.219 (1996) (Final) (quoting *Metallwerken Nederland B.V. v. United States*, 744 F. Supp. 281, 287 (CIT 1990)).

¹⁵⁴ See Stephen Trimble, *Bombardier details five-year C Series ramp-up*, FlightGlobal (Nov. 24, 2015), attached as Exhibit 103.

- *Adverse Price Effects:* Subsidized and dumped C Series pricing has already severely depressed pricing conditions for the domestic like product, as exemplified by the United and Delta sales. Bombardier's cut-rate pricing will continue to have such adverse effects because other U.S. customers will demand Aircraft prices similar to what Bombardier has been offering in its bid to dominate the U.S. market.
- *Negative Effects on Product Development and Production:* Bombardier's dumped and subsidized sales []

Each of these points is detailed in the following subsections.

Based on the Act and the Commission's practice, the facts in this case compel a finding that there is a threat of material injury. In *Large Newspaper Printing Presses*,¹⁵⁵ the Commission considered an industry that, like the Aircraft industry, featured long-lived, high-value products,¹⁵⁶ a critical need to fund R&D from sales revenues,¹⁵⁷ no sales from inventory,¹⁵⁸ the U.S. market as the "natural focal point for the marketing efforts" of all suppliers,¹⁵⁹ "a relatively small number of sales in any given year";¹⁶⁰ highly competitive head-to-head bidding for sales;¹⁶¹ long lags between orders and deliveries, along with installment payments and extended delays in accounting for the full financial impact of a sale or its loss;¹⁶² and significant adverse price effects from the subject merchandise "even when the domestic producers actually win the sale."¹⁶³ Notwithstanding the LNPP industry's positive financial performance "because of contracts awarded earlier in the period,"¹⁶⁴ the Commission found it to be vulnerable and threatened with material injury:

¹⁵⁵ *Large Newspaper Printing Presses and Components Thereof, Whether Assembled or Unassembled, from Germany and Japan*, Inv. No. 731-TA-736, 737, USITC Pub. 29889 (Aug. 1996) (Final).

¹⁵⁶ *Id.* at *31.

¹⁵⁷ *Id.* at *18.

¹⁵⁸ *Id.* at *9.

¹⁵⁹ *Id.* at *19.

¹⁶⁰ *Id.* at *7.

¹⁶¹ *Id.* at *12.

¹⁶² *Id.* at *31.

¹⁶³ *Id.* at *15.

¹⁶⁴ *Id.* at *16.

Although we have concluded that the domestic industry at present appears to be in relatively good financial condition, given the distinctive characteristics of this market, the financial condition of the industry is likely to deteriorate quickly in the near future. . . . Consequently, because of the delay of financial effects of the contracts awarded on industry performance, the full adverse impact of these lost sales will only be reflected in the domestic industry's financial results in the near future.¹⁶⁵

Key factors underlying the Commission's determination included the price suppression and depression that would likely result from the presence of the subject merchandise in the bidding process, regardless of whether it won the sales; a recent, significant increase in sales awarded to the subject merchandise; and a small number of imminent sales, which would intensify competition and aggressive pricing of the subject merchandise.¹⁶⁶

Similar circumstances prevail here. The United sale shows both how quickly the domestic industry's financial condition can deteriorate, and how the presence of the dumped and subsidized C Series in the bidding process causes significant price depression; C Series sales in the U.S. market recently surged with the 75 orders placed by Delta; and producers will compete intensely for the sales available from the few major customers that remain. Likewise, the Commission has found that, in an industry with a small number of repeat customers, "even a modest rise in import penetration would cause a significant diminution of domestic producers' market share and profitability and cause material injury to the domestic industry."¹⁶⁷ The same is true here. For instance, the subsidized and dumped C Series sale to Delta will cause subject imports' market share to jump from zero (its current level) to more than 60% of U.S. consumption, on average, during the 2018-2021 period.¹⁶⁸

¹⁶⁵ *Id.* at *17.

¹⁶⁶ *Id.* at *17-18.

¹⁶⁷ See *Certain Laser Light-Shattering Instruments and Parts Thereof from Japan*, Inv. No. 731-TA-455, USITC Pub. 2328, at *8 (Nov. 1990) (Final).

¹⁶⁸ See 100- to 150-Seat Large Civil Aircraft in the U.S. Market, Actual and Projected Deliveries and Market Share (2007-2021), with underlying Ascend Database, attached as Exhibit 44.

In addition, Congress has made clear that an industry need not show that it is actually losing money to establish material injury or threat of material injury.¹⁶⁹ This imperative is particularly strong in the context of the Aircraft industry, where significant positive margins are critical to healthy operation, given the long lead times for developing new products and the extraordinarily high fixed costs and commercial risks associated with both current production and new product development. Moreover, because of the long lead times, current and near-term profits largely reflect revenues from orders placed years ago, rather than recent sales of the domestic like product that have been affected by Bombardier's dumping.

In this case, the domestic industry's condition is poised to deteriorate. Bombardier's aggressive pursuit of United, and its successful, below-cost sale to Delta, have already secured more than two-thirds of the U.S. market for the C Series and signaled to customers that they should expect lower prices. Capitalizing on its self-described "tremendous momentum,"¹⁷⁰ Bombardier is pursuing additional orders in the U.S. market, and customers have every reason to demand the deal Delta received. To avoid losing customers and market share to Bombardier, the domestic industry will have to match subsidized and dumped C Series pricing. Even a single successful sale under such pressure [

].

¹⁶⁹ In the Trade Preferences Extension Act of 2015, Congress amended the ITC's injury criteria to make clear that profitable industries are entitled to relief from unfairly traded imports: "The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved." See Trade Preferences Extension Act of 2015, Sec. 503(a), codified at 19 U.S.C. § 1677(7)(J).

¹⁷⁰ Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016), attached as Exhibit 11.

Absent a remedy, the domestic industry will lose significant sales and still more market share, while suffering depressed prices, profits, and returns on assets. With depressed prices, a small base of orders over which to spread fixed costs, and poor commercial momentum, the new 737 MAX 7 program is [

].

The Commission and the U.S. Court of International Trade have both recognized that a single sale can have a powerful “lighthouse effect” that increases the likelihood of material injury.¹⁷¹ The lighthouse effect begins with a prominent, low-priced sale of subject merchandise in a low-volume/high-value industry where other customers have good information.¹⁷² The lighthouse sale creates an expectation among those other customers that similar imports “will be offered at that same low price in the future, resulting in further aggressive bidding.”¹⁷³ In such a situation, the Commission has “concluded that the prospect of lower prices for similarly performing products reinforces the imminence of increased imports.”¹⁷⁴

The lighthouse effect has already occurred here. Bombardier sold to Delta at such low prices that it was forced to record an approximately USD 500 million onerous contract provision¹⁷⁵—essentially, a public admission that the costs of producing the Aircraft will “exceed the economic benefits expected to be received under it,” including any indirect benefits

¹⁷¹ See *NEC Corp. v. Dep’t of Commerce*, 23 CIT 987, 996 (1999) (“Furthermore, the Commission pointed to evidence on the record that key terms of supercomputer contracts, including price and performance values, are often disclosed post-sale to other buyers, both commercial and government, leading to an expectation among buyers of a similar low price for the same performance level in future bids. This ‘lighthouse effect’ will have the consequence . . . of creating an expectation among buyers that similarly performing imports will be offered at that same low price in the future, resulting in further aggressive bidding. The Commission concluded that the prospect of lower prices for similarly performing products reinforces the imminence of increased imports . . .”).

¹⁷² See *id.*

¹⁷³ See *id.*

¹⁷⁴ See *id.*

¹⁷⁵ Bombardier Inc., First Quarterly Report—Q1 2016, at 68, attached as Exhibit 4. The onerous contract provision covered losses related to Delta’s orders for 75 CS100s, Air Canada’s orders for 45 CS300s, and Air Baltic Corporations’ orders for 7 CS300 aircraft. *Id.*

anticipated from “loss leader” pricing.¹⁷⁶ Nonetheless, as industry reports have observed, the Delta sale “gives the aircraft the stamp of approval from a major player in the American market” and “will help Bombardier sell the C Series to other carriers.”¹⁷⁷ Bombardier will, however, have little choice but to offer those carriers similarly subsidized low prices.¹⁷⁸ And Boeing will be faced with the choice to either match those abnormally low prices or cede the market to Bombardier.

In sum, positive evidence demonstrates the severe harm the domestic industry faces if orders are not issued. The following subsections show that each relevant economic factor supports an affirmative determination of threat of material injury.

A. Vulnerability: The Domestic Industry Is Vulnerable to Material Injury

At least three factors demonstrate that the domestic industry is vulnerable to material injury from subject imports: (1) the domestic industry competes in a risky, capital-intensive business and needs to maintain cash flows sufficient to fund both current production operations and new product development; (2) it is susceptible to rapid declines in revenues and profitability, []; and (3) it is at risk for [], as it competes for sales against the C Series.

First, Boeing, currently the sole domestic producer, is heavily dependent on cash flows from sales to satisfy the large capital requirements imposed by current production operations and new product development. Without a healthy flow of orders and the resulting revenue, and/or with sales at a lower-than-anticipated price point due to Bombardier’s dumped and subsidized

¹⁷⁶ See PricewaterhouseCoopers, IFRS Manual of Accounting, paras. 21.161, 21.168-21.169 (interpreting accounting principles for such provisions).

¹⁷⁷ Douglas Royce, *Major Delta Order Boosts Struggling C Series Program*, Forecast International (Apr. 29, 2016), attached as Exhibit 99.

¹⁷⁸ Tim Hepher & Victoria Bryan, *Bombardier faces discount headache as C Series sales take off*, Reuters (June 4, 2016), attached as Exhibit 36

sales, Boeing []. The loss of sales will not just impact its current Aircraft programs, but will also cause Boeing to lose the ability to support future Aircraft program development, which requires significant investment on the front end for products that take years to develop and may not become profitable for a decade or more. Further, losing sales—and the price transmission effect of Bombardier’s dumped pricing even in sales Boeing wins—causes Boeing to carry the cost of development investment longer than it otherwise should, thus increasing the size of investment and depressing revenue and returns. Unlike Bombardier, Boeing cannot rely on government subsidies to fund development expenditures, or to save it if costs run billions over budget. Boeing is therefore under intense pressure to achieve cash flow from fairly priced sales that will satisfy the capital requirements of the business, fund the development of the new products and technologies that are essential for long-term viability, *and* provide an adequate return to shareholders. A significant source of this cash flow is pre-delivery payments that begin shortly after customer orders. Accordingly, lost sales, and sales made at depressed prices, have both immediate and long-lasting impacts on the domestic industry that undermine its ability to operate in a sustainable fashion.

Second, because of the concentrated nature of demand and purchasing—with a few customers placing a few, very large orders—the domestic industry’s financial condition is susceptible to rapid deterioration. In fact, even if won by Boeing, a single sale can have a materially injurious effect on the domestic industry’s financial condition where it is made under pressure from dumped and subsidized C Series pricing.

In January 2016, Boeing succeeded temporarily in preventing Bombardier from taking the United business, but at great cost. Boeing was forced, in a high-profile sales campaign, to signal that unfair competition from the C Series will result in lower prices for its products, and

[

J. Ray Conner, then CEO of Boeing Commercial Airplanes, explained:

{Boeing Commercial Airplanes CEO Ray} Conner also told employees that Boeing had lowered its price dramatically to win an order in January from United for 40 current-generation 737s against “aggressive” competition from the new Bombardier CSeries jet.

...

He recalled how Boeing had lost similar sales battles in the 1990s to the Airbus A320 {i.e., again, at United}, allowing that jet to gain traction against the 737.

...

“Ultimately we won, but I’m going to tell you, we got pushed to the wall,” Conner told his employees.¹⁷⁹

The dumped and subsidized C Series offering [

] These future sales may well include another competition with the C Series for United’s business, given the airline’s decision to switch its Boeing order to models outside the 100- to 150-seat market, along with Bombardier’s expectations of another sales opportunity.¹⁸⁰

Moreover, absent that decision by United, this single sale would have directly harmed Boeing’s financial condition, and by extension, that of the domestic industry as a whole. The domestic industry’s per-unit Aircraft revenues would have [

], while operating margins [

].¹⁸¹ The price-depressing effect of the subject

¹⁷⁹ Dominic Gates, *Price war, plane transitions put Boeing in financial crunch*, Seattle Times (Apr. 1, 2016), attached as Exhibit 104.

¹⁸⁰ See Aaron Karp, *Bombardier still hopeful for United Airlines CSeries order*, Air Transport World (Feb. 16, 2016) (quoting Ross Mitchell, Vice President—Commercial Operations for Bombardier Commercial Aircraft), attached as Exhibit 40.

¹⁸¹ Boeing Financial Data, attached as Exhibit 105.

merchandise in the United sale shows how susceptible the domestic industry is to material injury as a result of a single sale or handful of sales.

Third, the future of the domestic industry's competing Aircraft depends on the 737 MAX 7. []], with entry into service scheduled for 2019. The 737 MAX 7 is competing for orders against the C Series, which offers subsidy-enabled characteristics (such as an all-new design) at prices far below the cost of production. Aircraft customers are well aware of the market acceptance achieved by the available models as reflected in order backlog data. Market acceptance affects aircraft residual values, financing, and the perceived risks of operating a given model, among other things. A relatively small order book can therefore render additional orders less likely. For the 737 MAX 7, [

] despite significant investment that includes a very recent expenditure to increase the model's size and revenue potential.¹⁸²

B. *Nature of Subsidies: The Subsidies Are of the Type Described in Articles 3 and 6.1 of the WTO Subsidies Agreement, and They Enable C Series Aircraft to Exist*

In conducting its threat analysis, the Commission must consider the nature of any countervailable subsidies at issue, and it must give particular attention to the question whether any of the subsidies are of the type described in Article 3 or 6.1 of the WTO Subsidies Agreement. There are two main categories of subsidies at issue here, without which the C Series program would not exist: (1) launch aid and (2) equity infusions.

¹⁸² See Press Release, Boeing, "Boeing, Kunming Airlines Announce Memorandum of Understanding for 10 737 MAX 7 Airplanes" (July 12, 2016), attached as Exhibit 106.

As to the first category, the governments of Canada, Québec, and the UK committed in 2005 to provide launch aid for the C Series, the terms of which were eventually finalized by 2009.¹⁸³ The available evidence makes clear that these subsidies share the same characteristics that the United States cited when it challenged EU launch aid as prohibited export subsidies to Airbus.

Specifically, in the *European Communities – Large Civil Aircraft* dispute, the United States argued that EU launch aid for certain Airbus aircraft models was export contingent because the funding was tied to Airbus making repayments over a specified number of sales of the financed aircraft, and Airbus could not reach the number of sales that it needed to fulfill its repayment commitment without exporting.¹⁸⁴ Although the precise terms of the C Series launch aid are not publicly available, the same tie appears to exist here.¹⁸⁵ In addition, as noted above, the C Series plainly is export-oriented. Thus, under the reasoning that the United States advanced in the *European Communities – Large Civil Aircraft* dispute, the C Series launch aid is contingent upon export performance and therefore is “of the type described in Article 3” of the Subsidies Agreement.¹⁸⁶

The subsidies to the C Series are by nature particularly pernicious, as they create supply where none would otherwise exist, in a capital-intensive industry where producers have a strong incentive to maximize production. Every C Series Aircraft in existence exists only because of the subsidies. Moreover, subject imports will begin to occur in 2018 per the terms of

¹⁸³ See *infra* Section IV.B.

¹⁸⁴ See, e.g., Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/R, adopted June 1, 2011, paras. 7.582-7.586 (setting out the U.S. arguments), attached as Exhibit 17.

¹⁸⁵ See *infra* Section IV.B.

¹⁸⁶ SCM Agreement, Art. 3.1(a); 19 U.S.C. §1677(7)(E)(i).

Bombardier's recent sale to Delta. Thus, the subsidies threaten to cause a surge in subject imports where there would be zero Canadian Aircraft in their absence.

Canada, the European Commission, and Bombardier itself have examined these subsidies and concluded that they were necessary for the C Series program to survive. In particular, Industry Canada stated:

Had government funding not been available the timing of development of the C Series aircraft would have been delayed and design compromises would have had to be made to reduce costs. According to {Bombardier}, this would have reduced the number of jobs, impacted the ability of Bombardier to deliver a technically competitive product and limited Bombardier's ability to meet the market window for the aircraft. This would have jeopardized the viability of the development of the aircraft.¹⁸⁷

Similarly, the European Commission found:

{G}iven the inability of the financial markets and industrial partners to make available financing to Bombardier and Shorts, and taking account of the company's internal constraints, public funding is necessary to make the project possible.¹⁸⁸

Thus, without launch aid, the C Series program would not exist.

Moreover, because of Bombardier's cost overruns, the launch aid (and other subsidies to Bombardier) proved insufficient to keep the C Series program alive. As a result, Québec committed in the autumn of 2015 to provide two additional massive injections of subsidies. In particular, as discussed above, *Investissement Québec* and the CDPQ committed to provide USD 2.5 billion in equity infusions, with disbursements occurring during the course of 2016. These subsidies gave Bombardier and its new management the financial resources they needed to compete aggressively for aircraft sales and buy market share in a series of sales campaigns in

¹⁸⁷ Innovation, Science and Economic Development Canada, Audit and Evaluation Branch, "Evaluation of the Bombardier C Series Program," at 13 (Sept. 2013), attached as Exhibit 21.

¹⁸⁸ European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, at para. 135 (June 17, 2009), attached as Exhibit 22.

2016, including the United and Delta sales campaigns. Through these campaigns, Bombardier set a new, low price ceiling, which was far below Bombardier's own cost of production.

Reflecting on this sequence of events, one industry observer attempted to explain why his earlier prediction that the C Series program would fail had proven wrong:

This was my mistake with the C Series: I underestimated the Canadian and Quebec governments' willingness to back this program. When it began, together they had provided CA\$700 million (\$550 million) in launch aid; I didn't think this would be the start of a much larger aid package. After all, this is Canada in 2016, not Indonesia in 1992. Modern industrial economies seldom provide this level of support for national champions.¹⁸⁹

Thus, Canada's and Québec's massive subsidies, which are so large and trade-distorting as to be uncharacteristic of modern industrial economies, enabled the C Series program to survive.

C. Capacity: Bombardier's Current Production Capacity Enables It to Imminently and Substantially Increase Exports of Subject Merchandise to the United States, and It Has Plans to Ramp Up Capacity Even Further

Thanks to the subsidies at issue in this dispute, Bombardier has put in place production facilities in Mirabel, Québec that enable it to ramp up from a production rate of 15-20 Aircraft per year in 2016 to 120 Aircraft per year by 2020. This increasing production capacity, in turn, compels Bombardier to pursue additional sales. As Bombardier's CEO stated: "{The} second quarter {of 2016} was really a turning point. . . . {W}e can really now focus our energies on ramping up production and selling aircraft and the sales team is very active and the sales and marketing pipeline is pretty good right now."¹⁹⁰

¹⁸⁹ Richard Aboulafia, *Why I Was (Probably) Wrong On C Series*, Aviation Week & Space Technology (May 4, 2016), attached as Exhibit 106.

¹⁹⁰ Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016), attached as Exhibit 11.



These significant capacity increases will enable Bombardier to fulfill the Delta order for 75 Aircraft and options for 50 more, resulting in subject imports.¹⁹² They will also afford Bombardier ample spare capacity to increase subject imports even further. For example, the Centre for Asia Pacific Aviation projects that the current C Series order backlog is insufficient to support Bombardier's planned production levels, with scheduled deliveries in 2020 not even halfway to the 120-unit goal for mature production.¹⁹³ As the Centre observes, Bombardier's

¹⁹¹ Bombardier presentation by Rob Dewar, Vice President C Series, *C Series Program Update*, at 23 (Apr. 2016), attached as Exhibit 108.

¹⁹² While Bombardier's 2016 deliveries fell short of the planned 15-20 units due to a supplier issue, Fred Cromer, President of Bombardier Commercial Aircraft, reaffirmed the overall trajectory of the production ramp-up: "We are very confident in our production ramp-up plan, including our ability to meet our production goal of 90 to 120 aircraft per year by 2020." Aaron Karp, *More than half of 2016 C Series deliveries delayed by GTF ramp-up issue*, *Air Transport World* (Sept. 6, 2016), attached as Exhibit 109.

¹⁹³ *Bombardier C Series: record orders in 2016 as both variants finally enter service*, CAPA Centre for Aviation, at 6 (Dec. 8, 2016), attached as Exhibit 5.

“planned production rate will require it to win some further orders.”¹⁹⁴

Indeed, if left unchecked, it is likely that Bombardier will devote additional near-term delivery slots to U.S. customers. In addition to its excess capacity, Bombardier’s current order book is weak, and many customers that have previously placed orders may renege.¹⁹⁵ The C Series order book includes 5 sales to the flag carrier of a country at war (Iraq Air), 10 to a start-up airline that has yet to begin operating (Odyssey Airlines), and 40 to an airline that is in bankruptcy (Republic Airways).¹⁹⁶ Bombardier will seek additional U.S. orders both to backfill these production slots and to increase the quality of its order book for purposes of appealing to other potential customers.

In sum, due to the subsidies at issue, Bombardier has both the capability and strong incentive to direct further significant volumes to the U.S. market in the near term.

D. Market Penetration: The C Series’ U.S. Market Presence Is Likely to Increase Substantially

Significant increases in subject imports are imminent, given that (1) the C Series has already penetrated the U.S. market to a significant degree, and (2) the C Series program is export oriented, with a focus on the U.S. market. Indeed, Bombardier has boasted about its “tremendous momentum” thanks in large part to the Delta sale,¹⁹⁷ and it reported to investors that this momentum enables it to “transition{} into the production ramp up and revenue generation phase of the {C Series} program.”¹⁹⁸ These points are discussed in greater detail below.

¹⁹⁴ *Id.* at 5.

¹⁹⁵ Indeed, in August 2016, the Russian aircraft lessor Ilyushin Finance scaled back its order for C Series Aircraft, renewing broader concerns about the C Series order book. See The Canadian Press, *Bombardier reports US\$490 million net loss; C Series order reduced*, CTV Toronto News (Aug. 5, 2016), attached as Exhibit 24.

¹⁹⁶ See 100- to 150-Seat Large Civil Aircraft in the U.S. & Global Markets, Actual and Projected Deliveries and Market Share (2007-2021), with underlying Ascend Database, & Ascend Backlog Database, attached as Exhibit 44.

¹⁹⁷ Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016), attached as Exhibit 11.

¹⁹⁸ *Id.*

1. With the Delta sale, the C Series has already penetrated the U.S. market to a significant degree

Bombardier boasts that “the C Series {d}ominates the 100- to 149-seat category,” with “{b}y far the largest number of orders and customers.”¹⁹⁹ This dominance recently extended to the U.S. market with the Delta sale, which will soon lead to significant subject imports, with additional volumes likely to follow. Even on its own, the Delta sale will boost subject imports’ market share from zero to more than 60% of U.S. consumption, on average, over the 2018-2021 period.²⁰⁰

Data on deliveries (which reflect U.S. consumption of Aircraft) show that from 2007 (the year before the C Series was launched in its current form) through 2016, the domestic industry accounted for 70% of U.S. consumption, on average.²⁰¹ That will imminently change as existing C Series orders are converted into deliveries, resulting in a Bombardier U.S. market share of 61%, on average, over the 2018-2021 period (*i.e.*, 100% in 2018, 53% in 2019, 42% in 2020, and 94% in 2021).²⁰²

Two things indicate that C Series sales are likely to increase even further. First, there is the significant potential lost sale to United that Boeing barely averted. In January 2016, Boeing succeeded in defending its position at United, but [

]. Boeing was forced to offer such pricing because of Bombardier’s subsidy-fueled attempts to sell the C Series to United. Even after United decided in favor of the 737-700, Bombardier was undaunted: “We don’t think that order necessarily changes the situation for us. We still believe strongly that the C Series will be successful in the North American market with

¹⁹⁹ Yan Lapointe, Manager, Investor Relations, Bombardier, “Investor Presentation,” at 27 (Nov. 2015), attached as Exhibit 48.

²⁰⁰ See 100- to 150-Seat Large Civil Aircraft in the U.S. Market, Actual and Projected Deliveries and Market Share (2007-2021), with underlying Ascend Database, & Ascend Backlog Database, attached as Exhibit 44.

²⁰¹ See *id.*

²⁰² *Id.*

the major carriers.”²⁰³ At the same time, the company affirmed that “on pricing we’ll make sure we do what it takes to be competitive.”²⁰⁴ Bombardier’s conduct in, and after, the United campaign showed that it is committed to increasing exports to the U.S. market even on non-commercial terms.

Second, the Delta sale will likely catalyze additional C Series sales. Delta itself has 50 options that it can convert into firm orders for either the CS100 or CS300.²⁰⁵ Delta’s endorsement of the C Series is also likely to lead to orders by its U.S. competitors as they renew their Aircraft fleets in the near future. American Airlines, Delta, Southwest Airlines, United, JetBlue, Spirit Airlines, and Frontier Airlines are the seven largest U.S. airlines by overall fleet size (including larger LCA such as twin-aisles). They all have large, aging Aircraft fleets and account for the bulk of U.S. Aircraft demand.²⁰⁶ The C Series has already exposed Boeing to depressed prices at United and taken the Delta account. With Delta’s high-profile endorsement of the C Series, the Canadian Government’s backing through subsidization, and the aircraft’s dumped pricing, it is likely that others in the U.S. market will follow absent the remedies sought by Boeing. Already, Spirit Airlines CEO Bob Fornaro has stated that his airline is considering a C Series purchase, and he expects that a competition featuring Bombardier will lead to “aggressive” concessions.²⁰⁷ In addition, JetBlue has reportedly been in discussions with Bombardier about a C Series order.²⁰⁸ And, although Boeing succeeded in fending off

²⁰³ Aaron Karp, *Bombardier still hopeful for United Airlines C Series order*, Air Transport World (Feb. 16, 2016) (quoting Ross Mitchell, Vice President—Commercial Operations for Bombardier Commercial Aircraft), attached as Exhibit 40.

²⁰⁴ *Id.*

²⁰⁵ See Aaron Karp, *Delta touts C Series, eyes CS300 model*, ATWOnline (Apr. 29, 2016), attached as Exhibit 109.

²⁰⁶ See 100- to 150-Seat Large Civil Aircraft Actual & Projected Deliveries & Market Share Charts, with underlying Ascend Database, & Ascend Backlog Database, attached as Exhibit 44.

²⁰⁷ Ted Reed, *Spirit CEO Hails Aircraft Maker Competition, Will Look at Bombardier CS-100*, TheStreet (Oct. 26, 2016), attached as Exhibit 8; Ben Mutzabaugh, *Spirit wants to shake its reputation for late flights*, USA Today (June 22, 2016), attached as Exhibit 9.

²⁰⁸ Frederic Tomesco & Mary Schlangenstein, *JetBlue and Bombardier are talking about the C Series again, sources intimate*, Montreal Gazette (May 4, 2016), attached as Exhibit 10.

Bombardier at United for the time being, the subsequent Delta campaign demonstrated just how far Bombardier is willing to go, leaving the next campaign with United ripe for Bombardier's taking if its dumping is allowed to continue.

The attached affidavit of [] of Boeing Commercial Airplanes addresses the nature of the threat posed by the C Series in the U.S. market.²⁰⁹

- “Bombardier has an obvious interest in selling even more Aircraft to Delta and in adding new U.S. customers—which comprise some of the largest, most experienced operators of Aircraft—to build and improve the quality of its order book (which still includes over 100 orders that are at risk of never being filled) and this interest will intensify as the commercial momentum of the Delta deal fades over the next several months”;
- Pressure from Bombardier’s C Series offering at United [], and [];

];

- “In seeking additional U.S. sales, Bombardier in the near term will likely be unable to deviate significantly from the pricing conditions it set at Delta, which were even more aggressive than what it offered United. Bombardier will likely find it difficult to sell the C Series to additional U.S. customers within the next 2 to 3 years without providing pricing similar to the extremely low prices it gave to Delta, which is approximately \$19.6 million per Aircraft”;
- “If Bombardier offers major U.S. airlines, [], pricing [];

];

²⁰⁹ Affidavit of [], attached as Exhibit 101. See also Affidavit of [], attached as Exhibit 102.

- “Boeing, in turn, will be forced to significantly lower prices or lose sales”;
- [

];

- Bombardier is indeed “attempting to sell the C Series [

];

- [

];

- [

];

- [], or another U.S. airline orders the C Series, the risk increases significantly that Bombardier will succeed in sales campaigns with even more domestic carriers.”

The concentrated nature of U.S. demand makes the threat to the domestic industry particularly acute. As discussed above, Bombardier boasts that it has “tremendous momentum” thanks largely to the Delta sale.²¹⁰ The domestic industry has precious little market position left to lose; it will likely take only a few additional sales to cement Bombardier’s dominant position

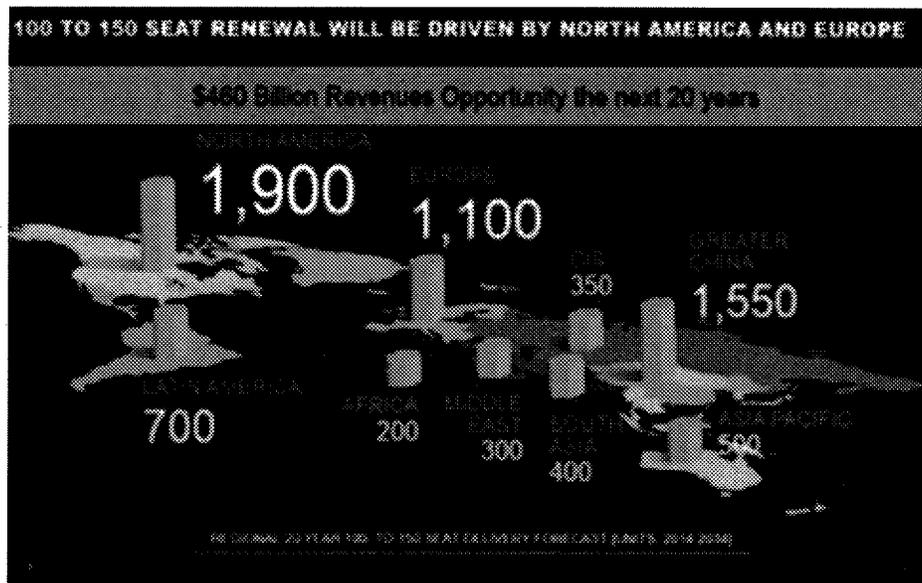
²¹⁰ Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016), attached as Exhibit 11.

and [

].

2. The C Series program is export oriented, with a focus on the U.S. market

The C Series program is export-oriented by necessity; the Canadian market is too small by itself to absorb the production volumes required for the program to succeed. Needing to export, Bombardier will continue to focus on the U.S. market, as it has the largest existing and aging fleets of Aircraft—presenting a prime opportunity to sell the C Series to airlines seeking to retire older aircraft—and also presents opportunities for growth. According to Bombardier’s projections (depicted below), “100 to 150 seat renewal will be driven by North America and Europe.”²¹¹ Overall, “North America” (*i.e.*, the United States and Canada) will be the largest market for Aircraft by a significant margin,²¹² with the United States accounting for the significant majority of North American demand.



²¹¹ Bombardier presentation by Rob Dewar, Vice President C Series, *C Series Program Update* (Apr. 2016) at 4, attached as Exhibit 108.

²¹² *Id.*

These projections help to explain why Delta's recent C Series order was widely considered to be a major success for Bombardier: it was the first of many expected Aircraft sales by Bombardier to the U.S. market and, simply by occurring, made additional such sales far more likely.²¹³

Part of the reason that U.S. customers are so attractive to Bombardier is that the U.S. airlines are leaders in the global aviation market. If customers in other regions see that the C Series is gaining market acceptance in the United States, they will be likelier to introduce the C Series into their own fleets as well. In addition, customers in the two next-largest Aircraft markets, China and Europe, are subject to political pressure to purchase locally-produced aircraft. These factors limit the C Series' ability to penetrate some major non-U.S. markets, further increasing the likelihood of significant subject imports to the United States. Accordingly, the Act's instruction to take "into account the availability of other export markets to absorb any additional exports" militates in favor of an affirmative threat finding.²¹⁴

E. *Adverse Price Effects: Subsidized and Dumped C Series Pricing Is Having Adverse Effects on Domestic Prices and Is Likely to Increase Demand for Further Imports*

The C Series is depressing prices throughout the U.S. market, with severe consequences for the domestic industry. The C Series has already exposed Boeing to depressed prices at United, and it has taken the market to a new low by giving Delta a price of USD 19.6 million per aircraft, *which is USD 13.6 million below the C Series' cost of production (i.e., USD 33.2 million)*. This trend of significant adverse price effects is likely to continue, and is likely to increase demand for additional C Series imports: U.S. customers²¹⁵ will insist on similar pricing

²¹³ Douglas Royce, *Major Delta Order Boosts Struggling Cseries Program*, Forecast International (Apr. 29, 2016) (observing that the Delta sale "gives the aircraft the stamp of approval from a major player in the American market" and "will help Bombardier sell the Cseries to other carriers."), attached as Exhibit 99; Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016) (boasting that Bombardier has "tremendous momentum" thanks in large part to the Delta sale), attached as Exhibit 11.

²¹⁴ 19 U.S.C. § 1677(7)(F)(i)(II).

²¹⁵ This includes United, which now has no outstanding orders for new Aircraft after switching its 737-700 orders to larger models that do not compete in the 100- to 150-seat market.

for any Aircraft, and Bombardier is the only producer that, as a result of government subsidies, has shown itself able to meet such demands.²¹⁶ Any sales Boeing manages to make will be at prices significantly lower than it could command if the C Series were not subsidized and dumped. Indeed, if Bombardier's market-distorting action is left unchecked, the only way Boeing could compete with the C Series on price would be to [] into the market.

To recall, the C Series and the domestic like product compete directly for sales, with price being a critical factor in Aircraft purchase decisions, as discussed above. Particularly on the short- to medium-range routes served by Aircraft, U.S. airlines require aircraft acquisition costs that will enable them to compete on price against other airlines for passenger traffic. An airline that obtains new Aircraft at subsidized prices significantly below the prices paid by competing airlines is therefore at a significant advantage, and likely to be followed by other airlines seeking similar pricing.

This dynamic is already playing out in the U.S. Aircraft market. Until recently, Bombardier was unable to sell the C Series to a major U.S. airline. The absence of a marquee U.S. customer, in fact, imperiled the entire C Series program. This changed when Bombardier received a fresh round of subsidies in late 2015 and began offering the C Series to U.S. customers at extreme discounts.

The United sales campaign featured a long-time Boeing customer with 737-700s already in its fleet. Boeing managed to win the campaign, but only temporarily, and only after being forced to drop 737-700 prices so sharply that it signaled customers to expect lower pricing conditions for the foreseeable future and exposed the domestic industry to a rapid deterioration in

²¹⁶ Cf. 19 U.S.C. § 1977(7)(F)(i)(IV).

its financial condition. Indeed, the 737-700 pricing United obtained thanks to pressure from the C Series [

], as shown in the chart below:



Had United not subsequently switched its orders for larger models, [

]. Having lost out at United for the time being, Bombardier was so determined to win the Delta campaign that it offered pricing significantly below both its cost of production and the pricing recently provided in its home market to Air Canada.²¹⁷

These adverse price effects are permeating the U.S. market. The United campaign sent a signal to the market that customers can expect deep discounts when competition is distorted by the dumped and subsidized C Series. Similarly, Delta now has Aircraft pricing reflecting Canadian government subsidies and Bombardier's dumping. Delta operates throughout the United States; there are few other domestic airlines, if any, that do not compete directly with

²¹⁷ See *infra* Part II.

Delta. Other U.S. airlines—including United, now that it no longer has outstanding orders for new Aircraft—thus will likely demand pricing on similar terms in upcoming sales campaigns, as indicated by recent industry reports:

While the cash-squeezed project was saved from a near-death experience with Delta's discounted order, Bombardier's rivals and others in the industry predict it will remain on the rack a while longer as others demand equal bargains.

...

Bombardier's task is not made easier by an outbreak of transparency in the secretive jet market after it was forced by Canadian accounting rules to take a \$500 million charge for the Delta deal and two others covering a total of 127 planes.

...

Macquarie analyst Konark Gupta wrote Bombardier could have difficulty getting the CSeries to break even by 2020-21 if it keeps selling at such prices. Others say it has limited choice.

"I think they have got their work cut out trying to convince others to pay maybe \$10-15 million more (than Delta)—why would they?" said Airbus executive vice-president Chris Buckley.

...

"The next big guy Bombardier talks to is going to say 'will you be taking a \$500 million loss for me?'" an industry source said.

Analysts say previous Bombardier managers sacrificed sales by refusing to bow to cut-throat competition in the jet market.²¹⁸

With Bombardier depressing pricing across the board, Boeing will be forced to accept depressed revenues and profits—either by selling Aircraft at the sharp discounts needed to compete with Bombardier's dumped prices or by conceding significant market share to the artificially-priced and heavily subsidized C Series.

²¹⁸ Tim Hepher & Victoria Bryan, *Bombardier faces discount headache as CSeries sales take off*, Reuters (June 4, 2016), attached as Exhibit 36.

In sum, the latest subsidy infusion to the C Series threatens a rapid deterioration in U.S. market pricing conditions and the domestic industry's financial health. If left unchecked, these adverse price trends will continue, leading to further subject imports and additional material injury.

F. *Negative Effects on Product Development and Production: Dumped and Subsidized C Series Sales Are Hindering Boeing's Ability to Develop and Market the 737 MAX 7*

The subsidized and dumped C Series is having negative effects on the domestic industry's efforts to develop a more advanced version of the domestic like product.²¹⁹ Specifically, the C Series is impeding sales and suppressing the prices of Boeing's 737 MAX 7, which is currently in development and scheduled to enter service in 2019.

If not enabled by the subsidies, the C Series would not be in the market at all, let alone available for purchase at dumped prices, and the 737 MAX 7 would occupy a significantly stronger position in the market. Instead, the domestic industry is facing an immediate decline in cash flow as a result of depressed pre-delivery payments, even before the longer-term declines resulting from fewer deliveries at suppressed prices are realized. The Aircraft market remains significant—worth hundreds of billions of dollars over the next two decades. As production of the 737-700 winds down, the 737 MAX 7 (and, at least potentially, the A319neo) will be the domestic industry's only Aircraft offering. Boeing recently invested additional development funds to stretch the 737 MAX 7 so that it will carry more passengers and offer more attractive operating economics.²²⁰ However, the C Series has greatly improved its position in the marketplace as a result of its subsidized and dumped sale to Delta. Absent a remedy, it is likely

²¹⁹ Cf. 19 U.S.C. § 1677(7)(F)(i)(IV).

²²⁰ See Press Release, Boeing, "Boeing, Kunming Airlines Announce Memorandum of Understanding for 10 737 MAX 7 Airplanes" (July 12, 2016), attached as Exhibit 106.

that the C Series will grow to dominate the relevant U.S. market and [

] . This is yet another factor indicating that the domestic industry is threatened with material injury by reason of subject imports.

G. Lost Sales and Lost Revenues

Boeing provides information related to lost sales and lost revenues in Part II of **Exhibit 66**.²²¹

V. CONCLUSION

As set forth in the other volumes of this petition, the subject merchandise benefits from massive subsidies and is sold at less than fair value in the United States. The domestic industry is threatened with material injury as a result. Indeed, the unfair trade practices of Bombardier and its government sponsors are already harming the domestic industry. Accordingly, the Department and the Commission should initiate antidumping and countervailing duty investigations, and the Commission should make an affirmative determination of threat of material injury by reason of subsidized and dumped imports.

²²¹ Customer and Lost Sales and Lost Revenues Information, at Exhibit 66, Part II. In accordance with 19 C.F.R. § 207.11(b)(2)(v), Boeing will submit all lost sales and lost revenue allegations electronically in the manner specified in the Commission's Handbook on Filing Procedures.

PART THREE: COUNTERVAILING DUTY ALLEGATION

I. INTRODUCTION

The federal government of Canada, the provincial government of Québec, and the Government of the UK are providing billions of dollars of countervailable subsidies—within the meaning of Section 771(5) of the Act²²²—with respect to the manufacture, production, or export of Canadian C Series aircraft. Indeed, as discussed more fully below, these subsidies made the C Series program possible. Accordingly, Boeing requests that the Department initiate a countervailing duty investigation into the subsidy programs set out below, as well as any additional subsidies discovered during the course of the proceeding, and impose countervailing duties of at least 79.41% *ad valorem*.

II. PERIOD OF INVESTIGATION

The period of investigation in a countervailing duty case is normally the most recently-completed fiscal year for the governments and exporters or producers in question.²²³ The Department has clarified that it will normally “set the POI according to the fiscal year of the individual exporters or producers.”²²⁴ The fiscal year for Bombardier, the only producer subject to investigation, is January 1 through December 31.²²⁵ Accordingly, the Department should establish the period of investigation in this case as January 1 to December 31, 2016.

²²² 19 U.S.C. § 1677(5).

²²³ 19 C.F.R. § 351.204(b)(2).

²²⁴ *Final Rule: Antidumping Duties; Countervailing Duties*, 62 Fed. Reg. 27,296, 27,309 (Dep’t Commerce May 19, 1997).

²²⁵ The fiscal year for the Governments of Canada and Québec is April 1 through March 31.

III. ESTIMATION OF SUBSIDY BENEFITS

Based on publicly available information, Boeing conservatively estimates that Bombardier's total subsidy margin exceeds 79.41%.²²⁶ The basis for this calculation is presented in **Exhibit 14**.

IV. SUBSIDY PROGRAMS

Bombardier and the C Series have benefited from a wide variety of subsidies, including equity infusions, launch aid, and various grants. As discussed below, the information that is reasonably available to Boeing indicates that each of these measures constitutes a subsidy within the meaning of Section 771(5) of the Act.²²⁷

A. Equity Infusions

1. USD 1 billion "investment" in the C Series program by the province of Québec

On October 29, 2015, Bombardier announced that it had entered into a Memorandum of Understanding with Québec—through *Investissement Québec*—that provided for *Investissement Québec* to "invest" USD 1 billion in the C Series program.²²⁸ Subsequently, on June 23, 2016, Bombardier and *Investissement Québec* recommitted to the terms of the Memorandum of Understanding by signing a definitive agreement.²²⁹

²²⁶ See Subsidies Calculation Workbook, attached as Exhibit 14.

²²⁷ 19 U.S.C. § 1677(5).

²²⁸ Press Release, Bombardier, "Bombardier Announces Financial Results for the Third Quarter Ended September 30, 2015; Government of Québec Partners with Bombardier for \$1 billion in C Series as Certification Nears" (Oct. 29, 2015), attached as Exhibit 62. *Investissement Québec* is an arm of the Government of Québec. See, e.g., *id.* (describing the equity infusion as "a \$1.0 billion investment by the Ministère de l'Économie, de l'Innovation et des Exportations du Québec (through Investissement Québec) (the Government)"; Press Release, Bombardier, "Bombardier announces the signing of a definitive agreement with the Government of Québec for a \$1 billion US investment in the C Series Aircraft Limited Partnership" (June 23, 2016), attached as Exhibit 31 (stating that the equity infusion would confer a 49.5% ownership share of CSALP to "the Government of Québec, through its mandatary, Investissement Québec.").

²²⁹ Press Release, Bombardier, "Bombardier announces the signing of a definitive agreement with the Government of Québec for a \$1 billion US investment in the C Series Aircraft Limited Partnership" (June 23, 2016), attached as Exhibit 31.

Under the terms of the agreement, *Investissement Québec* injected USD 1 billion into the so-called C Series Aircraft Limited Partnership (“CSALP”), a newly created joint venture to which Bombardier transferred the assets, liabilities, and obligations of the C Series program.²³⁰ Bombardier is using the USD 1 billion entirely for cash flow purposes of the C Series program.²³¹ Thus, the C Series injection is a “tied” subsidy under U.S. countervailing duty law. The first of two USD 500 million disbursements occurred on June 30, 2016, and the second disbursement followed on September 1, 2016.²³² Bombardier reportedly owns 50.5% of CSALP, will appoint three of five directors to the board of CSALP, and “maintain{s} operational control of the C Series program.”²³³ *Investissement Québec* owns the remaining 49.5% of CSALP and will appoint two directors to the Board.²³⁴

It is apparent that *Investissement Québec* did not obtain any ownership interest in Bombardier itself in return for its USD 1 billion. Although it received warrants that it could exercise in the future to acquire up to 100 million Class B Shares (subordinate voting) in the capital of the company,^{235,236} the exercise price per share (CDN 2.21) was 66.2% higher than the closing price of Bombardier shares on the date of the announcement of the Memorandum of Understanding (*i.e.*, October 29, 2015) and 11.6% higher than the closing price on the date of the

²³⁰ *Id.*

²³¹ *Id.*

²³² *Id.*

²³³ *Id.*

²³⁴ *Id.*

²³⁵ *Id.* In the initial agreement announced in October 2015, *Investissement Québec* received warrants to acquire up to 200 million (not 100 million) Bombardier shares. See Bombardier Financial Report 2015, at 82, attached as Exhibit 111. The press release announcing the definitive agreement did not mention this significant change in the terms of the agreement between Bombardier and *Investissement Québec*, which increased the benefit to Bombardier.

²³⁶ The warrants represent approximately 4.26% of the aggregate issued and outstanding Class A Shares and Class B Shares, assuming the exercise of the warrants, and approximately 4.45% of the aggregate issued and outstanding Class A Shares and Class B Shares on a non-diluted basis. Press Release, Bombardier, “Bombardier announces the signing of a definitive agreement with the Government of Québec for a \$1 billion US investment in the C Series Aircraft Limited Partnership” (June 23, 2016), attached as Exhibit 31.

signing of the definitive agreement (*i.e.*, June 23, 2016).²³⁷ With an exercise price so far above Bombardier's share price, the warrants had little to no commercial value at the time of the agreement.

Investissement Québec also obtained certain non-commercial commitments from Bombardier that, together with the other features of investment, would be of no value to a private investor, including a commitment to maintain in Québec for at least 20 years the following key aspects of the joint venture:

operational, financial and strategic headquarters, manufacturing and engineering activities, shared services, policies, practices and investment plans for research and development, in each case in respect of the design, manufacture and marketing of the *CS100* and *CS300* aircraft and after-sales services for these aircraft.²³⁸

a) Financial contribution

The provision of the USD 1 billion to Bombardier constitutes a direct transfer of funds, in the form of an equity infusion, within the meaning of Section 771(5)(D)(i) of the Act.²³⁹

b) Benefit

Under Section 771(5)(E) of the Act, the provision of equity confers a benefit on the recipient "if the investment decision is inconsistent with the usual investment practice of private investors, including the practice regarding the provision of risk capital, in the country in which the equity infusion is made..."²⁴⁰ In this case, given the structure of the investment, the

²³⁷ Press Release, Bombardier, "Bombardier Announces Financial Results for the Third Quarter Ended September 30, 2015; Government of Québec Partners with Bombardier for \$1 billion in C Series as Certification Nears" (Oct. 29, 2015) (citing the exercise price per share as "the US\$ equivalent of \$2.21 Cdn on the date of execution of definitive agreements"), attached as Exhibit 62. Bombardier's closing price was CDN 1.33 per share on October 29, 2015 and CDN 1.98 per share on June 23, 2016.

²³⁸ *Id.*

²³⁹ See 19 U.S.C. § 1677(5)(D)(i).

²⁴⁰ 19 U.S.C. § 1677(5)(E)(i).

Department should evaluate this question by focusing its analysis on the C Series program rather than the company as a whole.²⁴¹

Boeing has been unable to find any evidence of any private-party investment into CSALP. It appears that *Investissement Québec* was the sole cash investor, with Bombardier providing the assets, liabilities, and obligations of the C Series program as its contribution. Accordingly, the Department should determine whether CSALP was equityworthy or unequityworthy at the time of the equity infusion.²⁴²

Under the Department's regulations, an equityworthy firm is one that, viewed from the perspective of a reasonable private investor examining the firm at the time of the infusion, showed "an ability to generate a reasonable rate of return within a reasonable period of time."²⁴³ A reasonable private investor examining CSALP at the time of the infusion would have concluded that CSALP did not meet this standard.²⁴⁴

As far as Boeing has been able to determine, *Investissement Québec* either did not conduct or has not made public any internal analyses of the future financial prospects of CSALP.²⁴⁵ In addition, because CSALP was a newly-created joint venture, a potential private investor would have had no historic financial data that it could have drawn upon to analyze the joint venture's equityworthiness. It also appears that Bombardier does not publish balance sheets or projected financials for the C Series program alone. Thus, as would a private investor, Boeing has relied primarily on external assessments of the C Series program's future financial prospects to assess the equityworthiness of CSALP. As a secondary means of assessment, Boeing has also

²⁴¹ 19 C.F.R. § 351.507(a)(4) ("The Secretary may, in appropriate circumstances, focus its equityworthiness analysis on a project rather than the company as a whole.").

²⁴² 19 C.F.R. § 351.507(a)(3).

²⁴³ 19 C.F.R. § 351.507(a)(4).

²⁴⁴ A basic precept of finance states that investors require higher expected rates of return to compensate for higher risk. See, e.g., BREALEY, MYERS, & ALLEN, PRINCIPLES OF CORPORATE FINANCE 214 (9th ed. 2007).

²⁴⁵ See 19 C.F.R. § 351.507(a)(4).

considered then-current and past indicators of the financial performance of Bombardier itself, CSALP's predecessor and ongoing parent company.

i. **Prospects for the C Series program at the time of the *Investissement Québec* equity infusion**

In the months immediately preceding *Investissement Québec*'s equity commitment, the C Series program was on the brink of failure and threatening to bring down Bombardier. Although the program was still years away from production at normal levels, Bombardier had already burned through the program's original USD 3.2 billion budget, and it needed an estimated additional USD 2 billion to get the program to the production stage.²⁴⁶ Bombardier had garnered only 243 orders for the aircraft—well short of its program target of 300—and 108 of those orders faced a significant risk of delay or cancellation.²⁴⁷ Moreover, at the time of the investment, customer confidence—vital to the success of the program—was low and waning. The lack of *any* new orders during the preceding 13 months (*i.e.*, since September 2014) was a stark indicator of the market's lack of faith that the program was technically and financially viable.²⁴⁸

Thus, in the fall of 2015, Bombardier was in desperate need of cash and a commitment from a deep-pocketed investor to fund C Series development. As discussed above, Bombardier first turned to commercial investors, asking Airbus to invest in the C Series program. The two companies held talks, and Bombardier offered Airbus a stake in the program for what Airbus later described as a “song.”²⁴⁹ But Airbus terminated negotiations in early October 2015,

²⁴⁶ See Q3 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Oct. 29, 2015), question from Kevin Chiang, Analyst, CIBC (“the \$3.2 billion, if I recall, that’s almost equal to the original CapEx budget for the program. . . .”), attached as Exhibit 23; Kristine Owram, *How Bombardier's C Series dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15.

²⁴⁷ Kristine Owram, *How Bombardier's C Series dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15.

²⁴⁸ *Id.*

²⁴⁹ Kristine Owram, *Airbus sales chief says Bombardier offered C Series stake for a 'song'*, Financial Post (May 31, 2016), attached as Exhibit 28.

evidently concluding that the investment was not worth making, even at fire sale prices.²⁵⁰ In a research note issued the next day, Credit Suisse addressed the failure of the Airbus negotiations and what the attempted transaction said about the C Series' commercial prospects:

{T}he approach of Airbus is the clearest (though tacit) affirmation yet from {Bombardier} of the dire position of the program, and this revelation likely reflects the fresh perspective brought by CEO Alain Bellemare having now had time to fully assess C Series. That negotiations with Airbus fell flat suggests to us it was a “Hail Mary” and we would expect a similar outcome from any approach to Boeing It appears to us that the only options remaining to Bombardier are to 1) win more orders to stabilize the program—which is unlikely given the failure to do so thus far, 2) secure a deal with a more likely partner than a dominant competitor, perhaps the Chinese under a complex scheme that involves Chinese C Series orders and a possible stake in BT, 3) cancel the program outright to stem the cash burn. While this last option has been discussed as an outside consideration in the past, we think it is now a far more realistic possibility²⁵¹

Less than three weeks later, *Investissement Québec* committed to its USD 1 billion infusion. The virtually contemporaneous refusal by Airbus to invest in the program constitutes strong evidence that *Investissement Québec*'s decision to do so was inconsistent with commercial considerations.²⁵²

Other salient evidence of the C Series program's poor financial prospects at the time of the infusion include the following:

- According to Bombardier's CEO, the company was on the brink of bankruptcy at the time of the infusion.²⁵³ The company announced the transaction on the same day that it announced its dismal third-quarter financial results, which included losses of nearly USD 5 billion.

²⁵⁰ See Allison Lampert et al., *Airbus, Bombardier end talks over C Series jet investment*, Reuters (Oct. 6, 2015), attached as Exhibit 29.

²⁵¹ Robert Spingarn et al., *Credit Suisse, Bombardier Inc (SVS): Comment* (Oct. 7, 2015), attached as Exhibit 30.

²⁵² The refusal of private investors to inject equity into a company is evidence that the company is unequityworthy. See *Final Affirmative Countervailing Duty Determinations; Certain Carbon Steel Products From Sweden*, 50 Fed. Reg. 33,375, 33,377 (Dep't Commerce Aug. 19, 1985).

²⁵³ Bertrand Marotte, *Bombardier was on 'brink of bankruptcy,' CEO says*, *Globe and Mail* (Nov. 12, 2016), attached as Exhibit 25.

- Bombardier’s investment ratings in the time period prior to *Investissement Québec*’s commitment were extremely poor. At year-end 2015, according to Bombardier’s annual report, the company’s credit ratings were “five notches below investment grade.”²⁵⁴ All three of the major ratings companies (Fitch, Moody’s and Standard & Poor’s) rated Bombardier as “non-investment grade: speculative” in 2014 (the most recent fiscal year-end prior to the new equity commitments).
- Bombardier was taking on two well-established competitors (Boeing and Airbus) with many advantages, including proven designs and an existing customer base operating large fleets of aircraft with a high degree of commonality with future LCA models.
- As it ramped up production of the C Series, Bombardier was facing several years of large negative cash flows, and observers were already predicting that the program would need further infusions of funds.²⁵⁵
- Bombardier had a history of announcing large write-offs. In the third quarter of 2015—the quarter immediately prior to *Investissement Québec*’s commitment of the USD 1 billion—Bombardier wrote off USD 3.235 billion in investments in the C Series program²⁵⁶—more than the total value of the *Investissement Québec* equity infusion. In addition, in the prior year, Bombardier took a charge of USD 1.357 billion in conjunction with shutting down the Lear 85 program.²⁵⁷
- Notwithstanding the massive equity infusions, Bombardier and CSALP would remain under the tight control of the Bombardier family, which had been heavily criticized for poor decision-making and mismanagement of the program.
- At the time of its initial launch in the mid-2000s, the C Series was justified primarily on the basis of fuel cost savings. The subsequent collapse of world petroleum prices had eliminated many of the economic advantages of the program by the time of the infusion.
- In exchange for the capital infusions, Québec obtained certain non-commercial commitments from Bombardier that would be of no value to a private investor, including a commitment to maintain the joint venture in Québec for a period of 20 years.²⁵⁸ These unusual commitments point to Québec’s real motivation for the infusion, which was to sustain jobs in the province. No private investor seeking market returns would saddle its investment with such limitations.

²⁵⁴ See Bombardier Financial Report 2015, at 31, attached as Exhibit 111.

²⁵⁵ See, e.g., Kristine Ogram, *Bombardier Inc. may run out of cash by mid-2016: Scotiabank*, Financial Post (Oct. 5, 2015), attached as Exhibit 112; Ross Marowitz, *Bombardier may need more public funding after Quebec bailout: analysts*, The Canadian Press (Nov. 2, 2015), attached as Exhibit 113.

²⁵⁶ Bombardier Financial Report 2015, at 21, attached as Exhibit 111.

²⁵⁷ *Id.*

²⁵⁸ *Id.* at 82.

ii. **Current and past indicators of CSALP's financial condition calculated from CSALP's financial statements**

As noted above, CSALP was a newly-created joint venture at the time of the infusion. As far as Boeing is aware, it does not publish stand-alone financial statements. The best proxy available to a private investor would thus have been the recent performance of Bombardier itself. Therefore, to assess the equityworthiness of CSALP, Boeing has conducted a review of Bombardier's financial health during the three-year period preceding the infusion.²⁵⁹ As the following summary makes clear, Bombardier's financial ratios were poor, and dramatically so in the three-year period leading up to *Investissement Québec's* commitment of funds to CSALP:

- *Return on equity*: Negative in 2014 and 2015. By contrast, the average return on equity for comparable Canadian businesses during the same time period was 12.83% and 14.04%, respectively.²⁶⁰
- *Net income*: Negative in 2014 and 2015.
- *Equity, and financial leverage ratio*: Insignificant or negative book value of equity in 2014 and 2015.²⁶¹ Also, financial leverage ratio deteriorated from 4.7 in 2014 to 7.3 in 2015 as a result of lower EBITDA and higher adjusted debt in 2015 as compared to 2014.²⁶²
- *Working capital*: Insignificant or negative from 2013 onwards. Thus, ratios for working capital to total assets and sales to working capital were also insignificant or negative over the same period.
- *Current and quick ratios*: Extremely poor. From 2013 to 2015, Bombardier's current ratio hovered around 1. From 2013 onwards, its quick ratio never rose above 0.5, an indication that Bombardier was short of liquidity needed to cover current payment obligations.

²⁵⁹ It is important to recognize that Bombardier's aerospace business was in much worse condition than its other businesses. For example, as shown in Exhibit 114, the free cash flow generated from the aerospace business was deeply negative from 2011 onwards. See Bombardier Free Cash Flows, attached as Exhibit 114. Therefore, the use of the corporate-wide financials to judge the equityworthiness of the tied capital injection into the C Series project is conservative.

²⁶⁰ See *Infinancials, Bombardier Inc.—Main Ratios FY 2014*, attached as Exhibit 115; *Infinancials, Bombardier Inc.—Main Ratios FY 2015*, attached as Exhibit 116.

²⁶¹ Bombardier Financial Report 2015, at 24, attached as Exhibit 111.

²⁶² *Id.* at 32.

On the basis of these indicators, there is a reasonable basis to conclude that both CSALP and Bombardier itself were unequityworthy at the time of *Investissement Québec*'s USD 1 billion equity infusion. Bombardier itself was virtually a penny stock (generally considered a speculative investment by the U.S. Securities and Exchange Commission),²⁶³ with a closing price of CAD 1.33 per share on October 29, 2015, the date on which the Memorandum of Understanding with Québec was announced.²⁶⁴ And the C Series partnership, in which *Investissement Québec* was "investing," consisted of the worst-performing program in the worst-performing division of that poorly performing company. The equity infusion appears to have been motivated primarily by Québec's desire to further its industrial policy goals by giving Bombardier the financing it needed to cover the continuing cash shortfalls generated by the substantial development cost overruns in the C Series program.²⁶⁵

c) Specificity

The USD 1 billion infusion is specific as a matter of both law and fact within the meaning of Section 771(5A)(D) of the Act, as it was a one-off cash injection into Bombardier by *Investissement Québec*.

²⁶³ U.S. Securities and Exchange Commission, Penny Stock Rules, <https://www.sec.gov/answers/penny.htm>, accessed January 26, 2017; Bombardier Inc. Historical Stock Prices for October 29, 2015, Yahoo Finance, attached as Exhibit 117.

²⁶⁴ Bombardier Inc. Historical Stock Prices for October 29, 2015, Yahoo Finance, attached as Exhibit 117.

²⁶⁵ Indeed, Québec's Premier Philippe Couillard recently stated with respect to a potential \$1 billion Canadian federal government contribution to the C Series project that: "Governments in a situation like this should not behave like investors or bankers, but economic agents." Gordon Isfeld, *Ottawa under growing pressure to bail out Bombardier Inc as company clinches major C Series order*, Financial Post (Apr. 28, 2016), attached as Exhibit 118.

2. USD 1.5 billion “investment” in the Bombardier Rail Division by the CDPQ

In November 2015, Bombardier entered into an agreement with the CDPQ, a pension fund controlled by Québec,²⁶⁶ in which the CDPQ agreed to invest USD 1.5 billion in a newly-created holding company, Bombardier Transportation (Investment) UK LTD (“BT Holdco”).²⁶⁷ In return for the USD 1.5 billion, the CDPQ acquired shares in BT Holdco that it could choose to convert into a 30% equity stake in the company.²⁶⁸ Disbursement occurred on February 11, 2016.²⁶⁹ Although BT Holdco was the direct recipient of the USD 1.5 billion, it distributed the funds to Bombardier.²⁷⁰

Similar to the CSALP transaction discussed above, the CDPQ transaction included the issuance to the CDPQ of warrants—in this case, exercisable for 105,851,872 Class B (subordinate voting) shares in Bombardier. The warrants are exercisable for a period of seven years from the date of their issuance at an exercise price per share equal to USD 1.66, *65% above* the price of Bombardier’s shares at the time.²⁷¹ At an exercise price so far above Bombardier’s share price, these warrants were highly risky and therefore had little to no commercial value, just like the warrants granted *Investissement Québec*. Moreover, the CDPQ’s ownership (on conversion) and return are subject to downward annual adjustments if Bombardier outperforms its business plan, as well as upward adjustments if Bombardier underperforms its business

²⁶⁶ CDPQ was established on July 15, 1965 by an Act of Québec’s National Assembly. Québec appoints all of the members of CDPQ’s board of directors, including the chair—except that the president and CEO are appointed by the board of directors itself. See Act Respecting the *Caisse de dépôt et placement du Québec* (official English translation, updated to Dec. 1, 2016), attached as Exhibit 32. CDPQ has a dual mission to “contribut{e} to Québec’s economic development” while also achieving optimal return on capital within the framework of depositors’ investment policies. *Id.*

²⁶⁷ See Bombardier Financial Report 2015, at 109-111, attached as Exhibit 111.

²⁶⁸ *Id.*

²⁶⁹ *Id.*

²⁷⁰ See Press Release, Bombardier, “Bombardier closes the sale of a 30% stake in Bombardier Transportation to CDPQ” (Feb. 11, 2016), attached as Exhibit 119.

²⁷¹ Bombardier Financial Report 2015, at 111, attached as Exhibit 111. On February 11, 2016, Bombardier’s publicly-traded share price (as of market close) was CDN 0.78 (USD 0.59). See Bombardier Common shares, Class B—Historical Price Data for February 11, 2016, Bombardier Inc. Investor Relations, attached as Exhibit 120.

plan.²⁷² Thus, in essence, the agreement with the CDPQ limits the CDPQ's share in any upside from the investment, and increases its share in the downside. That deal is inconsistent with the usual investment practices of private investors.²⁷³

The structure of this investment mechanism is atypical and not the type that would attract a reasonable private investor. Specifically, while CDPQ's cash was invested in the transportation business under BT HoldCo, the funds were tagged for "general purpose" use by Bombardier. In return for its cash infusion, CDPQ received equity in BT HoldCo and warrants for Bombardier stock. Thus, the structure was not clearly delineated as an investment in the transportation segment at all. Instead, as Bombardier has acknowledged, the CDPQ's infusion was effectively an investment in the C Series, with a stake in the transportation segment and the ability to invest in the parent company (warrants) as the compensation for the investment. With Bombardier controlling both the cash and the distribution of BT HoldCo dividends, the CDPQ effectively tied its investment to the performance of the C Series.

a) Financial contribution

The provision of the USD 1.5 billion to Bombardier constitutes a direct transfer of funds, in the form of an equity infusion, within the meaning of Section 771(5)(D)(i) of the Act.

b) Benefit

Under Section 771(5)(E) of the Act, the provision of equity confers a benefit to the recipient "if the investment decision is inconsistent with the usual investment practice of private

²⁷² Bombardier Financial Report 2015, at 223 ("If Bombardier Transportation outperforms its business plan, the CDPQ's percentage of ownership on conversion of its shares decreases by 2.5% annually, down to a minimum threshold of 25%. In this circumstance, the convertible shares' minimum return also decreases from 9.5% to a floor of 7.5%. Conversely, should Bombardier Transportation underperform relative to its plan, the CDPQ's percentage of ownership on conversion of its shares will increase by 2.5% annually, up to a maximum of 42.5% over a five-year period. In this case, the convertible shares' minimum return also increases from 9.5% up to 12%."), attached as Exhibit 111.

²⁷³ Cf. 19 C.F.R. § 351.507(a).

investors, including the practice regarding the provision of risk capital, in the country in which the equity infusion is made.”²⁷⁴

As with CSALP (discussed above), Boeing has been unable to find any evidence of any private party investment into BT Holdco. It appears that CDPQ was the sole investor in the entity. Accordingly, as with CSALP, the Department should determine whether the firm receiving the equity infusion was equityworthy or unequityworthy at the time.²⁷⁵

Given the structure of the CDPQ’s investment, the Department should evaluate this question by focusing its analysis on the equityworthiness of Bombardier as a whole, as it is Bombardier, and not BT Holdco, that drives the sources of risk and return to the CDPQ.²⁷⁶ The fact that BT Holdco was a newly-created entity—and thus that a potential private investor would have had no historic financial data that it could have drawn upon to analyze the entity’s equityworthiness—further supports this approach.

Under the Department’s regulations, an equityworthy firm is one which, viewed from the perspective of a reasonable private investor examining the firm at the time of the infusion, shows “an ability to generate a reasonable rate of return within a reasonable period of time.”²⁷⁷ As discussed in the previous subsection, a reasonable private investor examining Bombardier at the time of the infusion would have concluded that the entity did not meet this standard.²⁷⁸

²⁷⁴ 19 U.S.C. § 1677(5)(E)(i).

²⁷⁵ 19 C.F.R. § 351.507(a)(3).

²⁷⁶ For example, CDPQ received warrants for Bombardier in exchange for its investment, so at least part of the return on the investment for CDPQ comes from the value of Bombardier as a whole. Press Release, Bombardier, “Bombardier and CDPQ enter into definitive agreement: CDPQ to acquire 30% of newly-created BT Holdco for \$1.5 billion” (Nov. 19, 2015), attached as Exhibit 121. Similarly, since Bombardier is the controlling shareholder of BT Holdco and controls BT Holdco’s Board, it also has control over BT Holdco’s dividend policy. Thus, Bombardier determines when and how much BT Holdco pays out in dividends, which also affects the CDPQ’s return.

²⁷⁷ 19 C.F.R. § 351.507(a)(4).

²⁷⁸ See section IV(A)(1)(B).

Furthermore, even if one were to focus the analysis on the commercial reasonableness of the CDPQ's investment, the outcome would be the same, as the evidence that is reasonably available to Boeing indicates that the CDPQ's decision to invest the USD 1.5 billion was not commercially reasonable. For example:

- ***The CDPQ's stake increases if the company does poorly, and decreases if the company does well.*** According to usual investment practices, private investors putting money into a high-risk company would not agree to a lower proportion of the rewards if the company does well. A private investor might agree to a higher proportion if the company does poorly if it resulted in majority control, but that is not the case here, as the upper limit for the CDPQ is capped at 42.5%.
- ***The CDPQ does not automatically receive voting rights in exchange for its purchase of shares.*** The available evidence suggests that the CDPQ has the option of converting its USD 1.5 billion investment into a 30% voting bloc. A reasonable private investor would not have agreed to such a provision, as it would have insisted on voting rights from the outset. The CDPQ's "optional" voting rights most likely reflect the government's capitulation to the Bombardier family's insistence on maintaining control over the Bombardier empire.
- ***Even if BT Holdco makes money, the CDPQ does not automatically receive dividends.*** Since Bombardier retains control over BT Holdco, the parent company can fix dividends. If cash generated from BT Holdco's operations are needed to fund Bombardier's other businesses, it has the right to transfer the cash to those other businesses. In light of the C Series' cash needs over the next several years as production ramps up, a reasonable private investor would not agree to such a provision.
- ***The warrants are for parent company shares, while the investment is in the newly formed transportation subsidiary.*** This is yet another example of the blurred lines between Bombardier as an enterprise and the ostensible investment in a discrete segment of the company's business. Moreover, as is the case with the warrants issued as part of the nearly contemporaneous CSALP equity infusion, these warrants were set at a price that was significantly above Bombardier's share price at the time, so they had little to no commercial value at the time of the commitment.
- ***Bombardier is using the cash from the equity infusion to fund the production of the C Series, while the CDPQ's rights in future returns are tied to the results of the newly formed transportation subsidiary.*** A private investor purchasing shares in a specific business will insist that the cash be used to improve the financial performance of that business. In this case, the available evidence indicates that Bombardier is using the USD 1.5 billion for the C Series, not for the transportation business. Indeed, in public statements, Bombardier has repeatedly linked the total USD 2.5 billion in new government equity infusions (which

includes the USD 1 billion injection into CSALP) as providing the cash needed to fund C Series production start-up.²⁷⁹

c) Specificity

The USD 1.5 billion infusion is specific as a matter of both law and fact within the meaning of Section 771(5A)(D) of the Act, as it was a one-off cash injection into Bombardier by the CDPQ.

B. Launch Aid

1. CDN 350 million in Canadian federal launch aid for the C Series

In May 2005, Canada announced that it would provide CDN 350 million in “repayable contributions” in support of the Bombardier C Series program (the “Industry Canada Bombardier C Series Program”).²⁸⁰ This funding commitment was made in coordination with Québec and the UK, in exchange for C Series work packages located in each of the respective government’s territories.²⁸¹ Under the Industry Canada Bombardier C Series Program, Industry Canada’s Aerospace, Defence and Marine Branch (“ADMB”) reimbursed Bombardier for CDN 350 million in R&D expenses incurred from May 1, 2005 through December 31, 2013.²⁸² The R&D expenses pertained to two projects: (i) a Generic Technologies Project involving the development of aircraft technologies “that will be applied to the C Series aircraft and to other aircraft platforms,” and (ii) a C Series Project involving the development of technologies “that will contribute to the unique design and specifications of the C Series aircraft family.”²⁸³ The

²⁷⁹ Press Release, Bombardier, “Bombardier announces the signing of a definitive agreement with the Government of Québec for a \$1 billion US investment in the C Series Aircraft Limited Partnership” (June 23, 2016), attached as Exhibit 31.

²⁸⁰ See Industry Canada, Final Audit Report: Audit of the Bombardier C Series Contribution Agreements, at 5 (May 2014), attached as Exhibit 122.

²⁸¹ See Press Release, Bombardier, “Bombardier Announces Location of Final Assembly Site and Work Packages for the C Series” (May 13, 2005), attached as Exhibit 16.

²⁸² See Industry Canada, Final Audit Report: Audit of the Bombardier C Series Contribution Agreements, at 5-6 (May 2014), attached as Exhibit 122.

²⁸³ *Id.* at 6.

terms and conditions of the program were signed in 2008 and provided for Industry Canada to disburse the funds to Bombardier over a six-year period.²⁸⁴ The last payments for this tranche of launch aid were made by December 31, 2013.²⁸⁵ Bombardier had not repaid any of the launch aid as of late 2015.²⁸⁶

Like other launch aid, the Industry Canada launch aid is “conditionally repayable,” which means Bombardier will repay the funds “through royalties from deliveries of C Series aircraft and derivatives that result from the C Series aircraft.”²⁸⁷ In other words, repayment is contingent on sales of the C Series, so Canada will not recover the principal of the financing, much less receive any return, unless the program is a commercial success. There also is no time frame for repayment. With no fixed time frame, there is no assurance whatsoever that the original principal will be returned.

Given these features, it is apparent that the Canadian federal government’s launch aid to Bombardier is similar to the Technology Partnerships Canada (“TPC”) financing that Brazil successfully challenged as a WTO-inconsistent subsidy to Bombardier in the *Canada – Aircraft* dispute, as well as the launch aid that the United States successfully challenged as a WTO-inconsistent subsidy to Airbus in the *European Communities – Large Civil Aircraft* dispute.²⁸⁸

²⁸⁴ *Id.* at 5-6.

²⁸⁵ *Id.* at 6.

²⁸⁶ Canadian Government Document at frame 30-31 (stating that the CDN 350 million in launch aid for the C Series was “not currently in its repayment phase.”), attached as Exhibit 88.

²⁸⁷ Innovation, Science and Economic Development Canada, Audit and Evaluation Branch, “Evaluation of the Bombardier C Series Program,” at 3 (Sept. 2013), attached as Exhibit 21.

²⁸⁸ See, e.g., Panel Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R, adopted Aug. 20, 1999, para. 10.1, attached as Exhibit 123; Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/R, adopted June 1, 2011, para. 8.1, attached as Exhibit 17; Compliance Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/RW, circulated Sept. 22, 2016, paras. 6.655-6.656, attached as Exhibit 12. Notably, in the *Canada – Aircraft* dispute, Canada did not contest that TPC financing constituted subsidies; it focused its defense on whether the subsidies were export-contingent. See Panel Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R, adopted Aug. 20, 1999, para. 6.202, attached as Exhibit 123.

As in those cases, no commercial lender would ever grant such generous terms on such large loans to what essentially is a start-up project involving untested technology.

a) Financial contribution

The provision of the launch aid to Bombardier constitutes a direct transfer of funds within the meaning of Section 771(5)(D)(i) of the Act—namely, success-dependent loans.²⁸⁹

b) Benefit

Under Section 771(5)(E) of the Act, the benefit of a loan to its recipient is the difference between the amount the recipient pays on the loan and the amount the recipient would pay for a comparable commercial loan that the recipient could actually obtain on the market.²⁹⁰ In this case, pursuant to 19 C.F.R. § 351.505(d), the financing should be treated as a contingent liability interest-free loan. Thus, every year, Bombardier receives the benefit of an interest-free loan in the amount of the outstanding principal, *i.e.*, CDN 350 million.²⁹¹

The commercial benchmark that the Department should use to measure the benefit of the launch aid should reflect a very high cost of borrowing. First, the terms and conditions of the launch aid were finalized in the 2008-2009 timeframe, when commercial borrowing rates were at historic highs. Second, as the European Commission concluded in June 2009, “given the inability of the financial markets and industrial partners to make available financing to Bombardier . . . and taking account of the company’s internal constraints, public funding {wa}s

²⁸⁹ The panel in the *Canada – Aircraft* was in “no doubt” that the Technology Partnership Canada loans that it examined in that dispute constituted financial contributions because they were “direct transfers of funds” in the sense of Article 1.1(a)(1)(i) of the SCM Agreement. Panel Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R, adopted Aug. 20, 1999, para. 9.306, attached as Exhibit 123.

²⁹⁰ 19 U.S.C. § 1677(5)(E)(ii).

²⁹¹ It appears that Bombardier has not begun repaying the outstanding launch aid principal. *See* Canadian Government Document at frames 30-31, attached as Exhibit 88.

necessary to make the {C Series} project possible.”²⁹² In other words, commercial long-term financing for the C Series program was not available to Bombardier on any terms.²⁹³

Finally, the benchmark should include a significant project-specific risk premium, given the risk of the C Series program itself, and the fact that Bombardier’s repayment of the majority of the financing is contingent on the commercial success of the C Series.²⁹⁴

c) Specificity

The subsidy is specific as a matter of both law and fact within the meaning of Section 771(5A)(D) of the Act, given that Canada limits access to the subsidy to Bombardier.

2. CDN 117 million in Québec launch aid for the C Series

In 2009, Québec issued a decree ordering *Investissement Québec* to confer CDN 117 million in “refundable financial aid” to Bombardier for the development of the C Series.²⁹⁵ This funding commitment was made in coordination with the Canada and the UK, in exchange for C Series work packages located in each of the respective government’s territories.²⁹⁶ The decree provided that the terms and conditions of the financing would be determined according to a ministerial recommendation, which is not publicly available.²⁹⁷ At the WTO, the United States asked Canada to provide additional details about the financing, but was rebuffed.²⁹⁸

a) Financial contribution

²⁹² European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, para. 135 (June 17, 2009), attached as Exhibit 22.

²⁹³ 19 C.F.R. § 351.505(a)(4).

²⁹⁴ As noted above, it is possible that the launch aid that Canada describes as being “allocated to the Global 7000” is also repayable contingent on the commercial success of the C Series. The Department should ask the respondents to provide documentation of the terms and conditions of this financing.

²⁹⁵ See *Décret 666-2009* (June 10, 2009), *Gazette Officielle du Québec*, July 8, 2009, No. 27, at 3123, attached as Exhibit 124; see also, e.g., Press Release, Investissement Québec, “Successful Takeoff for the C Series” (Sept. 20, 2013), attached as Exhibit 125.

²⁹⁶ See Press Release, Bombardier, “Bombardier Announces Location of Final Assembly Site and Work Packages for the C Series” (May 13, 2005), attached as Exhibit 16.

²⁹⁷ *Décret 666-2009* (June 10, 2009), *Gazette Officielle du Québec*, July 8, 2009, No. 27, at 3123, attached as Exhibit 124.

²⁹⁸ See, e.g., Committee on Subsidies and Countervailing Measures, Replies from Canada to Follow-up Questions Posed by the United States Regarding the New and Full Notification of Canada, G/SCM/Q2/CAN/64, at 2 (Apr. 27, 2015), attached as Exhibit 52.

Given that the financing took the form of launch aid, it is a direct transfer of funds within the meaning of Section 771(5)(D)(i) of the Act—most likely, success-dependent loans similar to those provided by the Canadian federal government (as described above).

b) Benefit

Under Section 771(5)(E) of the Act, the benefit of a loan to its recipient is the difference between the amount the recipient pays on the loan and the amount the recipient would pay for a comparable commercial loan that the recipient could actually obtain on the market.²⁹⁹ In this case, as with the Industry Canada launch aid, the *Investissement Québec* launch aid should be treated as a contingent liability interest-free loan.³⁰⁰ Thus, every year, Bombardier receives the benefit of an interest-free loan in the amount of the outstanding principal, *i.e.*, CDN 117 million.

c) Specificity

The subsidy is specific as a matter of both law and fact within the meaning of Section 771(5A)(D) of the Act, given that *Investissement Québec* limits access to the subsidy to Bombardier.

3. GBP 113.37 million in UK launch aid for the C Series

In 2008, the UK announced that it would provide a GBP 113.37 million “repayable advance” to Short Brothers, a 100% subsidiary of Bombardier that is developing and building the composite wing for the C Series program (“Bombardier/Shorts”). The UK agreed to provide the financing in coordination with the governments of Canada and Québec, after Bombardier awarded Bombardier/Shorts the work package for the aircraft’s wings, engine nacelles and

²⁹⁹ 19 U.S.C. § 1677(5)(E)(ii).

³⁰⁰ 19 C.F.R. § 351.505(d).

composite empennage structures.³⁰¹ Disbursements continued at least until fiscal year 2010, and possibly later.³⁰² Because the Bombardier/Shorts wing is designed solely for use in C Series aircraft, the financing is an integral part of the overall C Series program.

Neither Bombardier/Shorts nor the UK government has publicly released the precise terms of the C Series launch aid. However, the European Commission examined the financing under EU State Aid rules, and its determination makes clear that the financing had typical UK launch aid terms (namely, that “{t}he conditions for the reimbursement of the repayable advance depend on the successful outcome of the R&D project. . . . The repayable advance will be reimbursed to the UK government in the form of a fixed levy linked to the aircraft sales.”).³⁰³

As noted above, WTO panels and the WTO Appellate Body examined UK launch aid in the *European Communities – Large Civil Aircraft* dispute and concluded that it constitutes a subsidy.³⁰⁴ A WTO compliance panel confirmed in 2016 that every instance of UK launch aid—including that provided very recently—constitutes a subsidy.³⁰⁵ In addition, the European Commission concluded in its State Aid investigation that the UK’s financing of Bombardier/Shorts constituted “aid,” which is tantamount to a finding of subsidy.³⁰⁶ Notably, it

³⁰¹ Previously, in 2005, the UK Government had stated that it would provide USD 340 million (GBP 180 million) in “launch investment and financial assistance” to Bombardier for the C Series Program. See Press Release, Bombardier, “Bombardier Announces Location of Final Assembly Site and Work Packages for the C Series” (May 13, 2005), attached as Exhibit 16. *Id.* It is unclear whether the UK provided the difference between the GBP 180 million committed in 2005 and the GBP 113.37 million provided in 2008.

³⁰² See Bombardier Annual Report 2011, at 103, attached as Exhibit 126 (referencing “the receipt in fiscal year 2010 of contingently repayable investments from the governments of Canada, Québec and the U.K. in connection with previously expensed R&D costs for the C Series aircraft program, resulting in a \$28-million reduction in R&D expenses for fiscal year 2010...”). Bombardier’s subsequent Annual Reports have omitted explicit references to “repayable investments.”

³⁰³ European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, para. 71 (June 17, 2009), attached as Exhibit 22.

³⁰⁴ Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/R, adopted June 1, 2011, para. 8.1, attached as Exhibit 17.

³⁰⁵ Compliance Panel Report, *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft*, WT/DS316/RW, circulated Sept. 22, 2016, para. 6.656, attached as Exhibit 12.

³⁰⁶ European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, para. 85 (June 17, 2009), attached as Exhibit 22. Under EU State Aid rules, a measure is “aid” if it provides an “advantage” to the recipient, which is the same concept as a “benefit” to the recipient under the U.S. countervailing duty law.

also concluded that Bombardier could not have financed the C Series program without State Aid, and that it would have abandoned the program without it.³⁰⁷ Thus, the subsidies made the C Series possible.

Under Section 701(a)(1) of the Act, the Department “shall” impose a countervailing duty on merchandise imported into the United States if, *inter alia*, it determines that “the government of a country” is providing a countervailable subsidy to Bombardier/Shorts, a 100% subsidiary of Bombardier, with respect to the manufacture, production or export of the merchandise. That condition is satisfied here, as the UK launch aid is a countervailable subsidy with respect to the manufacture, production or export of the C Series.

In addition, Section 701(d) of the Act provides that:

if the members (or other participating entities) of an international consortium that is engaged in the production of subject merchandise receive countervailable subsidies from their respective home countries to assist, permit, or otherwise enable their participation in that consortium through production or manufacturing operations in their respective home countries, then the administering authority shall cumulate all such countervailable subsidies, as well as countervailable subsidies provided directly to the international consortium, in determining any countervailing duty upon such merchandise.

The legislative history of Section 701(d) makes clear that this provision was added to the statute to address the subsidies that Airbus was receiving from the various Airbus governments under a situation that was nearly identical to the one at issue here.³⁰⁸ In the case of Airbus, Airbus entities located in Germany, France, the UK and Spain manufacture major sections of the aircraft (*e.g.*, fuselage, wings) that are shipped to Germany or France (depending on the specific model

³⁰⁷ *Id.*, paras. 169-170.

³⁰⁸ *See, e.g.*, Omnibus Trade and Competitiveness Act of 1988, H.R. Rep. No. 100-576, pt. B, , at 589-590 (1988) (Conf. Rep.) (stating among other things that “{t}he conferees are aware of the fact that bilateral discussions are currently underway between the United States and the European Community on the issue of subsidies provided to Airbus Industrie. . . . it is the intent of the conferees to make it perfectly clear that the U.S. countervailing duty law may be applied to remedy subsidies provided by multiple governments to an international consortium which exports its product to the United States.”).

in question) for final assembly. Similarly, in the case of Bombardier, “major risk sharing suppliers and/or Bombardier subsidiaries, placed in different geographical locations . . . manufacture self-contained sections of the aircrafts (such as wings, centre fuselage, and empennage) to be integrated by Bombardier in a short cycle-time, high-rate final assembly.”³⁰⁹ In both cases, the individual governments (France, the UK, Germany and Spain in the case of Airbus; Canada, Quebec and the UK in the case of Bombardier) provide launch aid subsidies to the entities located in their respective home countries in support of those entities’ production or manufacturing operations related to the overall project.³¹⁰

Therefore, launch aid provided by the UK government to Bombardier/Shorts constitutes a countervailable subsidy and should be cumulated in determining the countervailing duty on C Series imports.

a) Financial contribution

The provision of the launch aid to Bombardier/Shorts constitutes a direct transfer of funds within the meaning of Section 771(5)(D)(i) of the Act—namely, success-dependent loans.

b) Benefit

³⁰⁹ European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, at para. 24 (June 17, 2009), attached as Exhibit 22.

³¹⁰ In its countervailing duty investigation of low-enriched uranium from Germany, the Netherlands and the United Kingdom, the Department concluded that Congress intended a “broad application of this provision to situations ‘in which foreign governments provide subsidized assistance for participation in international marketing ventures both within and beyond traditional customs union frameworks.’” Issues and Decision Memorandum: Final Affirmative Countervailing Duty Determinations: Low Enriched Uranium from Germany, the Netherlands, and the United Kingdom—Calendar Year 1999, C-428-829, C-421-809, C-412-821, Comment 2, citing Conf. Rep. at 589. The floor proceedings on the provision’s addition to the Act further support the Department’s conclusion. Omnibus Trade and Competitiveness Act of 1987, Amendment No. 321, 133 Cong Rec S 8641 (statement by Senator Adams) (“{i}n Washington State, we know firsthand how significant it can be when an international consortium, like Airbus, is permitted to continue to benefit from subsidies from several foreign governments. To our State, perpetuation of such an unfair trade practice means lost markets and lost jobs. *To counteract the growth of cases in which foreign governments seek to cooperatively provide subsidized assistance to international production and marketing ventures both within and beyond traditional customs union frameworks, the countervailing duty remedy should be explicitly available to U.S. industries confronted by such multi-country subsidization*”) (emphasis added).

Under Section 771(5)(E) of the Act, the benefit of a loan to its recipient is the difference between the amount the recipient pays on the loan and the amount the recipient would pay for a comparable commercial loan that the recipient could actually obtain on the market.³¹¹ In this case, as with the Canada launch aid, the launch aid to Bombardier/Shorts should be treated as a contingent liability interest-free loan.³¹² Thus, every year, Bombardier/Shorts receives the benefit of an interest-free loan in the amount of the outstanding principal, *i.e.*, at least GBP 113.37 million.

c) Specificity

The financing is specific within the meaning of Section 771(5A)(D)(i) of the Act because—as the Commission concluded in its State Aid investigation—the UK government provided the financing to one undertaking, Bombardier/Shorts, to support the C Series program.³¹³ Thus, on its face, based on publicly available information, the terms of the financing meet the specificity requirement.

C. Additional Subsidies

1. Export Development Canada export financing

Export Development Canada (“EDC”), Canada’s export credit agency, lists the aerospace industry in general, and the C Series program in particular, as one of three “promising areas” for “trade-creating initiatives.”³¹⁴ According to EDC:

Bombardier is now embarking on a completely new level of operation with the development of the C Series, a family of two aircraft destined to serve the 100-149 seat market segments. Like the {Canadair Regional Jet} 20 years ago, the C Series has the

³¹¹ 19 U.S.C. § 1677(5)(E)(ii).

³¹² 19 C.F.R. § 351.505(d).

³¹³ Similarly, the European Commission found that the aid was “selective” because it “favours explicitly only one undertaking, Shorts.” European Commission, State Aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, para. 83 (June 17, 2009), attached as Exhibit 22.

³¹⁴ Export Development Canada, “2012-2016 Corporate Plan Summary,” at 20 (Feb. 2012), attached as Exhibit 127.

potential to change the face of the Canadian aerospace industry and enhance our country's leadership in this sector globally.

The development of the C Series is a critical opportunity for Canadian aerospace companies all along the supply chain to move to the forefront of the industry. . . .

In this environment, many aerospace industry leaders increasingly rely in large part on {export credit agency} assistance. EDC, in accordance with its mandate, will consider financing sales of different aerospace products when private sector financing is limited or absent. In the case of the C Series, this may be more likely to occur during the first few years of the program.³¹⁵

EDC maintains a Canada Account from which it supports export transactions through loan financing, among other forms of assistance. This account reportedly contains over CDN 500 million allocated to finance transactions for buyers of Bombardier aircraft.³¹⁶ Delta has received loan financing support on two separate occasions for orders of Bombardier regional jets.³¹⁷ In the past, the EDC has provided support to Bombardier in the range of CDN 100-250 million.³¹⁸

Published agency reports and forecast plans show the EDC's intent to provide loan assistance to C Series customers. Specifically, the agency's Corporate Plan states that the EDC is "preparing to provide buyer financing for the early years of the C Series"³¹⁹ According to an EDC spokesman, the agency will offer "commercial loans to interested buyers that represent up to 75 per cent of the purchase price of the C Series" and, in contrast to the USD 1 billion in customer financing committed by *Investissement Québec* (discussed in the following section), "there are no limits to the amounts EDC is willing to loan."³²⁰

³¹⁵ *Id.* at 48.

³¹⁶ See Export Development Canada, "Canada Account," attached as Exhibit 128.

³¹⁷ See *Ottawa lends Bombardier customer \$173 million*, *Globe and Mail* (Aug. 5, 2009, updated Aug. 23, 2012), attached as Exhibit 129.

³¹⁸ See Export Development Canada, "Canada Account," attached as Exhibit 128.

³¹⁹ Export Development Canada, "2015-2019 Corporate Plan Summary," at 25 (2015), attached as Exhibit 130.

³²⁰ Sophie Cousineau, *Québec to support Bombardier's C Series sales*, *Globe and Mail* (Apr. 3, 2013), attached as Exhibit 131.

Brazil successfully challenged export subsidies to Bombardier from the Canada Account program in the *Canada – Aircraft* dispute.³²¹ Neither Delta nor the EDC have disclosed the existence of any loan agreement in connection with the C Series order; however, given this program’s history of supporting Bombardier sales (including to Delta) and EDC’s commitment to support C Series sales, the Department should seek additional information to determine if the EDC has provided any financial support and, if so, on what terms. Petitioner has searched for reasonably available information about the terms and conditions on which this subsidy was granted, and has determined that it is not obtainable.

a) Financial contribution

EDC export financing constitutes a direct transfer of funds within the meaning of Section 701(5)(D)(i) of the Act.

b) Benefit

EDC export financing confers a benefit within the meaning of Section 701(E) of the Act, because it provides financing on terms that are more favorable than the recipients would pay for comparable commercial financing.

c) Specificity

EDC export financing is specific within the meaning of Section 701(5A)(B) of the Act, because it is a subsidy that is contingent, in law or in fact, upon export performance.

2. USD 1 billion in customer financing by Québec

On March 7, 2013, Québec issued a decree ordering *Investissement Québec* to provide financing to Bombardier customers for the acquisition of C Series airplanes, with a budget of

³²¹ See Panel Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R, adopted Aug. 20, 1999, para. 9.231, attached as Exhibit 123.

USD 1 billion.³²² The decree states that the financing was being provided in response to a Bombardier request that Québec finance the C Series. The Department should examine the terms and conditions of this financing and determine whether it results in the conferral of countervailable subsidies to Bombardier, as is likely the case. Petitioner has searched for reasonably available information about the terms and conditions on which this subsidy was granted, and has determined that it is not obtainable.

a) Financial contribution

Québec customer financing constitutes a direct transfer of funds within the meaning of Section 701(5)(D)(i) of the Act.

b) Benefit

Québec customer financing confers a benefit within the meaning of Section 701(E) of the Act, because it provides financing on terms that are more favorable than the recipients would pay for comparable commercial financing.

c) Specificity

Québec customer financing is specific within the meaning of Section 701(5A)(B) of the Act, because it is a subsidy that is contingent, in law or in fact, upon export performance.

3. Technology Partnerships Canada program

Industry Canada maintains a Technology Partnerships Canada (“TPC”) program, which formerly provided “transfer payments” to defray the cost of R&D conducted by Canadian businesses, including in the aerospace sector. TPC provided these payments for projects

³²² *Décret* 160-2013 (Mar. 7, 2013), *Gazette Officielle du Québec*, Apr. 3, 2013, No. 14, p. 1375, attached as Exhibit 132.

contracted from 1996 to 2006.³²³ Bombardier was one of the recipients of transfer payments under TPC, and has received at least CDN 139.58 million for multiple projects.³²⁴

In the *Canada – Aircraft* dispute, Brazil successfully challenged TPC payments to Bombardier as WTO-inconsistent subsidies.³²⁵ While Canada subsequently took steps to eliminate the prohibited aspect of the subsidies (they were export-contingent), it did not, as far as Boeing is aware, take any steps to reduce the amount of TPC payments to Bombardier. The Department should examine Bombardier’s receipt of TPC payments to determine the full extent of the subsidies that the company has received.

a) Financial contribution

The provision of transfer payments under the TPC program constitutes a direct transfer of funds within the meaning of Section 771(5)(D)(i) of the Act.³²⁶

b) Benefit

Transfer payments under the TPC program take the form of success-dependent loans. Under Section 771(5)(E) of the Act, the benefit of a loan to its recipient is the difference between the amount the recipient pays on the loan and the amount the recipient would pay for a comparable commercial loan that the recipient could actually obtain on the market.³²⁷ Although the terms of TPC transfer payments are not publicly available, Canada stated in the *Canada – Aircraft* dispute that it does not seek a commercial return for such payments, and that it seeks instead to obtain a return that is sufficient to cover its cost of funds.³²⁸

³²³ Industrial Technologies Office, “Technology Partnerships Canada (TPC) Repayment Status Report” (May 1, 2016), available at <https://ito.ic.gc.ca/eic/site/ito-oti.nsf/eng/00935.html>, attached as Exhibit 133.

³²⁴ *Id.*

³²⁵ See, e.g., Panel Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R, adopted Aug. 20, 1999, para. 10.1, attached as Exhibit 123.

³²⁶ In the *Canada – Aircraft* dispute, the Panel stated that it was “in no doubt that TPC contributions constitute ‘financial contributions’ by a public body within the meaning of Article 1.1 of the SCM Agreement, as they are direct transfers of funds by the government of Canada, in the sense of Article 1.1(a)(1)(i).” *Id.*, para. 9.306.

³²⁷ 19 U.S.C. § 1677(5)(E)(ii).

³²⁸ Panel Report, *Canada – Measures Affecting the Export of Civilian Aircraft*, WT/DS70/R, adopted Aug. 20, 1999, para. 9.312, attached as Exhibit 123.

c) Specificity

The transfer payments are specific within the meaning of Section 771(5A)(D) of the Act because Industry Canada limits the payments to certain enterprises or industries, including the aerospace and defense sector.³²⁹

4. Technology Demonstration Program

Since 2013, Industry Canada has maintained a Technology Demonstration Program (“TDP”) that provides “non-repayable contributions to support . . . large-scale research and development {} projects” in the aerospace, defence, space and security sectors.³³⁰ According to Industry Canada:

Funding under the TDP is generally given to collaborative groups of Eligible Recipients. Eligible Recipients for funding under TDP are corporations incorporated pursuant to the laws of Canada that carry on business in Canada and propose to conduct industrial research and technology demonstration activities with Aerospace, Defence, Space and Security (A&D) applications, as well as Canadian universities or colleges and Canadian research institutes.³³¹

Industry Canada has further explained that eligible recipients are categorized as “lead recipients” and “partner recipients.” Lead recipients are typically Original Equipment Manufacturers (“OEMs,” such as Bombardier) or Tier 1 suppliers, and are responsible for managing the funded projects. Partner recipients work with the lead recipient to complete the projects. Partner recipients reportedly must include at least one small or medium-sized Canadian

³²⁹ See, e.g., Innovation, Science and Economic Development Canada, “Technology Partnerships Canada – Eligibility Criteria,” attached as Exhibit 134.

³³⁰ See Innovation, Science and Economic Development Canada, “Technology Demonstration Program (TDP)—Program Guide,” at 2, attached as Exhibit 135. The United States has raised questions in the Subsidies Committee re Bombardier’s potential participation in this program. See, e.g., Committee on Subsidies and Countervailing Measures, Replies to Questions Posed by the United States Regarding the New and Full Notification of Canada, G/SCM/Q2/CAN/66 (Mar. 29, 2016), attached as Exhibit 136.

³³¹ See Innovation, Science and Economic Development Canada, “Technology Demonstration Program (TDP)—Program Guide,” at 2, attached as Exhibit 135.

corporation and one academic institution (such as a university, college or affiliated research institute).³³²

According to Industry Canada, TDP support must be essential to the location, scope and/or timing of the project. The maximum contribution amount for a given project would normally not exceed CDN 54 million.³³³

The Department should examine Bombardier's receipt of TDP payments to determine the full extent of the subsidies that the company has received.

a) Financial contribution

The provision of transfer payments under the TDP program constitutes a direct transfer of funds within the meaning of Section 771(5)(D)(i) of the Act.

b) Benefit

Transfer payments under the TDP program take the form of grants. The benefit of a grant is the face value of the funds granted.³³⁴

c) Specificity

The transfer payments are specific within the meaning of Section 771(5A)(D) of the Act because the program is limited to companies performing research and development with aerospace, defense, space and security applications.³³⁵

5. Provision of production facilities and land at Mirabel

When Bombardier selected Mirabel as the production site for the C Series in 2005, it did so on the basis of a three-part offer provided by the government of Québec, which at the time

³³² See *id.*

³³³ See *id.* at 3.

³³⁴ See 19 C.F.R. § 351.504(a).

³³⁵ See Innovation, Science and Economic Development Canada, "Technology Demonstration Program (TDP)—Program Guide," at 2, attached as Exhibit 135.

was competing against other potential production sites.³³⁶ One of the three parts provided for the construction of the production facility itself, to be co-owned by *Investissement Québec* and private owners, and leased to Bombardier.³³⁷ This offer was likely the basis of Bombardier's eventual decision to site the C Series program in Mirabel.³³⁸

The Department should examine the terms and conditions on which the production facilities and the land at Mirabel have been provided to Bombardier, including any lease or sublease to Bombardier, in order to determine whether they result in the conferral of countervailable subsidies to Bombardier, as is likely the case.

a) Financial contribution

The provision of production facilities and land at Mirabel constitute provision of goods or services, other than general infrastructure, within the meaning of Section 771(5)(D)(iii) of the Act.

b) Benefit

The provision of production facilities and land at Mirabel were provided for less than adequate remuneration within the meaning of Section 771(5)(E)(iv) of the Act.

c) Specificity

The provision of production facilities and land at Mirabel is specific within the meaning of Section 771(5A)(D) of the Act, because the subsidy was expressly limited to Bombardier.

6. Tax credits provided by the city of Mirabel

³³⁶ See La Presse, *Québec offre de construire l'usine avec le privé* (Jan. 28, 2005), attached as Exhibit 137; see also Brazil WTO Request for Consultations, WT/DS552/1, at 2 (Feb. 15, 2017), attached as Exhibit 138.

³³⁷ See La Presse, *Québec offre de construire l'usine avec le privé* (Jan. 28, 2005), attached as Exhibit 137.

³³⁸ See Press Release, Bombardier, "Bombardier Launches C Series Aircraft Program" (July 13, 2008), attached as Exhibit 20.

On November 26, 2012, the city council of Mirabel, Québec issued *Règlement 1915*, establishing tax credits to companies in the aircraft manufacturing industry that set up an establishment at its airport.³³⁹ In particular, *Règlement 1915* states that it:

Establishes a new program of assistance in the form of a general and special property tax credit for the construction, expansion or renovation of an industrial building in the aerospace sector

Generally, the general and special property tax credit has the effect of offsetting, for new construction, extension or renovation, 100% of general and special property taxes, based on the value of the building for a period of twelve (12) months as of the effective date of the appraisal, and 38.5% of general and special property taxes, based on the value of the property for an additional period of one hundred eight (108) months.³⁴⁰

Thus, the tax credits are limited to the aerospace sector. The credits are equal to 100% municipal tax credit during the first year and a 38.5% annual discount for each of the following nine years.

As noted above, Mirabel is the site of Bombardier's production facility for the C Series. Thus, Bombardier has likely claimed this tax credit.

a) Financial contribution

The city of Mirabel's provision of tax credits constitutes "the foregoing or not collecting revenue that is otherwise due, such as granting tax credits," within the meaning of Section 771(5)(D)(ii) of the Act.

b) Benefit

The city of Mirabel's provision of tax credits confers a benefit in the amount of revenue foregone, within the meaning of Section 771(5)(E) of the Act.

c) Specificity

³³⁹ City of Mirabel, *Règlement numéro 1915* (Nov. 28, 2012), attached as Exhibit 139.

³⁴⁰ *Id.*

The city of Mirabel's provision of tax credits is specific within the meaning of Section 771(5A)(D)(i) of the Act, because the subsidy is explicitly limited to the aerospace industry.

7. Canada's provision of CDN 20 million for R&D

Canadian government documents indicate that the Ministry of Innovation, Science and Economic Development has given Bombardier CDN 20 million which is “{p}rimarily {for} aerospace R&D.”³⁴¹ The Department should examine the terms and conditions of the support provided to Bombardier by Innovation, Science and Economic Development Canada for aerospace R&D, in order to determine whether they result in the conferral of countervailable subsidies to Bombardier, as is likely the case. Petitioner has searched for reasonably available information about the terms and conditions on which this subsidy was granted, and has determined that they are not obtainable.

a) Financial contribution

The Ministry of Innovation, Science and Economic Development's provision of R&D funding to Bombardier constitutes a direct transfer of funds within the meaning of Section 771(5)(D)(i) of the Act.

b) Benefit

For R&D funding provided by the Ministry of Innovation, Science and Economic Development, the benefit is the face value of the funds granted.³⁴²

c) Specificity

³⁴¹ Canadian Government Document at frame 32, attached as Exhibit 88. This support was included in the Government of Brazil's request for consultations with the Government of Canada at the WTO regarding subsidies to Bombardier. Brazil WTO Request for Consultations, WT/DS552/1, at 2 (Feb. 15, 2017) attached as Exhibit 138.

³⁴² See 19 C.F.R. § 351.504(a).

R&D funding to Bombardier is specific within the meaning of Section 771(5A)(D) of the Act because the subsidies are limited to Bombardier or the aerospace industry.³⁴³

8. CDPQ Line of Credit

In 2009, the CDPQ announced that it would participate in an underwriting syndicate that made a USD 500 million credit facility available to Bombardier.³⁴⁴ The CDPQ stated that it contributed USD 195 million to this financing package, in the form of a line of credit with a two-year term.³⁴⁵ As of 2017, the credit facility was available for needs “other than Transportation’s usage,”³⁴⁶ meaning that in all likelihood, it was used to finance the C Series.³⁴⁷ It appears that Bombardier has extended the maturity date of the credit facility several times, most recently to June 2019.³⁴⁸

The Department should examine the terms and conditions of this credit facility, to determine whether it involves the conferral of countervailable subsidies to Bombardier, as is likely the case. Petitioner has searched for reasonably available information about the terms and conditions on which this subsidy was granted, and has determined that they are not obtainable.

a) Financial contribution

³⁴³ See Innovation, Science and Economic Development Canada, “Technology Demonstration Program (TDP)—Program Guide,” at 2, attached as Exhibit 135.

³⁴⁴ Press Release, CDPQ, “The Caisse de Dépôt et Placement du Québec Grants US\$195 Million in Financing to Bombardier” (Sept. 2, 2009), attached as Exhibit 140.

³⁴⁵ *Id.* Bombardier’s 2010 Annual Report comports with CDPQ’s press release, stating that it did receive a USD 500 million two-year unsecured revolving credit facility with a syndicate of commercial banks and “other institutions” in September 2009. See Bombardier Annual Report 2010, at 176, attached as Exhibit 141.

³⁴⁶ Bombardier Financial Report 2016, at 23 n. 1, attached as Exhibit 142.

³⁴⁷ The CDPQ line of credit should be treated as a subsidy that is tied to the C Series. See Subsidies Calculation Workbook, attached as Exhibit 14.

³⁴⁸ The 2009 agreement with the CDPQ was for a two-year term revolving credit facility. Bombardier subsequently renewed the credit facility to June 2014, June 2017, June 2018, and June 2019. Bombardier Annual Report 2011, at 186-187, attached as Exhibit 126; Bombardier Financial Report 2014, at 164, attached as Exhibit 143; Bombardier Financial Report 2015, at 28, attached as Exhibit 111; Bombardier Financial Report 2016, at 23-24, attached as Exhibit 142. In addition, the amount of the credit facility rose to USD 750 million, and then was decreased to USD 400 million. Bombardier Annual Report 2011, at 186-187, attached as Exhibit 126; Bombardier Financial Report 2016, at 23, attached as Exhibit 142.

The CDPQ line of credit constitutes a direct transfer of funds to Bombardier in the form of a loan, within the meaning of Section 771(5)(D)(i) of the Act.

b) Benefit

Under Section 771(5)(E) of the Act, the benefit of a loan to its recipient is the difference between the amount the recipient pays on the loan and the amount the recipient would pay for a comparable commercial loan that the recipient could actually obtain on the market.³⁴⁹ In this case, the CDPQ line of credit likely confers a benefit to Bombardier.

c) Specificity

The subsidy is specific as a matter of both law and fact within the meaning of Section 771(5A)(D) of the Act, given that Canada limits access to the subsidy to Bombardier.

9. *Emploi-Québec*

In November 2013, *Emploi-Québec*—a part of the government of Québec—announced that it would provide Bombardier with a subsidy (“*subvention*”) in the form of a grant (“*octroie*”) of CDN 4 million over three years to improve workforce training.³⁵⁰ Of this amount, CDN 2 million was designated specifically to train employees for the C Series program.³⁵¹ *Emploi-Québec* provided an additional CDN 2 million in June 2013 for training a workforce for the Global 7000 and Global 8000 business class aircraft program.³⁵² In announcing the subsidy, an *Emploi-Québec* official stated that the assistance would “support the success of important projects in which the company {*i.e.*, Bombardier} has invested considerable sums.”³⁵³

a) Financial contribution

³⁴⁹ 19 U.S.C. § 1677(5)(E)(ii).

³⁵⁰ See Reine Côte, “Formation de la main d’oeuvre: Québec octroie 4 M\$ à Bombardier Aéronautique” Nordinfo (Nov. 26, 2013), attached as Exhibit 144. The announcement stated that the subsidy was granted pursuant to a pre-existing plan dating to the autumn of 2012. *Id.*

³⁵¹ *Id.* The remaining CDN 2 million was provided for workforce training for the Global 7000 and Global 8000 business jet program. *Id.*

³⁵² *Id.*

³⁵³ *Id.*

Emploi-Québec's provision of CDN 4 million to Bombardier constitutes a direct transfer of funds within the meaning of Section 771(5)(D)(i) of the Act.

b) Benefit

The funding provided by *Emploi-Québec* to Bombardier constitutes a grant. The benefit of a grant is the face value of the funds granted.³⁵⁴

c) Specificity

Emploi-Québec's payments to Bombardier are specific within the meaning of Section 771(5A)(D) of the Act because the subsidy was expressly limited to Bombardier.

V. CONCLUSION

As demonstrated above, Bombardier has received billions of dollars of countervailable subsidies with respect to the manufacture, production, or export of Aircraft. Accordingly, Boeing respectfully requests that the Department and the Commission initiate a countervailing duty investigation and impose countervailing duties on Aircraft imports from Canada.

³⁵⁴ See 19 C.F.R. § 351.504(a).

PART FOUR: DUMPING ALLEGATION

I. INTRODUCTION

Bombardier is dumping the C Series at extreme levels in the U.S. market. At USD 19.6 million per aircraft, C Series pricing in the Delta sale is well below a constructed value of USD 35.3 million per aircraft. It is also significantly lower than Bombardier's contemporaneous below-cost sale in its home market, to Air Canada, which was reportedly at USD 30 million per aircraft. Comparing the Delta price to constructed value yields an estimated dumping margin of at least 80.50% *ad valorem*.

The dumping margin calculation is detailed in the Dumping Calculation Workbook, **Exhibit 42, Tab 1**. The Workbook contains a series of worksheets summarizing the U.S. Price, Normal Value, and Cost of Production/Constructed Value calculations used to derive Bombardier's estimated dumping margin. The specific prices and costs reported in the Dumping Calculation Workbook are further explained in affidavits attached as Exhibits 1 and 152. Boeing used export price as the basis for U.S. price because delivery and final invoicing for the sale takes place prior to importation into the United States.

Boeing began by identifying normal value ("NV"), using a contemporaneous price for a similar product in the home market. Next, Boeing compared the ex-factory Home Market Price to Bombardier's fully allocated cost of production. As set forth in Section III.F below, the single home market sale during the period of investigation was well below fully allocated production costs. Therefore, pursuant to Section 773 of the Act,³⁵⁵ Boeing calculated NV on the basis of Constructed Value ("CV").

³⁵⁵ 19 U.S.C. § 1677b(e).

Under these circumstances, the Department's standard rules for measuring dumping show that Bombardier has sold Aircraft in the United States at less than normal value. Accordingly, the Department should impose antidumping duties on Canadian Aircraft.

II. EXPORT PRICE

The Delta sale is properly classified as an export price ("EP") sale, given standard practices in this industry. A typical Aircraft sale entails months and perhaps years of negotiations. Once the manufacturer and the buyer agree on the essential terms of sale, the two enter into an initial agreement, which can take the form of a memorandum of understanding or letter of intent. Once all terms have been finalized, the buyer signs a definitive purchase agreement. Standard industry practice calls for a down payment at the time of definitive agreement, with periodic progress payments during the production planning, build, and testing period. Delivery and final invoicing for each aircraft usually occurs at the manufacturer's testing facility upon receipt of an airworthiness certificate. The delivered aircraft is then flown by the customer's crew to an airport of its choosing. If the aircraft's principal area of operations is within the United States, then it enters the U.S. customs territory upon first landing at a U.S. international airport. Because the terms are set and the sale occurs prior to importation, Boeing has classified the sole U.S. transaction as an EP sale.

Notwithstanding the treatment of the sale as an EP transaction, the dumping calculation should reflect the reality that Bombardier maintains substantial customer support and servicing operations in the United States. Through its network of offices, Bombardier provides marketing and sales support, technical servicing, as well as other post-importation services that are directly related to U.S. economic activity.³⁵⁶ Accordingly, while Boeing has classified the single U.S.

³⁵⁶ See Bombardier, "Bombardier in the United States," (2016), attached as Exhibit 145; see also Bombardier, "Contacts: Aerospace in USA," attached as Exhibit 61.

sale during the POI as an EP sale, in any investigation, the Department should require Bombardier to provide information on all expenses incurred in the United States, as well as any other costs that are directly related to U.S. economic activity. Any such costs should be deducted in the net U.S. price calculation.³⁵⁷

A. The Sale of 75 CS100 Aircraft to Delta

On April 28, 2016, Bombardier and Delta announced that Delta had placed a firm order for 75 C Series Aircraft.³⁵⁸ The first 35 deliveries are set to be for the CS100 model, while Delta has the right to switch the remaining firm orders (and any of the 50 options it received) to the CS300. As explained below, the Delta quarterly financial reports can be used to derive a precise per aircraft price for the sale. Those reports include the value and quantity of Delta's annual future purchase commitments by type of aircraft and by year. If, for any future year shown in the table, the increase in commitments in a particular quarter equates to the delivery of a single aircraft type from a single seller, it is possible to derive Delta's purchase price.

A comparison of Delta's quarterly financial reports from the first and second quarters of 2016 allows for a precise calculation of the price at which Bombardier has sold the CS100s to Delta. As shown in **Exhibit 42, Tab 7**, Delta's reported net change in total aircraft ordered in these two quarters indicates that the airline ordered aircraft from Airbus (A320s) and Bombardier (CS100s). Based on a review of aircraft delivery data from Ascend, a recognized industry source on aircraft orders and deliveries, as of March 2017, the only new aircraft scheduled for delivery

³⁵⁷ Based on its own experience selling similar aircraft, Boeing has identified, and estimated the cost of, the key types of ancillary items likely offered by Bombardier. See Affidavit of [], attached as Exhibit 1.

³⁵⁸ Press Release, Bombardier, "Bombardier Announces Major C Series Order and Reports Financial Results for the First Quarter of 2016," attached as Exhibit 146. At list prices, this sale was valued at approximately USD 5.6 billion. The published list price for one CS100 aircraft is USD 71.8 million. According to contemporaneous industry reports, Delta received discounts in the range of 65 to 75% off list for these aircraft. As shown in the Dumping Calculation Workbook, attached as Exhibit 42, these discounts would imply a price of USD 17.95 to USD 25.13 million—a range that is consistent with both public reports of the sale price and Boeing's calculations as described in this section.

to Delta in 2020 are 18 CS100s ordered in April 2016.³⁵⁹ As shown in **Exhibit 42, Tab 7**, Delta's net increase in aircraft purchase commitments in 2020 from Q1 2016 to Q2 2016 is equal to USD 420 million. Thus, the unadjusted per Aircraft price for the sale of the Bombardier CS100s to Delta is equal to USD 420 million/18 aircraft, or USD 23.3 million per aircraft.³⁶⁰ As shown in Tab 6 of the Dumping Calculation Workbook attached as Exhibit 42, this estimated price falls toward the upper end of the range of net prices reported in the press for this sale.

The price to Delta was so low that Bombardier was forced to record a USD 492 million onerous contract provision pertaining to that sale, as well as to sales involving Air Canada (a home market sale discussed in Section III below) and airBaltic (a third country sale).³⁶¹ According to the IFRS accounting rules applicable to Bombardier, this provision constitutes an admission that the costs of producing the Aircraft associated with these sales will "exceed the economic benefits expected to be received under it," including any indirect benefits in addition to the revenue from the sales.³⁶² Thus, each of the transactions covered by the provision were sold at prices below the cost of production.

B. Adjustments to Export Price

Aircraft selling prices frequently include a number of ancillary elements not found in commodity transactions. The precise nature and value of these elements varies from sale to sale.

³⁵⁹ See 100- to 150-Seat Large Civil Aircraft in the U.S. & Global Markets, Actual and Projected Deliveries and Market Share (2007-2021), with underlying Ascend Database, & Ascend Backlog Database, attached as Exhibit 44.
³⁶⁰ |

|. See Affidavit of |

|, attached as Exhibit 1.

| *Id.*
Bombardier Financial Report 2016, at 57, attached as Exhibit 142. The onerous contract provision covered losses related to Delta's orders for 75 CS100s, Air Canada's orders for 45 CS300s, and Air Baltic Corporations' orders for 7 CS300 aircraft. *Id.*

³⁶² See PricewaterhouseCoopers, IFRS Manual of Accounting, paras. 21.161, 21.168-21.169.

An affidavit attached as Exhibit 1 sets forth information available to Boeing on the likely ancillary items included in the Delta sale.

Below, Boeing lists ancillary elements that are likely to have been included in the Delta sale:³⁶³

- *Initial deposit and pre-delivery payments:* Aircraft purchases typically require an initial deposit at the time of firm order, followed by pre-delivery payments. To finance production, certain progress payments are paid between the time of the order of the aircraft and its completion, with the remainder payable upon delivery. In *Large Newspaper Printing Presses from Germany and Japan*, the Department calculated imputed credit during the post-order, pre-delivery period by “multiplying an interest rate by the net balance of production costs incurred, and progress payments made.”³⁶⁴
- *Entry into service (“EIS”) support:* If an airline buys an entirely new aircraft that has no commonality with its existing fleet, the manufacturer may be asked to provide substantial support, including by stationing engineers and other personnel on-site with the airline, to ensure a smooth delivery and quickly address any EIS problems. This includes addressing the challenges that arise as the new aircraft (and its systems, tools, spare parts, and other aspects) are integrated with the airline’s existing operations and with the infrastructures of various airports.
- *Spare parts support:* Any Aircraft purchase may include credits to purchase spare parts.
- *Customer training support (for maintenance, pilots, and cabin crew):* If an airline buys an entirely new aircraft that has no commonality with its existing fleet, the manufacturer may be asked to provide maintenance training, or credits to cover maintenance training provided by third parties. In addition to maintenance training, an airline buying an entirely new airframe will require substantial pilot training services, as well as cabin crew training. The aircraft manufacturer may offer to provide this training directly, or provide credits to cover the cost of such training provided by third parties. Indeed, Bombardier has reported that it provided training in Mirabel, Québec for pilots of Swiss International Air Lines (“SWISS”).³⁶⁵
- *Warranties:* Early customers of an entirely new aircraft typically require generous warranty terms.

³⁶³ See Affidavit of [], attached as Exhibit 1.

³⁶⁴ See *Large Newspaper Printing Presses and Components Thereof, Whether Assembled or Unassembled, From Japan: Preliminary Results of Antidumping Duty Administrative Review*, 65 Fed. Reg. 62,700, 62,702 (Dep’t Commerce Oct. 19, 2000).

³⁶⁵ Press Release, Bombardier, “Bombardier’s All-new C Series Aircraft Program Starts Ramp-up to Full Production and SWISS Pilots Kick Off C Series Aircraft Flight Training” (Jan. 19, 2016), attached as Exhibit 147.

- *Performance guarantees:* An important element of a purchase agreement for an entirely new airplane may be the guarantee provided by the manufacturer to the buyer that the airplane will meet certain thresholds for fuel consumption, hours of operation, and maintenance down-time.
- *Service life support:* In addition to EIS support, a customer may receive manufacturer support for the Aircraft's anticipated service life in the customer's fleet, which may include services related to maintenance, systems updates, and further crew training.
- *Residual value guarantees:* Besides a guarantee on key elements of the aircraft operating performance, early customers of entirely new aircraft may require a residual value guarantee, or "RVG." The RVG essentially is a guarantee to the buyer that the aircraft will be sold at no less than the specified price. The level of risk associated with RVGs is substantially higher for an entirely new aircraft, since there is no existing secondary market. Given Bombardier's poor financial performance over the past several years, it is highly likely that any early purchaser of the C Series would require RVGs for every aircraft. Thus, in extending these RVGs, Bombardier would be assuming substantial risks.
- *Delivery schedule flexibility:* A customer may receive the right to change scheduled deliveries without incurring any contractual penalties. This is a valuable right for the customer, as such flexibility transfers to the manufacturer the risk of unforeseen events (such as a downturn in passenger traffic or financial distress) that would make it disadvantageous for the customer to take delivery as originally scheduled.
- *Trade-in commitments:* Frequently as part of a sale, the producer will agree to buy back the Aircraft at a pre-agreed price after a certain term (e.g., twelve years). This trade-in commitment sets a floor for the aircraft's residual value and represents a significant financial commitment by the producer.
- *Simulator support:* Particularly when introducing a new Aircraft type, a customer will receive hardware, software, data, and technical support services that will enable the training of its pilots on flight simulator systems that replicate the operating characteristics of the Aircraft.

C. Ex-Factory U.S. Price

Based on information reasonably available to Boeing, estimated ancillary items have been deducted from the gross export price for the Aircraft, resulting in an ex-factory export price of USD 19.6 million.³⁶⁶

III. NORMAL VALUE

³⁶⁶ Affidavit of [], attached as Exhibit 1.

Pursuant to Section 773 of the Act,³⁶⁷ the preferred option for NV in cases involving products from Market Economy countries is home market price. As discussed below, Bombardier's sales in its home market are sufficient to meet the Department's market viability threshold.³⁶⁸ However, as discussed in Section III.F below, Bombardier's single home market sale is below fully allocated production costs. Therefore, the appropriate basis for NV is constructed value.³⁶⁹

A. Bombardier's Home Market Is Viable

Within the standard Department period of investigation,³⁷⁰ Bombardier sold 75 aircraft in the United States and 45 aircraft in the home market. Thus, Bombardier's home market sales clearly exceed the 5% threshold set forth in Section 351.404(b)(2) of the Department's regulations, and therefore are the starting point for determining NV.

B. The Sale of 45 CS300 Aircraft to Air Canada

On June 28, 2016, Bombardier announced that it had finalized the order it received from Air Canada for 45 CS300 aircraft.³⁷¹ According to industry sources, Air Canada paid USD 30 million, after discounts, for these aircraft.³⁷² Thus, for purposes of estimating the dumping margin, the starting price for these sales, before adjustments for movement charges, circumstances of sale or selling expenses, is estimated to be USD 30 million per aircraft, as shown in **Exhibit 42, Tab 2**.³⁷³

C. Adjustment for Differences in Physical Characteristics

³⁶⁷ 19 U.S.C. § 1677b(a)(1)(B)(i).

³⁶⁸ See 19 C.F.R. § 351.404(b)(2).

³⁶⁹ See 19 U.S.C. § 1677b(e).

³⁷⁰ See 19 C.F.R. § 351.204(b)(1).

³⁷¹ Press Release, Bombardier, "Air Canada and Bombardier Finalize Landmark C Series Order for up to 75 Aircraft" (June 28, 2016), attached as Exhibit 148.

³⁷² Robert Fife et al., *Bombardier gets lifeline as Air Canada places order for C Series jets*, Globe and Mail (Feb. 17, 2016) ("Industry sources said they believe Air Canada will pay just \$30-million (U.S.) each for the planes, a discount of almost 60 per cent from the list price . . ."), attached as Exhibit 41.

³⁷³ LCA are typically sold in U.S. dollars, regardless of the home country of the customer.

The CS100 and CS300 series aircraft are comparable. In fact, Bombardier has stated that the CS100 and CS300 have 99% commonality of parts as well as the same pilot type rating.³⁷⁴ According to Bombardier fact sheets, the CS100 and CS300 have the same wing, cockpit, tail, avionics, fuselage diameter, and doors, and they use the same Pratt & Whitney engine series, although the CS100 can be equipped with a less powerful variant.³⁷⁵ The main difference between the two models is that the CS300 includes an additional, 12-foot-long fuselage section that adds an additional 22 to 27 seats to the airplane's capacity.³⁷⁶ The C Series program as a whole has been designed to minimize other differences between the two models, since differences tend to increase the cost and complexity of production.

As set forth in **Exhibit 42, Tab 2**, Boeing estimates that this difference in physical characteristics equates to a variable cost difference of USD []. As shown in **Exhibit 42, Tab 2**, this amount falls well within the 20% difference in merchandise upper limit allowed by the Department for price-to-price comparisons.

D. Additional Elements of Home Market Price

The home market price likely includes a number of ancillary elements of the sort described above in Section II.B. However, since the home market price before deduction of these items is below cost, the exclusion of these items from the calculation has no impact on the dumping margin. Deductions from the home market price for these items would only increase the amount by which the cost of production exceeds the home market price.

³⁷⁴ Press Release, Bombardier, "Bombardier CS300 Aircraft Awarded Type Certification by Transport Canada" (July 11, 2016), attached as Exhibit 149.

³⁷⁵ See Bombardier, Bombardier CS100 fact sheet, attached as Exhibit 86; Bombardier, Bombardier CS300 fact sheet, attached as Exhibit 87.

³⁷⁶ See *id.*

E. Ex-Factory Home Market Price

For the reasons discussed above, Boeing has adjusted the home market price to account for differences in physical characteristics but has made no adjustments for ancillary elements. The resulting ex-factory home market price is shown in **Exhibit 42, Tab 2**.

F. Bombardier's Home Market Prices Are Below the Cost of Production

1. The production process for Aircraft

Responsibilities for the design, development, and fabrication of the C Series aircraft are split among a number of companies acting at the direction of Bombardier. In particular:

- The majority of the design and development effort, as well as fuselage, flight deck, and final assembly production activities are the responsibility of Bombardier and are performed in Canada.
- The aircraft wing, including the wing skins, stringers, and spars, have been developed and are manufactured by Shorts, a wholly-owned Bombardier subsidiary located in Belfast, Northern Ireland.
- Fokker Elmo—which is owned by Stork B.V., a Dutch company—is responsible for the design and production of the entire wiring and interconnection system, and provides the design and production of all flight test and instrumentation wiring required during the certification of the C Series aircraft. Manufacturing of development and flight test wiring systems is performed at Fokker Elmo Netherlands, while the serial production reportedly is executed at Fokker Elmo China.
- Alenia Aeronautica—a Finmeccanica subsidiary based in Italy—provides the horizontal and vertical stabilizers, fully equipped with hydraulic, electrical and flight control systems, lights and antennas.
- UTC Actuation Systems (formerly Goodrich Actuation Systems)—a business unit of UTC Aerospace, which in turn is part of the U.S.-based company United Technologies—is responsible for the design and production of the flap and slat actuation systems.³⁷⁷

Aircraft manufacturing entails many multi-step processes, which include a wide range of large-scale fabrication procedures carried out in a number of different countries. Further adding to the cost of each aircraft are the novel materials and production methods being employed by

³⁷⁷ See European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final, para. 26 (June 17, 2009), attached as Exhibit 22.

Bombardier. For these reasons, it is not practical to apply the typical “ground up” method for estimating production costs frequently used in antidumping petitions.³⁷⁸ Instead, consistent with aviation industry practice, Boeing has relied on its own estimating and pricing analysts, as well as its own extensive aircraft development and manufacturing experience, to derive a detailed estimate of Bombardier’s production costs. This methodology uses key Bombardier pricing and cost information that is in the public domain as a basis for extrapolating the total cost of production and constructed value.

2. Recurring production costs

Production costs in the aircraft industry are split into two broad components: recurring costs and non-recurring costs. Recurring costs consist of typical variable costs—materials, labor, and overhead—incurred at levels established after initial production ramp-up has been completed. Ramp-up can take several years due to what are known as “learning curve” effects, *i.e.*, the reduction over time of costs and organizational hurdles associated with developing and implementing a new production process for a highly complex product. If the program proceeds as planned, it reaches mature, full-scale production after several years, at which point production costs are lower and tend to fluctuate less.

Both the Air Canada and the Delta orders are scheduled for deliveries early in the program’s life cycle. Because of the “learning curve” effect, the actual variable manufacturing costs in those years will greatly exceed the average variable manufacturing costs over time. Therefore, as a conservative measure for its calculation, Boeing used average variable manufacturing costs, expressed in constant U.S. dollars, over the life of the C Series program. These costs have been spread over the projected number of deliveries over a twenty-year period,

³⁷⁸ By “ground up”, Boeing is referring to valuing the quantity and value of each of the many thousands of material, labor, and other inputs used to produce an Aircraft such as the CS100.

which is a reasonable estimate for the life of an LCA program. In essence, for purposes of this petition, notwithstanding the limited grounds on which the Department will grant a start-up adjustment under 19 C.F.R. § 351.407, Boeing has applied a start-up adjustment to Bombardier's POI production costs.³⁷⁹ In its normal books and records, Bombardier, following International Financial Reporting Standards ("IFRS"), does not allocate learning curve costs over the life of the program. Thus, Boeing's calculation of Bombardier's recurring costs is very conservative.

To estimate Bombardier's recurring costs, Boeing constructed a Bombardier recurring cost curve model using the following known information:

- Bombardier's published delivery schedule;
- The published break-even point of the first quarter of 2020;³⁸⁰
- Bombardier's expected loss of USD 32 million per unit over the first 50 aircraft;³⁸¹
- Published list prices; and
- Boeing's own experience on the shape of the cost curve for a new aircraft series.

In addition, Boeing assumed the following:

- A total production run of 2,085 units for the C Series program; and
- An average list price discount for the first 206 aircraft of 50%.

Boeing's estimates of Bombardier's production costs are provided at **Exhibit 42, Tab 3**. A detailed explanation of the model and how the public data were incorporated into the model to derive Bombardier's production cost for the C Series is provided at Exhibit 152.

3. Non-recurring expenses

³⁷⁹ During an antidumping investigation, it is Department practice to require the respondent to demonstrate and substantiate any claim for a start-up adjustment.

³⁸⁰ Press Release, Bombardier, "Bombardier Announces Major C Series Order and Reports Financial Results for the First Quarter of 2016," attached as Exhibit 146.

³⁸¹ Kristine Owram, *Bombardier Inc. will lose US\$32M for each C Series built in 2016-17: analysis*, Transportation (Oct. 26, 2015), attached as Exhibit 150.

Non-recurring expenses include pre-commercial production research and development, design and tooling costs. According to Transport Canada, total non-recurring expenses for the C Series, including the cost of an entirely new factory, are USD 5.4 billion.³⁸² To calculate the cost per aircraft of the non-recurring expenses, Boeing divided the total amount by the total quantity of expected production over the life of the program. The expected production quantity was based on Bombardier's published delivery schedule for the early years and the upper range of expected delivery rates in later years.

4. Selling, general, and administrative ("SG&A") and financing costs

Boeing calculated Bombardier's SG&A expenses using its 2016 Financial Report, as shown in **Exhibit 42, Tab 3**.³⁸³ Boeing calculated the average SG&A rate based on Bombardier's company-wide financial data, and then multiplied cost of goods sold plus overhead expenses ("COM") by the SG&A expense ratio to arrive at the total cost of manufacturing ("COP").

5. Comparison of cost of production to home market price

As shown in **Exhibit 42, Tab 1**, Bombardier's sole home market sale was well below its fully-allocated production costs. This conclusion is confirmed by the USD 492 million onerous contract provision discussed in Section II.A above, which identified the Air Canada sale as one of three transactions covered by the provision.³⁸⁴ Each of the transactions covered by the provision involved planes sold at below-cost prices.

³⁸² See Kristine Owram, *How Bombardier's C Series dream got its wings clipped*, National Post (Dec. 12, 2015), attached as Exhibit 15.

³⁸³ See Dumping Calculation Workbook, attached as Exhibit 42; Bombardier Financial Report 2016, at 136, attached as Exhibit 142.

³⁸⁴ See Bombardier Financial Report 2016, at 57, attached as Exhibit 142.

G. Constructed Value

1. Cost of production for Aircraft sold to Delta

To calculate the cost of producing CS100 aircraft sold to Delta for purposes of CV, Boeing used the same sources and methods described above to calculate the cost of production for CS300 aircraft sold to Air Canada. The total cost of production for CS100 aircraft is provided at **Exhibit 42, Tab 3**.

2. Profit

In its most recent financial statement, Bombardier reported substantial operating losses. Boeing is unaware of any other Canadian producer of Aircraft, or any similar aircraft. If there are no usable public financial statements for producers of identical or similar products in the country of exportation, the Department may use the financial statements of the U.S. petitioner to calculate CV profit.³⁸⁵ Therefore, as shown in **Exhibit 42, Tab 3**, to calculate CV profit, Boeing relied on its 2016 Annual Report to calculate a profit ratio.³⁸⁶

IV. LESS THAN NORMAL VALUE COMPARISON

In calculating the estimated dumping margin of Bombardier's sale to Delta, Boeing compared the export price to respective CV. Boeing then subtracted export price from CV, and divided the difference by the export price to determine the dumping margin for the U.S. sale. This yielded a transaction-specific dumping margin, which is also the weight-averaged dumping margin for Bombardier. This calculation has been provided in **Exhibit 42, Tab 1**.

The U.S. price to CV comparison demonstrates that Bombardier exported and sold, or offered to sell, the subject merchandise in the United States at prices that are less than normal value. The calculated dumping margin for Bombardier is 80.50% *ad valorem*.

³⁸⁵ See *Issues and Decision Memorandum for the Final Affirmative Determination in the Less than Fair Value Investigation of Certain Oil Country Tubular Goods from the Republic of Korea*, at 14-23 (June 10, 2014).

³⁸⁶ Boeing 2016 Annual Report, at 49, attached as Exhibit 151.

V. CONCLUSION

Boeing requests that the Department initiate an antidumping investigation and impose antidumping duties on Aircraft from Canada in an amount sufficient to offset the unfair pricing described above.

* * * * *

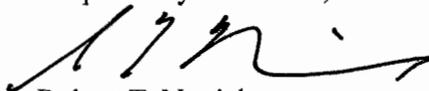
The domestic industry is faced here with unfair competition of the most pernicious sort. Government subsidies created the C Series program, and when the program ran into trouble, Bombardier resorted to even greater subsidies, coupled with dumping of Aircraft at levels far below the cost of production, in order to enable the program even to survive. Indeed, findings by the subsidizing governments themselves establish that the C Series' increasing penetration of the U.S. market would have been impossible without the government subsidies it received.

The effects on competition of such paternalistic government industrial policies are readily apparent. As shown above, Boeing is already suffering from the unfair trade practices of Bombardier and its government sponsors, and material injury is certain. Because of similar government-backed competition from Airbus, Boeing has already experienced how supply-creating subsidies can radically distort LCA markets to the great detriment of U.S. producers and their workers. Boeing is now threatened by Bombardier's aggressive strategy for its C Series program in exactly the same way.

We therefore ask the Department and the Commission to ensure that, this time, remedies are imposed to mitigate the harm to the domestic industry before it is too late. As detailed above, there is a strong and straightforward legal basis for doing so: the C Series is heavily subsidized, it is dumped, and it threatens the domestic industry with material injury. Accordingly, Boeing requests that the Department and the Commission initiate antidumping duty and countervailing duty investigations of Aircraft imports from Canada, pursuant to Sections 701 and 731 of the

Act, and impose antidumping and countervailing duties of at least 80.50% and 79.41% *ad valorem*, respectively.³⁸⁷

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'R. Novick', written in a cursive style.

Robert T. Novick
Patrick J. McLain
Jeffrey I. Kessler
Stephanie E. Hartmann
William Desmond

Counsel to The Boeing Company

³⁸⁷ 19 U.S.C. §§ 1671 and 1673.

APPENDIX—TABLE OF EXHIBITS

Exhibit No.	Description
1	Affidavit of [] (APO)
2	Delta Air Lines, Inc., Form 10-Q—Q1 2016 (Public)
3	Delta Air Lines, Inc., Form 10-Q—Q2 2016 (Public)
4	Bombardier Inc., First Quarterly Report—Q1 2016 (Public)
5	<i>Bombardier C Series: record orders in 2016 as both variants finally enter service</i> , CAPA Centre for Aviation (Dec. 8, 2016) (Public)
6	Bjorn Fehrm & Scott Hamilton, Interview: CSeries program update with Bombardier’s program chief Dewar, Leeham News & Comment (Nov. 24, 2014) (Public)
7	Jon Hemmerdinger, <i>Bombardier affirms 2017 CSeries delivery goal despite slow start</i> , FlightGlobal (Feb. 15, 2017) (Public)
8	Ted Reed, <i>Spirit CEO Hails Aircraft Maker Competition, Will Look at Bombardier CS-100</i> , TheStreet (Oct. 25, 2016) (Public)
9	Ben Mutzabaugh, <i>Spirit wants to shake its reputation for late flights</i> , USA Today (June 22, 2016) (Public)
10	Frederic Tomesco & Mary Schlangenstein, <i>JetBlue and Bombardier are talking about the CSeries again, sources intimate</i> , Montreal Gazette (May 4, 2016) (Public)
11	Q2 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Aug. 5, 2016) (Public)
12	Compliance Panel Report, <i>European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft</i> , WT/DS316/RW, circulated Sept. 22, 2016 (Public)
13	Office of the U.S. Trade Representative, 2017 Trade Policy Agenda and 2016 Annual Report of the President of the United States on the Trade Agreements Program (Mar. 2017) (Public)
14	Subsidies Calculation Workbook (Public)
15	Kristine Owrap, <i>How Bombardier’s CSeries dream got its wings clipped</i> , National Post (Dec. 12, 2015) (Public)
16	Press Release, Bombardier, “Bombardier Announces Location of Final Assembly Site and Work Packages for the CSeries” (May 13, 2005) (Public)
17	Panel Report, <i>European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft</i> , WT/DS316/R, adopted June 1, 2011 (Public)
18	Press Release, Bombardier, “Bombardier Aerospace Granted Authority to Offer CSeries Aircraft to Customers” (Mar. 15, 2005) (Public)
19	Press Release, Bombardier, “Bombardier Announces CSeries Decision” (Jan. 31, 2006) (Public)
20	Press Release, Bombardier, “Bombardier Launches CSeries Aircraft Program” (July 13, 2008) (Public)

Exhibit No.	Description
21	Innovation, Science and Economic Development Canada, Audit and Evaluation Branch, Evaluation of the Bombardier CSeries Program (Sept. 2013) (Public)
22	European Commission, State aid N 654/2008 – United Kingdom, Large R&D aid to Bombardier, C(2009)4541 final (June 17, 2009) (Public)
23	Q3 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Oct. 29, 2015) (Public)
24	The Canadian Press, <i>Bombardier reports US\$490 million net loss; C Series order reduced</i> , CTV Toronto News (Aug. 5, 2016) (Public)
25	Bertrand Marotte, <i>Bombardier was on 'brink of bankruptcy,' CEO says</i> , Globe and Mail (Nov. 12, 2016) (Public)
26	Martin Patriquin, <i>The inside story behind the bungled Bombardier C Series</i> , Maclean's (Feb. 8, 2016) (Public)
27	Jim Lee, <i>CSeries reaches critical milestones but future of the programme far from assured as Québec Government forced to invest</i> , Flying in Ireland (Nov. 14, 2015) (Public)
28	Kristine Owram, <i>Airbus sales chief says Bombardier offered CSeries stake for a 'song'</i> , Financial Post (May 31, 2016) (Public)
29	Allison Lampert et al., <i>Airbus, Bombardier end talks over CSeries jet investment</i> , Reuters (Oct. 6, 2015) (Public)
30	Robert Spingarn et al., Credit Suisse, <i>Bombardier Inc (SVS): Comment</i> (Oct. 7, 2015) (Public)
31	Press Release, Bombardier, "Bombardier announces the signing of a definitive agreement with the Government of Québec for a \$1 billion US investment in the C Series Aircraft Limited Partnership" (June 23, 2016) (Public)
32	Act Respecting the <i>Caisse de dépôt et placement du Québec</i> (official English translation, updated to Dec. 1, 2016) (Public)
33	Bombardier, 2015 Investor Day Presentation (Nov. 24, 2015) (Public)
34	Innovation, Science and Economic Development Canada, "Government of Canada and Bombardier announce significant investment to strengthen leadership in aerospace" (Feb. 7, 2017) (Public)
35	Office of the U.S. Trade Representative, 2017 National Trade Estimate Report on Foreign Trade Barriers (Mar. 2017) (Public)
36	Tim Hepher & Victoria Bryan, <i>Bombardier faces discount headache as CSeries sales take off</i> , Reuters (June 4, 2016) (Public)
37	<i>Bombardier CSeries at EIS</i> , Air Insight (July 7, 2016) (Public)
38	Peggy Hollinger, <i>Bombardier does a hard sell on its new passenger jet</i> , Financial Times (June 7, 2016) (Public)
39	Mark Nensel, <i>United Airlines converts 737-700s order to -800, -MAX versions</i> , Air Transport World (Nov. 15, 2016) (Public)
40	Aaron Karp, <i>Bombardier still hopeful for United Airlines CSeries order</i> , Air Transport World (Feb. 16, 2016) (Public)

Exhibit No.	Description
41	Robert Fife et al., <i>Bombardier gets lifeline as Air Canada places order for C Series jets</i> , Globe and Mail (Feb. 17, 2016) (Public)
42	Dumping Calculation Workbook (APO)
43	Paul Chiasson, <i>Québec's investment made deal happen between Bombardier and Delta: Couillard</i> , Montreal Gazette (Apr. 28, 2016) (Public)
44	U.S. & Global 100- to 150-Seat Large Civil Aircraft Actual & Projected Deliveries & Market Share Charts, with underlying Ascend Database, & Ascend Backlog Database (Public)
45	<i>European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft</i> , U.S. First Written Submission (Nov. 15, 2006) (Public)
46	Thomas L. Boeder & Gary J. Dorman, <i>The Boeing/McDonnell Douglas merger: the economics, antitrust law and politics of the aerospace industry</i> , Antitrust Bulletin (2000) (Public)
47	<i>European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft</i> , U.S. Second Written Submission (June 28, 2007) (Public)
48	Yan Lapointe, Manager, Investor Relations, Bombardier, <i>Investor Presentation</i> (Nov. 2015) (Public)
49	Vinay Bhaskara, <i>Delta Becomes the Largest C Series Customer</i> , Airways News (Apr. 28, 2016) (Public)
50	<i>Does Bombardier still need Ottawa's help?</i> , CBC Radio (Apr. 30, 2016) (Public)
51	Brad Haynes, <i>Brazil to challenge Canada at WTO over Bombardier funding</i> , Reuters (Dec. 19, 2016) (Public)
52	Committee on Subsidies and Countervailing Measures, <i>Replies from Canada to Follow-up Questions Posed by the United States Regarding the New and Full Notification of Canada</i> , G/SCM/Q2/CAN/64 (Apr. 27, 2015) (Public)
53	Office of the U.S. Trade Representative, <i>2016 National Trade Estimate Report</i> (Mar. 2016) (Public)
54	Stephen Trimble, <i>Bombardier denies near-term plan for CS500</i> , FlightGlobal (May 11, 2016) (Public)
55	Boeing Form 10-K For the Fiscal Year Ended December 31, 2015 (Public)
56	Boeing, "Renton Production Facility," available at http://www.boeing.com/company/about-bca/renton-production-facility.page (Public)
57	Boeing in Brief, available at http://www.boeing.com/company/general-info/index.page#/employment-data (Public)
58	Parija Kavilanz, <i>Dreamliner: Where in the world its parts come from</i> , CNN (Jan. 18, 2013) (Public)
59	Lockheed Martin, "L-1011: Luxury Among the Clouds," available at http://www.lockheedmartin.com/us/100years/stories/l-1011.html (Public)

Exhibit No.	Description
60	Boeing, "Boeing Completes McDonnell Douglas Merger," available at http://boeing.mediaroom.com/1997-07-31-Boeing-Completes-McDonnell-Douglas-Merger (Public)
61	Bombardier, "Contacts: Aerospace in USA" (Public)
62	Press Release, Bombardier, "Bombardier Announces Financial Results for the Third Quarter Ended September 30, 2015; Government of Québec Partners with Bombardier for \$1 billion in C Series as Certification Nears" (Oct. 29, 2015) (Public)
63	Press Release, Bombardier, "Delta Air Lines and Bombardier Sign Largest C Series order for up to 125 Aircraft" (Apr. 28, 2016) (Public)
64	<i>Republic Airways CSeries Order Removed from Production Schedule: Bombardier</i> , Airways News (May 20, 2016) (Public)
65	Karen Walker, <i>Republic SEC filing confirms CSeries deferrals</i> , Air Transport World (Oct. 27, 2016) (Public)
66	Customer and Lost Sales and Lost Revenues Information (APO)
67	Airbus website, "Airbus in the U.S.—Alabama," available at http://www.airbus.com/company/americas/us/alabama/ (last accessed June 15, 2016) (Public)
68	Bombardier, "C Series," available at http://commercialaircraft.bombardier.com/content/dam/Websites/bca/literature/cs_eries/Bombardier-Commercial-Aircraft-CSeries-Brochure-en.pdf.pdf (Public)
69	Embraer website, "Specifications E190", available at http://www.embraercommercialaviation.com/Pages/Ejets-190.aspx (last accessed Aug. 30, 2016) (Public)
70	Embraer website, "Specifications E195", available at http://www.embraercommercialaviation.com/Pages/Ejets-195.aspx (last accessed Aug. 30, 2016) (Public)
71	Embraer website, "Specifications E190-E2" & "Specifications E195-E2," available at http://www.embraercommercialaviation.com/ (Public)
72	Maxim Pyadushkin, <i>UAC Rolls Out MC-21, Delays First Flight</i> , Aviation Week (June 8, 2016) (Public)
73	Boeing website, "737 Commercial Transport: Historical Snapshot," available at http://www.boeing.com/history/products/737-classic.page (last accessed Apr. 12, 2017) (Public)
74	<i>Countdown to Launch: The Boeing 737 MAX Timeline</i> , Airways News (Jan. 27, 2016) (Public)
75	Airbus website, "History—The Narrative—Expansion, 1991-1992" & "The Narrative—Preparing the Future, 2009-2010" (Public)

Exhibit No.	Description
76	BAA Training, "Bombardier conquering the skies: a fleeting glimpse into the past" (July 25, 2016), available at https://www.baatraining.com/bombardier-conquering-the-skies-a-fleeting-glimpse-into-the-past/# (last accessed Apr. 12, 2017) (Public)
77	Press Release, Bombardier, "Bombardier announces new commercial aircraft family name at Farnborough Airshow 2004" (July 19, 2004) (Public)
78	Ross Marowits, <i>Bombardier clears milestone as Swiss Air Lines becomes 1st to accept CSeries—Company says federal financial assistance still needed</i> , CBC News (June 29, 2016) (Public)
79	Excerpt from HTSUS Chapter 88 (Public)
80	Q1 2016 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Apr. 28, 2016) (Public)
81	Ross Mitchell, Vice President of Commercial Operations, Bombardier, "Thirty Months Out—The OEM Perspective on Production Rates, Supplier Relations and the Competitive Landscape," (Mar. 9, 2016) (Public)
82	Q4 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (Feb. 17, 2016) (Public)
83	Fred Cromer, President, Bombardier, Presentation at the Deutsche Bank Aircraft Finance & Leasing Conference: "Bombardier Commercial Aircraft," (Sept. 9, 2015) (Public)
84	Event Brief of Q2 2015 Bombardier Inc. Earnings Call, Fair Disclosure Wire (July 30, 2015) (Public)
85	Q2 2015 Bombardier Inc. Earnings Call (July 30, 2015) (Public)
86	Bombardier, Bombardier CS100 fact sheet (Public)
87	Bombardier, Bombardier CS300 fact sheet (Public)
88	Canadian Government Document (Public)
89	Scott Hamilton, <i>David Versus Two Goliaths: Bombardier Takes On Airbus And Boeing</i> , Forbes (June 29, 2016) (Public)
90	Airbus, "A320," available at http://www.airbus.com/aircraftfamilies/passengeraircraft/a320family/a320/ (last accessed Apr. 12, 2017) (Public)
91	Bombardier, "CRJ Series," available at http://commercialaircraft.bombardier.com/content/dam/Websites/bca/literature/crj/Bombardier-Commercial-Aircraft-CRJ-Series-Brochure-en.pdf (last accessed Apr. 12, 2017) (Public)
92	Bombardier, "CRJ200," available at https://www2.bombardier.com/Used_Aircraft/pdf/CRJ200_EN.pdf (last accessed Apr. 12, 2017) (Public)
93	Boeing Internal Presentation No. 1 [] (APO)
94	Fan Yang & Siva Govindasamy, <i>Bombardier could extend COMAC accord to building jets in China JV: executive</i> , Reuters (Nov. 12, 2014) (Public)

Exhibit No.	Description
95	<i>Assessing the 100-149 Seat Sector</i> , Leeham News (Oct. 12, 2014) (Public)
96	Boeing Internal Presentation No. 2 [] (APO)
97	Dick Forsberg, "Aircraft Retirement and Storage Trends: Economic Life Analysis Reprised and Expanded," Avolon (Public)
98	Learning & Experience Curves in Manufacturing, available at http://www.strategosinc.com/articles/strategy/learning_curves.htm (Public)
99	Douglas Royce, <i>Major Delta Order Boosts Struggling Cseries Program</i> , Forecast International (Apr. 29, 2016) (Public)
100	Aaron Karp, <i>Winners and losers from Delta's Cseries order</i> , ATWOnline (May 3, 2016) (Public)
101	Affidavit of [] (APO)
102	Affidavit of [] (APO)
103	Stephen Trimble, <i>Bombardier details five-year CSeries ramp-up</i> , FlightGlobal (Nov. 24, 2015) (Public)
104	Dominic Gates, <i>Price war, plane transitions put Boeing in financial crunch</i> , Seattle Times (Apr. 1, 2016) (Public)
105	Boeing Financial Data (APO)
106	Press Release, Boeing, "Boeing, Kunming Airlines Announce Memorandum of Understanding for 10 737 MAX 7 Airplanes" (July 12, 2016) (Public)
107	Richard Aboulafia, <i>Why I Was (Probably) Wrong On C Series</i> , Aviation Week & Space Technology (May 4, 2016) (Public)
108	Bombardier presentation by Rob Dewar, Vice President C Series, <i>C Series Program Update</i> (Apr. 2016) (Public)
109	Aaron Karp, <i>More than half of 2016 CSeries deliveries delayed by GTF ramp-up issue</i> , Air Transport World (Sept. 6, 2016) (Public)
110	Aaron Karp, <i>Delta touts CSeries, eyes CS300 model</i> , ATWOnline (Apr. 29, 2016) (Public)
111	Bombardier Financial Report 2015 (Public)
112	Kristine Owram, <i>Bombardier Inc. may run out of cash by mid-2016: Scotiabank</i> , Financial Post (Oct. 5, 2015) (Public)
113	Ross Marowits, <i>Bombardier may need more public funding after Quebec bailout: analysts</i> , The Canadian Press (Nov. 2, 2015) (Public)
114	Bombardier Free Cash Flows (Public)
115	Infancials, Bombardier Inc.—Main Ratios FY 2014 (Public)
116	Infancials, Bombardier Inc.—Main Ratios FY 2015 (Public)
117	Bombardier Inc. Historical Stock Prices for October 29, 2015, Yahoo Finance (Public)
118	Gordon Isfeld, <i>Ottawa under growing pressure to bail out Bombardier Inc as company clinches major CSeries order</i> , Financial Post (Apr. 28, 2016) (Public)

Exhibit No.	Description
119	Press Release, Bombardier, “Bombardier closes the sale of a 30% stake in Bombardier Transportation to CDPQ” (Feb. 11, 2016) (Public)
120	Bombardier Common shares, Class B—Historical Price Data for February 11, 2016, Bombardier Inc. Investor Relations (Public)
121	Press Release, Bombardier, “Bombardier and CDPQ enter into definitive agreement: CDPQ to acquire 30% of newly-created BT Holdco for \$1.5 billion” (Nov. 19, 2015) (Public)
122	Industry Canada, Final Audit Report: Audit of the Bombardier C Series Contribution Agreements (May 2014) (Public)
123	Panel Report, <i>Canada – Measures Affecting the Export of Civilian Aircraft</i> , WT/DS70/R, adopted Aug. 20, 1999 (Public)
124	<i>Décret 666-2009</i> (June 10, 2009), <i>Gazette Officielle du Québec</i> , July 8, 2009, No. 27 (Public)
125	Press Release, Investissement Québec, “Successful Takeoff for the C Series” (Sept. 20, 2013) (Public)
126	Bombardier Annual Report 2011 (Public)
127	Export Development Canada, “2012-2016 Corporate Plan Summary,” (Feb. 2012) (Public)
128	Export Development Canada, “Canada Account” (Public)
129	<i>Ottawa lends Bombardier customer \$173-million</i> , <i>Globe and Mail</i> (Aug. 5, 2009, updated Aug. 23, 2012) (Public)
130	Export Development Canada, “2015-2019 Corporate Plan Summary” (2015) (Public)
131	Sophie Cousineau, <i>Québec to support Bombardier’s C Series sales</i> , <i>Globe and Mail</i> (Apr. 3, 2013) (Public)
132	<i>Décret 160-2013</i> (Mar. 7, 2013), <i>Gazette Officielle du Québec</i> , Apr. 3, 2013, No. 14 (Public)
133	Industrial Technologies Office, “Technology Partnerships Canada (TPC) Repayment Status Report” (May 1, 2016), available at https://ito.ic.gc.ca/eic/site/ito-oti.nsf/eng/00935.html (Public)
134	Innovation, Science and Economic Development Canada, “Technology Partnerships Canada—Eligibility Criteria” (Public)
135	Innovation, Science and Economic Development Canada, “Technology Demonstration Program (TDP)—Program Guide” (Public)
136	Committee on Subsidies and Countervailing Measures, Replies to Questions Posed by the United States Regarding the New and Full Notification of Canada, G/SCM/Q2/CAN/66 (Mar. 29, 2016) (Public)
137	<i>La Presse</i> , <i>Québec offre de construire l’usine avec le privé</i> (Jan. 28, 2005) (Public)
138	Brazil WTO Request for Consultations, WT/DS552/1, at 2 (Feb. 15, 2017) (Public)

Exhibit No.	Description
139	City of Mirabel, <i>Règlement numéro 1915</i> (Nov. 28, 2012) (Public)
140	Press Release, CDPQ, "The Caisse de Dépôt et Placement du Québec Grants US\$195 Million in Financing to Bombardier" (Sept. 2, 2009) (Public)
141	Bombardier Annual Report 2010 (Public)
142	Bombardier Financial Report 2016 (Public)
143	Bombardier Financial Report 2014 (Public)
144	Reine Côte, "Formation de la main d'oeuvre: Québec octroie 4 M\$ à Bombardier Aéronautique" Nordinfo (Nov. 26, 2013) (Public)
145	Bombardier, "Bombardier in the United States," (2016) (Public)
146	Press Release, Bombardier, "Bombardier Announces Major C Series Order and Reports Financial Results for the First Quarter of 2016" (Apr. 28, 2016) (Public)
147	Press Release, Bombardier, "Bombardier's All-new C Series Aircraft Program Starts Ramp-up to Full Production and SWISS Pilots Kick Off C Series Aircraft Flight Training" (Jan. 19, 2016) (Public)
148	Press Release, Bombardier, "Air Canada and Bombardier Finalize Landmark C Series Order for up to 75 Aircraft" (June 28, 2016) (Public)
149	Press Release, Bombardier, "Bombardier CS300 Aircraft Awarded Type Certification by Transport Canada" (July 11, 2016) (Public)
150	Kristine Owram, <i>Bombardier Inc. will lose US\$32M for each C Series built in 2016-17: analysis</i> , Transportation, (Oct. 26, 2015) (Public)
151	Boeing 2016 Annual Report (Public)
152	Affidavit of [] & Supporting Cost of Production Workbook (APO)
153	Affidavit of Gary M. Hegland (Public)
154	Bombardier, List Prices—Commercial Aircraft (June 21, 2016) (Public)
155	<i>Bombardier C Series cost estimate rises to \$5.4 billion</i> , Reuters (Feb. 12, 2015) (Public)
156	Allison Lampert & Jeffrey Dastin, <i>Bombardier Inc.'s first big break on its C Series jets may not have come cheap</i> , Financial Post (Apr. 28, 2016) (Public)
157	Daniel Michaels, <i>The Secret Price of a Jet Airliner</i> , Wall Street Journal (July 9, 2012) (Public)
158	Bombardier Annual Report 2008 (Public)