#### STATEMENT OF ROBERT DEWAR

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#### BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION

100- to 150-Seat Large Civil Aircraft from Canada Inv. Nos. 701-TA-578, 731-TA-1368 (Final)

December 18, 2017

Good afternoon. I am Rob Dewar. Since 2010, I've served as Vice President and General Manager of the C Series program. In this role, I'm responsible for the C Series program overall. I have worked at Bombardier for over 25 years and have been part of the C Series program from its inception in 2004.

# I. Origins of the C Series

C Series development began in 2004 when we conducted a marketing study that identified an opportunity in the lower end of the single aisle market. At that time, our products could only accommodate less than 100 seats, and the Airbus A320 and Boeing 737 focused on a larger capacity — well above 150 seats. No modern aircraft were specifically designed for this segment. Older jets like the MD-80 and Boeing 717 were in service but would require replacement within 10 to 15 years.

The lack of new aircraft offerings wasn't for lack of demand. Our market research showed that airlines were asking for a cost-effective aircraft to serve in the lower end of the single aisle market. Customers told us that no aircraft currently in production at Boeing or Airbus were meeting their needs.

We recognized that airlines weren't looking just for a certain seat capacity.

Smaller single-aisle aircraft were not profitable to operate — primarily because average

seat costs per trip were higher than for larger aircraft. So airlines needed a breakthrough in operating efficiency to offset these costs. They also wanted features that no manufacturer to date had been able to integrate into a single aircraft of this size — fuel efficiency, cabin comfort, extended range, short-field performance and reduced operational costs. We set all these features into our design.

Bombardier not only saw an opportunity, but believed we had a unique capability to capture it. Our experience in developing business and regional jets gave us helpful perspectives on how to build a better small single-aisle commercial aircraft. By contrast, Boeing and Airbus have focused on larger aircraft, and neglected the small single-aisle segment, because it was not as profitable for them.

### II. C Series Today

Today, the C Series is the most efficient and technologically advanced single-aisle commercial aircraft in service.

The C Series family delivers a 15% cash operating cost advantage and a 20% fuel burn advantage over existing aircraft in the lower end of the single-aisle market.

Initial feedback from our customers and their passengers has been very positive. This praise confirms that the aircraft is doing very well in service, in fact, better than we expected, in terms of fuel efficiency, costs saving and utilization. Passenger surveys also indicate that cabin experience is up to 20% better than other single aisle aircraft.

Because the C Series is a truly innovative product, we expect it will have long-term market success. As it proves its capabilities, airlines will rally to buy it. Imagine that — a cabin experience passengers actually like.

### III. Our Production Process and Final Assembly Line in Mirabel

In our design of the C Series, we integrated the most advanced technologies. In fact, a majority of our key components — including the avionics, flight control systems, and engines — were developed in the United States and are supplied by U.S. manufacturers. In all, over 50 percent of our total supplier spend goes to U.S. suppliers.

These components arrive at our production facilities at Mirabel, Quebec, where we assemble an aircraft in eight key steps. This is a very sophisticated manufacturing process incorporating the latest technology in the industry. We are very excited to replicate this high technology manufacturing process and bring it to our planned facility in Alabama.

In the aircraft industry, there is a learning curve associated with the production of a clean sheet design. It can take years to optimize the production process and get the production rate up to the facility's planned capacity. It is no secret that our production ramp-up process at Mirabel has not always gone smoothly, and we are still operating below our projected capacity levels.

In its preliminary decision, the Commission was concerned that Mirabel has open capacity and a shortage of orders to fill. In fact, the opposite is true. The main challenges for us remain in the reliability and timeliness of our supply chain. Our production and our progress down the production learning curve have been constrained by late deliveries of Pratt & Whitney's engines and other suppliers. In 2016, we were able to deliver only 7 out of 15 planned aircraft. For 2017, we forecast making only approximately 20 out of 30 to 35 planned aircraft deliveries, all to non-U.S. customers.

Due to capacity constraints at Mirabel, we would not be able to produce any additional aircraft for the United States in the imminent future.

## IV. Comparison to Boeing 737-700 or MAX 7

So far, you have heard what the C Series is. Now I'll tell you what it <u>isn't</u> — a substitute for the 737. The fundamental difference from a product perspective is that the C Series is a brand new technology, custom-built from the ground up. It seats five abreast and is optimized for the small single-aisle segment. The MAX 7, by contrast, is really just a smaller version of the MAX 8, which in turn is a version of the 737-800, which was based on multiple iterations of original 1960s design. The MAX 7 is Boeing's attempt to breathe new life into an aging platform by using a new engine. But there have been few takers, and many customers have converted to the MAX 8, 9, or 10.

Boeing argued today that the success of the C Series would come at the expense of the MAX 7. As one of the people who conceived and developed the C Series, that doesn't make any sense to me. Bombardier entered this space precisely because Boeing and Airbus had no product optimized for that segment. As a new entrant in the market for large civil aircraft, even with a breakthrough technology, we would have been foolish to set our sights on a part of the market well and actively served by the two established giants.

Today we're proud that the C Series is delivering on all its promises to airline customers and passengers. If you want to learn more about the C Series, I would be happy to host you for a visit to our facilities at Mirabel.

Thank you.