

**STATEMENT OF ROSS MITCHELL**  
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**BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION**  
*100- to 150-Seat Large Civil Aircraft from Canada*  
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My name is Ross Mitchell, and I am Vice President, Commercial Operations of Bombardier's Commercial Aircraft division. In this position, which I have held since 2014, I run the overall commercial aircraft sales and marketing team. The commercial aircraft division covers not only the C Series, but also regional jets and turboprops. I have also worked in the business aircraft division, and I spent a large part of my 18-year career at Bombardier in Contracts and Sales, working directly with airlines in various sales campaigns.

My remarks today will cover two topics. First, I will describe the position of the C Series in the marketplace for single-aisle aircraft. Second, I will discuss the ways in which large civil aircraft such as the C Series and Boeing's 737 family of aircraft are marketed and sold.

**I. Competition for the C Series in the Marketplace**

As my colleague Sebastien Mullet has explained, the C Series occupies a unique and underserved place on the continuum of customer demand for large civil aircraft. Airlines seek to optimize the deployment of their fleet, matching seat capacity to passenger demand on specific routes at specific times. Passenger demand is continuous across the spectrum up to 210 seats. As you can see on Slide 2, there is no break in demand at any particular seat count. To minimize trip cost, airlines typically utilize a range of model sizes, from regional jets to large civil aircraft of various dimensions. The C Series is a uniquely modern, high-performance, and efficient option for airline routes with passenger counts in the lower part of the single-aisle size range.

Analysts and customers praise its low fuel burn, quiet operation, passenger comfort, and landing and takeoff performance, among other features.

I describe the C Series as unique partly because there is nothing like it in the lower segment of the size continuum. As **Slide 3** shows, the C Series fills a recent gap in the single-aisle market. Boeing once produced aircraft within that segment, including the 717 and the 737-600, but it abandoned them more than a decade ago. Today, Boeing does not produce any commercial aircraft for the 100- to 120-seat segment, and thus offers no competitor to the CS100.

When our U.S. customers Delta and Republic placed orders for the C Series, the Boeing 737-700 and MAX 7 were not on the airlines' radar screen. If an airline is looking to cover a route with only 100 to 120 passengers, it cannot turn to the MAX 7 because using a MAX 7 on those routes would result in higher trips costs and no return from the additional empty seats. Our competition for the Delta deal, for example, was not any new aircraft from Boeing. As **Slide 4** shows, Boeing admits that it offered only *used* aircraft. Boeing was eager to get rid of Embraer E-190s that it had accepted as trade-ins. The Delta campaign was never a price competition among new aircraft, and whenever we are competing against used aircraft, there is inevitably downward pressure on pricing.

In the global marketplace more generally, as in the Delta campaign, Embraer is widely perceived as the main competitor of the C Series. The C Series, the Embraer E-Jets, the Airbus A320 family, and the Boeing 737 family are all in the single-aisle segment. As **Slide 5** indicates, that is how Boeing itself describes the market.

Boeing's 737 family is not generally regarded as interchangeable with the C Series. In fact, as **Slide 6** shows, Boeing executives have made clear that they *do not want* to compete at the low end with the C Series. Neither the 737-700 nor the MAX 7 was designed from the

beginning to serve the part of the market on which the C Series is focused; each is a smaller version of the 737-800 or MAX 8. As a result, neither is as efficient or as capable as the C Series.

Boeing markets and supports its 737 line as a family, built from a common blueprint. Boeing calls it “one airplane in three sizes.” The 737 family competes with the Airbus A320neo family, not with the C Series. For example, when Boeing reconfigured the MAX 7 last year it *added* seats. As **Slide 7** reveals, Boeing’s smallest 737, the MAX 7, now holds more passengers than the CS100 and the CS300. This means there will be even less competition between Bombardier and Boeing in the future. That is by design, from Boeing’s standpoint. Boeing works hard to upgrade orders from the 737-700 and MAX 7 to the larger 737-800 and MAX 8 models, which are more profitable. Its efforts have paid off, as you can see on **Slide 8**: over the past 5 years, Boeing has delivered only one 737-700 in the U.S. market.

A clear example of this dynamic is the United campaign. In the early stages of our discussions, United told us the CS100 was *too big* for its needs. In response, we offered a smaller version, the CS100 Lite. Our competition throughout was the even smaller Embraer 190. At the very end, however, Boeing swooped in and offered United a deal too good to refuse—not on a 100-seat aircraft, but on larger 737-700s that do not compete with the CS100. United later converted its order to even larger 737s and never accepted delivery of a single 737-700.

Why did Boeing make this late move? A Boeing executive told employees that it was “very important” to Boeing that United not provide “validation of this C Series in the marketplace.” Again, Boeing was not competing with the CS100, in which United had expressed interest. As **Slide 9** shows, Boeing has almost 20 times as many single-aisle orders as Bombardier. Boeing was acting aggressively to preserve its dominant position as United’s

exclusive supplier. While Boeing won the campaign, it had to offer terms so attractive that United was willing to take an aircraft much larger and more costly to operate than what it claimed to need.

## **II. Sales campaigns and marketing strategies for large civil aircraft**

My second topic is the sales and marketing process. In my experience, a sales campaign is often a lengthy and gradual process of learning and relationship-building. An airline will indicate that it is thinking about a certain type of purchase and will encourage us to make an initial offer. Specifications and performance requirements begin to matter once an offer is on the table. It is thus misleading to suggest that the usual aircraft sale is the product of a formal bidding or tender process based on a single clear set of specifications.

The marketing and sales process for large civil aircraft is complicated because airlines are looking to accomplish two core objectives at the same time: first, they need an overall economic package that works for their business needs; and second, they need an airplane that performs according to their specific technical requirements.

On the economic side, in addition to purchase price, airlines place significant emphasis on considerations such as fuel burn rates and efficiency; the weight of the aircraft, which can drive landing fees and other costs; and maintenance costs. For an airline, the purchase price typically represents at most 25% of direct operating costs—and it is the long-term operating cost of the airplane over its lifetime that is critical to the economic assessment. On the performance side, factors such as range, passenger comfort, field performance, and noise levels may all be core considerations.

In sum, to win a sale, the aircraft must fit the customer's route network, the airline must have a need to expand or replace its fleet, and the overall economics of the deal must work.

Multiple considerations—economic, technical, and strategic—inform an airline’s evaluation of alternative aircraft. It is by no means a simple and straightforward assessment of the initial purchase price.

Turning to the topic of purchase prices, there is a pattern of pricing for new aircraft that are entering into service for the first time. An airline that is among the first to accept delivery of a new model knows that it faces risks of difficulties and delays, given the complexity of aircraft production. Early models of the Boeing 787, for example, were famously plagued by battery problems, among other issues. Technical problems can lead to flight cancellations affecting the entire network. Challenges on the production line or with suppliers can lead to late deliveries.

When airlines buy a new aircraft, they seek compensation for these kinds of entry into service risks. This is known in the industry as launch pricing, and it is standard practice. As shown on **Slide 10**, Boeing’s CFO has acknowledged that in launching the 787, Boeing faced “early pricing disruption” that Boeing expects to improve over time. Once the aircraft obtains certification, a steady delivery stream is established, and in-service disruptions diminish, the level of risk falls and prices tend to rise.

While this pattern is widely known, specific purchase prices are not known to others in the industry, so there is no “lighthouse effect” in the U.S. market. I talk with U.S. airline executives all the time, and I have never been told a competitor’s specific price for an aircraft. This is no surprise. Airlines have an obvious incentive not to disclose price information.

Once a contract is executed and a firm order is placed, the initial deposit is typically between 1% and 5% of the contract value. As delivery approaches, additional pre-delivery payments are often made, but they top out at 15% to 30% of the contract value. This makes it impossible to finance development costs using pre-delivery payments.

Even contracts with firm orders contain significant flexibilities. For example, deferral rights are common. They enable purchasers to adjust their delivery schedule. When such a right is exercised, the basic terms of an order may dramatically change. Just in the last couple of weeks, this happened twice: Delta deferred an order for Airbus A350s but added A321s, and WestJet deferred an order for Boeing MAX 7s but ordered widebody 787s. As these examples make clear, there are often significant changes between when a contract for a firm order is executed and when deliveries are made.

### **III. Conclusion**

In conclusion, I am grateful for the chance to speak with you today about the competitive landscape for single-aisle aircraft in the United States, and about how Bombardier markets and sells the C Series, an airplane of which we are proud. I look forward to answering any questions you might have.