C Series
CONTENTS

P.4
THE C SERIES
The world’s most advanced single-aisle jet

P.34
CUSTOMER SERVICES
Ensuring the readiness and reliability of your aircraft
The world’s leanest, most economical aircraft wasn’t created by tweaking – it was purpose-designed and built from the ground up. The C Series is now the most efficient aircraft in the skies.
The C Series is 100% new, from nose to tail. Yet this entirely purpose-built aircraft has been made possible thanks to a long line of industry-shaping aircraft in the Bombardier family. The C Series, which incorporates decades of experience in the aviation industry, is the natural progression and exciting future of Bombardier’s commercial aircraft.

Composed of the CS100 and the larger CS300, the C Series family represents the fusion of performance and technology. The result is two aircraft that deliver a 15% cash operating cost advantage and a 20% fuel burn advantage, making this family the ideal candidate for longer, thinner routes. This means airlines can connect far-flung points on continents or sectors that were previously not profitable or possible.

In addition to delivering best-in-class economics with the C Series aircraft, Bombardier has placed considerable emphasis on cabin design to ensure an excellent passenger experience. Although the C Series aircraft only has one aisle, the aircraft’s larger seats, overhead bins and windows create a widebody feel that offers passengers unparalleled comfort in a single-aisle cabin. The C Series also offers maximum cabin flexibility: great for airlines, and something passengers will love too.

This flexibility extends to operations. Together, the CS100 and the CS300 have over 95% parts commonality as well as the same type rating. The groundbreaking Pratt & Whitney PurePower® PW1500G, combined with advanced aerodynamics, delivers reduced fuel burn, noise and emissions, making the C Series a community-minded aircraft.

By focusing on the 100- to 150-seat market segment, Bombardier has built the C Series aircraft with a specific design point in mind. The focus on this segment drives the aircraft’s phenomenal economic proposition and performance, opening up new opportunities and new ideas for single-aisle operations.
FAMILY AFFAIR

With two distinct yet similar models, the C Series provides full flexibility when it comes to different levels of traffic, frequency requirements and operational realities.

CS100
The CS100 aircraft carries between 100 and 133 passengers and offers unmatched flexibility for many airline business models. It is an ideal solution for hot-and-high airports, short runways and steep approaches.

CS300
The CS300 aircraft offers the best seat-mile cost in its category, making it the most profitable solution for mid-sized markets with up to 160 passengers per flight, and ideal for a range of routes, including those serving transcontinental markets.

CONSIDERABLE COMMONALITY
The CS100 and CS300 offer full operational commonality – the highest commonality in the single aisle category. Over 95% of line-replaceable units are shared, and the aircraft have the same type rating and family of engines, meaning operators with more than one C Series model enjoy significant savings.

SHARED CREWS
Operationally, flight crews with the same type rating and cabin crew will enjoy a seamless transition from the CS100 to the CS300, or vice versa, greatly reducing training costs for those operating both models.
ECONOMIC ADVANTAGE

The C Series aircraft’s unmatched efficiencies, through significant reductions in fuel burn and operating costs, create superior economic advantages.

COST COUNTS
The family offers a 15% cash operating cost advantage over in-production aircraft and up to a 12% operating cost advantage over re-engined aircraft. This unbeatable economic advantage has led to the lowest break-even load factor in its class.

OPTIMAL DESIGN
As the C Series is entirely purpose-built and specifically designed for the 100- to 150-seat market, many cost-saving advantages have been built in, such as an optimized five abreast cabin and advanced materials. The result is an aircraft that is up to 12,000 lb. lighter than its competitors.

LESS DRAG
Less drag means that less fuel is burnt. The C Series aircraft’s reduced drag, optimized wing aerodynamics and integrated 3-axis fly-by-wire controls all contribute to the family’s 20% fuel burn advantage.

EFFECTIVE MAINTENANCE
The C Series provides more than 25% cost advantage on direct maintenance costs, thanks to its optimized maintenance program, higher maintenance intervals (850 hours for “A” checks and 8,500 hours for “C” checks), advanced systems integration and high-technology engine design.

PEAK PERFORMANCE

The ultra-modern CS100 and CS300 aircraft offer unmatched performance and operational flexibility, thanks to their exceptional airfield capabilities and transcontinental range.

IMPRESSIVE REACH
Both the CS100 and the CS300 possess a range of over 3,000 nautical miles, meaning they can easily connect far-flung points. At challenging airports, the CS100 has up to 50% range advantage over re-engined 100-seat aircraft due to its focus on the 100- to 150-seat market.

SHORT TAKEOFF
The C Series offers best-in-class airfield performance. The CS100, for instance, possesses a takeoff field length as short as 4,000 feet, making it an ideal candidate for hot-and-high and city-centre airport operations.
AVIATION ADVANCED

The C Series aircraft are ultra-modern, from engines to engineering, ensuring that operators enjoy value today and growth tomorrow.

TOTALLY NEW
Designed specifically for the 100- to 150-seat single-aisle market, the C Series is the only entirely new family of airliners in its class. The two models benefit from leading-edge technology and systems integration, advanced materials and the latest generation aerodynamics.

STATE-OF-THE-ART FLIGHT DECK
The C Series cutting-edge flight deck includes large LCD displays as well as dual flight management systems (FMS) with optimized control and display functions, RNP0.1 capability, dual cursor control devices, datalink, Cat IIIb autoland and side stick controls as baseline. The result is an integrated avionics experience that increases pilot situational awareness and reduces workload. The C Series flight deck sets new standards for others to follow.

ADVANCED MATERIALS
Extensive use of advanced aluminum in the C Series aircraft’s fuselage, and advanced composites in its wings, empennage and rear fuselage reduces weight and increases corrosion resistance, resulting in better maintainability. These advanced structural materials also deliver weight savings that result in considerable fuel burn advantages.

OPTIMIZED ENGINE
The aircraft is equipped with Pratt & Whitney PurePower® PW1500G engines. Possessing one of the highest by-pass ratios (12:1) of any turbofan engine in the world, the PW1500G delivers reduced fuel burn, noise and emissions thanks to its advanced combustion technology and Fan Drive Gear System™.

IMPROVED SYSTEM MANAGEMENT
The C Series Aircraft Health Management System (AHMS) has the power to change how airline maintenance crews manage their activities, resulting in fewer mechanical delays and superior dispatch reliability. This state-of-the-art tool, which was designed specifically for the C Series aircraft, provides advanced diagnostic capabilities that will be key components in Bombardier’s entry-into-service and start-up strategies to support operators.
A. Integrated flight management system
B. Graphical flight planning
C. Sensed electronic checklist
D. Advanced multi-scan weather radar
E. Advanced fly-by-wire with side stick controls
F. Auto throttle (moving thrust levers)
G. CAT IIIa autoland (CAT IIIb optional)
H. Controller pilot data link communication (CPDLC)
I. Data link with full-format printer (optional)
J. Optimized human-machine interface
K. Head-up displays (optional)
L. Class 2 electronic flight bags (optional)
M. Growth capability
CABIN COMFORTS

Every C Series interior configuration is designed to deliver a widebody feel in a single-aisle aircraft. The cabin was intentionally designed from the inside out to provide space where it matters most, leading to an unparalleled passenger experience.

UNRIVALLED SPACE

The C Series provides unmatched personal space without compromise, thanks to its seat width – the widest on a single-aisle aircraft – as well as large windows (11 x 16 inches), which are positioned to provide optimal viewing angles and natural light.

MORE STOWAGE

With the largest stowage in its class, the C Series is capable of carrying more bags, including oversized bags (measuring up to 24 x 17 x 11 inches), which can be inserted wheels first. Additionally, lower bin access brings storage within reasonable reach.

CUSTOMIZED CABIN

The C Series aircraft’s highly flexible cabins provide two flex zones – allowing operators to benefit from fully customizable modular cabin monuments, such as galleys, lavatories, windscreens and stowage, based on their specific needs.

UNMATCHED EXPERIENCE

In addition to being the quietest cabin in their class, the C Series aircraft offer connectivity for Wi-Fi-enabled devices and cutting-edge in-flight entertainment (IFE) systems, ensuring the highest level of enjoyment by their passengers. The C Series aircraft’s state-of-the-art integrated Cabin Management System is intuitive and controls all key cabin systems, such as mood lighting, at a single terminal. The aircraft also feature lavatories with increased accessibility, making them suitable for people with reduced mobility.
COMMUNITY FRIENDLY

The C Series is the ideal aircraft for urban operations thanks to its unmatched environmental scorecard.

REDUCED EMISSIONS

The C Series aircraft’s fuel burn advantage translates directly into a 20% reduction in CO₂ emissions. This means that one C Series aircraft could reduce an operator’s CO₂ emissions by up to 6,000 tonnes each year. The C Series will also emit 50% fewer NOx emissions than the CAEP6 NOx emission standards.

REDUCED NOISE

With the lowest noise levels of any commercial jet in production, the C Series is ideal for urban operations and noise-sensitive airports.

REDUCED IMPACT

Bombardier assesses the environmental impact of its aircraft throughout their life cycles. Through its design, manufacturing, operations and recyclability, the C Series will be issued an Environmental Product Declaration (EPD) upon entry into service – an industry first.

GREENHOUSE GAS EMISSIONS

20% CO₂ EMISSIONS ADVANTAGE PER SEAT

NOx EMISSIONS

50% LESS NOx EMISSIONS

NOISE FOOTPRINT

up to 4x smaller footprint

* Compared to competitors in the same category
## C SERIES TECHNICAL SPECIFICATIONS

### CS100

<table>
<thead>
<tr>
<th>Category</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passengers</strong></td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>108 (up to 133)</td>
</tr>
<tr>
<td><strong>Cargo</strong></td>
<td></td>
</tr>
<tr>
<td>Volume</td>
<td>838 ft.³ / 23.7 m³</td>
</tr>
<tr>
<td>Weight</td>
<td>8,000 lb. / 3,629 kg</td>
</tr>
<tr>
<td><strong>Maximum Takeoff Weight</strong></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>121,000 lb. / 54,885 kg</td>
</tr>
<tr>
<td>Max</td>
<td>134,000 lb. / 60,781 kg</td>
</tr>
<tr>
<td><strong>Maximum Landing Weight</strong></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>112,500 lb. / 51,029 kg</td>
</tr>
<tr>
<td>Max</td>
<td>115,500 lb. / 52,390 kg</td>
</tr>
<tr>
<td><strong>Maximum Payload</strong></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>30,350 lb. / 13,767 kg</td>
</tr>
<tr>
<td>Max</td>
<td>33,350 lb. / 15,127 kg</td>
</tr>
</tbody>
</table>

### CS300

<table>
<thead>
<tr>
<th>Category</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passengers</strong></td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>130 (up to 160)</td>
</tr>
<tr>
<td><strong>Cargo</strong></td>
<td></td>
</tr>
<tr>
<td>Volume</td>
<td>1,116 ft.³ / 31.6 m³</td>
</tr>
<tr>
<td>Weight</td>
<td>10,700 lb. / 4,853 kg</td>
</tr>
<tr>
<td><strong>Maximum Takeoff Weight</strong></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>132,000 lb. / 59,874 kg</td>
</tr>
<tr>
<td>Max</td>
<td>149,000 lb. / 67,585 kg</td>
</tr>
<tr>
<td><strong>Maximum Landing Weight</strong></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>124,500 lb. / 56,472 kg</td>
</tr>
<tr>
<td>Max</td>
<td>129,500 lb. / 58,740 kg</td>
</tr>
<tr>
<td><strong>Maximum Payload</strong></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>36,750 lb. / 16,670 kg</td>
</tr>
<tr>
<td>Max</td>
<td>41,250 lb. / 18,711 kg</td>
</tr>
</tbody>
</table>

### ENGINES

#### 2 Pratt & Whitney PurePower® PW1500G Engines

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>Thrust</th>
<th>Flat Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW1519G Engines*</td>
<td>18,900 lbf. / 84.1 kN*</td>
<td>ISA + 15.0°C</td>
</tr>
<tr>
<td>PW1521G Engines</td>
<td>21,000 lbf. / 93.4 kN</td>
<td>ISA + 15.0°C</td>
</tr>
<tr>
<td>PW1524G Engines</td>
<td>23,300 lbf. / 103.6 kN</td>
<td>ISA + 15.0°C</td>
</tr>
<tr>
<td>PW1525G Engines</td>
<td>23,300 lbf. / 103.6 kN **</td>
<td>ISA + 15.0°C</td>
</tr>
</tbody>
</table>

**Provides up to 5% additional thrust for non-static conditions**

### PERFORMANCE

<table>
<thead>
<tr>
<th><strong>Range</strong></th>
<th>(225 lb. / 102 kg per pax.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,100 NM</td>
<td>3,567 SM</td>
</tr>
<tr>
<td>5,741 km</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Takeoff Field Length</strong></th>
<th>ISA, SL, Base MTOW, Max. Thrust</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,000 ft.</td>
<td>1,219 m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Landing Field Length</strong></th>
<th>ISA, SL, Base MLW</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,450 ft.</td>
<td>1,356 m</td>
</tr>
</tbody>
</table>

### ADVANCED FEATURES

- Advanced fly-by-wire with full envelope protection & speed stabilization
- CAT IIIb Autoland*
- Single or dual Head-Up Display system (HUD)*
- Class 2 electronic flight bag*
- Integrated flight information system*
- Full-format printer with graphics capability*
- Advanced multi-scan weather radar
- Controller Pilot Data Link Communication (CPDLC)*

*Optional features

---

*PW1519G Engines applies only to the CS100 aircraft

** Provides up to 5% additional thrust for non-static conditions
C SERIES
TECHNICAL SPECIFICATIONS

DIMENSIONS

CS100

Length: 114 ft. 9 in. / 35.0 m
Wing Area: 1,209 ft.² / 112.3 m²
Height: 37 ft. 8 in. / 11.5 m
Wingspan: 115 ft. 1 in. / 35.1 m
Fuselage Maximum Diameter: 12 ft. 2 in. / 3.7 m

CS300

Length: 127 ft. 0 in. / 38.7 m
Wing Area: 1,209 ft.² / 112.3 m²
Height: 37 ft. 8 in. / 11.5 m
Wingspan: 115 ft. 1 in. / 35.1 m
Fuselage Maximum Diameter: 12 ft. 2 in. / 3.7 m

CROSS-SECTIONS

Business Class

Economy Class

A Wide 20.0 in. / 0.51 m business class seat
B Wide 18.5 in. / 0.47 m seat
C Oversized 19.0 in. / 0.48 m middle seat
CS SERIES
TECHNICAL SPECIFICATIONS

CS100 CONFIGURATIONS

<table>
<thead>
<tr>
<th>Class</th>
<th>Seats</th>
<th>Seat pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Class</td>
<td>108</td>
<td>38 in.</td>
</tr>
<tr>
<td>Standard Single Class</td>
<td>120</td>
<td>32 in.</td>
</tr>
<tr>
<td>High-Density Single Class</td>
<td>125</td>
<td>30 in.</td>
</tr>
<tr>
<td>Maximum Capacity</td>
<td>133</td>
<td>28 in.</td>
</tr>
</tbody>
</table>

CS300 CONFIGURATIONS

<table>
<thead>
<tr>
<th>Class</th>
<th>Seats</th>
<th>Seat pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Class</td>
<td>130</td>
<td>36 in.</td>
</tr>
<tr>
<td>Standard Single Class</td>
<td>140</td>
<td>32 in.</td>
</tr>
<tr>
<td>High-Density Single Class</td>
<td>150</td>
<td>30 in.</td>
</tr>
<tr>
<td>Maximum Capacity</td>
<td>160</td>
<td>28 in.</td>
</tr>
</tbody>
</table>
Around the clock and around the globe, Bombardier works to ensure the readiness and reliability of each of its aircraft. With a strong support network, Bombardier’s Customer Services ensures your aircraft operates efficiently and effectively.
GLOBAL NETWORK
Bombardier’s Customer Services is headquartered in Montreal and Toronto, Canada and is complemented by 10 regional support offices strategically located around the globe. Providing support that’s tailored to you, be it in person or online, they work with you from your aircraft’s entry-into-service and beyond.

TOTAL MAINTENANCE
As the original equipment manufacturer, Bombardier’s wholly-owned service centres and associated service facilities deliver comprehensive maintenance, repair and overhaul services. And, if the situation necessitates it, a dedicated mobile repair team can come to you.

MOVING PARTS
Bombardier guarantees fast, reliable and cost-effective delivery of aircraft parts, wherever you are. Its world-class parts network is able to ship parts and materials 24 hours a day, seven days a week, while the Smart Parts Program and Component Repair or Overhaul services offer component support and maintenance on a day-to-day basis.

DIRECT TRAINING
With FAA Part 142 training facilities, EASA type-rating training organizations and the ability to modify training to reflect ongoing aircraft enhancements, Bombardier is perfectly poised for training its aircrafts’ operators. It offers flight, technical and other training at state-of-the-art facilities around the globe.
Bombardier, C Series, CS100, CS300 and The Evolution of Mobility are trademarks of Bombardier Inc. or its subsidiaries.

*PurePower® PW1500G, PW1519G, PW1521G, PW1524G and PW1525G Engines are trademarks of United Technologies Corp. – Pratt & Whitney or its subsidiaries.

DISCLAIMER: The C Series aircraft are in the development phase. All data and specifications are estimates, subject to changes in family strategy, branding, capacity and performance during the development, manufacture and certification process. All performance references have been estimated based on a 500 NM North American operating environment and comparisons are to in-production aircraft. This document does not constitute an offer, commitment, representation, guarantee or warranty of any kind. The configuration and performance of the aircraft may differ from the image shown and, together with any related commitment, representations, guarantee or warranty, shall be determined in a final purchase agreement. This document must not be reproduced or distributed in whole or in part to or by a third party. Bombardier shall be notified in writing of all requests for permission to disclose.

All rights reserved © 2015 Bombardier Inc.
Printed in the UK, June 2015