

Airbus/Bombardier C Series Deal Has Broad Implications

Airbus's decision to take control of the Bombardier C Series bodes deep consequences across the civil aerospace industry

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When John Leahy was given a tour of the C Series at the 2015 Paris Air Show, even the brash Airbus sales chief was fairly complimentary of his competition. "It is a nice little airplane," Leahy said at the time. Nice and little, as in: "Not bad, but I really could not care less."

Fast forward two years, and the "nice little airplane" is now the catalyst transforming the market for commercial aircraft, both mainline and regional. For years, four manufacturers—Boeing, Airbus, Bombardier and Embraer—have dominated. But following Airbus's acquisition of a majority stake in the C Series program—for the bargain price of zero—the four have, in effect, become three.

Playing out simultaneously, the aircraft has become the subject of a giant trade dispute between the U.S. and Canada that, as a side effect, will lead to the opening of another commercial jet final assembly line in the U.S.

But overlooked by many since the Oct. 16 deal stunned the global aerospace community is the crucial fact that the C Series was not sold to China. This helps to maintain Western aircraft manufacturing dominance for now and to slow China's rapid ascent in the arena.

According to several industry sources with inside information, negotiations between the Chinese aerospace industry and Bombardier were so far advanced that Comac, manufacturer of the C919 and ARJ-21, could have soon taken control of the C Series. One source says China mainly wanted access to engineering know-how and help with certifying aircraft in the West.

That some portion of Bombardier was up for sale was one of the worst-kept secrets in the industry, in part because several candidates were approached. In the end, Airbus was able to act swiftly because it had established a path two years earlier, when it first considered buying the program.

Suppliers with knowledge of the situation say Boeing was "in shock" when the news broke. Belying the surface calm, there is reportedly serious concern within Boeing that the Airbus-Bombardier link will enable those manufacturers to compete with packaged fleet deals that the U.S. aircraft maker simply cannot match.

Senior industry sources say the tie-up is a big problem for Boeing, as the transatlantic alliance will be able to provide "stepping-stone" deals covering everything from regional and single-aisle aircraft up to the A350 and A380. The benefit of a common A320-like sidestick and

display flight deck architecture in the C Series—useful for easing pilot training transition between fleets—is huge.

“It is hard to imagine Boeing expected it to go this way,” says Ronald Epstein of Bank of America Merrill Lynch, but he urges caution. Bernstein Research describes the deal as “win, win, win, lose?”—with Embraer’s E195-E2 as the possible loser in a tougher competition against an Airbus-backed CS100.

Epstein says one potential Boeing response could be a tie-up with Embraer, as the companies already cooperate on the Brazilian manufacturer’s KC-390 military airlifter. But there are distinct differences: Embraer is not in crisis mode, and its largest aircraft is significantly smaller than the CS300, hence it does not compete with any Boeing or Airbus design. It therefore does not aid Boeing’s existing portfolio.



Airbus CEO Tom Enders waves to Bombardier employees after touring a C Series test aircraft at Bombardier’s plant in Mirabel, Quebec, on Oct. 20. Credit: Reuters/Christinne Muschi

Pundits underscore that the situation could have been a lot worse for Boeing, at least in the long run, if Comac were to have used the C Series as its catalyst and accelerator toward world standards. There is an argument among China aerospace experts that the threat feared by Western players is exaggerated, and the benefits of obtaining the C Series may be overblown. But it certainly was a strong motivator for Airbus.

Another fascinating aspect of the deal is that Airbus is moving into a part of the market it had declared to be too small to be significant any longer—100-150 seaters. Its own orderbook would have been an argument for not investing in the segment. Almost half of the narrowbody

orders (and soon production) are for the A321, while there are almost no orders for the A319neo; Boeing witnessed a similar trend with few sales for the 737-7. Bombardier has long argued that the A319neo and 737-7 have low orders because they are not optimized for their size. Embraer positioned its E2 in that size segment, but below that of the C Series, and with no expectation of the same volumes.

Bombardier's lack of C Series sales did not support confidence in that market niche's potential, either. Now that the program's competitive disadvantages in terms of sales, product support and credibility are history, the aerospace world will soon find out which school of thought prevails.

Airbus will bring its sales and marketing muscle to the C Series orderbook and its supplier management clout and negotiating power to procurement and production, while its global product support is expected to boost the confidence of customers wary of committing to the Bombardier aircraft. The deal can also have substantial implications for Airbus's own future product strategy as it ponders the positioning of an all-new A320neo-family replacement aircraft.

Airbus's ability to cut supplier costs in the C Series program is key to making the takeover a success, one senior industry source says. Enormous sums of money—30-40% of total supplier costs—can be saved, the executive with inside knowledge of the C Series cost base says. JP Morgan believes that decreasing procurement costs by 10% would add six points to the program margin.

Why? Because Bombardier had no market power vis-a-vis its industrial partners, and there was no confidence in the program's success; suppliers wanted the manufacturer to pay for their risk. And it did: "We did not reduce our price by one cent," says one senior supply chain source, "and Bombardier had to accept it." Component by component, partners realized enormous profit margins as they maximized their negotiating position. One example is the wing-to-body fairing, an insider notes. He says Bombardier pays four times the amount Airbus does for that piece on the A320neo. The excessive rates Bombardier was forced to pay are a major factor behind its taking of a loss on every aircraft it delivers—with or without launch pricing.

"The only risk Airbus has in the deal is execution," says one executive. He deems the risk manageable but notes it could take three years to turn around the cost structure of the C Series program. Many suppliers have locked in a high number of shipsets at pre-Airbus prices, in some cases as many as 200, and are unlikely to voluntarily give up their nicely profitable business—unless Airbus subtly forewarns of retaliation in other areas.

But not every supplier is the same. While the aerostructures sector generally suffers from overcapacity and would therefore be more likely to be willing to accept margin cuts, systems suppliers such as United Technologies Aerospace Systems, Honeywell or Rockwell Collins are in a much stronger position. They either enjoy monopolies for particular systems, or their

products could not realistically be replaced by a competing product because it would mean expensive, complex changes to the aircraft.

One area of cost concern remains composite wing production at Shorts in Belfast, Northern Ireland, one executive remarks.

Airbus Commercial Aircraft President Fabrice Bregier confirms the supply chain is already on notice as far as the C Series turnaround is concerned. He says the expectation is that supply chain costs will be consistent with what Airbus is charged.

In some sense, Airbus's risk goes beyond execution. Although it paid nothing for the program share, this is just a temporary balm. Airbus is stuck with no exit strategy if the deal proves unsuccessful. It is hard to imagine who would buy the C Series if Airbus fails to turn it around. And it is unlikely that Airbus could shut the program down if it falters, given the guarantees it had to make to the Canadian government and the political pressure sure to emerge should that event happen. Epstein offers a sobering reminder, recalling Boeing's acquisition of McDonnell Douglas and its rebranding of the MD-95 as the 717, only to shut down production barely 10 years after the merger.



The Airbus A319neo is the most obvious victim of the C Series arrangement. Already beset by slow demand, the Bombardier-Airbus deal may hasten its demise. Credit: Airbus

Bregier expects the deal to close in late 2018, following regulatory approvals. Until then, no structural changes can be implemented or decided.

"We bring credibility to the program," Bregier says. "We bring in confidence that this is a really good aircraft that will be supported and improved in the long run."

The C Series will become a new family of aircraft for Airbus that complements its existing portfolio and allows Airbus to offer aircraft "from 100-600 seats," Bregier says. He adds that the deal allows us "to increase our international footprint; we started in China and the U.S., now we also have Canada."

And though there are strategic risks, there are potentially huge rewards. "The C Series deal buys Airbus more time for its own NMA," says one industry source, referring to Boeing's proposed new midmarket airplane and Airbus's potential competitive response. With the CS100 and in particular the CS300 now part of its own portfolio, Airbus can afford to ignore the slow death of the A319neo.

The option to stretch the C Series further and, at some point, build a CS500 that could move into the A320neo field would allow Airbus to position the A320-family replacement at a higher basic design capacity without risking losing what could be at that point the bottom end of the market. Those customers could then buy CS aircraft.

But more important, Airbus plans to assemble aircraft for U.S. customers alongside its A320 family in Mobile, Alabama, circumventing the almost 300% in duties the U.S. government proposes imposing on C Series aircraft imported from Canada in response to Boeing's anti-dumping charges. Airbus CEO Tom Enders and Bombardier CEO Alain Bellemare stress that the partnership is not driven by the U.S. trade dispute. "This was not motivated by anything the competition was doing," says Enders. Bellemare agrees, saying: "This is not related to the trade issue; it is a strategic issue."

Boeing Chairman, President and CEO Dennis Muilenburg publicly plays down the importance of the tie-up. He says it does not "change our game plan. Our fundamental strategy is strong. We expect heavy competition in that marketplace, and competition makes us better. But it is important that everyone plays by the same rules."

He adds: "Some of these recent developments are not surprising to us. It is an attractive market with a lot of global competitors."

As for the Airbus-Bombardier plans to circumvent excess import tariffs by completing final assembly of the C Series in Alabama, Muilenburg believes the U.S. Department of Commerce will derail this. Boeing filed its anti-dumping and countervailing duty petitions with the U.S. Commerce Department and International Trade Commission (ITC) in April; the ITC decided in June to proceed with an investigation. Commerce announced its preliminary finding in late September/early October.

Boeing's decision to wage war on Bombardier "has arguably had some unintended negative outcomes," says Robert Stallard of Vertical Research Partners, including damaging relations with the Canadian and UK governments and driving Bombardier "into the arms of its arch competitor."

Bombardier continues to pin its hopes of resolving the trade dispute on the ITC finding that C Series pricing to win a key 75-aircraft order from Delta Air Lines in 2016 has done no

damage to U.S. industry because Boeing did not offer a competing aircraft. The ITC is due to rule in February; if it determines that no damage was done, duties will not be imposed.

But if the ITC does find that material damage occurred, and the import duties are imposed, Bellemare believes Delta will be willing to wait until U.S.-assembled aircraft are available, likely in 2019. "Clearly, the Mobile option is on the table," he says. "We will now engage with them in depth."

"We think aircraft produced at this U.S. site will not be subject to [tariff] duty. But it's more strategic than that: It is a very good move to bring this aircraft to the U.S. because the U.S. is the single largest market for this segment," says Enders. Assembly of the first U.S.-made A320 began at Mobile in mid-2015, less than three years after Airbus announced the \$600 million development. But given that the Mobile site is now well established, it may be possible to add the C Series in significantly less time.

Under the deal, Airbus will acquire a 50.01% interest in the C Series Aircraft Limited Partnership (CSALP), formed in 2015 when the Quebec government invested \$1 billion in the program. Bombardier now holds 62% of CSALP, and Quebec 38%. After the deal closes, Bombardier will own 31%, Quebec 19%.

No money will change hands on completion of the deal, and no debt will be assumed by CSALP. The joint venture is already investing \$2 billion in the C Series from 2015 to 2020, and Airbus's involvement is expected to at least double the program's value to \$4 billion or more, Bombardier Chief Financial Officer John Di Bert says.

The size of Airbus's stake is based on the expected value to the program of its sales and marketing, procurement management and customer support. In addition to its existing investment plan, Bombardier has agreed to provide up to \$350 million in the first year and a combined \$350 million over the next two years to cover any shortfall in funding. But Di Bert does not expect this to be required.

Although Airbus will pay nothing for its majority stake in the C Series, Bombardier expects to profit from handing over control through the program's increased strategic value.

That value is expected to come from increased orders for the aircraft, supporting a higher combined production rate in both Quebec and Mobile.

The \$5.4 billion spent developing the C Series—\$2 billion more than planned—pushed Bombardier close to a liquidity crisis, from which it was rescued in 2015 by Quebec's investment in the C Series and another \$1.5 billion from the province to buy a stake in Bombardier's rail business. Bombardier is ramping up C Series production to a planned 120 aircraft per year by 2020, when the program is expected to reach break-even cashflow. While the partnership could accelerate that, Di Bert expects to see "powerful cashflow generation" from the Airbus tie-up starting in 2021-22.