

# AEROSPACE & DEFENSE GLOBAL LEADERS SERIES

A CONVERSATION WITH FRED CURADO  
PRESIDENT AND CEO, EMBRAER

By Anthony Velocci

*In 2007, Frederico Curado was appointed president and CEO of Embraer, the aerospace industry's third largest aircraft manufacturer, after Boeing and Airbus, serving business, commercial and military aviation customers worldwide. It will generate about US\$6.5 billion in revenues in fiscal 2014. Curado stepped into his leadership role at a time when Embraer was in dire straits and struggling to adapt to an extremely tough business environment—emerging competitors, rapid technological changes, product cycles that were growing shorter, high oil prices that were hammering many of its customers, and a financial crisis that had its roots in the U.S. but had worldwide effects. In the following interview with Tony Velocci, former editor-in-chief of Aviation Week & Space Technology, Curado discusses parts of his management philosophy and how he has tried to change the company's culture.*



Fred Curado  
President and CEO,  
Embraer

***Embraer has been widely viewed as a disruptive force in the marketplace ever since the company became a player in the business aviation segment in 2000, with the introduction of the Legacy 600 jet. What differentiates Embraer from its competitors?***

Boldness, one of our core values, has a lot to do with what you are talking about. We have a very good process for identifying market opportunities and developing products absolutely customized to meet a set of market requirements at an extremely competitive price point vis-a-vis our competition. Of course, it takes more than just knowing what to do. You also must have the ability to do it well. Examples include our Tucano military, trainer, KC390 military transport aircraft, and Phenom 100 and Phenom 300 jets. In recent years, in particular, we have evolved tremendously in terms of our quality, production efficiency and engineering prototyping.

***Are you seeing a change in customer expectations?***

Very much so, especially among our airline customers who face survival issues. Their expectations for quality are much higher, and their operations have become more complex, which puts original equipment manufacturers under greater pressure to deliver on those expectations. We're also seeing growing sophistication among business jet customer, who are demanding higher levels of quality, performance and reliability, and they want more technology. They do not expect to pay \$30 million for a business aircraft and then get stuck because of reliability issues.

***How has Embraer adapted, and what is the best evidence that you are succeeding?***

We are in constant communications with customers to help us anticipate their expectations, and we are investing in our capabilities. In 2007, we launched an internal program call P3, with P designating 'programs' and '3' standing for Embraer Enterprise Excellence to improve the operating efficiency in

everything we do. The program involved a major investment in automation on the factory floor. The program has allowed us to increase our manufacturing flexibility and improve our quality and cost competitiveness.

***What leads a company to become an underperformer?***

There are a couple of causes. When a company listens more to itself than its customers, it probably is on a path to become an underperformer. It's just a question of time. Complacency is another one. Some companies mistakenly develop the attitude that their product is the best it can be, leaving them open to competitors with a more customer-oriented culture and that develop a better product in terms of quality, price or a combination of the two. When companies get too comfortable with their place in the market, they tend to take their eye off the ball. That's when you start losing your edge.

***What more could suppliers be doing to help their OEM customers succeed, and vice versa?***

It is more a matter of working together. The more that suppliers understand what their customers require, and the more that customers understand the risks that their suppliers are taking, the better.

***What is Embraer doing to make sure that it maintains a tight focus on process and technology innovation?***

First, we are investing for the long term—10, 15 years in the future. Second, our P3 program is comprised of 450 work cells made up of people from different functional areas, and their job is to drive creativity and continuous process improvement. Third, we make frequent use of what some people may refer to as 'offsites' where people get together to discuss new and innovative ideas to help direct our investments, whether it's in R&D or startup companies that can be a great source of technology innovation. Think of it as harnessing communities of knowledge inside the company. The program is called Innova. I try to ground everything in processes, and innovation is nothing if not a process.

## ***In your 30-year career at Embraer, is there a personal experience that had a profound lesson?***

In my career there have been several times when I have learned it is far better to anticipate problems than to hope they just go away. They only get worse. I'll give you one example. In 2008, we started seeing signs that there could be a financial crisis in the making, although we had no idea how deep it could become.

As it became clearer that serious problems were in the making, we evaluated the potential impact on Embraer and shared our assessment with customers, government officials and other stakeholders. Then we reduced the size of the company by more than 20%. That action was one of the worst things we had to do. Politicians and many other people tried to second-guess us. They asked, 'Why are you doing this?' Six months later the answer was very, very clear. I have learned both ways—having done it right and having done it wrong—that it is far better to get red early on than to get purple later when the problem will have become exponentially more difficult. Shrinking the size of the company was the right decision, but it was a lonely one."

## ***Looking ahead, what are your strategic priorities?***

The first one is our people—keeping them engaged and highly motivated, focused on our agenda. Are we there? No, but realistically, that is a never-ending process for all companies. The second strategic priority is diversification. A decade ago, fundamentally we were a single-product company— regional jets. Defense was a little business on the side. We entered the business aviation market in 2000. Today, we serve customers in the business, commercial and defense aviation segments, and provide after sales services and support to customers worldwide, and we have very good brand awareness. We will continue to grow all three of these core businesses. The third strategic priority is to continue making the company more global.

## ***Are you satisfied with you progress in making the company more global?***

No, but we have made a lot of progress. In fact, we have come a long way in all three strategic goals, which has required a cultural change across Embraer. Fifty percent of our top-level directors are from outside of Brazil. We serve customers worldwide, and so the idea is to get geographically closer to them. In business aviation, our center of gravity is shifting to the U.S. In five or six years, that part of the business will be centered in the United States.

Our most productive and cutting-edge factories are in Portugal, manufacturing components for product lines in both Brazil and the U.S. The bottom line is that we want to transition from being mainly a Brazilian exporter to a global company headquartered in Brazil.

## ***When you were appointed president and CEO in 2007, you embarked on sweeping change. What was your thinking?***

I think of companies as like living organisms that go through different phases. I resolved to address what I thought the company needed to thrive, and that is how I continue think of Embraer—providing what it needs now to grow. If we had continued to concentrate on just commercial aircraft after 2007, Embraer now would be literally two-thirds of the size it is today. I believe the company needs to be more diversified and more global to succeed in this phase of its life.

## ***What do you believe is the most meaningful measure of your contribution to the company—Embraer's financial performance, or a broader set of metrics?***

In the end, for a public company it's return on capital. But you don't achieve that goal in any meaningful way if you don't first accomplish some other goals—such as getting your workforce engaged, and investing the right amounts of money in R&D, and continuous process improvement, true customer engagement, and a host of other things. And if a CEO fails to deliver on that metric over time, fortunately or unfortunately, depending on one's perspective, you're out.



A 24-year veteran of *Aviation Week*, Tony Velocci is former editor-in-chief of *Aviation Week & Space Technology* magazine as well as editorial director of Aviation Week Group.

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