

Aviation Week Podcast with Accenture: Commercial Aerospace Business Forecast: Down But Not Out

Aviation Week Senior Business Editor Michael Bruno talks with Accenture Global Aerospace and Defense Lead, John Schmidt, and North America's Aerospace and Defense Lead, Brian Legan on the outlook for the commercial aerospace industry.

Michael Bruno: Hello, and welcome to Aviation Week's Check 6 with Accenture. I'm Michael Bruno, Senior Business Editor at Aviation Week, and your host for this edition of our regular podcast on major issues facing the global aerospace and defense sector. I'm joined by two Accenture leaders, John Schmidt, Global Industry Lead for Aerospace and Defense, and Brian Legan, Lead for North American Aerospace and Defense. Gentlemen, thank you for joining me.

Michael Bruno: We're going to talk about the latest findings from the Accenture Commercial Aerospace Insight Report, along with some findings from your aerospace executive poll as well. There's a lot for us to chew on, and not a lot of time, so I'm going to cut to the chase.

Michael Bruno: Accenture now sees the overall 2019 commercial aerospace market to grow at 2.5% annual growth rate year-over-year, which compared with 2018, was at 4.7%, so there's a significant slowdown. Respondents to your surveys generally see increased revenue over the next 12 to 18 months, but they do not expect any increase in the next six months. As far as revenue growth alone this year, companies should see only 2.5% over 2018's amount. I should add that revenue growth last year was 4.2%. So, John, can you explain these numbers for a moment? How do you get these numbers? And what do they represent as an index for industry?

John Schmidt: Well, Michael, we accessed data from several sources, including the quarterly reports from the largest commercial aerospace companies. And these feeds some complex econometric modeling, which we combined with insights from senior executives from across the commercial aerospace industry globally. And instead of focusing solely on OEM sales, the report covers a wide range of activities from supplier to MROs.

John Schmidt: And I think it's easy to guess what happened this year in commercial aerospace. And keep in mind also that the index represents a point in time at around the beginning of September. So, when we think about the executive sentiment that is built into the data and combined with the data, we're looking at that point in time even though as we sit here it's October.

Michael Bruno: Right. But this was end of summer when the results came out.

John Schmidt: End of summer. And if we look at what went on in terms of the data, we're seeing the presumptions on what 2019 growth would be in commercial, there is a presumption around Max in return to service.

Michael Bruno: So, let's talk about Max for a moment, because any conversation going on in aerospace and defense has to talk about Max. Brian, there's a term of art we hear a lot, and, and John just used it, this return to service. What is it? What is the current expectation for whatever that is? And why is it important for the midterm or the near-term outlook that you discuss in the report?

Brian Legan: So actually, return to service involves several dimensions. The term itself really means the reinstatement of the 737 Max into the fleet operations. But there are several dimensions, and I'll talk about four of them just briefly here. So, first, and obviously the main step is the FAA completing the re-certification of the new 737 Max configuration.

Brian Legan: But other dependencies also include getting the delivered and the undelivered aircraft brought up to this newly certified configuration, getting the pilots trained and checked out on that configuration, and then finally getting the airlines to reintroduce the 737 back into the fleet, and then of course restoring the public's confidence to fill the capacity.

Brian Legan: You also mentioned our mid-term outlook. The outlook assumes in the reports that the 737 Max will get the all clear by the end of this year and the spigot for Max deliveries will once again open up for Boeing. Let's talk about the numbers in the report a little bit. So, the grounding of the Max certainly had an impact on the numbers, as you mentioned. For example, Boeing delivered about 239 jets in the first half of the fiscal calendar year 2019. That's a 37% year-over-year decline from previous years.

Brian Legan: That also has an impact on the North American numbers. For example, we're expecting a slight decline of about .4% primarily due to the Max grounding. So, now that's the kind of the pessimistic or the gloom view.

Michael Bruno: So, the whole market is going to be .4% down in the North America market.

Brian Legan: There's some strong points in other segments obviously. Let me talk about the optimistic side of the equation, because there is a bright side here. So, optimism of return to service of the Max; there're a few indicators beyond and some current ones that you probably also saw in the press lately. Going back to the Paris Air Show; I think many of the listeners know that Boeing signed a letter of intent with the International Airlines Group for a commitment to buy a fleet of 200 737 Max aircraft.

Michael Bruno: It was a very eye-catching announcement.

Brian Legan: Well, 24 billion dollars is quite significant. Right? So, to me and to Accenture, that indicates some confidence in the safety and regulatory process and the re-approval for the return to service. In June, Boeing completed the development, not the implementation, but the development of an updated software for the 737 Max. And just yesterday American Airlines announced in their SEC filing that they expect to reintroduce the 737 Max aircraft back into the fleet as of January 16.

Brian Legan: So, a lot of positive indicators and confidence that the plane will be reintroduced. And now let's conclude this part by saying, "Well, what impact would this have then on 2020, the coming year?" For the coming year with those assumptions, we're forecasting a quarterly year-over-year growth that's generally higher in the first and second quarter of 2020. And 2020 really has the promise of getting the North American market back on track. And growth we anticipate will be about 10.5% of an increase year-over-year sustained in 2020. So again, some, some positive outlook there.

Michael Bruno: Aircraft orders are traditionally the life blood of this industry, but Accenture does not expect a dramatic increase in new aircraft orders over the next 18 months. Likewise, only 34% of aerospace and defense executives expect to increase their unit delivery rates in 2019 compared to the previous year. Whereas, 66% expect an increase in unit delivery rates in 2020. So, besides the Max, China, European tariffs, there's also Brexit and a continuing challenge within the supply chain that, John, you and I've talked about a couple of times in these podcasts; challenges to deliver parts and subsystems like engines. Without getting too much into the details of any one of those subjects, can you explain how all of these are clouding the near-term aerospace and defense prospects but maybe not the long-term.

John Schmidt: You put a, a lot in there, Michael. When you put it like that, I think it's easy to see why we don't see unit deliveries overall going up until some time in 2020. And while the expectations expressed by the executives we surveyed included a presumption of return to service in Q4, all of the other things are still in play and frankly, many unknowns in the near-term, which makes it hard really for these companies in the industry to really plan in the near-term.

John Schmidt: I think when we look out 18 months from now, it makes things seem like they'll be a little bit clearer. And by then being able to plan and being able to adjust, and of course, that presumption of return to service, why things bounce back in, the longer term. And, again, this index is really targeted trying to look at between the next six months and the next 18. A lot of folks are looking at three years from now where we're going to be. A lot of people are looking at next quarter, where are we going to be.

John Schmidt: So, we're trying to hit that middle zone, and that's where the bringing together of the econometric data, that I think probably a lot of folks could probably look at and crunch on the way and blend that in with the executive sentiment from senior executives across the global commercial aerospace industry. Really gives

us a better view to what's really going on in those kinds of medium-term timeframes.

Michael Bruno: So, some pretty strong headwinds that we mentioned. But when you talk to industry executives, analysts and others, there's still a lot of optimism in this industry. And Brian, you were alluding to this, looking out, people have expectations about once returned to service comes back. And you're going to see growth in all kinds of things. They talk about airline passenger traffic going up, and maybe most of all, the backlog as a really key distinguisher that marks this as a healthy industry in the long-term.

Michael Bruno: The Accenture report says, "The significant backlogs are allowing the commercial aerospace industry to ride through the current aircraft order volatility." John, why is the backlog so important?

John Schmidt: Well, while China and European tariffs, Brexits, pipe change, challenges create uncertainty. The upper demand for air traffic and the backlogs of aircraft provide some level of confidence when it comes to planning for the future. And as you know, this industry has a tremendous amount of technical debt, and each company needs to consider that wise pivot between continuing to spend on the old technologies and systems versus investing in the new, including AI, robotics, 3D printing etc.

Michael Bruno: So, besides the backlog, the Accenture report points out that a strong MRO market is also powering growth here in part due to lower aircraft retirement levels and the delay of the onset of the next generation aircraft. Brian, where is this MRO growth coming from?

Brian Legan: This is an aspect of, of the industry that I think often gets overshadowed by new aircraft deliveries, new technologies and so forth. But there's actually a lot of tremendous progress being made in MRO and future opportunities. So, for example, 60% of the aerospace and defense executives that we polled expect the MRO activity to increase over the next 18 months due to, as you say, the rise in 2019 of air traffic growth but also, again, a larger fleet of older aircraft because of deferred aircraft retirements.

Brian Legan: Just to put a point on that, when we say older aircraft, we're talking about airplanes or aircraft that are ten years or more in service. And surprisingly, or maybe it won't surprise you, these aircraft make up more than 50% of the global commercial fleet. And they require ongoing and more frequent maintenance. This hasn't been lost on the OEMs, by the way, either. And the OEMs in addition to the traditional MRO providers are increasingly focused on aftermarket services, and they're shifting towards new business models and alternative revenue streams.

Michael Bruno: Oh, and global services.

- Brian Legan: You got it. And why are they doing that? Besides the obvious growth, those revenue streams have the potential to provide a cushion against potential economic downturns in the future that might impact aircraft sales. Just a few other comments on the innovation going on here. So, the MRO market as we see it, is really becoming a significant driver of digital innovation in this aspect of the industry. Companies are utilizing, I think, John, you mentioned it earlier, you know, connected in intelligent products to enhance efficiency, improve profitability and growth. And that actually has extended value.
- Brian Legan: So, if you think about the airlines, and you look at the airline performance and the EBIT margins over the last four years, there's actually quite a bit of headwinds there. And just to give you some statistics here, in 2015, the EBIT margins were about 8.6%. They've declined to 5% in 2019. So, having a more efficient aftermarket service providers and so forth, should be also a benefit to the airline industry, their cost structure, and ultimately perhaps their profitability.
- Michael Bruno: They're creating revenue growth in a different sub sector versus the traditional where the margin is declining.
- Brian Legan: Absolutely.
- Michael Bruno: Well, I want to get deeper into the changes that are happening in MRO, the digitalization you talked about. But before we do, first let's hear a quick word from our sponsor.
- Speaker 4: With more than 30 years of experience in the aerospace and defense industry, Accenture helps companies harness digital technologies to improve operational performance, enable competitive differentiation and drive profitable growth. To learn more, visit [Accenture.com/aero](https://www.accenture.com/aero).
- Michael Bruno: John and Brian, we were talking about growth coming in part from MRO. The report says, "The MRO market is becoming a significant driver of digital innovation with companies utilizing connected and intelligent products to enhance their operational efficiency." Indeed, MRO is the center of a major change happening in this industry we report about a lot at Aviation Week. Despite the current headlines about the Max, China and all those other headwinds, it could be more significant in the long run. So, Accenture does polling about digitalization and other new technologies that are changing the business of aerospace and defense. What do the executives you talk to, what are they telling you?
- John Schmidt: Well, first of all, they're telling us that digitization is actually happening in more than just the MRO segment. It's happening across the enterprises that are engaged in this industry. And we're seeing an increase in intelligent solutions being leveraged to provide better customer service and/or greater operational efficiency. And examples would include predictive analytics platforms, digital

records management, reliability analysis and really augmented reality, virtual reality solutions.

John Schmidt: And what we find is 2/3 of the aerospace and defense executives say they have implemented artificial intelligence or are trialing it in at least one area of their business. And yet, 33% of those same executives have ranked AI as the technology that will have the greatest impact on their organization over the next three years. So, you take and you look at another statistic that comes out of the same poll that says only one in five say they're scaling the majority of their digital pilots to deliver superior returns or on a best, better customer service or greater operational efficiency.

John Schmidt: So, lots of people looking at some of these technologies, particularly around AI. A good number believing that this is going to have a huge impact on their organization. And yet, a very small number really getting the scaled benefit effects either on the customer service side or the operational efficiency side.

Michael Bruno: Sounds like a lag there. Do you think that's a lag in the belief of the power of AI, or is it just simply a question of people not knowing where to put follow-up investment dollars?

John Schmidt: I think it's a couple other things. First, I think that there's a lot of trialing going on in small areas of the business before executives have confidence to be able to roll out and scale. The second one is I think around talent. There's a huge talent shift that's required to be able to take advantage of these technologies. And acquiring that talent in this industry, and we've talked about this on past podcasts and in Aviation Week as well, that the workforce challenges of attracting the right talent into this industry, are putting a strain on company's abilities to be able to leverage technologies or new in-innovation as they look forward.

Michael Bruno: All right. But being this is an industry built around flying, we should note there are other major investments going on. Let's flash back to the Paris Air Show for a moment. John, you, Aviation Week, a lot of other folks were struck by the sudden dominance of the environmental sustainability as a major issue. Without going off too much on that issue specifically, that attention is translating into significant new investments in the hybrid propulsion and CO2 reducing technology. There is real money being spent now changing how aircraft fly.

John Schmidt: Well, there certainly is investment happening across a range of existing aerospace companies and startups and the sustainability side of this. And we're seeing some new services emerging, like smart flights planning and others that are in response to this. What we're also seeing in the industry is you've got air transport action groups setting targets to reduce CO2 emissions to half of 2005 levels by 2050. And you have IATA working towards full implementation of the Carbon Offsetting and Reduction Scheme for International Aviation or CORSIA, which will cap net CO2 emission at 2020 levels and require airlines to purchase carbon offsets to compensate for their increase in CO2 emissions.

Michael Bruno: These are heavy goals.

John Schmidt: They are heavy goals. And in our research, it shows that 59% of aerospace and defense executives say that more than half of their current annual revenues are from the sale of products or services that deliver reduced CO2 emissions through fuel efficiency improvements for operators. Which, by the way, as we were talking about it in Paris, right, you know, from my perspective, only makes sense as fuel is a huge component of cost for operators. And I expect the drive for efficiency, whether through electric, hybrid electric, or new fuels or other improvements to continue. It just makes good business sense.

Michael Bruno: So, the point necessarily is it's not just about the current headline over sustainability and maybe the public relations for that, but these airlines, these operators, the manufacturers, they're going for this for other reasons that also are sustainable.;

John Schmidt: I think it's a perfect blending of what's good for the environment and sustainability with makes just good plain old business sense.

Michael Bruno: All right. Well, I'm amazed at how much of the business of aerospace and defense could change in the mid or long-term. But before we sign off, I want to follow a little bit of a tradition and ask both of you for a prediction, a big, bold prediction that most people do not appreciate or can't focus on right now because of the urgent headlines of the day. So, who wants to go first?

Brian Legan: I think I'm going to stick with the MRO because as you mentioned that gets overshadowed a lot of times given the other activities and things in the news here. One of my predictions, and you could decide if it's bold or not, is the evolution of a new digital ecosystem in the aftermarket that not only increases efficiency, but as somebody who flies a lot, maybe this is hopeful, that improves the customer experience and friction that we see. And, you look at the transactions that happen in this market right now, the technology and the manually intensive way they do these things hasn't changed in year ... decades.

Michael Bruno: Decades.

Brian Legan: And given all the technology that John mentioned, this market, I feel, and I think we feel, is very ripe and overdue for what we call the wise pivot to the new.

Michael Bruno: So, you're talking about disrupting a lot of middle ... little middle companies, middle providers?

Brian Legan: What's going to be interesting to see, is how these traditional MRO players, the OEMs who I mentioned before are really eyeing this market. And non-traditional companies who may be more agile and equipped to really disrupt this market bring these technologies to the four, partner, in a JV or some other form to really disrupt the market. And let's not forget the Asia market, which is also

growing, and the opportunity for some of these folks to move into that market beyond just the North American market and others.

Michael Bruno: Right. John, what do you think?

John Schmidt: Well, I'm going to go back to artificial intelligence. And I quote this in the statistics from my recent research about 2/3 of the aerospace executives' kind of it being involved in some manner with AI across one ... at least one part of their business and yet, only one in five being able to really bring those things to scale. As you know, we do our [tech vision](#) in research as Accenture and we do an industry slice for aerospace and defense every year, which is where those data points came from. This year when we do that tech vision, my bold prediction is that we're going to see that 2/3 going up to 99%. We're going to see that 20% going up dramatically from where it is today, because we're starting to get our hands on this. Companies are starting to be able to take the talent in that they need to get these things done. There's a recognition that the ecosystem of partners that a company needs to be able to accomplish its goals could include other maybe not necessarily aerospace and defense companies, companies like an Accenture to really help make these things come to life. And, I think you're going to see the number go up. So, 99%, not 100.

John Schmidt: I'm going to give somebody one percent, not yet into it. And I'm going to say that we're going to be seeing at least 50% if not more of those companies really seeing real value coming from AI, and customer service and/or operational efficiencies.

Michael Bruno: So, if I may take the liberty of putting words in your mouth, essentially what you're saying is if you are not thinking about AI now and pretty soon, if you're not already investing in it, you're falling behind.

John Schmidt: Absolutely.

Michael Bruno: Well, with that, we will wrap up this edition of Check 6 with Accenture. Be sure to check out the [Accenture Commercial Aerospace Insight Report](#) online, and tune in to the next edition of the Check 6 Podcast.