

**AVIATION WEEK CHECK 6 PODCAST WITH ACCENTURE
COMMERCIAL INSIGHT REPORT
OCTOBER 23, 2020**

OPENING VOICEOVER

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Michael Bruno:

Hello and welcome to Aviation Week's Check 6 with Accenture, I'm Michael Bruno, Senior Business Editor at Aviation Week. Aerospace manufacturing is between a rock and a hard place right now, rock, could mean rock bottom, as in the bottoming out of commercial air travel after the COVID-19 pandemic. While the International Air Transport Association's latest data shows fliers have picked up since the springtime lows of 95% off the previous year's travel levels, forecasters still expect 2020 to end between 50 to 60% down from 2019s levels. This has forced a reckoning in industries forecasts for 2020 and 2021. Revenue has fallen, costs are climbing, business models are being rewritten, but someday production will have to pick up from the subterranean levels as there remains widespread confidence in the long-term outlook for commercial aviation. While that sounds like a good problem to have, it will still be a big challenge for industry because that production ramp up is probably 18 months or two years out.

That is far too long to just grin and bear the cost of maintaining the supply chain built for what is probably about twice the size of what is needed now. Unfortunately, and not surprising, we are seeing lots of layoffs, factories closing, and already an uptick in mergers and acquisitions as industry consolidates. Through it all the dilemma remains, how can industry stay resilient and ready to meet future production increases while facing frankly, its bleakest near term forecast in memory. At least industry can call upon experienced experts to help guide the way and I'm very happy to be joined by a trio of Accenture's leading aerospace and defense advisors to discuss these issues. They are John Schmidt, Accenture's Global, A&D lead, Jeff Wheless, Global A&D Research Leader and Joyce Kline, Accenture's Digital Lead in the North American A&D practice. John, Jeff, Joyce, thank you so much for joining me today.

John Schmidt:

Thanks Michael.

Jeff Wheless:

Thanks Michael. Good to talk to you again.

Joyce Kline:

Thanks Michael.

Michael Bruno:

Glad to have you all back. Now, John and Jeff, I want to start with you two because we have access to the new Accenture Commercial Aerospace Insight Report. I always look forward to this report because it's about the only A&D industry index report that regularly surveys A&D business leaders and incorporates responses alongside the data. Jeff, your team puts these numbers together, what do you see happening with global commercial aerospace revenue this year and next year?

Jeff Wheless:

Well, as you mentioned earlier, we are in for some interesting times in the short-term, until things pick back up. And the title of this edition of our report is in it for the long haul. And we think that statement could not be truer. We're anticipating 2020 to be about 37% lower than 2019 in terms of overall aerospace demand and that's both across production and aftermarket MRO and services. And we don't think that anyone would disagree with those reductions and some might be a little bit more optimistic or pessimistic on that, but all are essentially different degrees of badness. Now, that said, the decline that we've seen globally would have been even worse if it hadn't been for the Asia Pacific region and China in particular, recovering far faster than expected, not just in the aviation sector, but the economy that fundamentally drives it.

And as you mentioned earlier, as part of this report, we pull C-level executives across the globe for our forecast and they're thinking additional short-term decline and making corresponding capacity adjustments until demand starts to incrementally increase in the back half of 2021. And even then, we're still going to be seeing a global industry that's down 33% from 2019 levels.

Michael Bruno:

Jeff, this industry has a habit of watching orders and deliveries of large commercial aircraft with bated breath. What does Accenture see happening there?

Jeff Wheless:

Orders and deliveries are literally a rollercoaster. And we think that we're going to continue to see headlines where the order changes and grim net orders statistics. Now, overall, we expect the overall commercial deliveries in 2020 to be somewhere in the range of 600 to 700 aircraft, as compared to about 1200 deliveries in 2019, where industry had already been hit by the 737 Max grounding and 1800 aircraft deliveries in 2018. The pulse of the executives that we pulled showed that folks are expecting 2021 deliveries to be at least incrementally better than this, but nowhere near 2018 or even 2019 levels.

Michael Bruno:

So John, getting a little deeper there, not every program is effected equally from what I see in the inside report. Can you tell us about any kind of relative winners or losers?

John Schmidt:

It looks like narrow body programs to be the winner, with aircraft deliveries, better positioned than wide body aircraft through 2021. Even in 2021, compared to today, two thirds see wide body deliveries the same or lower than 2020, while 90% see narrow body deliveries the same or increasing, which is consistent with what Jeff was just saying with the numbers. We also see that there are some hidden danger in deliveries, particularly for 737 with deferrals and cancellations being balanced with reordering of the delivery schedule for other customers. And overall, more than 1900 deliveries planned for 2020 and 2021 have been either pushed back or canceled as of the data last month. And we expect further reductions in the coming months. Wide body demand will take more time to recover as airlines consider the retirement of some models and restructure their fleets while we all wait for reopening of national borders and international travel to return to some semblance of normal.

Michael Bruno:

And then just like with the programs, the different regions are expected to recover differently. John, can you give us some insight there?

John Schmidt:

Yeah. From the results of it, the survey and the index itself, we really see North America and Europe, their return to growth being what looks like a long haul. Asia has some upside and in a lot more volatility as we look forward.

And in 2021 is projected to be only 5% lower compared to 2019 pre pandemic levels, which is somewhat amazing when I think about what we've all been through. And I think it's a reflection of the recent economic results we're seeing coming out of Asia and a more "return to normal" versus what we're seeing in the West, seems to be a continued increase in COVID levels on a country to country basis. So far faster and stronger come back in Asia than we would have expected.

Michael Bruno:

So we're a good six months into this COVID 19 pandemic and reality is really starting to hit the supplier base from what I hear and I think what is said in the Accenture Inside Report and Accenture Survey. Your survey respondents offered some insights on expected price cuts, expectations for supplier deliveries, raw material costs. I mean, these are big metrics that are very important to the supply base. So Jeff and John, what have you heard so far?

Jeff Wheless:

So I think building on what John said on the narrow body and wide body segments, executives in the polls saw rebound in late 2021 for aero products and parts and components, both for production and aftermarket, with two thirds of them thinking that they're going to see an increase in unit sales. And they're also saying they're going to increase their capacity to deliver on that demand. So I think that's important. And so as folks set up their long-term planning, rehire, rebuild, we'll start to see that happen a little bit earlier. And the one thing that was really surprising and we validated this with some additional interviews as well was, well, it's certainly a supply chain scramble. A lot of that was focused very much right after the pandemic hit. And so in fact, 70% of our respondents said that their suppliers are meeting or exceeding delivery expectations. And that was actually pretty surprising to us.

Now, certainly, 30%, that says 30% aren't and so it takes all the parts to make a plane or a component, but I think that bodes well in terms of while there's been a lot of doom and gloom about the supply chain, that there's resiliency there and folks are making their way through the short-term situation. Now, in terms of looking out 18 months or so, expectations from the executives that they're going to see higher productivity, but that's going to come at a cost. So across the board for talent materials and subsystems, they see price increases coming in the 18 month time horizon.

Michael Bruno:

And really quick, before we get to some bigger issues, I want to touch on one area near and dear to our hearts here at Av Week, and that's MRO, that's another sector, maybe not as glitzy as the supplier side of things sometimes. But MRO has been taken a big hit here and there are new expectations. John, what are you hearing about that sector?

John Schmidt:

Well, MRO in the aftermarket and sustainment is a big sector for us as well. In fact, we treat them as a completely separate segment as we look at the market from an internal Accenture perspective. And aftermarket spends being negatively impacted really primarily two things. One, is just simply the lower aircraft utilization, we just have fewer aircraft flying than we had. And second, is really the deferral of having maintenance by the airlines, probably most cases to conserve cash. We expect global MRO spend in 2020 to be down in the range of 40 to 60% and that's very consistent with what I read from many sources. And according to the research we did, more than 80% of the executives expect MRO spend to remain flat or be lower over the next 12 months. On a different note, the pandemic is proving to be a catalyst for digital transformation for both the airlines and MRO organizations. And there's been a real focus on moving to paperless maintenance, doing virtual inspections, driving the adoption of digital records management and investing in predictive analytics platforms and ARVR solutions.

Now, some of this is in response to efficiencies and some of it's in response to just dealing with new COVID rules on social distancing and doing work in a safe way. And it's also interesting that there's a concern around talent, that concern used to be all about, do we just have enough of it? Now, our survey is showing us that airline

executives in the aftermarket are sighting count as one of the top five areas. And they're looking, this is our airlines, are looking to the OEMs and the MRO service providers to help the airlines increase their performance. And at the same time, on the OEM MRO side of the equation, they're looking at talent and the digital gap and the talent they're hiring as a challenge that they need to go in overcome, so they can leverage some of the improvements they're making in digitization in their businesses. So talent seems to still be a big priority in aftermarket, just a little different twist on how they're looking at things.

Michael Bruno:

So these are some pretty sobering survey results and forecasts, but I want to point out to our listeners that well, currently grim there remains an expectation of recovery in the forecasts and the survey responses as well. This all begs the question about what does it mean for industry now and the near future? How do we get to recovery? But before we turn to the conversation to those action items, first, let's hear a word from our sponsor.

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Michael Bruno:

All right, so let's be clear that industry is expected to recover. There are forecasts for return to pre pandemic growth. It might be three to five years off, but both Airbus and Boeing and many other observers say the base case for commercial aerospace remains positive in the long-term. That's great, but what do you do between now and then? What do industry leaders need to be thinking about the position now and prepare for the future and what should suppliers look to act on? Joyce, Accenture has insight here into what industry leaders are already thinking, what keeps them up at night right now?

Joyce Kline:

Our research shows that even with the downturn in production, there are challenges in managing the supply chain. While the supply chains ultimately meet OEM requirements, many of that due to the hero mentality that they have, as they adjust to reduce demand, many suppliers have been asked to take price cuts by the tier ones, somewhere in the range of five to 20%. What's interesting is from our survey, 29% of the executives expect their suppliers will not be able to meet expectations or deliver on time over the next six months. What's interesting is when you compare this data to 2019 and look at that same six month time horizon, at that time, 13% of the executives expected their suppliers would not be able to meet expectations and deliver on time. So even with significant decreases in production, due to COVID-19, there's approximately a 16% increase in suppliers being challenged to meet delivery commitments in 2020 than they were in 2019. And I find that really interesting as you look at all of the factors impacting the supply chains that we're involved in.

Michael Bruno:

Joyce, you're already working with Accenture clients on many of these questions. You've helpfully listed buckets of action items for triaging, regrouping and regrowing. What are you tell in industry about the now and the next?

Joyce Kline:

Within the insight report for supply chain and production, we've identified clear actions that can be taken across those three areas, Michael, in terms of triage and prioritize, reconfigure and scale and maintain. As OEMs and tier ones, look at their supply base, the assessment should evaluate suppliers capabilities in terms of operational, financial and delivery performance. So in terms of triage and prioritize, it's important for OEMs to assess the availability of critical components and parts that support their operations. When risks are identified, now's the time to seek alternative sources of supply while also working to improve the performance of the existing

suppliers. When we take a look at reconfigure, it's important to ensure that there's operational agility within production operations, so that when demand changes, there's flexibility and the ease to rebalance production lines. And this can translate into the use of SIOP processes and technologies as well as cross-training of resources to provide some of that agility.

When we consider scale and maintain, it's critical that business continuity plans factor and monitor COVID hotspots, as well as emerging outbreaks. At some point in the near future, we'll be past COVID-19 and these plans can then be converted into monitoring the next supply chain disruption.

Michael Bruno:

So appreciate getting those action items and things to look for. But John, I hate to point out the fact that A&D had plenty of problems before COVID-19 and they weren't necessarily all getting solved overnight. You and I have spoken many times about the relentless digitalization that is sweeping this industry, as it's sweeping other industries, for sure. But when we talked in the spring, you were one of the first people, perhaps the first person I actually, I remember to predict to me that digitalization was going to hit the afterburner as the industry wrestled with COVID-19. That's a dual edged sword though. I mean, re-skilling remains a huge challenge for industry.

John Schmidt:

Well, thank you, Michael. And looking at what's going on, I think it certainly has come to be true. And when it comes down to it, this is more than a change in technology and tools. And one of the biggest challenges has been required changing culture. In fact, we did some research in a point of view on the digital divide in the workforce, between people who have been in this workforce for a long time, maybe not as naturally digitally savvy or natively digitally savvy versus the new people coming in. And moving from an effectively a hands-on, highly collaborative environment, to a more distributed workforce that's digitally collected, but not necessarily physically co located, that remains a work in process for most companies. And it's going to be a continuing evolution of getting that to all come together and work so we can get the most of these digital tools.

Michael Bruno:

Joyce, you and I have talked a few times about trying to get insight into the supply chain. And we knew in the best of that OEMs and top tiers really didn't have as good of insight as they should have had or wanted to have for certain, but that's a problem that plagues the whole industry. The reason behind choke points might've changed now with supplier liquidity questions, but there are still choke points. So what do you see in regards to the need for better insight into the supplier base?

Joyce Kline:

Michael, I got to tell you, I love the term choke point, because it's such a great way to describe some of the challenges that are existing within tier supplier performance. On an earlier podcast, we discussed Accenture supplier resiliency solution. And over the last few months, we've been meeting with tier one and OEM clients to discuss how they're managing and monitoring the supply base. And what's been very interesting is to learn that a major pain point is gaining visibility into end tier performance. It's these suppliers, embedded deep in the supply chain, are the ones that are causing the choke points. And as you start to think about obtaining data from these sub tier suppliers, it's all about control, access to information and incentives around sharing that information. As an OEM, the question is how far can they reach into the supply chain to obtain delivery and quality information?

And what it really boils down to at the end of the day, it's about change management and contractual discussions, to build a more resilient supply chain, we're really at an inflection point, where obtaining supplier performance data is becoming more critical. Now really is the time to change. We feel it needs to be driven by the OEMs and tier ones, digging deep into their supply chains, requesting this information and really managing the change that these end tier suppliers start to provide more information and visibility. Because that's going to be critical to change behaviors and enable data access.

Michael Bruno:

Well, we're nearing the end of the podcast, but John, I've got one last question for you and I do want to make it a little bit more personal. I want to ask you about working with industry leaders right now and what is both the first downturn that many of them have seen, but also probably unfortunately the worst ever in commercial aerospace. So how do you help executives, the customers you work with strike a balance between necessary sobriety, but reasonable optimism?

John Schmidt:

Well, it's a good question. And I think every executive I've talked to has been saying the right things between dealing with the near term and cost and efficiency today, while also thinking about what the critical investments need to be today to be ready for when we do come out of this thing. Because as you said at the very beginning, we will and the long-term forecast is good for commercial aerospace. One of the things that I see as really critical, is using data and insights to help drive decisions. As an industry, we are absolutely data rich, data rich in our enterprises, data rich in the data coming off the products that we have out there and the aircraft and the engines. And for different executives, it's a little different. So for CFOs, it's really about managing cashflow and liquidity and the data they have at their disposal to do that, and more of a control tower fashion. For operations executives as Joyce discussed, now's the time to take supply chain data combined with artificial intelligence, understand delivery performance, identify the high performing suppliers, identify the true risks in manufacturing or assembly of supply disruptions.

And we're seeing clients use this time as a time to double down and improve on their internal master data, as this is so critical to getting the full leverage out of those data insights. So that's really the number one thing that I am recommending to the executives I interact with, in terms of helping them balance between, as you said, the sobriety of the situation with the optimism of what we need to be able to do to prepare for the future.

Michael Bruno:

Terrific. I appreciate that. That's a wrap for this edition of Check 6 with Accenture. Joyce, Jeff, John, thank you very much for joining me again today.

John Schmidt:

Thank you, Michael.

Joyce Kline:

Thanks Michael.

Jeff Wheless:

Thanks Michael.

Michael Bruno:

Be sure to check out the new Accenture Commercial Aerospace Insight Report at accenture.com/aero. And join us at Aviation Week again next week for another edition of Check 6, which is available for download on iTunes, Google Play, Spotify and Stitcher. Thanks for joining us and have a great rest of your day.

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