

OPENING VOICEOVER

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Joe Anselmo: Welcome to another Check 6 with Accenture podcast. I'm Joe Anselmo, Aviation Week's editor-in-chief.

A new surge in coronavirus cases is choking off a fragile recovery and US airline traffic. That's leaving airlines even less able to take delivery of new airplanes they have ordered. Aircraft makers face the daunting challenge of cutting back production, but not so drastically that they kill off their own suppliers.

John Schmidt, the lead in Accenture's global aerospace and defense practice, and Pat Weir, a leader in Accenture's North American aerospace and defense practice, have been spending a lot of time advising C-suite executives on how to ride out the storm. They join us today to share some of their insights on business resiliency now, and into 2021.

John, let's start with you. What is the state of aerospace and defense today, and what's your outlook for 2021 and has that changed at all in the recent past?

John Schmidt: Well, I think, recent past, if we go back into January/February, things have changed dramatically. If you say recent past in terms of how I'm feeling today versus how I was feeling back in June, not nearly as much. I think, if I sum it up, I think I look at the industry and it's almost a tale of two cities. If you remember that Dickens novel, where on the commercial side we have all kinds of things going on, the impact of airlines and the reduction in capacity, and reduced number of aircraft being taken and all that kind of stuff going on, dampening down the business.

And the other side, with defense. And defense largely continuing to perform well. There're some issues there, some blips in the supply chain, certainly related to things like COVID. But it really is a tale of two city. And we look at Boeing and Airbus both announcing production rates and rate cuts, and of course we have the existing 737 challenge facing industry as well. I think there's a different side of the coin when we start looking at what's happening on the defense side.

Joe Anselmo: And what is that different side of the coin? Much more positive, right?

John Schmidt: Well, it's much more positive and this morning RTX reported their results. And even just in RTX, you can see an example of the tale of two cities playing out right now. And I think, what I'd like to say is that looking at what we're hearing, and if we were going to go into Farnborough Airshow this year, which of course, unfortunately we did not. Every year Accenture steps back and looks at what we're seeing across the numerous research elements that we have, our tech vision, our commercial index and supply chain research. And we look at the work we're doing for clients. We look at what we're talking to our clients about in terms of where their priorities are. And we look at what's going on in the industry at large. And from that, we try to distill out what we think are really going to be the quote unquote stories to watch.

And if we were to do that this year, Joe, I think there's four things that I think would come out. And the four things that I hear consistently, and I think Pat would echo this as well when we talk to C-level executives across our clients, defense and commercial, and those four things are related to cash management, number one. Number two, supply chain and smart manufacturing. Number three, workforce and workforce impact. And number four is really around technology and systems and resiliency of those systems. And so thinking about

where we are today and COVID, and what companies need to be thinking about as they look forward to their calendar 21, those four things are really top of mind.

Joe Anselmo: Okay. Pat, what are your thoughts? Had we gone to Farnborough, what were you prepared to be talking about?

Pat Weir: I think the themes that John mentioned are spot on. One concept that intertwines through cash management, supply chain, workforce, and systems resiliency is really a need to continue that digital transformation. The level of change that aerospace and defense companies are dealing with today is really unprecedented. And I think it's changed the focus of trying to accelerate the agility of decision making.

Joe Anselmo: Workforce has been a fascinating topic. How has the debate on that changed in this? We had a lot of... A lot of the talk was about workforce shortages and now companies are laying off tens of thousands of people. Is that a short term blip, John? What are you telling companies to do to be prepared for the workforce of the future?

John Schmidt: Well, it's interesting, if you think back a couple of years, we were worried about the great tsunami and everybody retiring. Then we go back, even back to the January timeframe, worried about shortages, whether it's pilots or people in the maintenance shops. And now of course we see companies laying off and furloughing on the commercial side, but we also see companies on the defense side hiring, right?

So, I think Lockheed announced 5,000 new hires, Northrop announced 8,000 new hires, right? So, it's almost again that tale of two cities is what's happening. But I think that the three things that we're talking to clients a lot about now in this COVID world, where we have more people we're working remotely than we ever did before. And I'm sure, Pat, you have more you're going to want to add on to this. But it's really about the people experience, how each individual as a worker is being interacted with their company, and that comes down to how they work, who they work with and how they get their work done.

The second thing is around organization, leadership and culture. Culture, particularly I think in our industry, and maybe I'm biased because I'm in this industry, I love this industry, but you walk into the building and you see the sign, you see the flag, you walk through the hallways, almost any aerospace and defense office, or even in the factory assembly floor, and you see the product, you see pictures of the product, you see people, pictures of people using the products. That helps build culture. Now I see the four walls of my home office, or maybe it's my kitchen table or wherever I happen to be working remotely. That's a big topic these days of how you manage and lead and maintain culture.

And the third one is really about the work itself, and how the workforce works with the work and deals with things like remote connectivity, high performance computing environments. Can I get to those from home in a secure environment? Et cetera. Pat, you probably have other things you'd want to add to that topic.

Pat Weir: Yeah, one thing to add, John, is that as the customer demand has decreased and aerospace companies are facing that reduced customer demand, they're having to right size their workforce. And if you think about ways to improve the effectiveness and productivity of your workforce, we often talk about leveraging digital capabilities. And so it presents a challenge which is, today, what skills do you have? And then as you look forward on the digital journey, what digital skills or digital fluency do you need to be able to sustain this new way of working? I think that talent/skills gap is something that aerospace companies are addressing. And we often talk about up-skilling and reskilling the workforce to be able to tap into these digital capabilities and be more effective in the future.

Joe Anselmo: You guys mentioned smart manufacturing. Do you think the current crisis will accelerate the implementation of smarter manufacturing or will it slow it?

Pat Weir: Joe, I think it will accelerate the demand in smart manufacturing. I think it's... You have, again, the workforce challenges we just talked about where you have to make each worker more effective. And I think that combination of human plus machine is really critical in achieving that step change in productivity. And so I think you'll see an acceleration in the manufacturing technologies and the leverage of digital. I think that the thing that helps with that transition today is that we used to be talking about production rate. And today we're not talking about rate. So there's an opportunity for aerospace companies to get ready for the next resurgence or rate in the future by investing in smart manufacturing.

John Schmidt: One thing I'd add to that on when it comes to smart manufacturing, maybe on the supply chain side is, we're working with clients now, particularly the supply chain area to implement, and this is really an acceleration, but to implement artificial intelligence capabilities.

And one of the things I hear from my clients often is, I wish we were more digital now. I wish we had prepared for this environment sooner. I wish we were actually more in the cloud, believe it or not, depending on who I'm talking to, than we are today. And one of the things that these tools are giving us in the supply chain is the ability to provide better visibility. So, to understand really what's going on. Assess and prioritize where the actions need to be taken, especially proactive actions that can be taken with time to mitigate challenges, and then ultimately what the mitigating actions need to be.

And we're doing that by tapping into ERP data beyond just the typical buyer workbench, so that we can be looking at building material and where insertion locations are for something on the assembly floor, for instance. Tapping into supplier history and supplier data by part, by supplier. Tapping into external databases that have influence over what's happening with respect to logistics and other freight, as well as looking at, well, called "COVID related statistics", where there's been border changes, border closings, where there are localized lockdowns, because all that stuff can affect supply chain for defense companies, as well as commercial companies. And we're really finding that by bringing all that data together and leveraging an AI engine, so the internal company data, as well as some of those external sources, we're able to provide insights that really are critical these days with the supply chain being in the state it is.

Pat Weir: One thing to add there, John, is that many aerospace companies now have to really focus on the what if's, right? As the situation in the economy and the business conditions are changing rapidly, how do you account for the supply chain and planning for the health and the viability of your supply chain partners, right? So whereas before it was focused on rate and getting the right part at the right time. Now it's really looking more deeply into the supply chain to make sure that there's a forewarning or an ability to impact the supply chain performance that you're experiencing.

Joe Anselmo: Well, the health of the supply chain is obviously a huge concern in this industry. And I want to get into that some more with you guys, but first let's take a quick break and hear a little bit more about Accenture.

MIDROLL VOICEOVER

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).

Joe Anselmo: At Aviation Week, we recently sat down with David Calhoun, the CEO of Boeing. And we talked about COVID-19 and one of the silver linings he talked about, "silver linings" my word, not his, but was that this crisis and this ratcheting back of production by Airbus and Boeing has given some breathing room to the supply chain.

The supply chain was stretched so thin by this demand to increase production, that he felt it was broken and unhealthy and that this crisis is at least giving us a chance to make the supply chain healthier. Do you see evidence of that, Pat, that the supply chain is being fixed because of this?

Pat Weir: Hi Joe. Certainly the supply chain was being stretched by the production rates projected by both Airbus and Boeing. What's interesting to me is that 69% of A&D executives have yet to prioritize anticipating and reacting to supply chain events to protect the customer experience. And I think that's an opportunity now with this reset to refocus on the supply chain health and delivery performance.

Joe Anselmo: One of the topics we've been talking about a lot, until COVID, was the pressure on the supply chain by OEMs. They were squeezing the suppliers margins so they could increase their own margins. Now, the concern seems to be, will the suppliers... How do you keep the suppliers from going out of business? Does that mean the OEMs, John, are easing up a bit on their suppliers?

John Schmidt: Well, I'm not sure it's easing up a bit as much as we're just in a completely different situation today than we were before. We used to be in a supply constrained world, right? I mean, very simple. And you just mentioned and as, Pat, you just discussed. Now we're in a variable demand world with a volatile supply. And so those 70%, I think it was 69, but 69% of executives who haven't really focused on this yet, need to start.

But you bring up another element that we're hearing a lot and talking a lot about, and that's really around cash and liquidity, right? And it's not just cash and liquidity of the, let's say, the primes and tier ones, even tier twos themselves, as much as the cash and liquidity, particularly the liquidity, of the smaller suppliers.

So, there are suppliers down there farther in the supply base that have a mix between commercial and defense. And if that mix is in the wrong direction, then they could have some serious challenges. So you read about how Lockheed and Northrop and some of the defense companies they're accelerating payments into the supply chain, even the commercial companies are doing so as well, because having a balanced financial strategy is really important when it comes to cash. And that means for me, myself, if I'm the CFO or the CEO, credit lines, inventory, payments, receivables, how I manage that with respect to layoffs or furloughs and balancing all that with my ability to generate cash. But it's also looking past that into what's happening in my supply base.

Joe Anselmo: Is it inevitable that we're going to see more consolidation at the lower levels of that supply base? The mom-and-pop owned companies that can't afford to make it through this crisis on their own?

John Schmidt: I think our view is looking at the overall capacity we have in industry today and what we think is going to be the need for that capacity as we look forward, that there's inevitably some kind of reduction in that capacity. Whether that comes by virtue of companies exiting the aerospace business and going into other businesses or through consolidation, mergers, acquisitions, et cetera, it's yet to be seen. But there's no question there's going to be less capacity. In fact, just today we had the Raytheon Technologies earnings report, and Greg Hayes said, his view is, it's 2023 before we get up close to 2019 levels. And so if we think if he's right about that, then clearly in the next couple of years there's going to be a reduction in the need for the capacity that's been expanded to today.

Maybe as just a side, Joe, we did some analysis on the top 25 companies in aerospace and defense. And what we did is we looked at, the combination of, from their ability to generate cash and their ability to assume affordable debt using a basket of metrics for each. Then plot them on that two by two matrix. And what we found was, actually I think somewhat interesting, because I expected to see a different and more negative results, but half of those companies ended up in the area what would consider resilient, meaning they have the ability to be offensive in terms of where they make investments. And because they're in a good position for generating cash and/or being able to generate affordable debt.

Unfortunately, five of them really look like they're fairly exposed and really need to think about that balance I talked about in their own cash and liquidity, as well as that as the supply chain. And seven of them are in a threatened position as we sit here today. Now, this is earning seasons, so second quarter earnings are going to come through. We're going to rerun our own analysis and see what's happening here as the industry goes, but it just points how important it is to have, understand what you do from a liquidity perspective, have a liquidity

control tower, make sure that data and analytics capabilities you have are spot on and that you've attended to those basics so that you can start to make decisions, as well as be able to communicate with your stakeholders, whether it's the wall street or your own employees or your board or anybody else on what's going on with respect to your business.

Joe Anselmo: I think, John, you might've just buried your lead there, which is a large swath of this industry is very resilient. There's just really some positive news out there, as well as all the negative news we've been fed. So, one last... We're starting to run short on time, but one last topic you guys are paying very close attention to is sustainability in aviation. So tell us, has this crisis dragged out the implementation of more sustainability or has it accelerated it because older airplanes are being retired, newer models are going to replace them, and you have governments pushing for things like this hydrogen initiative in Europe?

John Schmidt: Well, Europe has been pushing for sustainability for quite some time. And then just recently, looking at what the US is thinking about with adopting some of the emission standards as well, I think it's going to be a key focus for the industry. In fact, if I had to project, what are we going to be talking about in Paris next year? And I'm going to say that I'm going to be very optimistic and say we will be in Paris next year. It's going to have a lot to do about sustainability and the technologies that companies are investing in right now.

And from an innovation standpoint, I look at things like the hybrid electric engines, right? And in some of the things that we've been doing around fuels. And they blend together in a nice cohesive way with what we want to do for the environment anyways, because a hybrid-electric is going to be less expensive to operate. And if it's less expensive to operate for an airline, right now coming out of this COVID situation, that's going to be very attractive, not just because it's more sustainable and it helps the environment, but because it's lower cost to operate and it can help them be able to get more capacity in the air to be able to start bringing their routes back faster.

Similarly, for some of the other technologies, and I've said this before, if you look back, there's been a number of innovations in this industry which has really helped us reduce emissions, even as air traffic has increased. And overall emissions have increased, but without some of those innovations, it would be even more than it is today. And so all that was done for that dual reason of what's right for the environment and what's right for the customers and the operators themselves. I think that's going to continue and be a bigger topic even next year.

Joe Anselmo: Do you buy this a talk of a carbon neutral hydrogen powered airliner by 2035, or is it perhaps a little bit ambitious?

John Schmidt: You know what? It's always tough to bet against technology improvements, Joe. I remember a couple of years ago on an interview with the Aviation Week, "blockchain" was the buzzword of the day. And it might've been Michael Bruno who point blanked me and says, "So when are we going to see blockchain for real implemented?" And I said, "I think that's going to happen within the next two to three years."

And after that interview, I will tell you, a lot of my internal Accenture colleagues were thinking, "Are you crazy?" I don't know what the rest of the folks who are listening to that podcast or reading that interview thought, but I'll tell you this, in six months after that interview, we had our first production system running with a defense client and some critical components coming from Asia, blockchain enabled, for immutable supply chain.

So, here's a buzzword that I thought, well, if in two or three years we'll be there. And in six months we already there. So, technology today, we are able to do some amazing things when we set our minds to it. So I'm not going to bet against 2035, but on the other hand, I'm not a betting man. So I'm not going to bet.

Joe Anselmo: Final question. And you set this up because I look forward to seeing you in Paris next year, but what is 2021 going to be like? Going to be a tough year for this industry?

John Schmidt: Wow, I should punt this one to Pat. I think 2021 is still going to be a challenging year. I think a lot of it really depends on what we're seeing now in terms of these vaccines and whether a vaccine is really going to be viable, and able to be produced in the numbers that are going to be needed. That's the number one known unknown, if you will, right now. A cure for the worst cases would be a secondary thing that might help us as well. But really I think it's tied to that vaccine.

And right now with these different waves and flare ups we're seeing in the US with even individual States being shut down, we're starting to see flare ups now in various countries in Europe, it just puts it in inhibition on travel. So, the business travel has to happen, will happen, but even then we know how reduce that is. But the leisure travel, right, which is a big part of things as well, is going to continue to have downward pressure until we're able to get past these waves. And I really think it's going to be one of those literally up and down, up and down things until we're able to see something like a vaccine come through.

Joe Anselmo: So let's give Pat the last word. Pat, what are your thoughts on that?

Pat Weir: Yeah, I think we're still going to be weathering the storm next year, but I see aerospace and defense is a very resilient business and it will recover. I do think that a vaccine will be critical to that. I think the opportunity that A&D companies have today is to invest in some of these digital capabilities to help them be more agile and more productive and effective in the future.

So, I think taking advantage of the current situation, to prepare for that return to growth, is going to be a focus over the next year or two for A&D.

Joe Anselmo: Okay. Well, John, Pat, thank you very much for an insightful discussion. We look forward to having you back for the next Check 6 with Accenture, but that's a wrap for this one. Thank you for joining us and have a great day.

John Schmidt: Thank you, Joe.

Pat Weir: Thank you, Joe.

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