



## AVIATION WEEK PODCAST SERIES WITH ACCENTURE

### Podcast: Help Wanted—Must Love Airplanes

*Senior Business Editor Michael Bruno talks with Accenture Global Aerospace and Defense Industry Lead, John Schmidt, and Communication, Media and Technology Managing Director, Jessica Kane, who offer a game plan.*

**Michael Bruno:** Hello, and welcome to Aviation Week's Check Six 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 John Schmidt, Managing Director and the global aerospace and defense lead at Accenture, and Jessica Kane, Managing Director for Communication, Media, and Technology.

The A&D sector has a people problem. Either there are not enough of them to fill the job openings, or they don't have the right skills, or maybe both. But after so many years of lip-service, concerns over workforce and talent recruitment seemingly have rocketed to the top of almost everyone's priority list. From the President to the CEO's. The White House recently released a five-year STEM agenda, and the Aerospace Industries Association is promising to make workforce a key 2019 focus. Both Aviation Week and Accenture have been tracking the issue for years. Including with new reports just recently. Jessica, you all have been looking at the workforce of the future. Can you boil down for us what are the three or so major concerns we are seeing developing in the A&D industry?

**Jessica Kane:** I like that you asked for three; these are the three areas that we look at: One is the reality of the changing and aging workforce. I know that this has been a topic you've heard of in the past, but it still remains to a challenge for the A&D sector very specifically. The second is the competition for talent really across the enterprise and against the non-A&D players. We look at this and we see still too few STEM graduates for the demand, according to the statistics that are out there. We also see diversity challenges that continue in the STEM space. Too few women are choosing this as a profession and going into these careers. Also, the A&D recruiters have to compete for talent among candidates who have skills highly attractive to Silicon Valley. And that's always going to be a challenge for your sector. The good news is 79% of young professionals would recommend A&D for that future employment. And 65% of University Engineers are considering A&D for future employment. So, there are people that are interested in coming into this space, but again, if you look at those statistics with A&D having a higher percentage that's about to retire, it's still not enough. Lastly, what we see is the emergence of technology requiring a different skillset. So it's no news to you that you see digitization happening across the A&D sector, and that commercialization of IT across those industries including A&D are going to pose challenges on the workforce. A&D specifically has challenges to continue to build those highly complex products that you see, maintain an enormous level of employment across many states and local governments, and still provide adequate returns to the shareholders that are driving more digitization of that workforce. So, they still have to adhere to this, even though they're putting capital investment in technology, they're going to have to invest in the workforce as well.

**Michael Bruno:** So the workforce aging, I have to tell you that many listeners may be thinking, we've heard this before. A decade ago having published more than a few commentaries about people warning about the mass exodus so called silver tsunami of baby boomers who are going to leave industry and take all their knowhow and talent with them, now of course the great recession seemed to have put the brakes on that. For better or for worse, but there was no mass exodus. But suddenly, everybody seems to be thinking that once again this could be a concern. Why? Why are we here talking about this again?

**John Schmidt:** Well I think you said it. When we were talking about this a decade ago, and we were looking at all the numbers, and who's going to be eligible for retirement we saw the tsunami coming, and we had the great recession, and that changed plans for a number of people who decided it might be advantageous to continue working for a period of time. Then we saw an upsurge in, in demand for workers in both the commercial and the defense sides of our business. Then, all of a sudden, being retired became a little harder because there was so much need. I think what we're seeing here is a little bit more interest than just a tsunami coming. It's really what I'll call the bifurcation of the normal distribution of the employees at most of these firms. Particularly when we start thinking about STEM professionals. You've got people who are ready for or eligible for retirement. Then there's small number of people in kind of the 40s who weren't hired back when things were not looking as positive potentially in this industry. And now there's an influx of young people coming in. So, we've got that double hump kind of phenomenon going on and I think a lot of companies are struggling with a couple things that Jessica said, but one of them is, where is the next level of leadership coming from? I mean the people you would pull from normally, the people who are in their 40s they'd be accelerating up, there's not as many of them as there would normally be.

**Michael Bruno:** Sort of lower-case middle management. The people that you would choose to be on the career track.

**John Schmidt:** Exactly. And then the second side of it is with digitization of the business and of the products, the skillsets and the need to be agile and able to work in new and different ways and continue to be comfortable with technology. It's going to take a little bit of a different type of worker who's going to be able to bring those kinds of skills. It's really becoming obvious that we're going to have to have that kind of flexible workforce. And the consumerization of IT helps. For example, I used UBER to get here, and that application has improved steadily since it first came out. Well, that's like for a lot of the things we do in our work life, especially internal to the company.

**Michael Bruno:** I do want to go back to one quick thing about the exodus. Do you feel, and I don't know if Accenture has covered this in the studies it's done itself, or just from your own anecdotal evidence, but do you feel like a very quick exodus of the baby boomers and maybe a little older may actually be happening, or is it that is a function of time and that age group is at the natural retirement and therefore going forward we will see them leave? Whether it's a trickle or, or a flood?

**John Schmidt:** I think we're seeing it being more of a natural progression. Instead of the tsunami that we predicted. And again, I think part of it is that there is so much demand. So much growth. So many things going on in the industry today, coupled with the fact that we have that middle ground, where their companies are trying to find who's going to replace that person, who's going to retire. And this is on the shop floor and the back office. This is the industry at large.

**Jessica Kane:** Adding to that, there's the other challenges. The longer those that are at or beyond retirement age are staying in those roles, that next layer down, get very impatient. And when you look at the millennials that are coming in right? We talked about the STEM programs that they're hiring from, they're even more so impatient. And so what happens is if you don't start to see that natural progression of careers, they'll leave, because they can go elsewhere and use those same skillsets. That's going to be a real challenge to make sure that you're looking for both succession planning and career progression as part of that workforce challenge.

**Michael Bruno:** You know that actually touches on a couple of things regarding talent that I wanted to unpack. When it comes to the source of talent, the A&D in industry has a long history of picking up from government retirees of course, and in the pilots and the commercial airline industry will, almost always came from the Air Force both in the U.S. and abroad. Or you just had civilian retirees from the government helping to go work at the government contractors. And there was always a bit of hiring from colleges directly at the graduate level. But in the last couple of years, or maybe, since the recession, the hiring from colleges had kind of petered out, and there really wasn't that much. And there's mostly been hiring that's been poaching from between the companies. That seemed to be working for a while according to the anecdotal evidence I heard, but I'm hearing now that that's just not enough, and that companies are actually getting a little concerned about where they're pulling talent from.

**Jessica Kane:** That's exactly right and as discussed earlier, compared to other industries, A&D has a real challenge because they are double the number of baby boomers that are still working. So, when you think about that in context, they're there, but it's only a matter of time when they're going to retire, so it's less of a gradual, and at some point there's going to be a cliff. And that's going to be a challenge for everyone to resolve. It just creates a compounded risk for A&D.

**John Schmidt:** I think that's why we're seeing so many of our clients investing in equipment and HR transformation, really looking at their whole human capital or talent model, and the processes behind that model, and then to a large extent what kind of technologies they can implement to help them. Primarily thinking about talent acquisition. So how do I acquire it, and if I identify you know attract, acquire, on-board talent. And then how do I develop that talent once I have it. Engaging and making sure that they maintain the agility that they're going to need, especially in the world as it's developing. And then of course succession planning on how we make sure that those individuals feel like they have a path.

**Michael Bruno:** And now we're seeing companies actually spend money on forming those processes which of course tells you, it's a real priority.

**John Schmidt:** It definitely tells you it's a real priority. It's a C level agenda item, right now in having the right talent, in the right places and enough of the right talent. And again, it's on both sides. It's the STEM talent, and the engineers, and the professional staff. It's everybody who's manufacturing, assembling product and the aftermarket. You hear it coming from almost every CEO.

**Michael Bruno:** I want to get a little more philosophical in a moment because your report tries to look ahead and help frame what is happening for business leaders. But first, let's hear a quick word about Accenture.

*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:** If we can agree there's likely reason to focus on this issue, companies are going to want to know what to do. How do companies start really addressing their workforce concerns? What should they actually be doing that maybe they weren't doing before?

**Jessica Kane:** Firstly, you have to know what future skills are required in the business. And it's not just looking at your workforce today and saying what are those skillsets that are required, but it's looking at those future roles and being very predictive and using technology to help you with those predictions around what are the skills that are going to be required. So that's, that's first and foremost, looking there. The second thing that they should be doing if they're not already, is doing an inventory of their current workforce skills. So, to John's point of having the right people in the right roles, you also have to have the right people in the right roles with the right skillset. So what are those skills that you have today, and are they transferrable? Can you pivot them to new skills that you need? And then how do you fix or align your future workforce needs, mixing the humans and technology right that comes up with every conversation we have? It's not humans or technology, which is I think sometimes what people get hung up with, it's humans and technology. And so, it's that cohesion and that ability to work together, and make sure that you've identified what are humans going to be best suited with and doing, versus what are machines going to be best suited with doing. And then couple that with the cultural implications of being comfortable working alongside a machine and trusting that data. That's something that organizations across the spectrum are still getting comfortable with.

**John Schmidt:** I think that's a big thing. We've talked about this before on one of our [previous podcasts](#), talking about artificial intelligence in this industry, and when we look at workforce this is one area where an element of AI, specifically robotic process automation, is really coming in as a co-bot for the industry. I think from an Accenture perspective, we see AI working next to people far more than we ever see them as replacements for the people themselves. There are going to be cases where we can use robotic process automation, such as rule based transactional kinds of task, that the drudgery type tasks - let a bot do that. Let AI take care of that stuff. So, we can start raising people into doing the stuff that they enjoy. We want to do the things that are using our brains, more interesting and creative. Those are the processes that will be very hard for an AI to take over. And as you know we do research all the time and 83% of the executives that we researched expect AI to be working next to humans in the next three years. It's like a different question. 80% of that same group of executives believe AI will be driving critical automated decision making an unprecedented scale for the same time. So there's, there's going to be a lot of interaction here and it's firstly going to be something we have to look at to deal with these workforce issues. Those STEM shortfalls aren't going to go away.

**Michael Bruno:** So definitely some best practices, but I'd really like to get you all to talk about what the trendsetters are doing. What are the companies that you think are either out ahead of everyone else, or at least are sounding like they have got a pretty good handle on what they need or what is a best practice in their industry? What are they doing? What distinguishes people who are getting ahead of it from everyone else?

Jessica Kane: It's a good question and I wish I could say I see all of the trendsetting happening in A&D. That isn't always the case. But you can learn a lot from looking across industries to say well what are others doing in that space? We start to see the experience of work continually improving. That's a really key part of it. When you think about the technologies like AI, and machine learning and what they've done for your lives personally, how they connect us and how they allow us to connect with others. How we find our way around a city. All those things are driven through machines and they give us a better more human experience when you use them.

That's not going to be any different in the workplace. You see those types of consumerization of IT coming into the workplace. We have to give people better tools to do their job. Tools that they want to use. Tools that are helpful for them to use. That's one area that we see. Another is, looking at using technology that's going to help you be smarter in your goal, so using RPA, using AI, using platforms that are more intelligent, around this business solution. It helps both give humans the highest value you can have around the work that you're best suited to do, and it takes that automation and the analytics, and it puts it back into the business challenge. To say okay, are we actually moving the needle in the way we should.

Another area that we start to see is when we use AI and machine learning these, these are really great technologies, to help analyze your organization as well.

And so we mentioned you know knowing what your skillsets are. Knowing where your workers are. Knowing what's coming around the corner. Looking at that almost like an X-ray to see, do I have the right skillset in the structure in place to actually make the best use of the talent I do have. And that also helps me figure out where I need to go find the talent in the marketplace. Where are the gaps that I need to go solve for?

**Michael Bruno:** I think John actually you and I have talked before about how Accenture is using some of this technology to redeploy some of your own folks.

**John Schmidt:** We actually are in fact, when it comes to doing just things like robotic process automation we have a large business process outsourcing part of our business, where on behalf of our clients we will do finance and accounting transactions, HR transactions, instead of continuing to hire, hire, hire. We've actually employed RPA starting in 2013 such that we've replaced in effect, 40,000 people with bots. And what that's done for us is allowed us to take people we had and upgrade them into higher levels as a process. And of course, if we're both having to go and hire 40,000, that we'd have to go find, which is a big number to go find. Even for a consulting firm like Accenture, that's a great talent engine. That takes us back to to one Jessica's examples; use a trendsetter as one of the leaders; you know social media is out there right? We can talk about you know the effectiveness or how we use different things like Twitter or Facebook or you SnapChat, and all these other medium. The fact is that companies are using these platforms. They're using Twitter, they're using YouTube, they're using LinkedIn, they're using these different social medial platforms. What we've found is that across the board at least initially, is that some companies are missing a huge opportunity. Some of these companies have great followership. You know YouTube channels and great followership. But they're not thinking through how to use them strategically to attract talent. Particularly how to get messaging across their own employee base. Many of them follow their own employer. It's a natural thing to go do. And so, the trendsetters are starting to think about that and think about how to use that social channel. A little bit differently than just I'm going to send a Tweet out there every once in a while when something happens and hopefully somebody picks it up.

**Michael Bruno:** You're absolutely right though, it just occurred to me that on LinkedIn for example, around Face Book, a lot of reposts or, or re links are from employees within the company putting forward you know forwarding some video that they saw that their own company put out.

**John Schmidt:** The millennials these days spend a lot of their time streaming. Whether it's on Netflix or Amazon Prime, or YouTube. We've done the, the social listing. We've found a lot of strong followership. The trendsetters are recognizing that and they're using that to their advantage.

**Michael Bruno:** I have to say because we talk about artificial intelligence and robots, and co-bots, and working together with technology. The robots are going to take over everything. They're going to wipe away all the jobs and we're going to be replaced by you know silicon ased overlords. You know this fear. We've talked about for a good long time. Where are we in accepting or, or dealing, managing that?

**John Schmidt:** Michael you are always so dark on the side of the bots! I think that this is a natural evolution, technology. And so when I talk to my family about this stuff and my kids will ask me about you know robots and AI. What's my job going to be? I ask them, do you think Siri's going to take over doing what you do? Is Google going to start running things for you? I mean, we love these tools today. These are digital agents. And those digital agents are starting to be deployed in the workplace as well. And it's natural that they should be, and they'll be received naturally. Will they replace the human that needs to be there to, to direct what's going to go on? I don't believe it's so. We do our research on this, it's Accenture's position as a firm. It's my position, personally, that I don't believe it's going to happen. What will happen is the stuff that's drudgery, the stuff that we prefer not to be doing anyway - that will go away. The stuff that where we just want for convenience, for example, saying "Hey Google, add this to my to do list" or "Hey Google, you know what's the temperature outside?" Or "Siri, text Michael Bruno I'm going to be late for the podcast". That's the kind of stuff that's really going to start being taken over by AI. And then it will keep calculate for us, more complex stuff, like "Hey AI digital assistant, you know what's going to happen here under this complex set of engineering circumstances?" And then digital assistant will go off and run the complex modeling software and come back with answer. Instead of me pressing all those buttons myself. I can see that happening and relatively soon.

**Michael Bruno:** So bold predictions. I'd like to ask you all at the end of the podcast to think of the future and think about, with this issue we're talking about workforce and recruitment and talent needs, what do you think is going to happen in the near future that maybe not everybody is really thinking it or appreciating?

**Jessica Kane:** I believe that workforce agility will become the most critical concept in managing our people. The only constant is change and now more than ever it's more accurate to say that, that the only constant is an ever-accelerating pace of change, because it's moving so quickly. That when you think about how we're keeping up, people have to be agile. They have to be flexible. And really I think the only way that the A&D companies are going to be able to survive in modern economy is to excel at adapting to those changing markets. The changing technologies, and the business landscapes that are coming across. This requires really tapping into people's innate ability for learning and growth and innovation. It's not just about the machines, but it's about how will these organizations absorb that technology and help that change along.

**Michael Bruno:** John? Bold prediction?

**John Schmidt:** I'm going to go a little bit on the other side of the that. I'm going to say that we've already seen how augmented reality mixed with virtual reality is invading different elements and components of what we do in aerospace and defense. We've already seen analytics and how analytics can come to the fore. We're seeing early adoption in some places of AI and robotic process automation. We're seeing mobility in assuming mobility in most of what we do. I think within the next 12 to 24 months, you're going to see digital assistants coming into the workplace both in the front office as well as on the shop floor.

**Michael Bruno:** Excellent. Well we have a couple of bold predictions there. We'll be watching for them. We've come to the end of our time. John Schmidt, Jessica Kane, I want to thank you for joining me, and offering your insight. Thank you do the listeners for joining us, for Check Six with Accenture. Please check out the rest of our Check Six podcasts on [Aviation Week.com](https://www.aviationweek.com).

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