



**Professor Anna Smallwood  
and Dr Thomas Budd**

**Professor Anna Smallwood** and **Dr Thomas Budd** work in the Centre for Air Transport Management at Cranfield University. In this podcast, they discuss the important role young people will play in the future of the aviation industry.

**Break the podcast down:**

**00:57: Anna and Tom, can you give a quick introduction to our listeners to give them an idea of the kind of work you're involved in at Cranfield University.**

**Anna:** We both work at Cranfield University, which is a postgraduate university. It's actually comprised of four different schools. Air Transport Management is the area that Tom and I work in, which is in the School of Aerospace Transport and Management. Tom, perhaps you could say a bit more about the Air Transport Management Centre.

**Tom:** As Anna said, we both work in the Centre for Air Transport Management at Cranfield, based in the Transport Systems theme of the School of Aerospace Transport and Manufacturing. As a centre, we sit between the technical side of aerospace and aerospace engineering, and the management side of things. We are hopefully helping prepare future planners and managers in air transport.

**01:53: Tom, I want to ask you about your role specifically. Am I right in saying you are involved in research on how airlines adapt to climate change?**

**Tom:** That's one of the areas of my role. I have a research profile that looks at the environmental impacts and sustainability-related aspects of air transport, which includes both the impacts aviation is having on the environment and, conversely, how the environment is impacting air transport and what the sector needs to be doing to adapt to a changing climate.

**02:28: What opportunities does this present for students who are looking for careers in aviation? There's obviously a lot of work to be done there.**


**Tom:** The environment, and sustainability in particular, is one area that certainly in the last five years or so has really grown in importance, and that's reflected in the types, quantity and variety of roles. It's not the

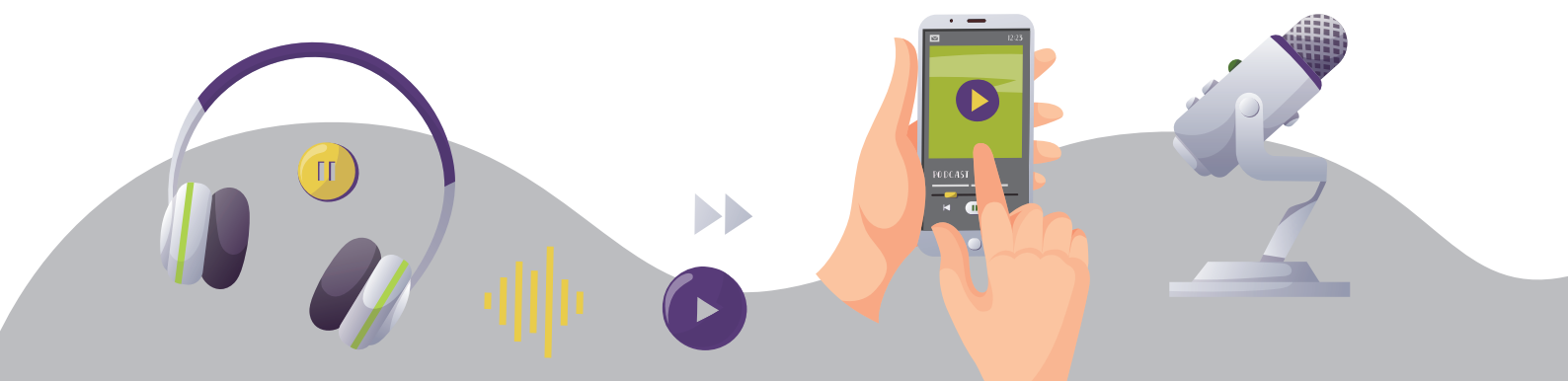
case that you necessarily have to be an aviation enthusiast who's always been a plane-spotter since day one to go and work in aviation. If you have a skill set and interest in environmental sustainability, climate change and climate change adaptation, those skills are very much in demand by the sector. I think it presents an opportunity for people going into the industry who may not have what would be considered a 'traditional' air transport skill set, to then go and make their way, make a difference and contribute to the sector.

**03:23: Because people who have that inclination toward environmentalism, aviation wouldn't be the obvious choice. But I guess it's an area where a lot needs to be done so there is a lot of opportunity.**

**Tom:** I have quite a strong opinion on this, that while it might be an easy assumption to think that if you are environmentally conscious and someone who considers themselves to be environmentally aware, why would you go and work in aviation? My response to that is, you need to be part of the solution. We recognise that it is a major challenge. So why not take on that challenge and make a big, big difference? Some sectors may be easier to decarbonise perhaps, or in shorter timeframes, but decarbonising air transport is one of the major challenges that we face. So I would say to someone thinking about starting a career in air transport, why not be the difference and contribute to a really big challenge rather than taking an easier option?

**04:25: So Anna, talking about unconventional choices for a career, in the brochure you said that you studied English literature at university. How did you end up in the aviation industry?**

**Anna:** I ended up in aviation because I wanted to go and travel. I figured that joining an airline as cabin crew would be a really good way to satisfy that curiosity. But I had intended only to do it for a year or two then move on. But when I joined the industry, I absolutely fell in love with 



it. The people that I met, the experiences I had... I often say to people I learnt as much in three years' of operating as cabin crew with all the different types of people that you meet and situations you deal with, as I learnt in three years as an undergraduate at university, it was just a different type of education.

**05:22: Amazing. University is often the default choice, but it shows that there are other routes that can get you to where you want to go. But would you say your time studying for your undergraduate degree, are there any skills you picked up from that or any experiences you had during that time?**

**Anna:** I think so. There are always takeaways from whatever it is that you study and that you practice. Personally, given the course that I did – and it's probably true for lots of education – it was being able to assimilate lots of different pieces of information, lots of different opinions and perspectives and be able to take that and distill that down into either an argument for an essay perhaps, or into a proposal. I think there are principles and approaches you can take regardless of the content of what you're studying that you can absolutely take forward into your working life.

**06:25: Anna, do you have any advice for young women who are considering a career in aviation who maybe don't see it as something for them, and see it as, traditionally, a more male-dominated field?**

**Anna:** It's a really good point. There are a lot of explicit efforts across the industry to address gender equality and all sorts of different diversity issues. But it's also true to say that there is, particularly amongst pilots and engineers, a predominance of the male gender. It is changing, it's changing slowly. My personal experience is I have been fortunate that I have always been absolutely supported by great female leaders who have been role models and have given me the belief that it doesn't matter. If you work hard and deliver on your responsibilities, if you bring commitment and passion, it will be recognised and you'll have the opportunities. And I've also been well-supported, some of the mentors and supporters that have helped me in my career have been male. They've supported me, recognising that it's really about the work I can deliver, the approach I can bring.

I would just say to anybody, believe in yourself. Do the work, follow your passion, be committed and I think the opportunities are there now. It obviously takes a while but certainly there is recognition by the industry that we need everybody's skills, we need everybody's input and the label that you might fit under is not what determines whether you succeed or not.

**08:24: It's nice to see the industry making that active effort and recognising that there's stuff that needs to be done. Tom, do you have any advice for students in general about when you're considering what**

**career to take, considering your next steps after high school?**

**Tom:** I remember thinking when I was in that position myself and it seemed at the time a really important decision. It is an important decision. But my advice would be whether you do physical geography in my case, or English literature in Anna's case, or other topics, even if you choose a different route to going to university, ultimately, while there are specific skill sets you will develop from those courses. There's a great deal of transferability in terms of your numerical skills. But also important things like your communication, your ability to work in a team, working to tight deadlines. Those soft skills are in some cases as important, if not more so, than some of the technical aspects that you might pick up during your university course.

So I would advise students not to agonise too much whether they're picking the exact right part of engineering or whether it's physical or human geography that they go for or whatever that decision might be because ultimately, that education is broader than the specific theoretical content that they might cover in their university or college course. I guess that would be my first piece of advice.

I guess this is generally a good piece of advice but you get out what you put in, in the sense that if this is something that you're motivated towards and work hard for it, that generally leads to good things. Engage properly, be interested, want to learn more, make connections, and reach out to people. Generally speaking, people who work in aviation are enthused by younger people who want to work in the industry because we've been in the same position ourselves. So by and large, people respond very positively to younger people reaching out and asking questions about their role and asking for advice. If someone asks me about my job, I'm very happy to talk about it, at length!

**10:46: Anna, do you have anything more to add?**

**Anna:** I think the only thing to add is that the industry needs young people. The industry has to change and adapt. We live in a really fast-changing world where advances in technology, opportunities, artificial intelligence of course is something that everyone's talking about at the moment and trying to understand how we get the benefits of that and avoid the risks, as well as developing solutions to some of the environmental and sustainability challenges we talked about earlier. It's a fast-moving world and aviation as an industry has to keep up with that and has to evolve and change.

As we said earlier, there are so many different elements in the industry, so many different roles and so many different opportunities. I'm sure that anyone can find something within the big complex organism that is aviation that would be of interest to them.

