

Transcript

Title: Swinburne International Webinar Series: Aviation and Piloting

Presenters: Venus Liao and Dr. Matt Ebbatson

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Venus Liao

Hello. Good afternoon, everyone. My name is Venus Liao. I'm the regional recruitment manager at Swinburne University. I'm responsible for Australia onshore and New Zealand region.

On your right hand side today is our panellists for today's webinar, including Dr. Matt, aviation postgraduate course director, and Mahdi Shariatian, international recruitment manager from the Faculty of Science, Engineering, and Technology.

Thank you for joining us today for virtual training on Swinburne Aviation and Piloting. This is part of the onshore webinar series I'm running for the month of May to July. Today, we'll be hearing about how aviation and piloting have been impacted by COVID-19, how are we as a university preparing our students to deal with this situation and future scenarios. We will also be talking about projection of emerging jobs in this field.

During the presentation, if you have any questions, please leave your question in the Q&A box down below. At the end of the webinar, we will leave 5 to 10 minutes to go through your questions together.

I would like to introduce today's speaker, Dr. Matt Ebbatson, aviation postgraduate course director at Swinburne University. Thank you, Matt.

Matt Ebbatson

Hi, Venus. Thank you very much for that. And hello, everybody. I can't see you, but I'm sure it's nice to see you virtually, anyway. So Venus, are you OK if I start?

Venus Liao

Yes, please. Go ahead.

Matt Ebbatson

Excellent. OK, so I'll be relatively brief with this, but the presentation is an overview of the course offerings of aviation at Swinburne University, and also as Venus was saying, how we are dealing with the COVID-19 situation.

So I want to give you a bit of background. There is a bit of a different course, as well, at the university, so I'll give you a bit of a background on what the courses are, the two courses that we deliver, and the structure of them and how they are impacted and what we're doing.

So I have been with the department for seven years now. Prior to that, I was in the UK. But the course itself, or the department itself has existed for 27 years, and we have been delivering pilot training for about 25 of those years.

So we have-- the department's relatively small. It's six full-time members of teaching staff, but we have a very large student load, and we're one of the biggest providers of new pilots from Australia, but also, we supply pilots globally.

The two degree programs that we offer, or the two core degree programs that we offer are the Bachelor of Aviation and Piloting for international students, and the Bachelor of Aviation Management for international students. We have a slightly different variation of the Bachelor of Aviation and Piloting for onshore students, but actually, the delivery and the syllabus is exactly the same for onshore and offshore.

I want to talk principally about the Bachelor of Aviation and Piloting. That's the degree program where the students spend three years with us. And whilst they're at the university, they are also doing vocational training to fly an aeroplane, and that starts from week 1. So they spend half of their time with us on campus and half of their time, roughly, at an airfield around about 15 kilometres down the road called Moorabbin, with our training partner, CAE.

It used to be called CA Oxford, but they've just recently rebranded to CAE, who are one of the largest training providers in the world. They're actually an offshoot of the Canadian aviation training company CAE Global, who are the biggest training and aviation training enterprises in the world. And we've worked with them or the predecessors to them for the past 20 years, so we have a very good relationship with them. We're the only Australian university flight training program provided to be working with CAE.

I'll talk a little bit, as well, about the Bachelor of Aviation Management, because that shares a common core. Essentially, the Bachelor of Aviation Management is a course for the people that want to go and work in the industry, not necessarily fly, but work in the supporting roles. And there's some exciting positions in network operations control centres and at airports that work alongside, supporting the flying operations. So I'll go through both of those courses.

I think first of all, I just want to spend some time talking about the aviation industry as a whole and the situation we're in at the moment, and just explain what that means to aviation.

There is certainly no doubt that the current COVID-19 situation has a serious impact on the aviation industry as a whole. But it's quite strange, in that there are certain sections of the aviation industry which have almost shut down, and certain sections of the aviation industry in the broader sense which are booming, and to speak particularly about the logistics industry and the air freight industry.

But we've been actively managing the welfare of our students by hosting a series of webinars with them over this time, just to assure them of the long term state of the aviation industry. Most of us, in fact, all of us in the department at the moment have worked in the aviation industry for prolonged periods of time. And it's fairly safe to say that the aviation industry goes through these cyclical shocks, where we call a shock a fairly-- because it's a global industry, it suffers from being exposed to global events, like the Gulf War and the domestic terrorist events and 9/11 in the States, and the global financial crisis in 2008. And that's actually when I was in employment in the airline industry, and so I felt that very closely.

But the message that we always give the students is that the aviation industry as a whole is a growth industry and always has been. And in fact, recent over its profile has been growing exponentially. So the graph that I just put up there on the screen, so I hope you can see, it just shows the number of passenger movements that the industry has carried. So it's a central metric that we use for the industry, how many how many passengers are we moving around the world in the air transport industry.

And the general trend, as you can see there, is increasing, but it has been increasing rapidly, especially so in the last in the last 15 years. And that's mostly driven by the emergence of a more affluent middle class offshore to Australia, in places like China and India, and lots of low cost airlines springing up requiring pilots.

Up until around about six weeks ago, I tried to to write a piece for an article in the press, stating that we had a huge pilot shortage. And that was becoming a real problem globally, that we couldn't source enough pilots. We had to train more pilots.

That was because this demand was so high. If you look at the graph there, you can see the yellow section split down in two. Every time we hit a billion passengers transported, those yellow sections are becoming closer and closer and closer to each other. So it doesn't-- that shows the pace of growth. We were struggling to supply the market with enough pilots to fly that.

Now at the moment, this period of shock, we go through two, maybe one, two, maybe three years of declined growth, or sometimes what we might call a levelling period. But the industry always seems to return. And that's because the drivers are still there.

The drivers behind that are a demand for global travel, which is increasing. We see these small downturns, but we do see a continuous growth in the long term. So whilst we're talking to our students at the moment, I think the most concern rests with the students which are about to finish this year, going into a market where they're going to find it a little bit harder to find jobs initially. And to that end, we've been talking to them about maybe taking the opportunity to go post-graduate education for a year or so and hold off their introduction to the market for a year.

But for the students that are just starting with us, I think it's actually, without ignoring the situation, I think is actually a reasonably positive situation for them. Because in three years time, by the time they enter the market, given past performance we can be guaranteed that we'll be back in the growth period. And that demand for pilot positions, which we were suffering to fill before, will be back with us.

The state of-- the arrangement of the players will definitely change. We've seen the Australian market change considerably in terms of the airlines and where they're going to be. But that's just the nature of competition. And I imagine we are also seeing a lot of retirements of older fleets, which means the retirement of older pilots as well, a generation of pilots which are approaching retirement age and have taken the opportunity to exit the industry.

And so already airlines are wondering, OK, we need to future proof ourselves. How are we going to deal with that? So at all levels, I think we're fairly confident that in other times, students at the moment that we're recruiting and we're training into the industry, it's going to be buoyant for them again. And I can certainly take any questions on that at the end of this presentation.

What I will do is just carry on and just talk about the programs that we offer, because I think it needs to be clear that what we're offering is something quite special. There's a lot of flight training programs in academia that are available across the world. But only a few programs do that in a way that really produces what we call professional pilots. And I think we would say we are one of the leaders. I think we produce, globally, one of the best products in terms of professional pilot training. And we're one of the ones that do it properly.

So our students go through the three years of degree program training, they're going through three years of flight training. They'll go through all of the steps of flight training. So they'll initially gain their private pilot's license within the first-- sometimes-- six months of training. They will then go on to train to fly a multi-engine airplane. And then, go and get their commercial pilot's license. So they will be trained to fly multi-engine commercial airplanes, which means any airplane for the purpose of flying revenue passengers-- that doesn't mean jets-- that means starting to earn the money for flying.

From there, a lot of courses end. A lot of courses would give that as a bare minimum to the pilots. And really, that's the starting point of the industry. Students need more than that to be able to get on the ladder, which is still career. So we take them further. We give them, on top of that, multi-engine instrument rating as well, which is a significant period of training for them, as well as getting their what we call Air Transport Pilot's License Examinations and Theory underneath them, which is again a lot of book training as well.

And at the end of that, we also give them a flight instructor rating. So that allows them then to start teaching back basic flight training to what we call ab initio pilots. And really, it's a ticket to their first job in the industry if they want to become a flight instructor. And indeed, up until very recently, flight instructor was one of the pilot positions that we were losing in this country and globally. We didn't have enough people to train new pilots.

And if you're a new pilot with very few hours under your belt, getting a job can be a challenge. And so we want to make our students competitive. And having a flight instructor rating is one of the best tickets to get the first paid job, to start building hours towards that first job in the airlines. And indeed, because most of our students-- well all of students-- are trained through CAE, they're seen by CAE for three years. And a lot of them get employment with CAE as a flying instructor. So they go into their first job straight away.

It's not impossible that some of our students will also go straight to airlines. It's rare that they'll go straight to a jet. It's rare that any new pilot will go straight to a jet. Some of them do, though. Some of them are of the caliber that they'll do that. And we work with Qantas. Qantas to look at our pilots across the three as a training through something called the Future Pilot Program. And they will offer conditional places of employment to two students in the second year of their training, providing they meet the standards that Qantas laid down by the end of their training.

And that's a real incentive for our students. Qantas don't look to all pilots anywhere in the country. They only look to certain, selected providers. And we're one of their trusted providers for that. Yeah, so it's a very well-tuned process.

If you want to be a professional pilot, not just fly for a hobby, and you want to spend a considerable amount of money training to be a pilot, then we believe it's the best route to do so. Airline-- well a reasonable question to ask is why? A potential student might ask is why train to fly through university when I could just go and spend that money directly with a flight training provider? And we answer that question relatively easily. The reason this course exists was that 22 years ago, we felt that being a pilot-- and we talked with airlines and they agree-- that being a pilot is more than just knowing how to fly an airplane. It's understanding the business as well.

Big airlines don't just want basic level pilots that can manipulate an airplane. They want somebody that understands when they're making decisions about whether to take an extra terminal two of fuel or whether to divert to an airport because the weather's bad, they understand the economic reasons behind that. Because at the end of the day, the pilot is in the position to determine whether the airline makes or doesn't make money. Flying the airplane is the basic part of the job. Then, flying the airplane in a way that makes the airline money is the job of a professional pilot. And that is the bit that we teach. That's the bit that we add to the training that in the world prior to a university degree, they had to sort of learn through osmosis over 10 to 15 years of employment.

And they may progress in that career, they may not. We're very proud that our students progress very rapidly, not just going in as first officers, but they progress to captains and training captains very quickly. And they're well thought of and regarded within the industry. It is a fully integrated syllabus, meaning that we take care of every step of training. We have a liaison officer at the university.

Many years ago, we learned that especially in times like now, if a student's training becomes derailed, but they need to do some extra training because they're not quite getting one of the lessons, or they depart from the main syllabus, that needs managing. It's an incredibly complex training process. You have to deal with the regulators in terms of the aviation regulators, in terms of the way the training is delivered. And the student can find that hard to navigate.

And 20 years ago, we found that we had students suffering because of that because they fell behind in their studies. And we learned that required dedicated staff to liaise between the university and the flight training organization to coordinate everything and make sure it was on schedule and those students had a very streamlined, easy progression through their training. And to keep the pressure on them, the motivation too. It's a hard course as well, but it's very rewarding.

So we have dedicated staff to do that. And now I can proudly say we've got a very streamlined training program that works well for the students and for us. Students learn to fly from week one. Competitor courses at other major universities, the few that there are, often they do all of the basic ground training up front and the students don't get near an airplane until the second year, or at least six months into the training program. And we don't believe that's right. If you want to fly an airplane, you need to be exposed to it constantly. You need to be training to be in the airplane and understand the environment straight away.

So we're very adamant that our students-- all of them fly within week one. At the push, week two if the weather's not so good in week one. But all of them fly within the first two weeks of the course. We focus on professionalism. We're not training pilots to go fly recreationally. We say wear a professional outfit. All of our students wear uniforms all of the time.

Whenever they're anywhere near the airplane, they wear a uniform. Whenever they're at their flight school, they have to wear a uniform. So they feel like they're as part of a professional airline from day one. We use airline standard operating procedures and ways of conducting business. So by the time that they do arrive at the airlines-- whether they be small commuter air taxi airlines or even big airlines like Jetstar, Qantas, Indigo, or any of the carriers abroad-- they know how that works.

And when they go to interview, they present themselves as professional pilots. And the airlines are confident in their abilities. We also have a strong history of industry connection and strong internal connections to the industry. So we work behind the scenes all the time to promote our students and the quality of the courses to the various airlines. Whilst the students are at CAE, they're exposed to students from various cadet-ships at other airlines as well and to board members from airlines actually presenting them to CAE. It's an interesting environment for them to be in, and they meet a lot of people. They get to network with the industry.

And I think-- I talked about the Qantas Future Pilot Program already. We're one of the few courses that Qantas deem of high enough quality that they will look and actively seek their future employees from. We're confident that we'll continue to do that as the industry recovers and grows again.

I think the last point to mention is safety, that we take safety very, very seriously. All of that professionalism is safeguarding the safety of our students and the safety of the operation. And myself, I've worked in aviation safety as a professional. So have all the people at CAE. So we ensure that the standards and the operating procedure put safety first all the time.

I'll talk a bit about the aviation management course as well, because this sometimes gets overlooked, but actually I think it's of increasing importance to the industry, especially now when we're seeing that the challenges that are facing the industry are restructuring and actually the expertise that's going to be required is at a management level. How do we make our company stronger in this challenging

environment? So the aviation management course is sort of an applied business, applied management degree.

The students study alongside the flying students, but all they do is rather than learning to fly an airplane, in that time that they're learning to gain the skills about operating big operations like airlines and airports and all the logistics that's involved in the marketing and the finances and all of those skills too. And a lot of the skills are the same in terms of making high risk, high tempo decisions in uncertain environments.

One of the things which we found quite interesting at the moment is those skills that we train those students are highly in demand at the moment. As I mentioned earlier, logistics companies and freight companies are booming at this moment in time. If you try to actually transport any freight by air at the moment, you'll know that the prices have gone through the roof. And they're operating more flights than they've ever operated before.

And the skills of being able to do that and work in their management teams are the sorts of skills that we train our aviation management students to have. So there's that side of the career as well, which I think is always worth mentioning. And in fact, some of the students-- it's a safeguard in a way to the piloting students. If they get halfway through the course and they suddenly decide that once you get them a private pilot's license, maybe I'm not really keen to be a commercial pilot, they can step sideways into the management course and have a very good career in that way. So it's a little bit of safeguarding for the piloting students.

Just to mention that we've also got a double degree suite offering. So both of those degrees I mentioned earlier, the aviation with piloting and the aviation management, are offered as four year double degrees with the Bachelor of Business here at Swinburne. We also teamed the aviation management degree up with the Bachelor of Laws here at Swinburne for a five year program. That program is really aimed at students that want to go and work with a regulator, with a safety management organization in the regulatory aspects and the development of law in the background of aviation.

So, yes. I think that's all. I'll just go back to the first slide. I think that's all I wanted to talk about in terms of the offerings, just to keep it simple and broad. I think the key message there is we are confident. And we've been through many of these shocks in terms of short term shocks like COVID-19. And we've always seen the industry recover. And we've always seen the bounce back. So we're already preparing for that right now.

So I'll leave it there. And Venus, I'll hand back over to you. But I'm quite happy to take questions.

Venus Liao

Thank you, Matt, for your great presentation. We've already got some of the questions coming in during your presentation. So first one up, can you--

[INTERPOSING VOICES]

All right, just this one. To be able to do flying training, students need to pass CASA Class 1 medical certificate. Please advise what health condition to pass this check. And if not pass, if the student has already enrolled in the course, what can they do?

Matt Ebbatson

Yes, OK. That's a very good question. Yes, so there were a couple of extra requirements of being able to study on the course. The CASA class 1 medical is one of those. It's probably worth, Venus, if

you can just remind me to come back to the Skills Assessment Test as well, because that's another unique entry requirement.

Venus Liao

Yeah.

Matt Ebbatson

Yeah. Any professional pilot needs to hold a Class 1 Medical, and that is the same in any country. They might be called something slightly different in different countries, but for the States, the UK, for Europe, and for Australia, it's called a Class 1 Medical. The details of that-- I can't off the top of my head quote exactly what tests, because there is a lot of them. But if you go to the website casa.gov.au so C-A-S-A dot G-O-V dot A-U and click on the medical link at the top, there's a breakdown. And it will say exactly what the requirements are.

So the major points in there are eyesight and ECG tests, a heart function test. It's the same as a sort of standard-- there are various grades of medical, and you can be a recreational pilot with a grade 2 medical. The areas that they test on aren't any different. It's the standard that they test to. So you can wear glasses. You just need to be corrected to 20/20 vision. You can wear contact lenses, again, they just need to correct to 20/20 vision.

But there are additional tests in there like a range of peripheral vision, tests for colour blindness, the ECG test will look at heart function very closely. And then you've got to constantly maintain blood pressure in certain parameters I can't-- I'm not a medical doctor, so I can't say the exact conditions of the test. But like I said, the CASA website has the guide to medical doctors as to what they need to test to.

There is a cost associated with that. It's around about \$450 in Australia at the moment to do that. And there are a lot of medical testing offices which can do that. If this student is-- I think the question relates to the student can enrol in the course without a Class 1 Medical. However, without a Class 1 Medical, they cannot take an airplane solo, so go and fly an airplane on their own. And within the first 10 hours, that's a requirement of training. So within 10 hours a student needs to be able to fly an airplane solo to progress.

So effectively, if they don't have the CASA Class 1 Medical, then they won't be able to continue on their course of study. And we very rarely have that. Because what we do is we say to students that they should at the very least go and get a preliminary medical check, so Class 2 Medical before they enroll. But we highly encourage them to hold a Class 1 Medical before they enrol to stop any disappointment there.

Excuse me while I just move my cat out of the way. Adventures of working from home. I think we've only had it in one or two cases that I know of where a student hasn't been able to attend a Class 1. And in both of those circumstances, they transferred across to the aviation management course. Because in both areas, they were very keen to be in the world of aviation, it just meant they couldn't fly.

And indeed, the reason I'm-- on an aviation note, I had a Class 1 Medical. And I lost the Class 1 Medical further down the line. And so I stayed within aviation. There were a lot of-- as a professional pilot, you have to maintain a Class 1 Medical as well. And that means going for a test every six months. So any pilot anywhere in the world has to constantly maintain their health and has to hold a Class 1 Medical. So it's one of the professional risks. So it's well worth establishing early on that you can do that.

Venus Liao

Thank you, Matt. Another question, can you please repeat the name of the company in Canada that Swinburne is working with?

Matt Ebbatson

Yes, CAE. And I cannot remember what it stands for. I think it's Canadian Aviation Enterprises or something like that. But they are a well-established company. They build simulators and training systems. CAE Melbourne is an offshoot of the main CAE global organization. It's an independent company. It's also got bases in Oxford, in the UK, and Phoenix in America, too.

Venus Liao

Thanks, Matt. Another question, my goal is to become an air traffic controller. Is there any program through which I can pursue my goal?

Matt Ebbatson

Yes there are, not immediately through a university in Australia. So I don't know the full situation internationally, but for air traffic controllers in Australia, the provider, Airservices Australia-- which owns the airspace and the air traffic management services-- they train their own air traffic controllers. So they have a vocational course for that. And basically, you have to apply to them.

And they take less than 100 a year intake. Having said that, a disproportionately large amount of those come from Swinburne. They do like to take people who have either done the aviation management degree or the aviation piloting degree and they have that foundation. So I've had a few of my students go through the piloting degree and decide at the end of it they would prefer a career in air traffic management. And they've already got a lot of the skills that they'll need for that.

And the great thing about Airservices Australia is that they pay for the training at the moment. So they then went on to finish off their training with Airservices Australia. It is a very-- it's possible. It's a very difficult profession to get into globally. But there are lots of different training routes. And different countries do it in different ways.

Venus Liao

Thanks, Matt. Will the CPL commercial pilot license be recognized worldwide?

Matt Ebbatson

Yes. It's-- recognized is an interesting one. So the CASA license has a very strong standing. And it depends which country you want to take that back to as to what it does and doesn't stand for. So if you want to take it to the UK, for example, there's a short conversion course where you have to reset your aviation law exams, parts of it. I think one of the other ground exams as well, and then resit the licensing test. But the hours and training are recognized because the courses are aligned.

And every country has their own requirements on what it takes to convert the license to the domestic license, so it's slightly different. So I would go and research that. But the Australian standard is aligned with most of the international standards. It's one of the ones that people try and build their courses around. For instance, going to America, it's very easy to transfer your license to what we call an FAA license. But there is definitely, probably in every country, going to be a small conversion process for that.

Venus Liao

Thank you, Matt. Just one more question because we are already at 2:30 now. Can you tell us what is the perspectives of placements in aviation after course in Australia?

Matt Ebbatson

Sure. This week, probably not great, because we're not seeing a lot of luck. But actually even there, we are still placing students, I've realized, in various places. Good, generally the outlook's very good if you look in the right places.

I would say a lot people start with a career expecting that they'll be straight into the cockpit of a jet. Unless you're on one of the cadetship programs, that's unlikely. Most of our students within three to six months found some form of employment in the aviation industry. A lot of those are flying instructors. And at the moment, most people go straight into a flying instructor job.

In fact, some of our students start flight instructing whilst they're still studying. So they're finishing off their studies and they've already got a job with CAE teaching some of the basic flight training elements. Either that or they're working for taxi companies or they're working for parachuting companies up and down the coast earning their first 1,000 hours. Beyond that, our students find employment very quickly with the commuter airlines in Australia too like Qantas Link and Rex.

Venus Liao

Right, thank you, Matt. So today we have a total of 263 participants from around the globe. And we have already received 23 questions. And apologies if we can't go through your questions today. I will be working with both Matt and also Mahdi from the faculty to provide information on your questions. And we will update on our website the Information for Agents and Partners page post the webinar.

I want to thank you Matt and Mahdi, our panellists, and Karen from India, and also all the agents, students, and our colleagues joining us at the webinar today from around the globe. We will promote for the next coming up webinar, which is next Wednesday 20 of May on Swinburne PQP by Bruce Li. The invitation will be sent out before Friday this week. And we thank you again for joining us. Thank you.

[END OF TRANSCRIPT]