

ISSUE 11

ALL FASCINATED WITH AVIATION!

A thriving global aviation hub needs a strong supporting pool of skilled professionals. A passion in aviation is a plus. *Bridging Skies* talks to a group of up and coming aviation professionals who have chosen this field and are looking forward to effectively contribute to Singapore's growing aviation industry.

Nicholas Ho, 19, is an aspiring pilot and a second-year Aerospace Electronics student at Temasek Polytechnic.

Tnee Chin Kiat, 18, a second-year Aerospace Engineering student at Temasek Polytechnic, is drawn to the multitude of possibilities in the MRO industry.

Benedict Loh, 24, is a recent graduate with a Diploma in Aviation Management and Services from Temasek Polytechnic. His interest lies in the business and commercial aspects of airport management.

Joshua Chao, 23, a third year Aerospace Engineering undergraduate at NTU, is a passionate aviation buff, and considers Xenon Dragon, a Canadian who specialises in Unmanned Aerial Vehicles, an inspiration.

Yuan Shenghai, 21, currently taking Electrical and Electronics Engineering at NTU, is already exploring how he can adapt and apply this course of study into his passion for all things aviation.

Timothy Cheong, 34, is a first year Bachelor of Science in Aviation Maintenance student at UniSIM. He is currently working in the financial services industry, but hopes to make a successful transition as an aviation professional.

Tiffany Alice Ramalingam, 23, is looking into increasing her competency – from her Diploma in Avionics from Republic Polytechnic, to her job at the Singapore Airlines Engineering Company (SIAEC) as a Planning Assistant for the A330 to her constant pursuit of excellence at UniSIM under the Bachelor of Engineering in Aerospace Systems programme.

DRIVEN BY PASSION

The aviation industry is populated by people from all walks of life, fueled by a common passion and drawn towards an industry that is multi-faceted. The reasons for people entering the industry are varied, but nevertheless, centres on a passion for aviation and a hope to be an active part of this vibrant and dynamic industry.

Nicholas Ho: Since I was a child, I had a fascination with aircraft components and aspired to become a pilot. I wanted to realise this childhood dream which is why I decided to sign up for the Aerospace Electronics course offered by Temasek Polytechnic (TP). Together with the regular course work at TP, I was also given an attachment at the Lufthansa Technical Training (LTT). This was an added advantage as it allowed me to be trained on aircraft materials, hardware and maintenance. I believe that this combination of knowledge and hands-on skills will help me become an effective member of Singapore's aviation workforce.

Joshua Chao: It was a conscious choice and informed decision when I was choosing a university course several years ago. Since I'm passionate about aerospace engineering, I felt

that NTU was the best school for me, as its aerospace engineering programme not only equip me with the necessary knowledge and skills for my transition into the industry, but through the specialised course, I will also be surrounded by like-minded individuals who are passionate about aviation.

Timothy Cheong: My passion for aviation has spurred me on to consider making a career switch. Coming from the finance industry with very little insights into the industry, it is imperative that I bring myself up to speed with the basic knowledge and trends should I want to join the aviation industry one day. UniSIM offered me a course that is well suited to my needs – the programme prepares me with a well-rounded view of the aviation industry and more, for example, into specialised technical areas like aviation maintenance.

Tiffany Alice Ramalingam: I have always been taught not to rest on my laurels. Even with a recognised diploma in avionics, and now actively applying my knowledge and skills at the SIAEC as a planning assistant, I realised that I will always need to increase my knowledge about the industry if I want to succeed. The arrangement with UniSIM allows me to work and study at the same time, giving me the opportunity to apply my classroom knowledge at my workplace.

ALTERNATIVE DEVELOPMENT PLATFORMS

Not all enrichment programmes need to be formalised. NTU takes it one step further, by providing alternative platforms for aviation enthusiasts to mingle, network, exchange thoughts and ideas and mutually grow their passion for aviation.

Tnee Chin Kiat: Outside of lessons, lecturers from the Aerospace Engineering courses at TP also encourage us to join competitions such as the Singapore Amazing Flying Machine and Singapore Space Challenge. These competitions encourage critical thinking and sharpen our practical skills. I believe such competitions allow us to think for ourselves and apply what we've learned in class.

Yuan Shenghai: I joined NTU's Aerospace Society group because I am an avid aviation buff. Through the Society, I have been presented the possibilities that abound in the aviation industry. Coming from an Electrical and Electronics Engineering background, I can now apply my training, though non-aviation specific, in various fields like navigation, software programming and electronics and contributing to Singapore's aviation industry through research and development (R&D).

NOT EVERYTHING IS IN THE TEXTBOOK

Various collaborations with internationally recognised institutions ensure that the curriculum offered is not only world-class, but also customised to cater to the needs of the Singapore aviation industry and also address the future manpower requirements in order for the industry to expand and grow. These collaborations also supplement the teachings in the classroom by

offering students internships, attachments and networking opportunities with industry professionals.

Cheong: The programme I'm taking is in collaboration with Embry-Riddle Aeronautical University (ERAU), giving me two degrees – one from UniSIM and one from ERAU, who is a world leader in aviation and aerospace education. More importantly, the programme allows me hands-on experience on aircraft maintenance and aviation security. I now have a more practical grasp of the aviation industry that I wouldn't otherwise get from textbooks. This will definitely prepare me for challenges that come my way.

Ramalingam: Through the Bachelor of Engineering in Aerospace Systems programme in UniSIM, I am given the chance to handle aircraft parts. The hands-on experience complements and increases my knowledge. It allows me to do my job better. It's a win-win situation! With more training, knowledge and experience, I hope to become an avionics engineer one day.

Benedict Loh: Our curriculum is varied and our lecturers are mindful that we should not only be book smart, but to also know how to apply the lessons we've learned. We are encouraged to join exercises at Changi Airport where we are given the chance to test our knowledge and apply our lessons. It is valuable experience for us as students as we learn from our mistakes, albeit not as severe, as it is in a controlled, simulated situation! Advice from the experts at the exercises also enhances our familiarity with the business and commercial aspects of managing Changi Airport.

Chao: Professors and experts from countries like the United States and Korea are also based in NTU, giving us the opportunities to learn from them. The chance to speak with them is also useful, allowing us insights beyond our shores and learning from practices adopted from around the globe.

Ho: Apart from international experts in Singapore, the LTT attachment allows us to go on study trips to Germany and other parts of Europe. Through these visits, we get to network with the operational experts on the ground, gaining useful and practical insights. We also experienced the scale of actual operations at various aviation companies and hangars. The visits provided a glimpse of the different business models adopted in other countries.

Yuan: Apart from formal attachments, the Aerospace Society encourages self-learning through many hands-on aviation-related projects, allowing for the development of on-the-spot problem-solving and analytical thinking. Such skills are necessary for a successful career in aviation.

Chao: The Aerospace Society also encourages creative thinking in the areas of design and R&D. It provided us with an opportunity to participate in a UAV competition in Taiwan, where we were able to apply what we learned in the Aerospace Society. We won the first prize for best report and we were also the overall champion in the competition. I believe that what I learn in NTU and the Aerospace Society will allow me to play an integral part in Singapore's aviation industry.

READY TO TAKE OFF

The development and progression of the Singapore aviation industry has allowed for myriad choice offerings and opportunities not just in jobs and careers, but also in education. Today, with a buffet spread of courses and programmes, the graduating student is well-placed to be accepted into the fast-paced, ever-evolving aviation industry.

Loh: The aviation industry has shown its resilience, amidst challenges like terrorism and the economic downturn. To sustain its momentum, I believe that there needs to be a continued emphasis on education so that there will be a constant pool of talents that will keep the industry strong. My learning journey through TP has provided me the necessary training, for me to join and contribute as a professional.

Cheong: I believe that each course developed by the schools addresses different sectors of the industry in Singapore and complements each other. I foresee that Singapore's status as a vibrant aviation hub growing with the years to come to be cemented and surpassed as more aviation companies set up operations here. I hope to be part of that growth by being in the industry and contributing my part.

Yuan: I hope that Singapore continues to excel in the area of MRO, especially with the development of Seletar Aerospace Park. My training would serve me in good stead to join the sector upon graduation and I hope to contribute through my specialisation in the field of aviation R&D and further enhance Singapore's aviation industry.

CAAS Aviation Learning Journeys (ALJ), launched in January 2011, provides a platform for students to understand more about aviation – the history of aviation, key achievements of Singapore's aviation and the various career opportunities the industry offers. Upper secondary school and junior college students are given an opportunity to observe first-hand the dynamic work environments in the industry through site visits to the Singapore Air Traffic Control Centre, aerospace engine repair workshops and aircraft hangers. To find out more about the ALJ, write in to caas_ai@caas.gov.sg or find out more by clicking [here](#).