

Safeguarding national security

DSTA scholars Pang Zi Yang and Fiona Chen make use of science and technology to beef up Singapore's defence, reports **Wong Sher Maine**

Taking to the skies

MILITARY aircraft had always fascinated Mr Pang Zi Yang as a boy and he knew he wanted to pursue a career in defence, specifically in engineering.

Having studied aeronautical engineering at Imperial College London on a Defence Science and

Technology Agency (DSTA) scholarship, the 26-year-old is now living his dream as a research engineer (member of technical staff) at DSO National Laboratories.

The DSTA scholarship fitted his aspirations best and it was the only scholarship he applied for after completing his A levels at Victoria

Junior College.

During his time at Imperial College, he had to design, build and test an engineering apparatus every year. His creations included a wind turbine and an unmanned aerial vehicle that was flown and tested in a flight simulator.

"It was a great learning experience, and I think it brought both the theory and application aspects of engineering together very nicely," he says.

Mr Pang also applied for an undergraduate research programme that was conducted during one of the summer breaks.

"This research programme was supervised by a professor, and it gave me the opportunity to find out how research is conducted in a top-notch academic institution," he says.

His research work was published in the American Institute of Aeronautics and Astronautics journal.

What he learnt in the programme is proving valuable even today in his daily work as a research engineer in the guidance, navigation and control laboratory under DSO's guided system division.

Typically, he reviews research, undertakes design and simulation using various software tools, and conducts flight trials for experimental validation.

In the long run, he hopes to take up postgraduate studies and continue doing research work, although he is also open to the possibility of climbing up the management ladder.

The DSTA scholarship, he says, is perfect for those who are interested in science and technology.

"I think there are no better organisations offering research and engineering work as a career, not to mention that you will contribute to the national security of Singapore," he says.

Playing her part

Picking the right organisation was of paramount importance to Ms Fiona Chen when she was looking for a scholarship.

The 25-year-old was drawn to DSTA because she knew her work would contribute directly to building Singapore's defence and national security capabilities.

"In fulfilling this higher calling, I am also protecting my loved ones," says the DSTA engineer, who studied at the University of Illinois at Urbana-Champaign in the United States on a DSTA scholarship.

Ms Chen says the interviewers on the selection panel were keen to learn more about her as an individual and that made her feel comfortable about working in DSTA.

"The panel portrayed the organisation as one that values what each of us can contribute based on our individual abilities," she adds.

Like most students who go overseas, Ms Chen has fond memories of organising gatherings and annual food fairs as part of the Singapore Students Association, and of travelling extensively within the US during her holidays.

She was glad to "immerse in a totally different culture, travel to see the outside world and learn to be more independent".

Now, her responsibilities include meeting personnel from different ministries to receive feedback and providing technical advice to the national security coordination secretariat of the Prime Minister's Office.

She is currently working on a national technology roadmap that prioritises and develops technological applications to coordinate and focus technology and engineering efforts in national security better.

"Sometimes, I get the chance to



Ms Chen is keen to play her part in supporting the national defence of Singapore. PHOTOS: CHONG JUN LIANG

go to restricted places, such as Singapore's cargo handling areas and maritime ports. To me, that is one of the perks of my job," she says.

She also attends local and overseas training to keep abreast of the latest trends and developments in national security and defence.

"When I have accumulated suf-

ficient management experience and technology insights, I would like to gain greater exposure to multi-disciplinary technologies in DSTA, and see myself involved in exploring such technologies to configure systems of greater capability to support the national defence of Singapore," she says.

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— Mr Pang Zi Yang (below)

