

## singapore

## Camera-disabling app designer among Defence Technology Prize winners

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PUBLISHED: 7:35 PM, OCTOBER 20, 2017 UPDATED: 3:31 PM, OCTOBER 21, 2017

SINGAPORE — Switching phones and removing the camera from handsets has been the norm for soldiers reporting to camp — to prevent leakage of confidential information — but things may change soon, thanks to a new app that disables the camera with a tap.

The creation of Defence Science and Technology Agency (DSTA) director Leong See Sum, the app is integrated with a building's access systems barring entry by temporarily disabling a staff pass unless the camera function of a phone is turned off.

The app was piloted in November last year and is now available for use by personnel working in the Ministry of Defence (Mindef) buildings in Gombak.

Mr Leong was one of the winners of this year's Defence Technology Prize given out at the DSO National Laboratories on Friday (Oct 20). He won the prize for his various innovations in designing secure network systems, including the camera-disabling app.

The annual awards recognise scientists and engineers for their contribution in strengthening Singapore's defence capabilities.

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Five teams were also among those recognised at this year's awards.

One of them was the air surveillance system team from the DSO National Laboratories who developed a system that can detect small drones, which have evolved into potential security threats.



(http://www.todayonline.com/sites/default/files/styles/photo\_galle ry\_image\_lightbox/public/photos/43\_images/31166620.JPG?itok=gQzIydV)

Mr Leong See Sum, Director (Infocomm Infrastructure), Defence Science and Technology Agency present at the Media Briefing for Defence Technology Prize Award Ceremony 2017 at DSO National Laboratories. Photo: Koh Mui Fong/TODAY

With drones becoming more affordable and accessible, there is concern that people with malicious intent could modify drones to carry bombs to hit key buildings, said the team's programme manager Tay Poh Kok.

For instance, it was reported earlier this year that the terrorist group Islamic State are making use of weaponised drones to attack Iraq's military troops.

As conventional radars and sensors deployed in Singapore's military air bases were designed to detect only large suspicious aircrafts, they are unable to detect small drones, said Mr Tay.

"If their systems are modified to pick up drones, they would have too much to handle", he added.

Mr Tay said once sensors from the air surveillance system pick up drones deemed to be a security threat, information is relayed to the command and control centre at air bases so they can decide on the next steps. Speaking at the awards ceremony, Defence Minister Dr Ng Eng Hen reiterated that the Public Service has to continue ramping up its engineering talent pool. It is critical for the defence technology community to pass on the "culture of innovation and daring" to the next generation, he added.

"For the majority of you, not every day at work can be that exciting. It's unrealistic, but I know that among the senior staff, there's a steely resolve — over many years — to plod on," said Dr Ng. "You want to crack problems too hard to solve. And that is the culture that has to be passed on. A culture that says, 'I will take it up upon myself, I will solve this puzzle and I will make Singapore stronger'."

## Clarification:

An earlier version of this article said the camera disabling app created by Mr Leong See Sum was piloted in May. The Defence Science and Technology Agency has clarified that it was piloted in November 2016.