



SPEECH

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Keynote Address by Second Minister for Defence Mr Ong Ye Kung at the MINDEF PRIDE Day Awards Ceremony

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Permanent Secretaries

Chief of Defence Force

Mr Lim Siong Guan

Ladies and gentlemen

The PRIDE movement was introduced in 1981. Movements like these have two destinies, either they fizzle out or they catch on. And today, as we mark the 35th anniversary of the PRIDE movement, I am pleased to see that after so many years, the PRIDE spirit remains vibrant and dynamic, and our people continue to strive to do better. But the idea of innovation today is quite different from the idea in the 1980s, 1990s, or even the 2000s. In the past, organisations go to great lengths to achieve certifications like ISO 9000, Singapore Quality Class award and today, close to 90% of our SAF units have achieved these organisational excellence certifications. These certifications have provided very useful frameworks in thinking about organisational excellence and how we improve our capabilities. But the concept of what constitutes an innovative and learning organisation goes much more than that today.

Today, if you ask young people, the collective consciousness of an innovative organisation is one that they imagine can respond rapidly to demands of customers, not what we can supply but what people demand. An innovative organisation also creates space for its people to experiment, sometimes to fail, but fail small, fail fast, (and) fail cheap in order to stay ahead of the competition. An innovative organisation today is run collaboratively, not hierarchically, and what symbolises this most are those open offices with cubicle walls all coming down. That is the idea of an innovative organisation of 2016. All these are driven by necessity and realities of the new world - globalised and open, rapid urbanisation, advancing technology, and subject to new challenges like climate change and terrorism.

The impetus for MINDEF and the SAF to continue to promote innovation and organisational excellence through the PRIDE movement is stronger than ever. But the question that people will always have, and that is because they may not totally understand the culture of MINDEF and the SAF, is this, "will a hierarchical, strong in command and control organisation like MINDEF and the SAF be able to embrace the current concepts and perceptions of an innovative organisation. Is the nature of this organisation and our objectives compatible today?" The answer must be yes, because while perceptions and traits of innovation have changed, the fundamentals have not. MINDEF and the SAF have cultivated these fundamental tenets over 35 years, and what

are these tenets? First, innovation and productivity improvements are actually democratised processes, tapping on the ideas of everyone in the organisation. The most forward-looking organisations today empower every staff to come up, maybe with an application, to solve a problem. They all learn how to code, but this is not a new concept. It is in the past. The most forward-looking organisations empower every operator to stop the production line in order to solve a problem or to form teams to solve problems. The tools have changed, the technology has changed, that is all. What we must remember, are what the last two letters of PRIDE stand for, "Daily Efforts", and it involves everyone.

The concept of every soldier and staff empowered to make changes and playing their part is deeply ingrained today in MINDEF and the SAF. The second tenet of innovation is the tolerance or even the welcoming of occasional failures. We cannot experiment without some failures but we need to fail small, fail fast and fail cheap, and learn from it. There is less leeway for governmental organisations to fail, because as providers of public service and as regulators, mistakes can be very costly and can impact the public quite significantly. But in every organisation, there is always ample room for us to create sandboxes, big or small, where the downside is limited and when you can afford to try out new technologies, (and) new methods to make things better. And even if things do not turn out well, it is within the sandbox. It is not too bad. That is why Civil Aviation Authority of Singapore is trying out new applications for drones, Monetary Authority of Singapore is trying out FinTech products, universities are trying out new ways of teaching, and the SAF is using all kinds of new methods to improve ground operations.

The third tenet is the way individuals communicate and work together collaboratively in an organisation. It has to be collaborative today. This is not incompatible with the rank structure of MINDEF nor the SAF because it has more to do with our collective attitude of the organisation, that we are open to new ideas, and that we will listen to the ground. We want to understand the ground, and always to feel somewhat under sieged all the time and needing to break out of our constraints. People talk about cubicle walls coming down so their staff can collaborate. (But) you operate out in the field, you never had cubicles to start with.

Fortunately or unfortunately, this mentality of needing to innovate because we are under sieged and need to break out of our constraints is embedded in the Singaporean DNA, because we had no natural endowments nor a large domestic market, and we always have to face up to the harsh reality that we have to find our own living. In fact a strong command and control structure can play to our advantage in making innovation a disciplined yet collaborative process. The most valuable achievement of 35 years of PRIDE is this intangible and unmeasurable aspect of building a culture of openness to new ideas in MINDEF and in the SAF. Culture takes a long time to develop and I think 35 years is about right. Today, the imperative to innovate is just as strong with falling cohort sizes and falling conscription numbers, we will need to think ahead on how best to utilise our manpower and complement it with technology. We need to stay ahead of new threats, such as hybrid warfare and terrorism.

This is what the Smart Defence vision is about.

Last year, the Smart Defence committee was formed to steer MINDEF and the SAF towards developing highly-advanced warfighting processes and platforms, through new technologies and applications. Over the past year, we saw many promising innovations, with potential for broad and widespread applications.

One example is the unmanned systems currently being developed by the SAF and our defence engineers and scientists. Our micro-UAVs help us to detect and address potential threats in our urban environment more effectively. We have also started to trial the autonomous unmanned ground vehicles that will enhance the responsiveness of our security forces. In the long-term, we also want to exploit augmented reality to enhance our training efficiency and maintain realism while reducing the amount of logistics support required.

Another set of examples is on energy efficiency. HQ Combat Service Support Command (CSSCOM) and DSTA's Building and Infrastructure Programme Centre incorporated environmentally-friendly features such as rainwater and air-conditioning heat recycling, and solar power panels when conceptualising and building Kranji Camp III. These initiatives resulted in at least 25% savings in energy. Since then, we have continued to push boundaries on our green initiatives. The DSTA Integrated Complex and the redeveloped Paya Lebar Air Base

hangar are further examples where energy efficiency efforts reduce electricity consumption by about 30% in both cases.

In this information rich era, we also need to make better use of data analytics. The Internet of Things has made every operating component connected and constantly in correspondence. But it also means within the system the maximum vulnerability is in the weakest link. Many of us would have heard of the intentional and malicious attacks on one of our broadband service providers about two weeks ago. Our Cybersecurity Programme Centre, which was set up to oversee data security, advanced malware detection, and cybersecurity research and development, plays a critical role in keeping our information technology systems and processes intact.

PRIDE Movement: A Proud Tradition of MINDEF/SAF

Today we will recognise about 190 PRIDE day award winners. All award recipients have displayed resourcefulness and professionalism and contributed in areas ranging from productivity and resource optimisation to organisational excellence and improving staff well-being.

One of our winners, the Navy Medical Services, operationalised the Rapidly Deployable Maritime Container (RDMC) it allows the SAF to deploy advanced surgical capabilities for Humanitarian and Disaster Relief missions in a more resource efficient manner. RDMC incorporated new features such as advanced air filters, ultraviolet treated water and antibacterial wall coating and enhances patients' safety and minimise the risk of postoperative infections. The RDMC also integrates with the ship's power supply to provide uninterrupted electrical power source for optimal patient care. Last September, the RDMC was deployed in Northern Sulawesi for Operations Surya Bhaskara, a socio-civic mission jointly conducted by the Republic of Singapore and Indonesian Navies. A total of 10 surgeries were successfully conducted during the mission. The new features of the RDMC has garnered keen interest from established navies, with the United States Pacific Fleet asking for the RDMC to be cross-deployed on their High Speed Vessels so that they can learn more about its unique concept.

Another winner today, Military Expert 4 Jason Tan from the 6 Air Engineering Logistics Group, devised a repair procedure for corrosion defects on the Nose Gear Box of the Apache Helicopters. In the past, the gear box had to be replaced each time such a defect happened, which rendered the aircraft unserviceable for a day. With the new repair procedure, recovery time of the aircraft is reduced by close to 70%.

Innovations such as these not only help us do our work better and faster, they also bring about substantial cost savings. This year, our PRIDE initiative has saved us about S\$164 million, an increase of 16% from the previous year.

The Commitment of Our People

In conclusion, we need to sustain and strengthen our collective commitment to improve and to innovate. All the best technologies and fighting capabilities will come to naught if we do not have the people, the spirit, the right skills, the right attitudes and if we do not meaningfully nurture and tap on the full potential of our people.

I urge everyone here: We are at the next bound of our transformation journey. All of you can play a part to continue to uphold and strengthen our culture of innovation that has been built over the last 35 years.

I encourage all leaders and commanders; to give space to the people whom you lead, to continue to experiment, try new things, and accept the occasional setbacks and failures as part and parcel of the process of innovation.

I congratulate all of you, for being part of the PRIDE journey, and making MINDEF and the SAF an example of an organisation with a long history but with contemporary practices that are suited to the modern, high technology and changing world.

I wish all of you a productive and innovative year ahead. Thank you.

News Release:

- Second Minister for Defence Commemorates 35 Years of Innovation and Officiates Opening of SGDefence Exhibition (MINDEF_20161104001.pdf)

National Archives of Singapore