

**TRANSCRIPT OF KEYNOTE ADDRESS BY
DEPUTY PRIME MINISTER HENG SWEE KEAT AT
DSTA'S 20TH ANNIVERSARY ON 28 OCTOBER 2020**

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Minister for Defence

Mr Heng Chee How and Mr Zaqy Mohamad
Senior Ministers of State for Defence

Permanent Secretaries

Chief of Defence Force

Ladies and Gentlemen and all those of you from around the world joining us

1. It gives me great pleasure to join you here at the DSTA Integrated Complex as we mark your 20th anniversary.

BUILT BY SCIENCE & TECHNOLOGY

2. Science and technology have been instrumental to Singapore's survival and success. Our scientists, engineers and technologists have contributed to the growth of our city and the transformation of our economy. They have been crucial in securing a sustainable supply of water for Singapore and in helping mitigate the effects of climate change. Research and innovation will continue to feature prominently as we rebuild from COVID-19. We are finalising our Research, Innovation and Enterprise 2025 plans, and will be investing more than 20 billion dollars in science, research and innovation over the next five years.

3. Most importantly, science and technology have been instrumental in building our defence capabilities. When the British withdrew from Singapore, we had only two infantry regiments, two seaworthy wooden ships, and two borrowed Cessna aircrafts. Through the ingenuity and dedication of our defence community, the Singapore Armed Forces has grown from these humble beginnings into an advanced and capable fighting force.

BUILDING FOR THE FUTURE

4. The DSTA story began two decades ago when eight defence technology organisations were brought together as one. This move enabled us to better harness technology, promote innovation and nurture talent to meet our defence and security needs.

5. DSTA has grown by leaps and bounds since then. You have built a range of deep expertise – from our air, naval and land systems, to C3 and cybersecurity. Our locally designed and built platforms – like the Hunter Armoured Fighting Vehicle and Littoral Mission Vessel – are testament to your ability to translate technology and plans into reality. These capabilities have kept our fighting capabilities ahead of the curve.

6. As Singapore navigates an increasingly complex world with fast-evolving threats, a strong science and technology core will be even more critical to the Singapore story and the SAF.

7. The next 20 years will likely be even more exciting than the last. We are in the midst of the Fourth Industrial Revolution, and the pace of change has quickened since COVID-19. Automation, robotics, AI and the IoT will not only change the way we live and work, but also how the SAF fights and operates.

8. DSTA is riding the wave of digital transformation to great effect.

- a. Take for example the Hunter, our first fully digitalised armoured fighting vehicle. The Hunter fleet not only has better firepower, mobility and protection, but also requires less operators compared to its predecessor, the Ultra M113.
- b. Another area is the use of virtual reality to provide a higher level of training realism, as seen in the Navy's Littoral Mission Vessel Simulation Centre.
- c. DSTA has also developed advanced cybersecurity solutions. Leveraging AI, you have been able to better detect anomalies in our systems, and to learn and adapt as threats evolve.
- d. Beyond specific breakthroughs, we can more comprehensively capture new digital opportunities. I am glad that DSTA set up the Digital Hub and Digital Strategy Office to do so.

9. In the age of the Fourth Industrial Revolution, innovations are also occurring at the intersection of disciplines, which will require us to take an even more multidisciplinary approach.

- a. The Smart Air Base that is under development is one example of how we are heading in this direction. Together with our Air Force and other partners, you have taken an innovative fusion of AI, data analytics, robotics and other emerging technologies.
- b. This cross-disciplinary approach will further enhance our ability to generate and sustain air power.

10. To realise these possibilities, DSTA has been actively building a pipeline of future engineers and scientists, by nurturing an interest in STEM among our students.

- a. The Young Defence Scientists' Programme and BrainHack have opened the eyes of students to the immense possibilities, including in unmanned and space technologies.

- b. Going beyond STEM, we should also look at how to better integrate the learning of arts, humanities and design thinking. This way, future fighting platforms will not only be more effective and manpower efficient, but also more operator-centric!

FOSTERING CLOSE PARTNERSHIPS

11. What makes DSTA extraordinary is not just its range of deep expertise, but also your extensive network of partnerships.

12. The strong mutual trust and respect between DSTA and the SAF have been instrumental in delivering integrated ops-tech solutions and capable warfighting systems for the Next Generation SAF.

13. Your partnerships with the private sector have contributed to our economic development.

- a. ST Engineering Aerospace has grown from primarily servicing our Air Force to become a major MRO provider for commercial aircraft.
- b. Similarly, some of our local system integrators, such as NCS, have grown from their collaborations with the defence technology community.
- c. DSTA is also connected with and contributing to our start-up ecosystem through DSTA@71, a collaboration space for co-innovation and partnership.

14. You have also strengthened international partnerships over the years. DSTA hosts the Singapore Defence Technology Summit, bringing together global thought leaders to better appreciate the impact of emerging technologies on defence and security. DSTA has collaborated with global giants such as Rolls Royce, Airbus, Boeing, Samsung and IBM on areas such as IoT, data analytics and cybersecurity. These collaborations keep DSTA at the forefront of technology. The presence of so many of you here online on this very occasion is a testament of the strength of that relationship.

15. This spirit of partnership also reaches out to the rest of the public service, including for homeland security and public transport. You have also shared your experience in systems engineering, the acquisition and life cycle management of assets, and provided training for procurement. With the increasing dual-use of technology, I encourage DSTA to further strengthen collaboration with the public sector.

ORDINARY PEOPLE, EXTRAORDINARY PASSION

16. DSTA's achievements were made possible by all of you – its people. Your commitment to our national security, your pursuit of excellence, and your resilience in the face of challenges have made DSTA extraordinary.

17. Time and again, the men and women of DSTA have gone beyond the call of duty in times of crisis. In 2003, you adapted military technology to develop thermal scanners for temperature screening during SARS. In our ongoing fight against COVID-19, you have likewise contributed various solutions to support critical operations – from co-developing temperature self-check systems and Mobile Swab Stations, to tapping your networks to procure emergency healthcare supplies amidst global supply chain uncertainties.

18. To support the resumption of activities post-Circuit Breaker, DSTA also developed solutions to aid contact tracing, and medical and routine swabbing operations. Some of you also stepped forward to volunteer in swab testing operations and served as safe distancing ambassadors. I thank all of you for going beyond the call of duty and for standing in solidarity with all Singaporeans and people around the world during this difficult period.

19. It is most apt that the DSTA 20th anniversary book is titled “Ordinary People, Extraordinary Passion”. I am delighted to launch this book today. The book chronicles how you have embodied a can-do spirit to collectively make a difference to the defence of our nation. These stories strike a chord with many of you, and I hope they will inspire our defence community for decades to come.

CONCLUSION

20. As Singapore navigates a more contested and uncertain world, I challenge all of you to break new frontiers in the effective use of science and technology to safeguard our sovereignty.

21. Congratulations once again on twenty excellent years of progress and achievements. I look forward to DSTA scaling new heights for many more decades to come.

22. Thank you.