SPEECH BY MS LOW YEN LING, PARLIAMENTARY SECRETARY, MINISTRY OF TRADE AND INDUSTRY, AT THE OPENING CEREMONY OF ROTORCRAFT ASIA AND UNMANNED SYSTEMS ASIA, ON 18 APRIL 2017, 09:40AM, CHANGI EXHIBITION CENTRE.

Your Excellencies

Mr. Vincent Chong, Chairman, Experia Events

Distinguished guests,

Ladies and Gentlemen,

Good morning. National Archives of Singapore

Introduction

 I am pleased to join you today at the inaugural Rotorcraft Asia and Unmanned Systems Asia exhibitions. I am also encouraged by the positive response for this event, with participation from over 80 exhibitors around the world.

Singapore is well-positioned to tap on the growth of the helicopter market in the region

- 2. Demand for helicopters in the Asia Pacific region has grown rapidly, driven by infrastructure developments and the opening up of airspace in the region. For instance, the number of inservice helicopters in the Asia Pacific has grown by 45% between 2005 and 2015. In North America it grew just by 13% in the same period. Asia Pacific also accounted for around 30% of all helicopter deliveries in 2016.
 - 3. Singapore's aerospace industry is well-positioned to tap on the growing helicopter market in Asia Pacific. Leading companies such as Airbus Helicopters, StandardAero and Bell Helicopter have established operations in our Seletar Aerospace Park to serve their customers in the region. Last year, SAFRAN

Helicopter Engines also opened its regional headquarters for Southeast Asia and India in Seletar.

4. These investments have spurred the growth of our aerospace industry, which contributed nearly S\$9 billion in output, and employed close to 20,000 workers in 2016. We will continue to build upon our fundamentals, including our connectivity and skilled talent pool, and strengthen Singapore's position as a leading aerospace hub.

Singapore will create a conducive business environment to support the emerging Unmanned Aircraft System (UAS) segment National Archives of Singapore

5. We also see exciting new opportunities in the emerging Unmanned Aircraft System (UAS) segment. The global market for commercial applications of UAS is projected to grow from US\$2 billion in 2016 to around US\$127 billion by 2020. 6. We will support the growth of this emerging segment by encouraging early adoption and developing an enabling regulatory environment. These are key themes of the Committee on the Future Economy (CFE) report. They reflect how the Government is adopting a more pro-business stance to support new growth opportunities.

Encouraging early adoption

- Let me first elaborate on how we are encouraging the early adoption of commercial UAS technologies.
- 8. An inter-agency UAS Committee, chaired by the Ministry of Transport, has put in place a Whole-Of-Government contract to aid public agencies in the procurement of UAS services for activities such as inspection, surveillance and mapping.
 - 9. In fact, our public agencies are already actively looking at how UAS can support their operations, as well as enhance the safety of their officers. For example, as part of National Environment Agency's mosquito control operations, the agency is using

customised drones to dispense larvicide in hard-to-reach areas like roof gutters. The Land Transport Authority is also exploring the use of drones to inspect our Mass Rapid Transit (MRT) and road tunnels.

Developing an enabling regulatory environment

- 10. I will now touch on how we are developing an enabling regulatory environment to support innovative UAS applications.
- 11. The UAS Committee has been developing a regulatory framework to encourage the use of UAS in Singapore, while ensuring the safety and security of the general public. Since June 2015, we have put in place a facilitative permit regime, whereby users can apply for single activity permits as well as block permits for repeated UAS activities over a period of time.
 - 12. There are currently no global standards for commercial UAS technologies or applications. The UAS segment is also constantly evolving. Hence, we will continue to work closely with the industry to facilitate new use cases which are not

covered under existing regulations, as well as co-develop new standards and regulatory requirements.

- 13. For example, the Civil Aviation Authority of Singapore (CAAS) is partnering Airbus to explore the deployment of UAS for parcel delivery in an urban environment, with the National University of Singapore as the test bed. This type of deployment, which require Beyond Visual Line of Sight (BVLOS) and autonomous operations, is currently not permitted under existing regulations. This trial is one of the key steps to ensure that commercial drones can operate safely over urban areas.
- 14. We look forward to partnering more companies to develop and test bed new UAS technologies as well as business models Nati from Singapore. Chives of Singapore

Conclusion

Let me conclude. There are many exciting opportunities ahead.
Singapore is well-positioned to serve the growing helicopter industry in the region. We are also committed to create a

conducive business environment to support the emerging UAS segment.

16. Events such as Rotorcraft Asia and Unmanned Systems Asia serve as important platforms to bring stakeholders together to exchange ideas and take the industry forward. It is now my pleasure to declare the opening of Rotorcraft Asia 2017 and Unmanned Systems Asia 2017. I wish everyone a productive and enjoyable event. Thank you.

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