



# NEWS RELEASE

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## **Speech by Mr Chan Yeng Kit, Permanent Secretary (Defence), at the Singapore Amazing Flying Machine Competition Awards Presentation Ceremony**

22 Mar 2014

Professor Lim Tit Meng, Chief Executive, Science Centre Singapore, Mr Quek Gim Pew, CEO, DSO National Laboratories, Distinguished guests, Principals, teachers and students,

Ladies and gentlemen,

Good afternoon. This is the second time I am attending the SAFMC Awards Presentation Ceremony and I must say it is good to be back. I must say I was impressed with last year's entries. From what I had seen earlier on, I am even more impressed with this year's entries. Well done children. As the largest flying machine competition in Singapore, SAFMC has consistently attracted a diverse group of participants. In fact, more than 1,000 teams have taken part in this competition since its inception. This year, the participation rate, as Prof. Lim has commented just now, continues to be very encouraging. I am also heartened to know that for the first time in SAFMC's history, we have a primary school team going up against the big boys in Category E! I like to applaud the team from Jurong Primary School for their confidence and effort, as they challenge themselves to build their flying machine above and beyond their level.

Indeed, I believe this is what SAFMC is all about - a glimpse into your fascination to take to the skies, and stretching your imagination and ingenuity to create unique flying machines.

Some of you may have attended the Singapore Airshow last month with your families. Hope you did. Amongst the many incredible planes at the show, the gigantic Airbus

A350 XWB was quite a sight to behold. It flew in the opening day. As one of the most technologically advanced commercial airliner, the Airbus A350 XWB uses 25 percent less fuel. Its engineers were able to achieve the feat with the clever use of composite materials for over 50 percent of the aircraft structure. This resulted in an aircraft that is 15 tonnes lighter. Composite materials are made by combining at least two materials of different physical or chemical properties together, to form an overall structure that is often both stronger and lighter.

Earlier on we looked at the size of the aircraft, in terms of speed; the SR-72 is perhaps the world's fastest plane. An unmanned spy plane in the making, engineers are pushing the boundaries by giving this hypersonic jet the superior ability to fly at six times the speed of sound! At that speed, it can circumnavigate the planet, in other words go around the world, in just six hours, as compared to 50 hours for a normal commercial plane to do the same.

Today, amazing flying machines are no longer just limited to the skies. In fact Space, the final frontier, is the next exciting arena. I am very proud to share that Singapore is developing our very own satellite technology industry! And driving this is The Office for Space Technology and Industry, established a year ago to support and spur the industry's growth. Our local universities, NUS and NTU, are both building their own satellites to be launched by 2015; by next year! The keen enthusiasts among you could be working, when you join the workforce, not just on aeroplanes, but on the next generation of made-in-Singapore satellites in the future! From fascinating commercial jets and military spy planes to satellite technology, we come back down to earth to the humble paper plane.

I'm not sure whether those among the audience here know what the record is for a paper aeroplane to fly. Let me show you this fascinating video. 226 feet is around 70m. This took place in 2012, a demonstration showing a paper plane flying close to 70m, and breaking the previous Guinness World Record which was last set in early 2003! The inventor of that amazing paper plane is a guy called John Collins, if you google him you will find him. He is known as The Paper Airplane Guy. He is a TV producer by occupation, John Collins has neither training nor knowledge in aeronautics. It was his fascination with flight, in origami that started his journey of designing unique paper planes that performed different kinds of tricks. And it was his passion and relentless pursuit to keep getting better that finally earned him the world record title. From what I have seen today, all of you, your achievement in SAFMC is a testament to the wealth of creative ideas that you have, and the perseverance to realise them. Your learning journey in SAFMC is one of your first steps into the intriguing yet exciting world of discovery and innovation. I urge all of you to keep your passion. Continue to let your imagination take flight and dare to dream. Each and every one of you has the ability to transform big ideas into reality. You are the future of our nation. And I hope as bright innovators in the

making, you will also join, from a vested-interest point of view, you will join the defence industry; the local defence industry in the future, and make a difference for our nation's defence capabilities.

Finally, I want to congratulate all the participants, especially the winning teams, in following their dreams and persevering to develop the many awe-inspiring flying machines that we were wowed by today.

Thank you very much.

National Archives of Singapore