



SPEECH

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Keynote Address by Chief of Army MAJ-GEN Desmond Kuek at the Official Opening of the Land Defence Asia Conference 2006

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Distinguished guests, ladies and gentlemen.

Introduction

Good afternoon, and welcome to the inaugural Land Defence Asia Conference. Thank you all for attending, and my special thanks to our distinguished speakers who will be sharing with us various aspects of Land Warfare transformation and developments in Homeland and Urban Capabilities.

Let me begin by introducing them:

- a. Dr Rohan Gunaratna is Head of the International Centre for Political Violence and Terrorism Research, at the Institute of Defence and Strategic Studies, Singapore. He will share his insights on terrorist networks and the enduring threat in Southeast Asia.
- b. Brigadier General Eyal Eizenberg, Commander 98th Division from the Israeli Defence Force will speak about the IDF's experiences in Low Intensity Conflict in urban areas.
- c. Lieutenant General Thomas Metz, Commander of the 3rd Corps and Fort Hood from the United States Army will present the lessons learnt from urban operations in Ops Iraqi Freedom, and the implications of these on future training and transformation of the US Army.
- d. Brigadier Justin Kelly, Director General of the Future Land Warfare and Commander of the Land Warfare Development Centre from the Australian Defence Force will share his thoughts on the evolution of urban operations in the light of contemporary social, economic and demographic circumstances.
- e. Mr Patrick Curlier is the Business Development Director of Optronics & Airland Systems

Division, Sagem Defence Securite. Sagem has been contracted to develop and produce soldier systems to equip the French infantry with a fully integrated system to increase the soldier's capabilities in dismounted close combat domains.

f. Dr John Parmentola is Director for Research and Laboratory Management from the US Army. The US Army is transforming into a force that will be knowledge-based and network centric. Dr Parmentola will speak on Networking Urban Warfighters.

g. And finally, Professor Lui Pao Chuen, Chief Defence Scientist from the Ministry of Defence, who is enduring in his contributions towards the transformation of the SAF from the first generation to the third, will conclude today's conference with his thoughts on the future of land warfare in the face of new technologies.

With such an interesting line-up of speakers, it leaves me now to get out of your way quickly so that we can listen to them. So let me take just a few minutes to frame the context of these transformation ideas, and to recap what the drivers are. At least from the perspective of the Singapore Army, I would like to point out just two strategic imperatives that have shaped the transformation that is in motion.

New Mission Imperatives with the New Geostrategic Reality

The first is the new geo-strategic reality. By all accounts, much has changed in the world these past 10 years. Arguably, the end of the Cold War did not bring about the anticipated peace dividend. Instead, all the simmering tensions that were held in check by the bipolar balance of superpowers boiled over as more primal instincts of ethnic and religious ideology lent themselves to conflict. We saw a number of wars breaking out in Africa, Europe and the Middle East. With rapid urbanisation in the world, it was not surprising that many of these conflicts have centred on major urban sprawls.

The internet revolution brought us from the industrial age to an information age. With this, we also ushered in an era of globalisation. The world became a smaller place as cultures, economies and societies came together, sometimes integrating, but often also clashing. Cultural and moral norms of many societies are now challenged in a global village where there is free exchange of ideas and values. A butterfly flapping its wings in Mexico can cause a typhoon in Asia, and we saw that happen with the financial contagion effect that hit many countries in the late 90s. Similarly, cartoons in Denmark have sparked deadly ripples in far corners of the world as cultures and values clash, and racial and religious harmony is eroded.

Nearly 5 years ago on Sep 11, the world faced up to the threat of global catastrophic terrorism because of the World Trade Centre attack in New York City. Terrorism is an age-old problem, but the number of international terrorist incidents has nearly tripled from 100 in 2001 to 280 in 2005 - from Riyadh to Casablanca to Istanbul to Madrid to Bali to Jakarta. Terrorism became a reality to Singaporeans with the discovery of the Jemaah Islamiyah in

Singapore.

These new geo-strategic realities across the world have surfaced new security requirements and challenges. Armies around the world are likely to have to refresh their mission statements to recognise the expanded spectrum of operations that they will need to be ready and capable for - from troubled peace through to war. Soldiers everywhere have to adapt to be effective, ready and relevant, and units and headquarters will have to reorganise, re-learn and re-energize themselves to make sure that they remain competent, resource efficient and mission effective today and into the future.

New Warfare Ideas with New Technologies

The second key imperative for change is new technologies, and the new warfare ideas that these will bring. New technologies will change the way that Armies structure, operate and fight. They will change the types of forces and units we build. They will change our work flow and how we assign assets and resources. They must necessarily also change the way we think, decide and act, and even some of the ways in which we are to lead.

The military can learn much from the commercial world in tapping the potential of information networks, precision technology and unmanned systems. Many companies today use IT networks to improve their ability to manage real-time information. They can track the entire supply chain from production to delivery. They can respond dynamically to situations and needs, from defects in the production line to user complaints. Similarly, an army can exploit the power and potential of information and networks. Networks allow us to change the way we think about assets - no longer need we think that we must always physically own something in order to guarantee support. As long as we can reach the service provider virtually through the network - whether it is for fire, information, or transport and supplies - we can have responsive support.

Another area where things will change is in the use of precision weapons and munitions, which are particularly relevant in homeland and urban operations to mitigate against the risk of collateral damage. It has been illustrated that during World War II, it took thousands of aircraft carrying thousands more bombs to take out a target the size of a swimming pool. And if you happen to be within a kilometre or so of the target, you would have more than a fair chance of getting killed. In the Korean War, this came down to 500 aircraft and 1000 bombs, but you still had to be about 300 metres away. By the time of the Vietnam War in the 60s, 170 bombs from 40 aircraft could do the job and you would have been pretty safe 100 metres from the target. In the Gulf War recently, the job could be done by 1 bomb from 1 aircraft with double-digit accuracy. And soon, if not already, we should see this being accomplished with single-digit accuracy by one warhead without even needing a piloted aircraft. Which leads to developments in unmanned systems. This third area of technology advancement is already hugely successful in applications for bomb disposal and chemical defence operations - especially in urban areas and against terrorist threats.

A New Army - Towards a Third Generation

We can expect that Armies around the world will respond in their own appropriate way to these strategic drivers, in tandem with prevailing national considerations for security, resources and demographics. In Singapore, we have chosen to transform our Army fundamentally to what we have termed the 3G Army - in hardware, software and also heartware. Where we had focused on the conventional roles of the military, we now have to establish a full spectrum of capabilities. Where our structures and capabilities had been hierarchical and functional, and sometimes stove-piped, technology now allows us to be more networked and matrix-ed in organisation, process and behaviour. Where we had invested more heavily in mobility and firepower, we will now be giving greater attention to developing more networked, versatile and survivable solutions, that are enabled by Integrated Knowledge and C2 systems - with the view to achieving greater precision in effects. With the complex environment that accompanies troubled peace scenarios and the urban operating space, our soldiers and leaders will need to be trained to be more flexible, innovative and to apply hard as well as soft power depending on the operating environment.

Let me just mention a few specific areas as an indication of what we are considering. In Homeland Defence, the Army has responded with the set up of a dedicated Island Defence headquarters that has links with all the other homeland defence agencies. They keep a high readiness watch against terrorist threats to Singapore. An Infantry Battalion has been designated as a homeland security battalion to specialise in the protection of key installations. Elements of the Medical Response Force, as well as Chemical, Biological, Radiological and Explosive entities are hard-wired under command to be more responsive to medical emergencies and chemical and explosives situations. And the Army Special Forces Command maintains its standby as a reaction force to neutralise any possible threats.

As for Urban Operations, we have also designated a battalion for urban warfare experimentation. An Advanced Combat Man System is being developed for operational testing and evaluation. This urban-capable battalion will be equipped with an integrated network of sensors with mini-UAVs and robotics to enhance intelligence collection and situation awareness. And more effective and precise weapon systems and platforms are being evaluated as part of a combined arms and integrated capability.

Conclusion

Homeland security and urban operations are challenges for armies in today's threat environment, and what we can envisage into the future. New systems and technologies will be key to the development of fresh operational concepts and techniques in this new paradigm. But ultimately, we know that the soldier remains central to success in any battlefield. To transform successfully will require the careful grooming of bold and innovative leaders who dare to experiment and try new ideas, and yet at the same time, have a robust foundation

anchored on a strong sense of mission, values and emphasis on the soldiers whom they lead.

I trust that this inaugural Land Defence Asia Conference will be an opportunity for all of us to share insights and knowledge on all of these issues. Let me wish all participants an enriching and meaningful conference.

Thank you.

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