## Editorial

It has been an unforgettable period for Singapore in the last 3 months – we celebrated SAF Day on 1<sup>st</sup> July 2016 and rejoiced at our nation's 51<sup>st</sup> birthday on 9<sup>th</sup> August 2016, in a new National Stadium, no less! We also warmly cheered Joseph Schooling's historic win of Singapore's first ever Olympic Gold medal and for establishing the first Olympic Record by a Singaporean. Sadly, we also mourn the demise of our much loved President, Mr S. R. Nathan who passed away peacefully on 22<sup>nd</sup> August 2016. As Mr Peter Ong, Head of Civil Service commented, "As we mourn the loss of Mr Nathan, let us reflect on his contributions to Singapore and his unwavering dedication and tenacity in serving our country. We too can learn from him, to serve with compassion and from our heart, and always do our best to ensure Singapore's future success."<sup>1</sup>

In the current complex, challenging security environment, Pointer is featuring several essays which discuss how the Singapore Armed Forces (SAF) can better deal with changes and challenges in the security environment ahead. However, we should remember that we need to support the SAF in its mission to defend our home and country. Dr Ng Eng Hen, Minister for Defence said in his SAF Day Message, "But, a strong SAF is not built on hopes and aspirations alone... I ask all Singaporeans to support the SAF, with their hearts, encouragement and solidarity. What we inherited from our founding generation - our home, our Singapore - is precious and our way of life worth defending together."<sup>2</sup> In this issue, we present 2 essays on information warfare and one essay each on maritime security and the utility of air power for small states, respectively. We also include an essay on full spectrum operations and an analysis of the future of the SAF, in the midst of the transforming strategic, geopolitical and domestic environment.

The essay, 'To What Extent can Singapore's Maritime Security Outlook be considered as Exceptional within Southeast Asia?' is written by LTC Daniel Koh Zhi Guo. In the first part of his essay, LTC Koh discusses why Singapore's Maritime Security (MARSEC) is exceptional in the Southeast Asian region. He defines and explains what MARSEC is exactly and how it has conceptually 'widened' and 'deepened' alongside developments in Strategic Studies. He then tabulates the key MARSEC agencies of all eleven Southeast Asian states in a 'MARSEC Agencies Matrix', and examines countries that have established MARSEC institutions or agencies for the express purpose of collectively and comprehensively conducting MARSEC operations. Finally, he examines Singapore's development of the Maritime Security Task Force (MSTF), National Maritime Security System (NMSS) and Information Fusion Centre (IFC) and juxtaposes Singapore's MARSEC outlook with the fore-mentioned countries examined.

In the essay, 'Is Full Spectrum Operations a Viable Strategic Posture for the SAF?' MAJ Lee Hsiang Wei affirms that the ability to carry out full spectrum operations means that the SAF has to remain well trained in conventional war fighting, coalition operations as well as Operations Other Than War (OOTW). He points out that Singapore's diplomatic relations with other countries will be very significant for her defence. He highlights how being full spectrum capable would deter opposing forces from attacking Singapore. His essay takes into account the mission statement of the Ministry of Defence (MINDEF) and the SAF, "to enhance Singapore's peace and security through deterrence and diplomacy, and should these fail, to secure a swift and decisive victory over the aggressor." MAJ Lee concludes that for MINDEF and the SAF to achieve its mission, it is necessary for the SAF to maintain the strategic posture of full spectrum operations. However, he is aware that the ability for the SAF to maintain full spectrum operations in the future will depend on the resources available to MINDEF. In the near future, the budget allocated to MINDEF will inevitably face increasing pressures from social development sectors. In the long run, MINDEF and the SAF will need to continue to build on public trust and to be prudent in the spending of the tax dollar.

The essay, 'Cyber Attacks and the Roles the Military Can play to Support the National Cyber Security Efforts' by ME5 Alan Ho Wei Seng discusses the impact of cyber warfare to a country. He highlights that while the advent of low cost computing devices and fast access to the Internet has brought forth great convenience to everyday life, there are also many cyber threats lurking in cyberspace, waiting to exploit system or network vulnerabilities so as to compromise their integrity, availability and confidentiality. ME5 Ho stresses that on a national level, cyber attacks can exploit the vulnerabilities of critical infrastructures such as the energy, transportation and communication sectors and seriously undermine military mission success, since the infrastructures are critical in supporting the conduct of military operations. He therefore feels that there is vested interest for the military to partner with other defence agencies, private sectors and possibly international players to enable a 'whole-of-nation' effort to develop comprehensive cyber security measures in order to mitigate the impact of cyber attacks. In his opinion, this is essential as cyberspace may eventually be commonly accepted as a military domain of conflict.

The essay, 'The Future of the Singapore Armed Forces Amidst the Transforming, Strategic, Geopolitical and Domestic Environment' is written by ME5 Gabriel Lim Guang Nian. According to ME5 Lim, the strategic and political environment has transformed since the start of this century. The attacks on the United States on 9/11 have led to prolonged 'war against terror' campaigns in Afghanistan and Iraq that had international repercussions. Within the Asia-Pacific region, heightening geopolitical rivalries between great and emerging powers have resulted in regional tensions. The role of the military in non-traditional security issues such as peacekeeping, pandemics and natural disasters has become a significant area of interest for international organisations such as the United Nations (UN), states and militaries. Domestically, there have been greater diversity and expression of opinions on security, as well as the means to achieve it. The developments over the past 15 years have provided a glimpse into the challenges the SAF can face in the future. In this essay, ME5 Lim seeks to identify the future challenges facing the SAF and the means by which they may be addressed.

CPT Jeffrey Ng Zhaohong's essay, 'Information Warfare – The Challenges and Opportunities for Militaries in the Information Age' argues that owing to the globalisation of information technology, conflicts today will not only see an increase in the use of information in warfare as

an operational and strategic imperative, but also in the use of information as warfare to provide non-kinetic capabilities for achieving strategic outcomes. CPT Ng then briefly examines the implications for modern militaries and concludes that the information domain will bring gamechanging strategic value to militaries that can master both information in warfare and information as warfare.

Our View Point essay entitled, 'Espousing the Utility of Contemporary Air Power in the Strategic Domain for Small States' is written by LTC Victor Chen Kanghao. In this essay, LTC Chen explores how air power, defined as the ability to project military power or influence through the medium of the air to achieve strategic, operational or tactical objectives, may be utilised by the armed forces of small states like Singapore in the modern context. Firstly, using the example of Israel, he challenges critics of the early proponents of strategic bombing such as Douhet, arguing that traditional bombardment still has a decisive effect on the outcome of war, if used effectively and with precision. He then examines other strategic applications of air power for small states, namely in intelligencegathering, psychological operations and logistics. Lastly, apart from displaying 'hard power', he contends that a strong air force may help small states accumulate 'soft power' through developing close relationships with other armed forces and engaging the international community through Humanitarian Assistance and Disaster Relief (HADR) operations.

POINTER would like to bid farewell to four key members of the POINTER Editorial Board. We wish to thank COL Lim Siong Tiong, ME7 Shue Pei Soon, LTC Huang Miaw Yee and CWO Tang Peck Hoon for their full support. POINTER has benefitted from their insightful observations on a wide variety of military subjects. POINTER would also like to extend its warmest welcome to COL Victor Huang, SLTC Goh Tiong Cheng and CWO Ng Siak Ping as they join the POINTER Editorial Board.

## The POINTER Editorial Team

## **ENDNOTES**

- 1. http:intranet.defence.gov.sg/miapps/AnnouncementMgr/printArticle.jsp?aid=0A63176
- 2. http:intranet.defence.gov.sg/miapps/AnnouncementMgr/printArticle.jsp?aid=0A62555