editorial

## **Editorial**

In this first issue of *POINTER* for 2014, we are pleased to feature four essays from the Republic of Singapore Air Force (RSAF) with the theme "Sustaining the Third Generation SAF for Mission Success." This theme highlights the importance of sustainability as the RSAF forges ahead in the second spiral of its Third Generation RSAF transformation journey. This collection of essays explores how the RSAF must adapt in the new environment and covers issues related to fighter aircraft, Ground-Based Air Defence (GBAD), logistics and Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) remain key to enabling the RSAF to soar to ever greater heights of mission success.

"The Fighter Aircraft and the Future of Airpower: Reflections on the South-east Asian Landscape" is by MAJ Mark Lim, MAJ Ronald Tong and CPT John Samuel. In this article, the authors highlight that the global trend of replacing fighter aircraft with alternate technologies and concepts such as Unmanned Aerial Vehicles (UAVs) and groundlaunched precision strike capabilities will be an unrelenting trend in military aviation development. Nevertheless, they contend that the maneuverability, speed and payload of manned fighter aircraft will still remain unmatched by most UAVs for a while yet. As such, they argue for the cardinal need to retain manned fighter aircraft while harnessing integrated air operations between fighter aircraft, other manned aircraft, UAVs, ground launcher and even satellite-based sensors. The authors conclude that while the UAVs and alternative ground-launched strike options will continue to be developed, especially for dangerous missions and close range strikes, they cannot effectively replace manned fighter aircraft in all its mission roles. In the long run, what we will see is closer integrated air operations.

LTC Ong Tiong Boon, MAJ Joseph Peh and CPT Daxon Yap wrote "The Future of Singapore's Ground-Based Air Defence." The article surveys the strategic relevance of air defence capabilities, examines the potential future threat landscape and capability gaps, before identifying the challenges in developing a GBAD system for Singapore. The authors point out that with an understanding Singapore's strategic situation comes a realisation that air superiority and the presence of a robust air defence are vital for a nation's survival in war. These imperatives will drive our investments in air defence capabilities. To deal with the strategic need for a robust air defence system amidst an expanded spectrum of potential air threats, the RSAF must undergo a paradigm shift in our GBAD operations. According to the authors, there are clear trends in a widening spectrum of threats and a pressing need to build a sustainable force across the peace-to-war continuum. This will require the RSAF to overcome a number of challenges unique to our geography and operational environment, in order to continue safeguarding the peace and security of Singapore.

The third article, "Engineering and Logistics: Powering the Third Generation RSAF" by SLTC Low Chung Guan, MAJ Davis Lee, ME5 Neo Junjie and CPT Lynn Lee stresses that to achieve mission success, the RSAF must not only possess a sharp front line fighting force but also a capable backend logistics support. The logistics support system thus needs to be sufficiently resilient and able to withstand surges in operational demand at a single point. This essay examines the role of logistics in military capability and airpower, the demands and challenges of a strong logistics system for the Third Generation RSAF, and the RSAF's approach in overcoming the challenges to sustaining its Third Generation capability.

MAJ Lim Yu Sing, MAJ Chia Zhiming and ME5 Lee Hwee Kiat in their article on "Expanding The Discourse of C4ISR" seek to explore new challenges and concepts within C4ISR development and highlight noteworthy considerations for the RSAF, as the SAF focuses on C4ISR development and integration in the next spiral of transformation. Specifically, the exploitation of C4ISR would enable seamless information dissemination and ensure high information quality production to reduce the friction, if not lift the fog in the Information Operations (IO) domain.

Besides the RSAF articles, we are pleased to present our three top prize-winning essays from the Chief of Defence Force Essay Competition 2012/2013. Our top prize winning essay by CPT Alvin Chan is entitled "Managing Strategic and Tactical Uncertainty: Mission Command in the Third Generation Army." This essay examines the role of mission command in managing strategic and tactical uncertainty as the Army transforms into a Third Generation force. The essay revisits the origins of the philosophy and assesses its relevance in the current strategic landscape. It proposes some key initiatives for proliferation of the mission command philosophy in the Third Generation Army before concluding that the adoption of mission command, though challenging, enables the Army to better transform into an integrated and networked force that remains relevant in increasingly an unpredictable environment.

LTC Aaron Beng Yao Cheng's essay on "Submarine Procurement in Southeast Asia: Potential For Conflict and Prospects for Cooperation" is the second prize winner. According to LTC Beng, the acquisition of submarines by the various Southeast Asian countries

represents the proliferation of a new undersea capability throughout the region. The growing operationalization of submarines by the regional navies will no doubt raise questions relating to trust and transparency. Notwithstanding this, LTC Beng adds that significant prospects for cooperation among the submarine operating countries also exist, most tangibly in the areas of water space management, as well as submarine emergency and rescue. He concludes that the establishment of these collaborations would assist in lowering insecurities and anxieties, and help to diminish the potential for further escalation of any arms dynamic.

The third prize winner is MAJ Benjamin Kwan Shee Kong, who wrote "Developing A Strategic-Level Commander: Requisite Skills and Attributes." In his article, MAJ Kwan emphasises that a strategic commander helms the organisation by setting the vision, allocating resources to essential areas, and collaborating with the political side and other stakeholders to achieve national goals. His essay first frames the main challenges of the Contemporary Operating Environment (COE) before highlighting the distinguishing aspects of a strategic-level commander's role and identifying the required personal skills. MAJ Kwan concludes that the success of a military organisation depends on the strategic commander's ability to tackle the challenges that arise while ensuring that the military remains relevant as an instrument of political will to shape a secure future.

The POINTER Editorial Team