E D I T O R I A L

Chan Keng Luck
Editor, DSTA Horizons
Director (DSTA College)

With much excitement and anticipation last April, we launched the inaugural issue of DSTA Horizons. I am pleased to report that the journal was well-received, judging by the compliments and encouraging feedback from authors and readers alike. Credit goes to the authors and all who had contributed in one way or another to the production of DSTA Horizons.

I am happy to share that the articles in this second issue of DSTA Horizons are just as diverse as those in the first - a testimony to the wide spectrum of capabilities within DSTA. Of these, two articles feature innovations with applications beyond the military sphere. The first article, Securing of Marine Platforms in Rough Seas, introduces a novel design concept for rapidly connecting large floating platforms in rough seas. The author Han Lei has been granted a licence for the design patent and has since set up a company to further exploit the commercial potential of his innovations.

The second article, GeBIZ – From Vision to Reality, outlines the journey of the Government Electronic Business (GeBIZ), from a simple electronic catalogue purchasing system to a full-fledged central procurement portal for the public sector. GeBIZ, jointly developed by DSTA, the Ministry of Finance and the Infocomm Development Authority of Singapore, has been cited as an excellent example of e-Government. It has also helped the Singapore Government clinch the Explorer Award at the E-Gov 2002 Show for implementing the Public Service Infrastructure, a government–wide platform for delivering government e-services to citizens and businesses.

Seven other insightful articles make up this issue of DSTA Horizons. In the article, Command Post Anywhere – Exploiting the Use of

TeamSight for Ops Concepts, the authors discuss the concept of a dispersed command post footprint, which also achieves pervasive command presence. Another article, Systems Architecting for 3G SAF Transformation, presents a working definition of systems architecture, as well as a seven-step methodology and the framework currently adopted by DSTA's Directorate of Masterplanning and Systems Architecting to build an effective system-of-systems necessary for the realisation of the Third Generation Singapore Armed Forces (3G SAF).

Mother Nature takes centrestage in another article, Electronic Combat in Nature. The article examines the electronic weapons of bats and moths, in search of clues that may lead us to the next generation of electronic warfare weapons and how such knowledge can help to address some of the military problems in radar and electronic warfare.

Focus turns back to the SAF in the article, Evolution of Modelling and Simulation in the Singapore Armed Forces. It traces the evolution and changing landscape of Modelling and Simulation (M&S), concluding with a forecast of the nature of M&S systems in the future. Also of particular relevance to the 3G SAF is the article, Mobile Ad Hoc Networking, which gives an overview of Mobile Ad Hoc Network technology, its key characteristics, and how it can benefit the 3G SAF.

Recent incidents have highlighted the reality of asymmetric maritime terrorism and the vulnerabilities of ports, waterways and shipping routes. Given Singapore's dependence on trade and our status as one of the world's busiest ports, securing our sea lines of communications is especially critical. The article, Multi-Agent System for Tracking the Intent of Surface Contacts in Ports and Waterways, will therefore be particularly relevant.

The last article, Quantitative Risk-based System Safety Assessment for Ammunition Process Facility, outlines the methodology undertaken in conducting situational safety assessment based on location, infrastructure and other factors. The findings from this assessment are used to focus facility system safety efforts on achieving a comprehensive risk assessment and evaluation.

As we distribute this issue of DSTA Horizons, we are already preparing for the third. We welcome contributions from the defence technology community and look forward to the realisation of a vibrant culture of professional writing and sharing in the community.