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THE SAF'S NEXT CHALLENGE

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In the aftermath of the 1991 Gulf War, observers of military and strategic affairs came to believe that the world was witnessing a *Revolution in Military Affairs*. Emerging information and communications technologies integrated into military operations, and combined with doctrinal and organizational changes, appeared to produce a fundamental transformation in the way war was fought.

In retrospect, perhaps those harbingers of military change were somewhat premature. Since then, however, the world has seen the use of this new military power – with its emphasis on pervasive surveillance and long-range precision-guided weaponry – in Bosnia and Kosovo, culminating with the conduct of Operation Enduring Freedom in Afghanistan in 2001, and the US-led Operation Iraqi Freedom in 2003.

This new era of warfare led by advances in information and communications technologies, has highlighted the importance of quality over quantity. Such quality lay not just in technological advances, but also in the availability of a well-trained force. If the world was on the cusp of a revolution in military affairs in the 1991 Gulf War, it seems almost certain that we are now in the midst of this revolution.

The advances in war fighting over the last decade have led to several schools of thought as to what the *Revolution in Military Affairs* really means materially. One school of thought describes the RMA as the implementation of a *system of systems*, where the future of warfare will be dominated less by individual platforms and munitions than by real-time data processing and networking that tie the fighting forces together synergistically.

On the other hand, the *vulnerability* school posits that adversaries may benefit at least as much as the US because these technologies are dual-use and are available commercially. Other schools of thought like the *dominant battlespace knowledge* school emphasize the radical improvements in sensor technology that will render the battlefield transparent, and the *multidimensional revolution* school highlights the importance of networking highly mobile joint and special operations forces.

RMA attraction for Singapore

A combination of factors makes the RMA thesis an attractive proposition for Singapore. Declining birth rates have resulted in reduced numbers of annual enlistments into the Singapore Armed Forces (SAF), worsening the existing structural problem of manpower shortages. On the other hand, its well-educated workforce, knowledge-based economy, and a sophisticated defense-industrial base gives Singapore an advantageous position from which to benefit from the use of technology as a force-multiplier.

Furthermore, the SAF has a mature conventional defence capability, which is the necessary precondition for adopting RMA theories and technologies into its existing force structure. It also makes this idea of strategic transformation embedded in the RMA thesis simply the logical next step for the SAF. As the Minister for Defence Teo Chee Hean noted at the Command and Staff College graduation ceremony on 8 September, the SAF is now being transformed into a third generation, or 3G, fighting force. The SAF will need to 'contextualise new ideas in our unique operational context'. For the SAF in the years ahead, the critical issue will be ensuring a capacity to adapt, innovate and change.

However, implementing and incorporating RMA approaches and technologies in the SAF will be a difficult and potentially expensive enterprise. One of the weaknesses of the existing RMA literature is that it describes the *revolution* from the perspective of the United States: the discussion is not as advanced in terms of what this *revolution* means for small and medium powers. Even the United States is now learning in Iraq that winning the war using advanced technology may be the easier part. The greater challenge the US is facing is ensuring the peace, especially as its continued occupation of Iraq results in the rise of nationalist resistance.

For a small state like Singapore, it is critical that capabilities are developed in three major areas: firstly, to understand the military transformation taking place in China, Japan, India, Australia and states in Southeast Asia; secondly, to understand the various operational issues involved in transformation like the impact of advances in biotechnology on man and war, and the impact of modern technologies on operations other than war; and thirdly, to understand the limits to military transformation by studying the integration of technologies into military organizations, the impact of asymmetric warfare as technologically inferior forces utilize alternative means of warfare including guerilla tactics and acts of terrorism and how officer attitudes towards the change in the conduct of war affect transformation.

The challenge for the SAF in transforming itself to a 3G force is therefore one of equipping itself to wage a hi-tech over-the-horizon war while retaining the capabilities and doctrines of a compact fighting force that can repulse conventional or terrorist attacks on its homeland.

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