

USAWC STRATEGY RESEARCH PROJECT

**THE SINGAPORE ARMY MOVING DECISIVELY
BEYOND THE CONVENTIONAL**

by

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ABSTRACT

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The events of September 11 sent shockwaves across the world. It was not just an attack on the United States, the entire free world was under siege as international values of freedom, democracy and free enterprise were assaulted. September 11 signified the emergence of a lethal brand of terrorism willing to sacrifice thousands of innocent civilians for their cause. It also demonstrated the vulnerability of a superpower like the United States in the face of such threats.

The effects of September 11, magnified by the Bali bombing in October 02, were even more profound for a small country like Singapore. The Singapore Government is therefore determined to skillfully navigate these new realities to ensure its continued security and economic well-being. To support the government, the Singapore Army has stepped forward to embrace an expanded role and a wider sphere of operations. Besides training for its conventional wartime role, the Singapore Army also participates in a range of security operations during peacetime. To this end, the Singapore Army has taken a leading role in two major operations; island defense and peace operations.

This paper discusses the changed global security environment and its impact on Singapore. It examines how the Singapore Army supports its government to ensure Singapore's continued stability and to enhance regional and world peace.

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It is not possible for us to deal with these new threats with the same type of structure and capabilities we had in the past. It does not make sense for us to pretend that these threats are not there. They are there, and we should not let these threats disrupt our way of life.

--Dr Tony Tan Keng Yam
Deputy Prime Minister and Minister for Defense, Singapore
6 Jan 2002¹

INTRODUCTION

The horrific events of September 11 sent shockwaves across the world. It was not just an attack on the World Trade Center in New York City or the Pentagon in Washington. The entire free world was under siege as international values of freedom, democracy and free enterprise were assaulted, costing the lives of 3000 people from more than 80 nations.² September 11 signified the emergence of a lethal brand of terrorism willing to sacrifice thousands of innocent civilians for their cause. It also demonstrated the vulnerability of a superpower like the United States in the face of such threats. All these considerations led many nations to acknowledge their own vulnerability and rethink their security provisions.

The effects of September 11, magnified by the Bali bombing in October 02, were even more profound for a small country like Singapore. Singapore is a nation without a hinterland. It is an economy with no physical resources except for the ingenuity of its people. Singapore's survival and security are inextricably linked to regional and international stability and cooperation. The Singapore Government is therefore determined to skillfully navigate these new realities to ensure its continued security and economic well-being. The Singapore Army supports the government by embracing an expanded role, which encompasses a wider spectrum of operations ranging from peacetime to war. Besides training for its conventional wartime role, the Singapore Army is also participating in a range of security operations that will come under its ambit in peacetime. To this end, the Singapore Army has taken a leading role in two major operations; island defense and peace operations, to reinforce Singapore's continued stability in peacetime. For the purpose of this project, these two operations will be collectively termed as peacetime operations.

CHANGED GLOBAL SECURITY ENVIRONMENT

GREATER CONNECTIVITY AND INTERDEPENDENCE.

Globalization, coupled with advancement in technology, has resulted in a more interconnected and interdependent global environment. The global penetration of information and communications technology (ICT) has been most impressive and incisive in the past few decades.³ We see the expansion of national and global communications networks and improved information infrastructures. New tools for data handling and communications were found to enhance information sharing and innovative creation and management of knowledge. Advancement in various forms of transportation, particularly air transportation, has made traveling easier and faster. These dramatic advances have enhanced the real and virtual mobility of people, things and ideas. As a result, the world has become smaller and the social, political and economic interconnectedness of the world has increased manifold.⁴

After World War II, global economic policy institutions were established to regulate investment, finance and trade across the world. Such regulations were to facilitate free trade and market, which would then accelerate the processes and forces of democratization countries in the world.⁵ The tighter connectivity across the globe has enhanced these processes and encouraged more open economies. These in turn have resulted in stronger global economic cooperation and greater interdependence among nations.

With economic integration and shared economic interests, there are more reasons for nations to collaborate to promote economic prosperity. We see an increased interdependence in myriad areas from finance to scientific research, to facilitating economic growth and spreading prosperity. As a result, events happening in one part of the globe, could impact the rest of the world. For example, although the economic loss of September 11 pales in comparison to the human catastrophe, the fact remains that a single day's attack exacted a financial toll of nearly US\$1 trillion and sent the world spiraling into a global recession.⁶

Globalization has resulted in the increase in transnational crimes such as drug trafficking and money laundering. Threats to security also take on a more global nature. For example threats to cyber security have a world-wide feature. Significant international cooperation is required to crush these transnational crimes and security threats and prevent their resurgence.

With greater mobility of people and things, attacks on a nation no longer need to take place within the nation's soil. Most nations have critical assets in different parts of the world, which can become potential targets for terrorists and radical elements. For these reasons, nations cannot handle their national security alone. We see a new context of international

security rather than purely national security. Nations are now more dependent on each other economically and in the area of security. Greater cooperation among nations is therefore needed to promote peace, stability and economic prosperity.

MORE DANGEROUS AND UNPREDICTABLE WORLD.

Ideally, the common security and economic interests should see a diminished threat scenario among nation states and greater participation from the public in economic and political processes. Unfortunately, there is a darker side to globalization and advancement in technology resulting in a more dangerous and unpredictable world.⁷ Global economic openness and the reach of information and communications technology have given terrorists and other non-state actors greater access to foreign capital to support their activities. This has allowed these players to operate at a transnational level and at a highly synchronized manner. Large scale transfer of advanced and latest technology has also made the availability of more sophisticated and lethal weapon systems easier and more affordable, especially to non-state actors, and provided terrorists with myriad capabilities to launch attacks on any nation. Greater mobility of people all over the world, ease of communications and better sharing of information have facilitated the emergence of new and better coordinated transnational threats. It has also given the disenfranchised and disenchanted a voice and a global platform as evidenced by radical Muslims from other nations joining Mujahideen in Afghanistan and Iraq. The effects of any attack are also felt worldwide because of the integration and close links among the nations. The advancement in technology, especially with ICT, has accelerated the pace of change, sometimes at an uncontrollable rate. We are beginning to see frequent shifts of power relationships and the advent of ad hoc and opportunistic security arrangements.

Another side effect of ICT is the emergence of new form of warfare: cyber war. Cyber attacks on information and communications structure can be carried out more easily today to undermine the economies of many nations as telecommunications, electrical power, transportation, banking and finance, emergency services system are disrupted.

The emergence of new threats, new forms of warfare, new non-state actors as well as the fast pace of change as a result of greater economic openness and advancement in technology have ushered us into a more dangerous and unpredictable age in a world that is far from secure. Now more than ever, nation states need to redefine their security to minimize the consequences of these threats and safeguard peace and security within their borders.

SINGAPORE IN THE CHANGED GLOBAL ENVIRONMENT

Since its independence in 1965, Singapore has never taken its sovereign status and security for granted. Its very birth pangs were a lesson in the vulnerabilities arising from its geopolitical situation and from its need to be constantly engaged with the rest of the world.

Singapore is less than 700 square kilometers and it is wedged between the sea and airspace of two larger neighbors, Malaysia and Indonesia. Singapore has no hinterland and it lacks natural resources. Therefore it relies heavily on imports for the basic essentials of life like food, fuel and even water. For example, Singapore currently imports about half of its water from Malaysia and relies on imported technology to purify additional water required.⁸ The stability of Singapore's neighbors and the region as a whole is therefore of great concern to Singapore as its survival is very much dependent on a stable regional environment, particularly in Indonesia. This was reflected clearly by Richard Hu, Singapore ex-Finance Minister in February 2000 when he stated, "The biggest uncertainty in Singapore's immediate neighborhood is Indonesia, where the social and political tensions threaten to undermine financial and economic reforms.... An unsettled Indonesia will color the entire Association of Southeast Asian Nations (ASEAN) region, including Singapore."⁹

Given the circumstances of its geography, Singapore, its government, private sector and people therefore have embraced globalization and exploited advancements in technology to develop the nation and its economy. Singapore embraces a free market and open economy to achieve greater progress and prosperity. It exploits new and emerging technology to find new niche areas and establish a competitive edge to stay ahead. Today, its rapid development and its investment in technology have led to Singapore's success as a modern financial center and a communications and transportation hub. Singapore's open economy and its strong engagement in business, technology and communications with the world have propelled it to become a global city where the effects of events happening in the world, especially with key trading and security partners like the United States, are magnified in Singapore. For example, any peaks and troughs experienced by the Dow Jones in Wall Street reverberate in Singapore, in a matter of hours. Needless to say, September 11 and Bali bombing of October 2002 slowed down the recovery of Singapore's economy as they adversely affected tourism and travel trade in Singapore and the region.

TERRORIST THREATS.

The changed global security landscape has posed a greater challenge to the survival of small city-state like Singapore. As terrorist groups become more transnational, they have the

capabilities to cause major chaos in densely populated cities like Singapore. The arrest of 31 suspected terrorists plotting attacks on US and US-linked installations in Singapore since December 2001 showed that Singapore is also not immune to the threat of terrorism. These suspects, all of whom are ethnic Malays, are members of Jemaah Islamiyah (JI). JI is a Muslim religious group that has close links with the Al-Qaeda, who was responsible for the September 11 attacks. The ethnic composition of Singapore forms part of its rich cultural fabric. However events like this force the Singapore Government to be sensitive to any possibility of a sharp Muslim/non-Muslim fault line emerging within the multi-ethnic and multi-religious society.¹⁰ Its pre-dominantly Chinese population (about 76% of its population is ethnic Chinese) amidst a sea of Malays in the neighboring countries, also means that Singapore has to be sensitive to these religious, racial, language and cultural differences and their accompanying undercurrents. These differences must not become a source of violence and a destabilizing force in the region. The arrest of JI operatives in Singapore has showed that terrorist threats are indeed real. More worrying is the “enemy” within as the lines between “enemy” and innocent civilians are blurred. Singapore therefore needs to rethink its security and create a new security landscape for the island.

ADOPTING A TOTAL DEFENSE CONCEPT.

As a nation, Singapore has to protect its sovereignty, territorial integrity and vital national interests. It has achieved this by adopting the Total Defense concept.¹¹ The Total Defense concept mobilizes the entire nation to contribute to the security and stability of Singapore. Singapore's survival and continued economic well-being are also closely linked to a stable regional and global environment. Singapore sees stability as a prerequisite for investment, innovation, and other ingredients of a vibrant economy and society.¹² Singapore has enjoyed years of peace and prosperity as it has benefited much from the establishment and enforcement of an international system like the United Nations (UN), which is based on justice, peace and international law. Today, the UN continues to play a vital role in the maintenance of international peace and security by helping to diffuse crises, resolve conflicts and provide humanitarian assistance. As Singapore becomes more developed, it intends to play a more significant role as a responsible member to support the UN and other like-minded nations to preserve peace and enhance regional and global stability.

EXPANDED ROLE FOR THE SINGAPORE ARMY

In response to the national strategy to enhance peace and stability, the Singapore Army has expanded its conventional war-fighting role to include other operations in peacetime. The

new mission for the Singapore Army is now to deter aggression, and should deterrence fail, to secure a swift and decisive victory. In peacetime, the Singapore Army is to be ready and capable of conducting a spectrum of operations to protect Singapore's national interests and the well being of its citizens.¹³

The Singapore Army adopts the twin pillars of diplomacy and deterrence to achieve its mission. It spends a lot of efforts in defense diplomacy to build mutual confidence and enhance cooperation at bilateral and multi-lateral levels. The main objective is to develop extensive ties and enhance mutual understanding with regional and global partners.¹⁴ Through ongoing efforts to strengthen its defense capabilities, the Singapore Army continues to be a credible deterrence against any aggression and maintains the capability to decisively win the nation's wars. It maintains a sufficiently large standing force, comprising well-trained and motivated people and supported by advanced weapon and C3I systems, as a credible and ready force for its conventional war-fighting role.

While continuing with sustained investments in its conventional capabilities for war, the Singapore Army now participates in a broad range of operations to maintain peace and stability. To this end, the Singapore Army, as part of the Singapore Armed Forces, has taken a leading role in two key operations; that of island defense and peace operations.

ISLAND DEFENSE AS PART OF ISLAND SECURITY.

The island defense of Singapore must be taken in the larger context of security of Singapore. The new threats the nation confronts come from non-state actors and are transnational. Therefore it is clear that isolated and self-contained efforts by Singapore alone are insufficient to deal with such threats. Singapore has always believed in the need for multilateral dialogue to enhance security of the region. This priority was clearly articulated by its ex-Foreign Minister Wong Kan Seng in March 1991 where he explained that, "Over the long term, the security of South East Asia and Asia Pacific can be best served by having an engagement of all powers large or small, of necessity, in overlapping and multiple security and political frameworks."¹⁵ Today, the security of Singapore has taken a heightened regional and global dimension. We see the need for a network of nations to work closely together to synchronize security measures to eliminate these transnational threats. On 17 May 2002, the Association of South East-Asian Nations (ASEAN) agreed that closer cooperation is needed to counter transnational crime such as terrorism, arms smuggling, piracy, cyber crime, money-laundering and the trafficking of women and children. The extension of ASEAN's mandate from traditional economic cooperation and cultural understanding to include security cooperation is a step in the

right direction. The group also signed an important agreement with the United States to cooperate in their combat against international terrorism.¹⁶ The key areas of security-related cooperation are in surveillance and monitoring of potential threats, sharing of intelligence and in intercepting potential threats before they are able to carry out any attack. Similarly, Singapore remains committed to the ASEAN Regional Forum agenda to enhance regional security through confidence-building and preventive diplomacy among ASEAN countries, major regional powers and the United States. Singapore has implemented anti-terrorists measures adopted by the UN Security Council such as the freezing of terrorist funds and cooperation in the prosecution and restriction of movement of terrorists.

In addition to regional and international efforts, Singapore has taken measures internally to address non-conventional security threats. It is impossible to reduce the risk level to zero as the nature of the threats and its perpetrators continue to evolve. However, the security strategy for the island of Singapore should be sufficiently comprehensive to counter and reduce the impact of these threats.

Singapore has taken the first step towards enhancing island security by establishing a national security structure to direct and coordinate plans for effective island security. This security structure operates at two separate levels. The highest level, comprising ministers from key security ministries such as Defense, Home Affairs and Foreign Affairs, sets policies to build up required capabilities and infrastructures to enhance island security and deal with threats aimed at disrupting the country's social and economic life. Close support is also garnered from other ministries on specific issues requiring special expertise, for example Health and Environment. At the second level, a National Security Secretariat has been established to lead in the development of strategies to further national policies and to coordinate and integrate inter-agency efforts.¹⁷ This inter-agency level is responsible for prioritizing budget and resource, clarifying roles and responsibilities and working out an accountability mechanism. The overall leadership and coordinated management provided by such a structure at national level has helped to focus efforts and minimize confusion and inefficiency especially between the home agencies and the military.

There are two major areas that should be addressed in Singapore's strategy for island security. Firstly, Singapore has to take preventive measures to intercept any attacks on Singapore before they occur. This can be achieved through synchronization of the intelligence apparatus to seek out potential threats and development of capabilities to eliminate the threats once they have been identified. Secondly, Singapore should take decisive actions to minimize the impact of any attacks through prior preparation and effective consequence management.

Singapore cannot afford to adopt a reactive strategy to island defense and wait for terrorist threats to materialize. An attack on Singapore can destabilize the country and cause an adverse effect on investors' confidence and the Singapore's economy. With its limited resources and capabilities, it will be difficult for Singapore to take on a preemptive strategy using military force, as in the case of the United States' actions in Afghanistan and Iraq. Singapore therefore adopts a preventive approach to stop any attacks on Singapore through internal measures as well as through close regional and international cooperation. The key to prevention is to have timely and accurate threat and risk assessment to cue appropriate operational responses. In this respect, the Singapore military works closely with other security-related agencies to improve the sharing of information and surveillance and to conduct joint assessment of threats and vulnerability.

In minimizing the impact of any attack, the Singapore military also works with other government ministries and the private sector to conduct detailed analysis of critical infrastructures and assess their vulnerabilities. Such studies include recommendations for measures to be taken to harden and protect these infrastructures to reduce their vulnerabilities. Another area is related to information security. The challenge here is to strengthen the protection of critical infrastructures supporting computer, command, and control and information systems while denying access to those who want to disrupt these systems. Should an attack occur in Singapore or in the region, long and short-term physical, socio-economic, and psychological effects of the attack must be minimized to restore normalcy and confidence of the nation as soon as possible.¹⁸ The key challenge here is to assess how much risk Singapore is prepared to accept by taking into consideration the likelihood and impact of different threats and the efforts required to prevent these threats.

An Island Defense Headquarters has been set-up with the Singapore Army to provide a multi-agency approach to homeland security. This Headquarters coordinates and integrates the efforts of various agencies towards the common aim of enhancing Singapore's security. The Singapore military has led the effort among security agencies to work out clear lines of responsibilities, command and control issues and related process and procedures for crises and consequence management under different scenario settings.

The Singapore Army has a wide range of resources ranging from manpower and logistics to expertise and capabilities that can augment the capabilities of civil security enforcement agencies in Singapore. It has incorporated many of its capabilities in conjunction with those of various local security organizations to establish a comprehensive defense system for Singapore Island. For example, the Army works with the police and civil defense agencies to enhance land

defense system and response procedures. The role of soldiers in defending the nation has also been expanded to include policing and protecting key and critical installations. Singapore soldiers augment the police in patrolling installations like the airport and petrol-chemical industries in Singapore.

At the same time, the Singapore Army supports civil authorities to reinforce and fill critical requirements beyond the immediate capabilities of these authorities. The military will continue such support until the civil authorities have developed their own capabilities. Other areas of support include helping to coordinate, equip and train personnel in other organizations. Training and exercises are being conducted to test out the processes and procedures and enhance their interoperability at various levels. In addition, the Army has been helping other agencies to build their capabilities in different areas. For example, combat engineers from the Army are assisting the police and civil defense agency to build their capabilities in chemical and biological defense.

The Singapore Army could also assist in social and psychological defense to strengthen the national resilience and will of Singaporeans. The arrest of the JI operatives in Singapore tested race relations in the multi-racial and religious Singapore and threatened its delicate social fabric. The Singapore Government has taken additional steps to minimize social suspicion and discord by rebuilding confidence and enhancing racial harmony and integration of the populace. The aim is to persuade the populace to see themselves first as Singaporeans instead of different races and also to continue to live, work and play together regardless of race, language or religion. For now, Singaporeans need to be reassured that only a small group of Malays were involved in the JI incident while peace-loving Malays should be reassured that they are not being targeted. The key objective is to build stronger psychological and social resilience to weather the unpredictable circumstances of terrorist attacks without descending into general hysteria or social paralysis.¹⁹

Being a National Service Army, where the majority of young men in Singapore serve their obligation in nation defense, the Army is in a position to build understanding and cohesion among these young men from different races and religions. In its mission to inculcate the warrior spirit in its soldiers, the Singapore Army can enhance understanding and strengthen the bonds among these young soldiers. The Army educates these young men on the importance of having a cohesive Army and emphasizes their responsibility in the defense of the nation as citizen soldiers. These young men in turn become catalysts for greater cohesion and strong fighting spirit among other Singaporeans. When they return to their civilian life, they can set good examples as responsible and dedicated citizens to create a positive influence on their family, friends and colleagues.

ROLE IN PEACE OPERATIONS

The participation of the Singapore Army in UN-led or UN-sanctioned peace and humanitarian assistance operations has increased both in size and intensity over the years. Singapore is a relative newcomer to UN peacekeeping. Its participation started in 1989 when a Singaporean contingent, comprising military, police and civil servants, was sent to help supervise the election in Namibia under the UN Transition Assistance Group. Since then, the Singapore Army has contributed to numerous UN peacekeeping missions and other roles. Singapore soldiers have been part of UN peacekeeping effort in various capacities: as military observers in Angola and on the Iraq-Kuwait border; as election supervisors in Cambodia and South Africa; as medical support staff in the Persian Gulf and Guatemala and as peacemaker in Afghanistan. Singapore's largest involvement so far has been its deployment of a company of combat peacekeepers, staff officers and a helicopter detachment with the UN Mission of Support in East Timor (UNMISET). In mid-2002, Singapore also contributed one of its senior Army generals to be the Force Commander of UNMISET for a year. Since 1989, more than 1500 Singapore Army personnel have served in UN missions.²⁰ Despite its limited resources, the Singapore Army has committed planning officers, military observers, medical personnel, helicopters and transport aircraft to be on stand-by to support UN peacekeeping operations since 1997.²¹ Such commitment enhances UN's effectiveness in responding to crises. The Singapore Army intends to continue its participation in peace operations, which involves the creation or strengthening of national institutions, monitoring elections, providing reintegration and rehabilitation programs and creating conditions for resumed development.²²

It is important for the Singapore Army to work out a clear deployment strategy as it has every intention of participating in more UN peace operations. Bearing in mind the country's small size and limited resources, the Singapore Army needs to be very selective in its approach and participation of peace operations. The Singapore Army should participate as part of a regional or multi-national force and in niche areas, where its contribution is effective and sought after by UN and other leading nations. Besides contributing peacekeepers to UN missions, a possible niche area is the provision of medical support. The first Singapore Army medical team provided assistance during the Gulf War in 1991. The Singapore Army has since sent medical and surgical teams on numerous humanitarian and disaster relief missions. Another possible area is the contribution of its highly educated and IT-savvy manpower to serve as staff officers in UN Department of Peacekeeping Operations or UN mission headquarters. Situated at the crossroads between East and West, the Singapore Army could also provide officers to serve as mediators, negotiators or liaison officers to enhance understanding between parties in dispute

and enhanced mission success. Singapore Army can best play this role especially in areas within the South-East Asian or Asia-Pacific region.

Singapore's increased involvement in the international community helps to facilitate nation-to-nation security arrangements and military-to-military relations. The Singapore Army participates in numerous bilateral and multilateral activities with many partners, especially those in Southeast Asia and the Asia-Pacific region. An example is its annual participation in Exercise Cobra Gold in Thailand, together with the Royal Thai Armed Forces and the United States Pacific Command. These activities enhance inter-operability and build trust and confidence among the various Armies. They also resulted in successful peacekeeping operations in Timor Leste, where Singapore soldiers worked side-by-side with their counterparts from New Zealand and Thailand.

The Singapore Army recognizes the need for island defense and peace operations. It has also benefited richly from the operational experiences of working in these new areas. There are however, some inherent challenges arising from this expanded role.

CHALLENGES FACED BY THE SINGAPORE ARMY

One of the challenges faced by the Singapore Army today is balancing its force structure with its preparedness for the wide range of operations required during peacetime and war. Its limited resources make it even more challenging for the Singapore Army to perform this role effectively and efficiently.

TRAINING FOR WAR AND KEEPING THE PEACE.

The primary mission of the Singapore Army remains unchanged, that is to deter aggressors and if deterrence fails, to win a decisive victory. With its increasing participation in peace operations and its role in island defense, the challenge is to strike a balance between training for war and keeping the peace.

In peace operations and island defense operations, the rules of engagement are more restrictive when compared to conventional war. In conventional operations, the Singapore soldiers are trained to shoot to kill as the situation is one of "kill or be killed". In peacetime operations, soldiers need a different mindset as they are only allowed to shoot in self-defense. Moreover, these self-defense actions are often taken in very ambiguous situations. The operating environment for operations in peacetime is very different from conventional war. In peacekeeping and island defense operations, soldiers are expected to operate in smaller numbers over larger geographical area and in the thick of civilian life. The combat ratio of soldiers versus those that they are dealing with has shrunk tremendously while the size of the

area of operation has largely increased. There is a clear mismatch in mission requirements and force structure between the conventional war fighting role and these peacetime functions.²³ Besides additional training to acquire new skills in this new role, the Army should create new approaches to develop a warrior-diplomat attitude and enhance cross-cultural awareness to help soldiers to do their job better. Towards this end, soldiers will have to embrace a different mindset suited to peace operations.

As units participate in peace operations, their combat readiness will degrade, particularly for the combat forces. Critical war-fighting skills are rarely used from the time they commence pre-deployment training until the end of deployment in these peace operations.²⁴ The rules of engagement are more restrictive and soldiers have to shed their combat mindset when participating in peacetime operations. It will take some time to retrain units and soldiers for their war-fighting tasks after their deployment for peace operations.

NEW ROLES, OLD STRUCTURE.

Currently, the Singapore Army is organized and trained for its conventional warfare role.²⁵ As such, when the Army is required to support peacetime operations, forces have to be pulled out from fighting formations, given ramped-up training for specific missions before they are deployed for operations. With the mismatch in mission requirements between war and peacetime operations, there is a need to adopt a different focus in force structuring so that the Singapore Army can be nimble enough for the range of operations involved in war and peace. The Singapore Army should provide sufficient trained and ready forces to perform the various peacetime roles while maintaining an adequate level of combat readiness for its wartime role. An important consideration is to be able to maintain an appropriate operational tempo in peacetime so that the forces can still maintain their readiness for war, without being over-stretched.

SMALL CONSCRIPT ARMY.

The Singapore Army has 50,000 active servicemen, comprising National Servicemen Full-time (NSF) and career soldiers and 300,000 reservists or Operationally Ready National Servicemen (ORNS). The NSF serves two to two and a half years of full-time service before they become ORNS. The ORNS continues to serve in the military for another 13 years. The largely conscript profile of the Singapore Army limits the extent and scale to which it can contribute to UN peace operations.²⁶ It is one thing to enlist sons, husbands and fathers to defend the nation, it is far more difficult to convince the Singapore population of the need to deploy these young men to a faraway country in the name of maintaining world peace and

stability. The Singapore Army has to consider its largely conscript profile in its restructuring so that there will be better matching of manpower to mission requirements.

WORKING WITH OUTSIDE ORGANIZATIONS.

In peacetime operations, the Singapore Army has to work well with different organizations outside the Army to be successful in its mission. In performing its island defense tasks, the Singapore Army works with the Air Force, Navy and other security agencies in Singapore. For peace operations to be successful, the Singapore Army needs to understand its relations with the UN, work with other coalition partners, cooperates with forces and people of the host nation and coordinate with non-governmental organizations and other non-military agencies.

Although the Singapore Army has worked with other security agencies and cooperate with other Armies in bilateral and multilateral exercises and activities, interagency and coalition doctrines and processes have not been formally institutionalized. Every operation requires a different response and involves different players, who come with their individual agendas.²⁷ All these add to the complexity of striking a balance between training for war and keeping the peace. The Army needs to systematically capture and disseminate valuable experiences gained and lessons learnt from past operations so that individuals and the organization as a whole can continue to learn and be better prepared for future operations. As the Singapore Army lacks experience in these areas, it has to learn fast and be very flexible when conducting these peacetime operations.

PREPARING FOR THE ENLARGED ROLE

In preparing for its enlarged role, the Singapore Army could consider focusing on these key areas. It should restructure its organization and adopt a different force readiness approach to ensure that there are sufficient forces to carry out the wider range of operations. Soldiers have to be trained in new skills while maintaining their war fighting skills. Most importantly, the Singapore Army needs to develop competent and adaptive soldiers, who are able to carry out a variety of tasks in complex and uncertain environment.

RESTRUCTURING THE SINGAPORE ARMY.

The Singapore Army needs to constantly reshape its forces so that they are always ready and capable in war and peace. There is a need to strike a balance in its peace and wartime roles and ensure its commitment to various operations is sustainable. The Singapore Army should stand ready to exploit the possibilities of technology to enhance its effectiveness and efficiency.

An Island Defense Headquarters has been established to spearhead the efforts of different security agencies to enhance the security of Singapore. In the same vein, a Peace Operations Headquarters should be created to focus on doctrine and preparing the ready force for peace operations.

In the area of force structuring, there is a need to synchronize current capabilities with new requirements and future conventional and non-conventional capabilities. As the mission requirements and operating environment of operations during peace and war are vastly different, it is more desirable to have dedicated forces to perform these different tasks. With its limited resources, the Singapore Army cannot afford to have separate dedicated force to perform all its peacetime and war tasks. An alternative is to enhance the roles of soldiers and fighting formations so that they can perform certain peacetime tasks in addition to their war fighting role. Doing this may result in units having a lower readiness level in their war-fighting role as it is more difficult to focus on such a wide range of peacetime and wartime tasks. The Singapore Army therefore needs to provide sufficient time for these units, who are performing peacetime tasks, to raise their war fighting skills when war is imminent.

A full-time career professional force is preferred for the Singapore Army as career soldiers have more time for training and deployment and has less deployment constraint when compared to a conscript force. However, as Singapore has a small population, it is difficult for the Singapore Army to recruit sufficient numbers to build a relatively large professional force to perform all its assigned tasks. Furthermore, National Service in Singapore serves the dual purpose of nation defense and nation building. It reinforces the responsibility of every male citizen in the defense of the nation and at the same time, builds understanding and bonding among the people. Therefore, the Singapore Army will continue to have a mix of professional and conscript forces.

For the island defense tasks, the Singapore Army should enhance the skills of conventional fighting formations, comprising mainly NSF and ORNS, in areas such as protection of critical installations, control and restraint of civilians and policing tasks. These mainly conscript fighting formations can then be deployed in Singapore, together with other security forces, to enhance the security of Singapore during peacetime. This way, there will be sufficient forces available to be rotated to perform island defense tasks with minimum increase in manpower costs. Additional forces are however required within the Singapore Army to support the development of more specialized teams to support civil authorities in areas such as disposing ordnance and explosives, dealing with chemical and biological weapons and responding to terrorism. The Island Defense Headquarters, with its organic forces, can be

responsible for conducting experimentation, updating doctrine and reviewing force structure for island defense. This way, island defense forces can continue to stay relevant in their response to new and emerging threats to the security of Singapore.

For now, it is difficult for the Singapore to deploy conscript soldiers for peace operations in a foreign country. The Singapore Army should therefore set up a dedicated force, comprising full-time career soldiers and volunteers from the NSF and ORNS pool, to perform peace operations. This trained and ready standing capability should comprise of soldiers with a short-term career of four to six years. This is to facilitate renewal of resources and avoid over-taxing the same soldiers with multiple deployments. The size of this dedicated force for peace operations should be three times the size of the force, which Singapore is prepared to commit for such operations. The additional forces are to allow for rotation and ensure that the operation is sustainable over a longer period of time.²⁸ This peace operations force should be structured to be self-sufficient as far as possible, that is, the force must include combat forces and necessary organic support and service support forces and equipment.

ADOPTING A TIERED READINESS APPROACH.

For the Singapore Army to perform additional peacetime tasks with minimum increase in operating costs, it should adopt a tiered readiness approach for its wartime role. Instead of maintaining the whole Army at the highest readiness level, the Singapore Army should determine the force level that is required as the immediate response force in a conventional war setting. This response force should maintain the highest alert status. The rest of the Singapore Army could maintain a lower level of readiness during peacetime and the readiness level could be enhanced when war is imminent. This will allow the Singapore Army to fulfill its obligations and ensure greater efficiency in force structuring and budgeting.

LEVERAGING LATEST TECHNOLOGY.

As the Singapore Army restructures itself, it continues to leverage on emerging technologies to enhance its fighting capabilities in both conventional and non-conventional settings. Its exploit in ICT will enable the forces to respond better and faster in a network-enabled environment. The challenge is how to harness the potential of ICT to facilitate better and faster analyses and decision-making. ICT is also exploited to enhance dissemination and sharing of information and knowledge among communities having similar interests. In this regard, the Singapore Army has initiated different communities among company commanders, battalion commanders and commanders of various training institutions to enhance learning.

A flip side to the use of ICT is that having a more capable information network does not necessarily mean there will be less ambiguity. Ambiguity is defined here as a lack of clarity or existence of multiple meanings of events for which additional information does not add clarity, just more questions.²⁹ More information may lead to information overload. The Singapore Army must be conscious of this and ensure that its exploit in ICT will enhance its effectiveness and not add more confusion among its people.

Development in surveillance and detection capabilities such as deep scanning, radiation tolerance microelectronics, artificial intelligence and biometric technologies could broaden the scope for future employment to enhance island defense. Chemical and radiological spectral scanning technologies are being actively explored to boost aviation and maritime check-point security. The health and medical authorities are building sophisticated laboratories and capabilities to detect and combat bio-terrorism. The military and civil defense forces are working jointly to extend their working endurance in hazardous chemical and biological environments through comprehensive protective measures on the ground, in the air and at sea.³⁰

TRAINING FOR PEACE AND WAR.

As the skills required for peacetime operations are inherently complex and different from war fighting tasks, the challenge faced by the Singapore Army is to balance its participation in peacetime operations while maintaining its readiness for war.

The Singapore Army should give peacetime operations the correct emphasis by including them as primary tasks along with conventional war fighting tasks. This way, there will be greater focus to develop the doctrine and key operating principles for peacetime operations. The next step is to identify similar tasks and common skills required for the peacetime and war fighting operations. The proposed training approach is to provide initial training in core and common skills before moving into specialized skill training for conventional war and the peacetime operations. Where possible, the training plan should be deliberately structured to accomplish peacetime operations and war fighting training in the same activity.³¹ The Singapore Army will however need to guard against making training too broad and unfocused. Prior to any operational deployment, procedures need to be revamped so that soldiers are given the opportunity to refresh the skills relevant to the particular operation. They should also be given additional training on areas required for specific mission. Similarly, when war is imminent, the soldiers will need some time to raise their readiness level for their war fighting tasks.

Some additional specialized skills required for island defense are in riot-control, the use of non-lethal weapons and working with other security agencies. As for peace operations, specialized skills required are negotiation skills and working with coalition partners and multi-national forces. Other areas of focus include understanding and application of rules of engagement, working with non-governmental organizations and non-military agencies, understanding international humanitarian and human rights law and learning the cultures and languages of areas of deployment. The Singapore Army must also look into the training for post-conflict peace building and stabilization operations, which many militaries have now become more involved in.

DEVELOPING COMPETENT AND ADAPTIVE SOLDIERS.

The Singapore Army is and will be expected to operate in environments that are complex and volatile. Its soldiers must be technically and tactically competent. They should be competent to operate sophisticated weapon systems and equipment, including the latest IT and communications technologies. They must be trained well to exercise sound judgment and initiatives under stressful situations. Most of all, they must be capable of functioning under different situations and adapting to meet new demands.³²

Having good leaders is central to the success of these endeavors. The Singapore Army needs leaders, who are able to motivate their men and create conditions for success. These leaders must be adaptable enough to operate different tasks under various complex and uncertain conditions. They should be capable of anticipating future needs and be able to adjust to the demands of varying environment. In training these leaders, besides ensuring that they acquire the necessary skills and knowledge, the Singapore Army should develop their ability to learn. The leaders must learn to exploit new technology and learn to thrive in environments that are complex and changing. In order to achieve this, these leaders must be able to recognize situational demands of each mission and be capable of adjusting to changes in mission, resources and shifting priorities. As leaders are likely working in a foreign environment, they must also be able to adapt culturally. In short, leaders must be able to adapt if they are to succeed.³³

In addition to being adaptable, leaders in the Singapore Army need to be nurtured to think strategically. Strategic leaders must be able to think and act outside their organization. They must be able to identify emerging challenges and exploits emerging opportunities. This is especially important as the environment, which leaders work in, becomes increasingly interconnected, complex and unpredictable.

CONCLUSION

A stable Singapore within a stable region and world is essential for the survival of Singapore and its well being. Singapore therefore strives to enhance its security and play its part towards greater world peace and security. In line with this, the Singapore Army has expanded its role to include peacetime operations such as peace operations and island defense. As the Singapore Army finds itself getting more involved in these peacetime roles, the inherent challenge is to strike a balance between training for war and keeping the peace. The Singapore Army has to review its force structure bearing in mind its largely conscript nature, refine its training approach and develop its people to rise to the challenges of our times. The vital element that determines the success of these efforts is to have competent soldiers and insightful adaptive leaders.

WORD COUNT = 7296

ENDNOTES

¹ Lydia Lim, "National Security Secretariat Set-up in MINDEF," *The Straits Time*, Singapore, 7 Jan 2002.

² Peter Brookes, "The Anti-terrorist Coalition in the Pacific," *Heritage Lectures* No 781, (Washington, DC, 11 April 2003): 1.

³ George Wardenburg, "Some Pitfalls and Challenges for Asia-Pacific under Globalization," in *Asia-Pacific Security, Globalization & Development*, ed. M.L. Sondhi and K.G. Tyagi, (New Delhi: Indian Council of Social Science Research, 2001), 261.

⁴ Antulio J. Echevarria II, *Globalization and the Nature of War* (Carlisle Barracks: Strategic Studies Institute, United States Army War College, March 2003), 1.

⁵ Arun Kumar Singh, "Indian Diplomacy & the Emerging World Order Options, Opportunities and Constraints," in *Asia-Pacific Security, Globalization & Development*, ed. M.L. Sondhi and K.G. Tyagi, (New Delhi: Indian Council of Social Science Research, 2001), 90.

⁶ Ibid., 3.

⁷ Ted O. Kostich, *Military Operations Other Than War: The Evolution of American Strategy and Doctrine for Peace Operations*, Strategic Research Project (Carlisle Barracks: United States Army War College, 15 April 1996), 14.

⁸ Derek Da Cunha, "Defense and Security: evolving threat perceptions," in Singapore *in the New Millennium* (Singapore: Institute of Southeast Asian Studies, 2002), 134.

⁹ Richard W. Baker and Charles E. Morrison, eds., *Asia Pacific Security Outlook 2000 on Singapore* (Japan: An Asia Pacific Agenda Project, 2000), 150.

¹⁰ Christopher A. McNally and Charles E. Morrison, eds., *Asia Pacific Security Outlook 2002 on Singapore* (Japan: An Asia Pacific Agenda Project, 2002), 152.

¹¹ Ministry of Information, Communications and the Arts, *Singapore 2002*, (Singapore: Ministry of Information and the Arts, 2002), 109.

In 1989, Singapore adopted the Total Defense concept to unite all sectors of society where every citizen and every part of the society has a part to play in ensuring Singapore's continued survival, security and success. The five tenets of total defense are civil, social, economic, psychological and military defense.

¹² Brookes, 3.

¹³ Singapore Armed Forces, *Army 21: The Decisive Force*, (Singapore: Singapore Armed Forces, 2002), 3.

¹⁴ Christopher A. McNally and Charles E. Morrison, eds., *Asia Pacific Security Outlook 2001 on Singapore* (Japan An Asia Pacific Agenda Project, 2001), 153.

¹⁵ Michael Leifer, *Singapore's Foreign Policy: Coping with vulnerability* (London: Routledge, 2000), 133.

¹⁶ Jimmy Tan Cheng Yaw and Irvin Lim Fang Jau, "From Terror Fallout to Terra Firma - Convergent Focus on Strengthening Homeland Security," *Pointer* Vol. 28 no. 3, (Singapore: Singapore Armed Forces, Jul-Sep 2002): 5.

¹⁷ *Ibid.*, 12.

¹⁸ General Accounting Office, *Homeland Security: A framework for addressing the nation's efforts: Report to Congressional Requesters* (Washington, D.C.: United States General Accounting Office, 21 September 2001), 5-6.

The steps recommended for Singapore in the paper are adapted from David Walker's recommendations to the United States Government and customized for Singapore taking into considerations Singapore's unique situation.

¹⁹ Tan, 14.

²⁰ Deep Singh, *Singapore's Experiences in Peace Support Operations* (Singapore: 2nd RUSSI-IDSS Conference, 2002), 1.

²¹ Deep Singh, *Peacekeeping Challenges for Small States – The Case of Singapore* (New Delhi: ASEAN Regional Forum Peacekeeping Seminar, 2002), 4.

²² *Ibid.*, 6.

²³ Paul R. Plemmons, *Army Support to Peacekeeping Operations and the Inherent Readiness Challenges*, Strategic Research Project (Carlisle Barracks: United States Army War College, 10 April 2001), 2.

²⁴ William G. Phelps, Jr., *The United States Army in the 21st Century and the Conflict between Training for War and Keeping the Peace*, Strategic Research Project (Carlisle Barracks: United States Army War College, 12 March 2001), 5-6.

²⁵ Ministry of Information, Communications and the Arts, 109.

The Singapore Armed Forces (SAF) comprises the Army, the Republic of Singapore Navy (RSN) and the Republic of Singapore Air Force (RSAF). The Army, in particular, is structured for its conventional wartime role with three combined arms divisions, People's Defense Force for conventional island defense and other non-divisional units.

²⁶ Singh, *Peacekeeping Challenges for Small States*, 3.

²⁷ Steven J. Hoogland, *Peace Operations : Are We Getting Warm Yet?*, Strategic Research Project (Carlisle Barracks: United States Army War College, 1997), 15-16.

²⁸ A feasible sustainable approach for rotation is to have three similar forces with one in preparation and training phase, a second force that is ready for deployment or already deployed and a third force that is reconstituting after its deployment.

²⁹ Richard L. Daft, Kenneth R. Bettenhausen, and Beverly B. Tyler, "Implications of Top Managers' Communication Choices for Strategic Decisions," in *Organizational Change and Redesign: Ideas and Insights for Improving Performance*, ed. George P. Huber and William H. Glick, (New York: Oxford University, 1993), 117.

³⁰ Tan, 16-17.

³¹ Plemmons, 5.

³² Department of the Army, *Course 4 Implementing National Strategy*, Vol. 1, (Carlisle Barracks: United States Army War College, 20 November 2003 – 29 January 2004), 9-129.

³³ Will Cotty, Jat Thompson and Michael G. Sanders, "Special Forces: Selecting and Training Officers for Adaptability," *Special Warfare* Vol. 16 no. 2 (August 2003): 7-9.

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